

Promoting social cohesion and convergence

EU convergence: Geographical dimension, impact of COVID-19 and the role of policy



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Country codes

AT	Austria	ES	Spain	LV	Latvia
BE	Belgium	FI	Finland	MT	Malta
BG	Bulgaria	FR	France	NL	Netherlands
CY	Cyprus	HR	Croatia	PL	Poland
CZ	Czechia	HU	Hungary	PT	Portugal
DE	Germany	IE	Ireland	RO	Romania
DK	Denmark	IT	Italy	SE	Sweden
EE	Estonia	LU	Luxembourg	SI	Slovenia
EL	Greece	LT	Lithuania	SK	Slovakia
UK	United Kingdom				

List of abbreviations

APE	average partial/marginal effect
AROEPE	at risk of poverty or social exclusion
CEE	central and eastern European
CSR	country-specific recommendation
EQI	European Quality of Government Index
EMU	economic and monetary union
ERDF	European Regional Development Fund
ESF	European Social Fund
GDP	gross domestic product
ICT	information and communications technology
MFF	multiannual financial framework
NEET	not in employment, education or training
NUTS	Nomenclature of Territorial Units for Statistics
NWE	northern and western European
OECD	Organisation for Economic Co-operation and Development
PPS	purchasing power standard
RRF	Recovery and Resilience Facility
RRP	recovery and resilience plan
SE	southern European
SURE	Support to Mitigate Unemployment Risks in an Emergency
WGI	World Governance Indicator

Executive summary

Introduction

This study presents new empirical evidence on the state of convergence in the EU. It takes a multidimensional approach, looking at economic, social and institutional variables, to measure convergence at both national and regional levels in the EU between 2004 and 2019. The study also examines the impact of the COVID-19 pandemic and compares it with that of the 2008–2012 economic crisis. The study goes on to assess the potential role of the EU Recovery and Resilience Facility (RRF) in accelerating convergence in selected Member States. It concludes by exploring alternative options and instruments through which the EU could support upward convergence.

Policy context

Since the Treaty of Rome, economic convergence has figured as a key objective of the EU. The idea that EU economic integration leads to improvements in Member States' economic performance and – as a by-product – social performance, while closing gaps between countries, has always been seen as a promise of the EU. Historically, the political debate around integration and convergence in the EU has gathered momentum in the aftermath of a crisis. The oil shock in the 1970s was followed by the creation of the single market and, later, the economic and monetary union. The euro-zone crisis and the subsequent recession led to the strengthening of EU economic and financial governance and the adoption of the European Pillar of Social Rights. More recently, NextGenerationEU, an unprecedented package to support Member States, was agreed in response to the COVID-19 pandemic. Each of these major policy innovations has had the explicit or implicit objective to support economic, social and, more recently, institutional convergence.

Key findings

- Empirical evidence shows that, up to the outbreak of the pandemic, there had been significant progress towards closing economic, social and institutional gaps among the EU Member States. However, an examination of subperiods between 2004 and 2019 shows that convergence slowed down markedly during the economic crisis. While convergence regained momentum in the aftermath, weaknesses persist, especially in southern European (SE) countries.
- EU convergence is largely driven by central and eastern European (CEE) countries catching up faster with northern and western European (NWE) and SE countries than these latter clusters are advancing. The speed of convergence was particularly high before the economic crisis.
- The analysis of sigma-convergence, which measures the extent to which countries are close to or far apart from each other in respect of different indicators, shows that social indicators – notably the employment rate, the unemployment rate, and the rate of young people not in employment, education or training (NEET) – tend to follow the business cycle. Disparities tend to increase during recessions (and did so during the economic crisis) and reduce in times of economic growth.
- Economic indicators show mixed trends. Upward sigma-divergence was found for gross domestic product (GDP) per capita over the entire period under study.
- Government effectiveness, an indicator of institutional performance, exhibits a slight downward trend overall, especially in SE countries, but an upward trend in some CEE countries.
- Regional data for 2004–2019 confirmed upward convergence overall, but the speed of convergence at regional level is systematically lower than that at country level, across all dimensions. Similar to the country analysis, convergence in GDP per capita, the employment rate and quality of government are driven by CEE regions. Regions that were hit hardest by the economic crisis, especially in SE countries, have struggled to recover or even ended up worse off.
- Over time, an increasing percentage of regions have been moving towards the EU average on the indicators analysed. However, economic activity (as measured by GDP per capita and the employment rate) tends to be concentrated in capital regions. This phenomenon is particularly pronounced in CEE Member States.
- The outbreak of COVID-19 affected economic, social and institutional convergence by slowing down the process or reducing growth rates across all countries. Interestingly, for most variables, the changes associated with the pandemic are not a reversal of previous trends but rather an amplification of emerging, pre-pandemic trends. Importantly, the rapid and substantial policy response to the pandemic muted its impact on income and employment thereby attenuating its effects on convergence.

- The analysis of Member States' RRF plans shows that the RRF is contributing to the adoption of reforms and to investments that would have otherwise remained an aspiration, especially in those countries that entered the pandemic with structural vulnerabilities. However, convergence is not an objective of the RRF, and it remains a potential by-product of Member States' plans, dependent on the discretion of national governments to address the reduction of territorial disparities.
- The findings of the analysis of the RRF implementation plans and the RRF's potential impact on upward social convergence should serve as a basis for the broader and forward-looking debate about the policy instruments that the EU should put in place to foster upward convergence.
- The study identifies three potential models that could be used by the EU to support convergence. The first model is centred on strengthening traditional cohesion policies and enhancing the territorialised place-based approach. The second model is a centralised reform–investment model that leaves it to the discretion of Member States to identify territorial needs but increases national reform conditionality to strengthen countries' structural resilience. The third model takes an integrated approach that values the principle of territorial partnership on which traditional cohesion policies are based and the structural reforms and investments embedded in the RRF.
- The pros and cons of each model should be considered in the debate about the future of EU cohesion policy and the most appropriate way to support upward convergence.

Policy pointers

- To deliver on a key promise of the EU project, the goal of upward convergence should remain at the very centre of EU policy action.
- Upward convergence is not necessarily an outcome of EU integration, and policies play an important role in achieving upward convergence. EU cohesion policy is currently the key EU instrument for convergence.
- The increased frequency of large shocks and the deep economic and social changes that will be driven by the twin transition to a digital and carbon-neutral Europe may require EU policy tools to be adapted to ensure they support convergence, at regional and country levels, in a meaningful way.

Introduction

Significance of convergence to the EU

Convergence has always been a core element of European integration. The founding Treaty of Rome (1957) included among its priorities the reduction of differences between the best- and worst-performing regions, while the recently launched European Pillar of Social Rights (2017) explicitly aims to foster a process of upward social convergence across the EU Member States. Over time, the concept of convergence has progressively evolved from a purely macroeconomic concept to a multidimensional one that encompasses different areas and dimensions of Europeans' standards of living and quality of institutions. This evolution has been the result of the deepening of the EU integration process, notably the creation of the single market and the economic and monetary union (EMU), as well as of major crises, such as the Great Recession and the COVID-19 pandemic.

At the early stages of EU integration, neoclassical economic theory offered a framework for understanding how economic integration, through the single market, would play out in terms of relative development in the Member States. This theory assumes that capital can move freely and that its allocation is driven by returns, which diminish with the accumulation of capital (see Solow, 1956). This means that gross domestic product (GDP) growth per capita is negatively related to the initial level of income. Accordingly, countries that were initially poorer (with a lower GDP per capita) were expected to exhibit higher growth rates and quickly converge to the level of the richer countries, which were expected to grow at slower rates.

In line with neoclassical theory, the EU strategy to achieve convergence was based on the progressive removal of physical, technical and fiscal barriers to the free circulation of capital, services, people and goods. This approach was first reflected in the white paper on the single market (European Commission, 1985) and then in the adoption in 1986 of the Single European Act. While this act launched a wave of deregulation at national level and re-regulation at EU level, it was accompanied by a redistributive pillar to compensate for the potentially adverse effect of the single market in less advantaged regions. Internal market deregulation

and compensatory redistributive policies at regional level were thus the initial EU strategy to achieve economic convergence.

At the time of the creation of the single market, negotiations on EMU started, which resulted in the adoption in December 1991 of the Treaty on European Union in Maastricht by the European Council. At the core of the treaty was the principle of convergence, embedded in the requirements to access the EMU. This, however, went beyond the principles of the removal of national regulatory barriers and compensatory redistribution and embraced the more intrusive principle of economic policy surveillance and coordination of labour and product market policies.

The first decade after the launch of the EMU was characterised by convergence in both nominal terms (interest rates, inflation and exchange rates) and real terms (GDP per capita growth and decreases in the unemployment rate). The euro zone grew, on average, on par with the United States, while the European Central Bank quickly gained credibility and was able to bring inflation in line with its target of 'below but close to 2%'. On 1 May 2004, 75 million people and 10 new Member States joined the EU.¹ With the eastward enlargements that brought in Bulgaria and Romania in 2007 and Croatia in 2013, the transition of central and eastern European (CEE) countries towards a market economy and the process of adaptation to the standards of the European Economic Community were completed. Throughout the 2000s, CEE countries caught up with western Europe in terms of employment, wages and economic performance. The volume of intra-EU labour mobility doubled (mainly mobility from east to west) and capital flows increased significantly (largely flows from west to east).

The economic optimism of the first decade of the 21st century, however, came to a sudden halt towards the end of the 2000s. In 2008, the outbreak of the global financial crisis and the ensuing debt crisis in the euro zone represented major existential shocks to the process of European integration and the construction of the EMU. Several countries, especially in the southern periphery of the euro zone, experienced a major financial crisis that then led to an economic and social crisis. The crisis divided the EMU into two blocks, the 'core' and the 'periphery', with deteriorating social indicators in the latter. A debate started on the actual

1 Cyprus, Czechia, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovakia and Slovenia.

benefit of EMU membership, and the critiques of neoclassical theory, which began emerging in the 1990s (Krugman, 1991, 1993), were revamped. The economic geography literature, with its predictions about the effects of economic integration on the spatial distribution of economic activities and income, offered a theoretical tool to account for regional income disparities associated with economic integration (Baldwin and Wyplosz, 2009).²

The European Semester was the EU's immediate response to the weaknesses in the EU's economic governance revealed during the economic crisis. With the adoption of the 'six-pack' and 'two-pack' legislative packages, the EU put economic convergence at the centre of its agenda. The six-pack introduced a new macroeconomic surveillance tool – the macroeconomic imbalances procedure – to prevent the build-up of macroeconomic imbalances. The two-pack requires euro-zone Member States to present their draft budgetary plans for the following year in mid-October. The aim is to ensure that fiscal policy is discussed early in the budgetary process and that the Commission's guidance can be taken into account before national budgets are adopted.

The social scars of the crisis soon moved the debate beyond economic factors towards the need for social and institutional convergence. In 2009, the Lisbon Treaty reinforced the EU's social policy commitment. Its most important innovation was the horizontal social clause (Article 9 of the Treaty on the Functioning of the European Union), which states that the EU must take into account social issues (such as the promotion of a high level of employment or the guarantee of adequate social protection) when defining and implementing all of its policies and activities. The treaty also introduced new social objectives for the EU: full employment and social progress in a social market economy; combating social exclusion and discrimination; solidarity between generations; promotion of economic, social and territorial cohesion; and solidarity between the Member States. In 2010, the Europe 2020 strategy set out an integrated political agenda for Europe's future that rested on the balance between economic and social objectives.

Evidence that countries with resilient welfare states performed better economically during the Great Recession led the Commission, initially with the Social Investment Package and then more explicitly with the European Pillar of Social Rights, to renew the call for upward social convergence. In its reflection paper on deepening the EMU, the Commission, then headed by Jean-Claude Juncker, stated that its ultimate objective was to achieve convergence in a more integrated economic and fiscal union (European Commission, 2017a). Together with the objective of achieving economic and social convergence, the Commission stressed the importance of structural institutional convergence. Most importantly, the document paved the way for a broader reflection on the EU instruments to be put in place to achieve such convergence, not least the creation of an automatic stabilisation function and the fiscal capacity to support countries' structural reform.

Even though the debate launched by the Juncker Commission did not immediately result in the adoption of new policy measures to support convergence across countries, the toolkit became, de facto, the basis of the EU response to the COVID-19 pandemic. The debate around how the EU could support post-pandemic recovery was fuelled by significant concerns that the consequences of the pandemic would translate into a deepening of divergence trends. The Recovery and Resilience Facility (RRF), launched in February 2021 to support the post-pandemic recovery of the Member States, has at its heart the objective to promote the EU's economic, social and territorial cohesion. It builds on the proposal for a reform support programme (European Commission, 2018) and ultimately aims to enhance convergence within the EU.

What constitutes convergence?

Despite the importance of convergence within the EU policy debate, neither a common definition of convergence nor a unique approach to measure it exists, as Eurofound (2018a) notes. Besides the different types of convergence in terms of the dimensions considered (economic, social and institutional), there are different ways to assess the degree of convergence of geographical areas. Different statistical methods exist to conceptualise and measure it. Among these,

² The core-periphery model is based on the assumption that two opposed forces – agglomeration and dispersion – drive the spatial distribution of economic activities within a country and across countries (Krugman, 1991). Deepening economic integration, by lowering trade costs, tends to reduce the relevance of local competition and enhances the benefits accruing from economies of scale (Krugman, 1993). As a consequence, dispersion forces weaken and agglomeration forces strengthen. Ultimately, economic integration leads to more spatial concentration, and agglomeration forces tend to be self-reinforcing, driven by physical and human capital mobility and technology spillovers.

beta-convergence and sigma-convergence are the most common, each of which describes and investigates a different aspect of convergence.

- Beta-convergence is used to measure whether countries starting from initially low performance levels grow faster than better-performing countries, a process referred to as ‘catching up’. The speed of convergence can be measured either by disregarding countries’ initial characteristics or by controlling for them. The former case is called unconditional or absolute beta-convergence, and it assumes that all countries are converging towards the same steady state. The second case is called conditional beta-convergence, where the speed of convergence and the steady state towards which countries are converging can differ due to their initial differences.
- Sigma-convergence refers to the overall reduction in disparities among countries over time and is measured by the evolution of the statistical measures of dispersion, such as the standard deviation or the coefficient of variation. A decrease in the standard deviation or coefficient of variation over time indicates convergence. It should be noted that beta-convergence is a necessary, but not sufficient, condition for sigma-convergence.

Given that convergence essentially evaluates the progress made by regions between two points in time, its results are significantly affected by the time span considered, particularly the starting and ending points of the data series (Eurofound, 2018a).

Besides differences in terminology and measurements, an important point is what kind of convergence is considered ‘desirable’. For countries and regions to converge, it is sufficient that they all move in the same direction, independent of whether the path leads to an improvement or a deterioration. Moreover, even a common trend towards improvement does not necessarily imply convergence, as countries and regions that lag behind can still grow at a slower pace than the best-performing countries and regions, thus exacerbating rather than reducing disparities. For these reasons, from a policy perspective, it is sensible to focus on the notion of *upward convergence*, which accounts for both improvement and convergence in performance

(Eurofound, 2018a).³ Upward convergence is measured in comparison with a target, which can be either a nominal value (for example, a policy target) or a reference value (for example, an EU average). Furthermore, upward convergence can be either broad or strict (see Eurofound, 2018a). Broad upward convergence occurs when an improvement is recorded in the EU average while disparities are reduced. In this case, the EU average is improving, but not every Member State records an improvement. Strict upward convergence occurs when all countries or regions improve their performance while the disparities between them are reduced. In this case, no country is left behind.

In the literature, the concept of convergence has been traditionally applied to income per capita. Often, the purpose of a convergence analysis has been to assess to what extent EU membership could be associated with the faster growth of poorer countries towards higher EU (average) standards of living, as promised by the EU project. In this context, beta-convergence is the most used measure of convergence.

In practice, the concept of convergence, as measured by beta- and sigma-convergence, can be applied to a variety of indicators to provide useful information about outcomes associated with EU integration as well as with economic shocks and EU policies. The underlying idea is to test whether the resulting changes have caused EU Member States (or regions) to move apart or to move closer and to identify which were most affected by recent changes.

Indicators analysed in the current study

Table 1 lists 15 outcome indicators, in the sense that they capture the results of economic and social dynamics, policies and shocks. These indicators are used to measure EU convergence processes in the chapters that follow. They are classified according to the three dimensions of interest: economic, social and institutional. The analysis will look first at convergence across Member States (NUTS 0 level) and then at regional convergence, focusing on regions at NUTS 2 level.

³ This implies that there are different combinations of upward and downward convergence and divergence depending on the starting and ending values of all regions considered.

Table 1: Economic, social and institutional indicators used in the convergence analysis

Indicator	Source	Description	Span of time series	NUTS region
Economic				
GDP per capita	Eurostat	GDP per capita in purchasing power standard (PPS)	1995–2021	0 and 2
Disposable household income per capita	Eurostat	Adjusted gross disposable income of households per capita in PPS – calculated as the adjusted gross disposable income of households and non-profit institutions serving households divided by the purchasing power parities of the actual individual consumption of households and by the total resident population	2000–2020	0
Income inequality	Eurostat	Income quintile share ratio (S80/S20) of disposable income – the ratio of total income received by the 20% of the population with the highest income (the top quintile) to that received by the 20% of the population with the lowest income (the bottom quintile)	2005–2021	0
Compensation per employee per hour	Eurostat	National accounts data on the compensation of employees for the total economy – including wages, salaries and employers' social contributions – divided by the total number of hours worked by all employees, calculated in PPS	1995–2021	0
Social				
Employment rate	Eurostat	Percentage of employed persons in relation to the comparable total population. For the overall employment rate, the comparison is made with the working-age population, but employment rates can also be calculated for a particular age group or gender	2002–2021	0 and 2
Unemployment rate	Eurostat	Number of unemployed people as a percentage of the labour force aged 15–74 years.	2002–2021	0
Not in employment, education or training (NEET) rate	Eurostat	Percentage of the population of a given age group and sex that is not employed and not involved in further education or training	2002–2021	0
Early school-leavers rate	Eurostat	Rate of early school-leavers as a proportion of the population aged 18–24	2002–2021	0
At risk of poverty or social exclusion (AROPE) rate	Eurostat	Proportion of people who are at risk of poverty after social transfers (i.e. income poverty), severely materially deprived or living in households with very low levels of work intensity	2005–2021	0
Institutional				
Control of corruption	World Bank	Perceived extent to which public power is exercised for private gain, including both petty and grand forms of corruption, and to which the state is captured by elites and private interests	1996–2020	0
Government effectiveness	World Bank	Perceived quality of public services, quality of the civil service and degree of its independence from political pressures, quality of policy formulation and implementation, and credibility of the government's commitment to such policies	1996–2020	0
Political stability and absence of violence/terrorism	World Bank	Perceived likelihood of political instability or politically motivated violence, including terrorism	1996–2020	0
Voice and accountability	World Bank	Perceived extent to which a country's citizens are able to participate in selecting their government, as well as having freedom of expression, freedom of association and a free media	1996–2020	0
Rule of law	World Bank	Perceived extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police and the courts, as well as the likelihood of crime and violence	1996–2020	0
European Quality of Government Index (EQI)	University of Gothenburg	Measures institutional quality, defined as a multidimensional concept consisting of high impartiality and quality of public service delivery, along with low corruption	2010–2013 and 2017–2021	2

Source: *Compiled by the authors*

Objectives and structure of the report

The cyclical return of convergence objectives to the EU agenda, first under the auspices of neoclassical economic growth theory and progressively including additional layers, raises the question of where EU convergence stands today and, notably, what impact the COVID-19 pandemic has had from both an empirical and a policy perspective. Against this background, the purpose of this report is to take stock of the last two decades of convergence trends in Europe by looking at the key economic, social and institutional developments at national and regional levels.

To this end, this report first reviews the literature on EU convergence, focusing on its geographical dimension and on the impact of the COVID-19 pandemic (Chapter 1). This is followed by a descriptive analysis of the state of convergence before the pandemic, focusing on the economic, social and institutional indicators described above, at both national level (Chapter 2) and regional level (Chapter 3). Chapter 4 focuses on 2020 and 2021 to isolate the impact of the pandemic. Chapter 5 assesses the potential impact of the RRF and whether it can foster upward convergence. Finally, different scenarios for EU policies in support of upward convergence are discussed, based on the current experience with the RRF and the ongoing debate about the future of EU cohesion policy (Chapter 6). The final chapter draws conclusions.

1 Literature review

This chapter offers a comprehensive review of the academic literature and the grey literature (produced by think tanks, research institutes and international organisations and not necessarily published in peer-reviewed journals) on EU economic, social and institutional convergence. The review also covers recent works on the impact of the COVID-19 pandemic.

Geographical dimension of EU upward convergence

This section focuses on EU economic, social and institutional convergence, including the patterns identified across countries and regions and the drivers of these patterns.

Economic convergence

In academic research, convergence is usually defined in economic terms – GDP or income per capita – to understand whether poorer countries will catch up with richer countries and thus converge economically with them (Barro and Sala-i-Martin, 1992).

Since its original formulation, the concept of economic convergence has been received alternately with wild enthusiasm and near dismissal in the EU debate. Interest was very high at the time of the significant EU enlargement in 2004–2007. It then declined under the broad impression that the new Member States were converging towards EU growth rates. The effects of the debt crisis in the euro zone and political changes in CEE countries have revived not only scholars' interest in socioeconomic convergence, but also policymakers' interest, especially at EU level (see, for instance, European Commission, 2017b).

The economic recovery in the aftermath of the financial crisis did not correct the existing (and significant) differences in growth rates across Member States. Therefore, as argued by Alcidi (2019), there was growing concern that gaps between countries were not due to cyclical factors but rather signalled structural differences and the emergence of new patterns of divergence within the EU. In particular, among the oldest EU Member States in the euro zone, the crisis was long lasting for some. The difference between the richest and the poorest Member States was greater in 2018 than when the euro was introduced, despite the high-growth period before the crisis. By contrast, CEE countries appear to have performed well – almost all of them have moved closer to EU average GDP per capita, and even those hit hardest by the financial crisis have continued to catch up after very deep but relatively short recessions.

However, a number of studies have argued that the rapid internationalisation of the economies of CEE countries and their subsequent integration into the European single market resulted in a disproportionate agglomeration of economic activity in metropolitan regions (for example, the study by Petrakos and Economou, 2002, of south-eastern Europe). This view is supported by a range of empirical evidence showing that the process of economic integration of CEE countries into the EU has translated into within-country relocation of industry to the benefit of capital regions, where agglomeration economies dominate (see Traistaru et al, 2003). In this respect, Puga (1999) observed that a spatial agglomeration of industries, and hence a spatial concentration of income, takes place as trade costs fall if workers migrate in response to income differentials. The idea is that agglomeration of production increases local wages. However, if workers migrate in response to a wage differential, downward pressure on wages will result. By contrast, if wage differentials persist because of low mobility, firms will have an incentive to relocate and disperse. If this reasoning is applied in the context of the EU, the higher mobility of workers within countries may have contributed to agglomeration in metropolitan areas in CEE countries. Likewise, the relatively low mobility across countries may explain the dispersion of production across Europe and the broad trend of convergence.

According to Alcidi (2019), the EU (unconditional) beta-convergence hypothesis is confirmed at regional level. However, the speed of convergence among regions is around 30% slower than among Member States. In addition, while the distribution of regions in the space delimited by the initial level of income and growth rates broadly reflects the distribution of Member States, regions exhibit greater dispersion. During 2000–2007, cross-country and cross-regional differences in GDP per capita in PPS were falling, and hence sigma-convergence was taking place. Since 2008, however, variation at regional level has begun to increase as a consequence of the financial crisis, which hit the southern European countries hardest. Many eastern European countries, as well as Portugal and Spain, have been characterised by regional convergence. However, the opposite holds true for Greece and Italy, where differences between regional income levels increased.

Concerning the impact of the creation of the EMU on convergence, the assessment is rather contentious and politically charged, and 20 years after the introduction of the euro, additional reliable research is required. On the one hand, there is widespread agreement that the

reduced exchange rate volatility led to more integration and better institutional functioning. On the other hand, since the EMU was created, southern European Member States have diverged in socioeconomic indicators, in contrast to earlier trends (see, for instance, Boltho, 2020). It should be noted, however, that causality between euro-zone membership and convergence is difficult to establish. Other major developments were concurrent with the introduction of the euro, most notably globalisation, which, through a process of relocation of production to low-wage countries, had a more beneficial impact on emerging economies (such as new Member States) than on advanced economies (such as older EMU members; see Baldwin, 2016).

When focusing on convergence at regional level, Goecke and Hüther (2016), who analysed (conditional) convergence in real GDP per capita (in PPS) using NUTS 3 data, found that regions have been on the path towards convergence since 2000 but with huge differences among them. Many eastern European countries and several regions in Portugal and Spain are characterised by convergence, but the opposite holds for many regions in Greece and Italy. The size of a region's manufacturing industry is important for convergence, and directing subsidies from the EU to the right fields of activity also has a positive influence on a region's probability of convergence. Interestingly, the empirical strategy of Goecke and Hüther considers several factors (for example, the proximity to a national border, the relative sizes of the industrial and tertiary sectors, the extent of spending on research and development, and receipt of EU funds) that can explain variation in economic performance and convergence.

Finally, Bisciari et al (2020a), who investigated convergence at both country and regional levels, highlighted that most of the existing literature about economic convergence in the EU offers evidence of a failure of southern European countries to converge with northern European countries between the mid-1990s and 2008, and the gap widened during the 2008 financial crisis. By contrast, CEE countries have been a strong source of sustained convergence, as they have been in the process of catch-up since the mid-1990s. Bisciari et al argue that this process has not always been smooth and that convergence exhibits some cyclicity: strong convergence during high-growth periods and slower convergence or even sometimes divergence (among the pre-2004 Member States) during periods of crisis. The authors identify the structural polarisation of southern and northern European economies as the main source of this pattern. Differences in technological capabilities are considered relevant to explaining the coexistence of different growth models. Northern European countries have enough technological capabilities to adopt an export-led growth model and to successfully compete in international markets, while in southern European countries (with some exceptions), overall international competitiveness has deteriorated.

Social convergence

A key assumption behind European integration has always been that social progress would follow as a by-product of economic growth, and hence that economic and social convergence would go hand in hand. With the European Employment Strategy (1997) and more explicitly later with the Lisbon Agenda, convergence in employment rates and labour market participation gained visibility and became an explicit objective of EU policy. However, it was the economic and social crisis in the aftermath of the financial crisis of 2008 that prompted a paradigm shift. This crisis served as a wake-up call demonstrating that broad EU growth does not necessarily lead to economic convergence and even less so to social convergence.

The evolution of EU policy was also reflected in part in the attention paid by the academic literature to social convergence. Indeed, until the 2000s, few studies investigated the evolution of employment trends across EU Member States, and even fewer looked at regional trends (Martin and Tyler, 2000). This literature focused on employment and unemployment trends mostly to complement income convergence analysis (Cosci and Sabato, 2007; Marelli, 2007). After the financial crisis, the scope of the literature broadened to include various social variables, such as the AROPE rate, income inequality, the gender employment gap, labour market participation and wages. A significant body of research on social convergence has been undertaken by Eurofound (2018a, 2018b, 2019a, 2019b, 2019c, 2020a, 2020b), with the aim of providing a comprehensive picture of convergence trends in terms of employment and the socioeconomic dimension to reflect the principles of the European Pillar of Social Rights. In a similar vein, Vaughan-Whitehead (2019) investigated social convergence between and within EU Member States using the European Pillar of Social Rights as a benchmark.

Overall, these studies show that – at national level – key social indicators, such as the employment rate, the unemployment rate, the long-term unemployment rate, the rate of young people not in employment, education or training (NEET) and the AROPE rate, are strongly affected by the business cycle. Indeed, upward convergence, with overall improvement and lower dispersion, emerges in good times (notably in the 2000s), while downward divergence trends, with deteriorating performance and higher dispersion, characterised the post-Great Recession period. By contrast, diverging trends on these indicators emerge at regional level, where significant within-country differences persisted both in the 2000s and in the 2010s.

Other social indicators, such as income inequality and employment conditions, showed downward trends both in the 2000s and in the 2010s. Eurofound (2019a, 2019b, 2019c) has shown that income inequality – measured as the ratio of the top income quintile to the

bottom income quintile – increased from 4.8 in 2008 to 4.9 in 2018, reflecting a rise in inequality, with significant cross-country differences, especially between eastern and western European countries. As regards employment conditions, Vaughan-Whitehead (2019) demonstrated increasing downward divergence in fair working conditions, measured as the proportion of involuntary part-time workers among all part-time workers and the proportion of the workforce with temporary contracts. The financial crisis seems to have been the trigger of the steady increase of involuntary part-time workers, while the overall trend of part-time and temporary work has increased steadily from the 2000s.

Finally, for another group of social indicators, Eurofound (2019b) showed that upward convergence was steady and robust from 2008 to 2018, with the financial crisis having a limited effect. This was the case for the early school-leavers rate, the gender employment gap and the take-up of formal childcare for children under three years of age, for which dispersion has decreased and the overall performance of the EU has improved.

Institutional convergence

The analysis of institutional convergence – examining convergence in the quality of institutions – is at the same time difficult and of key importance, as it affects both economic and social convergence (Landesmann and Székely, 2021). Empirical literature on institutional convergence is scarce, mostly because of data availability. However, as will be illustrated in detail below, some data exist – from international organisations (such as the World Bank Group and the Organisation for Economic Co-operation and Development (OECD)) – based on measures of people’s perceptions.

Glawe and Wagner (2021) investigated institutional convergence from 2002 to 2018 by using institutional convergence clusters. They found the coexistence of multiple institutional ‘clubs’ that were associated with the geographical region. Northern and western European countries appear in higher institutional clubs, whereas southern European and CEE countries appear in lower institutional clubs. When analysing per-capita income clubs, Glawe and Wagner found a similar pattern, indicating that the underlying institutional clusters determine the formation of income clubs. They also found that levels of human capital and institutional quality were decisive factors for determining whether a country was on a high or low institutional growth path.

Schönfelder and Wagner (2019) applied the concepts of sigma-convergence and unconditional beta-convergence to institutional development within several country groups, focusing on World Bank indicators. They found institutional beta-convergence within the EU and its candidate countries, mainly driven by the post-2004

Member States. However, euro-zone countries converged only in the area of product market and business regulation – not in the area of governance. They also found that the oldest Member States were no longer converging or were even diverging over some aspects of institutional development, especially as regards control of corruption and rule of law. These findings are in line with those of Alesina et al (2017), who found no institutional convergence and showed that southern European institutions were falling behind the northern European frontrunners.

More recently, Obadić et al (2021) applied the sigma- and beta-convergence principles to analyse the convergence of labour market institutions in the EU in 1993–2018. The authors focused on five indicators of labour market institutions: the employment protection legislation index, the tax wedge, unemployment benefits, active labour market policies and minimum wages. The results of their analysis showed that there was no convergence in labour market institutions between EU Member States. The authors also tested the possibility of club convergence by differentiating between endogenous clubs, based on a clustering algorithm, and exogenous clubs, based on geographical proximity and labour market similarities. Convergence was evident only in some endogenous clubs.

Impact of the COVID-19 pandemic on convergence

This section extends the literature review to include the most recent studies covering the impact of the COVID-19 crisis. Because of the limited data available, with few exceptions, most published research covering the pandemic is qualitative and based on guesstimates. Chapter 4 will partially fill this gap using data for 2020 and, to the extent possible, 2021.

Economic convergence

Bisciari et al (2020b) are among the few who have attempted to quantitatively assess the impact of the pandemic on convergence, by using the GDP per capita growth projections of the Commission’s Spring 2020 Economic Forecast. Their findings suggest that, similar to the pre-COVID-19 period, after 2020, EU convergence may once again be being driven by the catch-up of CEE economies, whereas divergence may materialise due to Italy and Spain falling behind.

Martinho (2020) argues that, after the pandemic, it will be important for the EU institutions to keep in mind the potential GDP per capita growth contribution of CEE countries, such as Latvia, Lithuania and Romania, to promote convergence in the EU. According to Székely (2020), the COVID-19 health crisis revealed that some low value-added businesses in western Europe remained competitive with companies from CEE countries by presiding over extremely poor working and

living conditions that only people from deeply depressed parts of eastern Europe are willing to accept. The importance of strategically implementing GDP growth policies at EU level was also stressed by the OECD (2021).

Odendahl and Springford (2020) identified three main factors that will force divergence in the EU: the degree of containment measures in response to the intensity of the health crisis, the different sectoral compositions and the level of national debt, which limits the space for fiscal policy manoeuvres. They argue that the impact of lockdowns in southern European Member States will generate more long-lasting recessions than those in the north and east because of the prevalence of tourism sectors in these regions. In addition, Greece, Italy and Spain are in the most unfavourable positions because of their initial level of public debt, which implies a lower scale of fiscal support in these countries (*ex post*, it is known that this is not fully correct). Additionally, more indebted countries are likely to pay more service to debt. Finally, public expenditures and foregone revenues (such as the cancellation of some taxes and social security contributions) immediately led to budget balance deterioration without any direct compensation later (Fedajev et al, 2021).

Gräbner et al (2020) consider existing differences in production structures and growth models as fertile ground for the COVID-19 crisis to fuel further macroeconomic divergence and economic polarisation between country clusters.

Social convergence

Studying the impact of COVID-19, Darvas (2021) argues that the disproportionate employment and income declines during the pandemic have most likely boosted income inequality in the EU. In particular, he found a within-country variation between highly educated workers and workers with low levels of education: the more negative the GDP shock, the larger the difference between changes in the employment of highly educated workers relative to workers with low educational attainment, with the latter suffering more. He also argues that GDP and income inequality changes in 2020 are likely to be correlated. Because of the differing sectoral impacts, combined with adverse health effects and the importance of teleworking, the adverse distributional impacts in 2020 were greater than in previous recessions.

Darvas also argues that, although governments implemented employment protection schemes on a large scale, which contained the fall in total employment, adverse distributional implications were not fully prevented. In this respect, findings by Menta (2021) on poverty trends in five EU Member States (France, Germany, Italy, Spain and Sweden) in 2020 suggest that the increase in poverty is heterogeneous

across countries, with Italy being the most affected and France the least. Furthermore, the pandemic contributed to exacerbating poverty differences across regions within Italy and Spain.

By contrast, according to Christl et al (2021), simulations of the transition from work to unemployment and monetary compensation schemes indicated that national tax-benefit systems were able to absorb a significant share of the income shock (73.3% at EU level) and that monetary compensation schemes played a major role in cushioning the effect of the economic shock (35.2% at EU level). The stabilisation provided by unemployment benefits was significant but smaller than that provided by monetary compensation schemes. Similarly, Clark et al (2021), using ad hoc survey data to track income inequality during the pandemic in France, Germany, Italy and Spain, found that the change in relative inequality in equivalent household disposable income among individuals followed a hump-shaped curve between January 2020 and January 2021. The initial rise from January to May 2020 was more than reversed by September 2020. Absolute inequality also fell over this period. Since government compensation schemes targeted the poorest, income differences decreased on average.

Almeida et al (2021) found that national discretionary fiscal policies played a significant cushioning role, reducing the size of the income loss (from -9.3% to -4.3% for the average equivalised disposable income) and mitigating the poverty impact of the pandemic. Preliminary evidence from Dauderstädt (2021) showed that the impact of the pandemic on EU-wide inequality (poverty rates) appeared to be weak and that although the COVID-19 pandemic slowed down the previous declining trend in inequality, it did not reverse it.

Studying the EU employment shifts by job-wage quintiles from Q2 2019 to Q2 2020, Eurofound (2021) found that employment changes have monotonically declined along the job-wage distribution, with the largest increase in employment in the best-paid jobs and the sharpest losses in the lowest-paid jobs, suggesting a widening of earnings inequality. The restrictions on economic activity to control the spread of the virus and the negative effects on non-teleworkable occupations were also likely to have resulted in a deterioration of the material well-being of EU citizens (Eurofound, 2020b). According to a Eurofound survey, signs of diverging prospects in material well-being at EU level were already being observed in April 2020. At that time, 38% of people living in Europe claimed that their financial situation was worse than before the pandemic; this varied from below 20% of people surveyed in Denmark and Luxembourg to 50% or more of people in Bulgaria and Poland (Eurofound, 2020b).

Institutional convergence

Buti and Székely (2021) consider the COVID-19 crisis to be the biggest challenge ever faced by the EU, both economically and socially, and a source of divergences. They found a positive relationship between institutional quality, on the one hand, and research and development intensity, on the other. They also highlighted that this relationship was linear and weak for the countries falling within the lowest quintile of the income distribution in the EU but turned stronger

and became non-linear for countries in the highest quintiles. This suggests that high-quality institutions tend to move countries towards knowledge- and innovation-based activities. Because the COVID-19 crisis accelerated existing trends such as digitalisation and increased the role of teleworking, highly skilled workers benefited from the choice of where they could work. However, the concentration of highly skilled workers in certain areas is a risk that could induce further divergence.

2 Pre-pandemic state of EU convergence

This chapter presents an analysis of economic, social and institutional convergence in the EU between 2004 and 2019, before the outbreak of the COVID-19 pandemic. It measures beta- and sigma-convergence of the EU Member States in relation to the indicators listed in the Introduction (apart from the EQI).

Overview of EU country-level beta-convergence

Table 2 presents an overview of the results of the beta-convergence analysis, with the estimated coefficients for each of the indicators and the time periods analysed. To identify areas where convergence (or divergence) is stronger, the table uses a red-to-green colour scale, with colour intensity defined by five-point

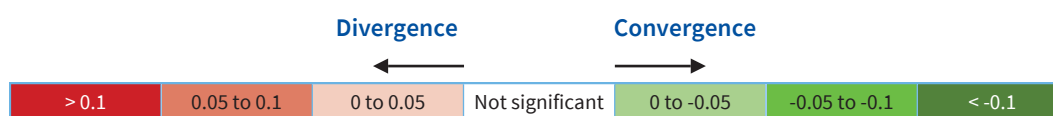
intervals (negative and positive) in the beta coefficients (0–0.05, 0.05–0.1 and above 0.1). Negative coefficients, indicating convergence, are in green, while positive coefficients, indicating divergence, are in red. Coefficients that are not statistically significant have been left white, whether they are positive or negative. Up and down arrows indicate the direction of convergence or divergence. Hence, there are five possible outcomes:

- upward convergence – green cell and up arrow
- downward convergence – green cell and down arrow
- upward divergence – red cell and up arrow
- downward divergence – red cell and down arrow
- result not statistically significant – white cell

Table 2: Unconditional beta-convergence in the EU, by indicator and time period, 2004–2019

	2004–2008	2008–2013	2013–2019	2004–2019
Economic				
GDP per capita	-0.04*** ↑	-0.02*** ↑	-0.02*** ↑	-0.02*** ↑
Household disposable income per capita ^a	n.a.	-0.03*** ↑	-0.02*** ↑	-0.03*** ↑
Income inequality ratio	-0.07*** ↓	-0.01	-0.02*** ↑	-0.03*** ↑
Compensation per employee	-0.03*** ↑	-0.01*** ↑	-0.03*** ↑	-0.02*** ↑
Social				
Employment rate	-0.04*** ↑	-0.03* ↓	-0.05*** ↑	-0.03*** ↑
Unemployment rate	-0.11*** ↑	-0.03* ↓	-0.04** ↑	-0.05*** ↑
NEET rate	-0.06*** ↑	0.01* ↓	-0.03*** ↑	-0.02*** ↑
Early school-leavers rate	-0.03** ↑	-0.04*** ↑	-0.02*** ↑	-0.03*** ↑
AROPE rate ^b	-0.03*** ↓	-0.03*** ↓	-0.02*** ↑	-0.02*** ↓
Institutional				
Control of corruption	0.01	0.00	-0.02*** ↓	-0.00 ↓
Government effectiveness	-0.01	-0.03*** ↑	-0.01*** ↓	-0.01*** ↓
Political stability	-0.04*** ↑	-0.03*** ↑	-0.07*** ↓	-0.03*** ↓
Voice and accountability	-0.04*** ↓	0.03*** ↓	-0.01*** ↓	-0.01*** ↓
Rule of law	-0.01* ↑	-0.01*** ↓	-0.01*** ↓	-0.01*** ↓

Key



^a The household disposable income series starts in 2009. ^b The AROPE rate series starts in 2005.

Notes: For each indicator, the change for the period was regressed on the log of the first year's value. The colour intensity changes according to the magnitude of the beta coefficient. Significance level is reported as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. n.a., not available.

Source: Authors

Overall, the results show a clear path of beta-convergence within the EU in economic, social and institutional indicators across time periods; however, there are differences that are worth considering. First of all, the economic and institutional indicators display opposite patterns in convergence over time, with an improvement in the former and worsening in the latter. Most social indicators show a tendency towards upward convergence except during the financial crisis.

When comparing the results of the four time periods, the full period of 2004–2019 showed the highest number of statistically significant coefficients but not always the largest ones. Coefficients were generally larger (in absolute value) in the first subperiod (2004–2008) and smaller in the second subperiod (2008–2013), with few instances of divergence. In the last subperiod (2013–2019), results were similar to the full period. Overall, this seems to indicate that convergence began quite strongly in 2004, then slowed down during the economic crisis and regained some momentum from 2013. Taking the overall period between 2004 and 2019 into consideration, coefficients (in absolute values) lie between 0.01 and 0.05. This means that countries with the worst initial values in the indicators improved, on average, at the highest speed.

While the overall assessment of the results indicates convergence across the board, a few indicators in certain time periods either do not exhibit a significant coefficient (for example, the control of corruption indicator in 2004–2008 and 2008–2013) or divergence. The economic crisis period is the period that shows the most heterogeneity across indicators (for example, in the NEET rate).

The next section goes into detail on the unconditional beta-convergence and sigma-convergence analyses for each indicator and subperiod. Most data series begin in 2004, apart from household disposable income (2009) and the AROPE rate (2005), and in most cases data are available for all countries. In addition to analysing the convergence of the EU Member States individually, the analysis also compares the convergence of three EU geographical country clusters:

- Northern and western European (NWE) countries, comprising Austria, Belgium, Denmark, Finland, France, Germany, Ireland, Luxembourg, the Netherlands and Sweden
- Southern European (SE) countries, comprising Cyprus, Greece, Italy, Malta, Portugal and Spain
- Central and eastern European (CEE) countries, comprising Bulgaria, Croatia, Czechia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia

Economic indicators

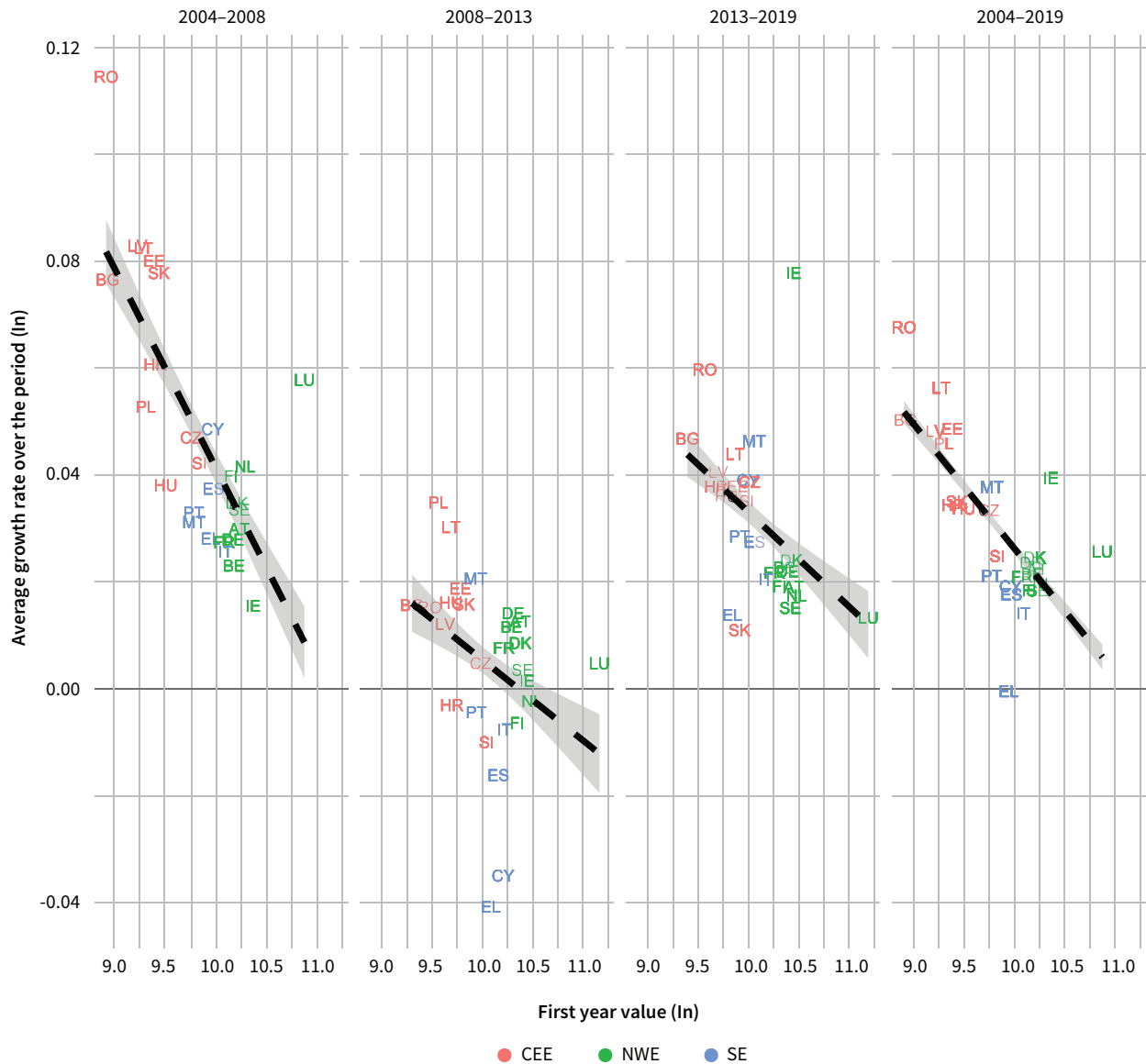
The economic indicators examined capture different dimensions of income: GDP per capita, household disposable income per capita, income inequality and compensation of employees per hour worked.

GDP per capita

GDP per capita measures output per citizen. It is the most commonly used indicator of average living standards in an economy and has been widely investigated in the context of EU convergence. Put simply, the EU represents a ready-made experiment to test neoclassical economic theory, and this has inspired a rich body of literature, some of which has already been discussed in Chapter 1. Here, the focus is on how convergence developed over the 16 years leading up to the COVID-19 pandemic and the impact of the financial crisis and the subsequent recession. To allow cross-country comparisons to be made, the indicator is expressed in PPS.

Figure 1 illustrates beta-convergence trends in GDP per capita between 2004 and 2019 and in the three subperiods. In the charts, a negative (descending) slope of the regression line indicates convergence. The shaded areas surrounding the regression lines represent the confidence intervals. Over the full period, EU average GDP per capita grew strongly, despite an abrupt drop in 2009, when it decreased by 1,514 PPS compared with the previous year, followed by a slowdown that lasted until 2014. The most significant progress was attained by countries that started with lower GDP per capita in 2004 but recorded significant growth by 2019, such as Romania and Lithuania, as depicted in the 2004–2019 panel of Figure 1.

Figure 1: Beta-convergence – GDP per capita (PPS), EU27, 2004–2019



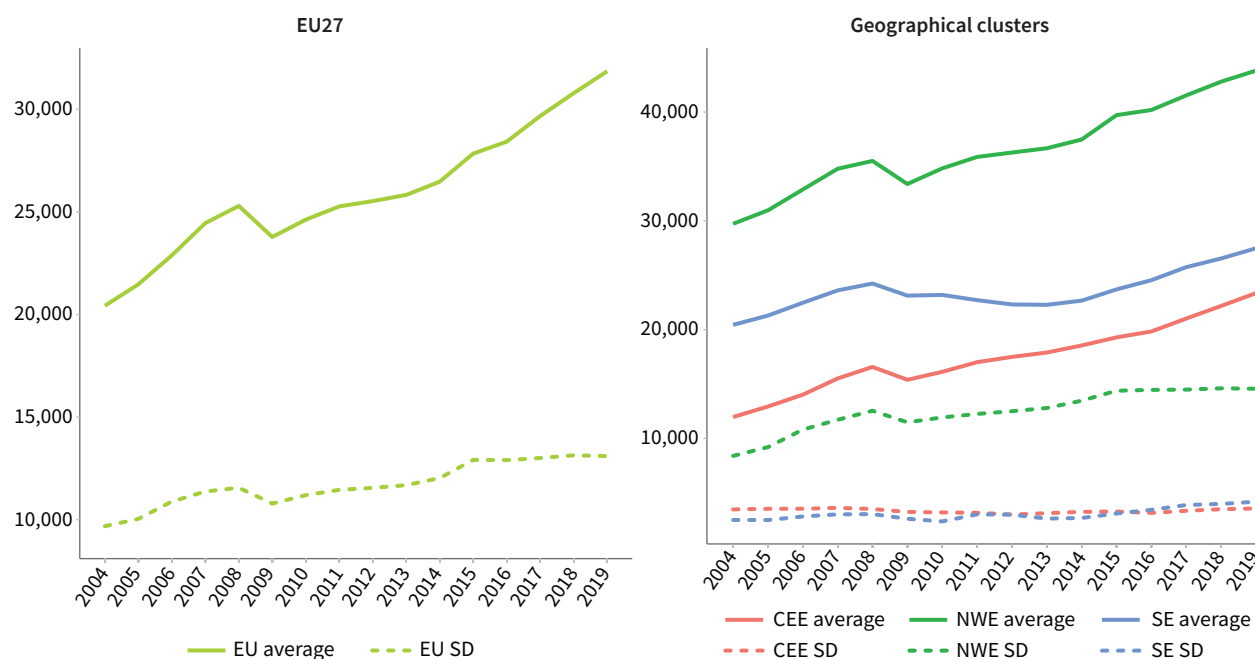
Source: Authors' calculations based on Eurostat, Main GDP aggregates per capita [nama_10_pc]

The strong EU beta-convergence between 2004 and 2019, associated with a beta coefficient of -0.02, was mostly driven by the fast GDP per capita growth rates of CEE countries and their catch-up with better-performing countries. In 2004, CEE countries were at lower levels of GDP per capita than NWE and SE countries (Figure 2), but their average growth rate of 4.3% was far higher than that of NWE (2.3%) or SE (1.8%) countries.

A look at the standard deviation among countries, however, shows that the entire period is characterised by upward sigma-divergence. While the EU average increased over the years, so too did the variation across EU economies, resulting in wider dispersion around the

EU average. These patterns are also reflected at the geographical cluster level. Average GDP per capita and dispersion among the NWE countries were at the highest levels they had ever been in 2004, and they further increased during the economic crisis, never returning to the initial level. By contrast, variation among SE countries remained limited, and between CEE economies, variation decreased over time.

Between 2004 and 2008, the average GDP per capita growth rate in the CEE cluster was 6.8%. Despite a few exceptions, such as Hungary and Slovenia, where growth rates were in line with NWE and SE economies, CEE countries including Bulgaria, Estonia, Latvia,

Figure 2: Sigma-convergence – GDP per capita (PPS), in the EU27 and by geographical cluster, 2004–2019

Note: SD, standard deviation.

Source: Authors' calculations based on Eurostat, Main GDP aggregates per capita [nama_10_pc]

Lithuania, Romania and Slovakia experienced growth rates of between 7% and 10%. During this period, the NWE and SE geographical clusters grew, on average, by around 3.3%, with exceptions such as Luxembourg (6%) and Cyprus (5%). This first subperiod is the one that registered the highest beta coefficient (with the smallest standard error) among the three subperiods analysed (Figure 1).

During the economic crisis period (2008–2013), the average GDP per capita growth rate in the CEE geographical cluster decreased to 1.4% from 6.8% in 2004–2008. Despite this, the indicator continued to grow in CEE countries, while some SE countries experienced negative growth rates, for example Greece (-4%) and Cyprus (-3%). In addition, the NWE geographical cluster experienced a sudden stop in growth, which fell close to 0%.

In the aftermath of the economic crisis, between 2013 and 2019, all countries returned to positive GDP per capita growth. In most NWE countries, growth rates improved slightly compared with the previous period, remaining close to 2%, except for the 8% growth rate in Ireland. Similarly, in CEE countries, growth rates were stable at around 4%, except for Romania (6%) and Slovakia (1%). Among SE countries, the picture was

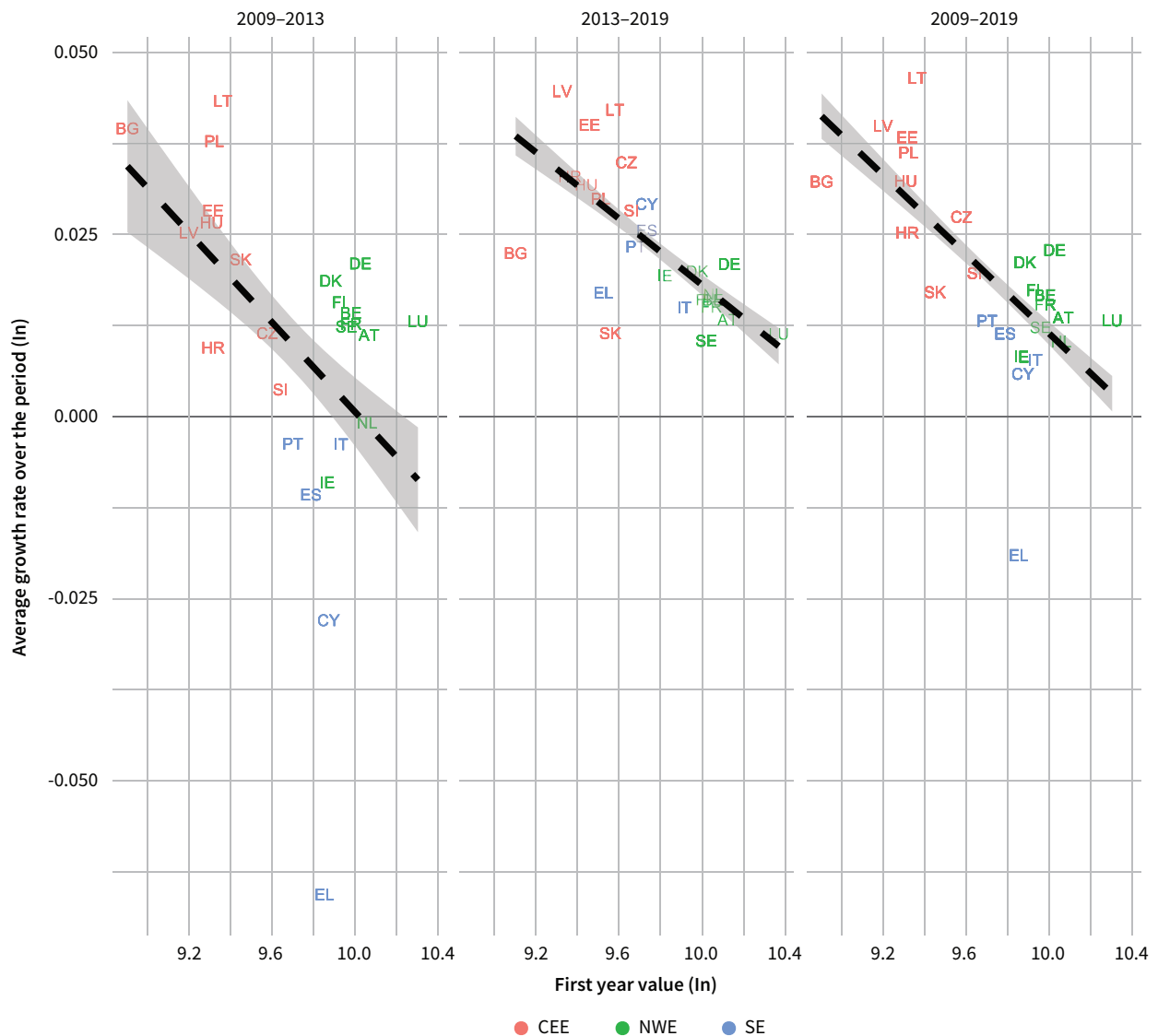
more diverse, with GDP per capita growing faster in Cyprus and Malta (4%) than the other countries in this cluster.

Household disposable income per capita

A complementary indicator to GDP is household disposable income. It reflects the income available to households for spending on goods and services, savings and investment once income distribution has been taken into account (for example, after taxes, social contributions and benefits). Thus, this indicator is a measure of the purchasing power of households. It is calculated as the adjusted gross disposable income of households and non-profit institutions serving households divided by the purchasing power parities of the actual individual consumption of households and by the total resident population.

In line with what was observed for GDP per capita, convergence in household disposable income has been strongly driven by the catch-up of CEE countries (Figure 3). Between 2009 and 2019, the average growth rate for the CEE cluster was 3%, compared with 1.5% in the NWE and 0.4% in the SE geographical clusters. While all NWE countries experienced positive growth rates, some SE countries had null or negative growth rates (for example, -1.9% in Greece).

Figure 3: Beta-convergence – adjusted household disposable income per capita (PPS), EU27, 2009–2019



Notes: Data availability starts from 2009. Data are missing for Malta and Romania in 2009 and for Bulgaria in 2018 and 2019.

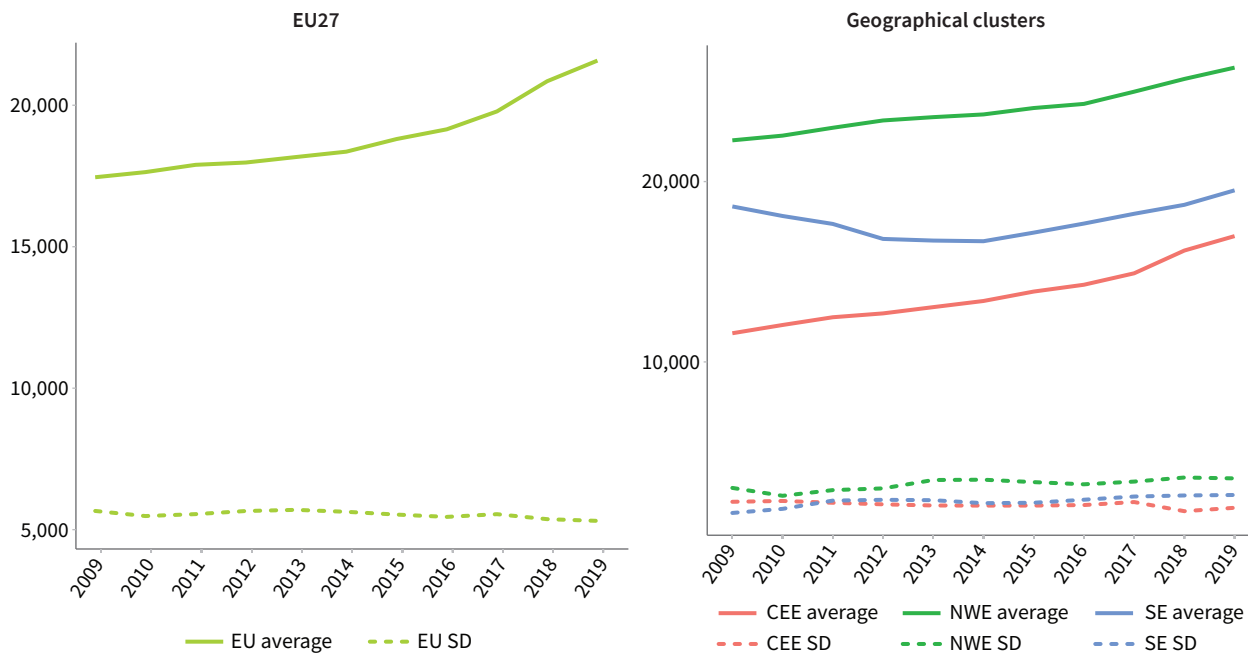
Source: Authors' calculations based on Eurostat, Adjusted gross disposable income of households per capita in PPS [tec00113]

During the economic crisis period (2009–2013), all SE countries suffered negative household disposable income growth rates (on average -2%). Greece (-6.6%) and Cyprus (-3%) were extreme cases, while rates were less negative in Spain (about -1%), Italy and Portugal (-0.4% in each case). The NWE cluster had a low growth rate (1.1%), while that of the CEE cluster was moderate (2.5%), with some outperforming countries, such as Bulgaria, Lithuania and Poland, with growth rates above 3%. This period was characterised overall by upward sigma-divergence, driven particularly by NWE countries. While in CEE countries the average disposable income grew with little between-country variation, SE countries experienced exactly the opposite

trend, resulting in downward sigma-divergence (Figure 4, right panel).

In the post-crisis period (2013–2019), growth rates in household disposable income improved and turned positive for all countries, with SE countries experiencing growth rates similar to those of CEE economies. The CEE cluster remained the region with the fastest growth in this indicator among the three clusters analysed, with an average rate of 3.2%, followed by the SE cluster at 2.2% and the NWE cluster at below 2%. This period was characterised by upward sigma-convergence, indicating that while, on average, disposable income increased, disparities among clusters and countries decreased.

Figure 4: Sigma-convergence – adjusted household disposable income per capita (PPS), in the EU27 and by geographical cluster, 2009–2019



Notes: SD, standard deviation. Data availability starts from 2009. Data are missing for Malta and Romania in 2009 and for Bulgaria in 2018 and 2019.
Source: Authors' calculations based on Eurostat, Adjusted gross disposable income of households per capita in PPS [tec00113]

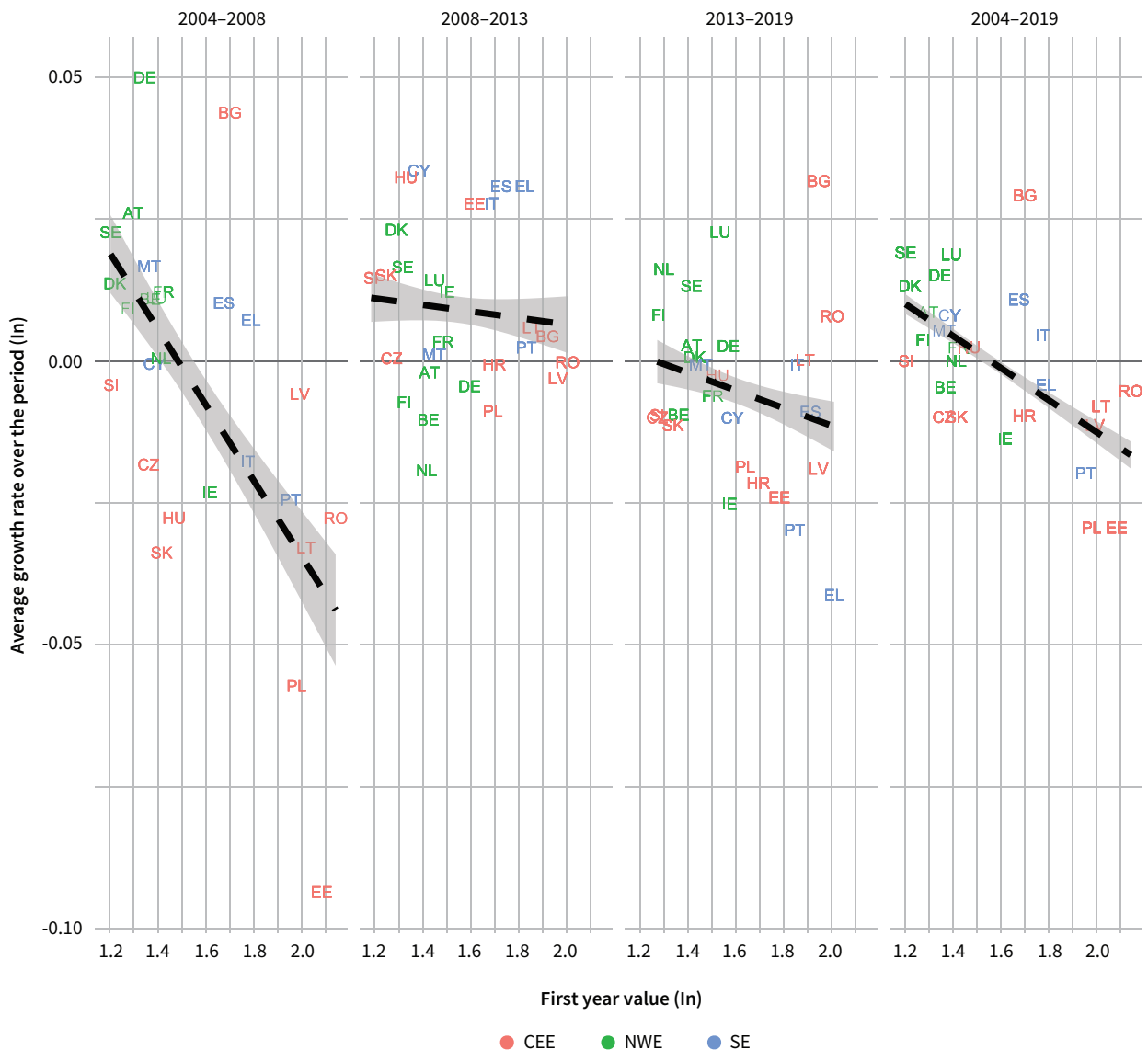
Income inequality

Income inequality is another income-based indicator that captures the distributional dimension of developments in income (as measured by GDP per capita and disposable income). A standard measure of income inequality is the income quintile share ratio (S80/S20), which is defined as the ratio between the total income received by the population in the top quintile and the total income received by the population in the bottom quintile. The higher the S80/S20 ratio, the greater income inequality is, with a ratio equal to 1 indicating an absence of inequality (that is, households in the two quintiles have the same annual income).

Data over 2004–2019 point to a speed of convergence in the rate of inequality of 3%, suggesting that the countries with lower inequality experienced an increase or those with the highest levels experienced a decline. The distribution of the scatter plot in Figure 5 shows, once again, that the process was led by CEE countries.

On average, the CEE cluster experienced a reduction of 0.7% in the income inequality ratio, with the best-performing countries being Estonia and Poland, which reached a 3% reduction. By contrast, in most of the SE countries, as well as in some NWE countries, income inequality gradually increased in the aftermath of the financial crisis.

Figure 5: Beta-convergence – income quintile share ratio, EU27, 2004–2019



Notes: The time series are complete for all EU27 countries starting from 2010. Growth rates for the pre-crisis (2004–2008) and the overall (2004–2019) periods were computed using the first year available (for example, 2004, 2005 or 2006). Thus, the growth rates and the initial values for those countries were computed for a shorter time length. For 2004, data were available for 13 countries; for 2005, data were available for 24 countries. Data for Croatia starts from 2013. The age group is people less than 65 years old.

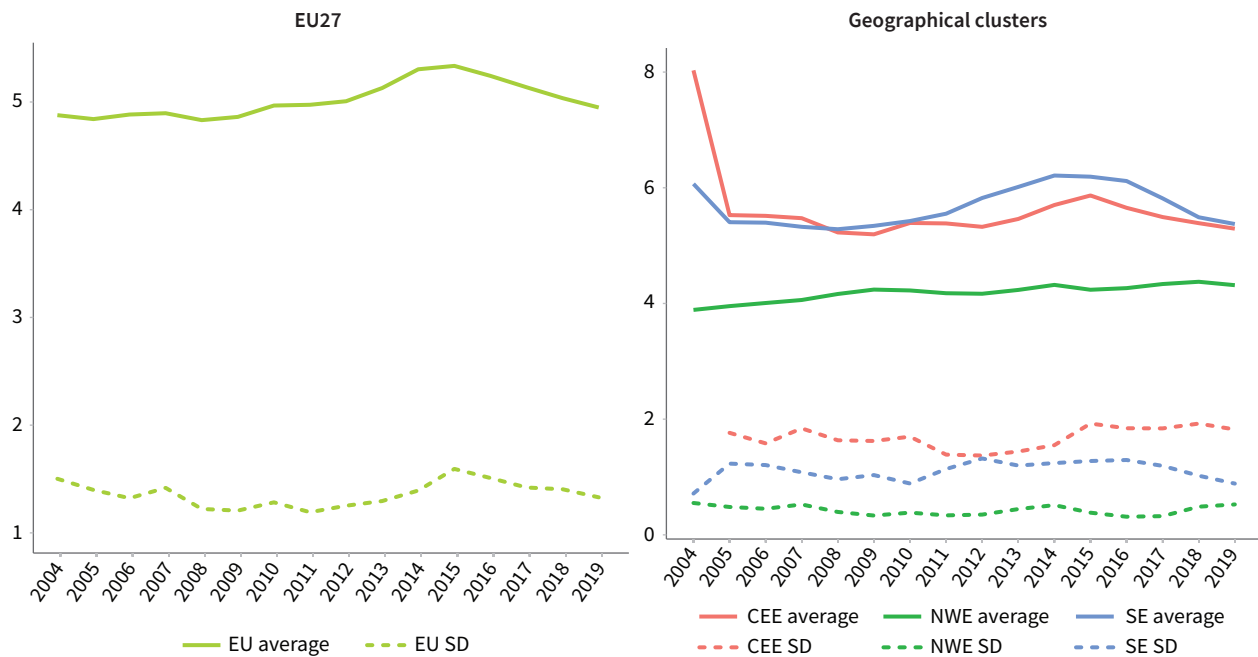
Source: Authors' calculations based on Eurostat, Inequality of income distribution S80/S20 income quintile share ratio – EU-SILC and ECHP surveys [ilc_pns4]

Starting from 2014, EU average income inequality started to decrease and, in 2019, it returned to close to the 2008 level (Figure 6). This dynamic is reflected in the standard deviation from the EU average, with a spike between 2014 and 2016. In terms of dispersion of income inequality at macro-regional level, the CEE cluster exhibited the highest level, followed by the SE and then NWE clusters. NWE countries also had, on average, the lowest level of income inequality. With the economic crisis, SE countries became increasingly unequal, even more unequal than CEE countries. Only since 2018 have SE countries started to return to their 2005 level.

Looking at the subperiod 2004–2008, the income inequality ratio decreased substantially in CEE countries, except in Bulgaria (+4.3%). Among the countries in the other two clusters, Portugal (-2.4%), Italy (-1.7%) and Ireland (-2.3%) also experienced a drop. This period was characterised by strong beta-convergence at EU level.

During the crisis period (2008–2013), the first-year value does not explain any of the variation in the growth rate, and therefore there is no evidence of beta-convergence. Moreover, an increasing EU average and standard deviation point to downward (in the sense of undesirable) sigma-divergence. In other words, not only did income inequality increase in the EU, but disparities among countries widened during this period.

Figure 6: Sigma-convergence – income quintile share ratio, in the EU27 and by geographical cluster, 2004–2019



Notes: SD, standard deviation. For 2004, data were available for 13 countries; for 2005, data were available for 24 countries. Data were available for all of the EU27 countries from 2010. The age group is people less than 65 years old.
Source: Authors' calculations based on Eurostat, *Inequality of income distribution S80/S20 income quintile share ratio – EU-SILC and ECHP surveys [ilc_pns4]*

In the 2013–2019 subperiod, there was evidence of upward sigma-convergence and weak beta-convergence towards lower income inequality. However, the distribution of countries starting with higher levels is quite dispersed. Higher drops occurred in Greece and Portugal (4% and 3%, respectively). This is likely to be explained by a gradual normalisation of economic conditions after the deep economic recession and the

sharp increase in inequality, rather than a redistribution within income levels. In the NWE cluster, some diverging patterns emerged: for instance, inequality decreased in Ireland by 2.5%, while it increased in Luxembourg by 2.4%.

Given the increasing debate on inequality, Box 1 attempts to shed further light on convergence in income inequality by looking into conditional convergence.

Box 1: Conditional convergence in income inequality

As previously mentioned, the literature on beta-convergence has essentially focused on income per capita rather than on the distribution of income. While per-capita income convergence can result from endogenous market mechanisms, such as those highlighted by neoclassical theory in the context of market integration, exogenous mechanisms can also play a role. On the one hand, it could be assumed that, if country characteristics are not too different, income convergence should be associated with convergence in income distribution (and hence in inequality and, by extension, poverty; see, for instance, Bénabou, 1996). On the other hand, redistribution mechanisms may be affected by major long-term changes and by public policies.

For instance, the transformation of CEE countries into market economies could be considered such an event. In that context, in a country with very low levels of inequality (a socialist economy), liberalisation is likely to increase inequality, and the process of EU integration is likely to have led to higher inequality than the EU average. Another example of exogenous changes are public policies. In countries with a strong welfare state, social expenditure and social policies are expected to be in place to fight increasing inequality. In addition, social tolerance for rising inequality is likely to be low in these countries and so result in political pressure for reduction.

From this perspective, factors other than endogenous market mechanisms make convergence in inequality a likely outcome in the EU. However, the recent evolution of inequality in the EU may not have resulted in the expected outcomes, suggesting that income inequality is a complex socioeconomic phenomenon, and its

dynamics result from the interconnections and feedback between numerous factors. Despite a large and flourishing body of literature, there is no certainty about the role of market forces, as opposed to institutional factors and policy choices, in determining the direction of income inequality. This makes the empirical analysis of convergence in inequality very complex, and several authors have tried to shed light on it.

As part of the current study, conditional beta-convergence in income inequality as measured by the S20/80 ratio was analysed. First, a set of potential explanatory variables on inequality in income level was regressed, keeping only those that were statistically significant. As a second step, their growth rates were regressed over three periods (2004–2008, 2008–2013 and 2013–2019) against the respective starting year value (the value for the first year of each of the three periods) and the relevant explanatory variables identified earlier.

The empirical approach was based on panel ordinary least squares regressions, which has the advantage of reducing the effect of short-term disturbances, with geographical dummies to control for cluster-specific characteristics, while retaining between-country variation that would otherwise be absorbed by country-specific fixed effects. Period dummies were also included to control for possible common shocks (Bisciari et al, 2020b).

The potential explanatory variables were derived from the literature. Following Nolan et al (2019), who started from the assumption that the interaction between the demand and supply of labour and capital determines the level of disposable income, which in turn influences the level of inequality via the tax–benefit system, structural macroeconomic changes were considered, such as technological transformation and globalisation. Higher technological innovation can increase job polarisation by increasing the demand for capital and for highly skilled labour over low-skilled labour (Acemoglu, 2002; Goos et al, 2014). According to the OECD, technological change increased the gap between the 90th and the 10th percentiles by about one-third. The effect of trade globalisation, on the other hand, is rather uncertain. While it has been shown that globalisation contributed to promoting competitiveness and efficiency, it is also cited as a driver of higher inequality. According to some studies, globalisation has a negative impact on income inequality, as the proportion of labour income is reduced in advanced economies (Jaumotte and Tytell, 2007; Dao et al, 2017). Tridico (2018) argues that globalisation changes socioeconomic models and has created vulnerabilities in societies by weakening labour market institutions and increasing labour flexibility, accompanied by a retrenchment of the welfare state that, in turn, results in higher income inequality in OECD countries.

In addition, human capital and technological endowment, which lead economic development, are usually associated with a higher demand for highly skilled workers and hence with inequality. Similarly, economies transitioning from higher value added in agriculture to higher value added in industry and services tend to experience increases in the existing income inequality. Demographic factors such as population, age, household size, immigration and gender can affect the labour supply.

Against this background, a simple model was developed explaining the contribution of several variables to the level of income inequality: GDP per capita, GDP per capita squared (along the Kuznets hypothesis),⁴ population growth, the proportion of the population with a tertiary education, the value added in the agriculture and information and communications technology (ICT) sectors, trade openness,⁵ the proportion of migrants among the total population, and the government's spending on social protection benefits. Dummies for the geographical clusters were also added. Based on the results of the regressions (which are reported on in detail in Annex 1), only the statistically significant variables were retained and a model to measure conditional beta-convergence was developed, as illustrated in Table 3.

Column 1 in Table 3 is included for comparison purposes. In columns 2–5, the addition of structural characteristics increases the beta estimate, indicating faster convergence. Higher GDP per capita is associated with lower growth in income inequality until a turning point when additional units of GDP per capita are associated with higher growth in inequality (columns 2–3).

Among countries' structural and demographic characteristics, only the value added in agriculture and the proportion of migrants are statistically significant. Both are associated with higher growth in income inequality.

While dummies for the CEE and SE clusters do not indicate any statistically significant difference in inequality growth rates from NWE countries, the crisis period (2008–2013) dummy indicates higher growth rates than the pre-crisis period (2004–2008).

4 This hypothesis states that, in the initial stages of development, a country tends to experience relatively low, but rising, wage (not income) inequality, because the productivity in the agricultural sector is considerably lower than it is in the emerging and growing industrial sector. Later in the course of economic growth, shifts in labour from the agricultural sector towards industry and progress in agriculture modernisation and productivity should lead to a decline in wage dispersion. The result is an inverted U-shaped relationship between income per capita and inequality, which is known as the Kuznets curve.

5 Trade openness is determined as the sum of exports and imports over the GDP.

Table 3: Conditional convergence in income inequality, 2004–2008, 2008–2013 and 2013–2019

Income inequality growth (ln)	(1)	(2)	(3)	(4)	(5)
Initial value (ln)	-0.034*** (0.011)	-0.053*** (0.013)	-0.043*** (0.011)	-0.044*** (0.014)	-0.053*** (0.015)
GDP per capita (ln)		-0.169** (0.08)	-0.183* (0.101)	-0.014 (0.154)	-0.168 (0.104)
GDP per capita ² (ln)		0.009** (0.004)	0.01* (0.005)	0.001 (0.008)	0.009* (0.005)
Population growth		0.003 (0.003)	0.005* (0.002)	0.002 (0.004)	0.003 (0.003)
Value added in agriculture		0.01*** (0.004)	0.01*** (0.003)	0.009** (0.004)	0.01*** (0.004)
Migration				0.007* (0.004)	
CEE dummy		-0.014 (0.011)	-0.006 (0.011)	-0.018 (0.013)	-0.014 (0.01)
SE dummy		0.005 (0.008)	0.009 (0.009)	-0.003 (0.01)	0.005 (0.01)
2008–2013		0.017*** (0.006)	0.015*** (0.005)	0.018*** (0.006)	0.017*** (0.006)
2013–2019		0.007 (0.008)	0.004 (0.006)	0.006 (0.007)	0.006 (0.006)
Constant	0.053*** (0.016)	0.875** (0.417)	0.904* (0.522)	0.12 (0.783)	0.871 (0.536)
No. of observations	80	80	76	75	80
Adjusted R ²	0.145	0.316	0.347	0.318	0.315
Region dummy	No	Yes	Yes	Yes	Yes
Period dummy	No	Yes	Yes	Yes	Yes

Notes: The table shows only statistically significant estimated coefficients. Robust standard errors are given in parentheses. Statistical significance is indicated as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Authors' calculations

To complement the analysis, the factors that can influence the probability of convergence were investigated. For this purpose, a binary logit model was estimated, in which the dependent variable is a binary outcome variable, which takes a value of 1 ('convergence in inequality') if a country started from a level of income inequality above the EU average in the first year of each subperiod considered and decreased over time (leading to either upward or downward convergence at EU level) or, otherwise, a value of 0.

Besides including the relevant explanatory variable in the logit regression, the initial value (as a proportion of the EU level at time t) of the relevant indicator was controlled for, to account for the fact that countries' distance from the EU average could be significantly different. It should be noted that, due to the non-linearity of the model, the estimated coefficients could not be interpreted as the effect of one unit change in the independent variable on the probability of convergence. However, to have a sense of how the independent variables could affect the probability of convergence, based on the regressions, the average partial/marginal effect (APE) was estimated. The APE measures the average of the partial effects of a unit increase in independent variables.

As illustrated in Table 4, higher income inequality at the start of the period is associated, on average, with a higher probability of convergence. Both a higher value added from the agricultural sector and trade openness were negatively correlated with a higher probability of convergence.

Table 4: APE on probability of convergence in income inequality

Convergence in income inequality	APE
First year value (% of the EU)	0.0153*** (0.00485)
Value added in agriculture	-0.231*** (0.0651)
Trade openness	-0.00600*** (0.00171)
CEE dummy	0.563*** (0.107)
SE dummy	-0.0425 (0.0839)
2008–2013	-0.332*** (0.0613)
2013–2019	0.183** (0.0770)
No. of observations	70

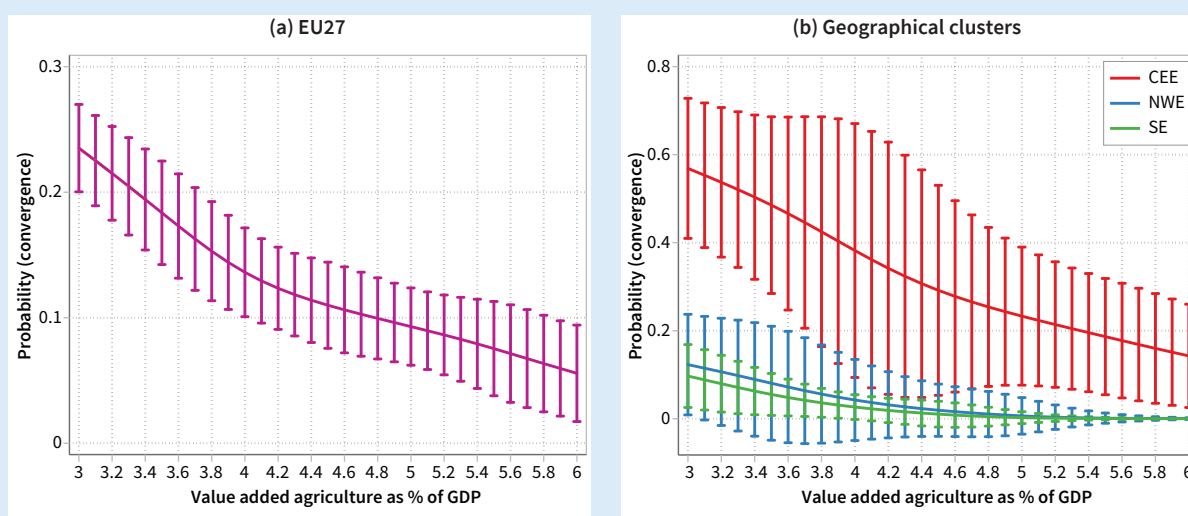
Notes: Robust standard errors are given in parentheses. Statistical significance is indicated as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Authors' calculations

The APE of being a CEE country, relative to NWE countries, increased the probability of convergence. For the crisis period, the APE on convergence was negative, indicating that, in this period, the probability of convergence was lower than during the pre-crisis period.

Finally, the predicted probabilities of convergence were plotted against a selected (significant) independent variable, in this case the value added in agriculture. Figure 7, panel (a), plots the predicted probabilities considering the EU as a whole, while panel (b) presents the results by geographical cluster, to highlight potential differences.

This exercise yielded the finding that the probability of convergence in inequality was lower for countries with higher value added in the agricultural sector. The probability of convergence was higher for CEE countries that had a lower proportion of value added in agriculture, whereas for SE and NWE countries the probability was lower and lost statistical significance as the value added increased.

Figure 7: Predicted probabilities of convergence in income inequality, by value added in the agricultural sector, in the EU27 and by geographical cluster

Source: Authors' calculations

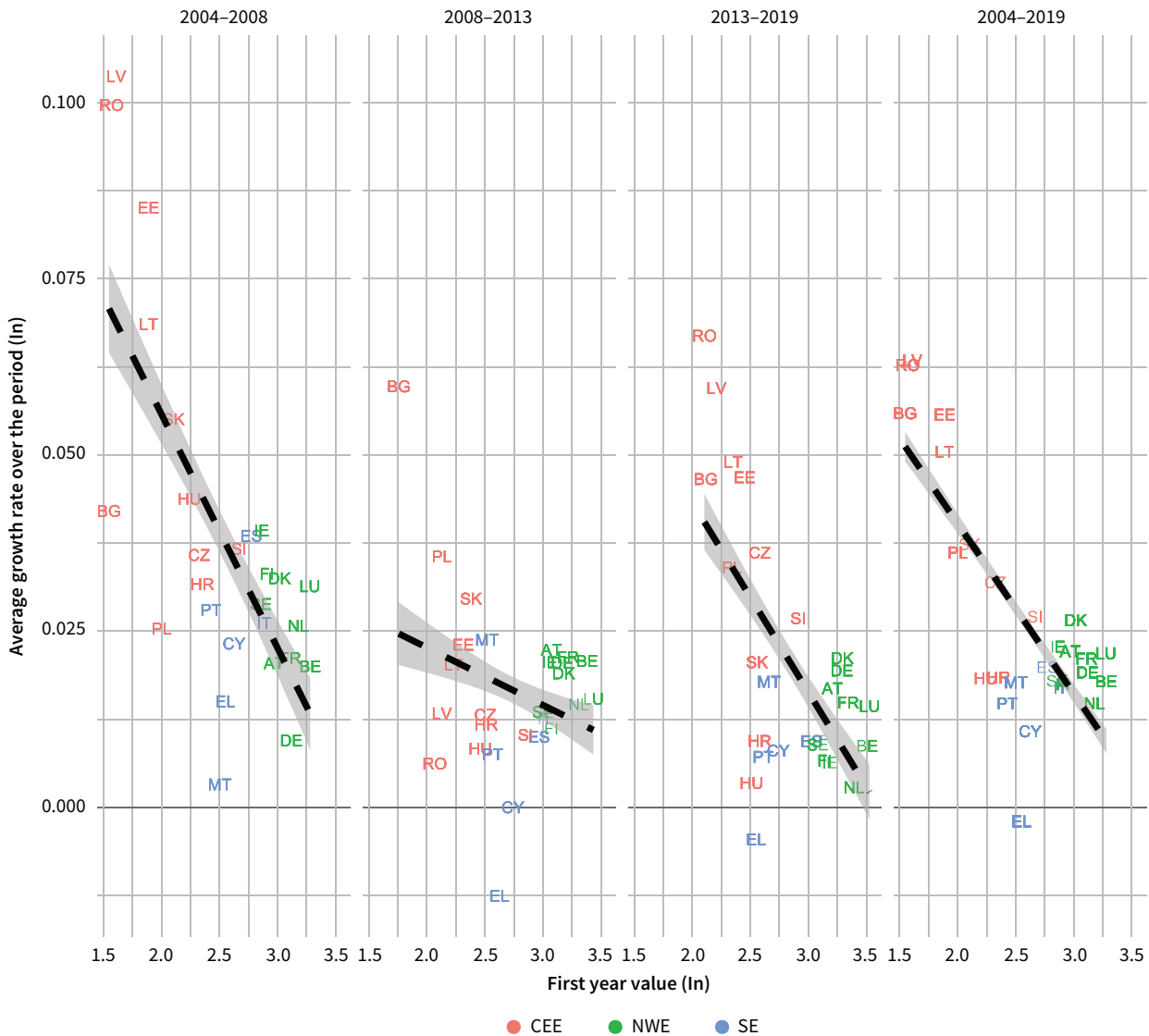
Compensation of employees per hour worked

The last income indicator considered is the compensation of employees per hour worked. This is calculated from national accounts data and is defined as the compensation of employees for the total economy – including wages, salaries and employers' social contributions – divided by the total number of hours worked by all employees. An increase in the ratio may be driven either by an increase in the

compensation (larger than the total number of hours worked) or by a decline in the total number of hours worked (relative to the compensation). This variable is typically used as an indicator of relative competitiveness⁶ rather than of income, and convergence patterns have always been considered relevant from a macroeconomic perspective, in particular in the context of the monetary union. The analysis uses values expressed in PPS in the EU27.

⁶ Cross-country comparisons of annual labour compensation provide some insight into movements in trade balances across countries, particularly within the euro zone and among countries with fixed exchange rates, for which labour cost differentials are key in determining commercial flows. If all other factors are considered equal, bilateral trade balances should be stable if hourly compensation increases in line with labour productivity (see OECD, 2014).

Figure 8: Beta-convergence – compensation of employees per hour worked, EU27, 2004–2019



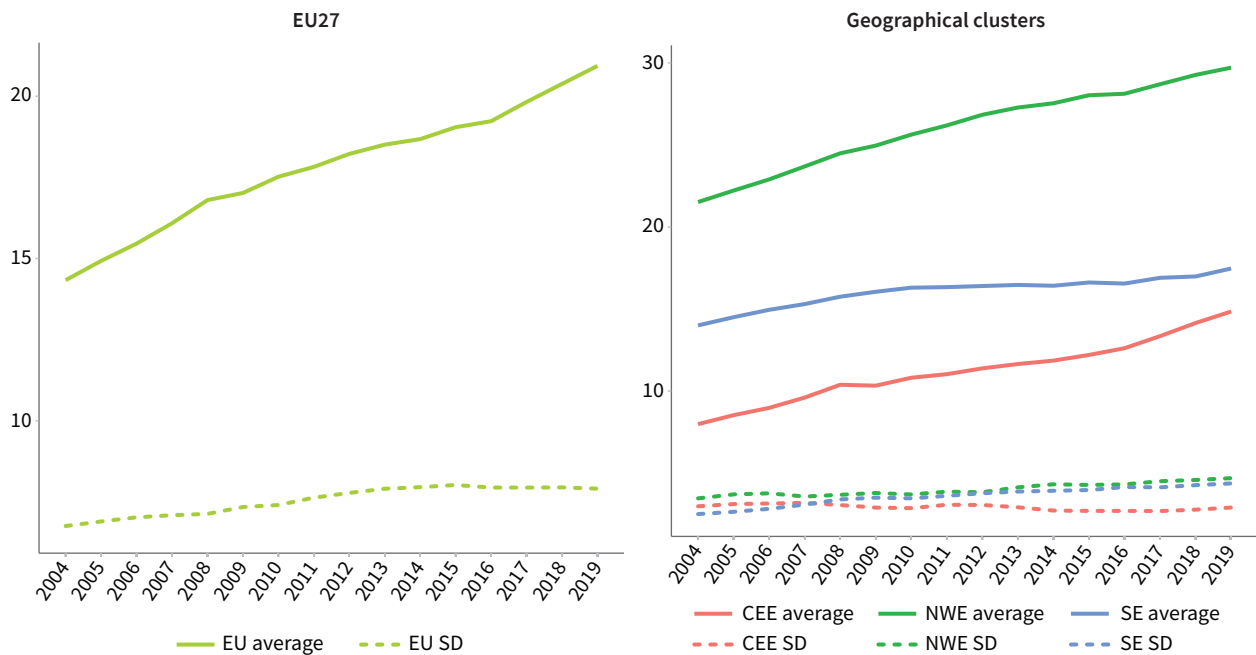
Source: Authors' calculations based on Eurostat, Labour productivity and unit labour costs [nama_10_lp_ulc]

The beta-convergence analysis points to strong convergence over the entire period (2004–2019), mostly driven by CEE countries, with an average speed in the catch-up process of 2% every year (Figure 8, 2004–2008 panel). In the CEE cluster, the indicator grew on average by more than 4%, with Bulgaria, Estonia, Latvia and Romania growing at around 6%. In the NWE and SE clusters, by contrast, the compensation of employees per hour worked increased by approximately 2%, with only Greece experiencing a reduction. Even though this period is characterised by an increase in hourly compensation in the majority of

the Member States and in the EU average, the variability increased as well, resulting in upward sigma-divergence (Figure 9, left panel).

NWE countries started with the highest average in 2004 and followed an upward trend, together with CEE economies. In CEE countries, the standard deviation decreased from 2007 onwards. SE countries, on the other hand, started with the lowest average standard deviation but reached similar levels to NWE economies, with no significant changes in the average (Figure 9, right panel).

Figure 9: Sigma-convergence – compensation of employees per hour worked, in the EU27 and by geographical cluster, 2004–2019



Note: SD, standard deviation.

Source: Authors' calculations based on Eurostat, Labour productivity and unit labour costs [nama_10_lp_ulc]

In the pre-crisis period, labour compensation grew particularly fast in the CEE countries, with Latvia (+10.4%), Romania (+10%) and Estonia (+8.5%) achieving the highest growth rates. This trend, however, abruptly stopped during the crisis period. In CEE and NWE countries, growth rates remained positive. Among SE countries, only Greece experienced a strong decrease in the labour compensation indicator, which also remained negative in the final subperiod (2013–2019).

Social indicators

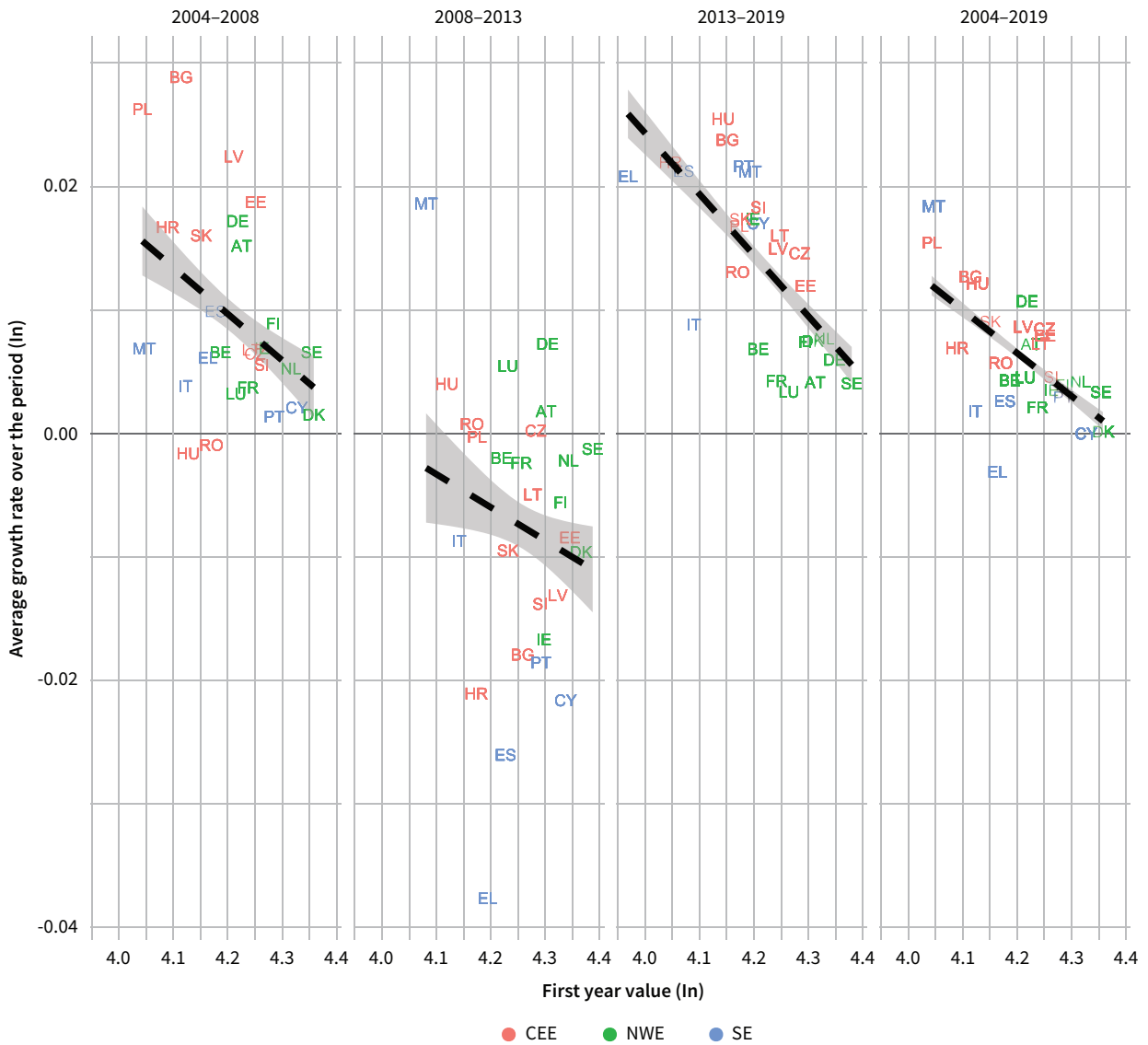
This section focuses on convergence in five social indicators: employment rate, unemployment rate, NEET rate, early school-leavers rate and AROPE rate.

Employment rate

The employment rate is defined as the number of employed people relative to the working-age population (those aged 20–64 years).

In 2004, CEE countries were starting from a lower employment rate than SE and NWE economies (Figure 10, 2004–2008 panel). On average, CEE economies' employment rate grew by 1% between 2004 and 2019, whereas it grew by only around 0.4% in the other two clusters. This period was characterised by an increase in the EU average until 2008, a decrease between 2008 and 2013, and a rebound to an upward trend afterwards.

Figure 10: Beta-convergence – employment rate, EU27, 2004–2019

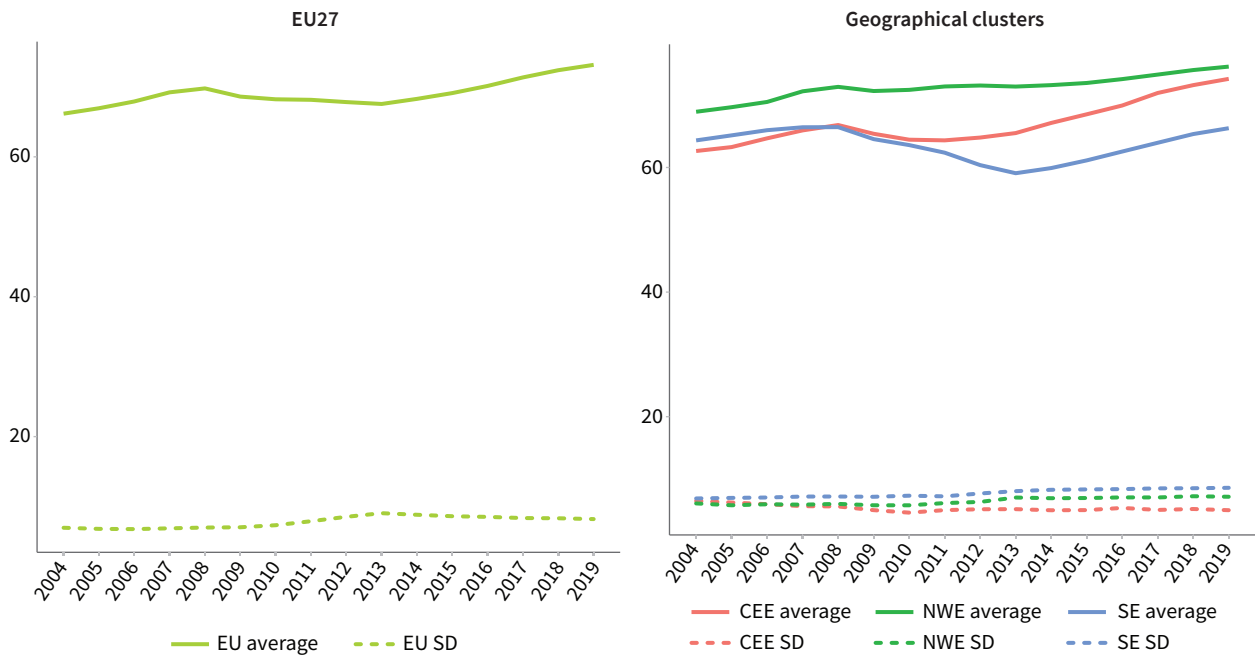


Note: The analysis was performed on data for both sexes, aged 20–64 years, of all citizenship statuses.
Source: Authors' calculations based on Eurostat, Employment rates by sex, age and citizenship (%) [lfsa_ergan]

The drop experienced during the financial crisis was particularly high in SE countries (Figure 11, right panel), where the standard deviation increased. NWE economies, on the other hand, managed to maintain, on average, a stable employment level, while CEE economies experienced an increase from 2010. In the last few years of the period analysed, CEE countries became more similar to NWE economies than to SE economies in terms of the employment rate.

In the first subperiod, the employment rate of CEE countries, which was low initially, grew rapidly. Employment in Bulgaria and Poland grew at rates close to 3%. Among NWE countries, the highest growth rates were registered in Germany (1.7%), while among SE countries the highest growth rate was in Spain (1%).

Figure 11: Sigma-convergence – employment rate, in the EU27 and by geographical cluster, 2004–2019



Notes: SD, standard deviation. The analysis was performed on data for both sexes, aged 15–64 years, of all citizenship statuses.
Source: Authors' calculations based on Eurostat, Employment rates by sex, age and citizenship (%) [lfsa_ergan]

This pattern, however, was disrupted by the economic crisis, when employment rates started to decrease in many countries. Exceptions were in northern and eastern Europe, where there was no significant change between 2008 and 2013. Employment rates, however, dropped significantly in SE countries, particularly in Greece (-4%) and Spain (-3%).

In the 2013–2019 subperiod, all EU economies recovered and recorded a rise in employment rates, particularly in SE and CEE countries. Among SE countries, only Cyprus and Italy experienced growth rates below 2%.

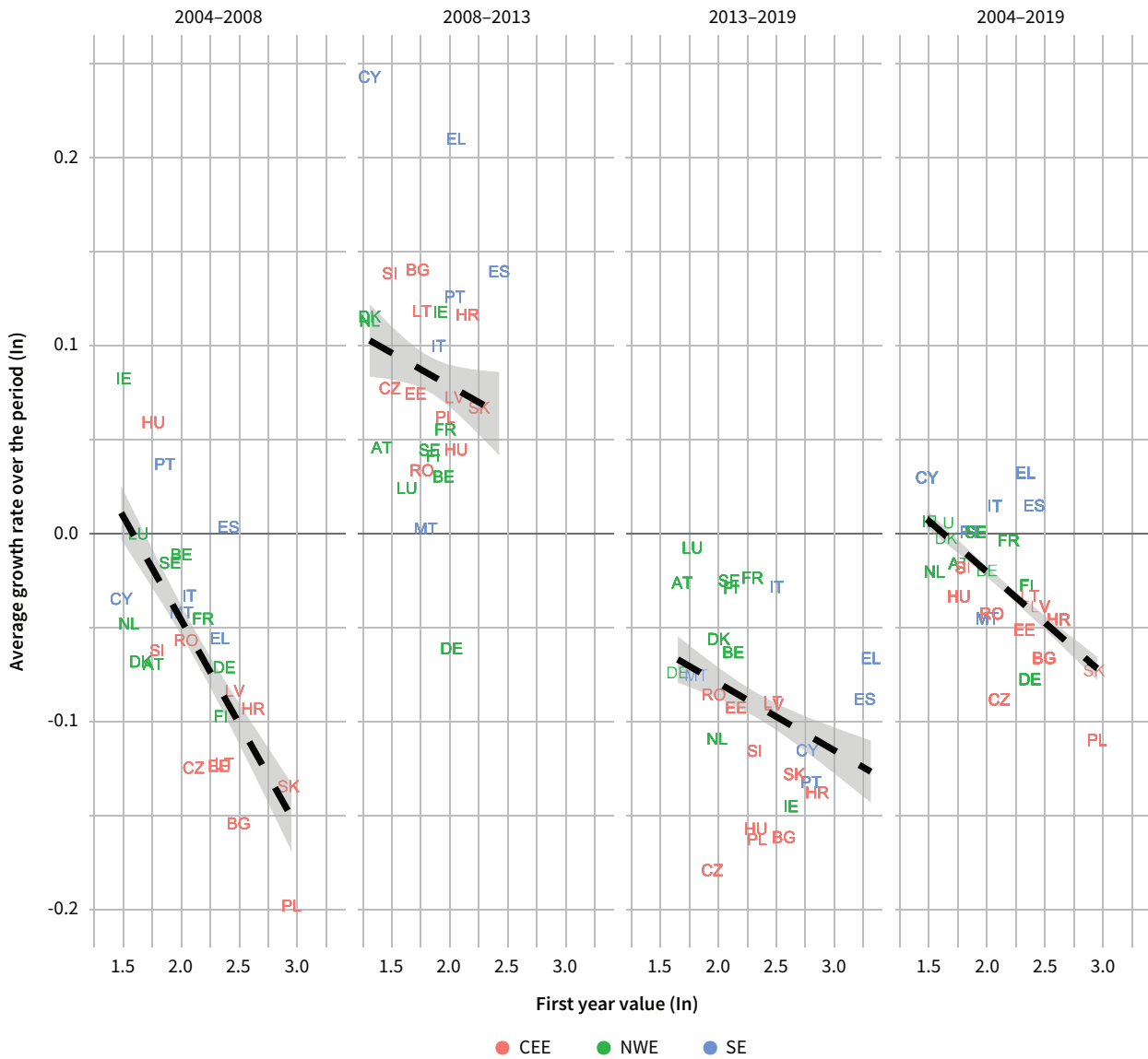
Unemployment rate

The unemployment rate is defined as the number of unemployed people as a percentage of the labour force aged 15–74 years. The analysis of this indicator offers a

similar, and complementary, picture to the analysis of the employment rate, but with more marked patterns. The reason for this is that the unemployment rate tends to react to changes in economic conditions more than the employment rate, as the denominator of the ratio (labour force) is affected by changing economic conditions.

Similar to the employment rate, the unemployment rate showed strong beta-convergence between 2004 and 2019 (Figure 12). This process saw decreasing unemployment rates in CEE countries, enabling them to catch up on average by 5.4%, while in SE economies rates increased on average by 0.8%. Convergence seemed to be mostly driven by the first subperiod (the pre-crisis period), when the beta coefficient was the largest, with an average speed of 11%. Convergence was much weaker during and after the crisis.

Figure 12: Beta-convergence – unemployment rate, EU27, 2004–2019



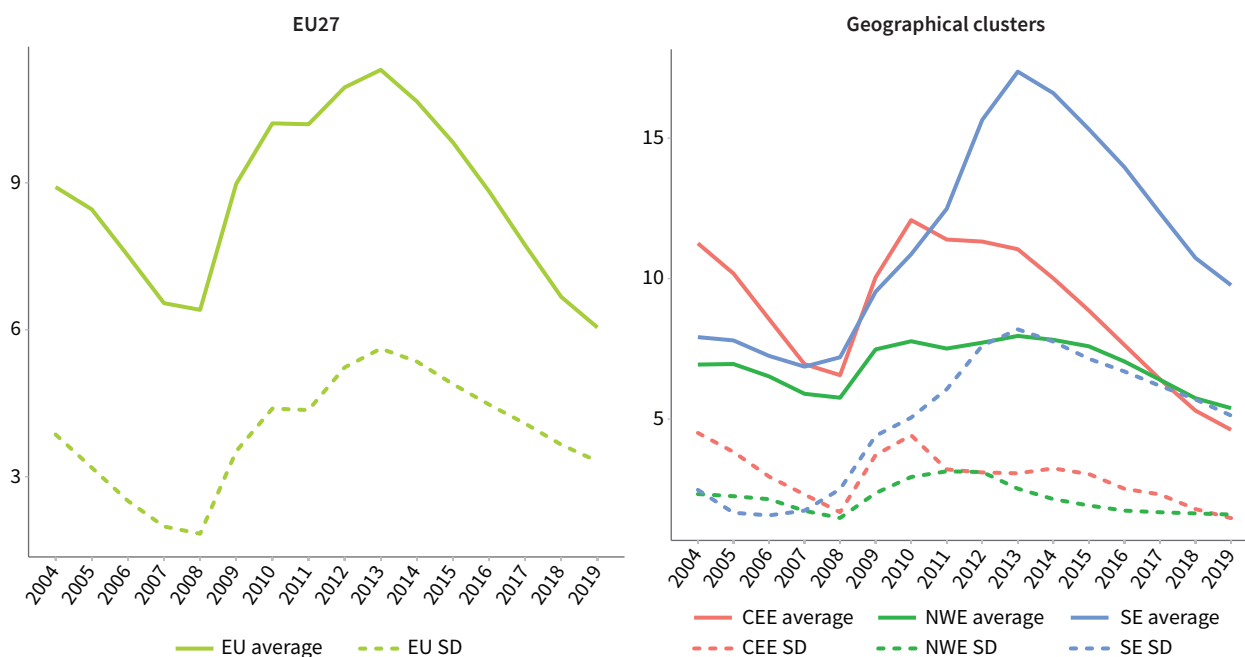
Note: The analysis was performed on data for both sexes, aged 15–74 years, of all citizenship statuses.

Source: Authors' calculations based on Eurostat, Unemployment rates by sex, age and citizenship (%) [lfsa_organ]

In terms of sigma-convergence (Figure 13), both the EU average and the standard deviation exhibit countercyclical patterns: a decline in times of economic growth and an increase during downturns. In the period prior to the economic crisis, the EU experienced upward convergence, with a decreasing EU average accompanied by a decreasing standard deviation.

Following this, there was a period of downward divergence during the Great Recession, until 2013, when the EU returned to the previous trend of upward convergence. These patterns are also reflected at the geographical cluster level, but while in CEE countries, upward convergence had already returned by 2010, SE and NWE countries had to wait until 2013.

Figure 13: Sigma-convergence – unemployment rate, in the EU27 and by geographical cluster, 2004–2019



Notes: SD, standard deviation. The analysis was performed on data for both sexes, aged 15–74 years, of all citizenship statuses.
Source: Authors' calculations based on Eurostat, Unemployment rates by sex, age and citizenship (%) [lfsa_organ]

In the first subperiod, almost all Member States experienced a decrease in the unemployment level. Interestingly, in 2004, the rate across countries was quite diverse, with CEE countries starting from the highest rates but also seeing the largest decreases (for example, -19.7% in Poland and -15% in Bulgaria). The only exception was Hungary, where the unemployment rate increased by 6%.

During the economic crisis, unemployment rates increased almost everywhere, particularly in SE countries, with the highest increases over 2008–2013 in Cyprus (from 3.8% to 16.1%) and Greece (from 7.9% to 27.7%). Increases were also relatively large in Italy, Portugal and Spain, but in those countries they were more in line with changes in some NWE countries (for example, Denmark, Ireland and the Netherlands) and CEE countries (for example, Bulgaria and Slovenia). On average, however, the growth in unemployment was higher in the SE cluster than in the CEE and NWE clusters.

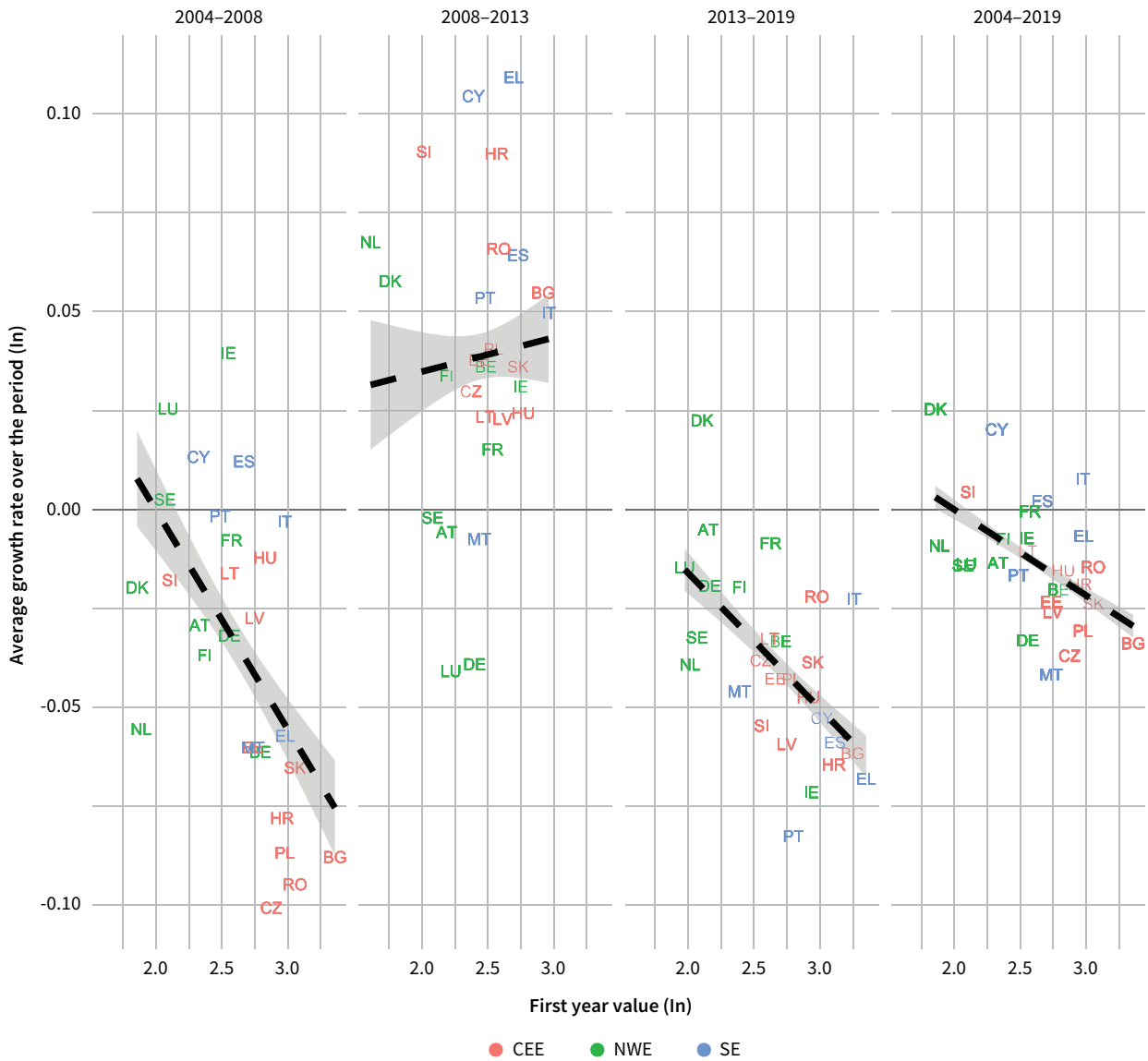
The economic crisis period was followed by decreasing unemployment rates in all countries, again mostly driven by CEE countries. At the beginning of the recovery period, CEE countries had unemployment rates closer to those of NWE countries than of SE countries, the latter being most severely hit by the crisis. This trend was also strengthened by the slower decrease in the standard deviation from the EU average compared with the first subperiod, possibly pointing to long-term effects of the crisis on unemployment.

NEET rate

Extending the analysis to add a specific youth dimension, EU convergence in the NEET rate was investigated. The NEET rate is defined as the percentage of people aged 15–29 years old who are not in education, employment or training. It is computed as the ratio between, on the one hand, the population aged 15–29 years who are inactive, are unemployed or have not received any formal or informal education or training in the four weeks preceding the survey and, on the other hand, the total population in the same age range. It should be noted that, by nature, the NEET rate refers to a highly heterogeneous group (Eurofound, 2016; De Luca et al, 2020) in terms of individual characteristics (for example, gender and educational attainment) and reasons for being NEET (for example, health or family situation) (Furlong, 2006). The NEET rate reveals the dynamics associated with the younger population in terms of education and participation in the labour market, as well as vulnerabilities in terms of the labour market and social inclusion.

The 2004–2019 period was characterised by beta-convergence in the NEET rate, driven by the catch-up of CEE countries (Figure 14). In CEE countries, where the NEET rate was highest in 2004, the annual average decrease was -2.1%, while in SE and NWE countries it was -0.6% and -0.9%, respectively. Only in Denmark (+2.5%) and Cyprus (+2%) did the NEET rate increase between 2004 and 2019. On average, the speed of the reduction in disparities (towards lower NEET rates) occurred at 2% on an annual basis.

Figure 14: Beta-convergence – NEET rate, EU27, 2004–2019



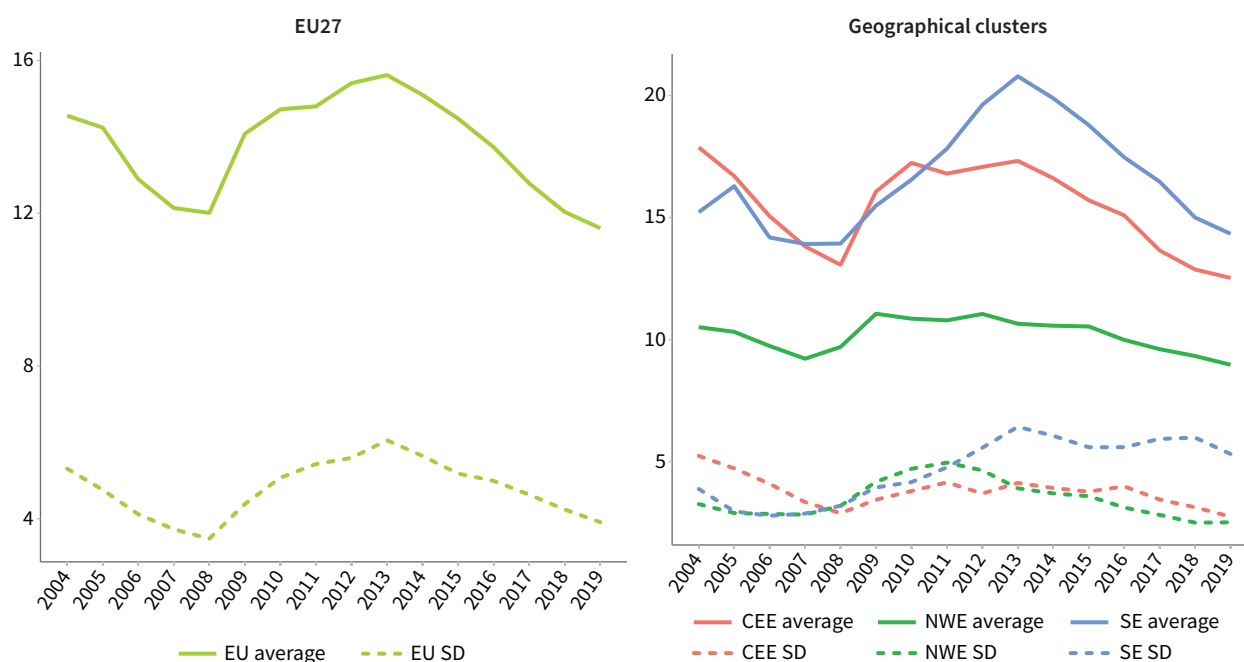
Note: The age group is 15–29 years.

Source: Authors' calculations based on Eurostat, Young people neither in employment nor in education and training (15–24 years) – % of the total population in the same age group [tipslm90]

Between 2004 and 2008, the NEET rate decreased in all EU economies, with CEE countries managing to catch up (particularly Czechia, with a 10% drop). Most of the NWE countries started from a low NEET rate and reduced it (for example, in Belgium it decreased by 6%). In SE countries, on the other hand, no significant progress was made. In terms of sigma-convergence, both the EU average and the standard deviation decreased, thus achieving upward sigma-convergence (Figure 15, left panel).

In 2008–2013, there was no evidence of beta-convergence in the NEET rate; instead, countries started to diverge at an annual rate of 1%. The NEET rate increased or experienced only a minimal decrease in most economies. Among SE countries, it increased substantially in Cyprus (10.4%) and Greece (11%). Up to 2013, both the EU average and dispersion increased, indicating downward sigma-divergence.

Figure 15: Sigma-convergence – NEET rate, in the EU27 and by geographical cluster, 2004–2019



Notes: SD, standard deviation. The age group is 15–29 years.

Source: Authors' calculations based on Eurostat data, Young people neither in employment nor in education and training (15–24 years) – % of the total population in the same age group [tipslm90]

During the 2013–2019 period, EU countries started to converge again. The negative impact of the financial and debt crises on SE countries was evident, as they reported NEET rates in 2013 in line with those of CEE countries. SE countries, however, experienced a greater average decrease than that during the pre-crisis period (-1% in 2004–2008 versus -5.5% in 2014–2019). In this final subperiod, there was also upward sigma-convergence, with a declining EU average and standard deviation. Similar to employment and unemployment rates, the NEET rate also seems to have followed a cyclical pattern: downward sigma-divergence during the recession and upward sigma-convergence in the subsequent recovery period, with both the EU average and the standard deviation in 2019 returning to the pre-crisis level.

At the geographical cluster level, the degree of variation between SE countries increased substantially in the aftermath of the financial crisis but reached (and even exceeded) the pre-crisis level afterwards. The post-crisis period for SE countries was characterised by downward sigma-divergence. The standard deviation in CEE and NWE countries exhibited a cyclical pattern, with many

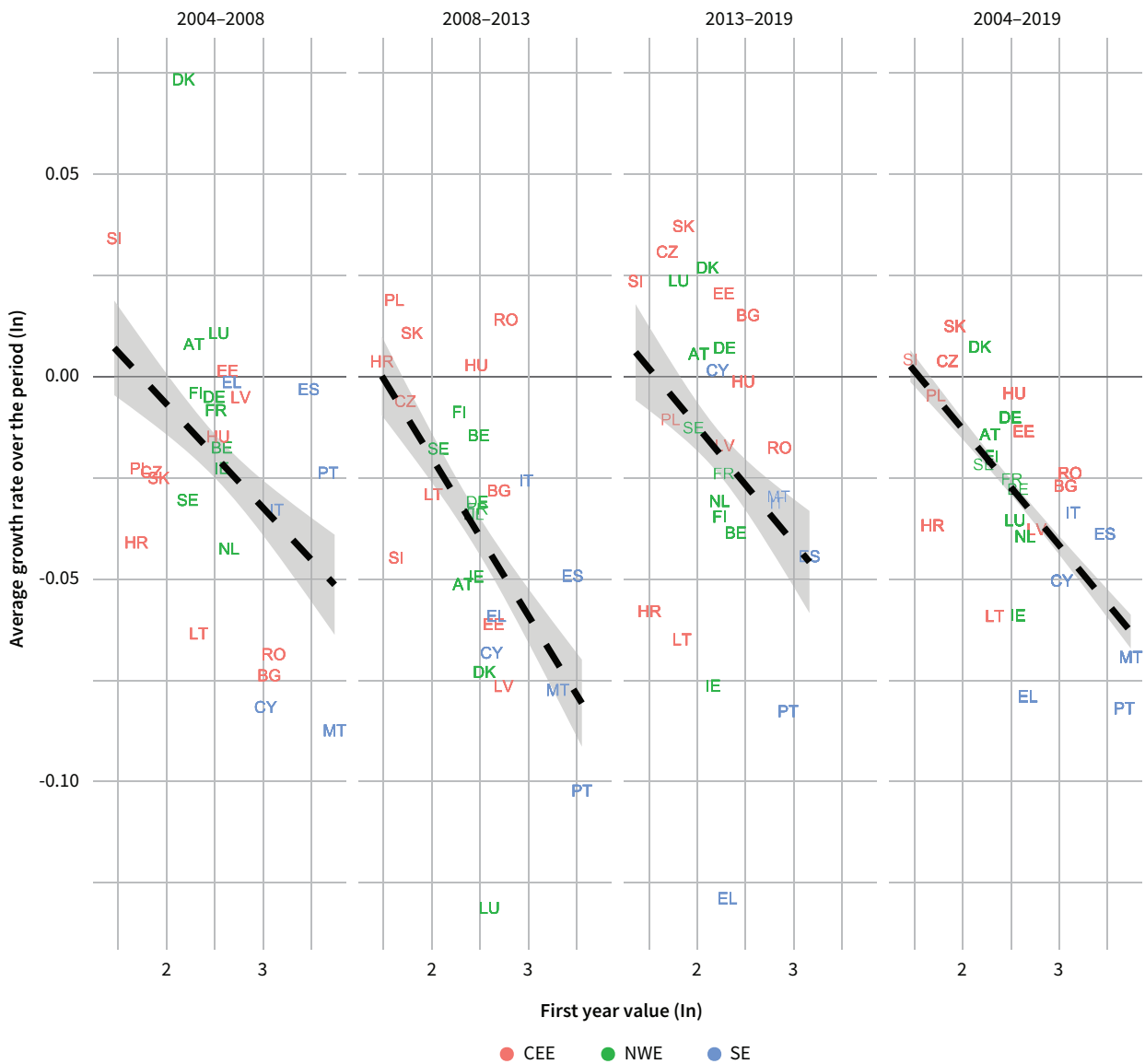
yearly fluctuations. Overall, these clusters experienced upward convergence starting from 2013.

Early school-leavers rate

Closely related to the NEET rate is the rate of early school-leavers. Because higher educational attainment can improve employability and wage prospects, as well as participation in education and learning activities at later stages of life, the early school-leaving phenomenon is closely linked to the risk of NEET. Disparities between Member States in the size of the early school-leavers group can be explained by population characteristics as well as countries' institutions, traditions and structural features (for example, vocational training, firms' attitudes towards lay-offs and recruitment and the welfare system; see Dietrich and Möller, 2016).

The rate of early school-leavers is the proportion of the population aged 18–24 years old who have completed, at most, lower secondary education and who have not been involved in further education or training during the four weeks preceding the survey.

Figure 16: Beta-convergence – early school-leavers rate, EU27, 2004–2019



Note: The analysis was performed on data for both sexes in the whole population aged 18–24 years.

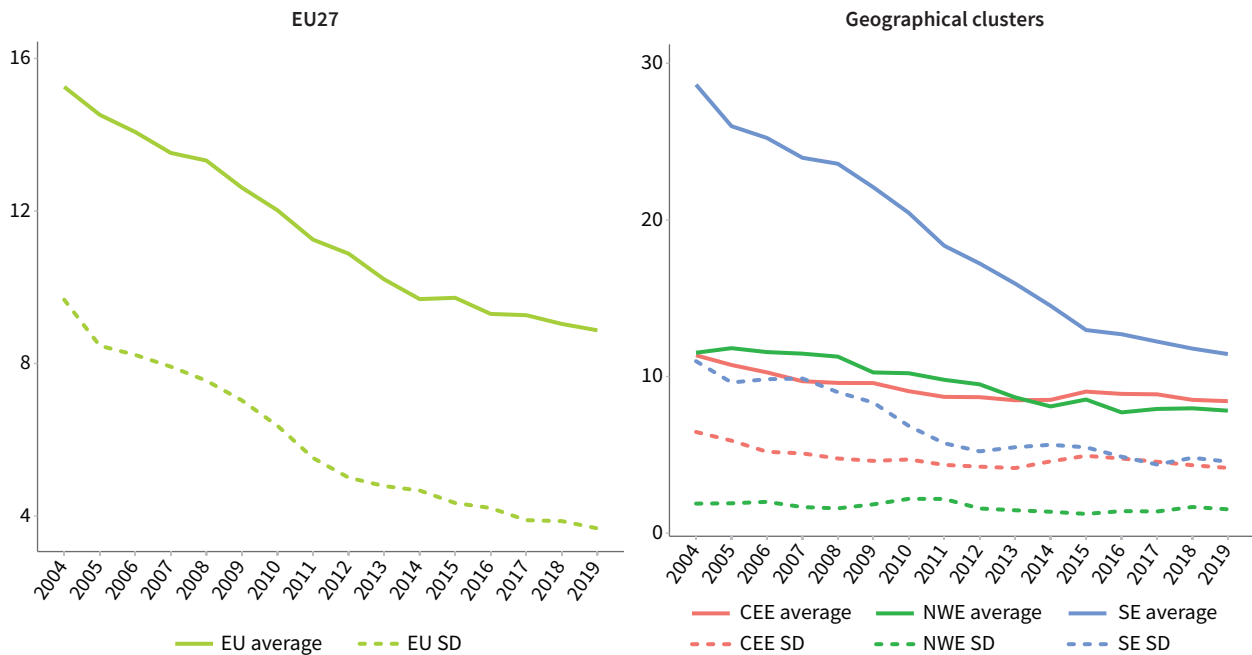
Source: Authors' calculations based on Eurostat, Early leavers from education and training by sex and labour status [edat_lfse_14]

Similar to the NEET rate, the early school-leavers rate showed strong beta-convergence over the period 2004–2019. SE countries, which began with the highest rate of early school-leavers, experienced a significant decrease (particularly in Greece, Malta and Portugal), catching up at a speed of almost 3% every year (Figure 16). By contrast, CEE countries, which started from a lower level, experienced smaller changes. The whole period was characterised by strong upward sigma-convergence (improvement towards a lower early school-leavers rate), with the EU average and the standard deviation declining at similar rates (Figure 17, left panel). The analysis of sigma-convergence by geographical cluster shows that upward sigma-convergence was particularly strong between SE countries (Figure 17, right panel).

The 2004–2008 period had the weakest beta-convergence among all of the subperiods. The early school-leavers rate dropped in CEE and SE countries, which both began with high rates; rates fell by 9% in Malta, 8% in Cyprus, 7% in Bulgaria and Romania, and 6% in Lithuania. However, some NWE countries saw their rate of early school-leavers increase (for example, by 7% in Denmark).

During the crisis period, there was strong beta-convergence towards lower early school-leavers rates. Some NWE and SE countries, particularly Luxembourg and Portugal, experienced a very large decrease in the indicator. By contrast, some CEE countries, which started from relatively low levels, experienced slight increases.

Figure 17: Sigma-convergence – early school-leavers rate, in the EU27 and by geographical cluster, 2004–2019



Notes: SD, standard deviation. The analysis was performed on data for both sexes in the whole population aged 18–24 years.
Source: Authors' calculations based on Eurostat, Early leavers from education and training by sex and labour status [edat_lfse_14]

In 2013–2019, the largest decreases in early school-leavers rates were registered in Greece (-13%) and Portugal (-8%). There were no clear regional patterns during the recovery, as some countries within the same region experienced an increase and others a decrease. Beta-convergence is nonetheless confirmed.

The early school-leavers rate exhibits a somewhat different pattern from previous indicators. The catch-up process seems to have been mostly driven by SE countries rather than CEE countries, which recorded some deterioration, although they remained the countries with the lowest NEET rates.

AROPE rate

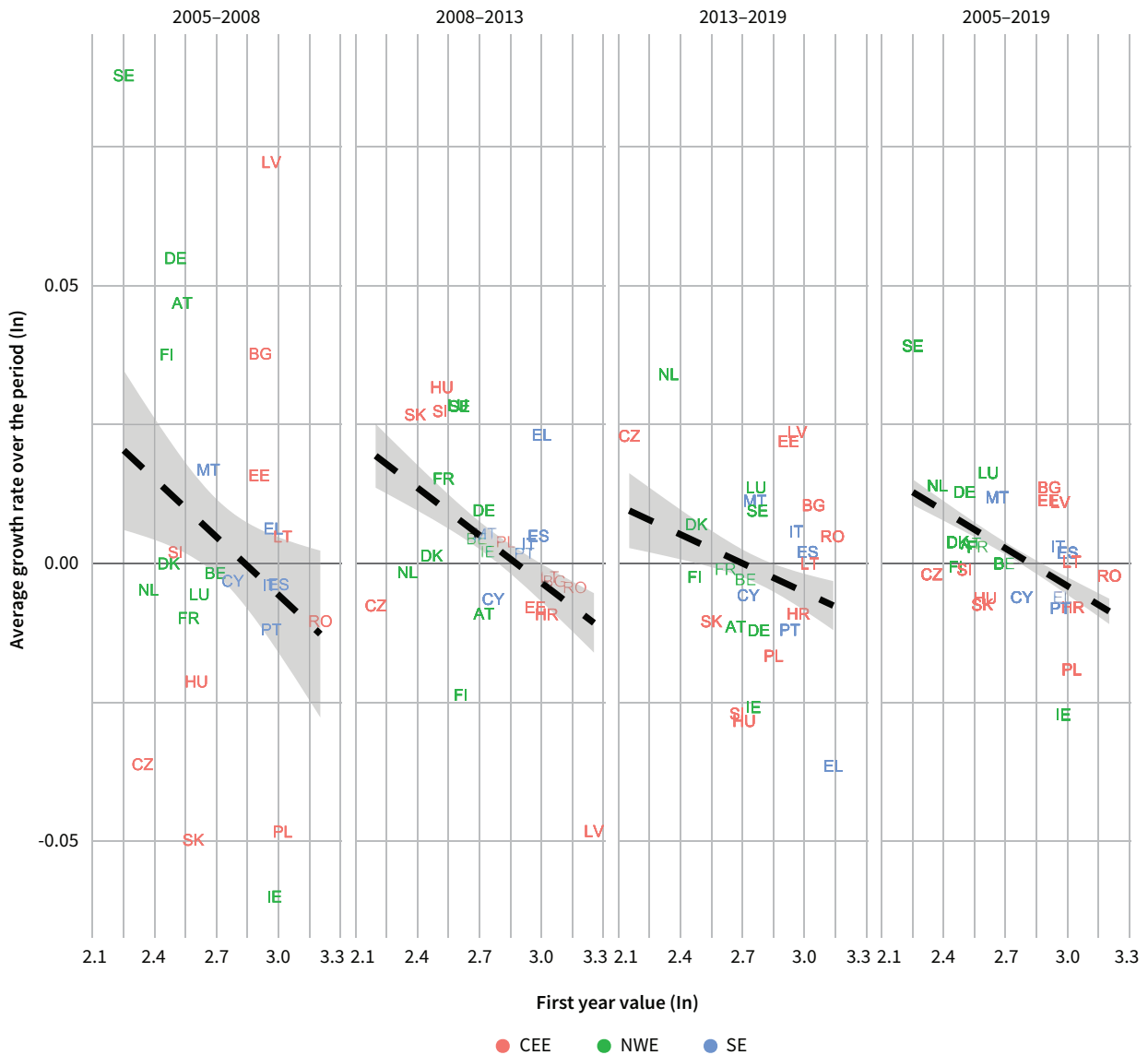
This section on social indicators concludes by considering poverty. Poverty is a multidimensional concept that pertains not only to a lack of income and material deprivation but also to other aspects, such as an impossibility to fully participate in society and in labour markets. The AROPE rate is a comprehensive indicator of poverty that serves the purpose of

capturing all of these aspects.

The AROPE indicator is based on both monetary and non-monetary aspects and describes the situation of people being in one of the following subindicator categories: (1) monetary poverty measured using the income poverty rate, (2) materially deprived or (3) living in a household with very low work intensity. To avoid 'double counting', people are counted just once, even if they fall into more than one category. More specifically, the AROPE indicator is defined as the proportion of people who are at risk of poverty after social transfers (i.e. income poverty), severely materially deprived or living in households with very low levels of work intensity.

Despite beta-convergence during the period 2005–2019 (Figure 18), no single geographical cluster drove this process. NWE countries started with a lower AROPE rate, but on average this grew faster (+0.6%) than in the other country clusters. The NWE average, however, remained below the CEE and SE averages. Despite some fluctuations, the standard deviation in the NWE cluster

Figure 18: Beta-convergence – AROPE rate, EU27, 2005–2019



Note: Data are missing for Bulgaria for 2005 and Cyprus for 2004–2009.
Source: Authors' calculations based on Eurostat, At-risk-of-poverty rate by sex [tessi010]

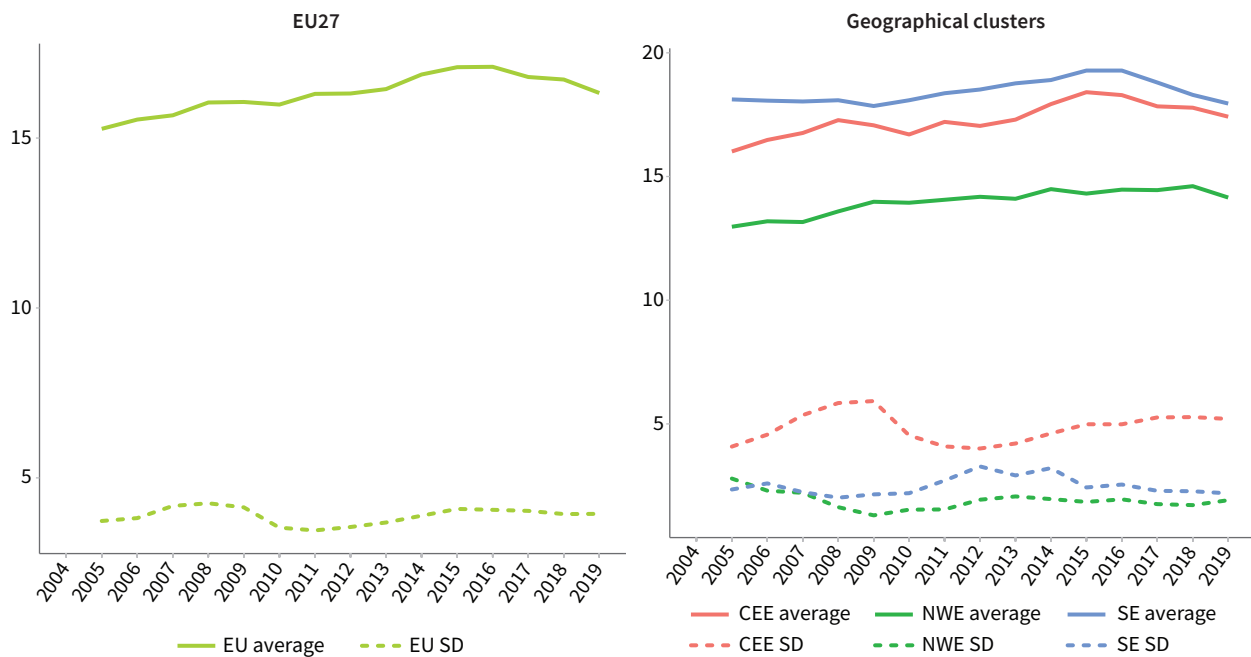
also remained below that of the other two geographical clusters. The highest dispersion of AROPE values was between CEE countries. At EU level, there was a slight upward trend towards more people at risk of poverty and social exclusion (Figure 19).

During the pre-crisis period, some CEE countries experienced a reduction in the AROPE rate of 2–4%, while others saw a significant increase. Similarly,

among NWE countries, Austria and Germany saw an increase in their AROPE rate of 5%, while it decreased in Ireland by 6%.

During the crisis period, the AROPE rate increased in many EU countries and somewhat more in those countries with lower initial levels, pointing towards downward divergence.

Figure 19: Sigma-convergence – AROPE rate, in the EU27 and by geographical cluster, 2005–2019



Notes: SD, standard deviation. Data are missing for Bulgaria for 2005 and Cyprus for 2004–2009.

Source: Authors' calculations based on Eurostat, At-risk-of-poverty rate by sex [tessi010]

During the final subperiod (2013–2019), variations became much smaller, although the AROPE rate declined in a few EU countries, regardless of their starting level, leading to very weak beta-convergence.

Box 2 focuses on developments in the convergence of Member States in respect of the AROPE rate by investigating conditional convergence.

Box 2: Conditional convergence in the AROPE rate

Similar to inequality, under certain conditions, income convergence should be associated with convergence in income distribution and, by extension, in poverty. As discussed earlier, the reality is quite different, and since the financial crisis, the attention given to poverty and to how countries have performed in preventing or dealing with poverty has grown.

A consequence of the multidimensional nature of the AROPE rate is that different drivers can affect each dimension differently. According to Eurostat (2015), unemployment and economic inactivity are major drivers of monetary poverty and material deprivation. Long-term unemployed workers (out of work for longer than a year) are usually at higher risk of material and social exclusion, as they usually find it harder to obtain a job than those who have been unemployed for a shorter period.

The EU policy agenda places a strong emphasis on increasing employment and on creating good-quality jobs. Some studies, however, argue that that emphasis on increasing employment, and economic growth in general, is not necessarily the ultimate answer to reducing poverty and social exclusion. In practice, social policies other than active labour market policies play an important role (see Förster and Mira d'Ercole, 2005). Nolan and Marx (2009) argue that there is a negative correlation between the incidence of poverty and government expenditure on social protection. Policies targeted at the most vulnerable people appear to be the most effective. Individual characteristics, ranging from education and skills to socioeconomic background more generally (gender, ethnicity and health), are key in identifying the individuals who are most at risk of poverty and social exclusion. The degree to which these factors create a higher risk of poverty and social exclusion, however, is contingent on household structure, labour market characteristics and institutional settings.

In the EU context, cross-country structural differences add a further layer of complexity. Bertolini et al (2019) found that while in southern European countries, a low employment rate could explain poverty, in eastern European countries, this does not hold true, and the structure of economic activities between different sectors

seems more important. Additionally, while in southern European regions a high proportion of the population being below the poverty threshold does not necessarily imply material deprivation, in central and eastern European peripheral regions, an income above the poverty threshold might not suffice to maintain a minimum acceptable standard of living.

Against this background, following the same approach as in Box 1, drivers of AROPE were estimated, such as socioeconomic and demographic structure, social expenditure and income inequality. The estimates, with geographical cluster and time period dummy variables, are reported in Annex 1. In all specifications, the employment rate is a strong predictor of the AROPE rate, with an inverse relationship between the two variables. Based on the results, the equation of conditional beta-convergence for the AROPE rate was estimated, including in the Z_t vector statistically significant explanatory variables from the regression with AROPE in levels.

Table 5 summarises the results (column 1 is reported for comparison). As income inequality and total social public expenditures are incorporated in the model – see columns 2 and 4 – the speed of convergence tends to increase. Income inequality (column 2) is associated with higher growth rates in AROPE, while government expenditure on social inclusion (column 4) is associated with lower growth rates. None of the geographical cluster or time period dummies is statistically significant in explaining geographical or time differences in the evolution of AROPE.

Table 5: Conditional convergence in the AROPE rate, 2005–2008, 2008–2013 and 2013–2019

AROPE growth rate	(1)	(2)	(3)	(4)	(5)
First year (ln)	-0.029** (0.013)	-0.07** (0.03)	-0.028* (0.015)	-0.035** (0.017)	-0.027* (0.015)
Income inequality		0.01* (0.006)			
Total social public expenditure				-0.017* (0.01)	
CEE dummy		-0.005 (0.01)	-0.003 (0.011)	-0.004 (0.009)	-0.002 (0.011)
SE dummy		0.005 (0.01)	0.004 (0.011)	0.004 (0.011)	0.005 (0.011)
2008–2013 dummy		0.002 (0.008)	0.001 (0.008)	0.001 (0.008)	0.001 (0.008)
2013–2019 dummy		-0.003 (0.009)	-0.001 (0.009)	0.001 (0.008)	-0.002 (0.009)
Constant	0.081** (0.036)	0.117 (0.087)	0.051 (0.065)	0.051 (0.069)	0.044 (0.066)
No. of observations	78	75	78	78	78
Adjusted R ²	0.074	0.048	0.005	0.038	0.005
Region dummy	No	Yes	Yes	Yes	Yes
Period dummy	No	Yes	Yes	Yes	Yes

Notes: Robust standard errors are in parentheses. Statistical significance is represented as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
Source: Authors' calculations

As a final step, the APE of selected independent variables on the probability of convergence in the AROPE rate was estimated, as were the predicted probabilities for different levels of income inequality. The variable convergence in AROPE takes the value of 1 if the country started with an AROPE rate above the EU average and managed to reduce it in the relevant subperiod.

Table 6: APE on the probability of convergence in the AROPE rate

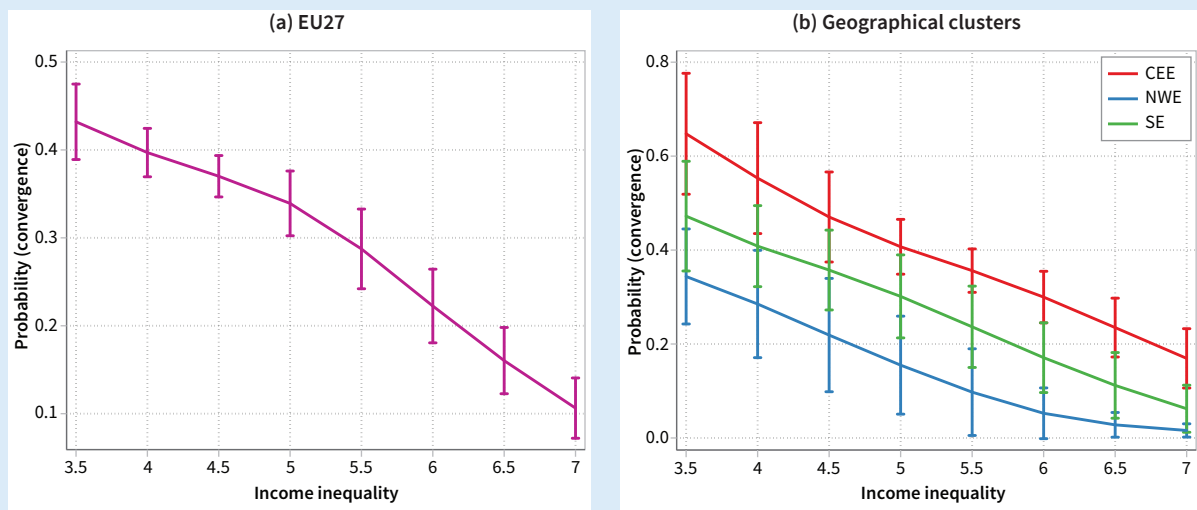
Convergence in AROPE	APE
First year value (% of the EU)	0.0233*** (0.00310)
Employment rate	0.0116* (0.00634)
Income inequality	-0.210*** (0.0430)
Total social public expenditure	0.0299*** (0.0102)
CEE dummy	0.360*** (0.0851)
SE dummy	0.113* (0.0584)
2008–2013 dummy	-0.144** (0.0604)
2013–2019 dummy	-0.0594 (0.0709)
No. of observations	77

Notes: Robust standard errors are given in parentheses. Statistical significance is indicated as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Authors' calculations

The results in Table 6 confirm that a higher employment rate and total public expenditure on social inclusion increase the probability of convergence in AROPE. On the other hand, higher income inequality has exactly the opposite effect. Countries with higher inequality reduce the probability of convergence. CEE and SE countries have a higher probability of convergence than NWE countries. For the EU27, however, the crisis period represented a period with a lower probability of convergence.

Finally, Figure 20 plots the estimated probability of convergence for different levels of income inequality. Panel (a) shows that increasing levels of income inequality are associated with a lower probability of convergence in AROPE. Thus, for a country starting with a high level of income inequality, the likelihood of converging towards the EU average AROPE rate is lower. As illustrated in panel (b), the predicted probabilities are highest for CEE countries at every level of income inequality, followed by SE and then NWE countries. Thus, the probability of a reduction in AROPE rate for a low level of income inequality in a CEE country is higher than in SE and NWE countries.

Figure 20: Predicted probabilities of convergence in the AROPE rate by income inequality levels, in EU27 and by geographical cluster

Source: Authors' calculations

Institutional indicators

The final part of this chapter investigates convergence in indicators of governance. As mentioned in the Introduction, there is widespread agreement among researchers and policymakers that ‘good’ governance plays a significant role in boosting economic growth and shared prosperity. While these are two broad objectives of the EU, the literature on EU integration has barely considered institutional convergence.

It should be noted that institutional convergence, intended to mean compliance with the common rules of the single market, is in practice a prerequisite for EU accession, which has to start well before actual EU membership (see, for instance, Pelkmans, 2000). In this section, the focus is on the perception of the overall quality of institutions, rather than on their concrete type and structure, to be consistent with the report’s broader interest in the social dimension of the EU integration process.

Although the quality of governance is, per se, difficult to measure, given the complexity and multidimensionality of the concept, the World Governance Indicators (WGIs) provide a comprehensive overview of the broad dimensions of governance. Each WGI is constructed through aggregation techniques using a variety of data sources (see Kaufmann et al, 2011, for a detailed summary of the methodology) pertaining to the perception of governance of a number of stakeholders, such as households and firms, commercial business information providers, non-governmental organisations and public sector organisations. What makes the WGIs suitable for the analysis of convergence is the comparability across countries and over longer periods (rather than a year-on-year change).

Two caveats need to be considered when using these WGIs. First, they measure the perception of institutional quality and not the quality of the institutions per se. Second, the correlation between

some of these indicators is quite high. More specifically, government effectiveness is very highly correlated with control of corruption and voice and accountability and is highly correlated with rule of law and political stability (Table 7).

Against this background, in line with Savoia and Sen (2016) and Schönfelder and Wagner (2019), the focus here is on government effectiveness as key indicator for assessing EU institutional convergence. Box 3 provides an overview of the evolution of country differences (sigma-convergence) for the other four WGIs. Government effectiveness captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government’s commitment to such policies. The indicator is subjective, and historical and cultural factors can play a major role in affecting perception. Therefore, this indicator may be affected by the level of economic development, the role of political rights and of civil liberties, and educational attainment. In this sense, a cautious approach should be taken in determining the possible policy implications deriving from this analysis.

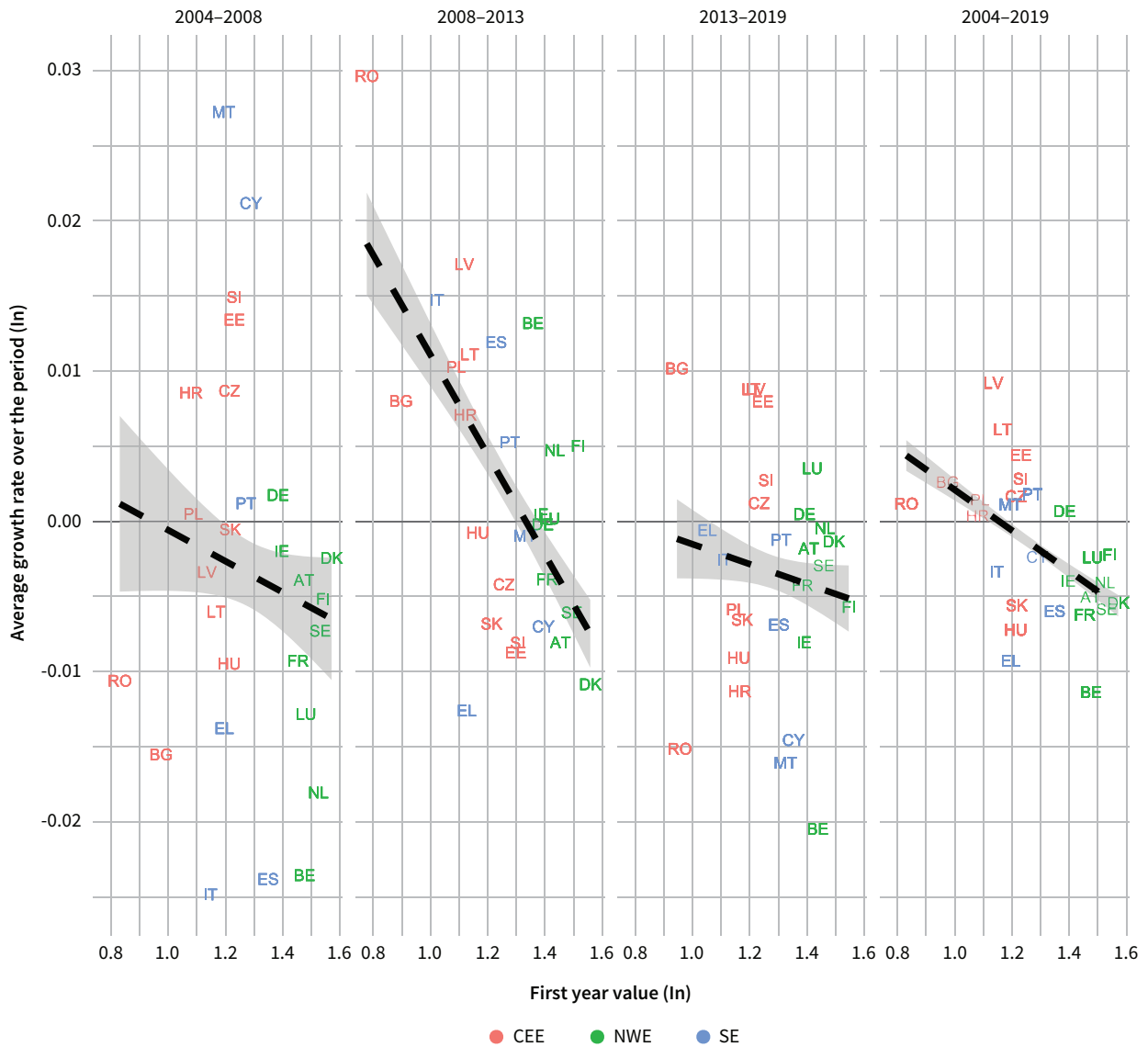
The beta-convergence analysis shows that, over the full period (2004–2019), the perception of government effectiveness decreased in most NWE and SE countries, while it increased in most of the CEE Member States (Figure 21). Countries starting from a lower level caught up at a speed of 1% on average yearly, suggesting convergence overall. Averages by cluster show that NWE countries had the highest level of government effectiveness. Over time, changes were minor, with most improvements seen in CEE countries, which were moving closer to SE countries. Small changes in sigma-convergence were seen in the cross-country dispersion, along with a slight decline in country differences at EU level after 2019.

Table 7: WGI pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)
Government effectiveness	1.000				
Control of corruption	0.942	1.000			
Voice and accountability	0.907	0.926	1.000		
Rule of law	0.658	0.629	0.725	1.000	
Political stability	0.616	0.576	0.607	0.367	1.000

Source: Authors’ calculations

Figure 21: Beta-convergence – government effectiveness, EU27, 2004–2019



Notes: Original data were rescaled to a 0–5 range (originally -2.5 to 2.5). 0 indicates a low quality of governance and 5 indicates a high quality of governance.

Source: Authors' calculations based on World Bank WGI

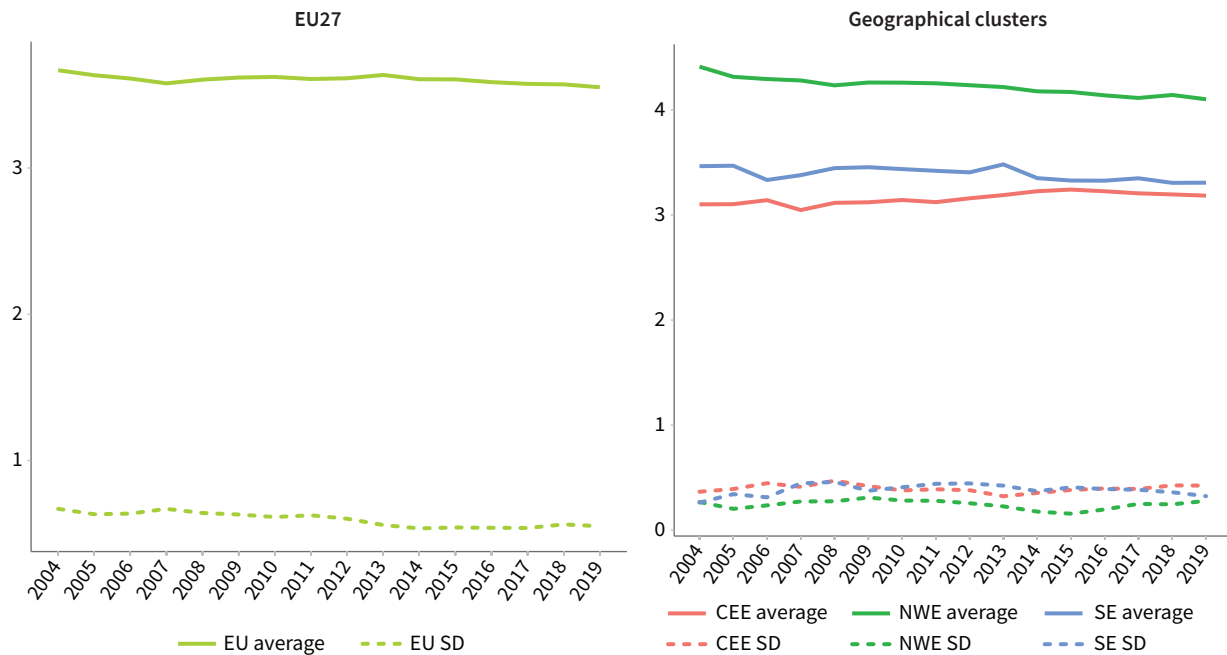
In the pre-crisis period, there is no evidence of beta-convergence, and the developments in each geographical cluster were mixed. In 2004, NWE countries had the highest perceived government effectiveness, followed by SE and then CEE countries.

Developments between 2004 and 2008, however, went in different directions depending on cluster. While, for CEE countries, changes were minor, in some NWE countries (such as Belgium and the Netherlands) the

indicator decreased. Among the SE countries, the indicator declined in Italy and Spain (-2%), whereas in Malta and Cyprus, it improved by 3% and 2%, respectively.

During 2008–2013, beta-convergence strengthened, driven by some CEE countries such as Bulgaria, Estonia, Latvia and Lithuania. However, in the final period (2013–2019), the process weakened quite significantly.

Figure 22: Sigma-convergence – government effectiveness, in the EU27 and by geographical cluster, 2004–2019



Notes: SD, standard deviation. Original data were rescaled to a 0–5 range (originally -2.5 to 2.5). 0 indicates a low quality of governance and 5 indicates a high quality of governance.

Source: Authors’ calculations based on World Bank WGI

Box 3: Sigma-convergence in quality of governance indicators

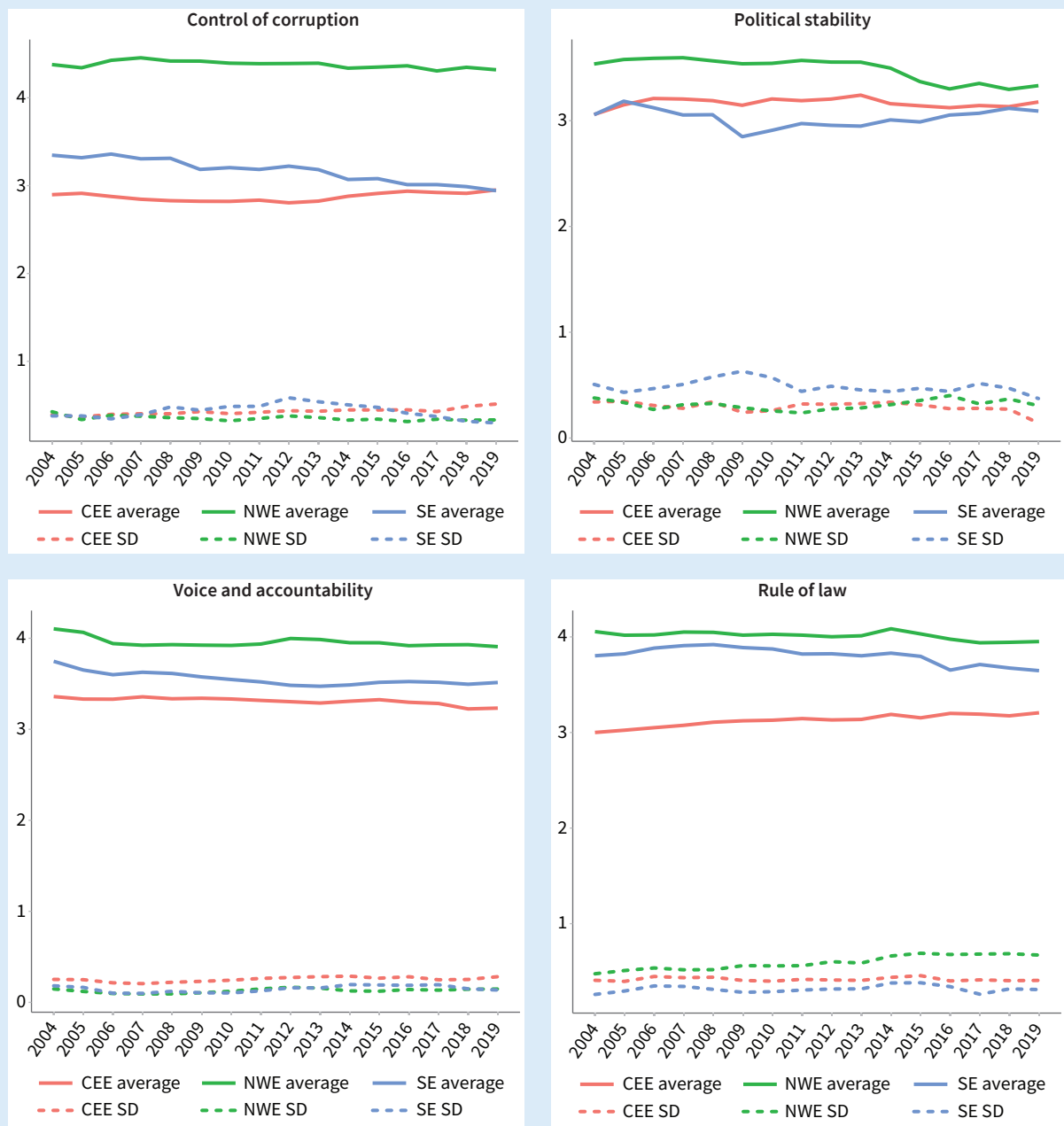
To extend the analysis of government effectiveness, the evolution of averages and the dispersion of the other four WGI were examined (Figure 23).

Control of corruption is the WGI with the largest difference across the clusters. NWE countries did not show significant improvement in the mean or the standard deviation with regard to this indicator, but they consistently outperformed the other clusters. SE countries exhibited slight downward convergence, with a declining trend in the mean and a decrease in the variation of this indicator. In CEE countries, improvements in the mean were accompanied by an increase in the variation, leading to upward divergence.

SE countries started with the highest dispersion in political stability, and despite a spike in 2009, this indicator returned to the previous trend subsequently. At the same time, the average of this indicator was lowest in SE countries. The average for the CEE cluster improved while that of the NWE cluster worsened, whereas the level of dispersion remained quite stable in both.

Changes in voice and accountability and rule of law were rather small for all three geographical clusters. However, rule of law seems to have improved, on average, in CEE countries (at least until 2019). Interestingly, rule of law was the only indicator for which NWE countries displayed higher variation than CEE and SE countries.

Figure 23: Sigma-convergence in quality of governance indicators, 2004–2019



Summary of convergence trends at country level

The analysis of convergence at country level highlights the overall progress being made towards closing the gaps among EU Member States across the economic, social and institutional dimensions. This process was quite powerful up to the financial crisis of 2008, and then it slowed down, only recovering in the final subperiod under study (2013–2019).

Statistically significant beta coefficients were found for the majority of indicators and time periods (see Table 2). These coefficients capture the catch-up of Member States that were lagging behind at the beginning of the period and grew at a faster pace than the front-runners. As expected, CEE countries were responsible for the catch-up in almost all of the indicators.

In terms of the three dimensions covered, the catch-up was stronger in the economic and social indicators than in the institutional ones, with larger beta coefficients reported for the former two.

The patterns of sigma-convergence for the economic indicators were more mixed than for the social indicators. Starting with **GDP per capita**, while the EU average has grown consistently since 2004, thus moving towards its policy target, the dispersion of countries around the average has also increased. Therefore, upward sigma-divergence was found for GDP per capita. For **household disposable income**, there was upward sigma-divergence between 2008 and 2013, after which the standard deviation decreased, signifying upward sigma-convergence. Concerning **income inequality**, the EU average increased sharply during the economic crisis (2008–2013), moving against its policy target (a decrease in the average). The standard deviation also rose sharply as countries became more dispersed around the mean. This therefore was a period of downward sigma-divergence in income inequality. After 2013, however, the EU average and the standard deviation started decreasing, thus denoting upward sigma-convergence. As regards **compensation of employees**, the analysis of sigma-convergence showed upward convergence until 2013 and upward divergence afterwards.

Over the long term, social indicators usually indicate upward sigma- and beta-convergence. Not only did the EU average of the indicators analysed improve over time (either increasing or decreasing in accordance with

the policy goal), but the standard deviation also decreased. For the **employment rate**, **unemployment rate** and **NEET rate**, the analysis shows a cyclical pattern: there was downward sigma-divergence during the economic crisis, which then quickly reverted to upward convergence between 2014 and 2019. Interestingly, when comparing the employment and unemployment rates, the standard deviation dropped more rapidly for the former than for the latter after 2014, possibly highlighting the long-term effect of the crisis on some countries' labour markets. The **rate of early school-leavers** showed strong upward sigma-convergence during the crisis, while the **AROPE rate** exhibited downward sigma-divergence up to 2014, after which both the EU average and the standard deviation started declining, resulting in upward sigma-convergence.

The sigma-convergence analysis of institutional indicators demonstrated an overall downward trend. While the perception of **institutional quality** in some CEE countries has generally improved since 2004, this was not the case across the entire EU, with worsened perceptions especially in SE countries. The institutional indicators mostly showed a declining trend in the average and the standard deviation, pointing towards downward sigma-convergence.

3 Regional-level convergence

The spatial dimension is of key importance when monitoring upward convergence. Changing the focus of the analysis from country to subnational level (for example, NUTS 1 or NUTS 2) can reveal additional patterns of convergence and divergence within countries that are otherwise hidden behind national averages. Furthermore, moving from country to regional level can allow the identification of cross-national clusters of regions with similar patterns of convergence, which might be driven by location (centre versus periphery), market integration and specialisation factors. Therefore, in this chapter, the analysis of the convergence of Member States within and across the three geographical clusters is complemented by the analysis of convergence at NUTS 2 level.

The regional analysis initially follows the same approach as the country-level analysis, investigating both beta- and sigma-convergence patterns but focusing on just three indicators, namely GDP per capita, the employment rate and quality of government (as measured by the EQI – see Table 1 in Chapter 1). Then, to detect changes in the pathways of convergence, a transition-probability matrix analysis is performed. For this purpose, regions were classified according to their value on each indicator in the first and last years under analysis relative to the EU average. The frequency of the regions that moved from one class to another was then calculated.

In the case of GDP per capita, following the approach of Manford (2020), five classes were identified, defined by the following intervals: 0–50%, 50–75%, 75–100%, 100–150% and > 150% of the EU average, and then the frequencies of transitions towards higher or lower classes quantified. The same approach was applied to

identifying classes for employment and quality of government. As the definition of the intervals is influenced by the distribution of observations of the variable under consideration, the quintile distribution for these two indicators was assessed to identify possible outliers and the intervals of each class were adjusted to make sure that each class was populated with observations. Detailed results of the analysis for each variable are shown in the sections that follow.

Overview of EU regional beta-convergence

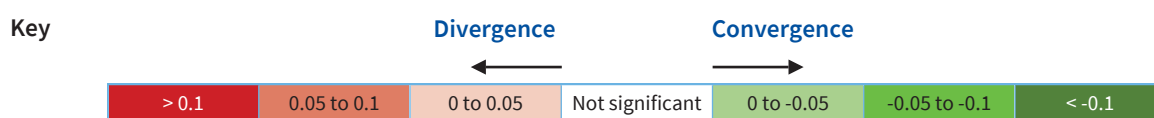
Table 8 shows the results of the absolute beta-convergence analysis for the 240 EU NUTS 2 regions. The results for GDP per capita and the employment rate broadly confirm the results of the country-level analysis. EU regions exhibit a significant degree of convergence; however, the speed of convergence is systematically lower at regional level than at country level. For the employment rate, convergence turned into divergence during the economic crisis. Regarding quality of government, although a different indicator from the WGI used at country level was analysed, this indicator points to a pattern of convergence at regional level similar to that at country level.

GDP per capita

Looking at convergence in GDP per capita at regional level across the three subperiods of the analysis shows that the most notable changes were the fall in the speed of convergence during the years of the economic crisis and the increased dispersion of the SE regions.

Table 8: Unconditional beta-convergence in the NUTS 2 regions, by indicator and period, 2004–2019

Indicator	2004–2008	2008–2013	2013–2019	2004–2019
GDP per capita	-0.02*** ↑	-0.01*** ↑	-0.01*** ↑	-0.02*** ↑
Employment rate	-0.03*** ↑	0.02*** ↓	-0.03* ↑	-0.01*** ↑
	2010–2013	2013–2019	2010–2019	
EQI	-0.03*** ↑	-0.03*** ↓	-0.02*** ↓	



Note: Statistical significance is indicated as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
Source: Authors

Beta- and sigma-convergence patterns

The 2004–2008 period was characterised by quite strong beta-convergence, driven by the catch-up of CEE countries (Figure 24). On average, disparities between regions fell by 2% every year. There were, however, considerable macro-regional differences, with CEE regions growing at faster rates (most of them around 5% annually and a few close to 10%) than SE regions and also NWE regions, where the majority of regions were growing at close to 3% per year.

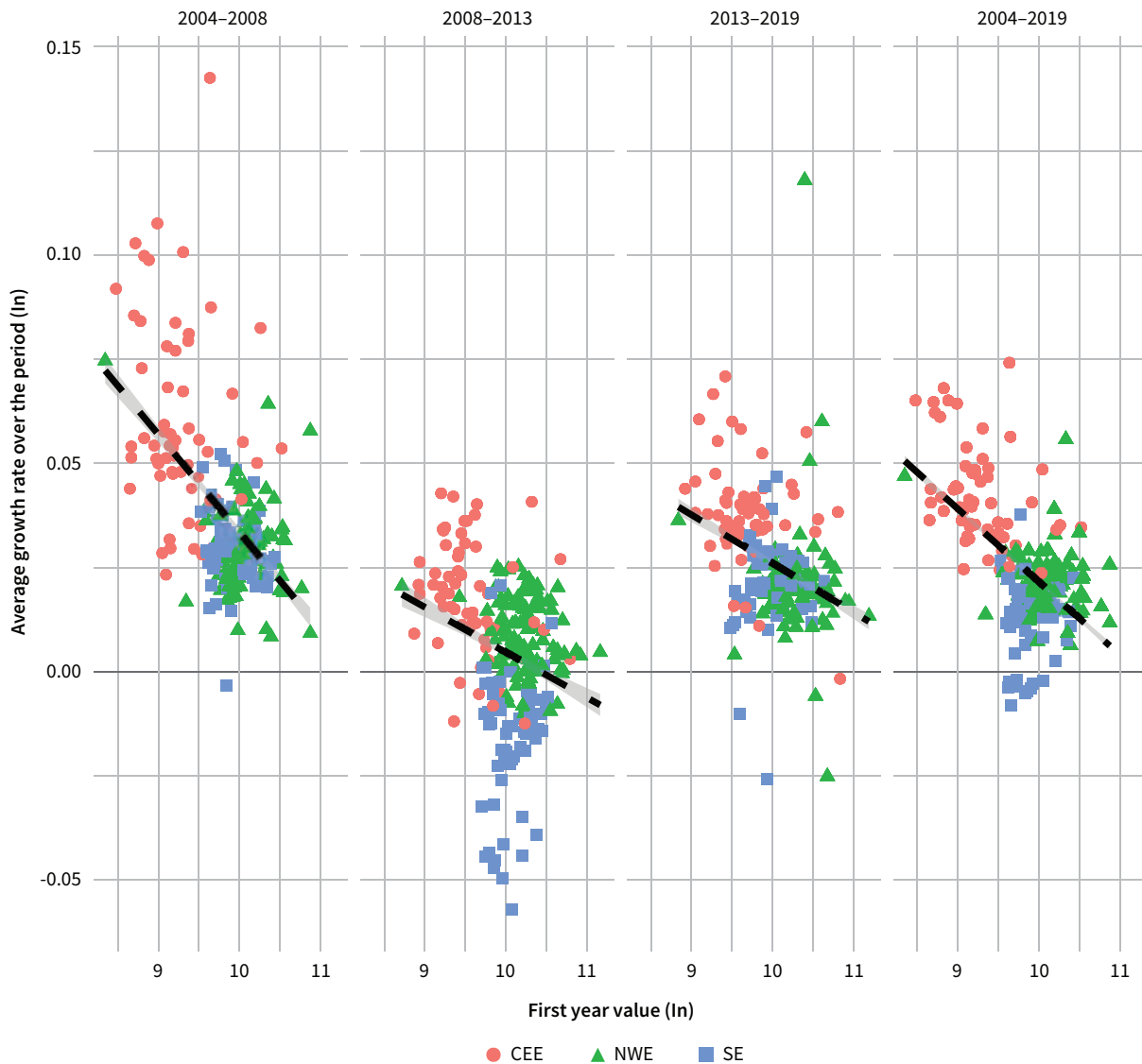
Growth slowed during the financial crisis. The average rate per year decreased by 1 percentage point, with the majority of SE regions suffering negative GDP per capita growth rates. By contrast, in CEE and NWE regions, growth rates more than halved but remained mostly positive.

After the economic crisis, regional growth in GDP per capita improved slightly but fell short compared with pre-crisis levels.

In line with the literature, over the whole period (2004–2019), the GDP per capita of CEE regions (which was low initially) grew at a faster rate than in richer regions of both NWE and SE countries. SE regions, despite having high growth rates before 2008, recorded low or even negative average rates over the full period. This hints at the consequences, possibly of a structural nature, that the financial crisis might have had on regional convergence.

This point is supported by the sigma-convergence analysis. The overall period was characterised by upward sigma-divergence, associated with an increasing EU average alongside higher dispersion.

Figure 24: Beta-convergence – GDP per capita, NUTS 2 regions, 2004–2019



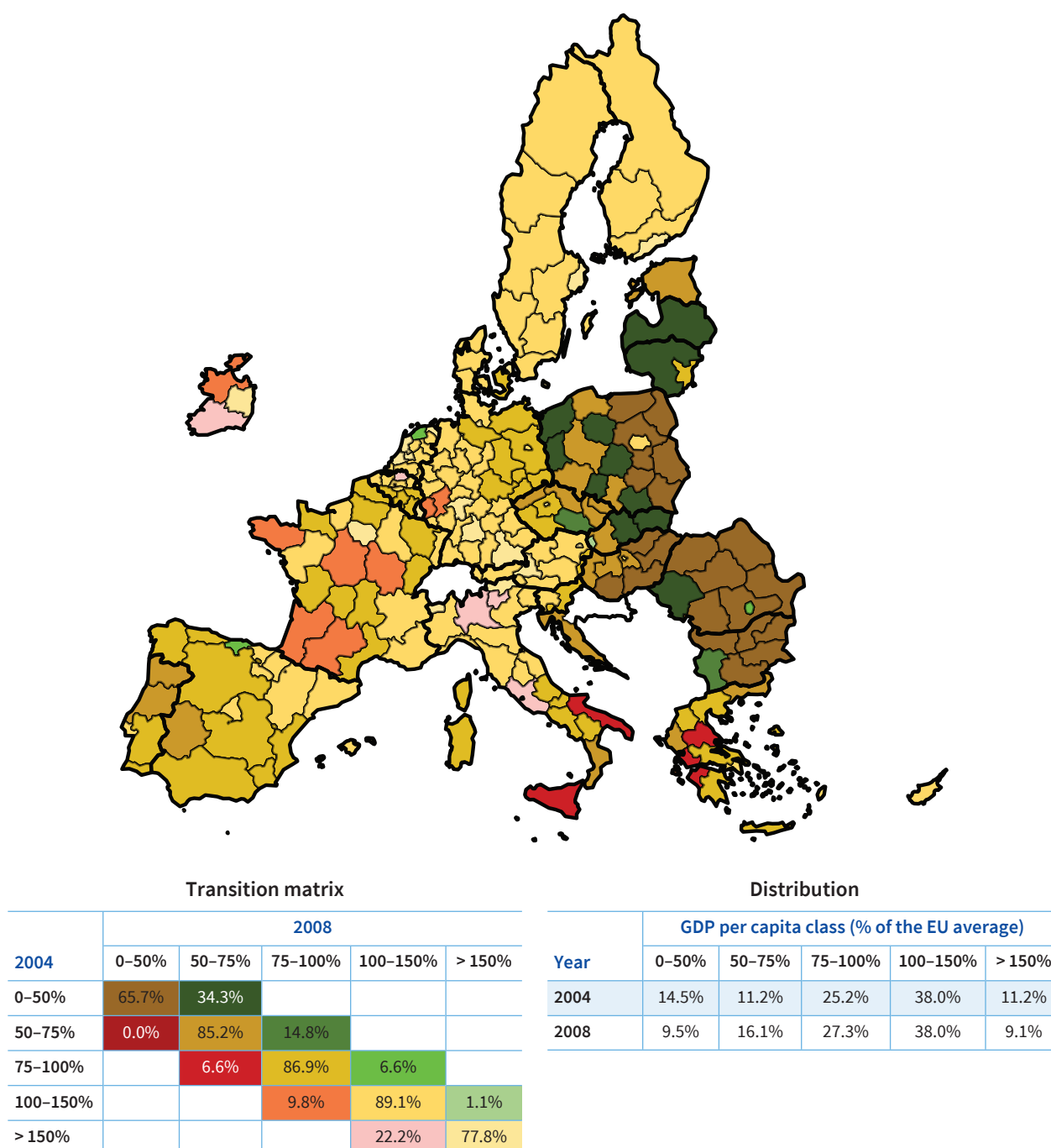
Source: Authors' calculations based on Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions [nama_10r_2gdp]

The SE regions appear to have contributed only marginally to the increase in the average GDP per capita but also appear to have been less dispersed than regions in other clusters. This suggests that SE regions became more similar to each other and relatively poorer.

Regional GDP per capita transitions

Alongside these findings pointing to the negative impact of the financial crisis and to marked differences across clusters of regions, it is instructive to look at whether and how regions have transitioned across classes of GDP per capita (Figure 25).

Figure 25: GDP per capita in NUTS 2 regions – transition maps and matrix and distribution of classes, 2004–2008



Notes: In the transition matrix, the GDP per capita classes in the left-most column refer to the situation of the regions in the first year of the period under consideration; the classes in the second row refer to the situation at the end of the period. The percentages in the coloured cells express the proportion of regions that moved to a higher class (green), moved to a lower class (red) or remained in the same class (yellow). The sum by row is as close to 100% as rounding allows. Dark shades of the colours refer to regions starting from a low class and light shades refer to regions starting from a higher class.

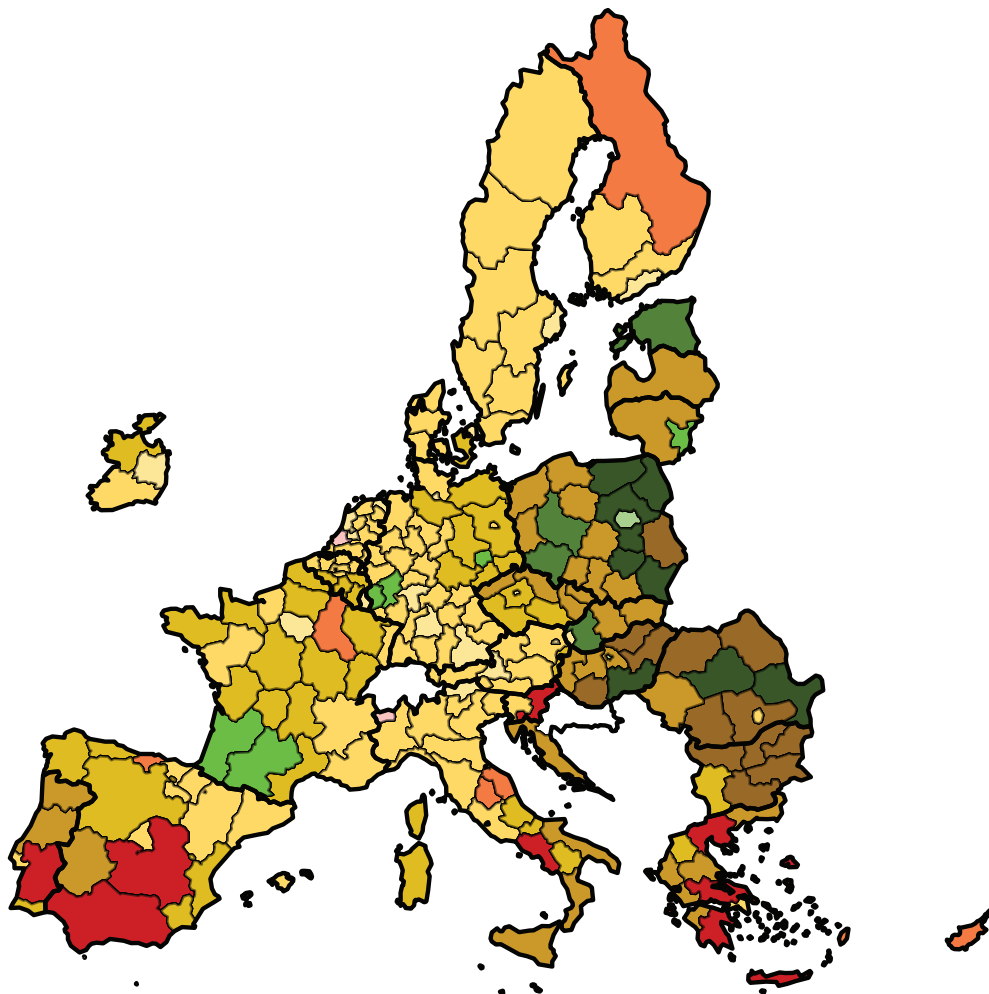
Source: Authors' calculations based on Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions [nama_10r_2gdp]

Looking at the tables on the distribution of GDP per capita across the classes by year (below each transition matrix in Figures 25–27), it emerges that the period 2004–2019 was characterised by a trend towards a higher concentration in the middle (75–100% of the EU average) and middle-lower (50–75%) classes. Concentrations in these classes increased from 25.2% to 28.5% and from 11.2% to 21.9%, respectively. By contrast, the proportions of poorer regions (0–50%) and richer regions (> 150%) both declined.

The transition maps and matrices confirm the convergence patterns whereby CEE regions, which started from the lowest class of GDP per capita in 2004, moved towards higher classes. By contrast, most NWE regions remained in the same distribution, and SE regions in south-western Spain, southern Italy and Greece moved to lower classes of income.

In the pre-crisis period, 34.3% of regions with GDP per capita below half of the EU average had moved to the 50–75% class by 2008. Most of these regions are in the

Figure 26: GDP per capita in NUTS 2 regions – transition map and matrix and distribution of classes, 2008–2013



Transition matrix

2008	2013				
	0–50%	50–75%	75–100%	100–150%	> 150%
0–50%	65.2%	34.8%			
50–75%	2.6%	84.6%	12.8%		
75–100%		19.7%	71.2%	9.1%	
100–150%			7.6%	89.1%	3.3%
> 150%				9.1%	90.9%

Distribution

Year	GDP per capita class (% of the EU average)				
	0–50%	50–75%	75–100%	100–150%	> 150%
2008	9.5%	16.1%	27.3%	38.0%	9.1%
2013	6.6%	22.3%	24.4%	37.2%	9.5%

Note: Refer to Figure 25 for a guide to interpreting the transition matrix.

Source: Authors' calculations based on Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions [nama_10r_2gdp]

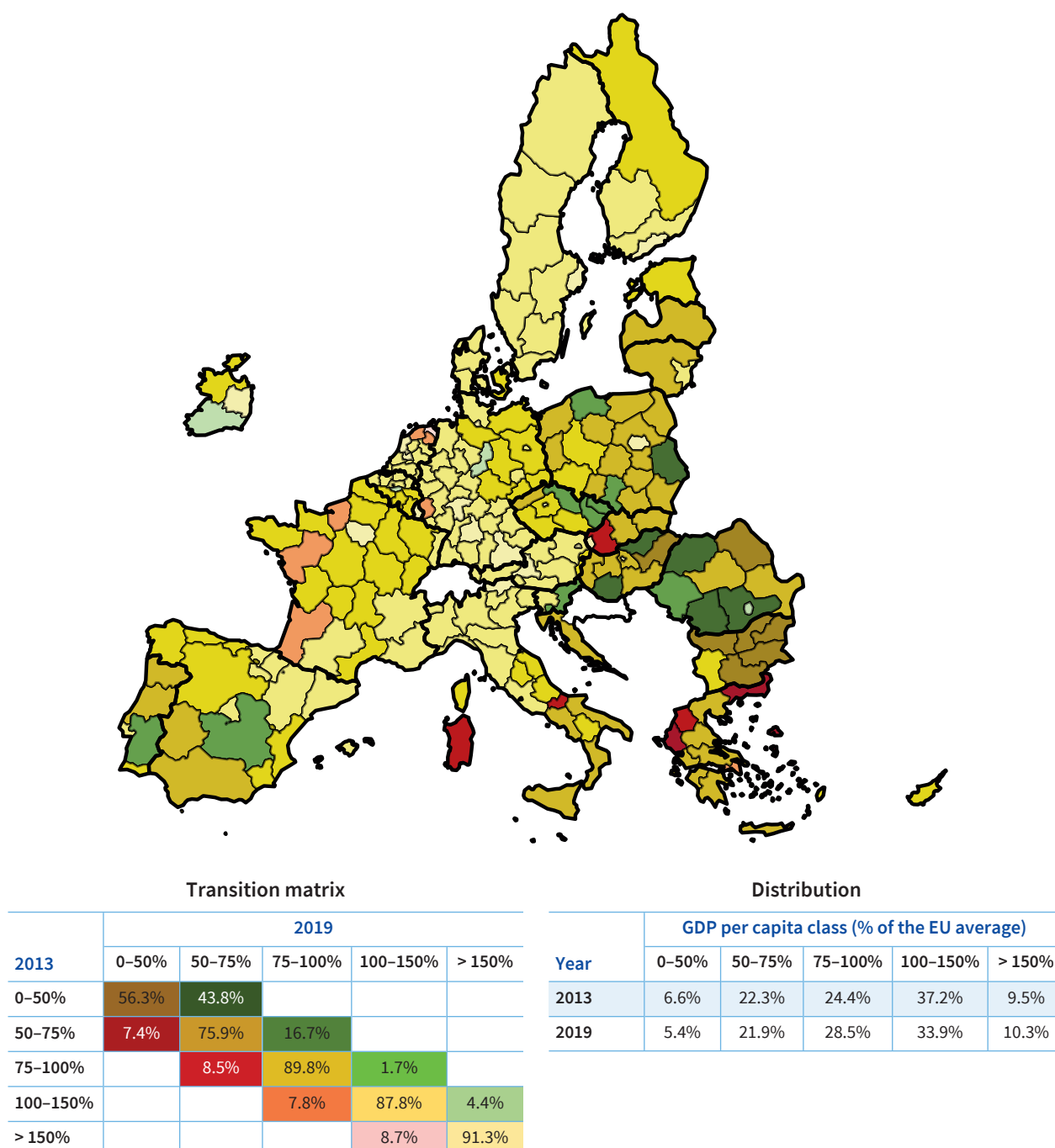
CEE cluster, such as in Latvia, Lithuania, Poland and Slovakia. While 14.8% of regions in the 50–75% class moved to the 75–100% class, only 1.1% of regions in the 100–150% class moved to the > 150% class. Overall, this period was characterised by a tendency for a concentration towards the middle classes and a reduction in the distribution in the extremes.

During the crisis period, CEE regions in Estonia, Hungary and Romania increased their GDP per capita, moving from the 0–50% class to the 50–75% class. Richer NWE

regions, most of which had a GDP per capita equal to or higher than 75–100% of the EU average, tended to stay in the same class. There were a few exceptions in western France and Germany, which moved up to the 100–150% class. On the other hand, many SE regions dropped from the 75–100% class to the 50–75% class.

In the aftermath of the crisis, CEE regions were still driving convergence, with high growth rates in Poland and Romania. Of the regions in the lowest class, 43.8% moved to the 50–75% class. The percentage of regions

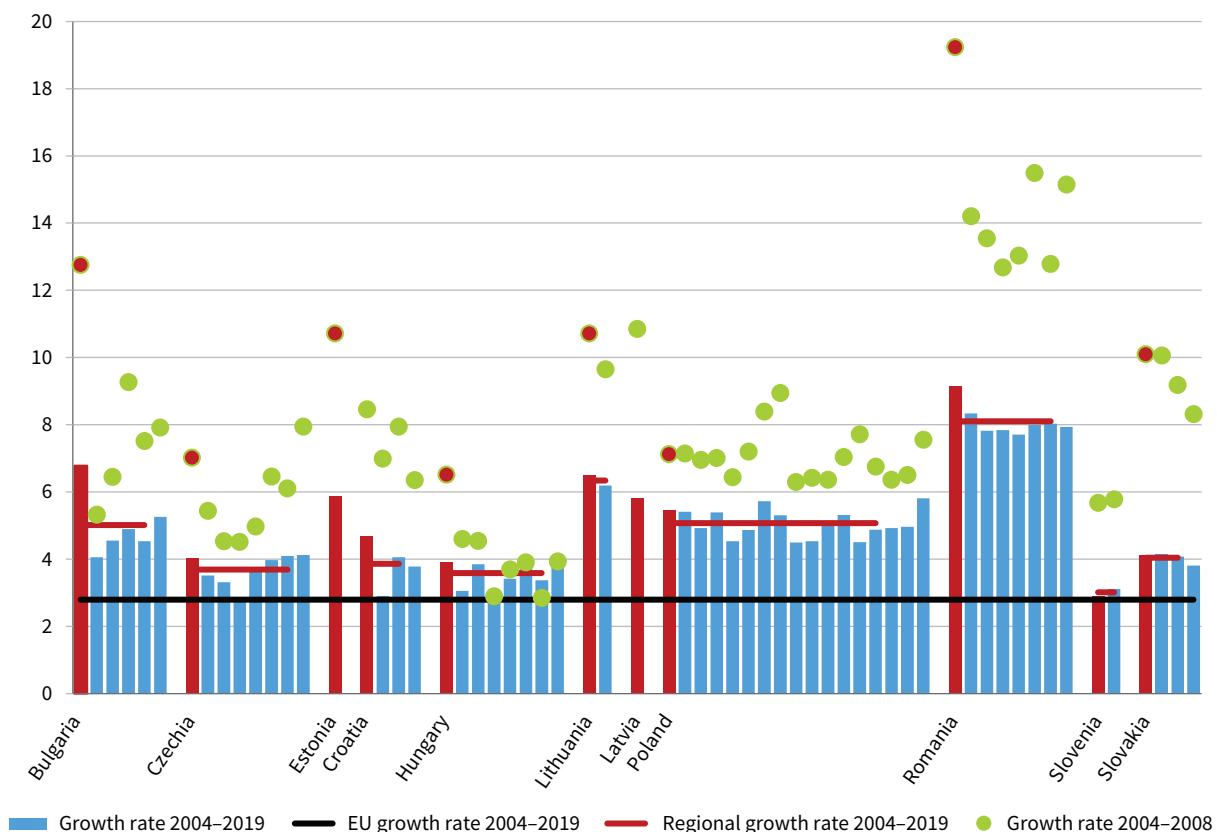
Figure 27: GDP per capita in NUTS 2 regions – transition map and matrix and distribution of classes, 2013–2019



Note: Refer to Figure 25 for a guide to interpreting the transition matrix.

Source: Authors' calculations based on Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions data [nama_10r_2gdp]

Figure 28: GDP per capita growth (%) in CEE countries, by region, 2004–2019



Note: Red bars indicate capital regions, while blue bars indicate other regions.

Source: Authors' calculations based on Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions [nama_10r_2gdp]

with decreasing growth rates diminished compared with the crisis period. While, in 2008–2013, 19.7% of regions moved from the 75–100% class to the 50–75% class, in 2013–2019, 8.5% underwent the same transition. However, more regions moved to the bottom class (7.4%) than during the crisis period (2.6%) or the pre-crisis period (0%). Thus, even after the crisis, some regions in Greece, Italy and Slovenia continued to transition towards lower levels of income.

Summary

The process of beta-convergence in GDP per capita appears very much to have been driven by the high-speed growth of CEE regions, while a clear divide between SE and NWE regions emerged during the crisis and persisted afterwards. By looking at CEE countries across the three maps (Figures 25–27), an increasing dominance of lighter colours can be observed, suggesting that regions were moving up in GDP classes. It is also notable, however, that, within the same country, regions display different patterns. This is even clearer in Figure 28. Capital regions (red bars) typically display a higher growth rate than other regions (blue bars), especially rural regions. In the period before the economic crisis, which contributed the most to driving convergence, the differences were quite dramatic. As noted by Alcidi et al (2018), most countries

even displayed internal divergence (over the period 2000–2015), with the capital region determining the negative slope of the convergence line. Differences between capital and other regions seem to have gradually attenuated in the post-economic-crisis period, but they remain an underlying feature of EU convergence.

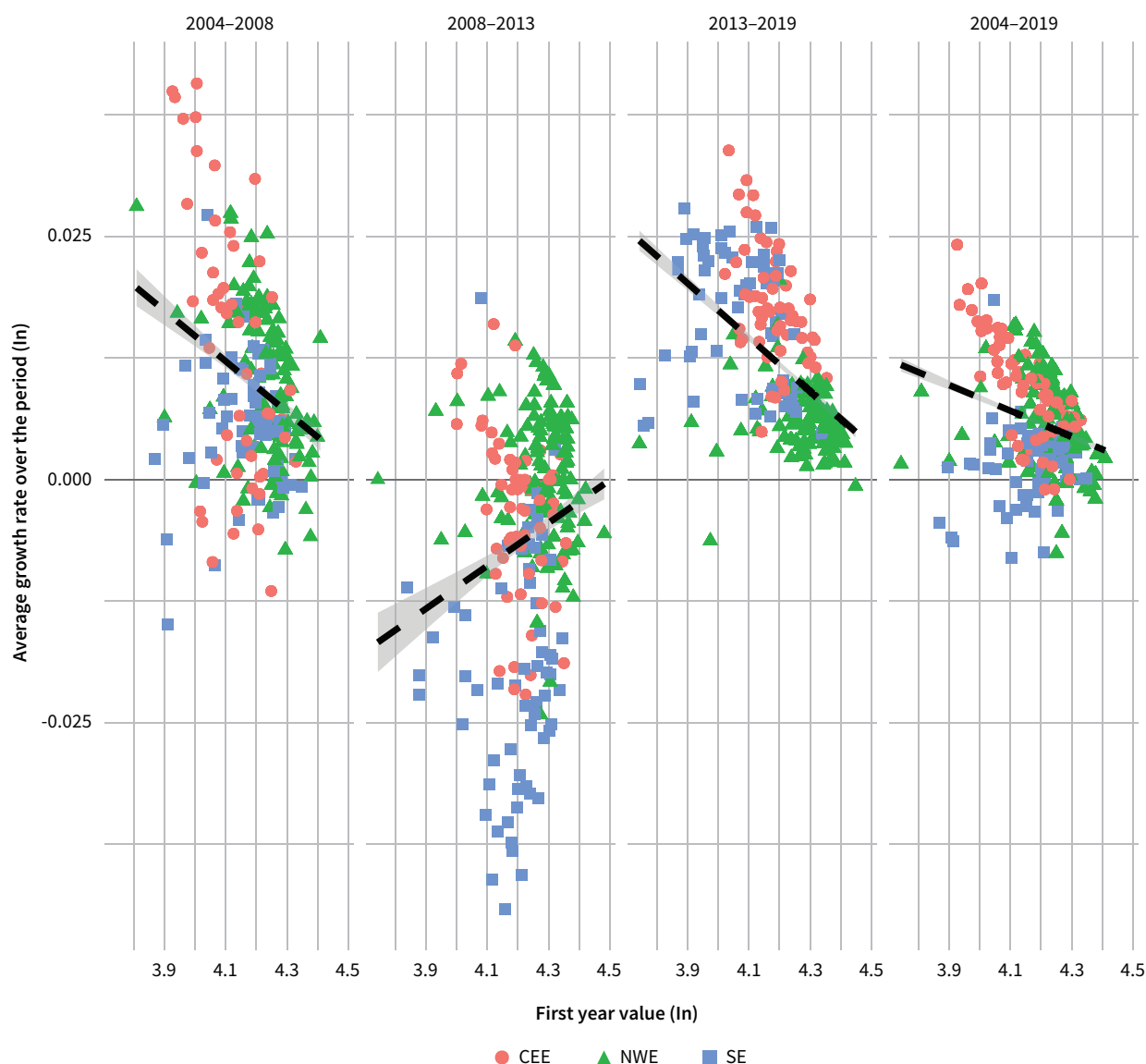
Employment rate

The examination of employment convergence at regional level, like that of GDP per capita, looks in detail at patterns across the three subperiods. Over time, the most notable changes were the divergence trends associated with the economic crisis and the subsequent return to convergence in the aftermath of the crisis. Interestingly, dispersion appears to have been relatively small over the full period, as the 16 years analysed were characterised first by negative and then by positive rates of change, especially in SE regions.

Beta-convergence patterns

In the pre-crisis period, there is strong evidence of beta-convergence: regions that had started with lower employment rates had the fastest employment growth, and the annual average growth rate was around 1% across all countries. Reflecting the fast economic

Figure 29: Beta-convergence – employment rate, NUTS 2 regions, 2004–2019



Source: Authors' calculations based on Eurostat, Employment rates by sex, age and NUTS 2 regions (%) [lfst_r_lfe2emprr]

improvements in GDP per capita, employment rates in CEE regions grew particularly strongly. By contrast, some SE regions that started with employment rates similar to or lower than CEE regions experienced negative growth rates (see Figure 29, 2004–2008 panel).

During the crisis period, there was beta-divergence. Employment rates fell in almost all SE Member States and in some CEE countries, while in most of the NWE countries it increased slightly.

In the aftermath of the economic crisis, almost all regions returned to rising employment rates, and the distribution of regions changed dramatically compared with the pre-crisis period. In the SE cluster, which started with the lowest employment rates, employment grew quite fast, as it did in CEE regions.

Overall, the whole period of 2004–2019 was characterised by beta-convergence in the employment rate, with an average annual growth rate of less than 1%.

Regional employment transitions

Given the impact that the economic crisis seems to have had on employment convergence patterns and the marked differences across clusters of regions, an analysis of how regions transitioned across classes of employment rates can shed light on the geographical dimension of the phenomenon.

First, it should be noticed that, based on the distribution of classes, the dispersion of the employment rates is much lower than GDP per capita. Employment rates were much more concentrated towards middle values, and no region had an employment rate below 60% or above 125% of the EU average. Therefore, the lowest

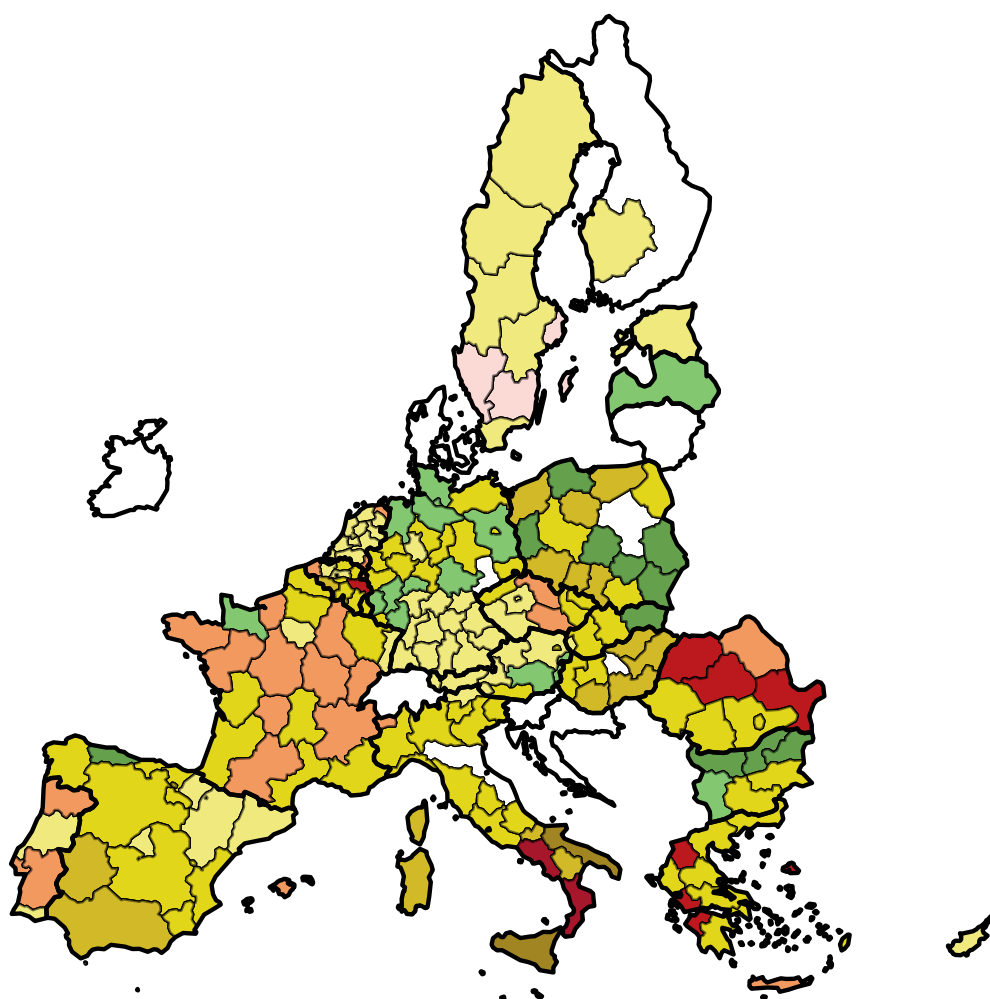
class was 60–75% of the EU average and the highest class was > 120% of the EU average, with three additional classes in between.

Figures 30–32 illustrate the proportions of regions moving from one class to another during the three subperiods.

In the pre-crisis period of 2004–2008, none of regions that started with the lowest employment rate

(60–75% of the EU average) moved to another class (Figure 30). Mobility was also low for the other classes. The only exception is the > 120% class. Only 25% of regions remained in that class, while 75% fell to the lower class (105–120%). The proportion of regions in the 90–105% and 60–75% classes increased (by 5.5 and 0.9 percentage points, respectively). The proportion of regions falling into the other classes, by contrast, decreased slightly.

Figure 30: Employment rate in NUTS 2 regions – transition map and matrix and distribution of classes, 2004–2008



Transition matrix

		2004				
		60–75%	75–90%	90–105%	105–120%	> 120%
2008						
60–75%		100.0%	0.0%			
75–90%		5.7%	62.9%	31.4%		
90–105%			9.1%	75.8%	15.2%	
105–120%				32.1%	67.9%	0.0%
> 120%					75.0%	25.0%

Distribution

		Employment rate class (% of the EU average)				
		60–75%	75–90%	90–105%	105–120%	> 120%
Year						
2004		1.8%	15.9%	45.0%	35.5%	1.8%
2008		2.7%	14.1%	50.5%	32.3%	0.5%

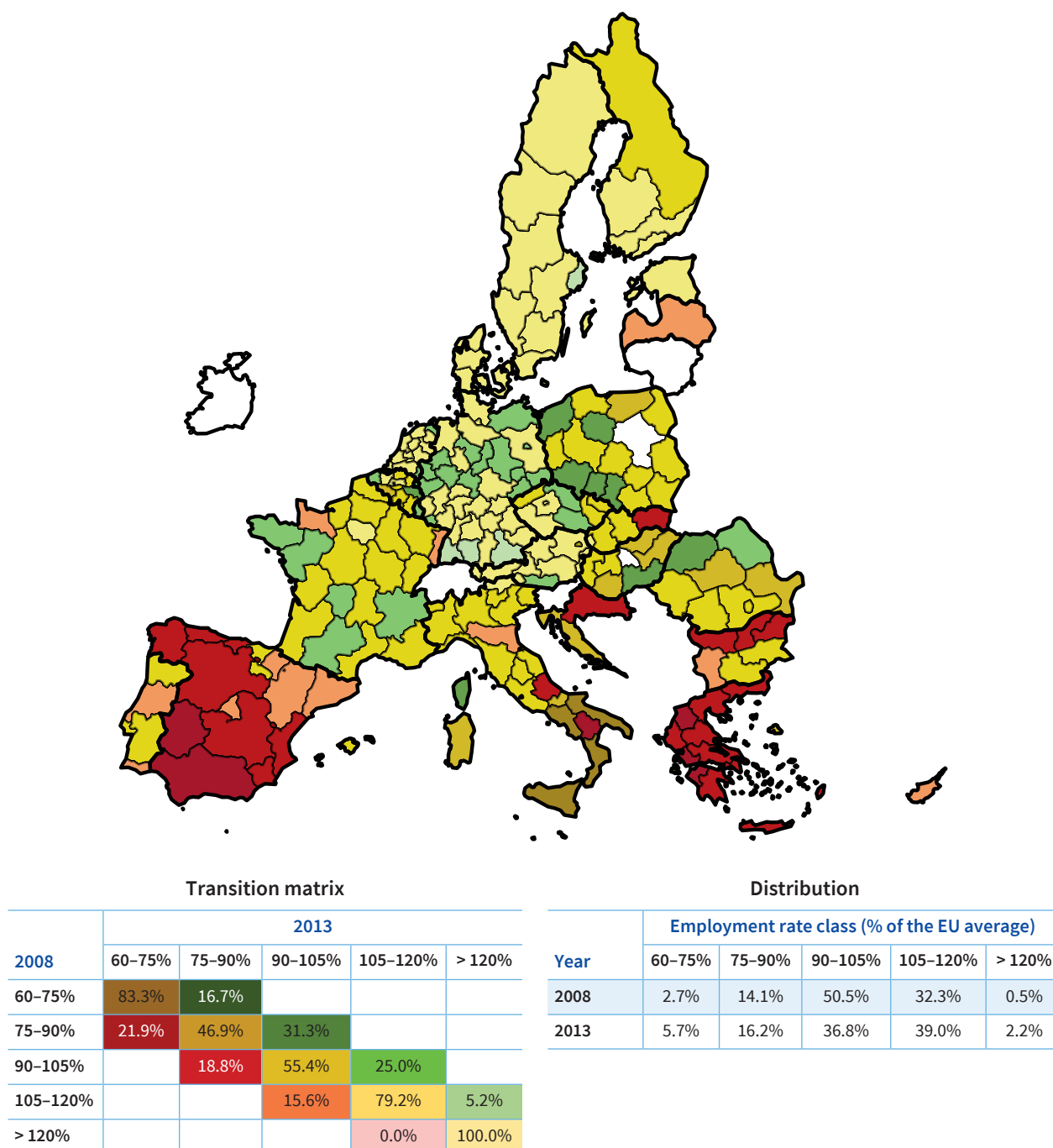
Note: Refer to Figure 25 for a guide to interpreting the transition matrix.

Source: Authors' calculations based on Eurostat, Employment rates by sex, age and NUTS 2 regions (%) [lfst_r_lfe2emprrt]

The 2008–2013 period was characterised by higher mobility between classes, towards both higher and lower levels of employment (Figure 31). This is fully consistent with the increase in the dispersion observed above. Many SE regions, particularly in Greece, Italy and Spain, transitioned to lower employment rate classes.

Almost 22% of the regions initially in the 75–90% class moved to the lower class (60–75%), and 18.8% of regions starting at the very centre of the distribution (the 90–105% class) transitioned to the lower class (75–90%).

Figure 31: Employment rate in NUTS 2 regions – transition map and matrix and distribution of classes, 2008–2013



Note: Refer to Figure 25 for a guide to interpreting the transition matrix.

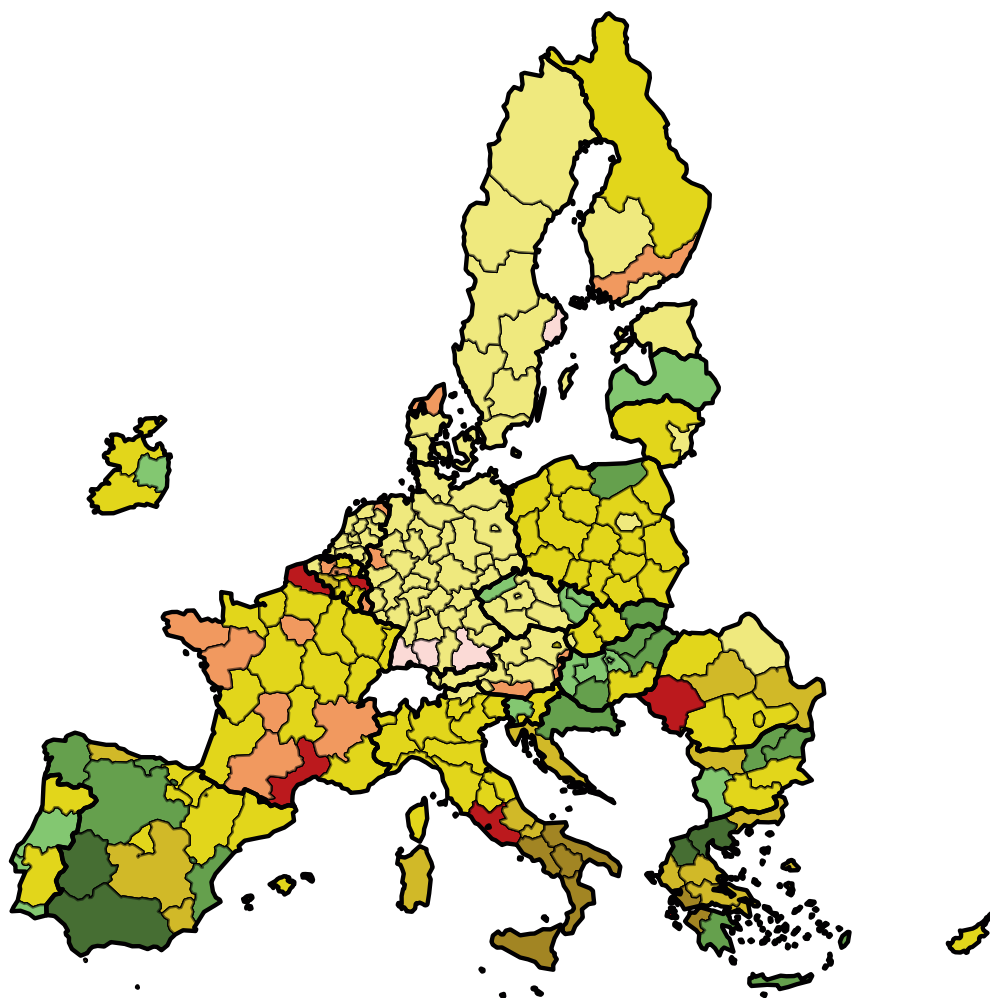
Source: Authors' calculations based on Eurostat, Employment rates by sex, age and NUTS 2 regions (%) [lfst_r_lfe2emprr]

Finally, during 2013–2019, there was some mobility between the lower classes but less among the classes in the middle (Figure 32). In the aftermath of the financial crisis, a few regions in Italy, France and Romania transitioned to lower employment rate classes. Others in Greece, Spain and CEE countries improved their situation. Interestingly, no region remained in the class above 120% of the EU average, with all regions that started in this class moving to the one below. Overall, most regions started to again converge towards higher levels of employment in this period.

Summary

It appears that the economic crisis triggered in 2008 led to a significant spike in regional disparities in employment. Since then, such disparities have lessened, but in 2019, they were still wider than before the crisis. The average employment rate in SE regions remained below that of NWE regions over the entire period considered, and since 2008, it has also been below that of CEE regions. However, the EU average recovered fully and, in 2019, it had reached the highest level over the 16 years under consideration.

Figure 32: Employment rate in NUTS 2 regions – transition map and matrix and distribution of classes, 2013–2019



Transition matrix

2013	2019				
	60–75%	75–90%	90–105%	105–120%	> 120%
60–75%	64.3%	42.9%			
75–90%	2.7%	56.8%	40.5%		
90–105%		6.5%	78.5%	15.1%	
105–120%			17.6%	82.4%	0.0%
> 120%				100.0%	0.0%

Distribution

Year	Employment rate class (% of the EU average)				
	60–75%	75–90%	90–105%	105–120%	> 120%
2013	5.7%	16.2%	36.8%	39.0%	2.2%
2019	4.2%	13.3%	43.3%	39.2%	0.0%

Note: Refer to Figure 25 for a guide to interpreting the transition matrix.

Source: Authors' calculations based on Eurostat, Employment rates by sex, age and NUTS 2 regions (%) [lfst_r_lfe2emprt]

Quality of government

Convergence patterns in quality of government are analysed here using the EQI. This indicator captures citizens' perceptions of the corruption in, quality of and impartiality of essential public services, such as health, education and policing, in their region of residence. The indicator, which usually ranges from -3 (low quality of government) to 3 (high quality of government), was rescaled to 0–6 for the purpose of the beta-convergence analysis. In addition, because the indicator is available only for 2010, 2013 and 2017, the linear interpolation method was used to impute data to missing years after 2010. Given the low variability of the indicator, this methodology does not present major shortcomings. The full period of analysis of this indicator is 2010–2019, with two subperiods, 2010–2013 and 2013–2019.

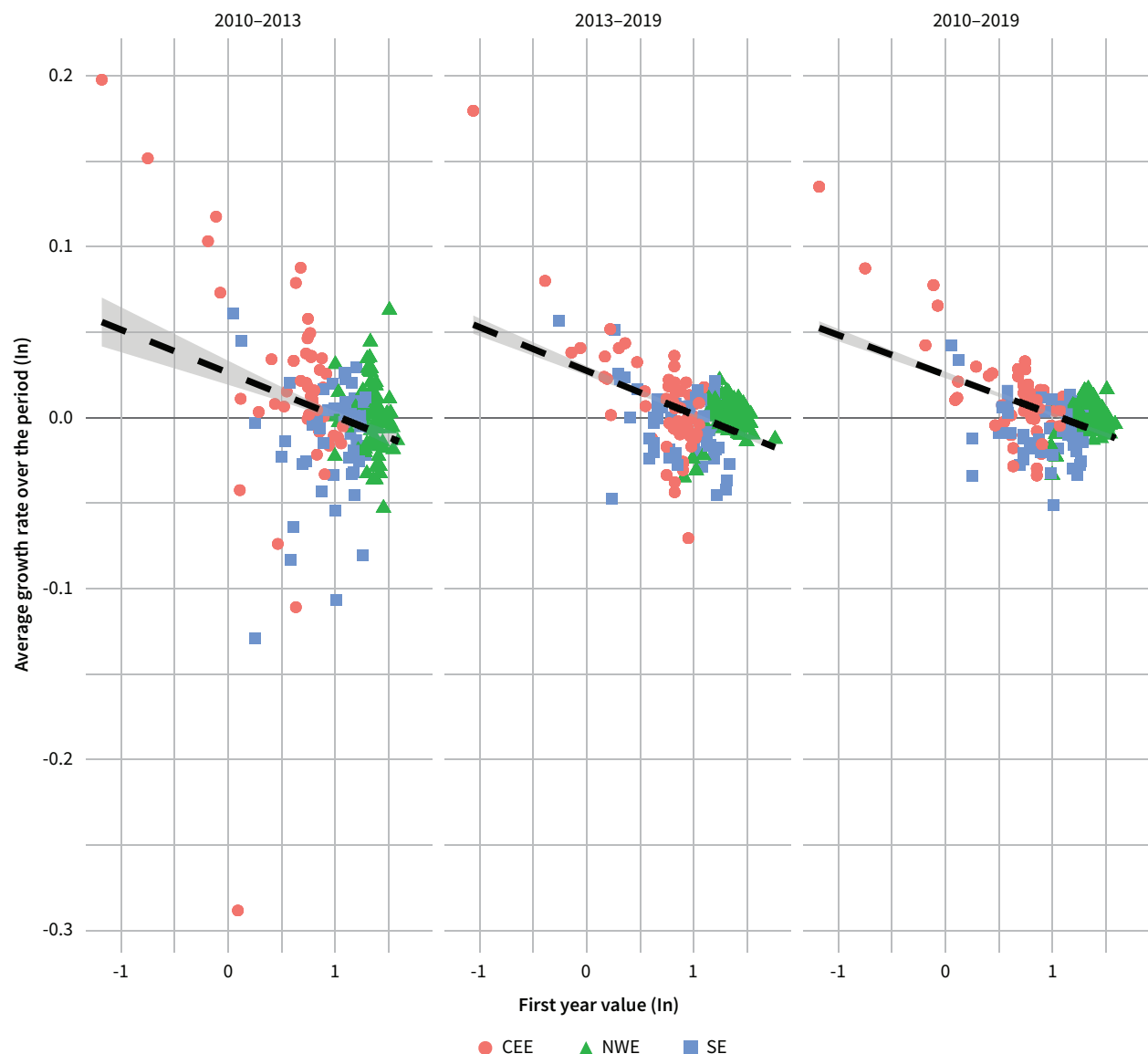
Beta-convergence patterns

Figure 33, which illustrates developments in beta-convergence over time, shows very similar patterns across the two subperiods and the overall period.

The distribution of the observations suggests that convergence was mostly driven by the few CEE regions that experienced an improvement in this indicator. By contrast, in most SE regions, the EQI score either improved little or worsened. In most NWE regions, which were very concentrated at high initial levels (right-most panel of Figure 33), limited changes were recorded.

Between 2013 and 2019, beta-convergence continued at the same rate as before, but dispersion declined somewhat, as illustrated in the centre panel of Figure 33.

Figure 33: Beta-convergence – EQI, NUTS 2 regions, 2010–2019



Note: Data for Germany refer to NUTS 1 instead of NUTS 2 owing to missing data.
Source: Authors' calculations based on the EQI, University of Gothenburg

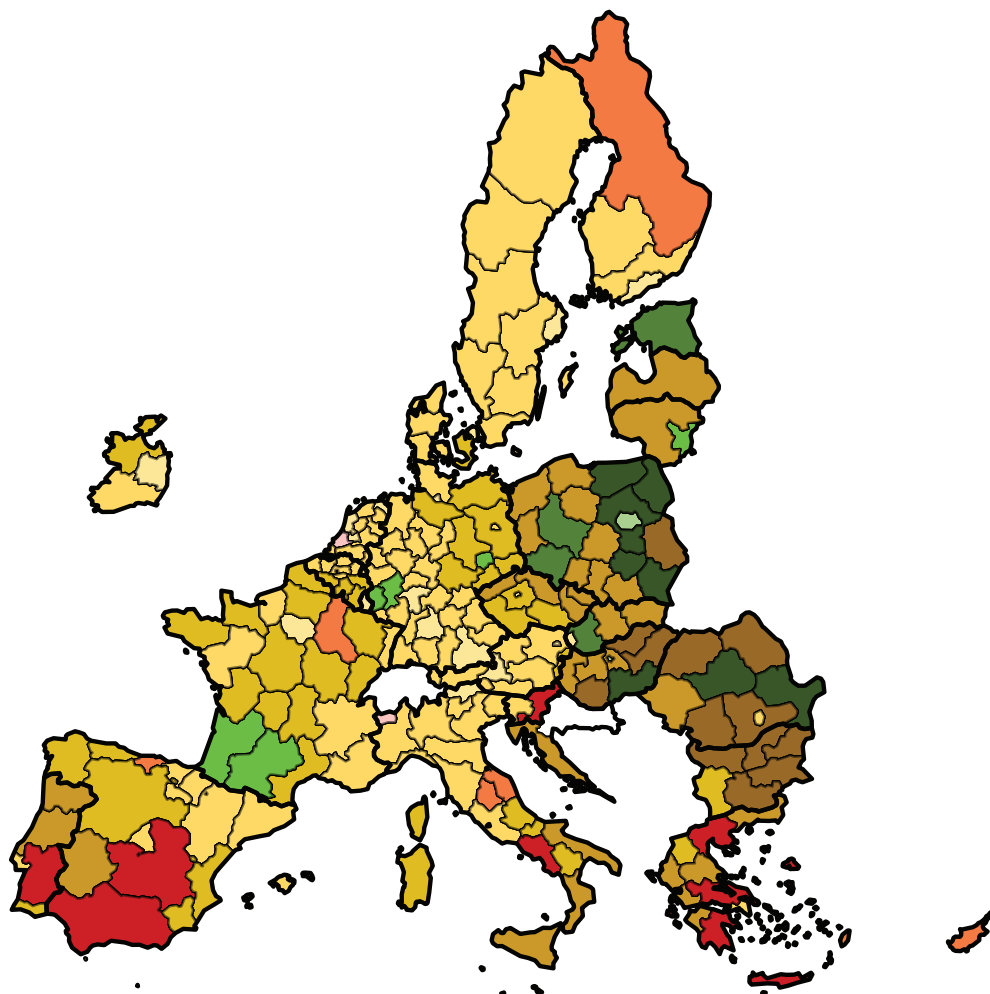
NWE regions remained those with the highest EQI scores. The perceived quality of government in SE and CEE regions in this period appeared to be in a similar range to that at the beginning of the overall period; however, several CEE regions experienced an improvement in their score, whereas most SE regions experienced either no change or a negative change.

Regional quality of government transitions

The transition matrices and maps (Figures 34 and 35) show even more clearly the different patterns across the

three geographical clusters. Between 2010 and 2013, no region from the 0–50% class improved its position regarding EQI score. By contrast, 40.4% transitioned from the low-medium class (50–75%) to the 75–100% class, while 8.5% moved in the opposite direction (from the 50–75% class to the 0–50% class). Almost 13% of regions that started from the medium class (75–100%) transitioned down to the 50–75% class. In Spain, a few regions transitioned from the medium-high class (100–150%) to the medium class (75–100%), while in Italy a few transitioned down from the medium-low

Figure 34: EQI in NUTS 2 regions – transition map and matrix and distribution of classes, 2010–2013



Transition matrix

2010	2013				
	0–50%	50–75%	75–100%	100–150%	> 150%
0–50%	100.0%	0.0%			
50–75%	8.5%	51.1%	40.4%		
75–100%		12.8%	79.5%	7.7%	
100–150%			8.1%	90.9%	1.0%
> 150%				40.0%	60.0%

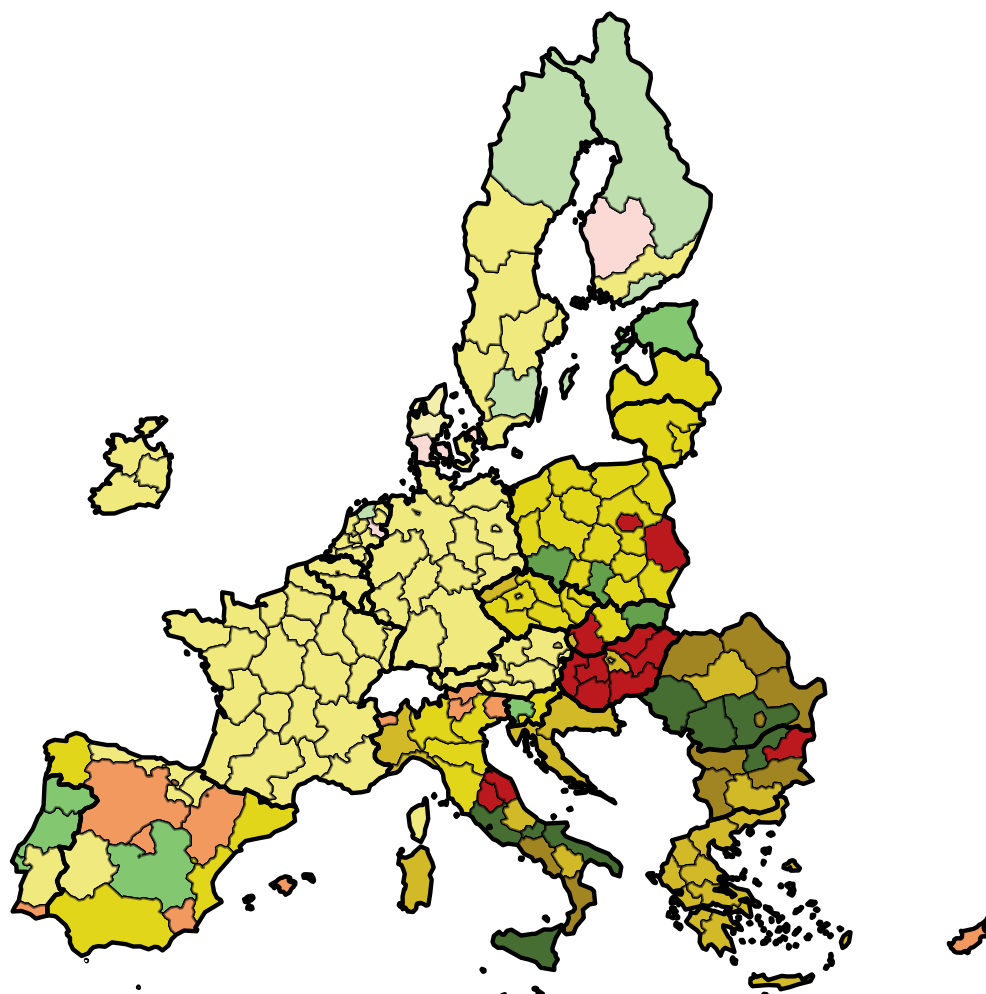
Distribution

Year	EQI class (% of the EU average)				
	0–50%	50–75%	75–100%	100–150%	> 150%
2010	6.3%	22.6%	18.8%	47.6%	4.8%
2013	8.2%	13.9%	27.9%	46.6%	3.4%

Notes: Original data (point observations in 2010, 2013 and 2017) were used to linearly interpolate missing years. Data for Germany refer to NUTS 1 instead of NUTS 2 owing to missing data. Refer to Figure 25 for a guide to interpreting the transition matrix.

Source: Authors' calculations based on the EQI, University of Gothenburg

Figure 35: EQI in NUTS 2 regions – transition map and matrix and distribution of classes, 2013–2019



Transition matrix

2013	2019				
	0–50%	50–75%	75–100%	100–150%	> 150%
0–50%	52.9%	47.1%			
50–75%	0.0%	89.7%	10.3%		
75–100%		24.1%	63.8%	12.1%	
100–150%			13.4%	81.4%	5.2%
> 150%				57.1%	42.9%

Distribution

Year	EQI class (% of the EU average)				
	0–50%	50–75%	75–100%	100–150%	> 150%
2013	8.2%	13.9%	27.9%	46.6%	3.4%
2019	4.3%	23.1%	25.5%	43.3%	3.8%

Notes: Original data (point observations in 2010, 2013 and 2017) were used to linearly interpolate missing years. Data for Germany refer to NUTS 1 instead of NUTS 2 owing to missing data. Refer to Figure 25 for a guide to interpreting the transition matrix.

Source: Authors' calculations based on the EQI, University of Gothenburg

(50–75%) to the low (0–50%) class. Among CEE countries, EQI scores worsened in two Romanian regions but improved markedly in Latvia, Lithuania and Poland. Most NWE regions remained in the highest classes.

In the aftermath of the crisis (2013–2019), 47.1% of regions in the 0–50% class moved a tier upward. Many of these regions were in Italy and Romania. Numerous SE regions performed better in this period than in the previous period, while no significant change happened

between the periods in NWE regions. Interestingly, among CEE countries, regions did not experience the same improvement as in the period before. While there was no worsening of regions in the 50–75% class, 24.1% of regions moved from the 75–100% class to the 50–75% class. A slight worsening also happened in regions that started in the highest class in 2014; it should be noted that although the percentage that moved down a tier (57.1%) is very high, the number of regions concerned is very small.

Summary

Most of the regions in the CEE countries, which started with the lowest EQI scores, achieved significant improvements. In the second subperiod (2013–2019), this was also true for some regions in SE countries. However, most regions that experienced a deterioration to lower quality of government were in CEE and SE countries. NWE regions remained by far those with the highest EQI scores and made rather steady advances.

Summary of convergence trends at regional level

Several regions in SE countries have suffered from economic stagnation and a general deterioration in social conditions (in terms of employment) and institutional conditions (as measured by the EQI). This aligns with the conclusion of the European Commission (2022), which suggests that these regions may be in a ‘development trap’. Regions that were hardest hit by the economic crisis of 2008–2012, which often started with middle income levels, have struggled to recover or have ended up even worse off.

EU convergence in GDP per capita and quality of government seems to have been driven by CEE regions. These regions, which started from lower levels in both indicators, experienced high increase rates. By contrast, a clear divide between SE and NWE regions appeared during the economic crisis and never really closed, despite improvements in some regions. Greece and Italy appear to have the regions that faced most difficulties.

It should be noted that quality of government, which is based on perception, tends to be highly correlated with economic conditions; therefore, it may not be a chance finding that EQI convergence often goes hand in hand with convergence in GDP per capita.

While regions in CEE countries appear to drive convergence across different indicators, significant differences seem to exist within countries. As briefly illustrated above and explained more in detail by Alcidi et al (2018) and the European Commission (2022), capital regions appear to perform better than other regions. The disparity between capital and other regions is not a feature solely of CEE countries, but it tends to be more marked in those countries. In several countries, the capital region typically exhibits higher GDP per capita and higher employment rates, which can often lead to a concentration of economic activity and employment in these regions. In NWE countries, however, the difference in growth between the capital and other regions seems to be more limited.

EU average employment has been growing, but regional disparities have also grown. The economic crisis led to a significant spike in regional disparities by hitting mostly SE regions. At EU level, the employment rate has fully recovered from the crisis and reached its highest value in 2019. Regional disparities have fallen since the crisis but remain wider than before it. Average employment rates in SE regions remained far below those in NWE regions and, since the crisis, have also been below those in CEE regions.

4 Impact of COVID-19 on convergence

To investigate the impact of the COVID-19 pandemic on convergence, the descriptive analysis of unconditional beta-convergence and sigma-convergence conducted at country level was extended to cover 2020 and, when possible, 2021. This inevitably also captures the effect of the measures adopted to contain the virus and to support individuals, households and businesses, as the effects of pandemic and the policy response to it cannot be disentangled.

The convergence analysis was carried out on one indicator for each economic, social and institutional dimension, namely GDP per capita, the employment rate and government effectiveness, one of the WGs. To capture and isolate the impact of the pandemic on convergence, convergence in the indicators over 2013–2021 was compared with that over 2013–2019 (the latter was already shown in Chapter 2).

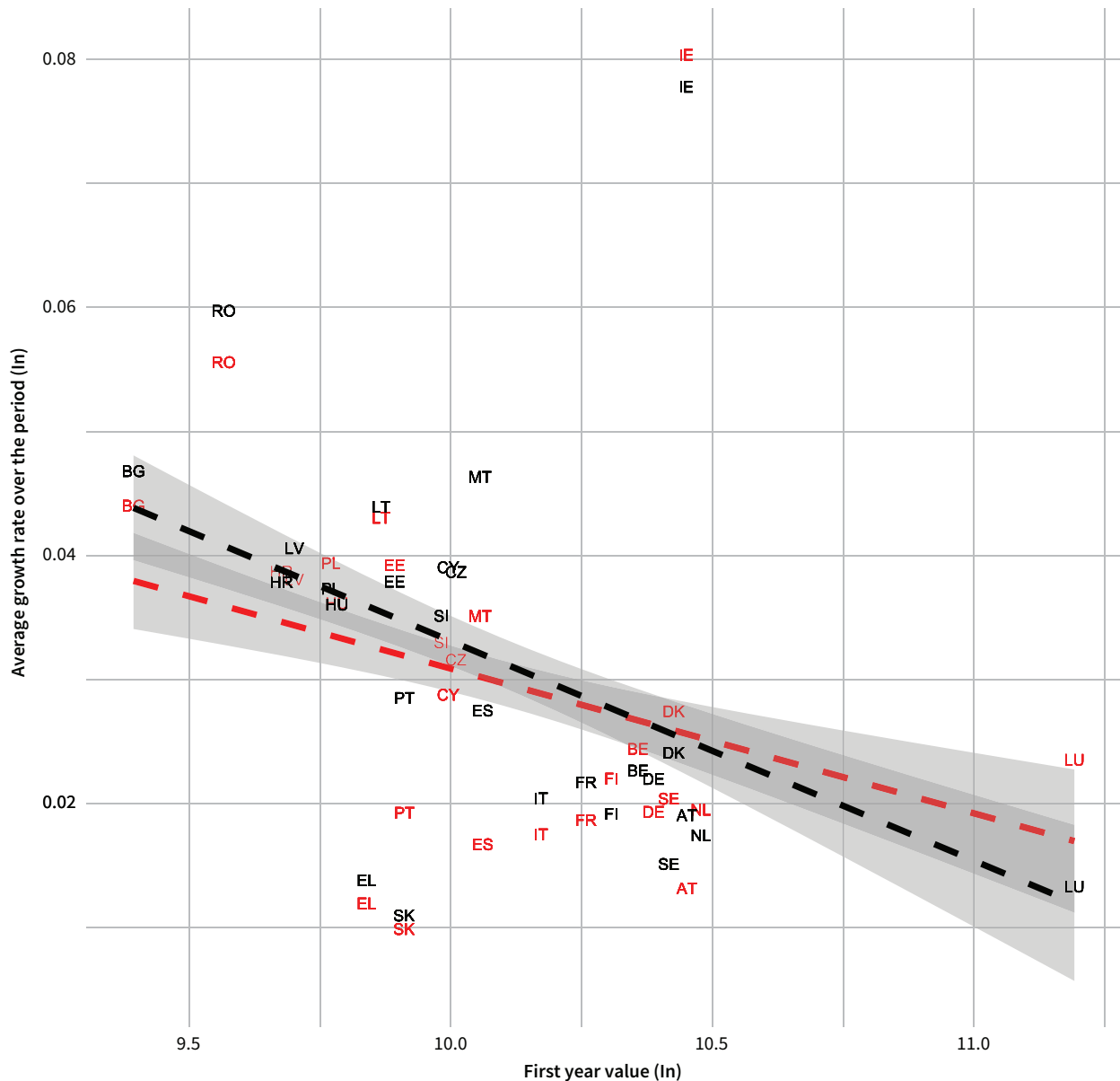
GDP per capita

As illustrated in Figure 36, the COVID-19 pandemic resulted in a relatively small change in the slope of the convergence line of GDP per capita (from -0.02 to -0.01), meaning a slowdown in convergence. While most countries in the SE cluster, especially Portugal and Spain, and some CEE countries recorded lower average

growth in GDP per capita when 2020 and 2021 were included, some NWE countries, such as Belgium, Ireland, Luxembourg and the Netherlands, recorded a higher rate than in 2013–2019. This increased growth rate was essentially driven by a very strong recovery in 2021 and a milder fall in 2020 in NWE countries than in the other clusters. These different outcomes across countries explain the change in the slope of the EU as a whole. The decline in the beta-convergence coefficient implies that lower GDP outcomes outweighed the higher outcomes.

Interestingly, convergence during the economic crisis (2008–2013), which like the pandemic period includes the policy response to it, was characterised by a steeper slope than the 2013–2021 period (-0.02 versus -0.01, respectively) – in other words, the speed of convergence was higher during the economic crisis. At that time, however, several countries exhibited negative average growth in their GDP per capita. Therefore, although the speed of convergence was greater, several countries were worse off. Notwithstanding the specific natures of the pandemic relative to the economic crisis, the policy response in support of the economy during the COVID-19 pandemic, which was unprecedented and far stronger than during the economic crisis, seems to have had a significant impact on convergence.

Figure 36: Beta-convergence – GDP per capita, EU27, 2013–2019 and 2013–2021

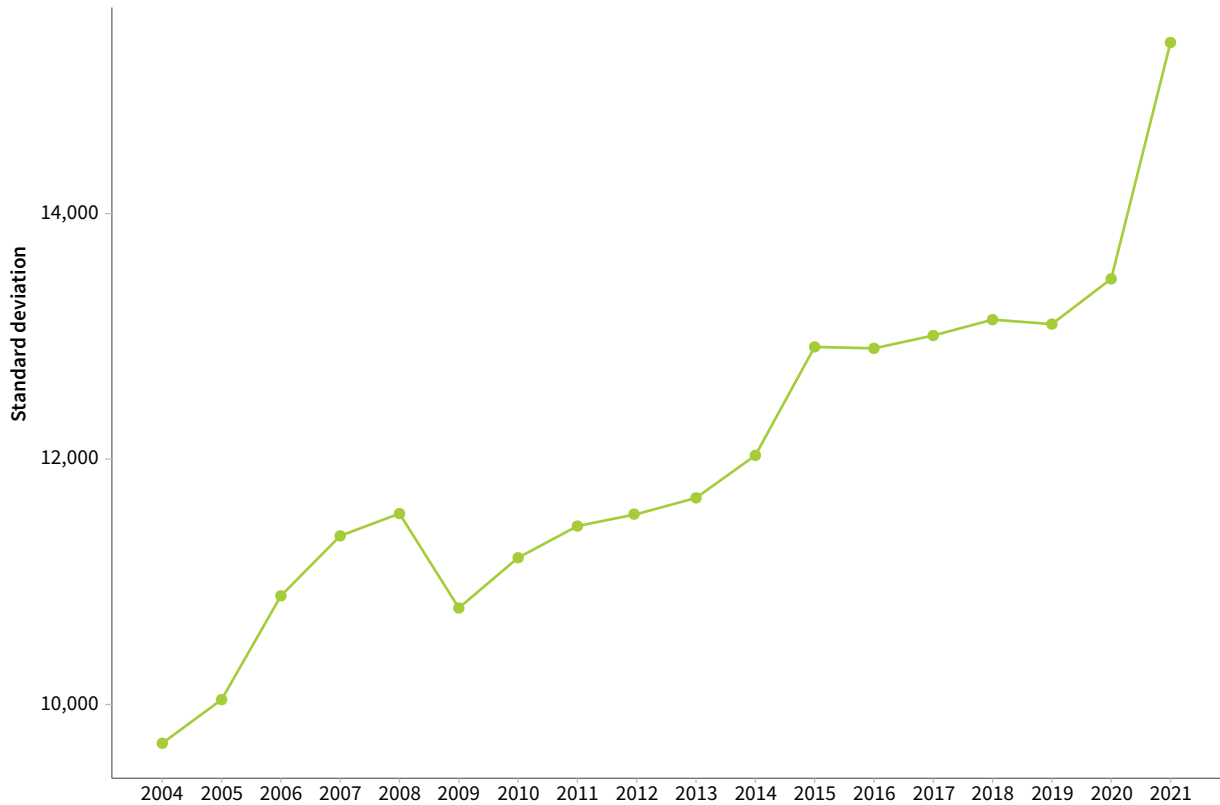


Note: The red line and labels represent 2013–2021; the black line and labels represent 2013–2019.
Source: Authors' calculations based on Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions [nama_10r_2gdp]

A further effect of the pandemic was an increase in dispersion of GDP per capita. As shown in Figure 37, the standard deviation was already increasing in 2020 and spiked dramatically in 2021. Therefore, the pandemic resulted in a slowdown of beta-convergence and increased sigma-divergence in GDP per capita.

It is notable that cross-country-differences in GDP per capita increased more during the pandemic than during the economic crisis. However, this represents not a reversal of trends but rather an amplification and an acceleration of the pre-existing trend. If 2009 is excluded, dispersion in GDP per capita has been increasing, though at differing speeds, since 2004.

Figure 37: Sigma-convergence – GDP per capita (€), EU27, 2004–2021



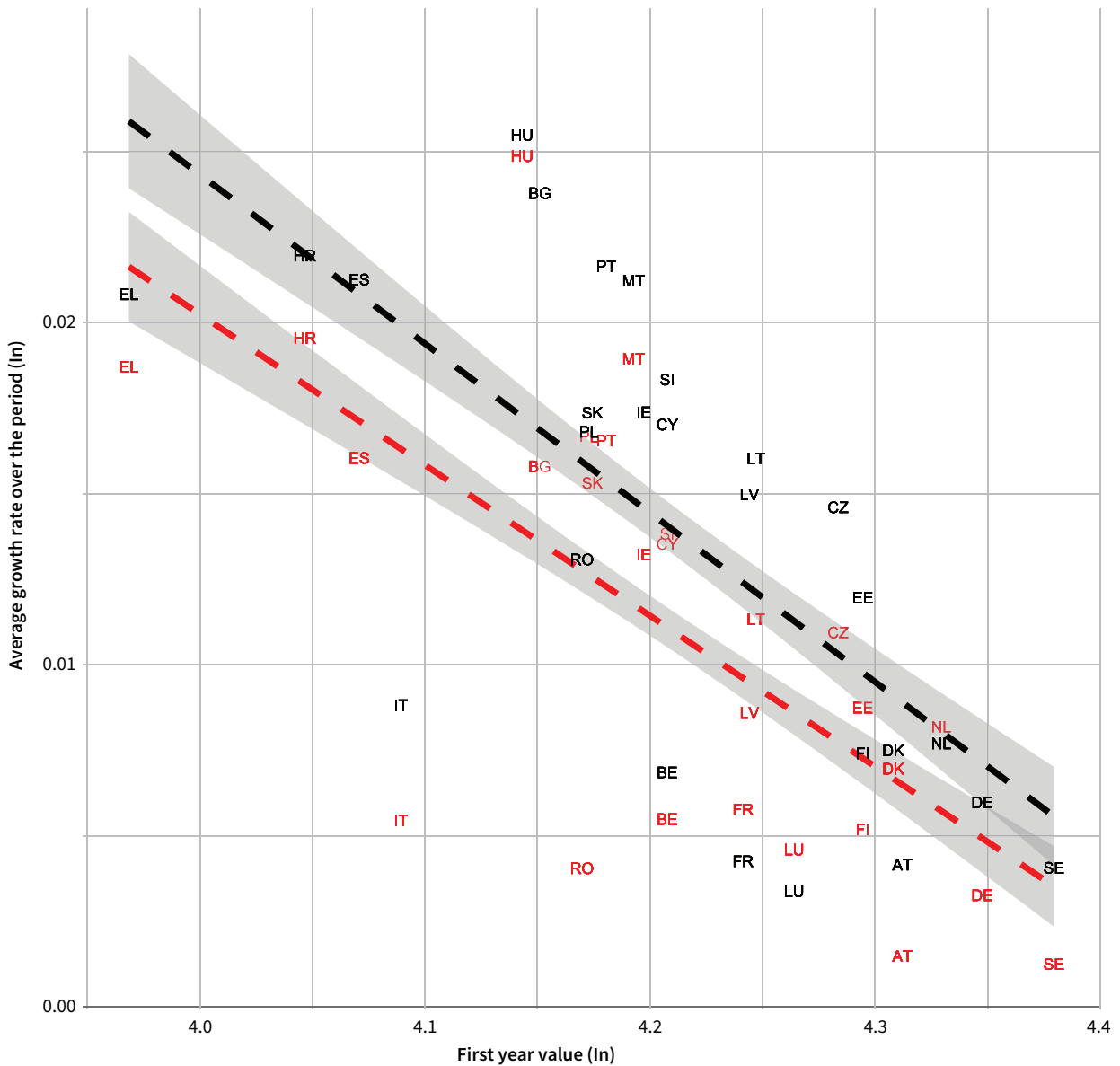
Source: Authors' calculations based on Eurostat, Gross domestic product (GDP) at current market prices by NUTS 2 regions [nama_10r_2gdp]

Employment rate

COVID-19 also altered the convergence dynamics of the employment rate, but in a different manner. Unlike GDP per capita, the speed of convergence in the employment rate was barely affected. In Figure 38, the slope of the convergence line for 2013–2021 (in red) is almost the same that for 2013–2019 (in black). The downward shift of the line, however, indicates that growth rates in

employment were relatively lower in all countries during the pandemic (the only exceptions were France, Luxembourg and the Netherlands). The largest decreases in employment growth rates (mostly in 2020) were experienced in CEE countries such as Bulgaria, Latvia and Romania and in SE countries such as Italy and Spain. By contrast, in NWE countries, reductions were comparatively moderate. However, overall, the magnitude of the changes was very small.

Figure 38: Beta-convergence – employment rate, EU27, 2013–2019 and 2013–2021



Note: The red line and labels represent 2013–2021; the black line and labels represent 2013–2019.
Source: Authors' calculations based on Eurostat, Employment rates by sex, age and NUTS 2 regions (%) [lfst_r_lfe2emprrt]

Figure 39 illustrates quite significant swings in sigma-convergence over 2013–2021. After a substantial increase during the years of the economic crisis, cross-country differences in employment rates declined to below the pre-crisis level. In 2021, a reversal was seen, with an increase in dispersion. However, this increase was limited, as the level was still below the 2019 value. This may be explained by

temporary factors such as different strengths of the recovery, associated with different degrees of persistence of the containment measures in Member States, as well as the sectoral compositions of their economies. Economies dominated by sectors involving contact between workers and the public (for example, tourism) typically experienced a milder recovery.

Figure 39: Sigma-convergence – employment rate (%), EU27, 2004–2021



Source: Authors' calculations based on Eurostat, *Employment rates by sex, age and NUTS 2 regions (%)* [lfst_r_lfe2emprt]

It should be noted that the scale of the changes in the employment rate was small. If one compares these changes to the magnitude of the impact of the pandemic on GDP, which fell by almost 10% in the EU in 2020, the employment rate changes observed are negligible. This contrasts with what was expected: a much larger fall in employment and a strong increase in unemployment.

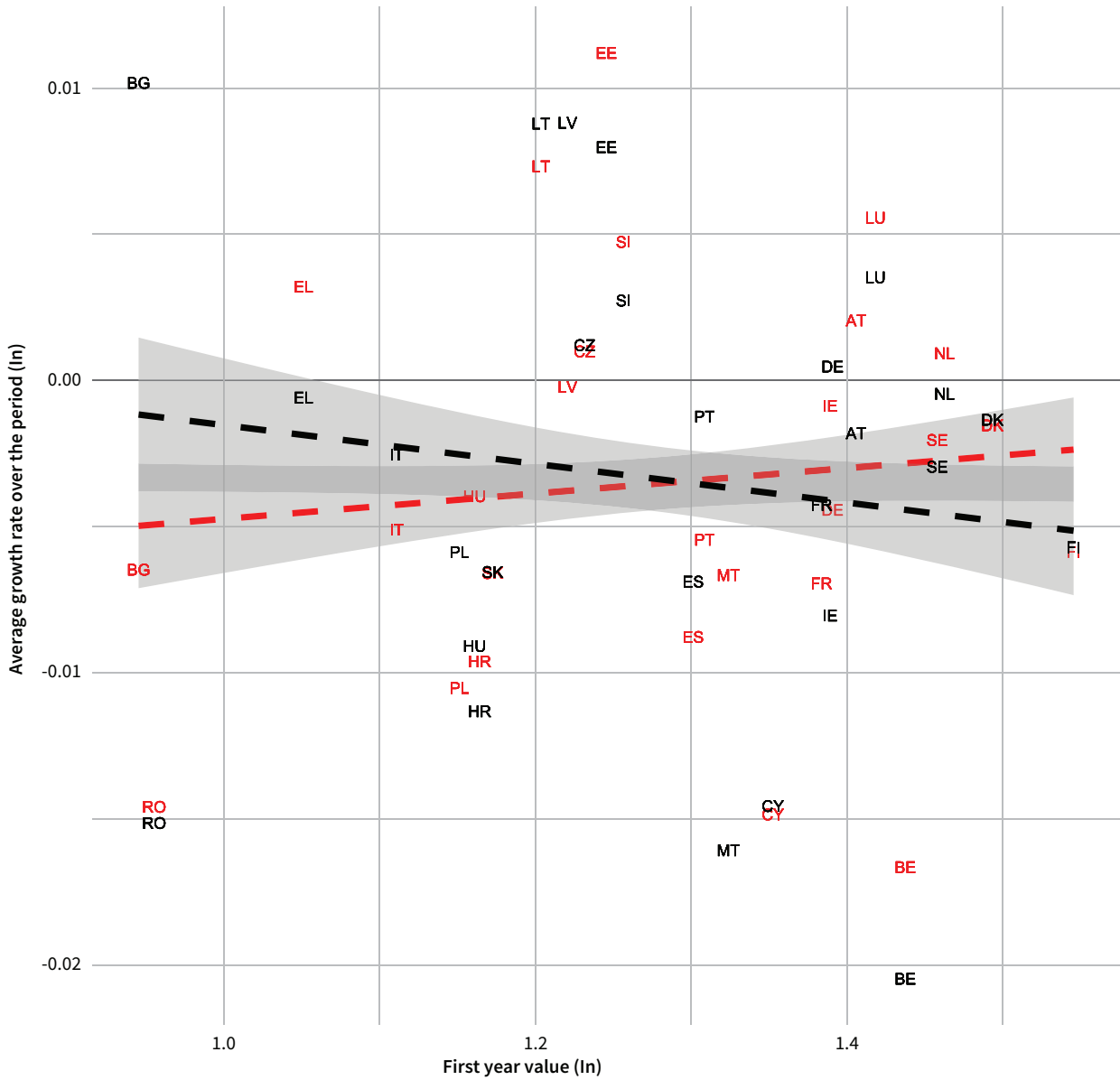
The disconnect between GDP and unemployment/employment is largely the result of a set of policy measures, namely the short-term working schemes that were introduced in 2020 and remained in place throughout 2021 in almost all EU Member States. These schemes consisted in transfers made by the governments to companies and workers to prevent temporary demand shortages resulting in job losses. With that in mind, the relatively mild impact on employment should not lead to underestimations of the effects of the pandemic on labour markets. Despite the number of unemployed workers increasing by only a

few thousand in the EU in the first half of 2020, the active population in the second quarter 2020 fell by almost six million compared with the end of 2019 (Eurostat, undated).

Government effectiveness

Finally, whether the pandemic affected convergence in government effectiveness was assessed by comparing beta-convergence in the WGI government effectiveness indicator during 2013–2019 with that during 2013–2020. Figure 40 shows that there was little convergence in government effectiveness during 2013–2019, and the inclusion of 2020 resulted in a clear flattening of the line, cementing the absence of convergence during this period. The distribution of the observations suggests that there was no clear pattern across geographical clusters: some countries appeared to have improved their scores, while others' scores worsened.

Figure 40: Beta-convergence – government effectiveness, EU27, 2013–2019 and 2013–2020



Notes: Original data were rescaled to a 0–5 range (from a range of -2.5 to 2.5). 0 represents a low quality of governance and 5 represents a high quality of governance. The red line and labels represent 2013–2020; the black line and labels represent 2013–2019. Source: Authors’ calculations based on World Bank WGI

The sigma-convergence analysis confirms the tendency towards higher dispersion between Member States (Figure 41). In 2020, there was a fairly substantial

increase in dispersion (although it was small in absolute levels, given the scale), in continuation of the pre-existing trend since 2018 (despite the blip in 2019).

Figure 41: Sigma-convergence – government effectiveness, EU27, 2004–2020



Notes: Original data were rescaled to a 0–5 range (from -2.5 to 2.5). 0 represents a low quality of governance and 5 represents a high quality of governance.

Source: Authors' calculations based on World Bank WGI

Summary of convergence trends during the pandemic

Overall, the COVID-19 pandemic seems to have negatively affected convergence in the EU, by slowing it down, by lowering it somewhat (as seen in the downward shift in employment) or by halting it completely. Interestingly, for several of the variables investigated, the pandemic seems to have accelerated or amplified a change that was already visible before its outbreak. This is very different from the effects of the economic crisis, which represented a clear break from the pre-existing trend.

When considering the impact of the COVID-19 pandemic, it is crucial to keep in mind that it is impossible to disentangle the impact of the health crisis from the impact of both the containment measures implemented to avoid the spread of the virus and the significant support measures put in place by national governments and the EU. This means that the analysis also captures the impact of the policy response, which was very much more timely, extensive and comprehensive than the response to the economic crisis.⁷ This difference appears to have affected convergence.

⁷ For a comparison of the policy responses to the Great Recession and the COVID-19 pandemic, see Corti and Alcidi (2021).

5 Impact of recovery and resilience plans on upward social convergence

The COVID-19 pandemic led to an unprecedented downturn in economic activity. Policymakers around the globe introduced emergency measures to halt the spread of the virus, such as social distancing and travel restrictions. Such measures led to the shutdown of large parts of the economy, including businesses, workplaces and schools. From the beginning of the pandemic, the European Commission was very concerned to support national fiscal responses, including through the suspension of common rules, such as the rules on state aid and the fiscal rules under the Stability and Growth Pact. In addition, it sought to provide a second line of defence with the Support to Mitigate Unemployment Risks in an Emergency (SURE) instrument, to financially support Member States in covering short-term working schemes.

However, the Recovery and Resilience Facility (RRF) – which is widely considered proof of European solidarity and a concrete manifestation of the EU’s commitment to addressing the pandemic crisis (Ferrera et al, 2021) – was the real ground-breaking innovation (Schelke, 2021). By providing €672.5 billion to support the post-pandemic recovery, mostly to southern European and central and eastern European Member States (Alcidi and Corti, 2021), the RRF marks a leap forward in the development of a stronger redistributive function within the EU and a ‘clear break with the precedent’ in terms of instruments and institutional mechanics (Buti and Papaconstantinou, 2021).

While the introduction of the RRF was triggered by the COVID-19 pandemic, it was also the product of a long-standing debate on the need for an EU fiscal capacity to strengthen economic policy coordination, convergence and solidarity and to focus on better economic governance in the euro zone (Bokhorst and Corti, forthcoming). Over the years, this debate has brought a swathe of reform proposals to the table, including the Competitiveness and Convergence Instrument (European Commission, 2013), the Reform Support Programme (European Commission, 2018) and the Budgetary Instrument for Competitiveness and Convergence (Eurogroup, 2020). All these proposals were based on the EU’s need to improve growth and prosperity and aim for sustained re-convergence across countries.

The Five Presidents’ Report recognised that convergence towards more resilient economic and social structures in Member States was an essential element for the success of the EMU in the long run.

Later, the *Reflection paper on the deepening of the economic and monetary union* recognised ‘jobs, growth, social fairness, economic convergence’ as guiding principles for strengthening the EMU (European Commission, 2017a). Upward convergence is a by-product of the RRF, arising from the promotion of the EU’s economic, social and territorial cohesion and the improved resilience, crisis preparedness, adjustment capacity and growth potential of the Member States.

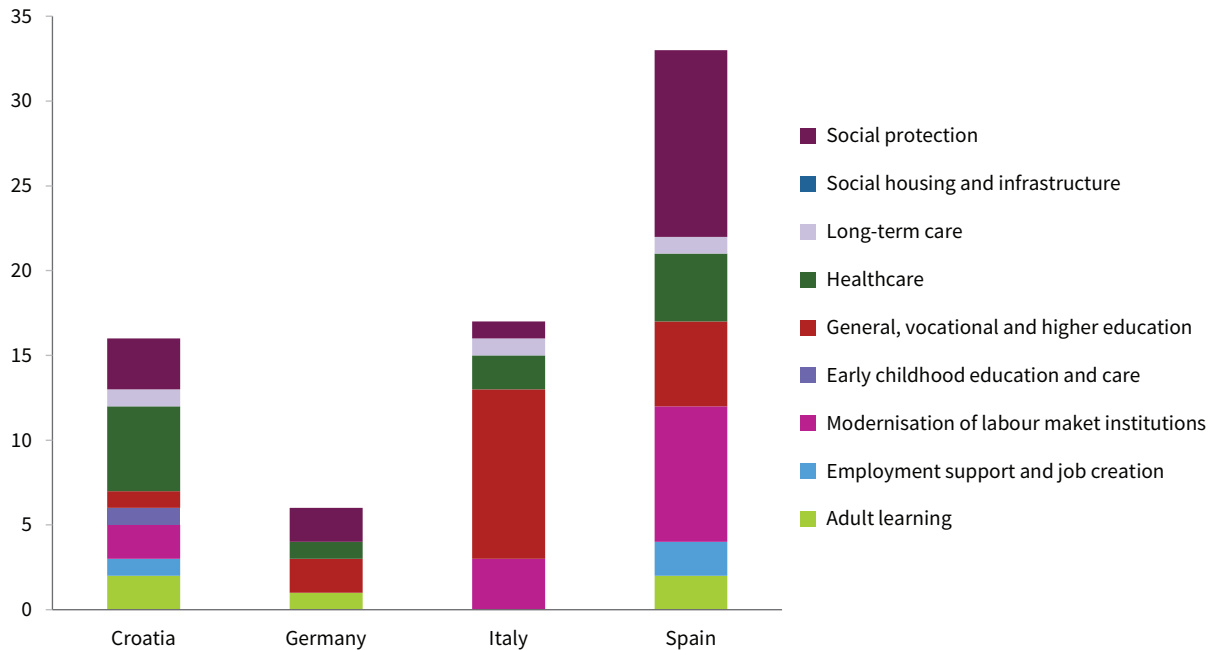
Against this background, the focus of this chapter is the RRF and its potential role in fostering upward convergence and, notably, upward social convergence. To access RRF funding, Member States submit a recovery and resilience plan (RRP) setting out the reforms and investments they plan to make. As stated in the RRF Regulation, the RRFs are expected to contribute to:

the implementation of the European Pillar of Social Rights, including through the promotion of policies for children and youth, and to mitigating the economic and social impact of the COVID-19 crisis, thereby enhancing the economic, social and territorial cohesion and convergence within the Union.

To assess the RRF’s role in upward convergence, case studies of four Member States are discussed in this chapter: Croatia, Germany, Italy and Spain. These countries represent all three of the geographical clusters that were analysed in the previous chapters (CEE, NWE and SE) and reflect the differing scales of funding received from the RRF (relative to GDP). Croatia, Italy and Spain received funding packages equal to 12.2% (€6.3 billion), 4.1% (€68.9 billion) and 5.8% (€69.5 billion) of national GDP, respectively, while Germany received 0.8% (€25.6 billion) of its national GDP.

The four Member States entered the crisis with different degrees of social vulnerabilities, as assessed in the European Semester country reports using the headline indicators of the European Pillar of Social Rights Social Scoreboard 2020 (see Annex 2). In Germany, no critical situations were found in the employment or social fields, but one indicator, income inequality, was considered one to watch. By contrast, in Italy, critical situations were found for eight indicators, and two indicators were considered ones to watch. Critical situations were found for three indicators in regard to Spain, and four indicators were considered ones to watch. Finally, in Croatia, a critical situation was found for one indicator and four indicators were considered ones to watch.

Figure 42: Total number of social reforms in Croatia, Germany, Italy and Spain, by policy area



Source: Authors' calculations based on Council implementing decisions on national RRFs and accompanying Commission staff working documents

Furthermore, these four Member States showed different degrees of territorial asymmetries, especially after the Great Recession, which negatively affected the southern regions of Italy and Spain in particular but also affected eastern Croatia. By contrast, Germany remained broadly stable and even experienced upward convergence in the employment rate in eastern states.

Overview of RRFs: Four Member States compared

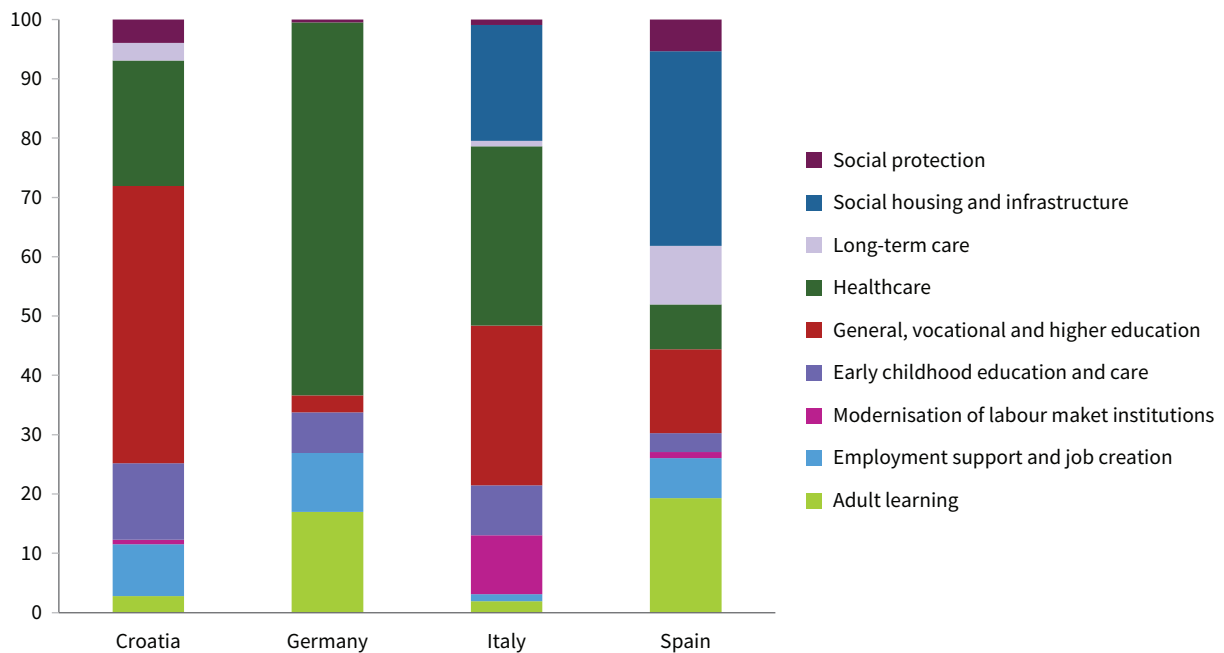
A preliminary overview of the interventions included in the RRFs seems to reflect the differing needs for intervention. As Figure 42 illustrates, Spain has by far the highest number of reforms (33), followed by Italy (17) and Croatia (16). By contrast, the number of interventions is significantly lower in Germany (6).

In terms of the allocation of resources, Spain has allocated the largest proportion of its RRF funding package to social spending (30%), followed by Italy (28%), then Germany and Croatia (26% each). At the same time, the plans show different priorities (Figure 43). The Italian RRF largely focuses on general and early childhood educational policies (35% of the total social spending), with investment in healthcare infrastructure (30%) and urban regeneration and social housing (20%) also particularly significant. Spain has prioritised investments in social infrastructure and housing (33% of its entire social spending), followed by adult learning (19%) and general educational policies (14%). Germany has invested the largest proportion of

its social spending on the digitalisation of healthcare (63%), while Croatia has invested the most in general and early childhood educational policies (60%).

To provide an in-depth analysis of the social dimension of the selected RRFs, this study first identifies the key challenges for each country related to labour market, educational and social policies before the outbreak of the pandemic (see Annex 2). This is followed by a preliminary assessment of the RRFs based on two criteria: (1) the relevance of the measures included in the RRFs, in terms of the degree to which they contributed to addressing the needs and country-specific challenges identified previously, and (2) the contribution, notably the investments made, to supporting upward social convergence and reducing territorial disparities.

The assessment builds on both the empirical findings collected in previous chapters and the results of 27 semi-structured interviews conducted between March and May 2022 with key experts. The experts included national public officials in charge of the drafting of the RRFs at ministerial level (ministry of finance and/or social and labour affairs), the European Commission representatives (from the Directorate-General for Economic and Financial Affairs and the Secretary-General) in charge of the country desk, and national experts on labour market and social policies (see Annex 3). Where possible, the assessment is based on the implementation of the investment projects included in the RRFs, by looking at the distributional criteria of the RRF funding indicated in the public tenders that have been issued to date.

Figure 43: Breakdown of investment by policy areas in Croatia, Germany, Italy and Spain (% of total RRF funds)

Source: Authors' calculations based on Council implementing decisions on national RRFs and accompanying Commission staff working documents

Italy's RRP

Relevance of challenges addressed

The measures included in Italy's RRP were all considered relevant, as they address the key challenges of Italian labour market, social and educational policies. Formally, the Italian RRP addresses the entire set of Italian country-specific recommendations of 2019 and 2020 issued in the European Semester. However, various challenges affecting both labour market and social policies are left unaddressed. For instance, the plan misses the opportunity to address two long-standing problems in the Italian labour market: low work intensity and low wages. No reforms to address the growing proportion of the working poor are envisaged. A proposal to introduce a minimum wage, which was initially included in the first draft of the RRP, was removed from the final version submitted to the European Commission. No measures to reduce the tax wedge on labour are included, even though a reform of the taxation system is ongoing (although it is not formally part of the plan). No reforms are planned to reduce the enormous number of national collective agreements or to review the regulation on the minimum level of representativeness in collective agreements. Finally, while the RRP identifies some of the main problems of university education, the complexity and

stratification of the sector makes the interventions rather unbalanced.

Impact on upward convergence

As regards the expected impact of the plan on convergence, the Italian RRP pursues territorial rebalancing and the relaunching of the south of the country as a transversal priority. The strategic axis of social inclusion aims to overcome profound inequalities (often worsened by the pandemic) and to overcome the structural weakness of the productive system of the south. It supports convergence between the southern region and the central and northern regions as an objective of economic growth, as requested several times in the European Commission recommendations. The plan makes at least 40% of the RRP's resources available to the eight regions of the south. In addition to these resources, Italy allocates a large part of its Recovery Assistance for Cohesion and the Territories of Europe (REACT-EU) funding to the south, that is, about €8.5 billion out of the total €13.5 billion.

Italy also allocates ad hoc resources for special interventions in support of territorial cohesion. In particular, the third component⁸ of Mission 5 (inclusion and cohesion) of the plan is explicitly dedicated to the reduction of the gaps between the different areas of the country: the 'demographic and

⁸ Components are constituent parts of RRFs and consist of a group of reforms and investments. According to the RRF guidance, 'Each component should reflect related reform and investment priorities in a policy area or related policy areas, sectors, activities or themes, aiming at tackling specific challenges, forming a coherent package with mutually reinforcing and complementary measures' (European Commission, 2021, p. 13).

service gap' between inland/rural, mountain, peripheral areas and urban areas; the 'gap in skills development' (targeting innovation for businesses, research centres and public authorities); and the 'investment gap' and 'social and economic gap' in the southern regions. To achieve this objective, this component, with total resources equal to €1.98 billion, is divided as follows: €830 million for the national strategy for inland areas; €630 million for the special economic zones; €300 million for the enhancement of assets confiscated from the mafias; and €220 million for socio-educational interventions structured to combat educational poverty in the south.

In addition to the specific purpose of the third component of mission 5, territorial cohesion is streamlined across all of the other components of the Italian RRP. For instance, mission 1 (on digitalisation, innovation, competitiveness and culture) explicitly dedicates part of the investments to the southern regions (for example, 45% of the investments made in broadband connectivity are for the south). A significant proportion of the resources under mission 2 (on the green revolution and the environmental transition) are allocated to improving waste and water management in southern regions. Similarly, as part of mission 3 (on infrastructure for sustainable mobility), investments will be made to strengthen the infrastructure of the south, in particular high-speed rail, further contributing to improving employment throughout the logistics chain.

Obstacles to effectiveness

Despite the focus on strengthening social cohesion and reducing territorial inequalities, the impact of Italy's RRP on territorial convergence might be reduced in the implementation phase. Focusing on investments, preliminary evidence collected from the expert interviews highlights three sets of obstacles that could hamper the effectiveness of the measures put in place: the lack of funds to cover current expenditures, the lack of support (technical assistance) for providers or local authorities to accurately develop projects' proposals and the lack of time to present projects. These problems specifically affect the investments channelled through public tenders, which represent 45% of the total Italian RRP allocation and almost the entire allocation for social infrastructural investments (Viesti et al, 2022).⁹ It is important to note that these funds are disbursed through local authorities, notably municipalities, and these authorities will be in charge of the implementation of almost half of the RRF investment projects (Ufficio Parlamentare di Bilancio, 2021).

With respect to the financial constraints, the RRF in principle supports only capital investments, while recurrent costs should be borne by national governments. This, in principle, risks discouraging local authorities in particular, notably in southern regions, from applying for this funding due to the lack of certainty around the capacity to bear these costs after the end of the RRF. In addition, given the very tight time constraints, the distribution of the funds is done via public tenders, with very strict and detailed requirements. This risks discouraging authorities and potential providers in marginalised areas (which also have less planning capacity) from presenting projects and acquiring RRF funds, given their lack of technical capacity to apply for such tenders.

The tight timing for the implementation of the RRF is forcing public administrations to significantly accelerate the presentation of fundable projects and often – given their limited technical capacity to present projects and the financial constraints – this is forcing public authorities to apply for a limited number of projects, thus not taking advantage of the full amount available. Therefore, the fact that the design of the national RRP in all Member States was centralised at national government level, without any significant involvement of subnational authorities, is now turning into a problem in the implementation phase.

One example of the implementation of the RRP is childcare investment in Italy, which was widely welcomed as a necessary response to the inadequate provision of childcare services for children aged 0–2 years. Based on the RRF specification, at least 40% of the investment in childcare should be allocated to the regions of southern Italy. Furthermore, as observed above, the specifications of the public tender on the allocation of resources account for the specific needs of territories. However, three main obstacles emerged in the implementation (see Corti et al, 2022a), for a broader discussion).

First, the municipalities, especially those in the south, were not able to cope with the high running costs of the infrastructure (for example, personnel). Second, the municipalities did not have the necessary competences to carry out complete planning in this field. This is firstly because of the lack of experience in the field and secondly because of the overlap between different calls for proposals, which meant that the priorities of the municipalities were not those of the day-care centres. As an example, small and medium-sized municipalities in inland and southern Italy, with little experience of nurseries, found it difficult to invest time and resources

⁹ According to Viesti et al (2022, p. 8), 'With the tender mechanism ... the Government favors the constructability of projects, that is, it understandably wishes to check that they have all the characteristics that make them actually feasible by June 2026. At the same time the individual ministries reserve the right to choose the projects deemed "best" on the basis of the criteria that they themselves define in the announcements. But in this way, the realization of the investments is unrelated to the endowment indicators (and therefore of "need") of the different territories. ... The allocation between regions, between cities, between large and small municipalities, between urban areas and inland areas will arise *ex post*: that is, it will be the final outcome of the resource allocation process, and in particular of the tender mechanism.'

in them, as they had to respond simultaneously to different calls for proposals in different sectors (Alleanza per l'infanzia, 2022). The third problem faced by the Italian early childhood education and care sector was the lack of educators, as there were not enough professionals to cover the new posts created. As a result of these three implementation constraints, the applications received for the first instalment of the RRF funding covered only half of the amount allocated (€1.2 billion), and most of the demand came from the northern regions or areas that already offer good childcare services.

Similar problems emerged with respect to the implementation of the new national programme for guaranteeing workers' employability (*programma nazionale per la garanzia occupabilità dei lavoratori*, GOL). Of the funding package for the GOL, 20% is allocated to regions and autonomous provinces. The latter need to adopt a regional plan for the implementation of the GOL within 60 days of the entry into force of the decree. The Agenzia Nazionale Politiche Attive Lavoro (National Agency for Active Labour Policies, ANPAL) then assesses the regional plan's coherence with the national plan within 30 days of receipt of the plan. Of the allocated resources, 75% are disbursed upon approval of the regional plan and the remainder are disbursed once at least 50% of the total resources indicated have been used.

At the time of writing, not all of the regions had presented their plans, and there were major delays with the plans of the southern regions (with the notable exceptions of Campania, Puglia, Sicilia and Sardinia). One of the factors limiting the presentation of plans is the fact that the introduction of the GOL has not been accompanied by an adequate revision of the active labour market policy. As stressed by Valente (2021), to implement the integrated active training policies proposed in the national RRP, it is essential to create a single and centralised governance and a single ANPAL information system, integrated with regional information systems to ensure the functioning of the conditionality mechanisms of income support. These are the two prerequisites necessary to efficiently deliver digital services and to ensure their uniformity throughout the national territory.

Finally, a recent study conducted by Viesti et al (2022) analysed the implementation of 11 investment measures included in the Italian RRP, including urban regeneration and social housing projects with a specific focus on the territorial impact of the spending allocation. The findings of this study align with what is illustrated above regarding childcare. Indeed, even though, formally, at least 40% of the spending should be focused on the south of Italy, significant disparities emerged in the final allocation of the projects.

According to the authors, generally there is a risk that resources will flow to the better technically equipped administrations, thus helping to feed, rather than reduce, territorial disparities within the macro-regions and regions themselves. Furthermore, to participate in tenders or to use the resources obtained from the departments, the municipalities may have used projects that were already available or designed projects that were easier to prepare, regardless of their quality or relevance. Here, again, there is an obvious risk that, once the projects are admitted to financing, their implementation may be delayed given the very short time frames of national RRFs.

Spain's RRP

Relevance of challenges addressed

The most relevant interventions of Spain's RRP are reforms that have the overall objective of strengthening the protection of workers within the labour market, notably addressing long-standing problems of labour market fragmentation, such as the individualisation of collective bargaining at company level, the indiscriminate use of temporary contracts, and the high proportion of bogus self-employed and involuntary part-time work. Furthermore, the plan builds up welfare buffers through the creation of a permanent mechanism for employment flexibility and stabilisation (known in Spain as the RED Mechanism), based on the positive experience of Spain's pandemic furlough scheme (Expediente de Regulación Temporal de Empleo, ERTE), the rationalisation of the non-contributory benefits of the minimum vital income schemes, the simplification of unemployment assistance and a reform of the pension system. By contrast, the RRP remains unclear when it comes to stock policies – that is, education, upskilling and reskilling, the policies that prepare individuals to enter the labour market and facilitate transitions within the labour market.

Concerning the labour market, most of the interviewees stressed the importance of the new labour reform, as it has corrected some of the most controversial aspects of the 2012 reform. Particularly welcome is the abolition of fixed-term contracts for works and services, which were used most in construction, as well as the introduction of just two types of work contracts: contracts enabling workers to alternate between work and study and professional practice contracts (Aranguiz, 2022). According to Rodríguez-Piñero Royo (2021), another positive aspect of this new legislation relates to the reform of subcontracting and the introduction of sectoral agreements, which should deter subcontracting by multiservice companies.

In addition, allowing ultra-activity of collective agreements (thus ending the time limitation included in the 2012 labour reform) has been welcomed.¹⁰

At the same time, other interviewees highlighted some scepticism with respect to the introduction of the presumption of an indefinite duration of contracts and the limitation on the duration of temporary contracts. The main concerns were that these changes could translate into excessive rigidities in the labour market. There were also some criticisms of the investment in strengthening the public employment services and the efficiency of active labour market policies, which the Spanish trade union CCOO (2021) considers insufficient to address the shortage of human and financial resources and to effectively carry out the functions of the public employment services.

With respect to the introduction of the RED Mechanism, this measure has been broadly welcomed and is expected to be effective on the whole. This expectation is based on the effectiveness of the ERTE in cushioning against the effects of the temporary layoffs during the COVID-19 pandemic (Osuna and García-Pérez, 2021). Similarly, the reform of the minimum vital income scheme is expected to be effective, as it addresses some of the shortcomings of the 2020 law that introduced it. Interviewees were particularly positive about the increases in the benefits for families with children and the better targeting of vulnerable groups, not all of which had previously taken up the scheme, including young and elderly people. Importantly, the reform allows third-sector actors to collaborate in the management of the scheme. By contrast, the pension reform is particularly controversial.¹¹

Impact on upward convergence

Regarding the potential impact of the Spanish RRP on social convergence, both territorial cohesion and social cohesion figure among the four axes on which the plan is built, and in each of the 10 driving policy areas of the plan, they are systematically addressed. In contrast to the Italian RRP, which includes specific projects dedicated to less developed regions, the Spanish plan adopts a more horizontal approach. This does not mean that the territorial aspects are not taken into account in the distribution of the funds. A closer look at the first investments adopted shows that the allocation addresses regional needs, for example through investments in childcare and in public employment services. With respect to the former, the Sectoral Conference on Education established the criteria for the distribution of funds from the Ministry of Education and Vocational Training to the autonomous communities.

The criteria are as follows (BOE, 2021):

- 40% weight – the level of education of the population aged 25–64 years in each autonomous community, according to the consolidated data of 2020
- 40% weight – the net schooling rate of 0- to 2-year-olds
- 20% weight – the population dispersion, according to the official population figures of the National Statistics Institute as of 1 January 2020

Similar criteria were adopted for the allocation of resources to the public employment services. Based on the Sectorial Conference on Employment and Labour Affairs, funds are distributed to autonomous communities based on changes in the number of jobseekers, the total number of employment service registrations and the follow-up of enacted policies (for example, the number of young people served in each autonomous community and the number of beneficiaries).

In both cases, however, there are some concerns, like in the case of Italy, about the actual criteria used for the internal distribution of resources within the autonomous communities. In this respect, two main obstacles have been observed.

First, despite the fact that the autonomous communities have the main responsibility for the implementation of the plans, they were barely involved in the drafting of the RRP. Some of the communities have complained about the criteria for the distribution of the funds, stating that they do not account for the actual balance of public and private providers, with respect to both childcare and employment services. This runs the risk of leaving some money unspent due to the incapacity of a publicly provided service to ‘re-invent’ itself in a very short period of time in areas where the service is currently provided by the private sector. In the specific case of childcare, the plan approved by the European Commission stipulates that the new posts created will be public. The current risk is twofold: firstly, in addition to the creation of public places financed through the RRF, private places will be created and financed using the autonomous communities’ own resources so as not to leave private providers unsatisfied, and secondly, there will be a transfer of pupils enrolled in private schools to public schools, but this will not lead to an increase in enrolment (Fenacein, 2022).

¹⁰ Ultra-activity refers to the principle whereby a collective agreement remains applicable beyond its expiration or termination date if a new collective agreement has not been reached.

¹¹ A discussion on the pension reform is outside the scope of this report. For more information, see de la Fuente et al (2020, 2022) and Bardisa (2021).

Second, it is explicitly specified in the agreement between the state and the autonomous communities that, from 2024 onwards, the communities will assume the running costs of the new posts created (BOE, 2021, p. 166416). The RRF funding package for childcare will temporarily also cover the current expenditure (on a transitory and extraordinary basis; BOE, 2021, p. 166416) for 40,000 of the 65,000 new places. However, like in the case of Italy, the risk is that some municipalities will not create these new places in the coming years due to a lack of funds for future maintenance costs.

Germany's RRP

Relevance of challenges addressed

Unlike the Italian and Spanish RRP, the social dimension of the German RRP is relatively weak. The social reforms and investments included in the German plan largely ignore the recommendations given by the Council in 2019, such as reducing disincentives to work, fostering affordable housing, reducing staff shortages in hospitals (especially nurses), reducing teacher shortages, closing territorial gaps in access to childcare and increasing the number of pupils enrolled in vocational education and training (VET) programmes. In addition, all of the measures included in the RRP were already planned before the submission of the plan to the Commission. As argued by Corti et al (2022b), the plan was designed based on the 'corona fiscal package' adopted in June 2020. The RRF funding is thus being used to replace expenditures that were already covered by the national budget.

For this reason, the authors cannot find any added value in the German RRP regarding social investments and reforms. This is not to say that the measures included in the plan are irrelevant, but they would have nonetheless been implemented whether the RRF was there or not. The lack of interest in addressing these challenges and the use of the RRF to finance already planned expenditures can be explained by the relatively small funding package that Germany received compared with its GDP and total government spending on social policy. This has led to little political interest in the national RRP, which is perceived more as an administrative burden than as an opportunity.

Impact on upward convergence

Regarding the potential impact of the RRP on fostering upward convergence, the plan does not pay specific attention to reducing within-country territorial inequalities. Territorial convergence is unaddressed in the plan overall, while the funding criteria for investments lack a territorial dimension. In the case of healthcare, where the bulk of social spending in the German RRP is allocated, hospitals are left to compete at federal level based on their project proposals, with

the implicit risk of favouring those centres already considered excellent. Similarly, with respect to the distribution of childcare funds, according to Section 27 of the Law on Federal Financial Aid for the Expansion of Day Care for Children (KitaFinHG), the only criterion used is the number of children in each federal state. Like in Spain, once the funds have been allocated to the states, they have the responsibility for the implementation of the federal financial assistance, as they have to produce specific funding guidelines that regulate the application, approval and use of the funds.

Croatia's RRP

Relevance of challenges addressed

Overall, the Croatian RRP addresses most of the social recommendations included in the country-specific recommendations of 2019 and 2020. Regarding the labour market, the reforms introduced are relevant. As regards the changes related to active labour market policies in particular, the quality of their profiling is increased, as well as the offer of reskilling and upskilling programmes through lifelong learning vouchers for adults, which focus on green and digital skills. Another positive aspect is that vulnerable groups are a cornerstone of the interventions, being among the main beneficiaries of the measures introduced.

However, there are two elements that may hinder the implementation process of the reform. The first relates to Croatian bureaucracy, as citizens face lengthy administrative procedures to obtain the lifelong learning vouchers. The second concerns the dichotomy between supply-side interventions, mainly focused on upskilling and reskilling, and the shortage of workers in sectors such as construction and tourism, which typically require workers who are not highly skilled and which are sectors that are mainly dependent on the demand for the services they provide.

A question that remains open is whether the changes in the active labour market policy area will be accompanied by an improvement to the infrastructure and materials needed for digital training. In any case, the results in this area will be influenced by the implementation process, as well as the performance of the different levels of administration involved. The reforms introduced seem not to assign a lot of importance to the other deficiencies that characterise the Croatian labour market. Among the deficiencies that seem not to be addressed are problems related to the low level of employment and labour participation; the existence of temporary, involuntary and undeclared unemployment; the labour differences across groups and regions; and the slow transition from school to work. Regarding the pension system, one of the most criticised aspects of the reform is the lack of inclusion of a life expectancy index. The reasons for not including this in the reform may be related to the highly

controversial nature of the topic and the possibility of losing public support. Another of the criticisms of the pension reform is the lack of improvement of the poor living conditions of pensioners. Finally, positive interventions in the RRP are the reforms of the social benefit system and of the minimum wage, as Croatia was lagging behind in these respects.

Impact on upward convergence

In terms of the RRP's contribution to social convergence, the plan is expected to support the reduction of economic and social inequalities and territorial disparities. Of particular importance are the measures targeted at disadvantaged groups in society. The most prominent examples include commitments to improve the adequacy and broaden the coverage of social benefits for the most vulnerable citizens, to focus upskilling measures and outreach activities on those farthest from the labour market, and to increase the minimum pension. Sizeable investments are also targeted at remote and less developed areas. These include not only spending explicitly labelled as social but also digital and green investments. For instance, there are some projects (for example, the Digital Broadband Network) that try to directly target the less developed areas of the country and the most vulnerable groups of the population (for example, by setting up a voucher system for adult education, training and upskilling). Furthermore, there are measures that could contribute to reducing territorial differences within the country. For example, applications from rural areas, where there are fewer social services, receive more points in their public tendering processes.

Discussion

The RRF represents an important new development for European integration from political, institutional, financial and operational perspectives. The provision of fresh financial resources, conditional on the implementation of the social recommendations in the European Semester, is an important step in the adoption and implementation of welfare reforms and initiatives, which would have otherwise probably remained an aspiration, especially for those countries with limited fiscal capacity. As shown in the empirical

analysis above, the opportunity offered by the RRF was seized by countries such as Croatia, Italy and Spain, allowing them to follow through their ambitions and put in place long-awaited reforms. While, through the RRF, the EU has enhanced its role in social citizenship (Ferrera et al, 2021), the analysis also shows that this new instrument fulfils its objective of increasing countries' social cohesion. However, when it comes to pursuing territorial convergence, especially within countries, this objective is left entirely to the discretion of each individual country.

As will be illustrated in more detail in the next chapter, the design of the RRF is aimed at supporting public investments in those Member States that entered the pandemic with higher economic and social vulnerabilities. RRF funds enable these countries to implement structural reforms that can strengthen the health sector and build economic, social and institutional resilience, with the aim of, among other things, increasing crisis preparedness and crisis response capacity. Social convergence remains a likely by-product of achieving stronger resilience at national level. However, this is not automatic: not only does the attention paid by Member States to a territorial convergence strategy vary in their plans, but the implementation of the plans can also significantly affect their ultimate distributional impact. The Italian case, in this respect, represents an important example of how – even with a territorial strategy – a lack of involvement of subnational actors, a lack of technical expertise across administrative levels, tight time constraints and financial obstacles can ultimately affect the convergence objectives set out in the plans.

Against these findings, questions emerge over whether the RRF alone can be enough to avoid the diverging trends that have been observed and that were consolidated by the outbreak of the COVID-19 pandemic. Indeed, while the RRF's objective is to support structural convergence in the EU, persistent regional asymmetries represent a problem that the RRF does not seem to solve. The next chapter investigates in more detail the governance of the RRF compared with traditional EU cohesion policies, with the aim of reflecting on how best and with which instruments the EU can achieve its convergence objectives.

6 EU policy tools in support of convergence

At the beginning of this report, the main theories on convergence were summarised by disentangling the different dimensions of convergence: economic, social and institutional. Convergence is a key objective of the EU. Article 174 of the Treaty on the Functioning of the European Union states that:

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.

But from the beginning, in the preamble of the Treaty of Rome, the founding Member States had already declared that they were ‘anxious to strengthen the unity of their economies and foster a harmonious development of economic activities’ throughout the European Economic Community (European Economic Community, 1957, Article 2).

The European Social Fund (ESF), created through the Treaty of Rome to sustain and improve mobility in the European labour market, did not have a regional target, and as the Thomson Report put it, such forms of aid ‘appear to be actually widening the regional gap rather than closing it’ (European Commission, 1973). In 1974, the first indication of a change of gear was given by the Council with the creation of the European Regional Development Fund (ERDF). However, it was endowed with a small budget (5% of the European Economic Community budget) that was defined annually based on national quotas negotiated by Member States, without targeting regions that were lagging behind in terms of development (Brunazzo, 2016).

It was with the adoption of the Single European Act in 1986 that regional policy became a European Community competence and social and economic cohesion became an explicit goal of the Community. This was followed in 1988 by the beginning of cohesion policy, which provided a significant increase in regional funding, doubling the structural funds (ERDF and ESF), and by 1993 these funds amounted to almost one-third of the European Community budget. Over the years, various reforms have been introduced to EU cohesion policy in 1993, 1999, 2007 and 2014. Such reforms were aimed at adapting European regional policies to the new EMU, to improve their effectiveness in view of the eastern enlargement, to match the enlarged EU and the broader EU goals set in the Lisbon Treaty and,

ultimately, to respond to the post-Great Recession context (for an overview, see Brunazzo, 2016).

As observed in Chapter 3 on regional convergence, many regions, especially in southern Europe, did not converge over the past two decades. The Commission’s latest cohesion report makes it clear that, despite the progress in convergence, some middle-income and less developed regions, especially in southern Europe, have declined. As observed by Crescenzi and Giua (2020), the positive effects of cohesion policy are not evenly distributed across the regions of all Member States. In Italy, for instance, the positive impact on employment did not survive the Great Recession, while, in Spain, economic growth benefits have been limited to the recovery period. Barca (2009) argued in favour of the importance of highly localised factors conditioning success and failure. This led to the decision to give a stronger role and independence to individual regions in the selection of tools and in the implementation of policies (Crescenzi and Giua, 2016). Empirical evidence, however, shows that macroinstitutional factors at national level remain central. Rules and implementation mechanisms of cohesion policy are the same across countries and they are differently operationalised (Crescenzi and Giua, 2020).

Against this background, the launch of the RRF has led to debate, first, on the compatibility of traditional cohesion policies and the new RRF and, second, on the opportunity to pursue convergence objectives in the EU by means of financial instruments other than traditional cohesion policies. A recent edition of the European Court of Auditors Journal, entitled *Cohesion and NextGenerationEU: Concord or clash?*, discussed these questions, directly addressing the future of European policy tools to promote convergence and cohesion (European Court of Auditors, 2022).

The purpose of this chapter is therefore to discuss thoroughly the main differences between traditional cohesion policies and the new RRF. To this end, first the main economic theory behind cohesion policy is described, along with the governance of the structural funds. As a second step, the key features of the new RRF governance, actors and procedures are introduced, and the key differences with the current cohesion policy are highlighted. Third, the main pros and cons of the two instruments are highlighted, along with the obstacles that emerged in the first phase of implementation of the RRF and of the multiannual financial framework (MFF) of 2021–2027. Finally, building on the expert interviews

and the literature review presented in previous chapters, three alternative models for future EU cohesion policies (post-2027) to support economic and social convergence are illustrated. The purpose of this exercise is to inform policymakers about the directions in which the debate is going to evolve and important aspects that should be taken into consideration in the decision-making process.

EU cohesion policy: Economic rationale and governance

Cohesion is not an easy concept to define (Begg, 2016). As briefly noted above, EU cohesion policy developed over time; it materialised in 1988 in the context of the creation of the single market and then the launch of the EMU. As a concept lacking a specific definition (Molle, 2015), the meaning of cohesion has changed over the years, in part reflecting the different economic theories behind it. Building on the traditional distinction in public finance theory between allocation, distribution and stabilisation (Musgrave, 1959), three different justifications for EU cohesion policy can be identified. The first relates to supporting the long-term competitiveness of regions by strengthening and facilitating the transformations of the supply side of the economy. The second refers to enhancing the current living standards of Europeans by redistributing resources from those who are better off to those who are worse off. The third relates to helping to stabilise the demand side of the economy.

Cohesion policy, as conceived at the end of the 1980s, is a device for redistribution or, put differently, side payments made to certain countries to 'buy' their support for other economic integration initiatives, such as the single market and the EMU (Leonardi, 2005). Such compensation is justified by the aim of curbing *ex ante* disparities, which means acting either to prevent divergence or to promote convergence. Cohesion is about ensuring that the least well-off are able to share in the benefits of economic integration (Begg, 2010). Cohesion policy is meant to overcome specific blockages in the integration process, such as enabling a minimum initial level of development. In this respect, divergence can derive from geographical phenomena (the centre versus the periphery) or location advantages (proximity versus remoteness).

The new economic geography theory justified the need for a cohesion policy in light of the agglomeration effects that derived from the single market. The single market did indeed increase countries' potential for specialisation in particular economic activities through

the interplay between agglomeration economies and congestion costs, which ultimately affected regions' potential. Member States that are able to specialise in industries subject to increasing returns to scale benefit more than those with specialisations in less dynamic sectors. Increased congestion in the most-favoured regions implies that, because of centrifugal forces, the most disadvantaged regions are pushed away from economic activities. Progressively over the years, the compensation and redistributive logic of EU cohesion policy has been accompanied by an allocative logic that first emerged in the introduction of the programming principle (before the EU budget was annual). It materialised *de facto* in the early 2000s when EU regional policies were explicitly linked first to the Lisbon Strategy and then to Europe 2020. Linking cohesion policy to the achievement of common EU objectives marked an important shift from a solely compensatory perspective to an allocative perspective – that is, the allocation of resources to achieve these objectives. As argued by Heraud (2007), the whole European approach to economic development went through a sea change at the turn of the millennium, with competitiveness gaining ascendancy over solidarity or equity considerations.

The economic logic underpinning cohesion policy, primarily aimed at redistributing resources to less developed regions and allocating resources to achieve EU objectives, is reflected in the governance of the cohesion policy funds. That is, cohesion policy is delivered through shared management between the Commission and the Member States and engages a multiplicity of actors over successive programming periods, *de facto* relying on a new concept of multilevel governance (Piattoni, 2016). Funds are distributed across regions mainly based on the GDP per capita criterion, distinguishing between less developed regions (GDP per capita < 75% of the EU average), transition regions (GDP per capita between 75% and 100% of the EU average) and more developed regions (GDP per capita > 100% of the EU average). Projects funded under cohesion policy are co-financed by Member States. In the current Common Provision Regulation, the co-financing rates – that is, the percentage of EU investments that Member States can receive – are 85% for the less developed regions,¹² 60% for the transition regions and 50% for more developed regions.

At European level, the Commission is the main institution involved in negotiating operational programmes with national authorities, and it guarantees that the projects funded meet the eligibility

¹² In the 2007–2013 programming period, the co-financing rate was 80% for the less developed regions – those whose GDP per capita was less than 75% of the average of the EU, but whose GDP per capita was above 75% of the average of the EU27.

criteria set out in the Common Provision Regulation (for example, additionality). The Commission is also in charge of approving the disbursement of the funds upon the presentation of receipts. Projects have to spend according to the timetable set at the time of project approval. Most importantly, as a consequence of the multiplication of objectives to be pursued by cohesion policy since the MFF 2014–2020, a new monitoring and evaluation system was introduced to enhance the results orientation of the programmes (Stephenson, 2016). Programme authorities are required to set up monitoring systems that allow the progress made towards established target values to be tracked, based on common output and results indicators (as listed in the Common Provision Regulation).

Starting with the MFF 2014–2020, a new performance-based approach was introduced in cohesion policy. Notably, three performance incentives were introduced: *ex ante* conditionalities (mandatory), a performance reserve (mandatory) and performance-based funding not linked to costs (optional). As shown by Jianu and Witkos (2022), *ex ante* conditionality was designed to set the conditions for effective spending, but the assessment was limited to a one-off exercise and no monitoring followed. The performance reserve was released almost exclusively upon the progress made in spending and outputs (not outcomes). Finally, the financing not linked to costs was hardly implemented.

At national level, national operational programmes and regional operational programmes make up the vast majority of spending. The key actors are the managing authorities, whose functions are listed in the Common Provisions Regulation. Managing authorities are usually ministries or departments at national and regional levels, and they are responsible for the accuracy and legality of payment transactions, including internal controls and corrective measures. They are also responsible for the information and publicity measures related to the operational programmes, liaison with the European Commission and the implementation of all accepted recommendations for amending management and monitoring procedures. Two other authorities are involved: certifying authorities, which are responsible for drawing up and submitting payment requests to the Commission, and audit authorities, which are responsible for carrying out audits.

Programmes under cohesion policy are implemented by intermediate bodies: ‘any public or private body which acts under the responsibility of a managing or certifying authority, or which carries out duties on behalf of such an authority, in relation to beneficiaries implementing

operations’ (Official Journal of the European Union, 2014, p. 8). Reviewing programme implementation and performances is a responsibility of the monitoring committees.¹³ Projects are identified either directly in the text of the national or regional operational programme or after competitions launched by managing authorities or intermediate bodies for potential beneficiaries (via public calls for proposals).

In summary, EU cohesion policy is based on a redistributive and allocative economic rationale. It aims to compensate less developed regions and to steer the direction of economic growth at territorial level towards EU objectives. In doing so, it relies on the key principle of multilevel governance.

RRF: Economic rationale and governance

As observed previously, the RRF was primarily conceived as a financial instrument to support Member States’ post-pandemic recovery. Financial support is distributed across countries based on their pre-pandemic vulnerabilities (measured in terms of GDP per capita and unemployment rate), population size and, to only a minor extent, the depth of the economic impact of the pandemic. In providing temporary fiscal capacity, the logic behind the RRF is primarily that of promoting the EU’s economic, social and territorial cohesion by improving the resilience, crisis preparedness, adjustment capacity and growth potential of the Member States. Contributing to upward economic and social convergence is a by-product of the strengthening of countries’ resilience.

The purpose of the RRF, to support the strengthening of national resilience, is also reflected in the governance of the new instrument, which significantly departs from that of cohesion policy. First, RRF management is central and not shared. This is linked to the fact that NextGenerationEU resources are raised as external assigned revenues, which requires the funding to be specific, time constrained and under direct management of the Commission (see Begg et al, 2022). The Commission has a significantly stronger role in the operation of the RRF compared with its role in cohesion policy. In the RRF, the Commission first assesses the RRFs based on a set of criteria (relevance, effectiveness, efficiency and coherence) and approves the disbursement of the funding based on the achievement of agreed milestones and targets defined *ex ante* with the Member States (Corti and Nuñez Ferrer, 2021). A key feature of the RRF in this respect is the adoption of new mandatory performance-based budgeting that shifts

13 With the 2014–2020 MFF, the social partners were given voting rights within the monitoring committees.

away from costs receipts to a new ‘financing-not-linked-to-costs’ system, whereby disbursement is authorised upon achievement of quantitative targets and the adoption of legislative provisions (Darvas, 2022).

The Commission is also in charge of assessing whether the plans presented by the Member States sufficiently address the country-specific recommendations (CSRs). As stressed above, the national RRFs are investment and reform plans. On top of investment projects, countries are expected to present a list of reforms in line with the CSRs received in the framework of the European Semester. The 2014–2020 European structural and investment funds and the Common Provision Regulation already required ‘relevant’ CSRs to be taken into account in the preparation of partnership agreements and operational programmes. Some analyses have highlighted that the CSRs have been taken up in the strategic choices set out in operational programmes of the European structural and investment funds (Ciffolilli et al, 2018; Viță, 2018). In practice, however, the absence of clear incentives or sanctions has limited the influence of the CSRs, while the incentives for the RRF are stronger and the consequences are clearer.

The governance of the RRF is also different at national level. The only actors involved in the drafting of the plans and in their preparation are central governments, mostly ministries of the economy or finance, and prime ministers. Line ministries are usually involved in implementing the plans, notably in assessing milestones and targets. The principle of multilevel governance has been significantly scaled down, if not removed entirely, compared with cohesion policy. Subnational levels are de facto excluded from the drafting of the plans, and the social partners are included only at the discretion of the national government. Intermediary bodies are not involved any longer. To ensure effectiveness in monitoring and implementing the plans, the RRF Regulation delegates to Member States the task of identifying a structure to do so. The regulation also requires Member States to establish appropriate control systems to prevent, detect and correct corruption, fraud and conflicts of interest.

As a result, the governance of the RRF plans varies significantly across countries. The nature and framework of such structures are influenced by the political structure of the Member State (for example, more or less centralised, federal or unitary).¹⁴ For the monitoring and implementation of the RRFs, including of the envisaged timetable, milestones and targets, and the related indicators, Member States either used established governance or control structures or set up

new ones. Italy, for instance, set up a completely new governance structure, with six new bodies. Croatia and Spain also created new structures, while Germany set up coordinating bodies within already existing structures. Some of the structures being used at national level are those currently responsible for dealing with other EU funds (including cohesion policy) and will follow similar procedures (notably in the cases of Estonia, Latvia, Lithuania and Spain; Dias, 2021). National audit institutions are involved in audit and control in a number of national plans.

To sum up, the RRF introduces a new financial mechanism based on a national cohesion and reform model that largely departs from both the economic rationale and the multilevel governance of traditional cohesion funds. While cohesion funds follow a mainly compensatory, redistributive and allocative logic, the RRF follows a primarily allocative and mostly sectoral logic, with a focus on maximising national resilience. The RRF model also involves a more centralised governance approach within Member States and at EU level. No national co-financing is foreseen in the RRF. Conditionality is reinforced through a stronger link with the European Semester, and new mandatory financing has been introduced that is not linked to a cost approach, which increases the pressure on national governments to efficiently and in a timely manner comply with the agreed milestones and targets.

Cohesion is noted as a challenge, and it figures as an explicit objective of the RRF (Pillar 5). The territorial impact of the pandemic and the specific infrastructure and service problems faced by the different regions are also acknowledged as a challenge for the RRF to address. However, the explicit territorial dimension of the RRF is often limited. The four countries studied in Chapter 5 illustrate well how the regional dimension is left to the discretion ultimately of the Member States. Italy is a good example of a plan in which the regional aspect is taken into account, while Germany represents the opposite. As observed by Mendez and Bachtler (2022), Member States address the regional question differently, for instance by introducing specific regional development objectives, ring-fencing allocations for certain areas (as Italy has done, for example) or indicating regional priorities (for example, Croatia, regarding the earthquake areas).

However, the form of intervention and the size of any regional funding is not clear. As illustrated earlier, the question of the territorial dimension emerges not only in the drafting of the plans but also in their implementation and in the development of the project selection criteria. Here, the lack of involvement of

¹⁴ These factors also influence Cohesion Policy set-up, although arguably to a lesser extent.

subnational authorities in the drafting phase of the plans as well as the administrative capacity, time constraints and regulatory challenges emerge as common problems that might risk a widening of territorial differences. Mendez and Bachtler (2022) (2021) also observed that the nature of the investment support included in some of the national RRP implies spending on specific types of territories with the risk of excluding others, by default.

RRF or cohesion policy: Which approach for EU convergence?

In early 2022, the European Commission published the eighth cohesion report, which takes stock of the state of regional convergence in the EU, assesses the impact of cohesion policy and aims to open a discussion on the future of cohesion policy after 2027 (European Commission, 2022).

The report's analysis of regional disparities shows a complex and nuanced scenario. Development traps have hit regions with different economic conditions, notably the less developed regions in southern Europe and middle-income regions. However, richer regions have not been spared. Most importantly, the report shows increasing divergence in performance innovation, human capital capacity, quality of governance and demography, all of which are traditionally considered key drivers of economic growth. Divergence has also emerged between the capital metropolitan areas and rural areas, with the former growing quickly and the latter stagnating or even declining. Peripheral regions in the south of the EU have been particularly affected. The COVID-19 pandemic had an asymmetric impact on regions, reflecting different regions' healthcare capacities, restrictions and economic structures.

With respect to cohesion policy, the report provides a detailed account of its support for regional and national public investments. In the relevant countries, cohesion funding grew from the equivalent of 34% to 52% of public investment between the 2007–2013 MFF and the 2014–2020 MFF, thus contributing to buffering the reduction of investments during the Great Recession. In terms of reducing inequalities, the report confirms the positive economic impact on less developed regions supported by cohesion policy at aggregate level, but – as observed above – the returns differ significantly across regions and among countries. Administrative hurdles, inefficient allocation of resources and low absorption capacity are identified as key problems that have hampered the effectiveness of cohesion policy.

In light of these findings, the report raises the question of how EU cohesion policy can respond to the challenges triggered by the green, digital and demographic transitions. It also asks how cohesion policy, together with other EU policies, ensure a fair

transition, strengthen resilience and responsiveness to asymmetric shocks, help regions respond to demographic change and address pressure on demography and its values?

Against this background, the authors have identified some possible policy tools to support EU convergence after 2027, and these are discussed next. The pros and cons of two models of EU policy tools are explored. The first, the territorialised approach, adheres to traditional cohesion policy logic. The other, the national reform–investment model, follows the RRF logic. Then a third model is presented, examining the possibility of a more integrated approach that would account for both the territorial dimension of convergence and the increasing need for national resilience.

Model 1: Territorialised approach

This model is anchored in the traditional understanding of cohesion policy as a redistributive tool to achieve territorial convergence by targeting less developed regions. However, this model involves a more explicit place-based rationale and governance architecture in practice that recognises the importance of territorial needs and capacities to address both cohesion policy and European Semester objectives. With respect to the latter, in this model, the European Semester would adopt a more territorialised approach, with the Directorate-General for Regional and Urban Policy directly involved in the strategic translation of EU territorial needs. From a financial perspective, a regional convergence model would refocus support on only less developed regions. A key governance change would be the reinforcement of regional programming across cohesion funds, given the tendency in recent reforms to centralise or rationalise the policy architecture in favour of national programmes with a weaker and less visible territorial dimension.

At the same time, this model would foster a further simplification of cohesion policy by reducing the number of funds and accordingly decreasing the fragmentation of the legal frameworks and the broader policy frameworks. An additional change that could be introduced to further simplify the use of the funds is the introduction of a financing-not-linked-to-costs approach to avoid the cost-receipts-based system that currently creates administrative delays and burden. Alternatively, more use of simplified delivery mechanisms, such as financial instruments or simplified cost options, has the potential to further reduce error rates in cohesion expenditure.

Pros

One advantage of adopting a territorialised approach to support convergence across countries is that this would largely resemble the current architecture and logic of cohesion policy. Despite its limitations, mostly related to the different degrees of effectiveness of the funds across regions, cohesion policy is still widely accepted

as an important tool to achieve upward social and economic convergence, compensating less developed territories that are negatively affected by the externalities of market integration and fostering growth towards EU common policy objectives. According to EU Commissioner for Cohesion and Reform Elisa Ferreira, aggregate evidence shows that

thanks to cohesion policy in the 2014–2020 period GDP per capita of less developed regions is expected to increase by up to 5% by 2023 ... a 3.5% reduction in the gap between GDP per capita of the 10% least developed regions and the 10% most developed ones [was also observed]

(Moonen, 2022, p. 22).

Additionally, cohesion policy funding accounts for a significant proportion of total public investment in beneficiary regions, which is likely to have a positive impact on GDP growth and social cohesion. Maintaining a territorialised approach to support convergence would mean not only that benefits could be gained from the know-how of the current cohesion policy but also that the expertise of the actors involved in the implementation of cohesion policy could be built on.

A second advantage of this model is that it would follow the approach outlined in the eighth cohesion report, which proposes relaunching EU cohesion policy by increasing the effectiveness of place-based policies, further streamlining the delivery of the policy for beneficiaries and strengthening its role in unlocking public and private investment in the green, digital and demographic transitions.

A third advantage of a territorialised approach is that it maintains the partnership principle, which would allow subnational (local and regional) authorities and social partners to be involved not only in the implementation but also in the design of the EU-funded actions. A fourth advantage is that the model builds on a place-based approach and strengthens the multilevel governance dimension.

At the same time, simplifying the management and implementation of the policies and reducing the fragmentation of the funds would be two positive developments to address the current delays in the implementation of cohesion policies. More importantly, by shifting the target to less developed regions only, this model could, in principle, overcome the problem of funds being reallocated *ex post* within countries' territories. Finally, a shift to a performance-based approach would increase the actual capacity to track cohesion policy outcomes and enable policymakers to identify where cohesion funds have improved the lives of citizens.¹⁵

Cons

The first disadvantage of relying on a territorialised approach is the risk of reproducing some of the limitations already encountered in cohesion policy, the various cracks and fractures of which limit its effectiveness. Those regions that caught up in the early 2000s are in development traps and have now stopped converging or even started to diverge, very often because previous growth trends were concentrated in capitals or metropolitan areas. Similarly, as noted by Commissioner Ferreira, some of the southern and south-western European regions

are caught in a middle-income trap, as they have to move from low-cost labour and infrastructure-based development towards more sophisticated levels of competitiveness

(Moonen, 2022, p. 22).

A key problem of cohesion policy funds, as observed above, is compliance – that is, the readiness to comply with regulations, monitor costs, and follow management and control procedures. The lack of compliance with these requirements creates delays and decreases opportunities to benefit from the support of cohesion funding. The changes introduced by the territorialised model might not be enough to counter the current limitations.

The main limit of an exclusive territorialised model for convergence, however, is that it risks ignoring the impact of structural conditions on the effectiveness of policy delivery. Recent studies by Crescenzi and Giua (2016, 2020) show that the effectiveness of projects funded by cohesion policy is significantly limited by national legislation and by the administrative complexity of regulations at national level. Regulatory complexity is also a key obstacle in the implementation of the RRF. It is not by chance that countries with key structural challenges have frontloaded reforms over investments to allow full absorption of EU funding. A territorialised model should not dismiss the importance of structural reforms. Evidence has shown that the CSR conditionality attached to cohesion policy and structural funds in general has not worked, mostly due to the different governance settings that require national governments, more than territorial authorities, to be involved. The RRF is a good complementary tool as a reform- and investment-oriented instrument operating predominantly at national level. However, the RRF remains a temporary measure that will be phased out after 2026. After that, a solution should be found to make *ex ante* conditionality also work in cohesion policy.

¹⁵ However, clearly a performance-based approach would involve difficulties in specific policy areas such as the social dimension.

Model 2: Reform–investment approach

The second model mirrors the RRF approach, with a focus on promoting national cohesion and structural reforms linked to the European Semester, specifically with a territorial approach. The targeting of less developed regions through eligibility or financial allocation criteria would be discontinued to provide maximum flexibility for pursuing national growth and reforms. This model would respond to the quest for a recentralisation of cohesion policies, with governments given more flexibility to decide on the priorities and allocation of resources within the country. This approach would be accompanied not only by more centralised governance but also by a reinforcement of European Semester-related conditionality, and the disbursement of the funds would be based on performance and not linked to costs.

Pros

The main advantage of this model is that it would enable a recentralisation of national governments' cohesion spending. In practice, a key advantage of the shift towards a reform–investment model would be the simplification of procedures, with the introduction of one single programme that overcomes the fragmentation of current cohesion policy programmes. Cohesion policy is heavily sectoral, which is apparent in the wide variety of funds, making the coherence and synergies between these funds and those directly managed by the Commission problematic. The reform–investment model would simplify these interactions and ensure more coherence at both the strategic planning and the implementation phases. The adoption of a performance-based approach that disentangles funding from costs and links it to agreed milestones and targets would be a step towards results-oriented budgeting and would also be less burdensome administratively.

A further argument in favour of a reform–investment RRF-like model is that empirical evidence has unequivocally shown that, over the years, the traditional cohesion policy approach has failed to achieve its objective of regional convergence. Instead, not only have disparities increased in southern Europe but also agglomeration effects have spread in central and eastern Europe, notably between metropolitan areas and rural areas.

It is questionable whether – even in those regions that have caught up – the need for public investment is still the same as it was a decade ago. The data provided in the eighth cohesion report on the proportion of gross fixed capital formations covered by cohesion policy, which demonstrate the importance of EU funding, are backward looking. An important question is whether the need for public (mostly infrastructural) investment is the same today. Against this backdrop, a shift towards a reform–investment model would allow Member States to identify country-specific needs and allocate

resources autonomously. At the same time, the conditionality linked to the implementation of structural funds would guarantee a strengthening of the resilience of Member States and – as a consequence – this would increase within-country cohesion and cross-country convergence.

Cons

While, in principle, this model would overcome long-debated concerns about cohesion policy, it also has various shortcomings. First, renouncing a territorialised, place-based approach leaves the reduction of within-country territorial disparities to the complete discretion of the Member States. Empirical evidence from the national RRFs, however, shows that not all Member States adopt territorial criteria in the distribution of funding. Furthermore, a risk that emerges in the implementation phase is a widening of territorial disparities.

Second, while it is true that a reform–investment model has a clearer focus on reforms and stronger conditionality, this is still limited to national legislation and does not necessarily affect local and regional administrative capacity. The empirical evidence illustrated earlier shows that the effectiveness of cohesion policy spending depends on both macro-institutional factors and the absorption capacity of the implementing authorities. In the case of the RRF, and even in the case of a territorialised approach, different administrative capacities can still affect the possibility of overcoming the regulatory and timing constraints that have emerged.

Third, while an approach that embraces performance-based budgeting and a mandatory financing-not-linked-to-costs approach is to be welcomed, as it will finally increase results-oriented budgeting, this is not – by default – any less simple. Simplification can be denied by difficulties in implementation, through legal uncertainties on treating financing not linked to costs (for example, interactions with state aid rules or treating them during the audit phase), although arguably this could be resolved within this programming period and the RRF. A more compelling problem is linked to the type of indicators selected. Preliminary evidence shows that the indicators agreed for the RRF, both milestones and targets, and especially in the case of social spending, are not impact indicators, so they do not actually track the results of the programmes. Instead, they largely reproduce the results of the input–output indicators already in place in the European Social Fund. The lack of relevant common indicators – mostly related to labour market status and transitions and not relevant to the objectives of operations regarding, for instance, social inclusion – poses the problem of how to develop a proper tracking system for (social) spending in a performance-based approach.

Finally, a significant problem of a national reform–investment model relates to multilevel governance in terms of the selection of the performance indicators. A key concern that emerged from the interviews was that milestones and targets were decided by national governments and the Commission without the involvement of subnational authorities. However, these authorities would be now largely in charge of implementation and in many cases would not be able – due to timing, regulatory and financing constraints – to cope with the objectives set out in the plan.

Model 3: Towards an integrated approach

Models 1 and 2 offer two different approaches to promoting convergence. The former explicitly pursues a territorialised strategy, in line with the traditional understanding of cohesion policy but with a simplification of procedures and a more explicit place-based approach. The latter departs from the principle of multilevel governance and conceptualises convergence as a by-product of strengthening country resilience and cohesion. The two models have both pros and cons. A third option would be to integrate the two logics within a new instrument that accounts for the need for a place-based approach in the identification of needs and region-specific projects while, at the same time, acknowledging that no territorial convergence can take place without institutional structural convergence at national level or without high administrative capacity at subnational level. The increasing number of shocks affecting European countries over the past decade has, without doubt, increased the need for Member States to strengthen their socioeconomic and institutional resilience. The RRF follows exactly this logic. However, evidence also shows how territorial disparities have increased over the last decade, thus undermining the resilience of Member States and their cohesion.

An integrated approach to convergence should thus consider both logics, raising several questions about how the EU could and should implement this. The key elements that should be considered are as follows.

- **Tool or tools:** The first question regards whether the two logics should be pursued through one or two instruments; if two, one would be focused on territorial convergence and the other on cohesion and resilience. Evidence shows that when the EU tried to integrate a country resilience logic in cohesion policy with the *ex ante* European Semester conditionality, it was not successful. Likewise, no other example exists of a case like the RRF that lacks territorial conditionality or – as put by the Conference for Peripheral and Maritime Regions – a ‘do no significant harm’ cohesion principle. Structural reform must be centralised and requires national-level involvement in terms of commitment. With respect to investment, the involvement of different governance levels depends on the policy areas.
- **Allocation key:** The allocation key changes depending on whether one or two tools are maintained. In a scenario of two tools, with a place-based approach in the case of territorialised convergence policies, the allocation key should be determined based on challenge-specific indicators rather than on the current GDP per capita system. By contrast, a criterion for the distribution of national investment should be identified. The current RRF allocation key is indeed based on GDP and the unemployment rate but also takes into account a COVID-19-related economic depth indicator.
- **Disbursement system:** With respect to the system of disbursement, the evidence is clear enough with regard to the opportunity for both cohesion policy and the RRF to shift towards a performance-based approach that decouples funding from costs, thus overcoming the problems of the simplified cost approach. At the same time, a reflection on the identification of the indicators is needed to guarantee that the performance-based approach does not end up becoming a new box-ticking exercise without any actual evaluation of outcomes.
- **Administrative conditionality:** An integrated approach should put at its centre the proposal for ‘administrative conditionality’ – that is, the requirement for improved effectiveness of public administration at national level and especially at regional and local levels as a precondition for funds disbursement. As observed above, government effectiveness at national level and the government quality index at regional level are key preconditions for economic and social upward convergence. They are also preconditions for a resilient society and should therefore be included as conditions in a future integrated approach.
- **Partnership principle:** A key decision in taking an integrated approach is whether to adopt a partnership principle in line with traditional cohesion funds, whereby subnational authorities and the social partners are involved in the definition and selection of the projects and the programmes’ priorities. A key advantage of cohesion funding is that it applies the partnership principle to all stages of programming (design, management, implementation, monitoring and evaluation) and helps ensure that action is adapted to local and regional needs and priorities. By contrast, the lack of involvement of the subnational authorities and social partners is an advantage in the design but a disadvantage in the implementation of the RRF.

- **Co-financing:** An important difference between cohesion policy and the RRF relates to the mandatory requirement for national co-financing in the case of the former. In the case of an integrated approach, one decision that needs to be made is whether co-financing should be required by the EU and, if so, whether different co-financing proportions should be set out depending on the criterion (for example, regional GDP level).
- **Financing system:** An additional decision that needs to be taken relates to the financing system, namely whether a simplified cost or a performance-based approach should be taken.

In summary, an integrated approach to EU cohesion policy to support convergence would take the best aspects of both the territorialised model and the national reform–investment model. Such an approach, however, would require significant changes in the design of existing instruments, which would have political implications. Any choice in this respect has pros and cons, but it is outside the scope of this study to identify a preferred option.

7 | Conclusions

Since the Treaty of Rome, economic convergence has figured as a key objective of the EU. The policy debates around EU convergence and major EU policy changes have coincided with the aftermath of different crises. First, the double oil shock in the 1970s led to the creation of the single market and later the EMU, then the Great Recession and the euro-zone crisis led to the strengthening of EU economic governance and the adoption of the European Pillar of Social Rights. More recently, the COVID-19 pandemic precipitated the establishment of NextGenerationEU, an unprecedented support package for Member States. Each of these policy responses had the explicit or implicit objective of supporting economic and social convergence or at least avoiding divergence.

This study first reviewed developments in EU economic, social and institutional convergence, at both national and regional levels, over the past two decades. The findings show that until the COVID-19 pandemic, at country level, significant progress had been made towards closing gaps among EU countries across the three dimensions. The overall beta-convergence process was largely driven by CEE countries catching up at a faster pace with NWE and SE countries than those latter clusters were advancing. When the study looked at subperiods, mostly to isolate the impact of the 2008–2013 economic crisis, it emerged that convergence slowed down markedly during the 2008–2013 period but regained momentum in the aftermath of the economic crisis. Nonetheless, convergence did not bounce back to the pre-crisis speed.

The analysis of sigma-convergence, which focused on how countries were similar to or very different from each other in respect of the indicators, showed that social indicators, notably the employment, unemployment and NEET rates, tended to follow the business cycle (cyclically or counter-cyclically). Disparities tended to increase during recessions, and downward sigma-divergence was found during the economic crisis. Economic indicators, on the other hand, showed mixed trends. Upward sigma-divergence was found for GDP per capita over the entire period studied. By contrast, for household disposable income, there was upward sigma-divergence during the Great Recession, after which the pattern changed to upward sigma-convergence. Concerning income inequality, the EU average and the standard deviation increased sharply during the economic crisis and then reverted to their pre-crisis levels after 2015, thus denoting upward sigma-convergence. Finally, institutional quality, as measured by the perception of government effectiveness, exhibited an overall slight downward

trend, especially in SE countries, while the perception in some CEE countries generally improved since 2004.

Findings at regional level are less positive than at national level, especially in SE regions, which have suffered from economic stagnation and a more general deterioration of social conditions (as measured by the employment rate) and institutional conditions (as measured by the EQI). Regions that were hit hardest by the economic crisis, many of which had a middle level of income pre-crisis, struggled to recover or even ended up in a worse-off situation. As was the case for the country-level analysis, EU convergence at regional level in GDP and quality of governance seemed overall to be driven by CEE regions. This notwithstanding, in CEE countries, it was mostly the capital regions that grew very fast, while a divide persisted with other regions. Capital regions typically exhibit a higher GDP per capita but also higher employment rates, which often leads to a concentration of economic activity and employment in these regions. This phenomenon seems, however, to have slowed down before the COVID-19 pandemic.

The COVID-19 pandemic, like other crises in the past, had an impact on convergence. The pandemic broke out after an overall period of broad upward economic and social convergence, although with scars from the Great Recession, especially in some SE countries and regions. A key difference between the COVID-19 and economic crises, however, is that the pandemic did not reverse a strong convergence trend. Rather, it seems to have amplified or accelerated new divergence patterns that were emerging right before the pandemic. In terms of GDP per capita, cross-country differences increased more abruptly during the pandemic than during the economic crisis, but the opposite was true for the employment and unemployment rates. As a result of the pandemic response policies, such as inclusive job retention schemes, the convergence dynamics of the employment rate changed, but in a rather different manner. Unlike GDP per capita, the speed of convergence in employment was barely affected, with even a reduction in the level of dispersion seen in 2020, followed by an increase in 2021. With respect to perceived government effectiveness, there was no clear pattern in employment rates at geographical cluster level.

The response of the EU to the COVID-19 crisis was immediate and unprecedented. This study focused in particular on the role of the introduction of the RRF as a new instrument to support countries' post-pandemic recovery and to increase the resilience and preparedness of national welfare and labour market systems. Focusing on four countries' recovery plans

highlighted how the new instrument has contributed to the adoption of reforms and the implementation of investments that would otherwise have remained theoretical, especially in those countries that entered the pandemic with greater social vulnerabilities. At the same time, convergence was also found to be a by-product of the RRF, at the discretion of national governments, which are not mandated to account for reductions in territorial disparities in the preparation and implementation of RRFs.

The findings on the implementation of the RRF and the potential impact on upward social convergence served as a basis for broader and forward-looking thinking about the policy instruments that the EU should put in place to foster upward convergence. Three different options were explored for the EU to support convergence. The first model is centred on strengthening traditional cohesion policies and enhancing the territorialised place-based approach. The second option is built around a centralised reform-investment model that leaves the identification of territorial needs to the discretion of Member States

but increases conditionality to strengthen countries' structural resilience. For each of these two models, the pros and cons were set out. Based on these pros and cons, a third model was proposed, which is an integrated approach that combines the territorial partnership principle-based approach of traditional cohesion policies with the structural reforms and investments embedded in the RRF.

The analysis of the options does not contain normative conclusions on their desirability; instead, it serves to inform policymakers and more generally the current debate about the future of cohesion policy (post-2027). Empirical evidence shows that while convergence never stopped, it deteriorated under the weight of multiple crises. The combination of vulnerabilities resulting from the COVID-19 pandemic and the current energy crisis risks leading to an amplification, rather than a reversal, of existing downward and diverging trends. A reflection on whether the RRF and cohesion policy can represent alternative or complementary policy instruments to support convergence is thus much needed.

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Annexes

Annex 1: Conditional convergence

Table A1: Income inequality convergence (2004–2008, 2008–2013, 2013–2019)

Income inequality growth (ln)	(1)	(2)	(3)	(4)	(5)
Initial value (ln)	-0.034*** (0.011)	-0.053*** (0.013)	-0.043*** (0.011)	-0.044*** (0.014)	-0.053*** (0.015)
GDP per capita (ln)		-0.169** (0.08)	-0.183* (0.101)	-0.014 (0.154)	-0.168 (0.104)
GDP per capita ² (ln)		0.009** (0.004)	0.01* (0.005)	0.001 (0.008)	0.009* (0.005)
Population growth		0.003 (0.003)	0.005* (0.002)	0.002 (0.004)	0.003 (0.003)
Value added in ICT		-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)	-0.002 (0.002)
Value added in agriculture		0.01*** (0.004)	0.01*** (0.003)	0.009** (0.004)	0.01*** (0.004)
Tertiary education		-0.0001 (0.004)			
Trade openness			-0.000001 (0.00004)		
Migration				0.007* (0.004)	
Social protection benefits					0.000001 (0.0002)
CEE dummy		-0.014 (0.011)	-0.006 (0.011)	-0.018 (0.013)	-0.014 (0.01)
SE dummy		0.005 (0.008)	0.009 (0.009)	-0.003 (0.01)	0.005 (0.01)
2008–2013		0.017*** (0.006)	0.015*** (0.005)	0.018*** (0.006)	0.017*** (0.006)
2013–2019		0.007 (0.008)	0.004 (0.006)	0.006 (0.007)	0.006 (0.006)
Constant	0.053*** (0.016)	0.875** (0.417)	0.904* (0.522)	0.12 (0.783)	0.871 (0.536)
No. of observations	80	80	76	75	80
Adjusted R ²	0.145	0.316	0.347	0.318	0.315
Region dummy	No	Yes	Yes	Yes	Yes
Period dummy	No	Yes	Yes	Yes	Yes

Notes: Robust standard errors are given in parentheses. Statistical significance is indicated as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.
Source: Authors' calculations

Table A2: AROPE conditional convergence (2005–2008, 2008–2013, 2013–2019)

AROPE growth rate	(1)	(2)	(3)	(4)	(5)
First year (ln)	-0.029** (0.013)	-0.07** (0.03)	-0.028* (0.015)	-0.035** (0.017)	-0.027* (0.015)
Employment rate		0 (0.001)	0 (0.001)	0.001 (0.001)	0.001 (0.001)
Low educational attainment		0 (0)	0 (0)	0 (0)	0 (0)
Migration		0.002 (0.004)			
Income inequality		0.01* (0.006)			
Total social public expenditure			0 (0.001)		
Social exclusion				-0.017* (0.01)	
Social protection benefits					0 (0.001)
CEE dummy		-0.005 (0.01)	-0.003 (0.011)	-0.004 (0.009)	-0.002 (0.011)
SE dummy		0.005 (0.01)	0.004 (0.011)	0.004 (0.011)	0.005 (0.011)
2008–2013 dummy		0.002 (0.008)	0.001 (0.008)	0.001 (0.008)	0.001 (0.008)
2013–2019 dummy		-0.003 (0.009)	-0.001 (0.009)	0.001 (0.008)	-0.002 (0.009)
Constant	0.081** (0.036)	0.117 (0.087)	0.051 (0.065)	0.051 (0.069)	0.044 (0.066)
No. of observations	78	75	78	78	78
Adjusted R ²	0.074	0.048	0.005	0.038	0.005
Region dummy	No	Yes	Yes	Yes	Yes
Period dummy	No	Yes	Yes	Yes	Yes

Notes: Robust standard errors are given in parentheses. Statistical significance is indicated as follows: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Source: Authors' calculations

Annex 2: Social vulnerabilities before COVID-19

Table A3 summarises the performance of the four countries analysed (Croatia, Germany, Italy and Spain) against the headline indicators of the European Pillar of Social Rights Social Scoreboard. The performance was assessed by the Commission against the EU average and is included in the country reports.

Table A3: Performance of four countries in relation to the European Pillar of Social Rights Social Scoreboard 2020

Social Scoreboard indicators	Croatia	Germany	Italy	Spain
Early school-leavers from education and training (% of population aged 18–24 years)	Best performers	Average	Critical situation	Critical situation
Youth NEET rate (% of population aged 15–24 years)	Weak but improving	Best performers	Critical situation	To watch
Gender employment gap	Average	Average	Critical situation	Average
Income quintile ratio (S80/S20)	Average	To watch	To watch	Weak but improving
AROPE rate (%)	To watch	Better than average	To watch	To watch
Employment rate (% of population aged 20–64 years)	Critical situation	Best performers	Critical situation	Critical situation
Unemployment rate (% of active population aged 15–74 years)	Average	Better than average	Critical situation	Weak but improving
Long-term unemployment (% of active population aged 15–74 years)	Better than average	Better than average	Critical situation	Weak but improving
Gross disposable household income per capita growth	n.a.	Average	Critical situation	To watch
Net earnings of a full-time single worker earning the average wage	To watch	Best performers	Average	To watch
Impact of social transfers other than pensions on poverty reduction	To watch	Average	Critical situation	Critical situation
Children aged younger than 3 years in formal childcare	To watch	Average	Average	Best performers
Self-reported unmet need for medical care	Average	Better than average	Average	Better than average
Individuals' levels of digital skills	Better than average	Best performers	n.a.	Average

Note: n.a., not available

Source: Compiled by the authors based on 2020 country reports

Annex 3: List of interviewees

Interviewee category	Institution	Interview format	Interview date
Croatia			
National government	Ministry of Labour and Pension System, Family and Social Policy	Microsoft Teams	21 April 2022
National government	Special Advisor to the Prime Minister for Economic Issues	Microsoft Teams	21 April 2022
Expert	CEA (Croatian Employers' Association)	Microsoft Teams	10 May 2022
Expert	Permanent scientific advisor at the Institute of Economics, Zagreb	Microsoft Teams	3 May 2022
Expert	Institute of Public Finance	Microsoft Teams	28 April 2022
European Commission	Directorate-General for Economic and Financial Affairs	Microsoft Teams	4 May 2022
European Commission	Secretariat-General of the Recovery and Resilience Task Force	Microsoft Teams	2 May 2022
Germany			
European Commission	Directorate-General for Structural Reform Support	Microsoft Teams	15 March 2022
National government	Ministry of Finance	Webex	4 March 2022
National government	Ministry of Social Affairs	Microsoft Teams	24 May 2022
National government	Ministry of Social Affairs	Microsoft Teams	24 May 2022
Expert	ifo Institute	Microsoft Teams	27 April 2022
Italy			
National government	Ministry of Labour and Social Policies	Microsoft Teams	29 April 2022
National government	Ministry of Economy and Finance	Microsoft Teams	10 May 2022
National government	Ministry of Economy and Finance	Microsoft Teams	10 May 2022
Expert	Save the Children	Microsoft Teams	4 February 2022
Expert	Polytechnic University of Torino	Microsoft Teams	5 May 2022
European Commission	Directorate-General for Economic and Financial Affairs	Microsoft Teams	6 May 2022
European Commission	Directorate-General for Structural Reform Support	Microsoft Teams	6 May 2022
Spain			
Expert	University of Valencia and Banco Bilbao Vizcaya Argentaria (BBVA) Research	Microsoft Teams	25 April 2022
Expert	Real Instituto Elcano	Microsoft Teams	6 May 2022
Expert	Economics at the Universidad Autónoma de Madrid	Microsoft Teams	29 April 2022
National government	PermRep Spain	Microsoft Teams	9 May 2022
Expert	Red2Red Consultores	Microsoft Teams	9 May 2022
European Commission	Economic analyst in the Secretariat-General of the Recovery and Resilience Task Force	Microsoft Teams	13 May 2022
National government	Head of Unit of the Spanish RRF programming	Microsoft Teams	17 May 2022
National government	Director-General of Macroeconomic Analysis, Ministry of Economic Affairs and Digital Transformation	Microsoft Teams	24 May 2022

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Historically, the political debate around EU convergence has gathered momentum in the aftermath of a crisis. In the wake of the COVID-19 pandemic, the purpose of this report is to take stock of the last two decades of convergence trends. The study begins with an empirical investigation of economic, social and institutional convergence over 2004–2019 at both Member State and regional levels. The analysis is then extended to 2020 and 2021 to examine the impact of the pandemic. The study confirms overall upward convergence, driven by the central and eastern European Member States, which the pandemic appears to have slowed but not stopped.

The analysis of trends is followed by an assessment of the potential impact of the Recovery and Resilience Facility (RRF) on convergence and a discussion of different policy scenarios to support upward convergence, based on the current experience with the RRF and the ongoing debate about the future of EU cohesion policy.

The European Foundation for the Improvement of Living and Working Conditions (Eurofound) is a tripartite European Union Agency established in 1975. Its role is to provide knowledge in the area of social, employment and work-related policies according to Regulation (EU) 2019/127.

