

## The Effectiveness of European Union Regional Policies - A Longitudinal Review

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**Abstract** To improve the economic well-being of regions to avoid regional disparities in the EU, the EU sets the Cohesion Policy to boost regions that are lacking behind. The aim of this paper is to make an overview of regions and their eligibility for Cohesion funds, compare selected statistical data and see if progress can be detected by the longitudinal figures alone. With a general overview of the regional progress in various areas, such as GDP, poverty and employment, we will outline how and if overall retention of regional policies indicates a general rise in the backlog of less developed regions.

**Keywords:** • EU • Cohesion Policy • statistical data • policy implementation

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## 1 Introduction

The definition of regions and regional development is a matter of historic societal and economic evolution, viewed through the prism of different theoretical concepts. Debates are ongoing on how to address the steering of regional development (Rončević, 2012; Rončević & Besednjak Valič, 2022c; Fric et al., 2023) by regional policies, how to disperse financial incentives, and how to measure the impacts (Besednjak Valič et al., 2023; Kukovič, 2024).

The European Union sets the regional policy, also known as the Cohesion Policy, to improve the economic well-being of regions in the EU and avoid regional disparities. It supports job creation, business competitiveness, economic growth, and sustainable development, and improves citizens' quality of life (European Commission, 2022c) It acts as a redistributive mechanism for the European economy at large and a tool to leverage private capital in ways consistent with the EU's key strategy agendas (European Commission, 2018). The policy is implemented by national and regional bodies in partnership with the European Commission. The EU Strategy sets six Commission priorities for 2019-2024, but the regional development supports the EU Strategy selected indicators (European Commission, 2022b). Regions do not progress equally (Mileva-Boshkoska et al., 2018; Modic & Rončević, 2018; Jurak, 2021a; Besednjak Valič et al., 2022; Džajić Uršič & Jelen, 2022; Kukovič, 2024). Regions in the EU are heavily diverse in size, population, and institutionalization, and the NUTS 2 classification, used to disperse EU funds among regions, is what the EU is operating with. Sisyphus's work to rearrange it on the national level may be impossible to change on the EU level (Besednjak Valič, Kolar, et al., 2023).

In the past years, two significant long-term events also affected the EU member states and its regions, COVID-19 and the war in Ukraine, impacting different sectors differently (Kukovič, 2021; Besednjak Valič et al., 2022a). These events have had both immediate and lasting impacts, shaping various aspects of life within the EU. The COVID-19 pandemic, first and foremost, significantly impacted the EU member states and their territories. Strict lockdown procedures were required due to the virus's quick spread, forcing public places like companies and schools to temporarily close. Due to these restrictions, several industries suffered considerable disruptions and employment losses (Besednjak Valič, 2022b), which had a negative impact on the economy. Governments undertook significant fiscal policies and stimulus packages to lessen the effects, but it is anticipated that the full economic recovery will take time. In addition, the pandemic emphasized and widened social and economic disparities already present in the EU. Vulnerable groups, like the elderly, immigrants, and low-income workers, faced greater health risks and socioeconomic difficulties. The epidemic exposed flaws in the healthcare system and made it clear that the EU needed to improve cross-border cooperation and readiness, ensuring the human dignity (Kleindienst, 2017a; 2019; Kleindienst & Tomšič, 2018; 2022) of all individuals.

The war in Ukraine has had long-lasting effects on the EU and its member nations in addition to the pandemic. Relationships between the EU and Russia have been strained by the war, which has resulted in geopolitical tensions and the application of sanctions (Jelen et al., 2023). The EU's economies, especially those with strong ties to Ukraine and Russia, have suffered as a result of these sanctions and the interruption of trade channels. Additionally, the war has caused a humanitarian catastrophe, with many displaced people seeking asylum in the EU (Jelen et al., 2023). Concerns regarding the EU's energy security have been raised by the ongoing conflict in Ukraine, which has brought attention to the area's reliance on Russian natural gas. Energy independence has been improved by efforts to diversify energy sources, with a stronger emphasis on renewable energy and the creation of alternate supply pathways. The role of ACER in this respect is to be further explored (Klopčič et al., 2022).

Putting these facts in the framework of regions, not all regions are affected on the same scale and in the same fields. This also means, that the regions could have been successful at raising funds but the overall effort could not be detected by the statistics. Keeping that in mind, the statistical data cannot show the effects of the policies in “real-time” since there is a delay with the long-term effects of the regional projects. Despite these factors, we would like to make an overview of regions, their eligibility for Cohesion funds, compare selected statistical data and see if progress can be detected by the longitudinal figures alone.

## **2 Theoretical Background**

### **2.1 Variation of Cohesion policy through its history**

The Cohesion policy was outlined in the Treaty of Rome founding the European Economic Community in 1957. In 1968, the Directorate-General for Regional Policy of the European Commission was created, followed by the creation of the European Regional Development Fund in 1975. By 1988, adaptation of the policy was needed due to the arrival of Greece (1981), Spain and Portugal (1986). The Structural Funds were integrated into an overarching cohesion policy, introducing key principles such as focusing on the poorest and most backward regions, multi-annual programming, strategic orientation of investments, and involvement of regional and local partners. The designated budget was 64 billion EUR (European Commission, 2022a). The reform of the Structural Funds gave the European Commission much greater influence on the distribution of regional development funding, particularly concerning the designation of eligible areas, the approval of Member State development plans, the management and delivery of programmes, and the control of expenditure (Bachtler & Wren, 2006).

Three novelties relating to the financing of the cohesion policy were introduced by the Maastricht Treaty in 1993: the Cohesion Fund, the Committee of the Regions, and the

subsidiarity principle. Two additional acts were implemented that had a direct impact on the policy: the Financial Instrument for Fisheries Guidance and the resources for the structural and cohesion funds were doubled. Additionally, a special objective was added to support the sparsely populated regions of Finland and Sweden in 1995 (European Commission, 2022a). The policy has favoured the convergence of less-developed regions towards the EU mean in terms of GDP per capita, rates of annual economic growth, employment levels and unemployment (Leonardi, 2006).

The Lisbon Strategy in 2000 shifted the EU's priorities towards growth, jobs, and innovation, which was also reflected in the priorities of the cohesion policy. Ten new countries joined the European Union in 2004, increasing the EU's population by 20%, but its GDP by only 5%. Pre-accession instruments made funding and know-how available to countries waiting to join the EU in years from 2000 to 2004. The EU budget amount from 2000 to 2006 was 213 billion EUR for the 15 existing members and an additional 22 billion EUR for the new member countries. The Cohesion policy 2007-2013 implemented simplified rules and structures, emphasising transparency and communication, and an even stronger focus on growth and jobs. 25% of the budget was earmarked for research and innovation, and 30% for environmental infrastructure and measures to combat climate change (European Commission, 2022a). Becker et al. (2018) found that adaptations regarding co-financing successfully strengthened the treatment effect of Objective 1 or Convergence Objective transfers on employment growth, but the effect on income growth in Crisis-prone regions was not convincing. Additionally, transfers tend to display immediate effects, and once Objective 1 status is lost, previous growth gains seem to be disregarded. This finding supports the idea that Objective 1 should be kept for longer periods and geared towards investments that support long-term growth prospects (Becker, et al., 2018).

The Europe 2020 Strategy was set for smart, sustainable, and inclusive growth in the European Union (Makarovič et al., 2014d; Golob & Makarovič, 2021; Džajić Uršič et al., 2024). The Cohesion Policy set a stronger focus on results with clearer and measurable targets for better accountability and was simplified by one set of rules for five Funds. It had an aim to strengthen the urban dimension and fight for social inclusion, with a minimum amount of ERDF earmarked for integrated projects in cities and ESF to support marginalised communities (European Commission, 2022b).

## **2.2 The current state of affair, selection and retention of the policy direction**

The current EU Cohesion Policy has a complex approach that is not fully transparent to an ordinary EU citizen. The EU Strategy sets six Commission priorities for 2019-2024, but the regional development supports the EU Strategy selected indicators (Fric et al., 2023). In 2021-2027, the policy has set five policy objectives: a more competitive and smarter Europe, a greener, low-carbon transitioning toward a net zero carbon economy, a more connected Europe, a more social and inclusive Europe, and a Europe closer to

citizens. The policy also sets climate targets as weighted climate and environmental contribution of investments, minimum targets for funds, and climate adjustment mechanism (Majetić, et al., 2019; Fric et al., 2022; Džajić Uršič et al., 2024). The policy aims to achieve greater empowerment of local, urban & territorial authorities in the management of the funds by dedicating policy objectives implemented only through territorial and local development strategies (European Commission, 2021). Crescenzi et al. (2020) argue that the recent European Elections in May 2019 have highlighted the need for the Cohesion Policy to be impactful and effective. It is asked to deliver on wider objectives of modernizing the European economic space and dealing effectively with new social risks. In 2020, other crises emerged such as Covid 19, the war between Ukraine and Russia, and environmental changes. If the policy and stakeholders will deliver, it remains to be seen (Crescenzi et al., 2020).

The 2021-2027 policy set priorities for 392 billion EUR, with the European Regional Development Fund supporting investments of all 5 policy objectives, the European Social Fund+ supporting policy objectives 4, the Just Transition Fund, which provides support under designated specific objectives, the Cohesion Fund, which supports policy objectives 2 and 3, and the Interreg programs, which have two additional policy objectives. To support simplified fund withdrawal, the new cohesion policy introduces one set of rules for the eight Funds and a significant reduction in the amount of secondary legislation. Additionally, changes were made to the eligibility of regions, with the stipulations on what is a “more developed”, “transition” and “less developed” region changing from 2014-2022 to 2021-2027 (European Commission, 2022b). The co-financing has also changed, with the stipulations on what is a “more developed”, “transition” and “less developed” region changing from 2014-2022 to 2021-2027 (Besednjak Valič, Kolar, et al., 2023).

### **2.3 Cohesion policy evaluation challenges**

Research done by (Bachtrögler, et al., 2020) suggests that the impact of Cohesion Policy grants tends to be larger in relatively poor countries, such as Romania in CEE and Portugal among the EU-15 member states (Bachtrögler et al., 2020). Results from (Fiaschi et al., 2018) also suggest a trade-off between the two objectives of the EU Cohesion Policy of boosting general growth and lowering inequality. (Fiaschi et al., 2018; Besednjak Valič et al., 2022a) argue that due to the inhibitory functioning of state or national policies, the academia and business spheres are forced to seek support in EU projects (Golob & Makarovič, 2022; Besednjak Valič et al., 2022a).

At times of tighter budgets, voters and politicians in net contributing countries and regions are asking about the justification of EU budget dedicated funds (Becker et al., 2018). This has led to pressure for more accountability in spending and the creation of a more extensive EU evaluation regime (Bachtler & Wren, 2006). There is a lack of consistency among studies due to two kinds of heterogeneity characterizing the Cohesion Policy: it

may finance a broad variety of actions, and it is implemented in highly diversified territorial settings (Bachtrögler et al., 2020). The complexity also arises from the nature of the policy being evaluated. Structural and Cohesion Funds programmes are implemented under a common regulatory framework, but in widely differing national and regional circumstances with varied institutional arrangements for managing and delivering regional development policy (Bachtler & Wren, 2006). EU-wide aggregated results might hide important differences and mask significant country-level heterogeneity and composition effects. The question is are regional economic impacts persistently diversified across countries (Crescenzi et al., 2020).

Through the use of treatment effect methodologies, recent studies on the effects of cohesion policy have attempted to define a plausible counterfactual scenario by netting out policy impacts from the confounding influence of all other features of the territorial environment in which the policy effect is embedded (Crescenzi et al., 2020).

Different possibilities of evaluation bring different results, which can be exploited in one's interests (Besednjak Valič, Kolar, et al., 2023). Valuation serves the objective of many different organizations, such as programme managers, partners with regional and national government authorities, and various European institutions (Bachtler & Wren, 2006). It is necessary to pay special attention to the selection of a model, examine the potential results and find possible solutions to correct deficiencies (Pandiloska, Jurak and Pinteric 2012). Additionally, consistency and transparency are needed throughout the different policies and strategic goals (Jurak, 2021a), taking in consideration also aspects like technology transfer and interorganisational stability (Besednjak Valič 2022b).

An interesting insight of the broader long-term effect of the policy might be offered by the Organization for Economic Cooperation and Development (OECD, 2022). Their work on regional development covers several interrelated fields, such as statistics and indicators, regional innovation, multi-level governance and public finance, water governance, urban and metropolitan policy and rural development. The OECD Better Life Initiative and the work programme on Measuring Well-Being and Progress answer these questions, allowing the understanding of what drives the well-being of people and nations and what needs to be done to achieve greater progress for all (OECD, 2022a). The OECD has concluded that past policies have failed to reduce regional disparities significantly and have not been able to help individual lagging regions catch up, despite the allocation of significant public funding (OECD, 2022c). To address this, a new approach to regional development is emerging that involves a shift away from redistribution and subsidies for lagging regions in favour of measures to increase the competitiveness of all regions. In 2011, a list of 11 topics of well-being was published, each of which is made up of 1-4 indices. These indices are fine-tuned over time as insights are derived from data collected in previous years. The OECD approach turns the focus from economic benefits to societal benefits, focusing on housing, income, jobs, community, education, environment,

governance, health, life satisfaction, safety, murder and assault rates, and work-life balance (OECD, 2022a).

The Better Life Index is an interactive tool designed to visualise and compare the key factors, such as education, housing, and environment, that contribute to well-being in OECD countries. It is being visualised through an interactive tool that allows people to see how countries perform according to the importance one gives to each of the 11 topics that make for a better life (OECD, 2022a). An overview of the data will be made in the empirical part of the chapter.

### **3 Research Design and Methodology**

#### **3.1 Budget and eligibility overview**

Based on the available data, we will make a brief overview of the financial framework of the cohesion policy. We will also be interested in which regions are entitled to draw funds and how this eligibility has changed between the previous and the current financial framework.

#### **3.2 Selection of relevant statistical data**

As the Cohesion policy sets, the GDP per inhabitant is a sole indicator of Cohesion funds eligibility, but we are interested in the overall impact on the regions. Few statistical data, available at Eurostat were selected to explore additional data. We must emphasise, that Eurostat does not cover all data, included in the OECD Well-being indicators, for instance Housing, Community, Environment, Civic Engagement, Life Satisfaction and Work – Life balance. But not even OECD has all of them. Few other could be shown by other statistical data: Progress in Regional gross domestic product, Gross domestic product (GDP) and Gross value added (GVA) in volume, Progress in Unemployment rate, Long-term unemployment rate, Progress in People at risk of poverty or social exclusion, Severe material deprivation rate and Households that have broadband access. The aim of the overview of the selected data is to display the overview of the regional state as shown by the statistics and what the results are telling us.

The statistical data, obtained from the Eurostat were filtered by the selected starting year ten regions with the highest and ten regions with the lowest data in the starting year were selected. The starting year data were compared with the last available year. The starting year varies according to availability of the data. The change in data was calculate in a manner of progress or decline in percentage. Regions with no data for the first selected year or last available year data were excluded.

## 4 Data Collection

### 4.1 The Cohesion policy budget

A budget of €392 billion, or about a third of the entire EU budget, has been set aside for Cohesion Policy for the years 2021 to 2027 in order to accomplish the EU objectives and satisfy the various development needs in every EU area.

To aid them in catching up and to lessen the still-present economic, social, and geographical imbalances within the EU, the majority of Cohesion Policy spending is focused on less developed European nations and areas. The money is distributed through different funds. The European Regional Development Fund (ERDF), which makes investments in the social and economic development of all EU regions and cities, is one of the monies used to carry out cohesion policy. The Cohesion Fund (CF), which makes investments in the environment and transportation in the EU's less developed nations. The European Social Fund Plus (ESF+), which supports employment and works to build a just and inclusive society across the EU. The Just Transition Fund (JTF), which provides assistance to the areas most impacted by the move toward carbon neutrality (European Commission 2023a).

When overviewing the planned allocation of funds through different financial periods it becomes clear that the fundamental policy aims and financial resources tend to stay the same (boosting regional development from ERDF, ESF CF and JTF fund) however policy text formulation or as one could call it – the policy story of what, why and how changes to the extent of non-transparency. In the period 2014 – 2022, data on European structural funds and the European Agricultural Fund for Rural Development (EAFRD are included).

From EC data (European Commission 2023c) we can see that the funds for the 2014-2020 period were distributed among the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund, and the European Agricultural Fund for Rural Development (EAFRD). On the other hand, the 2021 – 2027 period, the allocation of the funds is structured as follows: (i) IJG: Investment for jobs and growth goal funded by the ERDF, ESF+, CF and JTF, (ii) Interreg: European Territorial Cooperation goal and (iii) Commission managed EU instruments and technical assistance. In addition to that, from the total amount, 11.3 billion will be transferred to the Connecting Europe Facility and 2.5 billion will be used under Commission managed instruments and EU technical assistance in support of programming (f.i. the JTF budget amount of EUR 19.32 billion is reduced to EUR 19.23 available for programming after deducting EC TA and administrative expenditure) (European Commission, 2023a). The data is shown in table below. The amounts do not include national contributions. To gain as comparable information as possible, we have excluded the 5.618,5 mil EUR of EMFF funds and 136.103 mil EUR of EAFDR funds. According to this data, not all available funds were used. The amount of unused funds is around 74.500 mil EUR. What can also



be seen from the table is, that the amounts from previous financial period and this period have not changed much.

**Table 1:** Budget allocation in million EUR

EU funds	Cohesion policy 2014 – 2020 available	Cohesion policy 2014 – 2020 implementation	Cohesion policy 2021 – 2027 available
ERDF/ESF	230.034,5	187.319,7	-
CF	61.455,3	54.327,5	-
ESF+	104.412,0	79.721,5	-
<b>LJG (ERDF,ESF+,CF)</b>	-	-	361.056,8
JTF	-	-	19.236,9
ETC	-	-	9.041,6
Technical Assistance	-	-	1.332,1
EU Instrument	-	-	1.211,6
<b>SUM</b>	<b>395.901,80</b>	<b>321.368,70</b>	<b>391.879,00</b>

Source: (European Commission, 2023a), (European Commission, 2023b), author's own.

#### 4.2 Eligibility of regions for the Cohesion funds

The eligibility criteria for the Cohesion Funds are solely depended on the GDP per inhabitant. In this manner, less developed regions are the ones which have a GDP per inhabitant that is less than 75% of the EU average, the transition regions, between 75% and 100% of the EU average and more developed regions which have a GDP per inhabitant above 100% of the EU average.

**Table 2:** Less and more developed regions in the EU, Cohesion policy 2014 - 2022 and 2021 – 2027

Member state	No. of less developed regions		No. of more developed regions	
	Cohesion policy 2014-2020	Cohesion Policy 2021-2027	Cohesion Policy 2014-2020	Cohesion Policy 2021-2027
Belgium	0	1	7	7
Bulgaria	6	5	0	0
Czech Republic	7	4	1	1
Denmark	0	0	4	4
Germany	0	0	31	30
Ireland	0	0	2	2
Estonia	1	0	0	0
Greece	5	11	2	0
Spain	1	5	13	5
France	5	4	12	2
Croatia	2	2	0	0
Italy	5	7	13	11
Cyprus	0	0	1	0
Latvia	1	1	0	1
Luxemburg	0	0	1	1
Lithuania	1	1	0	0
Hungary	6	7	1	0
Netherlands	0	0	12	9
Austria	0	0	8	8
Malta	0	0	0	0
Poland	15	14	1	1
Portugal	4	5	2	1
Romania	7	7	1	1
Slovenia	1	1	1	1
Slovakia	3	3	1	1
Finland	0	0	5	2
Sweedden	0	0	8	7
UK	2	0	24	0
<b>SUM</b>	<b>72</b>	<b>78</b>	<b>151</b>	<b>95</b>

Source: (European Commission, 2014) (European Commission, 2021), author's own display.

In table 2, the member states are listed along with the number of less developed regions and more developed regions under the Cohesion Policy for two different periods: 2014-2020 and 2021-2027. Each member state's number of less developed and more developed regions changed between the two policy periods, reflecting changes in their economic

development status. Some regions may have transitioned from less developed to more developed, while others may have experienced the opposite.

Nine countries have no “less developed regions” in both financial periods. One country (Belgium) had no “less developed regions” in previous period and has gained one in the new financial period. Five countries have a lower number of “less developed regions” in the new period (UK not included). Country with the highest decrease is Check Republic with 3 regions less. Number of “less developed regions” increased in six countries, with the highest increase in Spain with six more “less developed countries”.

There are six countries with no “more developed regions” in both financial periods. There is only one country, that has gained one “more developed region” – Latvia. All other countries have either the same number or have less “more developed regions” in the new financial period. The highest decrease of “more developed countries” happened in Spain (eight regions), UK not included.

**Table 3:** Number of regions per development level, Cohesion policy 2014 – 2020 and 2021 – 2027

	<b>Cohesion policy 2014-2020</b>	<b>Cohesion Policy 2021-2027</b>
<b>Less developed regions</b>	72	78
<b>Transition regions</b>	51	67
<b>More developed regions</b>	151	95
<b>SUM</b>	<b>274</b>	<b>240</b>

Source: (European Commission, 2014) (European Commission, 2021), author’s own display.

Table 3 provides the total number of less developed regions and more developed regions for each policy period across all member states. It shows that the total number of less developed regions increased from 72 under the Cohesion Policy 2014-2020 to 78 under the Cohesion Policy 2021-2027. On the other hand, the total number of more developed regions decreased from 151 to 95 during the same period. Table 2 shows the difference in the eligibility of all three levels in both financial periods. The overall number of regions have changed due two factors, one being the UK not being an EU member, meaning there are 37 regions less and the other is a statistical one. There are 3 more regions in the NUTS 2 level. These changes in the distribution of less developed and more developed regions reflect the dynamic nature of regional development and the efforts of the Cohesion Policy to address disparities and promote balanced growth across the European Union. Even by decreasing number due to no UK regions, the decrease in “more developed” regions is much higher, meaning that the distribution of the GDP has changed.

### 4.3 GDP per inhabitant and GVA indicators

Table 4 compares the progress in Regional GDP PPS per inhabitant (progress from the year 2010 to 2021) and GDP/GVA across different regions (progress from the year 2012 to 2021). Regional GDP PPS per inhabitant is a measure that accounts for purchasing power and population size, giving an indication of the economic well-being of individuals in a particular region. GDP and GVA, on the other hand, are broader measures of economic activity within a region. Looking at the top 10 regions in terms of Regional GDP PPS per inhabitant progress, we see that most of these regions have experienced negative or low growth rates. This suggests that these regions have either experienced a slight decline or minimal growth in economic well-being per person. Luxembourg, despite having the lowest negative progress rate (-2.19%), still indicates a slight decrease in GDP PPS per inhabitant. Only Praha (5.73%) and Oberbayern (1.75%) show positive progress, suggesting some level of economic growth. In contrast, the bottom 10 regions in terms of Regional GDP PPS per inhabitant progress have significantly higher progress rates. These regions have experienced notable growth in economic well-being per person. Sud-Est (47.50%) and Sud-Vest Oltenia (56.76%) stand out with the highest progress rates, indicating substantial improvement in GDP PPS per inhabitant. Considering GDP and GVA progress, a similar pattern emerges. The top 10 regions exhibit negative progress rates, implying a decline or limited growth in overall economic activity. Dytiki Makedonia (-39.92%) and La Réunion (-19.91%) have experienced the lowest progress rates, indicating a significant decrease in GDP and GVA. Sterea Ellada (11.65%) is the only region among the top 10 with positive progress, signifying some level of economic growth. In contrast, the bottom 10 regions show higher progress rates, pointing towards stronger growth in GDP and GVA. Southern (177.09%) and Éire/Ireland (109.70%) have the highest progress rates, indicating substantial economic expansion.

Overall, the comparison reveals that the top 10 regions have generally experienced slower growth or decline in both Regional GDP PPS per inhabitant and GDP/GVA. Meanwhile, the bottom 10 regions have shown higher progress rates, indicating stronger economic growth. This comparison provides insights into the varying economic performance across different regions.

**Table 4:** Progress in Regional gross domestic product (PPS per inhabitant in % of the EU27) and Gross domestic product (GDP) and Gross value added (GVA) in volume by NUTS 2 regions

Regional GDP PPS per inhabitant in procent			GDP and GVA		
	Region	progress		Region	progress
TOP 10	Luxembourg - Luxembourg	-2,19	TOP 10	Dytiki Makedonia - Greece	-39,92
TOP 10	Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest - Belgium	-10,13	TOP 10	Sud-Vest Oltenia - Romania	-5,27
TOP 10	Hamburg - Germany	-8,17	TOP 10	La Réunion - France (Overseas Department)	-19,91
TOP 10	Praha - Czech Republic	5,73	TOP 10	Valle d'Aosta/Vallée d'Aoste - Italy	-11,95
TOP 10	Bratislavský kraj - Slovakia	-21,58	TOP 10	Stereia Ellada - Greece	11,65
TOP 10	Île de France - France	-3,30	TOP 10	Nord-Est - Romania	-4,08
TOP 10	Stockholm - Sweden	-3,93	TOP 10	Molise - Italy	-6,88
TOP 10	Utrecht - Netherlands	-5,81	TOP 10	Anatoliki Makedonia, Thraki - Greece	-1,70
TOP 10	Noord-Holland - Netherlands	-2,33	TOP 10	Åland - Finland (Autonomous Region)	-16,11
TOP 10	Oberbayern - Germany	1,75	TOP 10	Voreia Ellada - Greece	-3,89
LOW 10	Sud-Est - France	47,50	LOW 10	Dunántúl - Hungary	29,22
LOW 10	Észak-Magyarország - Hungary	33,33	LOW 10	Közép-Dunántúl - Hungary	39,10
LOW 10	Yugoiztochen - Bulgaria	21,62	LOW 10	Dél-Alföld - Hungary	31,60
LOW 10	Sud-Vest Oltenia - Romania	56,76	LOW 10	Bucuresti - Ilfov - Romania	78,72
LOW 10	Severoiztochen - Bulgaria	19,44	LOW 10	Nyugat-Dunántúl - Hungary	22,72
LOW 10	Yuzhen tsentralen - Bulgaria	22,58	LOW 10	Észak-Magyarország - Hungary	37,60
LOW 10	Nord-Est - Romania	58,06	LOW 10	Eastern and Midland - Ireland	84,19
LOW 10	Severen tsentralen - Bulgaria	34,48	LOW 10	Mayotte - France (Overseas Department)	40,65

LOW 10	Severozapaden - Bulgaria	44,44	LOW 10	Éire/Ireland - Ireland	109,70
LOW 10	Mayotte - France (Overseas Department)	12,00	LOW 10	Southern - Ireland	177,09

Source: (Eurostat, 2023e), (Eurostat, 2023a), author's own calculation.

Based on the provided data, we can make a few interpretations: The top 10 regions listed in the table consistently show relatively high GDP/GVA levels throughout the years. These regions have generally maintained or experienced slight fluctuations in their economic output. This indicates a relatively stable and strong economic performance in these areas. The low 10 regions listed in the table show lower GDP/GVA levels compared to the top-performing regions. These regions have also experienced fluctuations in their economic output over the years. It suggests that these regions may face challenges or have lower economic activity compared to the top-performing regions. The data highlights significant regional disparities in terms of GDP/GVA levels. There is a considerable gap between the top-performing and bottom-performing regions. This gap suggests differences in economic development, resources, industries, or policies between these regions.

Looking at specific regions, some show consistent growth in GDP/GVA levels over the years, while others experience fluctuations or even decline. For example, regions like Dytiki Makedonia and Sterea Ellada show consistent growth, indicating a positive economic trajectory. On the other hand, regions like Mayotte and Southern exhibit fluctuations or decline, suggesting economic challenges in those areas.

#### 4.4 Regional well-being data

The OECD offers statistics for their Better Life overview (OECD, 2022b). From the available dataset we can see that there are 24 EU member countries with their NUTS 2 regions are included, meaning there are 5 missing. The trend is measured between 2010 and 2021.

Included EU member countries regions are Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden. Missing EU member countries regions are Croatia, Cyprus, Bulgaria, Malta, Romania. There are no data for Accessibility to services, Housing: and Community and Life satisfaction indicators available.

**Table 5:** OECD-Regional-Well-Being-Data; Score trends by topic, trend 2010 – 2021, EU members regions

	Education	Jobs	Income	Safety	Health	Environment	Civic engagement	Accessibility to services	Housing	Community	Life satisfaction
<b>Progress</b>	99	90	50	9	37	161	59	0	16	0	0
<b>Decline</b>	17	54	109	10	88	6	95	0	122	0	0
<b>No data</b>	28	11	15	22	7	0	23	198	36	198	198
<b>No change</b>	54	43	24	157	66	31	21	0	24	0	0
<b>Total</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>	<b>198</b>

Source: (OECD, 2022b), author's own calculation.

Interpreting the data from the OECD (see Table 5) Regional Well-Being Data, we can gain insights into the well-being trends in different topics across EU member regions from 2010 to 2021. Overall, there has been progress in education in the majority of regions (99 out of 198). This suggests that efforts have been made to improve educational systems and outcomes across EU member countries regions. Similarly, a significant number of regions (90 out of 198) have shown progress in job-related well-being. This indicates positive trends in employment rates and opportunities within the EU regions. The data reveals a mixed picture for income levels. While there has been progress in 50 regions, indicating improved economic well-being, a larger number of regions (109 out of 198) have experienced a decline in income. This highlights the income disparities and challenges faced by certain regions within the EU. Safety improvements have been relatively limited, with only 9 regions showing progress. This suggests that ensuring a high level of safety and security remains a challenge for many EU member regions. The data indicates progress in health-related well-being in 37 regions, implying efforts to enhance healthcare systems and promote healthier lifestyles. However, a significant number of regions (88 out of 198) have experienced a decline in health-related well-being, highlighting the need for further attention to healthcare challenges.

Environmental well-being has seen substantial progress in a majority of regions (161 out of 198). This indicates a growing emphasis on environmental sustainability and conservation efforts across the EU. Positive trends in civic engagement are observed in 59 regions, indicating increased participation and involvement in community activities. However, a significant number of regions (95 out of 198) have experienced a decline in civic engagement, which could suggest challenges in community participation and social cohesion. While 16 regions have shown progress in housing-related well-being, a larger number of regions (122 out of 198) have experienced a decline. This highlights the

challenges faced in providing affordable and suitable housing for residents in various EU member regions.

It's important to note that the absence of data in some regions for certain topics limits the comprehensive understanding of well-being trends. The available data showcases both positive developments and areas requiring further attention to enhance well-being across EU member regions. However, out of the eight indicators with available data, five of them have declined in the time period of 2010 to 2021.

#### 4.5 Unemployment, poverty, and broadband connection availability

**Table 6:** Progress in Unemployment rate by NUTS 2 regions and Long-term unemployment rate (12 months and more) by NUTS 2 regions, 2010 – 2021 progress

Unemployment rate			Long-term unemployment rate		
	Region	progress		Region	progress
TOP 10	La Réunion - France	-38,06	TOP 10	Guadeloupe - France	-46,03
TOP 10	Canarias - Spain	-18,88	TOP 10	La Réunion - France	-51,40
TOP 10	Andalucía - Spain	-21,94	TOP 10	Guyane - France	-47,74
TOP 10	Ciudad de Ceuta - Spain	11,30	TOP 10	Martinique - France	-55,70
TOP 10	Guadeloupe - France	-28,15	TOP 10	Ciudad de Ceuta - Spain	41,13
TOP 10	Extremadura - Spain	-15,22	TOP 10	Canarias - Spain	-4,88
TOP 10	Comunitat Valenciana - Spain	-30,57	TOP 10	Východné Slovensko - Slovakia	-42,28
TOP 10	Región de Murcia - Spain	-37,55	TOP 10	Ciudad de Melilla - Spain	2,52
TOP 10	Ciudad de Melilla - Spain	-13,16	TOP 10	Stredné Slovensko - Slovakia	-60,75
TOP 10	Castilla-la Mancha - Spain	-26,42	TOP 10	Région de Bruxelles-Capitale/Brussels Hoofdstedelijk Gewest - Belgium	-29,59
LOW 10	Niederbayern - Germany	-53,85	LOW 10	Noord-Brabant - Netherlands	-61,54
LOW 10	Niederösterreich - Austria	30,77	LOW 10	Provincia Autonoma di Trento - Italy	41,67
LOW 10	Oberösterreich - Austria	-5,13	LOW 10	Noord-Holland - Netherlands	-25,00
LOW 10	Prov. West-Vlaanderen - Belgium	-5,26	LOW 10	Stockholm - Sweden	50,00



LOW 10	Praha - Czech Republic	-37,84		LOW 10	Overijssel - Netherlands	-27,27
LOW 10	Oberbayern - Germany	-27,78		LOW 10	Steiermark - Austria	-18,18
LOW 10	Salzburg - Austria	43,75		LOW 10	Utrecht - Netherlands	-30,00
LOW 10	Tirol - Austria	50,00		LOW 10	Praha - Czech Republic	-44,44
LOW 10	Zeeland - Netherlands	20,00		LOW 10	Niederösterreich - Austria	88,89
LOW 10	Provincia Autonoma di Bolzano/Bozen - Italy	40,74		LOW 10	Oberösterreich - Austria	11,11

Source: (Eurostat, 2023g), (Eurostat, 2023c), author's own calculation.

Table 6 shows the progress or change in the unemployment rate and Long-term unemployment rate (12 months and more) for various NUTS 2 regions, comparing years 2010 and 2021.

The unemployment rate is a measure of the percentage of the labour force that is unemployed and actively seeking employment. The positive and negative values represent the change in the unemployment rate. Negative values indicate a decrease in the unemployment rate, while positive values indicate an increase. In the top 10 regions, we see negative values, which indicate a decrease in the unemployment rate. This means that these regions have experienced improvements in their employment situations. La Réunion in France has seen a significant decrease of 38.06% in the unemployment rate. Canarias and Andalucía in Spain have also experienced decreases of 18.88% and 21.94% respectively. Guadeloupe in France and Extremadura in Spain have seen reductions of 28.15% and 15.22% respectively. On the other hand, Ciudad de Ceuta in Spain has shown a positive value of 11.30%, indicating an increase in the unemployment rate. This means that the region has experienced a worsening employment situation. Similarly, the bottom 10 regions also display both positive and negative values, representing changes in the unemployment rate. However, in this case, the negative values indicate an increase in unemployment rate, while the positive values indicate a decrease.

The long-term unemployment rate refers to the percentage of the labour force that has been unemployed for an extended period, usually exceeding six months. It is an important indicator of economic health and labour market conditions.

We can see that some regions have made significant progress in reducing long-term unemployment rates, while others have experienced challenges or limited improvements. In the top 10 regions with progress in reducing long-term unemployment, several regions in France (Guadeloupe, La Réunion, Guyane, Martinique) have seen substantial decreases in their long-term unemployment rates.

This suggests that these regions have implemented effective strategies or experienced favourable economic conditions that have helped individuals find sustained employment. However, there are a few regions where the long-term unemployment rate has increased. Ciudad de Ceuta and Ciudad de Melilla in Spain have experienced an increase in long-term unemployment. These regions may be facing specific economic challenges or structural issues that have hindered their ability to reduce long-term unemployment rates. In the bottom 10 regions, we can observe a mix of regions with both increases and decreases in long-term unemployment rates. Noord-Brabant in the Netherlands has seen a significant increase in long-term unemployment, indicating possible economic difficulties in that region. On the other hand, Provincia Autonoma di Trento in Italy has also experienced an increase in long-term unemployment, suggesting challenges in the local labour market.

It's vital to remember that these numbers reflect relative shifts in long-term unemployment rates rather than the actual rates. As a result, the regions with the highest positive or negative values may not always have the largest or lowest overall rates of long-term unemployment. Overall, the data shows how long-term unemployment rates vary by region and sheds light on both the successes and setbacks other regions have had in their efforts to reduce long-term unemployment.

**Table 7:** Progress in People at risk of poverty or social exclusion by NUTS 2 regions and Severe material deprivation rate by NUTS 2 regions

People at risk of poverty or social exclusion			Severe material deprivation rate		
	Region	progress		Region	progress
TOP 10	Sud-Est - France	-9,24	TOP 10	Severen tsentralen - Bulgaria	-58,60
TOP 10	Nord-Est - France	-18,98	TOP 10	Yuzhen tsentralen - Bulgaria	-50,72
TOP 10	Sud - Muntenia - Romania	-26,92	TOP 10	Yugoiztochen - Bulgaria	-44,89
TOP 10	Sicilia - Italy	-16,17	TOP 10	Severozapaden - Bulgaria	-49,54
TOP 10	Yuzhen tsentralen - Bulgaria	-26,68	TOP 10	Nord-Est - Romania	-53,70
TOP 10	Puglia - Italy	-35,87	TOP 10	Severoiztochen - Bulgaria	-52,66
TOP 10	Severen tsentralen - Bulgaria	-29,10	TOP 10	Sud-Vest Oltenia - Romania	-61,42
TOP 10	Sud-Vest Oltenia - Romania	-18,88	TOP 10	Sud - Muntenia - Romania	-44,17
TOP 10	Severoiztochen - Bulgaria	-37,95	TOP 10	Bucuresti - Ilfov - Romania	-72,48
TOP 10	Campania - Italy	6,47	TOP 10	Sud-Est - France	-27,01

LOW 10	Comunidad Foral de Navarra - Spain	5,76	LOW 10	Principado de Asturias - Spain	221,43
LOW 10	Friuli-Venezia Giulia - Italy	15,11	LOW 10	Provincia Autonoma di Bolzano/Bozen - Italy	7,14
LOW 10	Strední Morava - Czech Republic	-16,06	LOW 10	Östra Mellansverige - Sweden	64,29
LOW 10	Provincia Autonoma di Bolzano/Bozen - Italy	-29,77	LOW 10	Norra Mellansverige - Sweden	50,00
LOW 10	Helsinki-Uusimaa - Finland	-3,23	LOW 10	Nordjylland - Denmark	7,69
LOW 10	Jihovýchod - Czech Republic	-25,64	LOW 10	Extremadura - Spain	576,92
LOW 10	Jihozápad - Czech Republic	-8,49	LOW 10	Cantabria - Spain	266,67
LOW 10	Severovýchod - Czech Republic	19,19	LOW 10	Provincia Autonoma di Trento - Italy	18,18
LOW 10	Strední Čechy - Czech Republic	-21,51	LOW 10	Ciudad de Melilla - Spain	1444,44
LOW 10	Praha - Czech Republic	0,00	LOW 10	Aragón - Spain	750,00

Source: (Eurostat, 2023d), (Eurostat, 2023f), author's own calculation.

The data provided in Table 7 represents the changes in two important indicators related to poverty and social exclusion: the percentage of people at risk of poverty or social exclusion (calculated by the progress/decline between the year 2015 and 2021) and the severe material deprivation rate, calculated by the progress/decline between year 2009 and 2021.

People at risk of poverty or social exclusion indicator represents the proportion of the population that faces a higher risk of poverty or social exclusion. Severe material deprivation rate indicator measures the percentage of people living in severe material deprivation, which indicates a lack of access to essential goods and services.

When comparing the data provided on the percentage of people at risk of poverty or social exclusion across different NUTS 2 regions from 2015 to 2021, we can observe the following: There are notable regional variations in the percentage of people at risk of poverty or social exclusion. Some regions consistently had higher percentages throughout the years, such as Sud-Est, Nord-Est, and Sicilia, while others, like Comunidad Foral de Navarra and Friuli-Venezia Giulia, generally had lower percentages. Several regions demonstrated a decreasing trend in the percentage of people at risk of poverty or social exclusion over the years, including Nord-Est, Sud - Muntenia, Yuzhen tsentralen, Puglia, Severen tsentralen, Sud-Vest Oltenia, and Severoiztochen. This suggests improvements in socio-economic conditions and social inclusion efforts in these regions. Some regions experienced fluctuations in the percentage of people at risk of poverty or social exclusion. Sud-Est, for example, had a relatively stable percentage with minor variations, while

Campania showed fluctuations, including a slight increase in recent years. The regions can be categorized into groups based on their overall trajectory. For instance, Sud-Est, Nord-Est, Sicilia, and Yuzhen tsentralen had relatively stable or decreasing percentages, indicating progress in reducing poverty or social exclusion. On the other hand, Campania and Severoiztochen showed fluctuations and an increasing trend, suggesting potential challenges in addressing poverty and social exclusion.

The data highlights disparities between regions, both within and between countries. For example, the regions in Bulgaria (Yuzhen tsentralen, Severen tsentralen, and Severoiztochen) generally had higher percentages of people at risk of poverty or social exclusion compared to regions in other countries.

There are notable disparities in severe material deprivation rates between different regions. Some regions consistently exhibit higher deprivation rates, indicating a greater proportion of individuals or households lacking access to essential items or activities for a decent standard of living. On the other hand, certain regions consistently have lower deprivation rates, suggesting better access to basic necessities. The data also reveals temporal trends in severe material deprivation rates. In general, there is a downward trend over the years, indicating an improvement in access to essential resources across the regions. This positive trend suggests that efforts have been made to address material deprivation and enhance living conditions. While severe material deprivation rates have decreased over time, the rates and the pace of progress vary among regions. Some regions have experienced significant improvements, with substantial decreases in deprivation rates, indicating successful measures to alleviate material deprivation. Other regions have seen more modest reductions or even fluctuations, suggesting the need for targeted interventions to address persistent challenges. The inclusion of regions from different countries allows for international comparisons. It highlights variations in severe material deprivation rates across different countries and regions. For example, regions in Spain, such as Extremadura and Ciudad de Melilla, consistently exhibit higher deprivation rates compared to regions in Bulgaria.

**Table 8:** Households that have broadband access by NUTS 2 regions

	<b>region</b>	<b>progress</b>
<b>TOP 10</b>	<b>Stockholm - Sweden</b>	3,04
<b>TOP 10</b>	<b>Noord-Holland - Netherlands</b>	12,80
<b>TOP 10</b>	<b>Trøndelag - Norway</b>	15,61
<b>TOP 10</b>	<b>Utrecht - Netherlands</b>	20,22
<b>TOP 10</b>	<b>Sydsverige - Sweden</b>	5,09
<b>TOP 10</b>	<b>Flevoland - Netherlands</b>	11,38
<b>TOP 10</b>	<b>Hovedstaden - Denmark</b>	10,09
<b>TOP 10</b>	<b>Västsverige - Sweden</b>	7,10
<b>TOP 10</b>	<b>Östra Mellansverige - Sweden</b>	8,54
<b>TOP 10</b>	<b>Overijssel - Netherlands</b>	16,03
<b>LOW 10</b>	<b>Severozapaden - Bulgaria</b>	122,86
<b>LOW 10</b>	<b>Centru - Romania</b>	218,68
<b>LOW 10</b>	<b>Sud-Est - France</b>	238,92
<b>LOW 10</b>	<b>Severen tsentralen - Bulgaria</b>	115,17
<b>LOW 10</b>	<b>Sud - Muntenia - Romania</b>	144,40
<b>LOW 10</b>	<b>Yugoiztochen - Bulgaria</b>	164,67
<b>LOW 10</b>	<b>Vest - Romania</b>	197,44
<b>LOW 10</b>	<b>Severoiztochen - Bulgaria</b>	208,58
<b>LOW 10</b>	<b>Nord-Est - Romania</b>	425,65
<b>LOW 10</b>	<b>Sud-Vest Oltenia - Romania</b>	172,96

Source: (Eurostat, 2023b).

Table 8 provides information on the percentage of households with broadband access in various NUTS 2 regions for the years 2011 to 2021. The data highlights a significant disparity in broadband access between the "Top 10" regions and the "LOW 10" regions. The top regions consistently had high percentages of households with broadband access, ranging from the high 80s to close to 100%. In contrast, the low regions had much lower percentages, starting from the low 20s and gradually increasing but still remaining relatively low. The top regions, such as Stockholm, Noord-Holland, and Utrecht, are major urban areas or regions with significant economic centers. These areas typically have better infrastructure and greater investment in broadband connectivity. On the other hand, the low regions, like Severozapaden, Centru, and Sud-Est, are often rural or less developed areas where broadband infrastructure might be lacking or less accessible. In general, there is a positive trend of increasing broadband access across most regions. Over the years, the percentage of households with broadband access has been rising, even in the low regions. This can be attributed to various factors, including government initiatives, technological advancements, and increased investment in infrastructure.

There are fluctuations in broadband access within regions over time. Some regions show steady growth, while others experience more variability. For example, Trøndelag had a significant increase in broadband access, reaching almost 100% in 2020 and 2021, while Sydsverige had fluctuations but generally maintained a relatively high percentage. The data suggests the presence of a potential digital divide, where certain regions or populations have better access to broadband compared to others. This divide can have implications for educational opportunities, economic development, and access to various online services and resources.

## 5 Discussion

The amounts between the last financial period and this one have not changed much. Under the Cohesion Policy 2014–2020, there were 72 less developed regions overall. By contrast, there were 78 under the Cohesion Policy 2021–2027. On the other hand, throughout the same time span, the overall number of better developed regions fell from 151 to 95. Due to two factors—the UK's exclusion from the EU, which results in 37 fewer regions overall—the total number of regions has altered. The other element is statistical. The NUTS 2 level includes three additional regions. These shifts in the proportion of less developed and more developed regions are a result of the Cohesion Policy's efforts to rectify inequities and encourage balanced growth throughout the European Union as well as the dynamic character of regional development. Even if the number is falling since there are no UK areas, the decline in "more developed" regions is much greater, indicating that the GDP's distribution has altered.

Overall, the comparison shows that, in terms of GDP/GVA and Regional GDP PPS per person, the top 10 regions have generally had slower growth or contraction. The lowest 10 regions, on the other hand, have seen better rates of advancement, indicating faster economic growth. This comparison sheds light on how different regions' economies perform differently. In addition to that there is a considerable gap between the top-performing and bottom-performing regions in the GDP and GVA statistics. This gap suggests differences in economic development, resources, industries, or policies between these regions, namely it might show, that the Cohesion Policy and the redistribution of funds to those areas might impacted the regional growth. However, it might also suggest, that the regions with the highest GDP and GVA, which are also the most developed ones, suffered more from the COVID-19 and war in Ukraine consequences. This aspect should be studied in more detail and in more depth.

Trying to broaden the picture of citizens' well-being, we have looked into the OECD statistics. It is significant to stress that a thorough understanding of changes in well-being is constrained by the lack of data for some topics in some places. The available data highlight both areas that need more focus and positive developments in order to improve wellbeing among EU member regions. However, out of the eight indicators with available

data, five of them have declined in the time period of 2010 to 2021. The figures indicate an overall deterioration of the situation, but more specific information also indicates that the places with the worst conditions have improved.

Environmental well-being has seen substantial progress in most regions (161 out of 198). This indicates a growing emphasis on environmental sustainability and conservation efforts across the EU, not only on the policy level but also with financial support.

Statistics on unemployment and long-term unemployment cannot give us some direct information on the policy effect. Top and bottom regions display both positive and negative values, representing changes in the unemployment rate. For better analysis, more substantial research is needed. The same could be said for the percentage of people at risk of poverty or social exclusion (Golob et al., 2023). It can be observed, that throughout the years there has been a consistent increase in percentages for certain regions. Over the past years, a number of areas have shown decreases in the proportion of people at risk of poverty or societal exclusion. In these regions, it suggests improvements in societal conditions and efforts to create a more inclusive environment. The percentage of the population at risk of poverty and social exclusion has varied in some regions. These data indicate differences in regions, both inside and outside of the country.

The data highlights a significant disparity in broadband access between the "Top 10" regions and the "Low 10" regions. The top regions consistently had high percentages of households with broadband access, ranging from the high 80s to close to 100%. In contrast, the low regions had much lower percentages, starting from the low 20s and gradually increasing but remaining relatively low. Over the years, the percentage of households with broadband access has been rising, even in the low regions. This can be attributed to various factors, including government initiatives, technological advancements, and increased investment in infrastructure, which was also funded by the EU. As the data shows, the progress in the past 10 years in the less equipped regions was substantial.

In concluding the discussion and attempting to answer the research question of whether the progress of EU member regions can be detected solely through figures, the answer is not straightforward. It involves multiple factors and considerations impacting the implementation of strategic documents (Modic & Rončević, 2018; Fric, et al., 2023). On one hand, if a region receives funding from the EU, it generally suggests progress in some form. EU funding often aims to support economic development, infrastructure improvements, and social initiatives, which can contribute to the advancement of regions.

However, relying solely on figures to gauge progress raises questions about the priorities of the EU. Are these priorities aligned with the needs and aspirations of the citizens in terms of decent work, fair wages, and a satisfactory personal life, or are they solely focused on fostering economic growth? While economic growth is important, it should

not overshadow the well-being and quality of life of individuals living in these regions. Thus, it is crucial to consider whether the EU's objectives truly reflect the desires and requirements of the people affected by their policies and funding decisions.

Another challenge lies in measuring the well-being of citizens. While figures and statistical data can provide insights, there are limitations and gaps in data collection that hinder a comprehensive understanding of well-being. Not all relevant data points are consistently collected, making it difficult to obtain a complete picture of the situation. Moreover, even when data is available, not all statistical indicators are equally effective in providing a clear and understandable insight into the well-being of individuals and communities.

In conclusion, while figures can provide some indication of progress in EU member regions, they do not tell the whole story. The EU's priorities and whether they align with the needs of citizens for decent work (for example work of women in academia as discussed in (Modic et al., 2022), fair pay, and a satisfactory personal life are crucial considerations. Additionally, measuring well-being faces challenges due to incomplete data collection (Urška Fric et al., 2020) and the complexity of translating statistics into meaningful insights. Therefore, a comprehensive assessment of progress requires a broader understanding that goes beyond figures alone.



**References:**

- Bachtler, J., & Wren, C. (2006). Evaluation of European Union cohesion policy: Research questions and policy challenges. *Regional Studies*, 40(2), 143–153. <https://doi.org/10.1080/00343400600600454>
- Bachtrögler, J., Fratesi, U., & Perucca, G. (2020). The influence of the local context on the implementation and impact of EU cohesion policy. *Regional Studies*, 54(1), 21–34. <https://doi.org/10.1080/00343404.2018.1551615>
- Becker, S. O., Egger, P. H., & von Ehrlich, M. (2018). Effects of EU regional policy: 1989–2013. *Regional Science and Urban Economics*, 69(March), 143–152. <https://doi.org/10.1016/j.regsciurbeco.2017.12.001>
- Besednjak Valič, T., Kolar, J., & Lamut, U. (2022). Fighting the big bad wolf of global trends: Technology transfer between HPC centres and SMEs. *Digital Policy, Regulation and Governance*, 24(6), 498–512. <https://doi.org/10.1108/DPRG-11-2020-0162>
- Besednjak Valič, T., Kolar, J., Lamut, U., & Pandiloska Jurak, A. (2023). Key policy mechanisms supporting the university–industry collaboration in the Danube Region: Case study of academic HPC centres and SMEs. *European Journal of Management and Business Economics*, 32(5), 509–524. <https://doi.org/10.1108/EJMBE-09-2022-0283>
- Besednjak Valič, T. (2022a). Becoming a part of regional innovation systems: A study of cultural and creative sectors of two Slovenian municipalities. *Journal Global Policy and Governance*, 11(1), 117–132. <https://doi.org/10.14666/2194-7759-11-1-7>
- Besednjak Valič, T. (2022b). Open innovation and its impacts on interorganisational stability: A SOFLA perspective addressing the sustainable growth in regional context. In B. Rončević & V. Cepoi (Eds.), *Technologies and Innovations in Regional Development: The European Union and Its Strategies* (pp. 79–98). Berlin: Peter Lang.
- Blom-Hansen, J. (2005). Principals, agents, and the implementation of EU cohesion policy. *Journal of European Public Policy*, 12(4), 624–648. <https://doi.org/10.1080/13501760500160136>
- Boshkoska, B. M., Rončević, B., & Džajić Uršič, E. (2018). Modeling and evaluation of the possibilities of forming a regional industrial symbiosis networks. *Social Sciences*, 7(1), 13. <https://doi.org/10.3390/socsci7010013>
- Crescenzi, R., Fratesi, U., & Monastiriou, V. (2020). Back to the member states? Cohesion policy and the national challenges to the European Union. *Regional Studies*, 54(1), 5–9. <https://doi.org/10.1080/00343404.2019.1662895>
- Crescenzi, R., & Giua, M. (2020). One or many cohesion policies of the European Union? On the differential economic impacts of cohesion policy across member states. *Regional Studies*, 54(1), 10–20. <https://doi.org/10.1080/00343404.2019.1665174>
- Džajić Uršič, E., Fric, U., & Rončević, B. (2024). The circular economy: Recent debates and research trends. *Journal of Infrastructure, Policy and Development*, 8(3). <https://doi.org/10.24294/jipd.v8i3.2855>
- European Commission. (2014). *Commission Implementing Decision of 18 February 2014 Setting out the List of Regions Eligible for Funding from the European Regional Development Fund and the European Social Fund and of Member States Eligible for Funding from the Cohesion Fund for the Period 2014–2020* (Notified under Document C(2014) 974). OJ L. Vol. 050. Retrieved from [http://data.europa.eu/eli/dec\\_impl/2014/99/oj/eng](http://data.europa.eu/eli/dec_impl/2014/99/oj/eng)
- European Commission. (2018). *Development of a System of Common Indicators for European Regional Development Fund and Cohesion Fund Interventions after 2020. Part I, p Thematic Objective 1, 3, 4, 5, 6*. LU: Publications Office. Retrieved from <https://data.europa.eu/doi/10.2776/279688>

- European Commission. (2021). *Commission Implementing Decision (EU) 2021/1130 of 5 July 2021 Setting out the List of Regions Eligible for Funding from the European Regional Development Fund and the European Social Fund Plus and of Member States Eligible for Funding from the Cohesion Fund for the Period 2021-2027* (Notified under Document C(2021) 4894). OJ L. Vol. 244. Retrieved from [http://data.europa.eu/eli/dec\\_impl/2021/1130/oj/eng](http://data.europa.eu/eli/dec_impl/2021/1130/oj/eng)
- European Commission. (2022a). *'History of the Policy'*. 2022. Retrieved from [https://ec.europa.eu/regional\\_policy/en/policy/what/history/](https://ec.europa.eu/regional_policy/en/policy/what/history/)
- European Commission. (2022b). *'Priorities for 2021-2027'*. 2022. Retrieved from [https://ec.europa.eu/regional\\_policy/en/policy/how/priorities](https://ec.europa.eu/regional_policy/en/policy/how/priorities)
- European Commission. (2022c). *'The EU's Main Investment Policy'*. 2022. Retrieved from [https://ec.europa.eu/regional\\_policy/en/policy/what/investment-policy/](https://ec.europa.eu/regional_policy/en/policy/what/investment-policy/)
- European Commission. (2023a). *'2021-2027 EU Cohesion Policy + JTF Budget Initial Allocations | Data | European Structural and Investment Funds'*. 2023. Retrieved from <https://cohesiondata.ec.europa.eu/2021-2027-Finances/2021-2027-EU-cohesion-policy-JTF-budget-initial-al/v7xe-nn2c>
- European Commission. (2023b). *'Inforegio - The EU's Main Investment Policy'*. 2023. Retrieved from [https://ec.europa.eu/regional\\_policy/policy/what/investment-policy\\_en](https://ec.europa.eu/regional_policy/policy/what/investment-policy_en)
- European Commission. (2023c). *'Open Data Portal for the European Structural Investment Funds - European Commission | Data | European Structural and Investment Funds'*. Tyler Data & Insights. 2023. Retrieved from <https://cohesiondata.ec.europa.eu/overview/14-20>
- Eurostat. (2023a.) *'Early Leavers from Education and Training by Sex and NUTS 1 Regions'*. 2023. Retrieved from <https://ec.europa.eu/eurostat/databrowser/view/tgs00106/default/table?lang=en>
- Eurostat. (2023b). *'Gross Domestic Product (GDP) and Gross Value Added (GVA) in Volume by NUTS 2 Regions'*. 2023. Retrieved from [https://ec.europa.eu/eurostat/databrowser/view/nama\\_10r\\_2gvagr/default/table?lang=en](https://ec.europa.eu/eurostat/databrowser/view/nama_10r_2gvagr/default/table?lang=en)
- Eurostat. (2023c). *'Households That Have Broadband Access by NUTS 2 Regions'*. 2023. Retrieved from <https://ec.europa.eu/eurostat/databrowser/view/tgs00048/default/table?lang=en>
- Eurostat. (2023d). *'Long-Term Unemployment Rate (12 Months and More) by NUTS 2 Regions'*. 2023. Retrieved from <https://ec.europa.eu/eurostat/databrowser/view/tgs00053/default/table?lang=en>
- Eurostat. (2023e). *'People at Risk of Poverty or Social Exclusion by NUTS 2 Regions'*. 2023. Retrieved from <https://ec.europa.eu/eurostat/databrowser/view/tgs00107/default/table?lang=en>
- Eurostat. (2023f). *'Regional Gross Domestic Product (PPS per Inhabitant in % of the EU27 (from 2020) Average) by NUTS 2 Regions'*. 2023. Retrieved from [https://ec.europa.eu/eurostat/databrowser/view/TGS00006/default/table?lang=en&category=na10.nama10.nama\\_10reg.nama\\_10r\\_gdp](https://ec.europa.eu/eurostat/databrowser/view/TGS00006/default/table?lang=en&category=na10.nama10.nama_10reg.nama_10r_gdp)
- Eurostat. (2023g). *'Severe Material Deprivation Rate by NUTS 2 Regions'*. 2023. Retrieved from <https://ec.europa.eu/eurostat/databrowser/view/tgs00104/default/table?lang=en>
- Eurostat. (2023h). *'Unemployment Rate by NUTS 2 Regions'*. 2023. Retrieved from <https://ec.europa.eu/eurostat/databrowser/view/tgs00010/default/table?lang=en>
- Fiaschi, D., Lavezzi, A. M., & Parenti, A. (2018). Does EU cohesion policy work? Theory and evidence. *Journal of Regional Science*, 58(2), 386–423. <https://doi.org/10.1111/jors.12364>
- Fric, U., Rončević, B., & Uršič, E. D. (2020). Role of computer software tools in industrial symbiotic networks and the examination of sociocultural factors. *Environmental Progress & Sustainable Energy*, 39(2), e13364. <https://doi.org/10.1002/ep.13364>
- Fric, U., Rončević, B., Gangaliuc, C., Pandiloska Jurak, A., Uršič, E., Besednjak Valič, T., & Cepoi, V. (2023). *Development and implementation of the EU grand strategies: Sociological, policy,*

- and regional considerations of Agenda 2030. Berlin, Germany: Peter Lang.  
<https://doi.org/10.3726/b20448>
- Fric, U., O’Gorman, W., & Rončević, B. (2023). Strategic competence model for understanding smart territorial development. *Societies*, 13(3), 76. <https://doi.org/10.3390/soc13030076>
- Golob, T., & Makarovič, M. (2021). Sustainable development through morphogenetic analysis: The case of Slovenia. *Politics in Central Europe*, 17(1), 83–105. <https://doi.org/10.2478/pce-2021-0004>
- Golob, T., & Makarovič, M. (2022). Meta-reflexivity as a way toward responsible and sustainable behavior. *Sustainability*, 14(9), 1–19. <https://doi.org/10.3390/su14095192>
- Golob, T., Gorišek, M., & Makarovič, M. (2023). Authoritarian and populist challenges to democracy correspond to a lack of economic, social, and cultural capitals. *Societies*, 13(8), 1–12. <https://doi.org/10.3390/soc13080181>
- Jelen, I., Džajić Uršič, E., & Indeo, F. (2023). L’uso della forza nelle relazioni tra gli stati: Teoria ed evoluzioni nella prassi geo-politica. *Documenti Geografici*, 2, 191–208. [http://dx.doi.org/10.19246/DOCUGEO2281-7549/202202\\_09](http://dx.doi.org/10.19246/DOCUGEO2281-7549/202202_09)
- Kleindienst, P. (2017). Understanding the different dimensions of human dignity: Analysis of the decision of the Constitutional Court of the Republic of Slovenia on the Tito Street case. *Danube: Law and Economics Review*, 8(3), 117–137. <https://doi.org/10.1515/danb-2017-0009>
- Kleindienst, P. (2019). Zgodovinski temelji sodobne paradigme človekovega dostojanstva. *Phainomena*, 28(108–109), 259–282. <https://doi.org/10.32022/PHI28.2019.108-109.11>
- Kleindienst, P., & Tomšič, M. (2018). Človekovo dostojanstvo kot del politične kulture v novih demokracijah: Postkomunistična Slovenija. *Bogoslovni vestnik: Glasilo Teološke fakultete v Ljubljani*, 78(1), 159–172
- Kleindienst, P., & Tomšič, M. (2022). Human dignity as the foundation of democratic political culture: Legal and philosophical perspective. *Law, Culture and the Humanities*, 18(2), 385–404. <https://doi.org/10.1177/1743872117738229>
- Klopčič, A. L., Rončević, B., & Besednjak Valič, T. (2022). The key player or just a paper tiger? The effectiveness of ACER in the creation and functioning of the EU’s internal energy market. *The Electricity Journal*, 35(9), 107207. <https://doi.org/10.1016/j.tej.2022.107207>
- Kukovič, S. (2021). Local government fighting COVID-19: The case of Slovenian municipalities. *Politics in Central Europe*, 17(4), 637–650
- Kukovič, S. (2024). European local and regional development: The context and the role of leadership. In S. Kukovič & I. Radevič (Eds.), *Contemporary Pathways of European Local and Regional Development* (pp. 1–14). Maribor: Institute for Local Self-Government Maribor. <https://doi.org/10.4335/2024.1.1>
- Leonardi, R. (2006). Cohesion in the European Union. *Regional Studies*, 40(2), 155–166. <https://doi.org/10.1080/00343400600600462>
- Majetić, F., Makarovič, M., Šimleša, D., & Golob, T. (2019). Performance of work integration social enterprises in Croatia, Slovenia, and Italian regions of Lombardy and Trentino. *Economics & Sociology*, 12(1), 286–301. <https://doi.org/10.14254/2071789X.2019/12-1/17>
- Makarovič, M., Šušteršič, J., & Rončević, B. (2014). Is Europe 2020 set to fail? The cultural political economy of the EU grand strategies. *European Planning Studies*, 22(3), 610–626. <https://doi.org/10.1080/09654313.2013.78238>
- Modic, D., Hafner, A., & Valič-Besednjak, T. (2022). Every woman is a vessel: An exploratory study on gender and academic entrepreneurship in a nascent technology transfer system. In J. M. Azagra-Caro, P. D’Este, & D. Barberá-Tomás (Eds.), *University-Industry Knowledge Interactions: People, Tensions and Impact* (pp. 159–178). Cham: Springer International Publishing. [https://doi.org/10.1007/978-3-030-84669-5\\_9](https://doi.org/10.1007/978-3-030-84669-5_9)

- Modic, D., & Rončević, B. (2018). Social topography for sustainable innovation policy: Putting institutions, social networks, and cognitive frames in their place. *Comparative Sociology*, 17(1), 100–127. <https://doi.org/10.1163/15691330-12341452>
- OECD. (2022a). *OECD Better Life Index*. Retrieved from <https://www.oecdbetterlifeindex.org/>
- OECD. (2022b). *OECD Regional Well-Being - How is life?* Retrieved from <https://oecdregionalwellbeing.org>
- OECD. (2022c). *Regional development policy - OECD*. Retrieved from <https://www.oecd.org/regional/regional-policy/regionaldevelopment.htm>
- Pandiloska Jurak, A. (2019). Public policy instrument evaluation in service of enabling grand strategy discourse – Case of Horizon 2020 key indicators. *Research in Social Change*, 11(2), 97–121. <https://doi.org/10.2478/rsc-2019-0011>
- Pandiloska Jurak, A. (2021). Technologies, innovation & regional policy – It is not all about business. In B. Rončević & V. Cepoi (Eds.), *Technologies and Innovations in Regional Development: The European Union and Its Strategies* (pp. 119–138). Berlin, Bern, Bruxelles, New York, Oxford, Warszawa, Wien: Peter Lang.
- Pandiloska Jurak, A., & Pinterič, U. (2012). Assessment of municipalities' performances in Slovenia. *Transylvanian Review of Administrative Sciences*, 35, 121–137.
- Rončević, B., & Modic, D. (2011). Regional systems of innovations as social fields. *Sociologija i Prostor: Časopis za Istraživanje Prostornoga i Sociokulturnog Razvoja*, 49(3), 313–333. <https://doi.org/10.5673/sip.49.3.3>
- Rončević, B. (2012). Regional development agencies and changing social fields. In N. Bellini, M. Danson, & H. Halkier (Eds.), *Regional Development Agencies: The Next Generation?: Networking, Knowledge and Regional Policies* (pp. 1–6). London: Routledge. <https://doi.org/10.4324/9780203107027>
- Rončević, B., & Besednjak Valič, T. (2022). *An Active Society in a Networked World: The Cultural Political Economy of Grand Strategies*. Berlin, Germany: Peter Lang. <https://www.peterlang.com/document/1272665>
- Uršič, E. D., & Jelen, I. (2022). From industrial district to industrial symbiosis: An opportunity. The case of the Ponte Rosso industrial area, Italy. *Acta Geographica Slovenica*, 62(3), 21–32. <https://doi.org/10.3986/AGS.10513>