

ECONOMIC ANALYSIS OF EMERGENCE OF BIPOLAR EUROPEAN UNION, 2011-2022

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Abstract. Looking at the economies of the 27 Member States of the European Union, we see a significant degree of polarisation. These disparities are reflected in marked differences in the levels of social and economic development of the EU Member States. The enlargement process of recent decades has clearly reinforced these trends. Generally speaking, the economic performance of the less developed Member States (generally those that joined in 2004 or later) has moved closer to the EU average, but it can also be said that the NUTS 2 regions with the highest levels of underdevelopment are mainly located in these EU Member States, and thus tend to be further away from the EU average. On the basis of these results, we have analysed the bipolar economic development of the EU Member Countries. The aim of our study was to identify the links between employment rates and their changes and economic performance that would provide a comprehensive picture of the deep-rooted structural differences that are nowadays proving to be of crucial importance in the EU Member States. Our results show that employment trends in the EU Member Countries that joined in 2004 or later have caught up with the average of the pre-2004 Member States by 2022, but their economic performance has evolved at a much slower pace, and economic gaps between the two groups of countries have increased, contributing to the almost permanent differences in economic competitiveness between the two poles of Europe and between the groups of countries.

Keywords: European Union; economic development; labour market; convergence; divergence.

Introduction

Today, in most countries of the world and the European Union, there are significant differences in development both within and across borders. The main reason for the emergence of territorial disparities is that economic and social processes are constantly being reorganised in space and time, and these factors are only increasing with globalisation. This process of reordering can be observed throughout Europe, but it can also be measured in global terms. In order to gain an accurate and realistic picture of the territorial processes in Europe today, it is worthwhile to understand the processes of territorial inequality that have occurred and are continuing to occur in time and space, and their impact on changes in the spatial structure, since a comprehensive knowledge of these processes can help avoid the disappearance of a two-speed Europe. We believe that in this context of multi-faceted relations, the elaboration of new international development strategies should be based primarily on the potential of the territories concerned, on the exploitation of endogenous potentials, and on the renewal and development of their own forces [1; 2].

The concept of territorial processes in the European Union refers to a sustained series of social, economic, cultural and demographic phenomena with a spatially specific territorial imprint [3]. These processes can be both longer and shorter in terms of their duration. They are the result of a series of decisions taken by individuals, businesses, institutions, local authorities, national governments, international organisations, etc. [4; 5]. Thanks to the constant territorial changes in the European Union, territorial disparities have become inevitable and permanent. In order to understand this, it is important to point out, for the purposes of the subject under study, that the emergence of spaces with unfavourable economic conditions has led to a variety of social responses, including migration, internal and inter-country emigration and the improvement of unfavourable conditions (e.g. isolation, infrastructure backwardness). A general characteristic of disadvantaged areas is that many of them have low levels of infrastructure, low levels of services and a lack of dominance of efficient economic sectors closely linked to employment opportunities. The consequence of all this is the presence of polarised earnings relations. A general phenomenon is the emigration of the younger generation from disadvantaged areas, which contributes to an ageing age structure that is not favourable in the long term. For the purposes of our research, it is important to note that the two basic components of spatiality, inequality and orderliness, are observed in tandem when examining spatial inequalities [6]. The duality of inequality and configuration is in many ways analogous to the conceptual duality of region and spatial structure [7]. Nowadays, the basic question of inequality research is: How large and how are territorial inequalities changing? In the 21st century, thanks to our highly developed information society, there is no part of Europe for which we do not have measured or counted natural (environmental) or social information. These databases make a significant contribution to research into the realistic results of territorial

processes, to the interpretation of the disparities that have emerged and to the analysis of their causes [8; 9].

The coordination of spatial elements with basic social functions and social needs has taken different forms in Europe. Spatially organised, spontaneous economic and social processes have developed between countries, and these differences are clearly visible. In the uncentric countries (France, Austria, Hungary, most of the Central and Eastern European countries), the peripheries outside the dominant capital cities have a weaker performance, the rail network has been developed in a radial structure serving the centre of the state, and cultural and political functions have been concentrated there [10; 11]. The rapid development of resource-intensive industries began in areas far from the former growth centres (e.g. Antwerp, Venice, Florence, Amsterdam, Bordeaux), and the population of the settlements in these areas (e.g. Lotharingia, the Ruhr, Northern Italy) multiplied. Other parts of the country were depopulated by the great migrations. The turn of the 19th and 20th centuries saw the emergence of metropolitan industrial agglomerations, which established the monocentric spatial structure of many countries. The uninterrupted economic development of the 1950s and 1960s, the prevailing political current and economic thinking of the time, and the economic policy of the welfare state, opened a new era in spatial development and thus in the growth of disparities between countries. The hidden, "dormant" territorial development of the past was replaced by an active state intervention policy. A comprehensive evaluation of the theoretical and practical experience of this development period has clarified the tasks and objectives of spatial development in industrial and post-industrial societies, and regional policy has become an integral part of social and economic policy. The advanced capitalist countries have entered a period of so-called structural adjustment. Central and Eastern European spatial development policies, due to considerations of power stability and ideological downplaying of the role of infrastructure, were clearly pro-urban and anti-urban, and despite their declarations, they promoted a strong concentration of the settlement network [12]. The disparities in territorial processes were also accelerated by the political and economic changes in the Eastern European countries in the early 1990s, which created a new situation in the European spatial structure. New markets had to be reached, transport networks had to be interconnected, elements of the municipal network had to be linked up and a host of other, hitherto unknown, regional problems had to be tackled [13]. In the European Union today, public awareness of territorial disparities has increased and is growing. The reason for this is that inequalities are constantly increasing and new forms of inequality are emerging, with the result that the importance of territorial policy is growing, gradually increasing year by year. This general trend can be seen and observed today, as the enlargement of the European Union in several stages after 2004 has brought the issue of territorial disparities into sharper focus, the nature and laws of which are explained in more detail in theories of growth [14].

All this suggests that the European economic and social space is highly fragmented. Differences in settlement networks, economic structures, education levels and infrastructure are rooted in the continent's historical development over several centuries. Changes in recent years suggest that the scope for regional policy at the beginning of the 21st century will be determined by two major factors, in addition to the developmental laws of the economy: the reform of the organisation, operation and financing of the European Union and its enlargement to the east since 2004, and the emergence of a new division of power within nation states, decentralisation, which is in no small part due to the former. However, the basic objective is unlikely to change significantly, as territorial disparities are an obstacle to economic development, hamper competitiveness, lead to social tensions and limit the realisation of the concept of a united Europe [15-17].

Based on all these theses, the aim of our research is to analyse the bipolar development path of the European Union (EU27), focusing on the aggregate performance of the EU Member States that joined before 2004 (EU14) and the EU Member States that joined in 2004 or afterwards (EU13) separately.

Materials and methods

Our analysis includes the employment rate for the age group 20-64 and the gross domestic product (GDP) per capita for the 27 Member States of the European Union, covering the period 2011-2022. For the time series analysis of the employment rate of the 20-64 age group and GDP per capita, both averages and dynamic analysis of variation were used.

We have chosen to examine the relationship between these two indicators because they are two very significant indicators of economic growth. Employment rates play a key role in determining the competitiveness of national economies, as does GDP per capita. However, a number of issues can arise when using the change in gross domestic product (GDP) as an indicator of development (e.g. it includes profits that do not serve local development or investments with negative environmental/social impacts). It is therefore appropriate to examine indicators describing human development, innovation capacity and the state of the business environment in our next analysis in order to obtain a more comprehensive picture of the level of territorial development.

The 27 Member States are grouped by year of accession to the EU as follows:

- **EU14:** Austria 1995, Belgium 1958, Denmark 1973, Finland 1995, France 1958, Germany 1958, Greece 1981, Ireland 1973, Italy 1958, Luxembourg 1958, Netherlands 1958, Portugal 1986, Spain 1986, Sweden 1995.
- **EU13:** Bulgaria 2007, Croatia 2013, Cyprus 2004, Czechia 2004, Estonia 2004, Hungary 2004, Latvia 2004, Lithuania 2004, Malta 2004, Poland 2004, Romania 2007, Slovakia 2004, Slovenia 2004.

Results and discussion

Our research looked at the differences in labour market and economic performance between Member States that joined the European Union before 2004 and those that joined in 2004 or after 2004, using statistical data from the past 12 years.

The results in Figure 1 show that the aggregate employment rates of the EU27, EU14 and EU13 all moved in a positive direction between the two end points of the period under review.

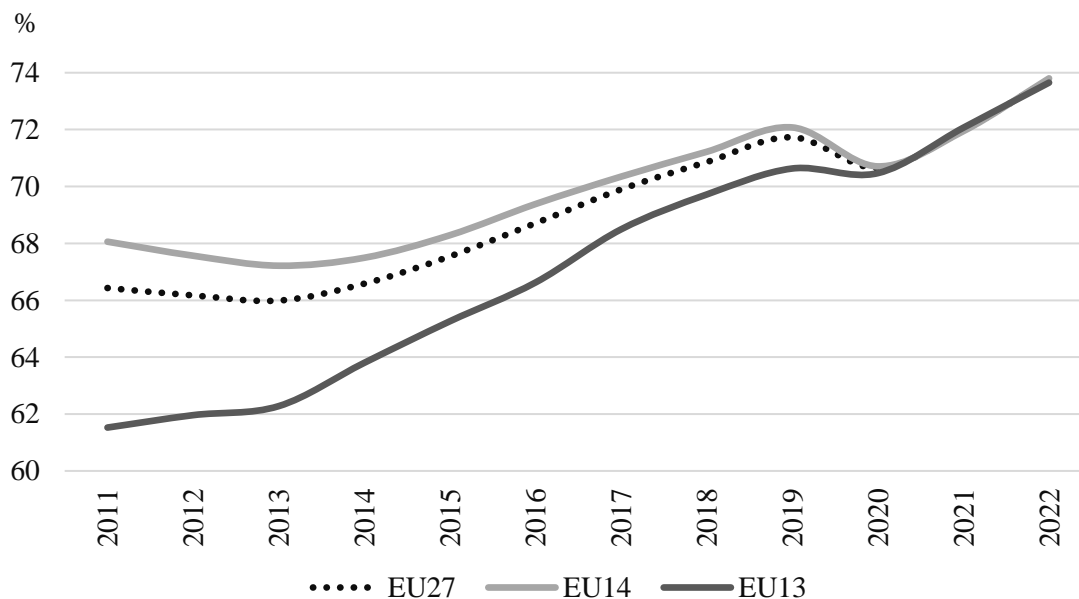


Fig. 1. Evolution of the employment rate (20-64 years) in the EU from 2011 to 2022

In the EU27, the number of employed persons aged 20-64 increased by 14.399 thousand, of which 10.540 thousand were in the EU14 and 3.859 thousand in the EU13. The graph shows that the period under review can be divided into 4 main parts:

1. Between 2011 and 2013, the EU27 and the EU14 show a slight downward trend, while the EU13 shows a slight increase in employment rates.
2. Between 2013 and 2019, there is a steady increase for the EU27, the EU14 and the EU13, while the EU13 is growing at a faster rate than the EU27 average.
3. A decline in employment rates from 2019 to 2020, which can be defined as the impact of the labour market constraints of the COVID-19 pandemic. Based on the data analysed, the fall in employment rates in the EU14 because of the pandemic is much more pronounced than in the EU13. This can

be explained by the differences in the economic structure of the Member States (e.g. EU14 Member States have a higher number of jobs in the service sector).

4. Covers the period 2020-2022, with employment rates in the EU27, EU14 and EU13 growing in synchrony, with almost equal average rates. We also feel it is necessary to highlight the countries with outstanding employment rate growth over the period under review, namely Malta (21.3%), Hungary (17.2%), Ireland (14.7%), Croatia (13.8%), Bulgaria (13.1%) (Figure 1).

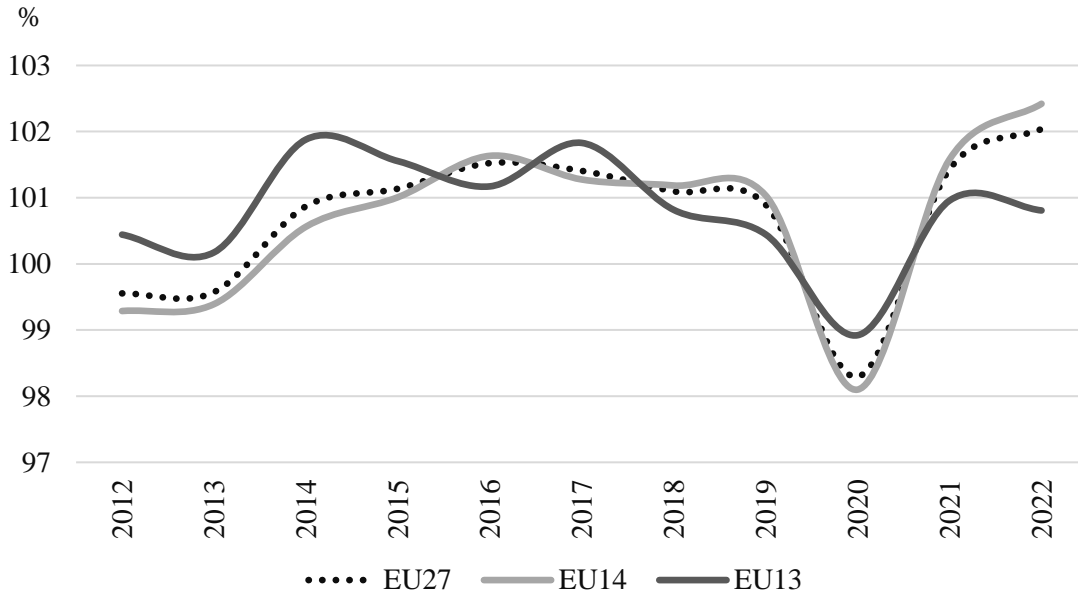


Fig. 2. Changes in employment rate (20-64 years) in the EU from 2012 to 2022 (Previous year data = 100%)

Figure 2 shows the change in the employment rate for 20–64-year-olds compared to the same period last year. The values for the EU14 are close to the EU27 average in each of the years under review, due to the much higher weight of this group of countries in Europe, with more people employed in nominal terms. In contrast, the EU13 values are much further away from the EU27 average in the years studied (Figure 2).

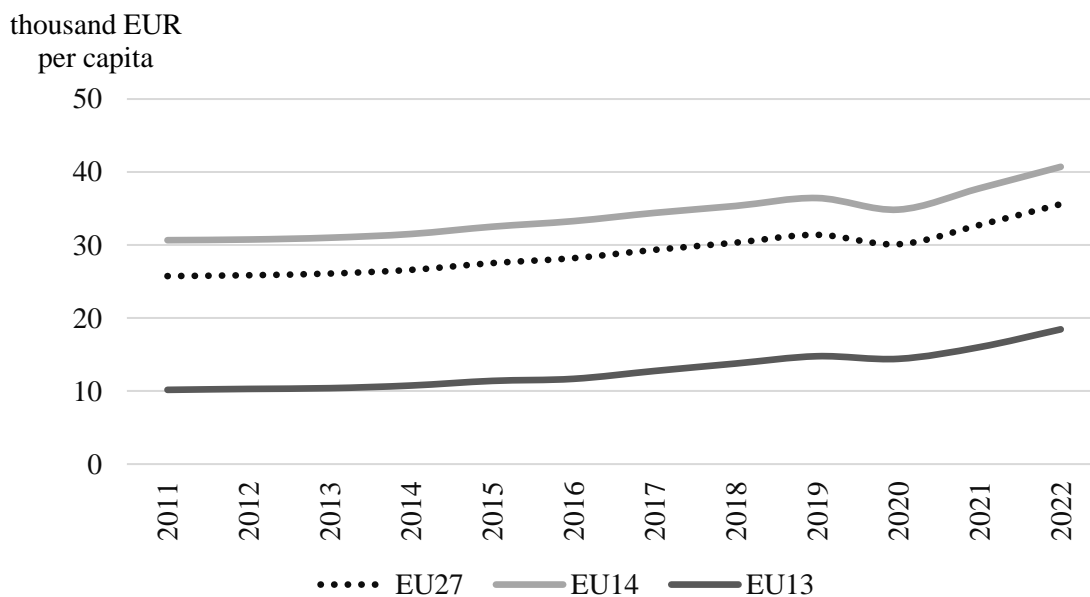


Fig. 3. Evolution of the gross domestic product (GDP) per capita in the EU from 2011 to 2022

GDP per capita varies markedly between the groups over the years studied. In the EU13 cluster of countries, which includes most of the Eastern European Member States, GDP per capita is lower than in Western European countries, in addition to the less favourable income situation (Figure 3).

In our view, there is an empirical correlation between the spatial differences in the indicators under study across the European Union. It should be noted, however, that the employment rate figures are much closer in relation to each other, and even reach the EU13 behind the EU14 by the end of the period under review. However, the gross domestic product shows a much more marked, almost constant, difference between the same areas.

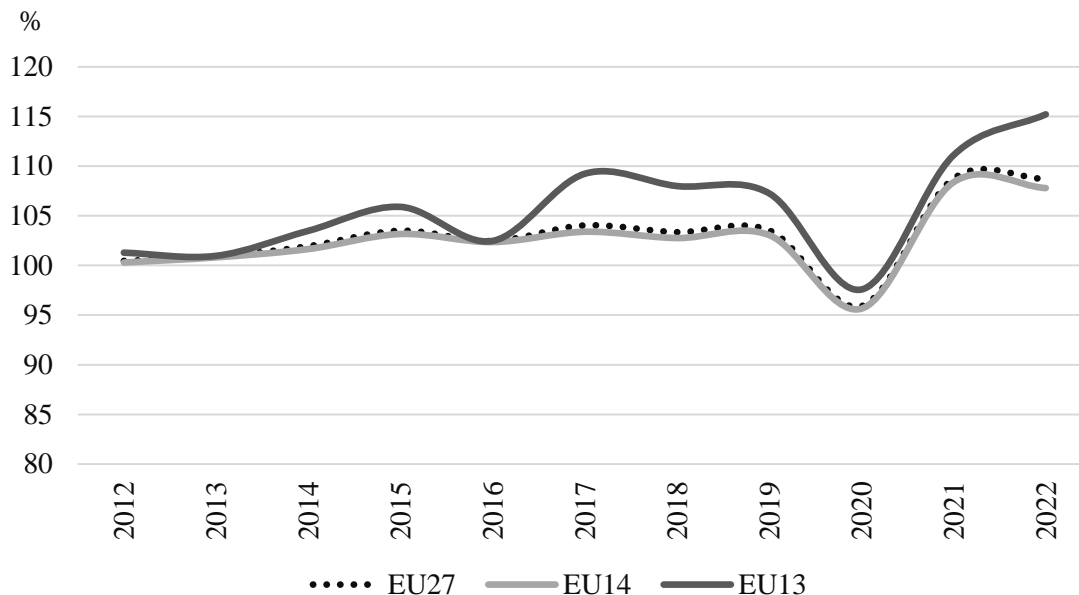


Fig. 4. Changes in gross domestic product (GDP) per capita in the EU from 2012 to 2022 (Previous year data = 100%)

However, the rate of catching-up and year-on-year economic progress for EU13 Member States is, on average over the period, higher than the cumulative figures for EU14 countries. However, the GDP figures in nominal terms show significant differences (Figure 4).

The results of our research suggest that there is a close relationship between employment rates and economic growth dynamics, as social catching-up and hence improvements in employment data are clearly dependent on the direction of change in economic factors. In this context, it is important to note that the determinants of economic competitiveness and dynamism are increasingly becoming the factors of competitiveness that are fundamentally redefining the development directions of current national economic strategies, so that it can be argued that the strong differentiating effect of welfare indicators should play a prominent role in the future strategic reduction of territorial disparities.

Conclusions

1. Our research has shown that employment data in the Member States that joined the EU in 2004 or afterwards have improved significantly, catching up with the EU average. Labour-based economic models have had a marked impact on labour markets and social development in national economies over the period 2011-2022.
2. Economic development, including GDP per capita, has not caught up, contrary to employment data. There are significant differences between the two poles of Europe, which further confirm our earlier findings that the European economic and social space is highly fragmented.
3. Territorial disparities are an obstacle to economic development, hampering competitiveness, leading to social tensions and limiting the realisation of the concept of a united Europe.
4. The results clearly show Europe's advanced centres of economic innovation, although the majority of EU Member States that joined in 2004 or afterwards appear as peripheral, thus demonstrating the existence of territorial disparities and the emergence of a bipolar Europe.

Author contributions

Conceptualization, L.B. and K.J.; Data collection and Methodology, L.B.; Formal analysis, K.J.; Investigation, L.B. and K.J.; Writing-review and editing, K.J.; Visualization, L.B. All authors have read and agreed to the published version of the manuscript.

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