Interreg Danube Region

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COOPOWER

# Territorial diagnosis and baseline study

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# List of abbreviations

| | |
|---|---|
| AROPE | At Risk of Poverty or Social Exclusion |
| DRP | Danube Region Programme |
| ELET | Early Leavers from Education and Training |
| GFCF | Gross Fixed Capital Formation |
| GVA | Gross value added |
| ICT | Information and Communication Technology |
| ILO | The International Labour Organization |
| Jems | Joint electronic monitoring system |
| LP | Lead partner |
| MA/JS | Managing authority and Joint secretariat |
| NEET | Not in Employment, Education or Training |
| NUTS | Nomenclature of Territorial Units for Statistics |
| PP | Project partner |
| PR | Partner report |
| PPR | Project Progress Report |
| PPS | Purchasing Power Standard |

# 1. Introduction

Young people's transition from education to employment is one of the most consequential processes in contemporary European societies — and one of the most unequal. Across the Danube region, the structural conditions shaping this transition vary enormously between countries, between regions within countries, and between the national averages that typically inform policy and the local realities in which young people actually live. In disadvantaged territories, the gap between available support and the complexity of need is particularly big: educational vulnerability, labour-market precarity, and socio-economic exclusion co-occur, reinforce each other, and are compounded by institutional systems that are often fragmented, under-resourced, or simply unable to reach the young people who most need them.

This document is the COOPOWER project`s Baseline Study and Synthesis Report: Territorial Diagnosis of Disadvantaged Regions and Vulnerable Youth Transitions implemented under the Interreg Danube Region Programme. The project brings together partners from six pilot countries — Bulgaria, Hungary, Romania, Slovakia, Serbia, and Ukraine — alongside comparative partners from Austria and the Czech Republic. Its central objective is to improve the labour-market integration of vulnerable young people aged 15–30 in disadvantaged territories through coordinated, place-based, and intersectoral pilot interventions.

The report serves three interconnected purposes. First, it establishes the structural evidence base for the project: it documents, through systematic comparative analysis of Eurostat data and partner country reports, the demographic, economic, educational, and social conditions that shape young people's trajectories in the participating countries and regions. This analysis covers the period from 2015 to 2024, with particular attention to the six pilot territories where interventions will be implemented. Second, it provides the analytical bridge between the structural evidence and the design logic of the pilots: it identifies cross-country patterns of disadvantage, organises structural barriers into a typology relevant to intervention, and articulates the shared rationale that justifies a cooperative, integrated, and territory-sensitive approach across all six interventions. Third, it establishes the monitoring and evaluation framework that will track the progress and impact of the pilots throughout the project: a baseline indicator framework combining macro-level structural indicators, project-level output and result indicators, and pilot-level expected change indicators.

The report is structured as follows. Chapter 2 sets out the conceptual and methodological framework, defining the project's interpretation of youth vulnerability and disadvantaged areas, and describing the data sources and analytical approach. Chapter 3 presents the comparative structural analysis across eight countries and six pilot regions, covering demographic trends, economic conditions, labour-market dynamics, education and training outcomes, social exclusion and poverty, and digital skills. Chapter 4 draws on this evidence to construct the analytical bridge to intervention: it identifies the dominant patterns and barrier types, maps these onto the design

logic of each pilot, and articulates the four-pillar shared rationale for cooperative action. Chapter 5 presents the comparative analysis of the six pilot interventions, using a structured matrix to identify their common and distinct features. Chapter 6 establishes the baseline indicator framework across three levels. Chapter 7 sets out the conclusions and implications for pilot implementation.

The analysis was produced through desk research, drawing primarily on Eurostat databases for national and regional indicators, and on the country reports prepared by project partners for pilot-area-level analysis. These country reports integrate available statistical data with findings from territorial diagnostic analyses, stakeholder interviews, and local consultations conducted in each pilot territory. The synthesis process identified both the shared structural features that justify a common project framework and the contextual specificities that make place-based calibration of each intervention necessary.

The draft versions of this report were reviewed by stakeholders of the local and transnational networks of the project (ACT2.1 and ACT2.2). The findings directly inform the local strategies (O3.3) and the transnational strategy (O3.4) of the project, and serve as the reference baseline for the monitoring and evaluation of pilot outcomes throughout the implementation phase.

# 2. Methodology

## 2.1. Conceptual framing

### 2.1.1. Definition of vulnerable young people

Vulnerability is a multifaceted concept used across many scientific domains, from disaster and climate change research to the social sciences and academic legal literature, yet it lacks a universally recognised definition (Chowa et al., 2021; Mayrhofer, 2025; Zimmerman, 2017). Across disciplines, the meaning of vulnerability varies depending on analytical focus, and the term is often used without explicit definition, particularly in policy documents (Maiztegui-Oñate et al., 2023).

International organisations, such as the International Labour Organisation (ILO, 2024), generally define vulnerable young people as those who face greater-than-average difficulties in the transition to adulthood due to heightened exposure to structural and social risks. These include, among others, the risk of poverty, interrupted or fragmented educational pathways, and difficulties in entering and remaining in the labour market. The likelihood of vulnerability increases in contexts characterised by low household socioeconomic status, disadvantaged personal and family background, and precarious forms of employment (ILO, 2024).

The vulnerability of young people is therefore not solely the result of individual decisions or a lack of skills. It is, however, closely linked to social and economic structures that make transitions from education to the labour market increasingly unpredictable (Furlong, 2006). Interruptions to education, especially failure to obtain a secondary school diploma, can create disadvantages early in life that limit young people's long-term integration into the labour market. Increasingly non-linear labour market trajectories further reinforce this, as does the spread of temporary and precarious employment—forms of work characterised by uncertainty, instability and insecurity (Kalleberg, 2018)—which fails to provide a stable livelihood for a considerable proportion of young people (Furlong, 2006). Given the increasing complexity of modern labour markets, it is necessary to move beyond the employed-unemployed dichotomy (Furlong, 2007). In this sense, according to Furlong (2006), all young people in precarious positions or with low educational attainment can be considered vulnerable, regardless of whether they are currently NEET (Not in Education, Employment, or Training), employed, or in training. From this perspective, examining young people's vulnerability also justifies the inclusion of the educational dimension, as most early school leavers – and many later school leavers – are in a vulnerable situation (Furlong, 2006). The vulnerability category also includes precarious work (Alcázar et al., 2020), employment in unstable, temporary, or contract jobs (Kalleberg, 2018).

Empirical measurement and international comparison of vulnerability are supported by indicators developed in policy-oriented literature. Among these, indicators of the transition from school to work are fundamental, including the proportion of Early Leavers from Education and Training (ELET); the NEET status, which indicates labour market and educational underutilisation; and the AROPE (At Risk of Poverty or Social Exclusion) indicator, which measures the risk of poverty and social exclusion in a complex way. Each of these indicators captures a distinct dimension of vulnerability and will be examined in turn in the following sections.

**Early interruption of studies as a structural determinant of young people's vulnerability**

The examination of young people's vulnerability cannot be separated from the development of their educational careers, particularly the phenomenon of dropping out of school without qualifications. According to Eurostat's definition, Early Leavers from Education and Training (ELET) are young people aged 18–24 who have at most a lower secondary education and have not participated in any education or training in the four weeks prior to data collection (Eurostat, 2025a).

The skills and competencies acquired in secondary education can be considered the minimum requirements for successful entry into the labour market. These competencies not only form the basis for further learning and training opportunities but also determine young people's readiness to become full and active citizens (European Commission, 2015). Those who leave education and training without a secondary qualification face significant difficulties entering the labour market, as opportunities for low-skilled young people seeking early entry have declined significantly since 2008 (Scandurra et al., 2021). Early school leaving is associated with unemployment, social exclusion, and poverty (Cedefop, 2016). In addition to labour-market disadvantages, it is associated with poorer health, lower self-esteem, and inadequate emotional and psychological well-being (Brown et al., 2021).

In line with the project's objectives, including early school leavers in the definition of vulnerable young people is particularly justified. Failure to obtain a secondary school qualification significantly reduces the chances of long-term stable employment, especially in disadvantaged areas where institutional and structural constraints, limited access to quality education, and inadequate support services combine.

**The NEET category as an indicator of youth vulnerability**

The traditional indicator of young people's vulnerability in the labour market, youth unemployment, has increasingly been replaced in the literature and in policy by the NEET category (Furlong, 2006). The term entered political debates in the United Kingdom in the 1990s, primarily in relation to the social and labour-market integration of young people who had dropped out of school. Since then, it has undergone several changes, particularly in the age groups it covers, yet it has proven to be a valuable tool for understanding young people's vulnerability. As a result, the NEET category has become an important reference point for youth policies across the Member States of the European Union (Mascherini & Ledermaier, 2016). Despite its widespread use in policy and research, the NEET concept has been criticised in the literature (e.g., Furlong, 2006). One of

the most frequently cited arguments concerns the internal heterogeneity of the NEET group. According to Mascherini and Ledermaier (2016), the category encompasses seven substantially different subgroups, including the short- and long-term unemployed, young people who are temporarily unavailable due to family responsibilities, illness, or disability, as well as those who are seeking alternative career paths or do not see suitable job opportunities for themselves. The NEET category also includes young people who wish to return to the labour market or education in the near future. Another heterogeneous subgroup includes both privileged young people and hard-to-reach, severely vulnerable groups.

However, Furlong (2007) points out that these subgroups not only differ in characteristics but also in experiences and needs, making it challenging to identify the young people most in need of targeted policy interventions. In addition, the use of the NEET category may divert attention from young people who, although employed, are in precarious, unstable forms of work, thereby often remaining hidden in terms of their vulnerability (Furlong, 2006). In the longer term, these employment patterns may also carry the risk of social and economic exclusion (Alcázar et al., 2020).

These limitations became even more evident during the COVID-19 pandemic, further reinforcing the recognition that, when examining young people's vulnerability, it is worth considering not only labour-market underutilisation but also the dimensions of employment quality. Young workers are more likely to be employed in non-standard forms of employment, which are associated with greater income insecurity (MacDonald et al., 2023) and are often linked to less secure jobs, such as temporary or informal employment (ILO, 2021). Some authors link young people in precarious employment to the NEET group (Petrescu et al., 2024), thereby further nuancing the interpretation of vulnerability.

**The AROPE indicator as a measure of social risks among young people**

In the European Union, AROPE (At Risk of Poverty or Social Exclusion) is a widely used indicator of young people's socio-economic vulnerability. Eurostat considers three main dimensions when measuring AROPE: severe material and social deprivation; the proportion of people at risk of poverty; and the proportion of people living in households with very low work intensity. A person is considered at risk of poverty or social exclusion if at least one of the above conditions is met (Eurostat, 2025b).

Research shows significant differences in vulnerability among NEET subgroups, as measured by AROPE (O'Higgins & Brockie, 2024). The highest risk is observed among young people who are NEET due to family responsibilities, primarily young women. Overall, the risk of poverty or social exclusion is substantially higher among NEETs than among students or employed young people of the same age. These results confirm the usefulness of the NEET category for examining young people's vulnerability, especially when the analysis also considers educational discontinuity and risks arising from social background.

Based on the above, this study does not consider only the current labour market status of young people to be decisive in determining vulnerability, but also takes into account interruptions in

educational pathways and social and economic factors that influence the chances of stable employment in the longer term.

In the present study, vulnerability is understood not as a fixed or inherent individual characteristic but as a **life situation** (Ranci & Migliavacca, 2010) that weakens or destabilises young people's integration into the labour market. In this sense, vulnerability is not tied to ascribed personal characteristics that are largely non-modifiable, but to conditions that reflect discontinuities and risks in young people's employment trajectories. The distinction between inherent and situational vulnerability has precedent in the literature (see Brown, 2016), as does the emphasis on vulnerable situations in this field (Maiztegui-Oñate et al., 2023). Although we acknowledge that certain factors—such as gender or ethnic minority status—can shape the likelihood or intensity of vulnerability, conceptualising vulnerability in this way highlights its openness to change, supporting a non-stigmatising, intervention-centred approach. This perspective aligns with critiques in the literature that have highlighted the stigmatising effects of interpreting vulnerability as a fixed or essentialised personal characteristic (e.g., Brown, 2011; Virokannas et al., 2020; Mayrhofer, 2021).

In summary, this study distinguishes three main dimensions of vulnerability:

- **educational vulnerability**, as indicated by early leaving from education and training (ELET) and low educational attainment;
- **labour market vulnerability**, represented by NEET status and precarious employment dimensions; and
- **socio-economic vulnerability**, measured by the AROPE indicator and indicators capturing disadvantaged social contexts.

This multidimensional interpretation of vulnerable young people closely aligns with the project's objectives, which primarily target young people who face difficulties entering the labour market due to educational and/or socio-economic factors, particularly in disadvantaged regions.

### 2.1.2. Project-specific interpretation of disadvantaged areas

In recent years, studies examining the integration of young people into the labour market have increasingly emphasised the role of spatiality as a key factor shaping youth employment and inactivity (Kapitsinis et al., 2022). Spatial location is a critical dimension of youth (Farrugia & Wood, 2017), substantially influencing young people's training and labour market opportunities, as well as the risk of inactivity and NEET status (Avagianou et al., 2022). This results in significant regional differences within a country in the transition from school to work (Scandurra et al., 2021). Spatiality can thus be understood as a fundamental dimension of inequality, as young people live in areas with varying levels of resources, ranging from poverty to privilege (Farrugia & Wood, 2017).

Despite the recognition of the importance of spatiality, there is no universally accepted definition of disadvantaged regions in the literature.

The concept is often associated with **rural or peripheral** areas, where the proportion of young NEETs is higher in many European countries (Eurostat, 2025c). At the same time, young people in these areas often face limited job opportunities, precarious forms of employment, greater dependence on their families, and a predominance of low-skilled, precarious jobs (Petrescu et al., 2022; Almeida & Simões, 2020). Peripheral labour markets typically offer fewer job opportunities, a narrower sectoral structure, and limited access to certain forms of education and training (Avagianou et al., 2022). Rurality, peripheral location, and isolation can collectively weaken regional resilience in the face of declining youth employment and rising NEET numbers (Kapitsinis et al., 2022). This is further reinforced by structural constraints, career-dependent development processes, labour market segmentation, and informal employment practices, which can result in persistently high youth unemployment and inactivity (Kapitsinis et al., 2022). This dynamic can be conceptualised as a "self-reinforcing cycle of decline," in which reduced employment opportunities and limited access to services drive out-migration, thereby further weakening regional economic and social resilience (Bock, 2016). This picture is further nuanced by **demographic processes**: the share of young people determines the potential labour supply in regions, while selective migration by education and age shapes local labour markets differently across regions (Prenzel & Iammarino, 2021). Although migration outflows may ease entry-level competition in the labour market in some areas, in the longer term, they can lead to labour and skill shortages (Cefalo & Scandurra, 2021). Demographic changes, especially ageing, are expected to affect all regions, but will be felt first and most strongly in rural areas (Dijkstra, 2022). In addition, it is important to note that disadvantage is not characteristic only of rural areas; urban areas that have been "left behind" (Rodríguez-Pose, 2018) should not be overlooked.

Emphasising **economic disadvantages** relative to a country's national average is also common when defining disadvantaged regions (Manthey, 2024). One example is the GDP-based approach, which underpins the EU's cohesion policy. Development is indicated by GDP per capita: if this indicator is below 75% of the EU average, the region is considered less developed (Dijkstra, 2014). This approach captures economic disparities only partially and fails to reflect the social, demographic, and institutional dimensions of regional disadvantage. Consequently, there is a growing consensus that a single macroeconomic indicator is insufficient to assess regional disparities in development. As a result, composite indicators have been developed, including the Socio-Economic Vulnerability Index (SEVI) (Sánchez & Jiménez-Fernández, 2023) and the EU Regional Social Progress Index (EU-SPI 2.0) (European Commission, 2024).

Disadvantaged regions can therefore be understood as multidimensional phenomena, characterised not only by underperformance in the economy and labour market, but also by demographic challenges and poverty risks, as well as limited access to infrastructure and services (MacKinnon et al., 2022).

Based on the above considerations, this project also adopts a multidimensional approach that focuses specifically on regional factors affecting the integration of young people into the labour market. Disadvantages include (a) social and demographic risks, (b) economic and labour market disadvantages, (c) barriers to access to training and skills development, and (d) territorial and infrastructural peripherality. In line with Interreg's place-based and integrated territorial approach, a disadvantaged area in this project is understood as a **structural environment** that, to varying degrees and in different ways, contributes to the educational, labour-market, and socio-economic vulnerability of young people. Together, these dimensions illustrate the structural and institutional barriers, limited access to opportunities, and inadequate support services that disadvantaged regions face, making it difficult for vulnerable youth to achieve stable employment. This conceptual framework underpins the selection of target territories and the identification of vulnerable youth groups in the subsequent analytical steps.

## 2.2. Analysis methodology and data sources

The analysis is primarily based on a desk research methodology that aims to explore and comparatively interpret the structural and institutional processes affecting young people at multiple levels.

The analysis distinguishes among three territorial levels: national, regional, and pilot areas. The national and regional level analysis is primarily based on quantitative data. The primary data source for this analysis is the Eurostat database, which enables a comparative examination of time-series demographic, economic, educational, and social trends across the countries and regions studied. When selecting the indicators, particular emphasis was placed on their suitability for presenting the longer-term structural processes affecting the younger age group.

In the case of pilot areas, the analysis methodology differs from that used at the national and regional levels. Given that the pilot target areas vary in size (municipal, district, county or functional areas) and that uniform, comparable statistical data on these areas are limited, other sources supplement the analysis. The interpretation of the situation in the pilot areas is therefore based primarily on the country reports prepared by the partner countries. These reports integrate available statistical data with the findings of territorial diagnostic analyses conducted in the targeted areas. Through interviews and consultations with key local stakeholders, the partners gained in-depth insights into the specific challenges, opportunities and development priorities of each pilot territory. They incorporated these findings into the country-level reports.

# 3. Analysis

Building on the methodological framework, this chapter provides a comprehensive overview of the structural factors shaping the situation of vulnerable young people in the countries participating in the project. The analysis examines, across several dimensions—demographic, educational, and socio-economic—the territorial processes that influence young people's labour market integration, with a particular focus on disadvantaged regions.

The factors examined do not operate in isolation; instead, they contribute to the persistence of regional inequalities in a mutually reinforcing way. Accordingly, the analysis adopts a multi-level approach: in addition to presenting national trends, it examines regional differences behind the national averages, then focuses on the pilot areas to interpret local challenges. These areas often display weaker demographic, social, or economic indicators even within their regions, which justifies targeted interventions.

The analysis covers the eight countries participating in the project (see Table 1). For six partner countries, the study covers both regional and pilot levels, while **Austria** and the **Czech Republic**, as non-pilot countries, provide a comparative framework using their national-level data. The countries and regions concerned are summarised in the table below.

***Table 1. Countries, regions and pilot areas participating in the project***

| Country | NUTS2 regions | Pilot area |
|---|---|---|
| **Austria** | | |
| **Czech Republic** | | |
| **Bulgaria** | Yugoiztochen Region | Burgas district |
| **Hungary** | Northern Hungary | Tállya municipality |
| **Romania** | Centre | Harghita county |
| **Slovakia** | Eastern Slovakia | Prešov Region |
| **Serbia** | Southern & Eastern Serbia | Nišava District |
| **Ukraine** | Ivano-Frankivsk region | Ivano-Frankivsk LTC |

*Source: Own compilation based on project documentation.*

This chapter first reviews demographic trends, as population structure, ageing, and the decline in the proportion of young people fundamentally determine labour market supply and the long-term socio-economic sustainability of regions. This is followed by an analysis of economic and labour market trends that are decisive for youth employment. Educational and skill barriers are also of paramount importance for economic activity, and the chapter explores these as well. From a social perspective, disadvantaged regions can be defined by poverty, exclusion, and health indicators, and the chapter concludes with an analysis of these risks.

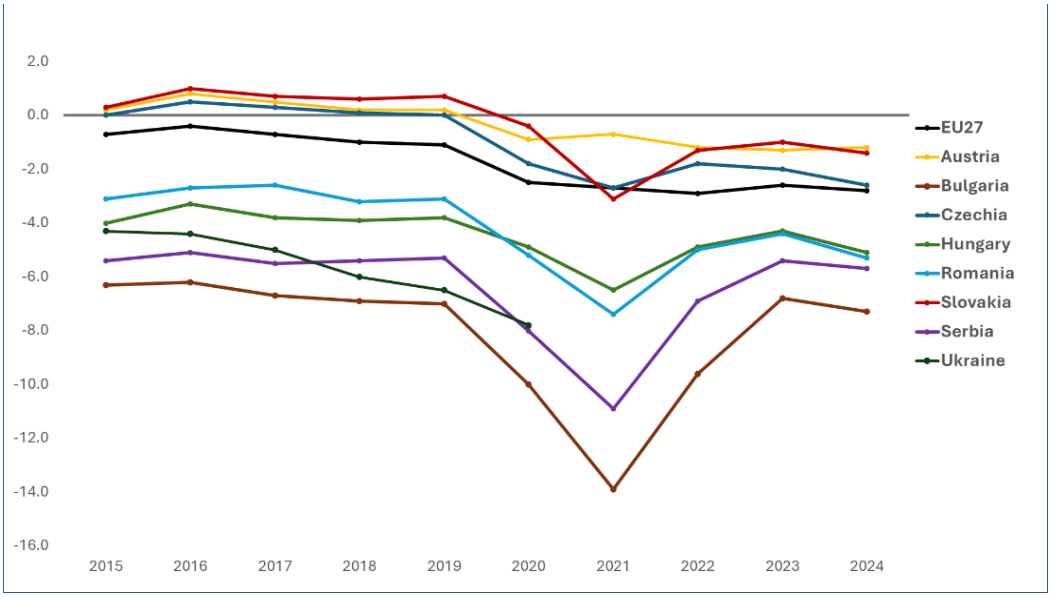
# 3.1. Population and demographic statistics

This section provides a comparative and territorial overview of the main demographic processes shaping the situation of young people in the participating countries. The analysis focuses on long-term population trends and age-structure characteristics. More detailed local dynamics and contextual factors are addressed in the respective country reports.

## 3.1.1. Population and age structure

The analysis covers countries in the Danube region that differ in size and demographics but face common challenges. One of the most relevant of these is natural population decrease, which has been observed in all the countries examined since 2020 (see Figure 1). The 2021 data show a temporary intensification of natural decrease, partly attributable to the COVID-19 pandemic, which helps to contextualise this short-term dip. Still, trends suggest that natural decrease may persist, even in countries with more balanced demographic structures, such as **Austria** and the **Czech Republic**. Natural population decline exceeding the EU average is evident in several countries, including **Hungary**, **Romania**, **Bulgaria**, **Serbia**, and **Ukraine**, indicating a deepening demographic imbalance. This trend is driven primarily by ageing and low fertility, which, over the longer term, are expected to reduce labour supply. In **Ukraine**, this is further exacerbated by the accelerated population decline caused by the war, posing serious risks not only from a demographic perspective but also from social and economic perspectives. In **Slovakia**, the previous stagnation has been replaced by a slight population decline, and the worsening trend following the pandemic suggests a gradual shift towards a population decline.

***Figure 1. Crude rate of natural change of population in the studied countries (2015-2024) (%)***

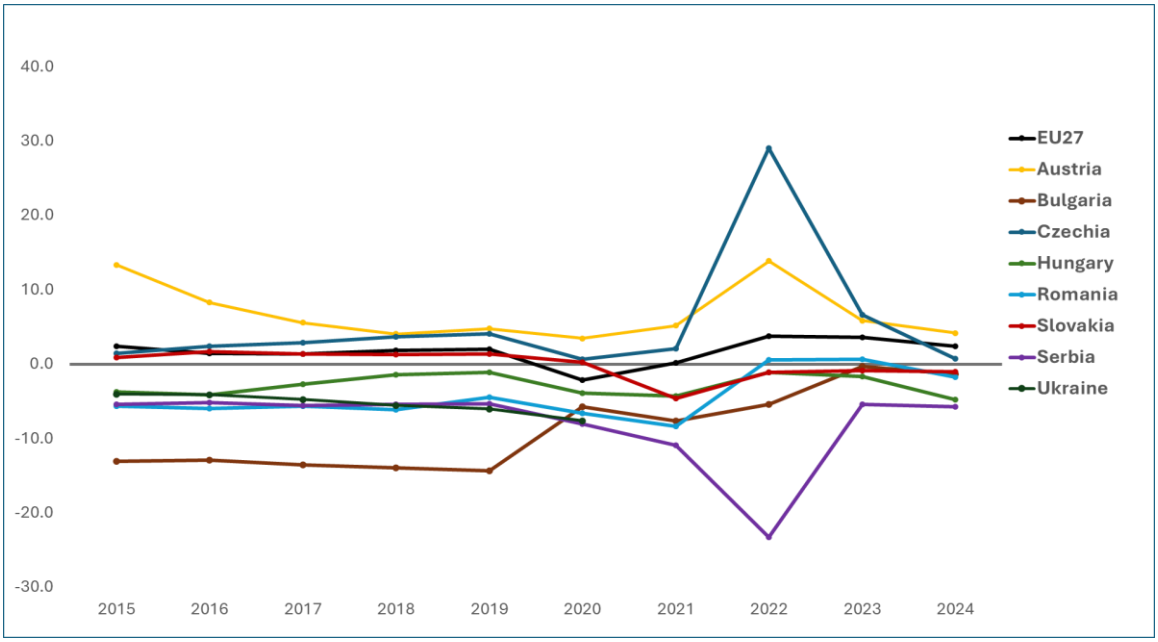



*Source: Eurostat: [demo_gind__custom_19872916]*

However, the total population change presents a more nuanced picture (see Figure 2). This divergence reflects the role of net migration in shaping overall population trends. On average across the EU, and in Central and Eastern European countries, particularly in **Austria** and the **Czech Republic,** migration has substantially offset natural decline, especially since the outbreak of war in **Ukraine** in 2022. This effect also temporarily mitigated Romania's negative population balance. Still, the latest data indicate a return to the downward trend, suggesting that migration can cushion the impact of adverse demographic processes in the short term but does not provide a lasting solution. In **Bulgaria**, the rate of population decrease slowed substantially in the second half of the period under review, partly due to a temporary positive migration balance. However, the continued negative values of the demographic indicators suggest this improvement cannot be considered a structural turnaround, and depopulation may remain a major challenge in the longer term.

In countries characterised by persistent emigration, labour outflows, and rapid depopulation, such as **Hungary**, **Romania**, **Bulgaria**, and, to some extent, **Slovakia**, population change is negative or stagnant throughout the period under review. In the long term, this trend points to weakening economic competitiveness and growing challenges to the sustainability of public services. In some countries, such as **Ukraine** and **Serbia**, population trends are shaped not only by structural demographic constraints but also by broader political and economic developments. Together, these factors may further accelerate population decline and increase the risk of long-term territorial inequalities in the Danube region.

***Figure 2. Crude rate of total population changes in the studied countries (2015-2024) (%)***




*Source: Eurostat: [demo_gind__custom_19872916]*

In summary, the COVID-19 pandemic and, more recently, the war in **Ukraine**, have substantially affected recent demographic trends. In **Austria** and the **Czech Republic,** natural population

change shifted from slightly positive or balanced levels before the pandemic to clearly negative values in the subsequent years. At the same time, migration has played an important compensatory role in shaping overall population trends. In particular, the inflow of people following the outbreak of the war in Ukraine temporarily offset natural population decline in some countries. However, this effect should be interpreted as a short-term response to external shocks rather than a stable or structural trend. Time-series data indicate that migration alone does not offer a sustainable solution to long-term demographic challenges. Demographic risks, including low fertility and emigration, characterise the other countries examined. Although **Slovakia** may appear to be an exception, population decline has also emerged there in recent years.

Regional (NUTS2 level) demographic analysis provides a more accurate picture of the structural processes affecting young people than national averages, which often mask regional inequalities. Based on natural population change, most regions, like most countries, are characterised by a sustained decrease (Table 2). In the Yugoiztochen region in Bulgaria, the natural decrease is slightly less pronounced than the national average, but remains persistently high throughout the period. The temporary deterioration observed during the COVID-19 pandemic reflects broader demographic vulnerabilities rather than a deviation from the long-term declining trend. By 2023, the gap between the region and the country in terms of population decrease had narrowed, confirming a prominent demographic risk. In Northern **Hungary**, the decline is more pronounced than at the national level. As in the **Bulgarian** region, a persistent decline in the natural population is evident. The Centre region of **Romania** showed a smaller population decline than the national data indicated, but in 2020, the decline accelerated. The data in this region also suggest a persistent deterioration in demographic trends. In contrast to the other regions, Eastern Slovakia has been characterised by predominantly positive natural population change, with a temporary decline during the COVID-19 pandemic, followed by a return to positive values. This reflects the region's relatively younger age structure.

***Table 2. Crude rate of natural change of population in the studied regions (2015-2023) (%)***

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|---|
| **Yugoiztochen Region (BG)** | -5.2 | -5.0 | -5.6 | -5.9 | -6.1 | -8.7 | -12.3 | -9.1 | -5.9 |
| **Northern Hungary (HU)** | -4.7 | -3.9 | -4.4 | -4.5 | -4.6 | -5.8 | -8.0 | -5.6 | -4.7 |
| **Centre (RO)** | -1.6 | -1.1 | -1.0 | -1.7 | -1.8 | -4.0 | -6.1 | -3.8 | -3.0 |
| **Eastern Slovakia (SK)** | 2.2 | 3.0 | 2.8 | 2.7 | 2.6 | 1.6 | -1.1 | 1.3 | 1.6 |
| **S. & E. Serbia (RS)** | | | -8.1 | -8.0 | -7.8 | -11.1 | -14.4 | -9.7 | -7.8 |

*Source: Eurostat: [demo_r_gind3__custom_19876233]*

However, the total population change provides additional insight (see Table 3). In Bulgaria's **Yugoiztochen region,** migration partially offset the natural decrease, resulting in a temporary population increase in 2023, demonstrating that migration can mitigate demographic losses in the short term. Migration has a similar, larger positive effect in the **Centre** region, in Romania, leading to population growth. However, the sustainability of this effect remains uncertain, as recent migration gains are at least partly linked to external shocks, including the war in Ukraine. By contrast, in Northern **Hungary**, emigration is exacerbating natural decline, resulting in a

population decline greater than the national average. This suggests that demographic risks — particularly population decline driven by natural decrease and emigration—will persist. In 2021, this trend was interrupted in Eastern Slovakia, implying that external shocks can quickly override the benefits of a more balanced demographic structure. The Southern & Eastern **Serbia** region shows a persistently negative trajectory, even compared with the national-level trends. Both natural decline and total population decline in the region are persistent and substantial, indicating cumulative demographic disadvantages. Although internationally comparable regional data on natural and total population change are not available for **Ukraine**, the partner country report suggests that, at the regional level, demographic and social indicators are slightly above the national average but remain fragile.

***Table 3. Crude rate of total population change, in the studied NUTS2 regions (2015-2023) (%)***

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|---|---|---|---|
| **Yugoiztochen Region (BG)** | -13.0 | -12.9 | -13.6 | -14.1 | -14.2 | -4.5 | -5.9 | -5.5 | 2.9 |
| **Northern Hungary (HU)** | -9.6 | -8.5 | -7.9 | -7.7 | -7.1 | -5.4 | -8.9 | -6.9 | -9.6 |
| **Center (RO)** | -3.5 | -3.9 | -3.2 | -3.1 | -1.5 | -5.2 | -12.9 | 3.3 | 3.2 |
| **Eastern Slovakia (SK)** | 1.1 | 1.9 | 1.6 | 1.5 | 1.4 | 0.9 | -25.6 | -0.2 | 0.2 |
| **S. & E. Serbia (RS)** | | | -10.1 | -10.2 | -10.2 | -12.8 | -16.2 | -26.2 | -9.8 |

*Source: Eurostat: [demo_r_gind3__custom_19876233]*

Overall, regional demographic trends indicate growing territorial differentiation: while some regions show demographic resilience, others face sustained population decline. This heterogeneity is closely linked to unequal socio-economic conditions affecting young people, which makes targeted, territory-sensitive interventions especially justified.

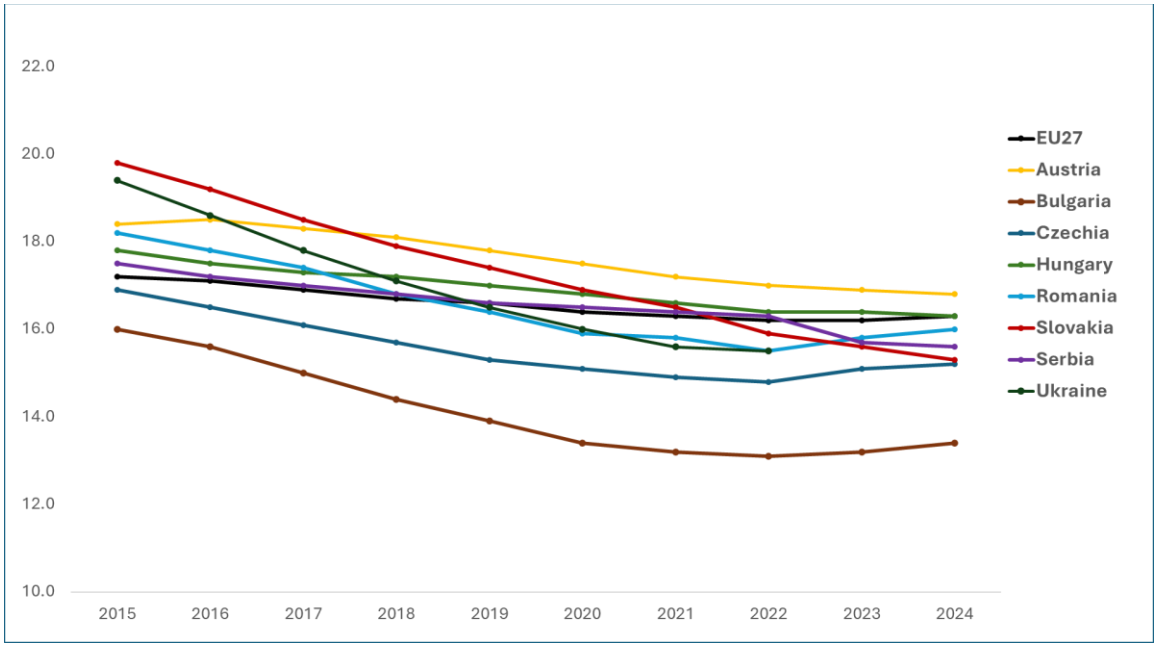
## 3.1.2. Age structure of the population and youth cohorts

In line with the project's target group definition (15–30 years), the analysis focuses on the 15–29 age cohort, which provides the closest available approximation based on harmonised Eurostat age-group classifications.

The trend in the proportion of young people indicates a further decline in demographic processes. The average proportion of young people in the EU-27 has declined steadily over the period under review (see Figure 3), indicating not only short-term fluctuations but also a structural demographic challenge. At the beginning of the period under review, the proportion of young people was substantially higher than the EU average in four countries (**Austria, Slovakia, Ukraine**, and **Romania**). However, there was a considerable decline in these countries, except **Austria**. **Bulgaria** was also affected by the sharp decline, even though the proportion of the population aged 15–29 was already among the lowest in the base year. In **Hungary**, **Serbia**, and the **Czech Republic**, the decline was more moderate but steady. Overall, the decline in the share of young people across all eight countries examined exceeds the EU-27 average, suggesting that population ageing is accelerating.

Regional analysis shows similar trends across the pilot countries: the share of young people aged 15–29 has declined in all six regions examined over the past ten years (own calculations based on Eurostat, 2025). The steepest declines occurred in **Serbia**, **Slovakia**, and **Ukraine**, but the rate of decrease in the other three regions is not negligible either.

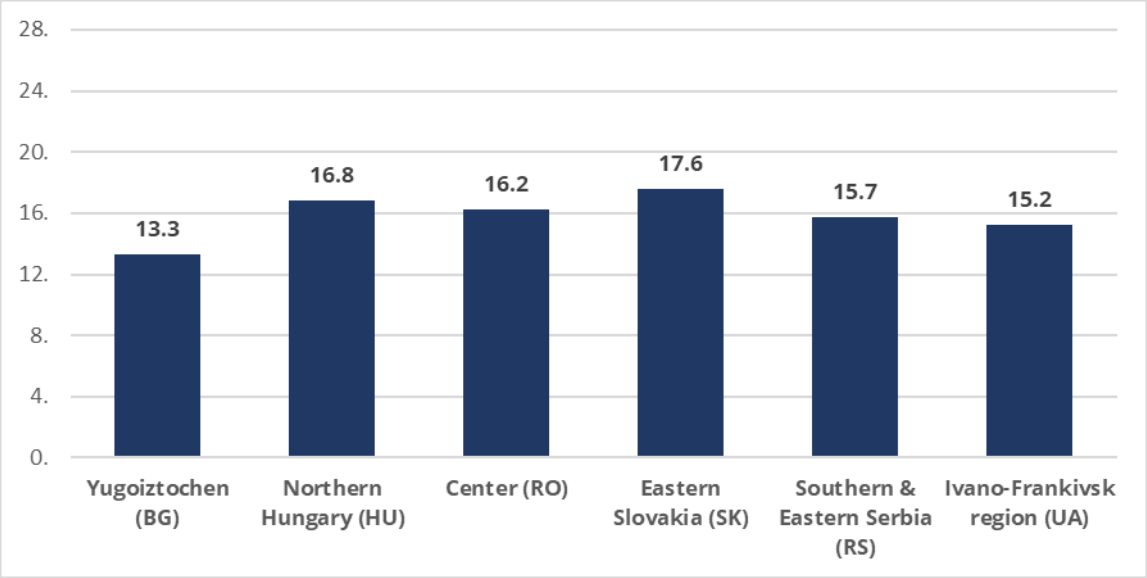
***Figure 3. Proportion of population aged 15-29 years in the studied countries (2015-2024) (%)***




*Source: Eurostat: [demo_pjangroup__custom_19796829], own calculations*

The NUTS 2-level comparison highlights notable differences in the share of young people across the examined regions (see Figure 4). The lowest proportion is observed in the **Yugoiztochen** region in Bulgaria, while the highest value is recorded in **Eastern Slovakia**. In the latter, the share of the population aged 15–29 is also significantly above the national average. In **Northern Hungary** and the **Centre** region of Romania, the proportion of young people is slightly higher than the respective national levels. By contrast, in the **Southern & Eastern Serbia** region and in the **Ivano-Frankivsk** region in Ukraine, the share of young people is slightly below the national average, although the differences are relatively small. Overall, most regions show values close to their respective national levels, with **Eastern Slovakia** exhibiting the largest positive deviation.

*Figure 4. Proportion of population aged 15-29 years in the studied regions (2024) (%)*

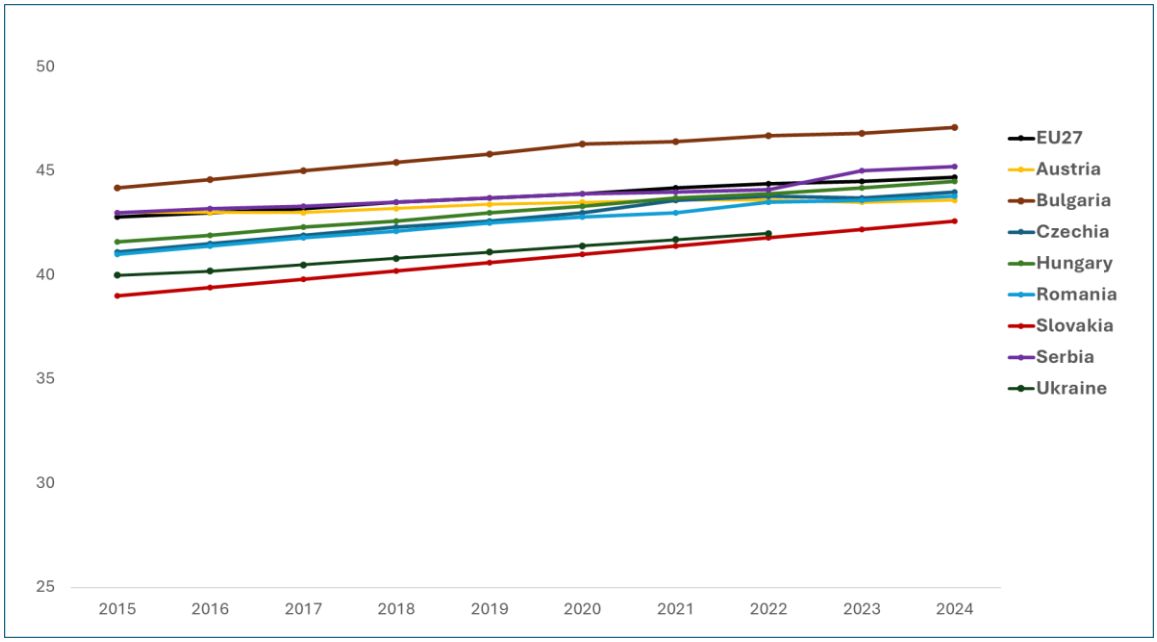



*Source: Eurostat: [demo_r_pjanind2__custom_19801183]; Ukraine: country report.*

According to country reports, most pilot areas have seen a decline in the share of young people aged 15–29 in recent years, consistent with national and regional trends. In the pilot areas of **Bulgaria**, **Hungary**, **Romania**, and **Slovakia**, this decline suggests a shrinking labour force and a long-term rise in the share of older people. In the pilot area in **Serbia**, partner reports indicate that the share of young people remains below the national average, suggesting a less balanced age structure, including a lower proportion of young people and a higher proportion of older individuals. In the pilot area in **Ukraine**, the country report notes that outward migration of young people has intensified considerably since the outbreak of the war, likely further reducing their share at the local level. This decline reflects not only low fertility rates but also the economic and political instability that characterised many of these countries in the post-2000 period, which contributed to both reduced birth rates and significant emigration of young people and families of reproductive age.

The median age shows a clear and continuous ageing trend across the EU-27 as a whole and in the individual countries examined (see Figure 5). The EU median age rose by nearly 2 years during the period under review, while in all countries except **Austria** the increase was even greater. In **Slovakia**, the rise is almost double the EU average, indicating an acceleration in the ageing process. Among the countries in the region, **Bulgaria** and **Serbia** are among the oldest societies. Bulgaria, in particular, has a persistently high and rising median age, indicating a more advanced stage of population ageing relative to the EU average. **Slovakia** and **Ukraine** are among the countries with the lowest median ages, but both are experiencing rapid growth. The median ages of **Hungary**, the **Czech Republic**, and **Romania** are gradually approaching the EU average, indicating a general trend of population ageing in the region.

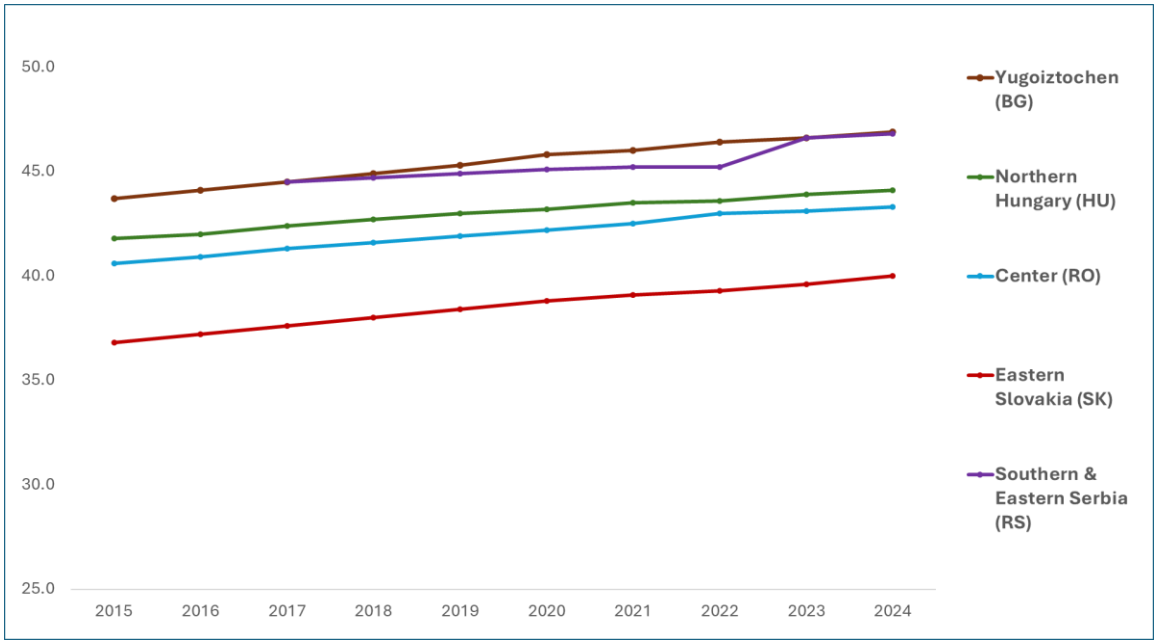
*Figure 5. Median age of the population in the studied countries (2015-2024) (year)*




*Source: Eurostat: [demo_pjanind__custom_19799559]*

A regional analysis of median age also reveals ageing trends in all regions examined (see Figure 6). The highest median age is characteristic of the **Yugoiztochen** region of Bulgaria. Over the past decade, values in this region have been consistently high, mainly in line with the national average. As strong ageing processes also characterise **Bulgaria** as a whole, the region reflects national trends well. After the Bulgarian region, Southern and Eastern **Serbia** is the oldest region. The median age in this region is higher than the national average, especially from the early 2020s onwards, suggesting that ageing is more concentrated here than in Serbia as a whole. The median age of the **Hungarian** and **Romanian** regions remains below the national level. Still, the rise is steady, indicating that, despite a lower share of the young population, regional demographic processes are in line with national trends. Eastern **Slovakia** is among the youngest regions, where, although the median age is rising rapidly, it remains well below the national level. According to the partner country report, the **Ukrainian** region has a relatively young population, with a median age of 40.8 years. This value is lower than in most other analysed regions and is consistent with the younger age profile observed at the national level.

*Figure 6. Median age of the population in the studied regions (2015-2024) (year)*




*Source: Eurostat: [demo_r_pjanind2__custom_19801183]*

Overall, it can be concluded that although all regions examined are on an ageing trajectory, regional differences persist. Some areas closely follow the national average, while others consistently have a younger or older age structure.

Demographic analysis shows that most of the countries and regions examined in the project are characterised by persistent, structural population decline and ageing. Based on national time-series data, the COVID-19 pandemic and the war in Ukraine appear as substantial demographic shocks that have intensified existing negative trends in several countries. It should be noted that pandemic-related excess mortality, concentrated among older age groups, may have temporarily moderated the increase in median age without altering the underlying ageing trend. Although in some cases — primarily in Austria and the Czech Republic — migration has temporarily offset natural decline, this largely reflects exceptional, context-specific inflows and cannot therefore be considered a sustainable demographic buffer in the long term. The regional breakdown clearly reveals the territorial inequalities underlying the national averages. While some regions show relatively more balanced demographic patterns, in other regions—particularly in the **Bulgarian**, **Serbian**, and **Hungarian** regions—natural decrease and emigration together create cumulative demographic risks. In most of the pilot areas, these processes are more concentrated within the region, reinforcing the need for targeted interventions.

The decline in the share of 15-29-year-olds is observed across all countries and regions examined and, in many cases, exceeds the EU-27 average. This trend has a direct impact on labour market supply and the sustainability of local education and training systems. The steady rise in median

age further reinforces this picture, indicating that ageing processes have become decisive not only at the national level but also at the regional level.

Overall, the demographic analysis shows that the structural challenges affecting young people vary widely across regions yet follow common patterns. These processes are closely linked to inequalities in educational opportunities and labour market integration, which will be analysed in the following sections of this chapter.

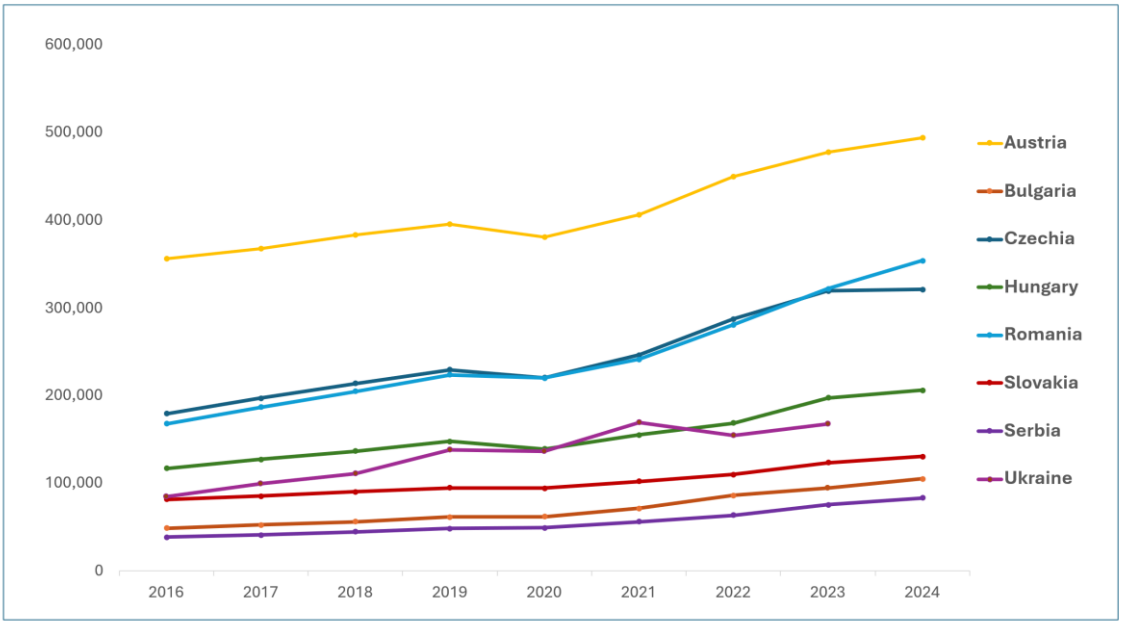
# 3.2. National Economic Accounts

To assess the overall economic capacity of the studied countries, the analysis draws on total GDP in million euros, GDP per capita in euros and PPS, and their relative position compared to the EU-27 average.

## 3.2.1. Gross Domestic Product (GDP)

Gross domestic product (GDP) at current market prices records the total value of goods and services produced within a region, valued at current prices and without adjustment for inflation. It provides a measure of the overall size and performance of the economy.

***Figure 7. GDP, current prices (2016-2024)** (million euro)*

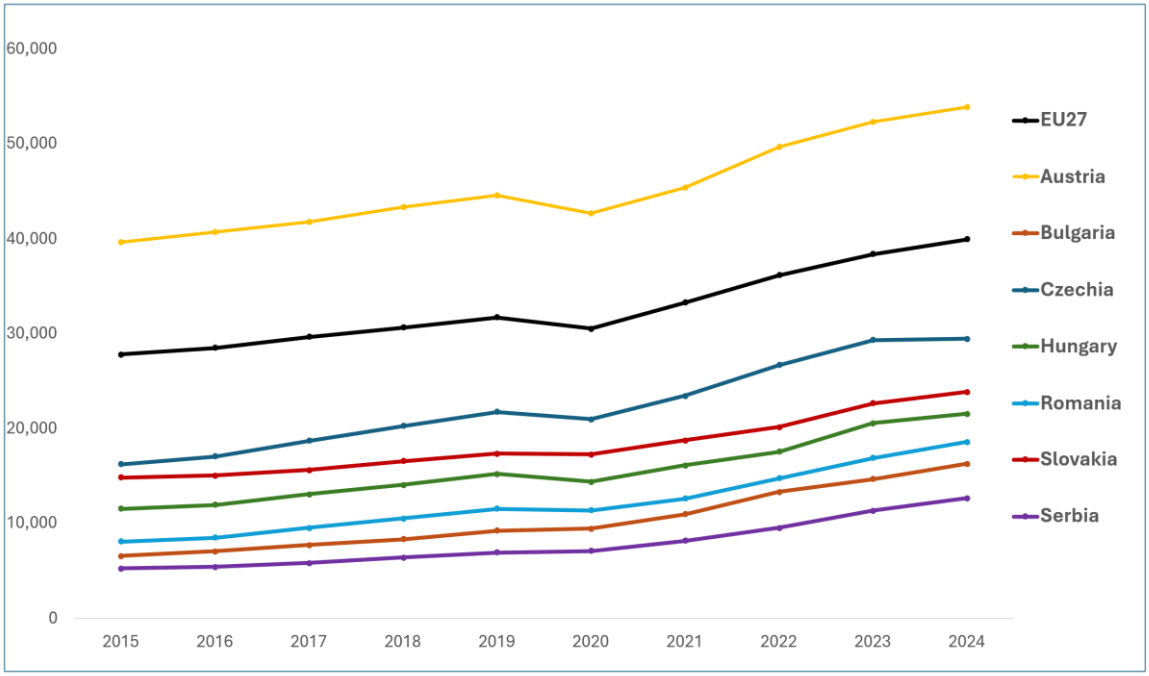



*Source: Eurostat: [nama_10_gdp]*

The GDP at current prices (million EUR) for these countries between 2016 and 2024 exhibits a steady upward trajectory, with a visible dip or stagnation in 2020 due to the global economic impact of the pandemic. **Austria** remains the largest economy in this comparison, nearing the 500,000 million EUR mark by 2024, while **Romania** and **Czechia** show significant growth, converging at similar levels over the last few years. Smaller economies, such as **Serbia** and **Bulgaria**, demonstrate consistent but more gradual increases, maintaining their relative positions at the lower end of the scale.

EU countries' GDP per capita grew strongly over the decade at approximately the same rate, thanks to close cooperation within the EU and common economic policy recommendations.

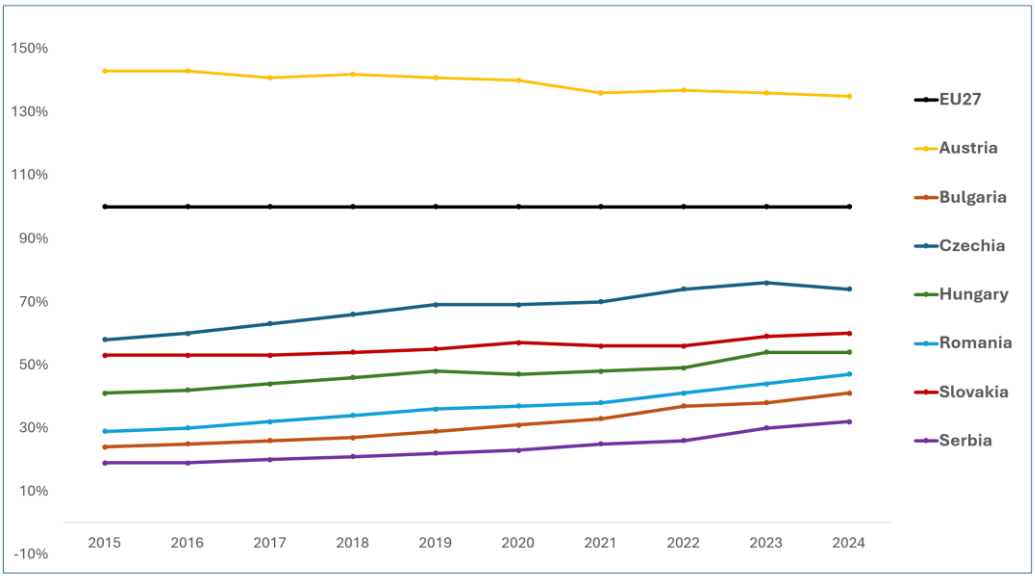
***Figure 8. GDP per capita, current prices (2015-2024)** (euro)*




*Source: Eurostat: [nama_10_gdp]*

The GDP per capita of the EU-27 countries increased by 43% in the ten years under review, with the fastest growth rate in Bulgaria and Serbia and the slowest in Austria.
In addition to economic growth, an important European principle is the convergence of lagging regions and countries. Figure 9 compares the GDP per capita based on current prices of the countries examined to the EU average.

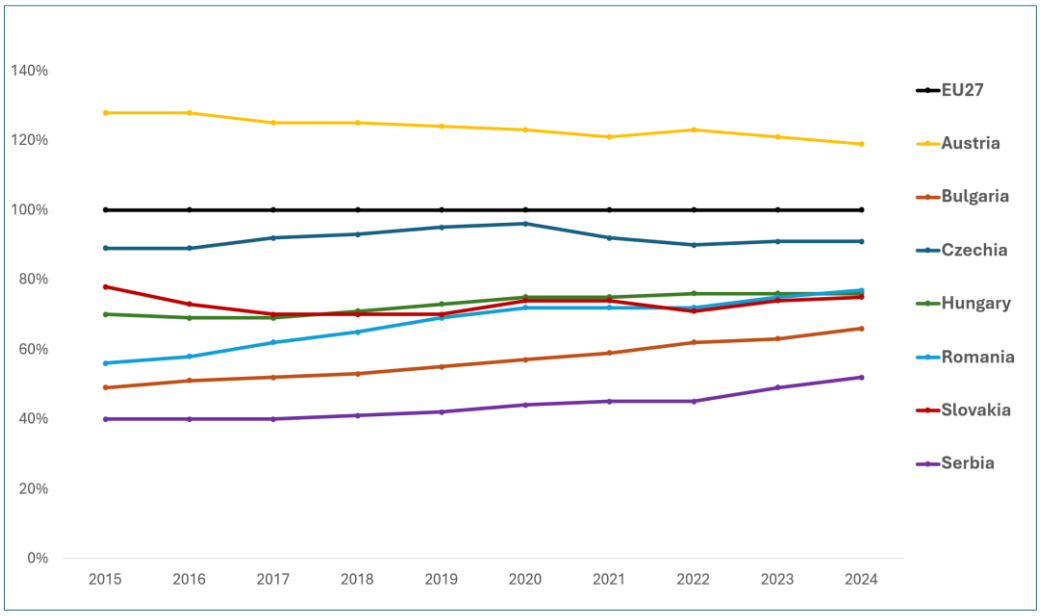
***Figure 9. Percentage of EU27 total per capita, based on million-euro, current prices (%)***




*Source: Eurostat: [nama_10_gdp]*

The convergence is even more striking if we calculate GDP/capita using PPS[1]. This indicator measures the relative economic prosperity of a region by comparing its local purchasing power per person to the EU average, where a value of 100 represents the EU-wide baseline.

***Figure 10. GDP per capita in percentage of EU27 average,*** *current prices in PPS (%)*




*Source: Eurostat: [nama_10_gdp]*

[1] PPS (Purchasing Power Standard) is an artificial common currency used by Eurostat to eliminate price level differences between countries.

**Austria**`s GDP grew steadily between 2018 and 2023, reaching €477 billion by the end of the period. Despite global challenges, Austria maintained its position as a high-income economy, with Vienna contributing significantly (approx. 25%) to the national total. Local GDP in Austrian districts remains high compared to the EU average, though rural areas show slower growth than urban service hubs.

**Bulgaria's** GDP saw a significant nominal increase from €56 billion in 2018 to nearly €94 billion in 2023. The South-East (Yugoiztochen) region, including the Burgas pilot area, contributes roughly 11.5% to the national economy. Burgas is at only 40-50% of the EU average GDP per capita, reflecting deep local structural poverty.[18.1]

In **Czech Republic** GDP increased from €211 billion in 2018 to €317 billion in 2023, reflecting a robust industrial base. Prague remains the dominant economic centre, with a per capita GDP far exceeding the EU average.

The **Hungarian** national GDP rose from €136 billion to €197 billion over the 2018–2023 period. While nominal growth was high, real growth was affected by inflationary pressures, and regional disparities between Budapest and rural areas persist. In Borsod-Abaúj-Zemplén county – which includes the pilot area - the GDP is significantly lower than the national average, characterizing it as a "lagging region" with low purchasing power.

The **Romanian** economy showed robust growth, with GDP climbing from €206 billion (2018) to approximately €325 billion (2023). Growth was driven by strong domestic consumption and services, although counties like the pilot area Harghita still lag behind urban hubs. The county's GDP is impacted by its mountain topography and rurality, resulting in undeveloped infrastructure, not competitive agriculture, lower economic and industrial density than neighbouring counties.

**Serbia**: GDP grew from €42.9 billion in 2018 to €69.5 billion in 2023, supported by manufacturing and exports. The Nišava District i lags significantly behind Belgrade (the capital), but it is a key regional contributor, benefiting from industrial revitalization and foreign direct investment.

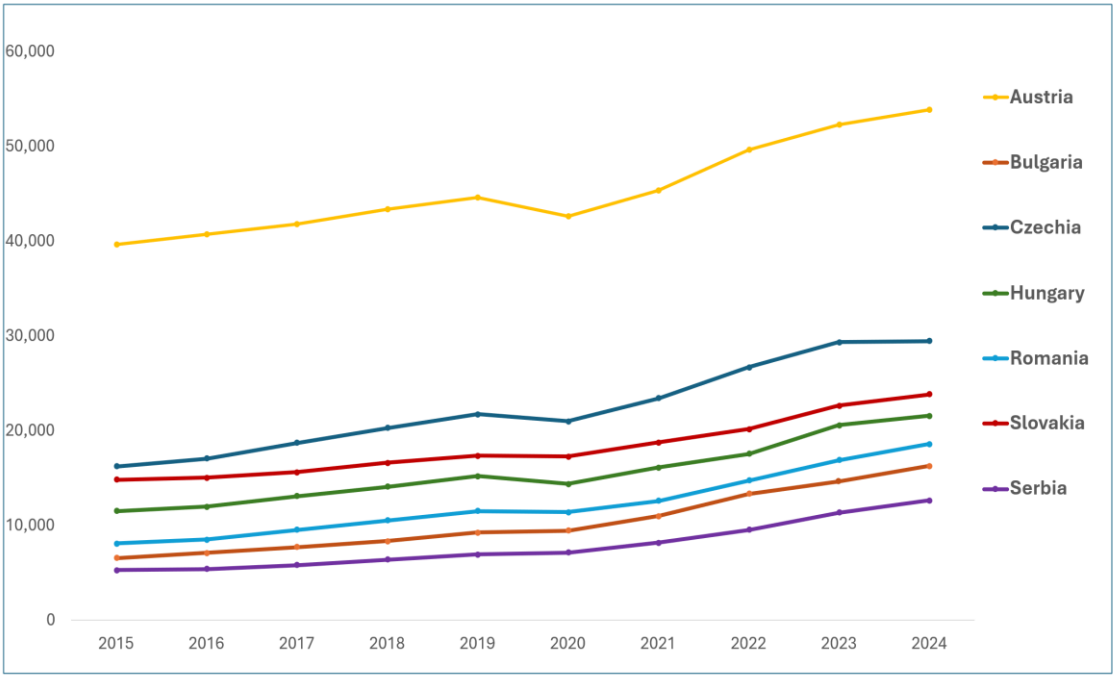
**Slovakia**: GDP reached €122 billion by 2023, up from €90 billion in 2018, heavily influenced by the automotive sector. However, the Prešov Region remains one of the least developed areas, with a GDP per capita significantly lower than the national average. In Prešov Region consistently underperforms in GDP per capita, remaining one of the least developed NUTS 3 areas in the country.

In **Ukraine** following a drastic contraction of nearly 30% in 2022 due to the full-scale invasion of Russia in the country, the GDP began a slow recovery in 2023. The Ivano-Frankivsk region has become a relatively stable economic hub for displaced businesses and people based on the local GDP data (2019).

## 3.2.2. Gross Value Added (GVA) and Gross Fixed Capital Formation (GFCF)

Gross value added (GVA) at basic prices measures the value of goods and services produced in the economy, minus the cost of intermediate inputs, and is therefore a key indicator of overall economic activity. Unlike GDP, it excludes taxes and subsidies on products, providing a clearer view of the actual production generated within a country or region. The data representing **Gross Value Added (GVA)** at basic prices provides a critical metric for evaluating the socio-economic impacts of the business sector across the analysed nations. While the absolute number of enterprises offers insight into market scale, GVA highlights the actual economic contribution and the **income-generating ability** of these entities. Consequently, GVA serves as a vital measure of regional significance, shifting the focus from the quantity of market participants to the qualitative efficiency and economic output of the entrepreneurial segment.

***Figure 11. Gross Value Added at basic prices** (million euro)*




*Source: Eurostat: [CP_MEUR]*

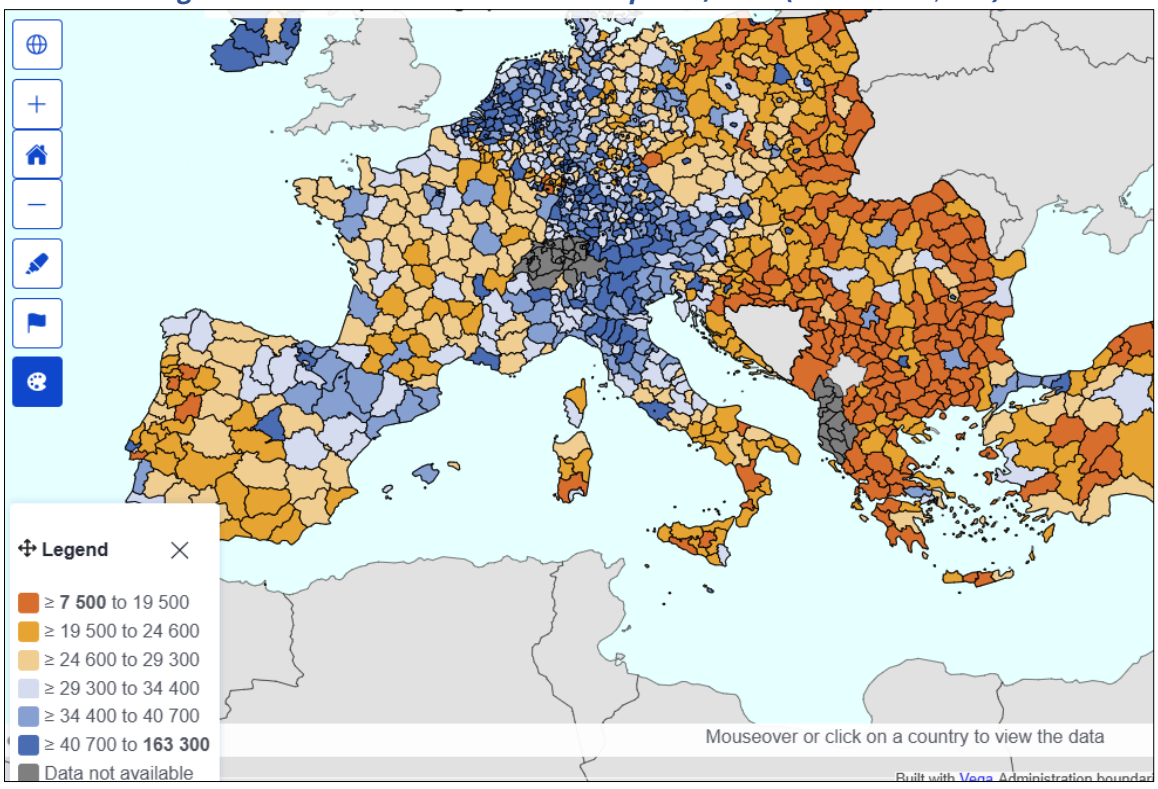
The data reveals a consistent upward trend across all countries, despite a visible deceleration or slight contraction around 2020, likely attributable to global economic disruptions.

**Austria** maintains a leading position throughout the period, with its GVA significantly exceeding that of the other countries included in the analysis, driven largely by a tertiary sector that accounts for approximately 70% of its total economic output, followed by a strong industrial sector. Financial

services and professional activities are particularly concentrated in the Vienna region. GVA at the local level is driven by high-tech manufacturing and specialized tourism services.
In contrast, the **Czechia** and **Slovakia** show steady growth supported by their strong industrial bases; for instance, industry remains a cornerstone in Czechia, contributing nearly 30% to its GVA — one of the highest shares in the EU. While **Romania** and **Bulgaria** start from a lower baseline, they exhibit robust growth rates, with Romania's economy increasingly fuelled by the IT and communications sectors. Services contribute over 60% of GVA in the Romania economy, with significant growth in the IT and communications sectors over the last five years. In Harghita county the GVA structure is largely based on wood processing and agriculture, which are lower down the value chain.
In Bulgaria the GVA structure shows a gradual shift toward services, though the South-East region maintains a strong industrial profile due to energy and manufacturing.

Figure 12 presents a geospatial distribution of GVA for the year 2022, utilizing **Purchasing Power Standards** (PPS) to provide a clearer view of actual production by accounting for price level differences between regions. This visualization highlights significant regional disparities and the "socio-economic impacts of the business sector" across the European landscape.

***Figure 12. Gross value added at basic prices, 2022 (****million euro, PPS****)***



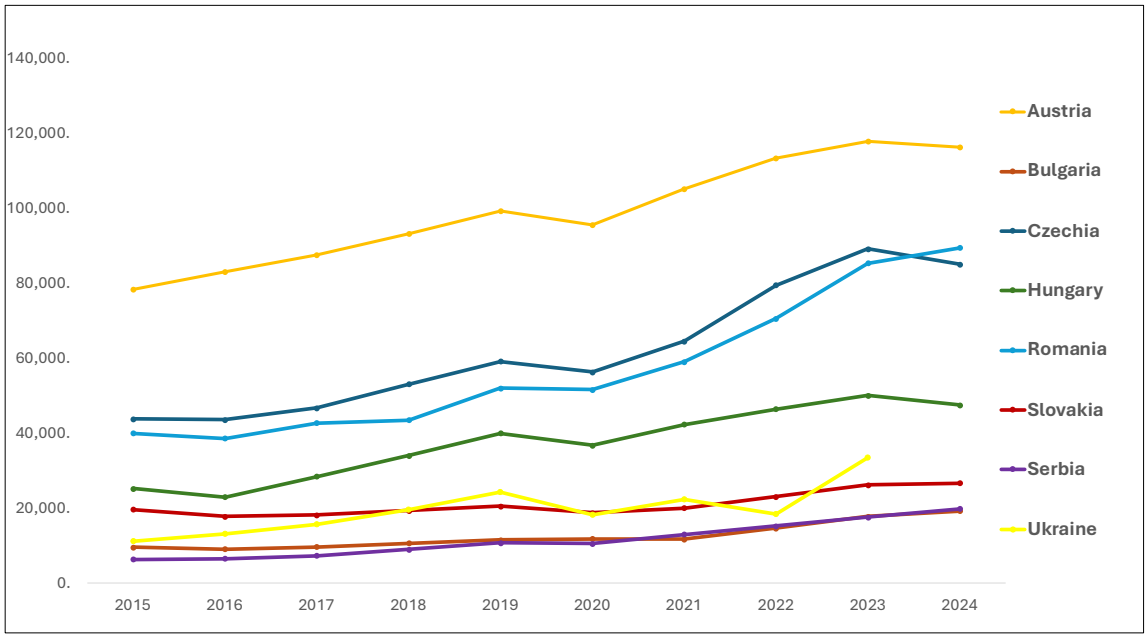

*Source: Eurostat: [PPS_EU27_2020_HAB]*

The map reveals a pronounced concentration of high-value generation (indicated by darker blue shading) in Western and Central European hubs, such as the Vienna region, where financial

services and professional activities are particularly dense. Conversely, many regions in the eastern periphery—including parts of Romania and Bulgaria — exhibit lower GVA levels, often tied to sectors lower down the value chain, such as agriculture and wood processing. This regional breakdown underscores that while national-level data may show growth, local GVA is frequently "hampered by a lack of innovation" or high sensitivity to sector-specific crises, particularly in districts dependent on a single large employer

**Gross fixed capital formation (GFCF)** measures investment in fixed assets such as buildings, machinery, equipment, and infrastructure, and is therefore a central indicator of long-term productive capacity. It reflects both private and public sector investment in the economy. The GFCF saw fluctuations but showed overall growth, particularly in infrastructure projects funded by EU programs.

***Figure 13. Gross fixed capital formation** (million euro)*




*Source: Eurostat: [nama_10_gdp]*

GFCF in **Austria** accounts for a stable portion of GDP, reflecting consistent reinvestment in capital-intensive sectors. Local investment is high, focusing on green energy and digital infrastructure in the districts.

In **Czechia** industry remains a cornerstone of GVA, contributing nearly 30%, which is one of the highest shares in the EU. The service sector in Prague is the primary driver of national GVA growth. GVA in local districts is often tied to a single large employer (e.g., automotive), creating high local sensitivity to sector-specific crises. The investment rate is among the highest in the EU, often exceeding 25% of GDP. This is primarily driven by high levels of foreign direct investment in manufacturing and high-tech sectors. The GFCF remains steady at the district level, supported by consistent reinvestment from established manufacturing firms.

In **Hungary** GVA is largely driven by manufacturing and market services, reflecting a diversified economy. In the pilot regions, agriculture and smaller-scale industry play a more significant role compared to the Budapest-centric service economy. In Borsod-Abaúj-Zemplén county (LPA), GVA is heavily concentrated in heavy industry and agriculture, lacking a strong service-sector contribution. Hungary maintains a high investment rate, with GFCF focusing heavily on manufacturing and logistics. EU funds and FDI remain critical drivers of capital formation across all regions. In the Local Pilot Area Investment is extremely low and mostly tied to state-funded public work equipment or small vineyard developments.

The GFCF of **Romania** has grown one of the fastest since 2020 among the countries studied, with a focus on infrastructure and real estate development. An important source of the private sector`s GFCF is the remittances, the transfer of the romanian migrant and seasonal workers in EU. In 2024, personal transfers from the Romanian diaspora reached approximately €6.5–7 billion, accounting for nearly 2% of the national GDP, and have been a primary driver of the construction boom in rural areas and secondary cities. Regional investments vary, with higher concentrations in metropolitan areas and emerging industrial hubs. The LPA, the Harghita county faces low GFCF due to the low level industrialization and a lack of large-scale private investment.

**Bulgaria'**s gross fixed capital formation remains among the lowest in the EU, its rate comparing to GDP is 18,3% is significantly underperforming the Union's average investment rate of 21–22% of GDP (2024). This reflects a structural reliance on public sector allocations and European structural funds, which continue to outpace private sector engagement in long-term asset accumulation. Investments in the **Bulgarian** pilot area, Burgas region have focused on transport and energy modernization. Local capital formation is often limited to EU-funded infrastructure projects rather than private industrial capital.

**Serbia`s** sustained growth in GFCF (23.8% of GDP in 2024) is largely attributed to large-scale infrastructure projects and foreign manufacturing investments. Niš has seen significant capital formation in industrial zones and technology parks. In the Nišava District, GFCF is insufficient to replace aging industrial assets, limiting the growth of new jobs.

Manufacturing, particularly the automotive industry, remains the primary source of **Slovakia`s** GVA at the national level. In the Prešov Region, GVA per employee is lower than the national average, indicating lower productivity in localized sectors. Prešov's GVA has grown in absolute terms but hasn't increased its share of the national total, indicating stagnant local competitiveness. The GFCF is closely linked to automotive sector expansion and public infrastructure development. Investment in the Prešov Region (LPA) remains lower than in western Slovakia, hindering rapid regional convergence. This region suffers from lower investment levels compared to Western Slovakia, leading to slower modernization.

In **Ukraine** investment dropped sharply in 2022 but is now refocusing on reconstruction and defence-related industries. In safer regions like Ivano-Frankivsk, there is a shift towards investment in resilient energy and humanitarian infrastructure. The GFCF in the local community was primarily directed toward residential construction and basic service infrastructure.

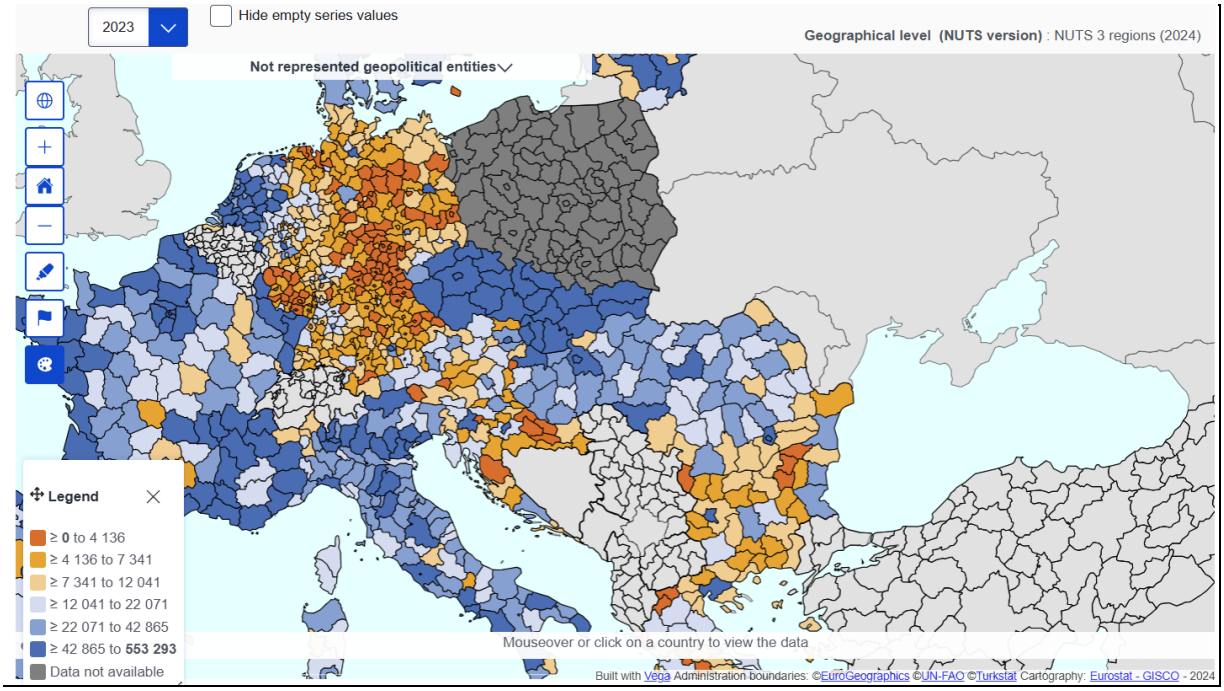
# 3.3. Business Statistics

We begin our analysis of business statistics at the national and regional levels with the number of businesses and their socio-economic impacts.

## 3.3.1. Number of Active Enterprises

There are significant differences at the level of NUTS-3 regions in the countries examined, and these are even more pronounced along the specific indicator projected on the population.

***Figure 14. Enterprise number at regional level, 2023** (number)*

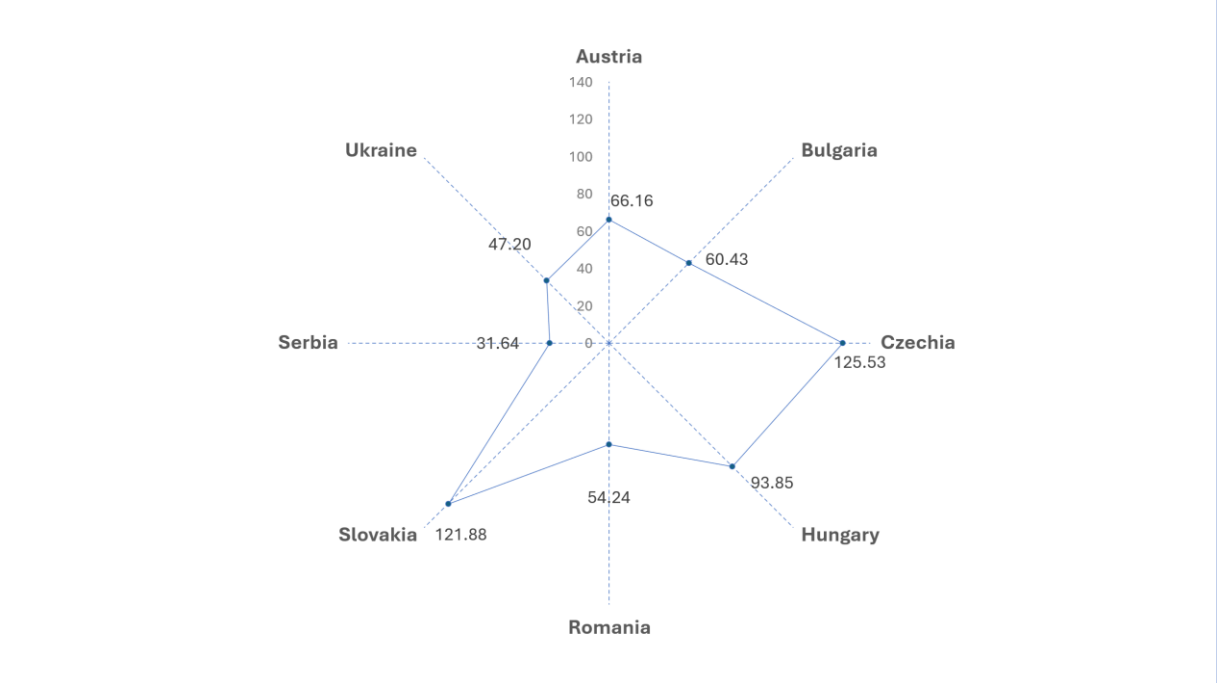



*Source: Eurostat [bd_hgnace_r__custom_19803401]*

The **Czechia** and **Slovakia** lead the comparison in the absolute number of regional businesses, but specific indicators adjusted for population size truly express the regional significance of the entrepreneurial segment.

The radar chart (figure 15.) bellow illustrates the density of entrepreneurial activity across the examined countries, revealing that the **Czechia (125.53)** and **Slovakia (121.88)** have significantly higher number of active enterprises per thousand inhabitants. It is surprising that the **Austrian** value is in the bottom third of the list. If we compare it with the significant growth of Austrian GDP in recent years, the explanation could be the higher productivity and income-generating ability of Austrian companies.

***Figure 15. Number of enterprises, 2024*** *(per thousand inhabitants)*




*Source: Eurostat [bd_hgnace_r__custom_19803401]*

The distribution of enterprises by size (table 4.) underscores that **micro-enterprises (0–9 employees)** represent the vast majority of total business entities in every surveyed country. In absolute terms, **Ukraine** and **Romania** possess the highest number of registered economic units. However, the proportion of large-scale enterprises (250+ employees) remains marginal compared to the micro-sector across all nations. This structural composition confirms the continued dominance of the Small and Medium-sized Enterprise (SME) sector within the Central and Eastern European economic landscape.

***Table 4. Number of enterprises by size, 2024 (number)***

| Country | 0-9 | 10-49 | 50-249 | 250+ | total |
|---|---|---|---|---|---|
| **Austria** | 557,366 | 40,365 | 6,392 | 1,521 | 605,644 |
| **Czech Republic** | 385,485 | 25,637 | 4,685 | 758 | 416,565 |
| **Bulgaria** | 1,303,098 | 36,692 | 7,452 | 1,719 | 1,348,961 |
| **Hungary** | 863,768 | 31,778 | 4,854 | 1,009 | 901,409 |
| **Romania** | 977,265 | 45,369 | 7,841 | 1,748 | 1,032,223 |
| **Slovakia** | 654,237 | 12,660 | 2,548 | 668 | 670,113 |
| **Serbia** | 193,884 | 16,584 | 3,151 | 729 | 214,348 |
| **Ukraine** | 1,915,000 | 52,400 | 14,200 | 2,100 | 1,983,700 |

*Source: Eurostat [bd_hgnace_r__custom_19803401].*

## 3.3.2. Business churn: birth and death rate of enterprises

Business churn is defined by Eurostat as the sum of enterprise birth and death rates, reflecting the dynamism of the business economy. On side it suggests a "low-barrier" economy where it is easy to start a business, showing high entrepreneurial spirit or a rapid shift toward new industries (e.g., tech or services), but in on the negative side it can indicate a lack of business sustainability. If the death rate is the dominant factor, it reflects a volatile business environment where companies struggle to survive long-term.

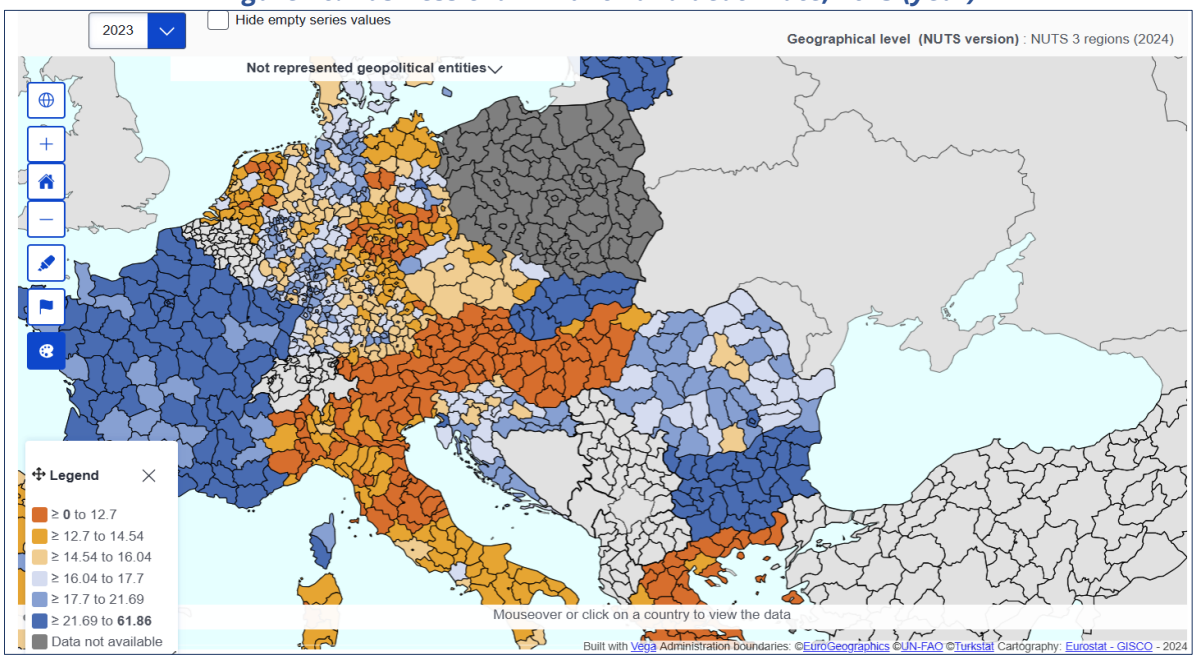
**Austria:** The birth rate of enterprises is stable at around 7–8%, with new entries primarily in technical services. Vienna attracts the highest share of innovative startups due to its infrastructure and funding. The enterprise death rate is relatively low (around 6–7%), indicating a stable business environment. Failures are most common in the hospitality and retail sectors during periods of low consumer confidence.

**Bulgaria:** The enterprise birth rate remains healthy at around 10–12% of the total active stock. New businesses in the Burgas region are frequently linked to the service economy and localized manufacturing. The death rate of enterprises is slightly lower than the birth rate, typically between 8% and 10%. Business exits are frequently seen in the volatile tourism and seasonal service sectors.

The very high value of 27.2% of churn rate means that more than one-quarter of the total business population in that region either started or closed down within that single year.

**Czech Republic:** New business registrations peaked in 2021–2022, driven by a surge in e-commerce and digital services. The birth rate is particularly high in urban centres like Prague and Brno. Business exits are stable but saw a slight increase following the energy crisis. Most "deaths" occur within the first three years of operation, particularly for micro-enterprises.

*Figure 16. Business churn – birth and death rate, 2023 (year)*




*Source: Eurostat [ENT_BRTHR_DTHR_PC]*

**Hungary:** The birth rate of enterprises has fluctuated between 10% and 12% during the observed period. Recent years saw a surge in the construction and real estate sectors, though 2022 saw a slowdown due to regulatory changes. The death rate remained stable around 8–9% until 2022, when it spiked due to the restructuring of small business taxes. Higher energy costs also contributed to increased closures in the manufacturing and retail sectors.

**Romania:** Romania has one of the highest enterprise birth rates in the region, often exceeding 13%. Entrepreneurial activity in Harghita is focused on tourism, food processing, and handicrafts. The death rate averages 10%, with a notable spike during the 2020 pandemic. In Harghita, business survival rates are generally higher in traditional sectors compared to modern services.

**Serbia:** The birth rate has been positive, supported by state grants for youth and women-led businesses. Niš has seen a steady influx of new enterprises in the IT and service sectors. Enterprise death rates have stabilized as the economy modernized and credit access improved. Support programs for SMEs have helped reduce the failure rate of new businesses in the Nišava District.

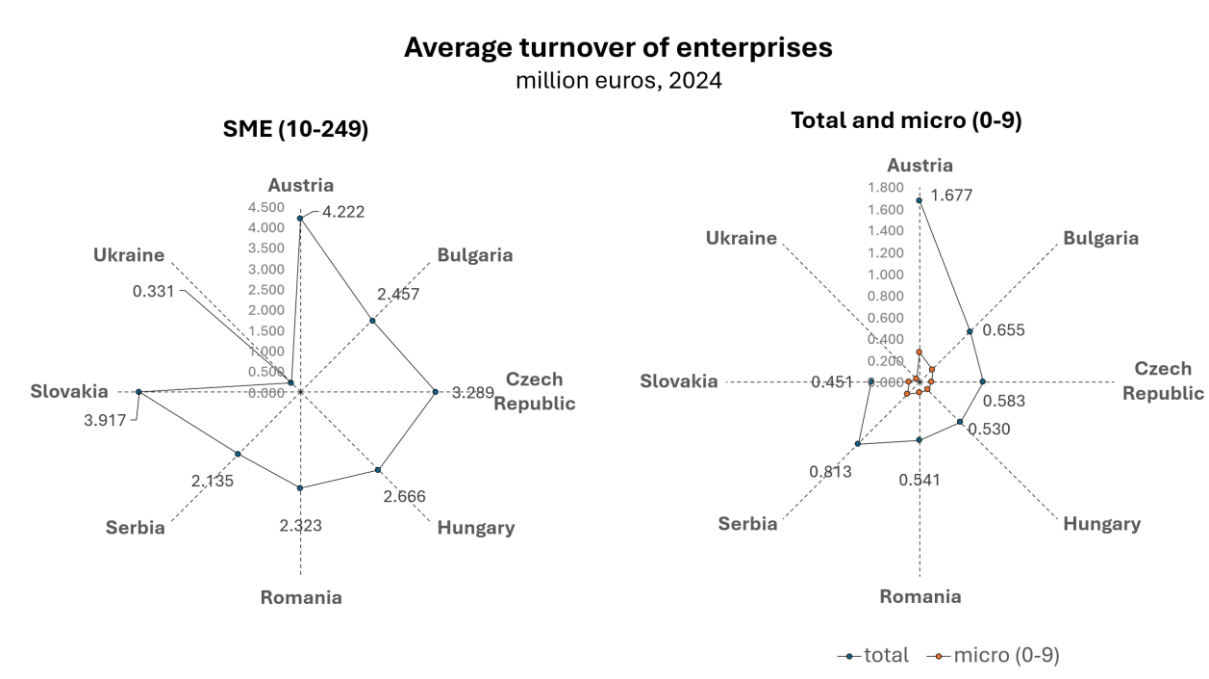
**Slovakia:** The birth rate of enterprises is around 10% nationally. In the Prešov Region, new business creation is often a response to a lack of formal employment opportunities, leading to a high share of self-employment. The death rate of enterprises is around 9%. In the Prešov Region, business closures often correlate with the migration of young entrepreneurs to more developed regions or abroad.

**Ukraine:** Despite the war, 2023 saw remarkable resilience in business creation, with over 300,000 new sole proprietorships registered. Most new businesses are in retail, logistics, and IT services. Business closures reached record highs in 2022 due to direct war damage and the loss of major markets. In Ivano-Frankivsk, the death rate is lower than in the east, but rising costs and labour shortages remain major challenges.

## 3.3.3. Corporate performance indicators

Total revenue per number of companies makes the basic business performance indicator of countries comparable.

*Figure 17. Average turnover of enterprises (million euros)*



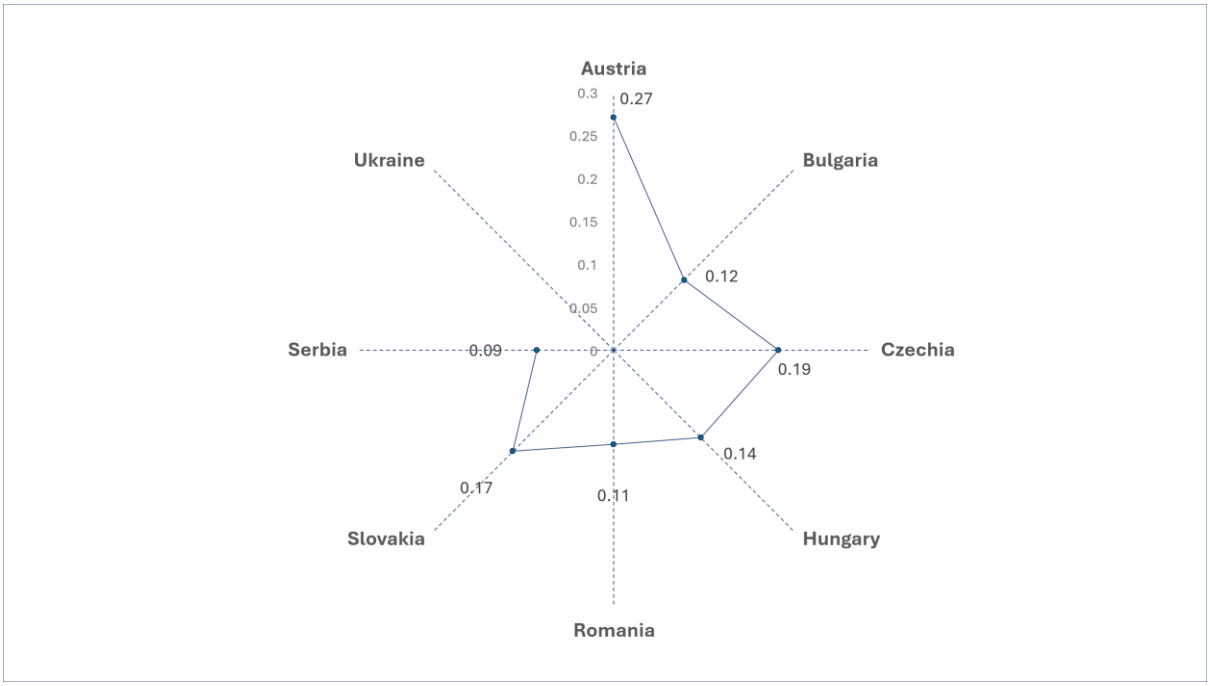

*Source: Eurostat [sbs_sc_ovw], EU4Business in case of Ukraine*

The average turnover of all enterprises, regardless of company size, is approximately the same in almost all countries (approx. 0.4-0.6 million euros), but in Austria it is three times the average of the other countries (1.6 million euros). The difference is mainly caused by different productivity, but the different proportions of company segments by size may also play a role.

If we look at the average turnover among small and medium-sized enterprises, Austria continues to lead, but with a smaller advantage, and the Czech Republic and Slovakia also stand out from the field. In the micro-enterprise segment, the Austrian average is more than twice that of the others, but interestingly, the averages of Serbia and Bulgaria are slightly but significantly higher.

One of the most important corporate performance indicators is productivity, which fundamentally determines corporate competitiveness and employee income.

***Figure 18. Productivity (****net turnover / nr. of employees)*




*Source: Eurostat [bd_hgnace_r]*

This gross indicator of productivity also well explains differences in corporate efficiency and, subsequently, the income of the employees.

The Austrian indicator is well above the others, and the Czech and Slovak indicators are, although to a lesser extent, significantly higher than the indicators of the other countries. These differences are also reflected in income statistics later.

In the case of Ukraine, we did not have reliable basic data to calculate productivity.

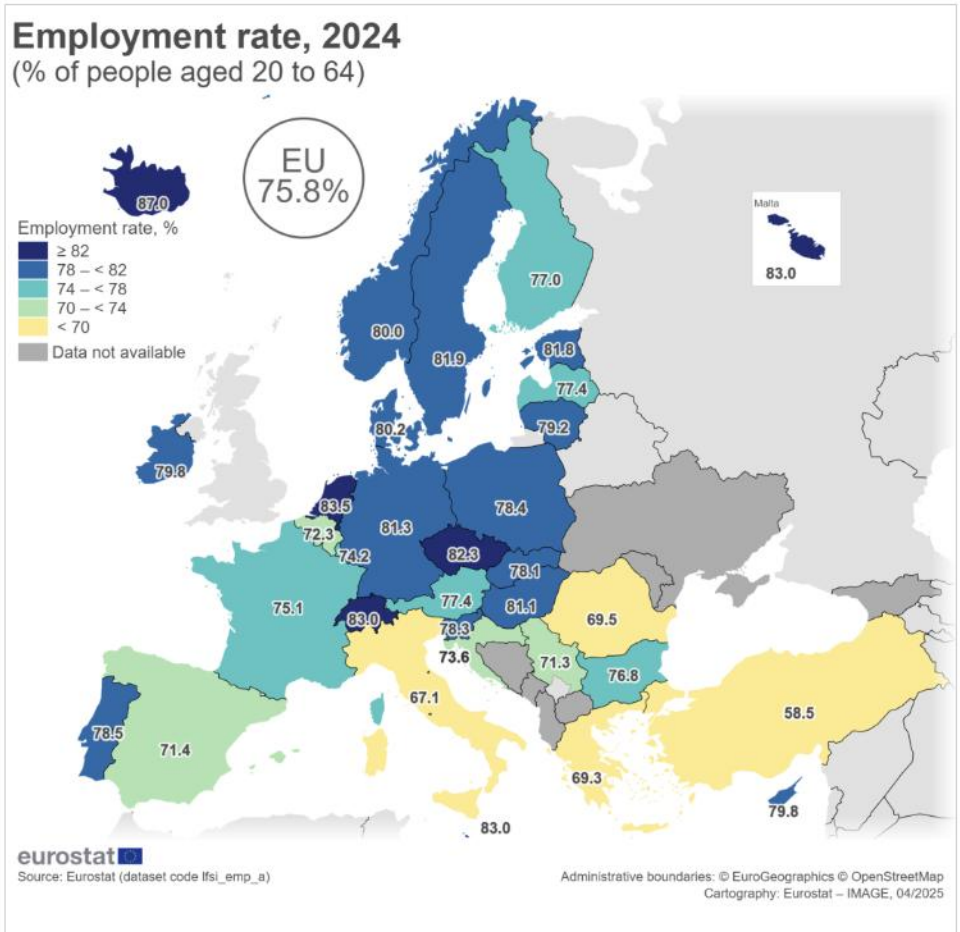
# 3.4. Labour market situation

## 3.4.1. Employment (labour market participation)

The most basic labour market indicator is the employment rate, what is the percentage of the working-age population that is currently employed. According to Eurostat, someone is considered employed if, during the reference week worked for at least one hour for pay, profit, or family gain or had a job but were temporarily absent (due to illness, holiday, maternity leave, or vocational training). It is important to note that Eurostat does not look at company payrolls, instead, they conduct questionnaire-based surveys among private households. This allows them to capture self-employed individuals and family workers who might not appear on a standard corporate payroll.

Figure 20. illustrates the employment rate across Europe in 2024 for the 20–64 age group. The map highlights that Southern and Eastern European countries — including several in our sample — lagging behind the Nordic and Central countries of the EU.

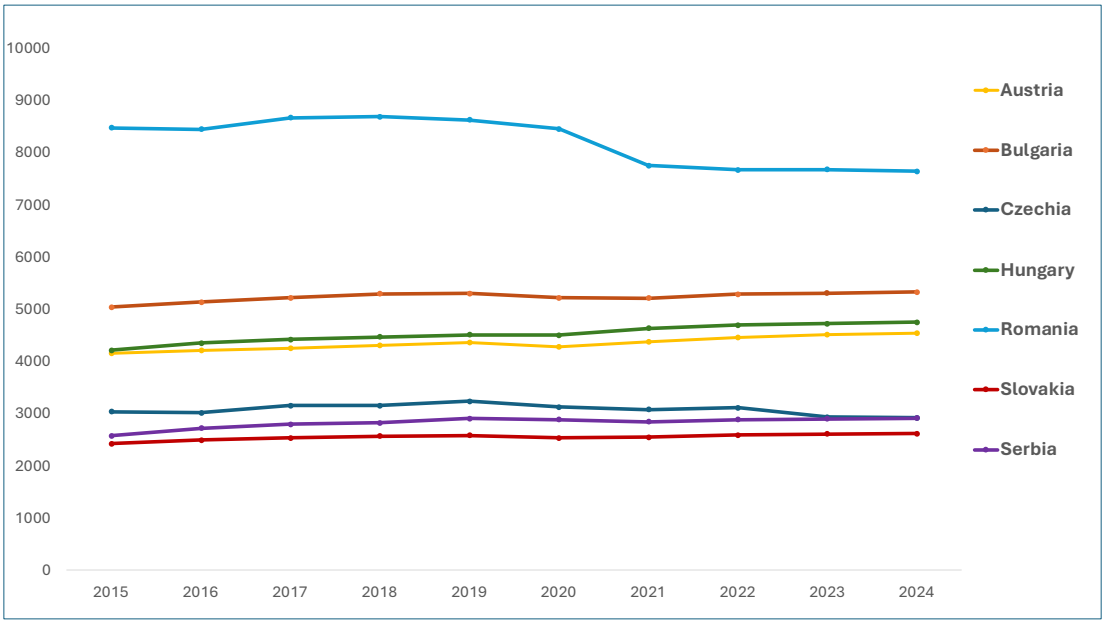
***Figure 19. Employment rate in Europe, 2024 (****% of people aged 20 to 64)*




*Source: Eurostat (lfsi_emp_a)*

Employment rates in 7 EU countries surpassed 81%, in our analysed group of countries Czechia (82.3%) and Hungary (81.1%). By contrast, Romania (69.5%) had one of the lowest employment rates in Europe and the lowest of eight countries.

***Figure 20. Total employment, 2024 (% of working-aged people 20 to 64)***




*Source: Eurostat (lfsi_emp_a)*

Employment has increased in the majority of the countries examined over the past ten years, with the exceptions of Romania, where the 2024 value is 90.2% of 2015, and the Czech Republic, where it is 96.2%. In the case of the Czech Republic, it can be said that one of the highest employment rates in the EU has decreased slightly, and as we saw earlier in Fig.19, this is associated with high productivity. The highest growth was in Hungary, Austria and Slovakia.

In the case of Ukraine, we do not have Eurostat, but ILO estimates, which are shown in a separate table (table 5.) due to its significantly different values. The enormity of the war can also be seen in the decline in employment data in 2020.

***Table 5. Total employment, Ukraine***

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Ukraine** | 16,406 | 16,237 | 16,156 | 16,361 | 16,578 | 15,915 | 15,613 | 12,500 | 12,300 | 12,150 |

*Source: International Labour Organization.*

Table 6. presents total employment broken down into **employees** (employees in public sector and the enterprise sector), and the **self-employed** persons based on the most recent available data for 2024. The key distinction from employees is that self-employed persons bear their own economic risk — they are not paid a fixed wage by an employer but generate income through their own activity. The self-employed sector comprises independent **entrepreneurs**, liberal professionals (lawyers, doctors, architects) running their own practice, skilled tradespeople and

craftsmen (plumbers, electricians, carpenters), freelancers and independent contractors, and — particularly significant in Eastern European countries — **subsistence and semi-subsistence farmers** and unpaid contributing **family workers** in agriculture.

***Table 6. Total employment, employees, self-employed** (thousand persons, 2024)*

| Country | Employees | Self-employed | Total employment |
|---|---|---|---|
| **Austria** | 4 176,1 | 555,9 | 4 732,0 |
| **Czech Republic** | 4 668,9 | 781,9 | 5 450,9 |
| **Bulgaria** | 2 672,0 | 846,7 | 3 518,7 |
| **Hungary** | 4 397,5 | 390,6 | 4 788,1 |
| **Romania** | 6 722,8 | 1 904,5 | 8 627,3 |
| **Slovakia** | 2 080,3 | 350,0 | 2 430,3 |
| **Serbia** | 2 311,8 | 1 060,2 | 3 372,1 |

*Source: Eurostat [nama_10_a64_e]*

In Eastern European countries like Romania and Serbia the high self-employment share (22% and 31%) largely reflects **disguised unemployment** and **subsistence agriculture** rather than entrepreneurship.

Table 7. further disaggregates the enterprise sector by establishment size class, showing the number of persons employed in micro (0–9), small (10–49), medium (50–249), and large (250+) enterprises in 2024.

***Table 7. Number of employees by enterprises size, and their weights. 2024 (number, %)***

| Country | 0-9 | 10-49 | 50-249 | 250+ | total |
|---|---|---|---|---|---|
| **Austria** | 1,055,164 | 765,320 | 636,986 | 1,327,674 | 3,785,144 |
| | 28% | 20% | 17% | 35% | 100% |
| **Czech Republic** | 1,426,644 | 727,428 | 764,266 | 1,299,010 | 4,217,347 |
| | 34% | 17% | 18% | 31% | 100% |
| **Bulgaria** | 718,093 | 501,089 | 454,805 | 555,791 | 2,229,778 |
| | 32% | 22% | 20% | 25% | 100% |
| **Hungary** | 1,302,595 | 598,068 | 479,088 | 962,682 | 3,342,433 |
| | 39% | 18% | 14% | 29% | 100% |
| **Romania** | 1,528,876 | 897,893 | 807,427 | 1,531,383 | 4,765,579 |
| | 32% | 19% | 17% | 32% | 100% |
| **Slovakia** | 841,973 | 246,227 | 260,999 | 480,661 | 1,829,860 |
| | 46% | 13% | 14% | 26% | 100% |
| **Serbia** | 522,578 | 322,321 | 320,578 | 647,020 | 1,812,497 |
| | 29% | 18% | 18% | 36% | 100% |

*Source: Eurostat [bd_hgnace_r__custom_19803401].*

**Austria:** The national employment rate remains high and stable, though a notable gender gap persists in part-time work patterns. Employment is driven by a strong service sector and high demand for skilled labour across most industries. Total employment reaches 4,176,100 wage employees, with large firms (250+) dominating the enterprise sector with a 35% share, reflecting

Austria's strong industrial and corporate base. Local employment in rural NUTS 3 districts shows higher reliance on service and tourism sectors compared to the industrial core of the capital region.

**Bulgaria:** Employment has grown steadily, with GDP per capita rising significantly as the country converges towards EU averages. Nevertheless, a development gap persists in less dynamic rural regions. Total wage employment stands at 2,672,000, with the enterprise sector relatively fragmented: micro firms (0–9) employ 32% of the workforce, while large firms account for only 25% — the lowest share in the group. The Local Pilot Area districts suffer from a 'low-skills trap', with available employment concentrated in traditional, low-paid sectors offering limited career progression for youth.

**Czech Republic:** Czechia maintains one of the highest employment rates in the EU (82.3%), underpinned by a very strong manufacturing base. Total wage employment reaches 4,668,900, broadly distributed across enterprise size classes, with large firms at 31% and micro firms at 34%, indicating a balanced industrial structure. Employment participation is strong at district level, though a visible gap in female participation exists due to limited flexible work arrangements and childcare provision.

**Hungary:** National employment has seen steady increases in recent years, reaching record highs driven by private sector expansion and state incentives. Total wage employment stands at 4,397,500, with micro enterprises (0–9) accounting for the highest share in the group at 39%, suggesting a fragmented enterprise structure with a large base of small and family businesses. At the sub-national level (Borsod-Abaúj-Zemplén county), employment is often precarious, with high reliance on seasonal agricultural work or short-term state programmes.

**Romania:** The national employment rate for the 20–64 age group stands at approximately 69.5%, well below the EU average, indicating a large share of the potential workforce that remains untapped or engaged in subsistence agriculture and contributing family work. Total wage employment reaches 6,722,800, with the enterprise sector showing a dual structure: both micro and large firms account for 32% each, signalling limited development of the mid-size segment. In Central Romania (NUTS2) the employment rate is higher at 75.4%, driven by dynamic urban centres such as Brașov and Sibiu, while Harghita county (NUTS3) records only 69.7%, constrained by rurality and a low density of employers.

**Slovakia:** Employment is heavily concentrated in the automotive and industrial sectors, which provide stable jobs for the qualified workforce. Total wage employment stands at 2,080,300, with the highest micro-firm employment share in the group at 46%, while the 10–49 size class accounts for only 13% — suggesting a structural gap in small business development. The Prešov Region (NUTS2) faces constrained participation due to a significant lack of industrial investment and a structural mismatch between labour supply and market demand.

**Serbia:** As a non-EU candidate country, Serbia's labour market data are compiled on a comparable basis through Eurostat's enlargement statistics. National employment has shown steady recovery since the pandemic, though youth participation remains low at 23.9%. Total wage employment

reaches 2,311,800, with large firms (250+) accounting for the highest share at 36%, pointing to the dominance of a limited number of large employers, many of them legacy industrial enterprises. Southern & Eastern Serbia (NUTS3) records a very low youth employment rate of only 20.6%, reflecting a lack of regional industrial investment and the slow transition of legacy industries to modern service-based models.

**Ukraine:** Before 2022, employment was growing in the service and IT sectors, though it remained uneven across the country. National statistics showed a focus on stabilising the 25–39 age group in formal employment. The Ivano-Frankivsk LTC records a local employment rate slightly more favourable than the regional average, yet it remains vulnerable to national economic volatility, with a significant presence of contributing family workers and subsistence agriculture. The ongoing conflict has severely disrupted labour market dynamics, making reliable comparative data unavailable for 2024.

### 3.4.2. Trainees and Inactivity (NEETs & Reasons for Inactivity)

**Austria`s** youth inactivity is primarily driven by education, with 56% respectively 72% of inactive youth (15-29 years old) being students or trainees. Among females, care responsibilities for children or elderly (up to 19.2%) are a much more significant factor than for males. At NUTS3 level inactivity is primarily driven by high participation in tertiary education; however, local data shows that care responsibilities remain a significant barrier for young women in rural districts.

In **Bulgaria** seasonal fluctuations in tourism and agriculture lead to high numbers of youth moving in and out of "trainee" status or inactivity. There is a persistent challenge in reaching long-term inactive youth who are not registered with the labour office. Local inactivity is often tied to "discouragement," where young people in remote districts stop looking for work entirely due to the perceived absence of opportunities.

Youth Inactivity in **Czech Republic** is almost exclusively linked to the high proportion of young people pursuing tertiary education. However, young women frequently report that a lack of flexible work or childcare keeps them inactive during family-building years. Inactivity is largely temporary and education-based, but in specific industrial districts, young people without specialized vocational training face higher risks of becoming NEET.

The **Hungarian** NEET rate is a key policy focus, as a portion of the youth population remains disengaged from both education and the primary labour market. Inactivity is often linked to the lack of secondary qualifications in disadvantaged households. The NEET rate is exceptionally high in local rural pockets; in **Tállya** (LPA part of a NUTS3 region), inactivity is often a long-term state linked to the structural lack of any vocational training or local apprenticeships.

**Romania** faces one of the highest NEET rates in the EU, particularly among young women in rural areas. The mismatch between the school curriculum and the requirements of modern employers

leaves many "trainees" unprepared for actual jobs. **Harghita** county (NUTS3 region) reports some of the highest NEET rates in the country, exacerbated by early family formation and a lack of local mobility support for young trainees.

In **Serbia** the inactivity rate is exceptionally high at 68.1%, with many young people feeling discouraged from even searching for work. The NEET rate stands at 12.4%, indicating a significant detachment from both schooling and work. **Nišava District:** the inactivity rate is a staggering local challenge; it is driven by a severe mismatch where local vocational schools do not produce the specific technical skills required by the few active employers.

**Slovakia`s** inactivity is often a result of young people being "trapped" in education systems that do not offer clear pathways to local industries. Disengagement is higher in regions where there are few entry-level trainee positions. In **Prešov Region** inactivity is frequently caused by a combination of continued education and "forced" inactivity due to the lack of suitable local entry-level positions for school leavers.

Inactive youth in **Ukraine** are largely concentrated in the 15–19 age group due to full-time education. For those not in school, the lack of vocational training tailored to market needs remains a barrier to entry. In **Ivano-Frankivsk** region while many are inactive due to education, there is a significant group of "hidden NEETs" who are not in the system due to the mismatch between their degrees and local economic realities.

### 3.4.3. Unemployment

**Austria`s** unemployment is relatively low but concentrated among those with only a compulsory school leaving certificate. The belief that "no jobs are available" is a psychological barrier for about 10% of the unemployed youth. At regional level local unemployment is also generally low, but for those who are unemployed, the main obstacle is often the lack of higher-level qualifications required by the modern Austrian job market.

**Bulgaria:** long-term unemployment is a risk for youth who do not find a job within six months of graduating. The national rate has dropped, but the "hard-to-reach" unemployed remain a significant percentage of the youth population. In the district of Burgas (Local pilot area) unemployment is often structural and long-term, as the local labour force lacks the digital or linguistic skills needed for modern remote or service work.

**Czech Republic** enjoys the lowest unemployment in the group, though regional pockets of joblessness exist. Long-term unemployment for youth is rare but usually associated with social or health-related barriers. At regional level also the unemployment remains below the EU average, but local fluctuations occur in districts that are overly dependent on a single manufacturing plant.

**The Hungarian** national unemployment is low, yet structural unemployment persists in specific geographical "pockets" that haven't recovered from industrial decline. Youth unemployment is

often tackled through public work schemes rather than permanent market jobs. **Borsod-Abaúj-Zemplén** county (NUTS3) has some of the highest jobless rates in Hungary (9.5%–17%); in **Tállya**, long-term unemployment is the norm, with residents often depending on short-term public work schemes. In **Zemplén** the lack of local industry means that many young people are officially "unemployed" or "registered jobseekers" for years.

Unemployment in **Romania** among the 15–24 age group is nearly triple the national average, reaching over 20% in some years. This reflects a deep structural issue where young people are the first to be laid off and the last to be hired. The local registered unemployment rate (5.4%) is significantly higher than the national average (3.3%), reflecting a localized crisis of job creation and the out-migration of the skilled.

**Serbia`s** youth unemployment increased to 25.0% recently, showing that it is becoming even harder for young people to enter the market. This trend is opposite to the general unemployment rate, which has been more stable. In **Nišava District** unemployment is concentrated among the youth (25%), who face growing difficulty in securing their first job due to a lack of local internship-to-employment pipelines.

Despite of good employment rate in **Slovakia** the long-term unemployment is a chronic issue, particularly for youth without high school diplomas. The benefit system is linked to work history, leaving unemployed youth with very little financial support. **Prešov Region** records some of the highest youth unemployment figures in Slovakia, characterized by many young people being registered at labour offices for extended periods without success.

**Ukraine`s** youth unemployment (15–24) was 16.2% in 2019, significantly higher than the adult average of 8-9%. This highlights the "experience gap" where employers are reluctant to hire first-time job seekers. **Ivano-Frankivsk** region`s youth unemployment is a key local challenge, reaching s for the 15–24 age group, which is significantly higher than the 8.8% general rate for the city community.

# 3.5. Education and training of young people

This section provides a comparative, territorial overview of key education-related indicators for young people. More detailed country-specific analyses of education systems and institutional frameworks are presented in the respective country reports. The structure of this section follows Eurostat's main groups of education-related indicators, focusing on variables most relevant to analysing vulnerable young people, their risk of early school leaving, and their transition to the labour market. Due to data limitations and the ongoing war, comparable Eurostat data for Ukraine are unavailable for several education-related indicators. Consequently, Ukraine is excluded from the quantitative analysis in this section; relevant insights from the partner country report are incorporated where possible.

## 3.5.1. Participation in education

The rate of participation in education is closely linked to subsequent employment and labour market opportunities. At least an upper secondary qualification is critical in this regard, as it is a basic entry requirement for the contemporary labour market and a prerequisite for obtaining a higher education degree (OECD, 2024). The typical age group for ISCED level 3 is 15-19 years old, since upper secondary education typically begins at age 15, though in some countries students start earlier, at 14 (e.g., Hungary). In most countries, students complete upper secondary education at ages 17 or 18 (OECD, 2024).

The education participation rate among 15- to 19-year-olds in the 27 Member States of the European Union was 87.4% in 2020 (see Table 5), indicating a relatively high participation rate, but there are significant differences between countries. Among the countries examined, the **Czech Republic** stands out as having the highest value, exceeding the EU average. The time-series analysis suggests that these patterns are persistent rather than temporary. In **Slovakia**, participation in education is somewhat below the EU average but still comparatively high, as confirmed by increases in participation rates over time. **Hungary** and **Austria** show values that are already noticeably lower than the EU average. The difference between the two countries is that this value is declining in Hungary but increasing in Austria. Data from **Serbia** and **Bulgaria** further reinforce the trend that educational participation in the region is generally lower than in the EU as a whole. At the same time, however, a downward trend in educational participation can be observed in these two countries, which may reflect changing participation patterns in upper secondary education. The lowest participation rate is observed in **Romania**, which is notably lower than both the EU average and that of the other countries analysed. This may indicate challenges in retaining students throughout the full duration of upper secondary education, even though the entire cycle is compulsory in this country (OECD, 2024).

According to the **Ukrainian** country report, participation in education has remained relatively stable in formal terms, despite being strongly affected by demographic decline, internal displacement and war-related disruptions. This apparent resilience can be partly explained by administrative maintenance of enrolment and the widespread use of distance learning, rather than uninterrupted access to stable, high-quality learning environments. At the same time, important disparities in digital access and learning conditions, as indicated by the country report, suggest that high participation rates may mask substantial learning losses and inequalities.

***Table 8. Participation rate of 15–19-year-olds in education at the national level (2021 – 2022) (%)***

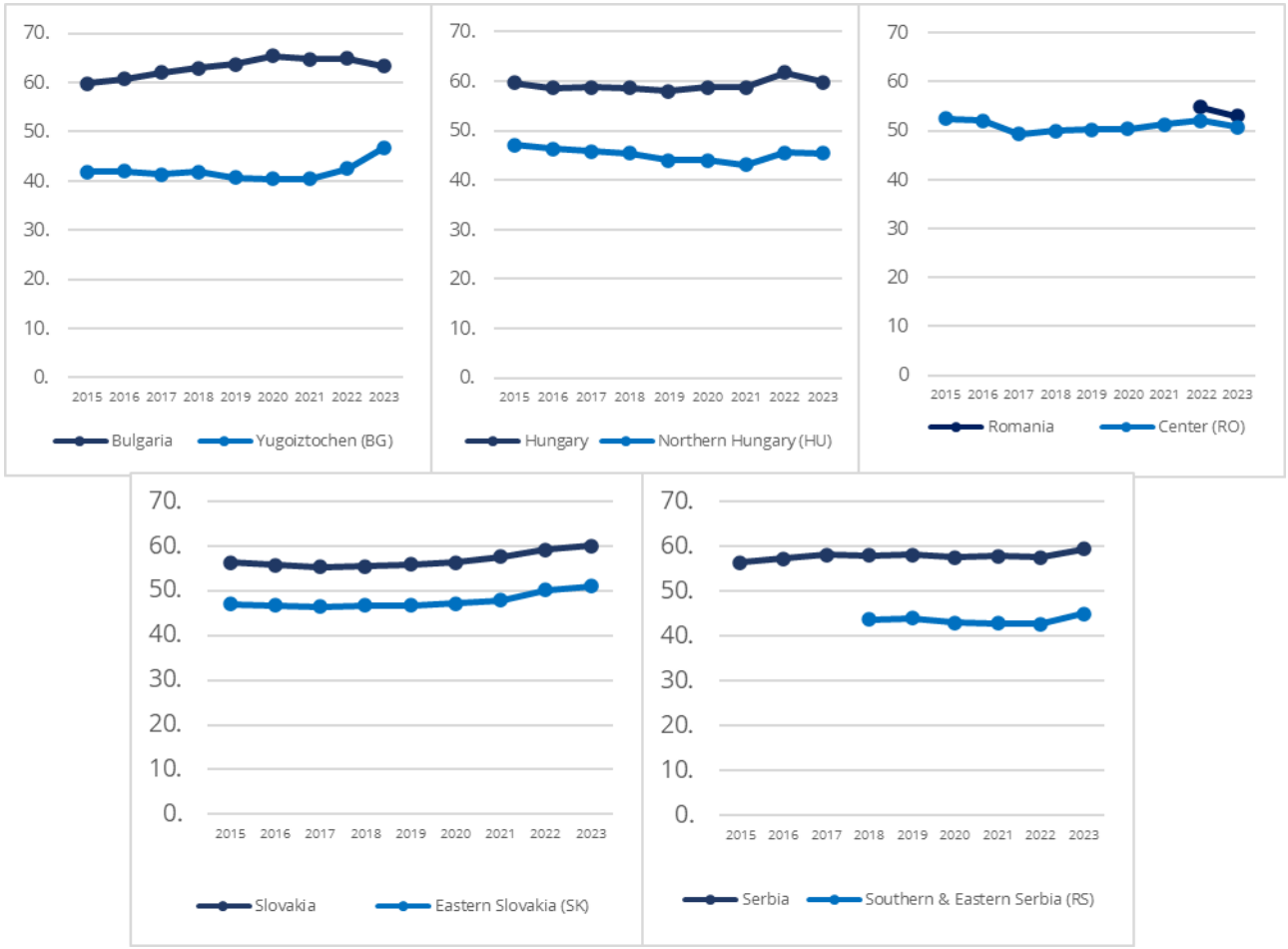
| | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|---|
| **EU-27** | 86.0 | | 87.4 | | 87.4 | | |
| **Austria** | 78.0 | 78.2 | 78.8 | 79.7 | 80.1 | 81.5 | 80.2 |
| **Bulgaria** | 79.1 | 79.1 | 76.9 | 75.4 | 75.0 | 75.0 | 76.1 |
| **Czechia** | | | 90.3 | 90.0 | 90.3 | 90.9 | |
| **Hungary** | 83.9 | 83.7 | 83.3 | 82.9 | 82.7 | 81.2 | |
| **Romania** | 71.1 | | | | | 71.6 | 70.9 |
| **Slovakia** | 83.6 | 83.4 | 83.8 | 83.5 | 83.7 | 84.6 | 86.1 |
| **Serbia** | 81.4 | 81.5 | 81.2 | 80.8 | 79.2 | 78.7 | 77.9 |

*Source: Eurostat [educ_uoe_enra05__custom_19967696]*

Since data on education participation at the regional level were available only for the 15–24 age group, the analysis focuses on this indicator. This makes it possible to compare trends across countries and between regions, and to examine their respective national contexts. The figure below shows education participation rates from 2015 to 2023 for five countries and one region each, enabling a visual analysis of regional differences and changes over time. The participation of 15-24-year-olds in education is relatively stable in most of the countries analysed, with a slight increase between 2015 and 2023. However, regional data show much lower participation rates than the national average, indicating regional disparities. This difference is particularly noticeable in Bulgaria, where regional values lag substantially behind national indicators. In **Hungary** and **Serbia**, the difference between regional and national participation rates is also considerable, but slightly smaller than in **Bulgaria**. In **Slovakia**, the difference between the two levels appears to be more moderate than in the above cases, but when examined in isolation, it is by no means negligible. In **Romania**, the difference between regional and national participation rates is much smaller. These differences highlight the importance of strengthening participation in education at the regional level as part of efforts to reduce territorial disparities.

According to the country report, there are profound regional differences in educational participation across **Ukraine**. In metropolitan areas, a variety of educational opportunities are available, and student enrolment is relatively stable. In contrast, in rural and border areas, teacher shortages, school closures, and falling student numbers are common. 40% of damaged schools are located in the eastern and southern regions, reducing participation. In areas hosting internally displaced persons, class sizes increase by 20-30%, increasing the burden on schools and teachers.

*Figure 21. Participation rates of 15–24-year-olds in education at the national and regional levels (2015-2024) (%)*



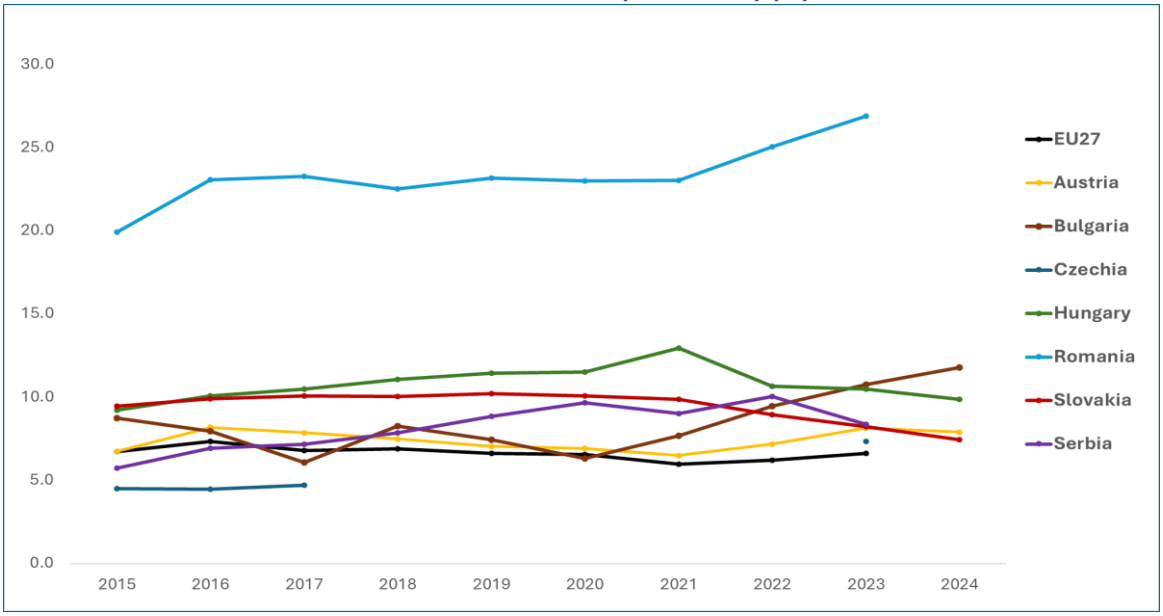

*Source: Eurostat [educ_uoe_enra14__custom_19920781]*

A complementary perspective is provided by the out-of-school rate, which measures the proportion of young people in a given age group who are not participating in any form of formal education. Given low educational participation among 15-19-year-olds, **Romania's** out-of-school rate stands out among the countries examined (see Figure 22). Values exceeding the EU average are also found in **Bulgaria** and **Hungary**. In the latter country, however, the downward trend in recent years offers hope, in contrast to **Bulgaria**, where we see a marked increase in the out-of-school rate. As in Hungary, the proportion of young people out of school is also declining in **Slovakia**, indicating a positive trend. **Serbia** started from a relatively low level below the EU average, which later increased above it, but the latest data suggest a downward trend, the sustainability of which is not yet clear. Among the countries examined, **Austria** and the **Czech Republic** had the lowest out-of-school rates in 2023.

While internationally comparable out-of-school rates are not available for **Ukraine**, evidence reported in the partner country report, drawing on national and international assessments, indicates an increased risk. One in five children is at risk of educational disruption and exclusion

due to war-related stress, financial hardship, and displacement, which make it difficult for them to continue their education. There are more than two million school-age internally displaced children who face many challenges in enrolling and integrating into new schools. Between 10 and 15 per cent of students in online education are regularly absent, indicating hidden dropout rates. Together, these factors point to a substantially increased risk of school dropout and educational disengagement.

***Figure 22. Out-of-school rate in the population of upper secondary school age at the national level (2015-2024) (%)***




*Source: Eurostat [educ_uoe_enra29__custom_19930148]*

Overall, the majority of 15-19-year-olds in the European Union participate in education. Still, in several countries in the Danube region, the share of participation in education in this age group is below the EU average, which may lead to lower labour market participation in the future. The data highlight that strengthening educational retention remains a key policy challenge, particularly in Romania. Although harmonised and internationally comparable statistical data are not available for Ukraine, evidence reported in the partner country report—drawing on national and international assessments as well as qualitative inputs—indicates a considerable increase in educational vulnerability among young people.

In the pilot areas, overall participation in primary and lower secondary education is high. Still, there are considerable differences at the upper secondary and post-secondary levels, as well as in geographical distribution. These differences suggest that maintaining participation in education beyond the younger age groups remains a challenge, especially in disadvantaged areas.

In **Burgas (the pilot area),** Bulgaria, the absolute number of participants in secondary education is high, particularly in vocational education, reflecting the district's demographic and institutional concentration. Nevertheless, the proportion of out-of-school rate remains high nationally, and

there are significant regional differences in educational participation, indicating structural inequalities.

In Hungary, in **Tállya**, Borsod-Abaúj-Zemplén County, participation in education is substantially affected by demographic decline and limited socio-economic resources in rural areas. Due to the rapid decline in student numbers and limited local educational opportunities, further education pathways are fragile, and early school leaving is a structural problem, especially among boys.

In Romania, in **Harghita** County, the number of students in secondary education has declined over the past decade, while the proportion of those out of school, especially at the upper secondary level, exceeds the national average. The dominant role of vocational and technological training, particularly pathways that do not culminate in the baccalaureate examination and therefore provide limited access to tertiary education, may contribute to the persistence of inequalities in education participation, especially in the context of the region's specific demographic and geographical characteristics.

In Slovakia, in the **Prešov** region, participation in primary education is almost universal, but progression to upper secondary education, particularly into general education, is less common. Vocational pathways tend to dominate, which may limit access to more academically oriented tracks and, in some cases, to further educational opportunities. The proportion of out-of-school rate in the region exceeds the national average, especially in rural areas where access, economic, and social barriers are more pronounced.

In Ukraine, in the urban community of Ivano-Frankivsk, participation in education has remained formally high despite the war, especially in higher education and vocational training. At the same time, educational participation is highly differentiated: in rural and conflict-affected areas, the predominance of online education, infrastructure damage, and internal migration all increase the risk of school dropout and educational disengagement.

In Serbia, in the **Nišava** district, participation in primary education is high, but enrolment rates are lower at the secondary and tertiary levels. The proportion of out-of-school youth and early school leavers exceeds the national average, reflecting the region's economic difficulties and limited opportunities for training and further education.

Overall, participation in education among young people remains high across the European Union, particularly at the upper secondary level. However, the analysis highlights persistent cross-country differences and marked territorial disparities within the Danube region. Lower participation at the upper secondary level is associated with increased risks of early school leaving and more limited labour market prospects. These findings underline the importance of examining not only participation but also educational outcomes, which are addressed in the following section.

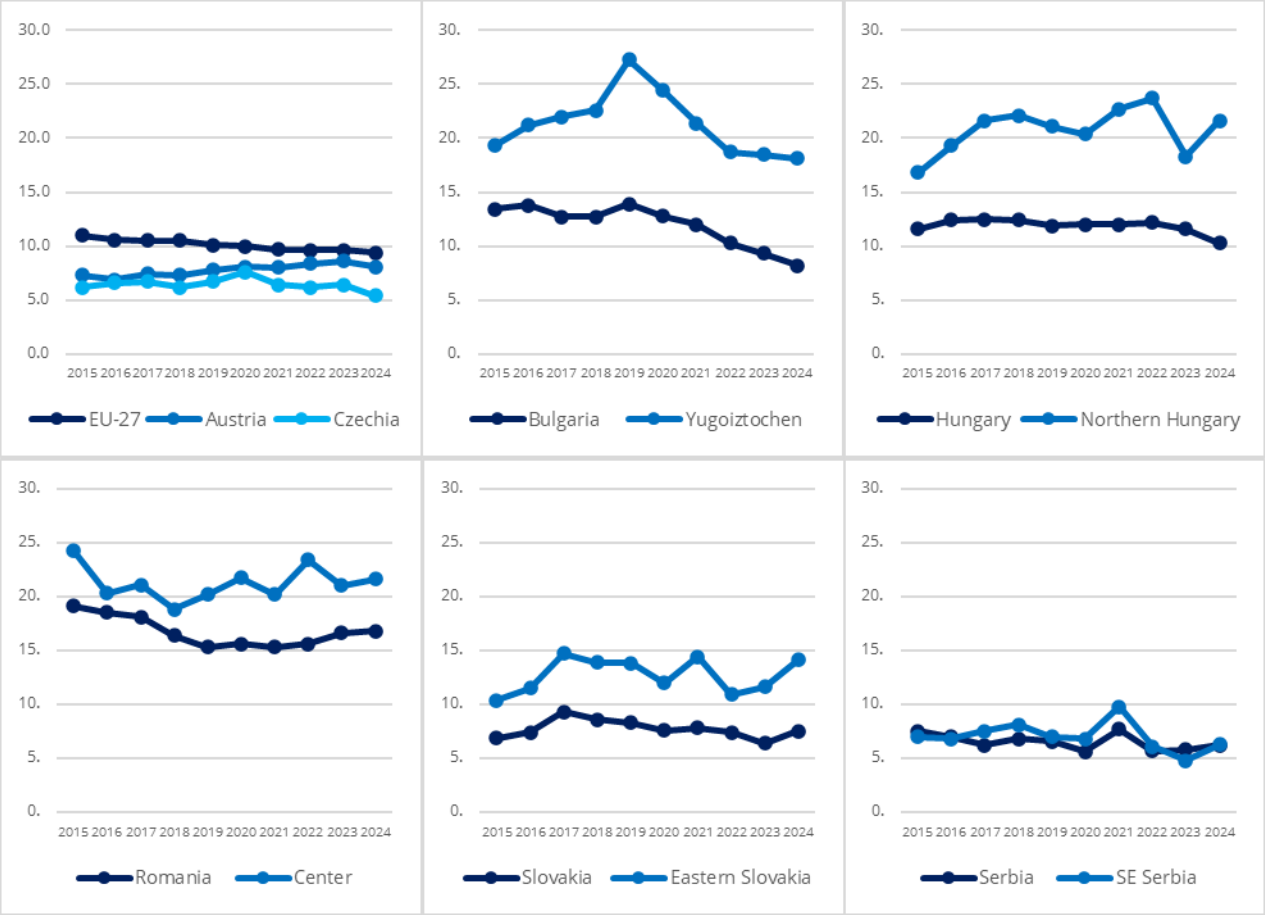
## 3.5.2. Education and training outcomes

Early Leavers from Education and Training (ELET) is an important education policy indicator in the European Union. As outlined in the Methodology chapter, it measures the share of young people aged 18–24 with at most primary education who did not participate in any training in the four weeks before the measurement (Eurostat, 2025c). The EU education framework has set a target to reduce the share of early school-leaving to below 9%. The EU-27 average is approaching this level, reflecting steady improvement over the past decade (see Figure 23). However, there are major differences among the countries included in this analysis. The data for the **Czech Republic**, **Serbia**, **Austria**, and **Slovakia** show a positive trend as these countries have remained below the EU average throughout. These countries show outstanding results for 2024. **Bulgaria** has shown a major improvement in recent years, with its ELET value also falling below the EU average in 2024. **Hungary** also improved in 2024, although this value remains above the EU average. **Romania's** ELET values are well above the EU average. Although the situation has improved compared to 2015, the trend over the past five years has been stagnant or slightly deteriorating.

Regional analysis reveals regional disparities more clearly. Across all regions examined, the ELET value falls below the national average by varying margins. The largest gap is in **Hungary**. While the national average is improving, the regional ELET rate is more than double the national average. The situation is similar in **Bulgaria**, where the national ELET rate shows a clear downward trend, yet the regional value remains consistently high. Regional ELET rates are highest in the **Romanian** region, but the difference is minor compared to national data, because the national level is also fundamentally high. The difference between national and regional values is also smaller in **Slovakia**, though it seems to have been increasing in recent years. The **Serbian** region is almost entirely in line with the national average and was even better than it was in 2023. This suggests relatively stable educational outcomes in this context. The regional analysis highlights substantial internal inequalities within countries.

According to the **Ukrainian** country report, reducing ELET is a strategic goal, yet young people's educational trajectories remain fragile. The decline in the number of students entering higher education between 2021 and 2024 suggests that some young people are not continuing their studies after secondary school. The war has exacerbated these trends: increased migration among young people, disrupted educational pathways, and limited access in rural areas heighten the risk of early school leaving, particularly among vulnerable groups. The Ukrainian region broadly follows the national pattern, but its younger demographic structure and the development of educational infrastructure may mitigate the risk of ELET. Nevertheless, the acceleration of youth emigration since the war and difficulties in maintaining participation in higher education indicate increased vulnerability, particularly in rural areas where training opportunities are more limited.

***Figure 23. Early leavers from education and training at the national and regional levels (2015-2024)** (%)*




*Source: Eurostat [edat_lfse_16__custom_19983786]*

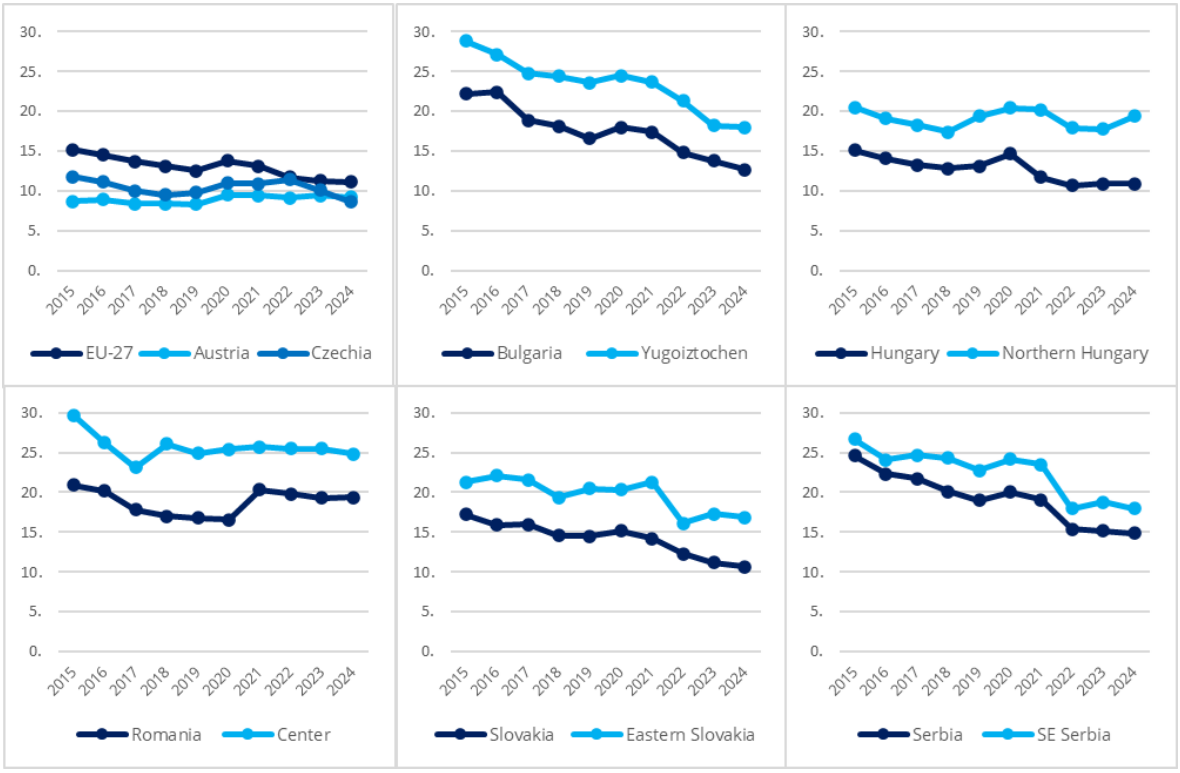
The **NEET rate** is an essential indicator of educational outcomes. It measures the proportion of young people not in education, training, or employment. The indicator reflects not only how well the education system retains young people but also how well it prepares them for entry into the labour market. The EU framework has set a target of 9%, which, despite the downward trend, has not yet been achieved across the EU (see Figure 24). Over the past decade, the EU-27 average has shown a clear downward trend, although the rate of decline has slowed in recent years. Among the countries examined, the **Czech Republic** and **Austria** consistently record the lowest NEET rates for the 15–29 age group, with both countries remaining well below the EU average throughout the period. In the **Czech Republic**, the value was slightly higher at the beginning of the period examined. Still, the decline was more pronounced, resulting in the lowest NEET rate among the countries examined. **Hungary** and **Slovakia** also recorded values below the EU average, reflecting a sustained downward trend. **Bulgaria** and **Serbia's** NEET values remain consistently above the EU average. Both countries show substantial improvement, with a decline of nearly 10 percentage points over the past decade. Nevertheless, according to the latest data, they are still

above the EU average. **Romania** has the highest NEET rate, with a positive trend interrupted by the COVID-19 pandemic, and its adverse effects on the NEET indicator have not yet been reversed.

Overall, Central European countries (**Austria**, the **Czech Republic**, **Slovakia**, and **Hungary**) tend to have lower NEET rates and generally improving trends. By contrast, Southeast European countries (**Bulgaria**, **Romania**, and **Serbia**) are characterised by structurally higher NEET rates.

Regional analysis shows that all regions are below the national average, though there are significant differences between them. Despite a downward trend, the **Romanian** region continues to record the highest NEET values among the regions analysed. However, the decline is not yet substantial. The next group comprises the **Hungarian**, **Bulgarian**, and **Serbian** regions, which also have high NEET rates. The **Hungarian** region shows one of the most striking internal differences. The NEET rate is consistently above the national average, and the improving trend is interrupted by periods of deterioration. In contrast, the **Bulgarian** and **Serbian** regions are showing sustained improvement, but the region as a whole remains lagging. The **Slovak** region is showing a considerable decline, but it is still well above the national average

***Figure 24. Young persons (15-29) neither in employment nor in education and training at the national and regional levels (2015-2024) (%)***




*Source: Eurostat [edat_lfse_22__custom_19990368]*

According to the partner country report, integrating young people into **Ukraine**'s labour market faces serious challenges: unemployment and NEET rates are high, indicating structural difficulties in the transition from education to work. The war has further exacerbated the situation through

labour force attrition, migration, and low labour market confidence among young people. In the Ivano-Frankivsk region, the risk of NEETs is compounded by poor labour-market absorption of skilled young people and by the migration of rural youth. Unemployment among recent graduates, together with the psychological and economic uncertainties associated with the war, further hampers successful labour market entry.

Overall, none of the regions is close to the EU average, suggesting that these areas are structurally disadvantaged, with educational and labour market integration remaining a persistent challenge. In the pilot areas, educational outcomes reflect lower shares of tertiary graduates and higher shares of early school leavers and NEETs relative to national and EU averages.

In **Bulgaria**, the predominance of lower levels of education and persistently high early school-leaving rates in the Yugoiztochen region limit young people's long-term labour market prospects.

In **Hungary**, particularly in Tállya and its wider environment, a significant proportion of young people leave the education system with no more than lower or upper secondary education. Higher education attainment is relatively low, while the NEET rate, especially at the local level, may exceed the regional average, reflecting structural economic constraints.

In Harghita County, **Romania**, the predominance of technological and vocational training and higher dropout rates mean that a considerable proportion of young people leave the education system with lower qualifications. The risk of early school leaving is particularly high at the secondary level, further reducing learning and employment opportunities.

In **Slovakia**, the Prešov region has one of the lowest rates of higher education attainment in eastern Slovakia. The NEET rate exceeds both the regional and national averages, particularly among young men, a pattern explained by limited economic opportunities and weak labour-market transitions.

In **Ukraine**, the Ivano-Frankivsk community has better overall educational outcomes than many other regions, with high rates of tertiary education and doctoral enrolment. At the same time, the risk of early school leaving is rising nationally, particularly in war-affected and rural areas, where educational disengagement and interruptions in learning are more common.

In **Serbia**, educational outcomes in the Nišava district differ from the national average, with higher rates of early school leaving and NEETs. A major proportion of young people leave education with low or intermediate qualifications, while the labour market's limited absorption capacity weakens the transition from education to work.

Overall, the analysis shows that although participation in education remains relatively high at the primary and lower secondary levels in most of the countries examined, there are substantial regional disparities in upper secondary participation, dropout rates, and transitions from education to the labour market. Regional data consistently provide a more nuanced picture than national averages, particularly for early school leaving and NEET rates, pointing to underlying structural disparities across regions.

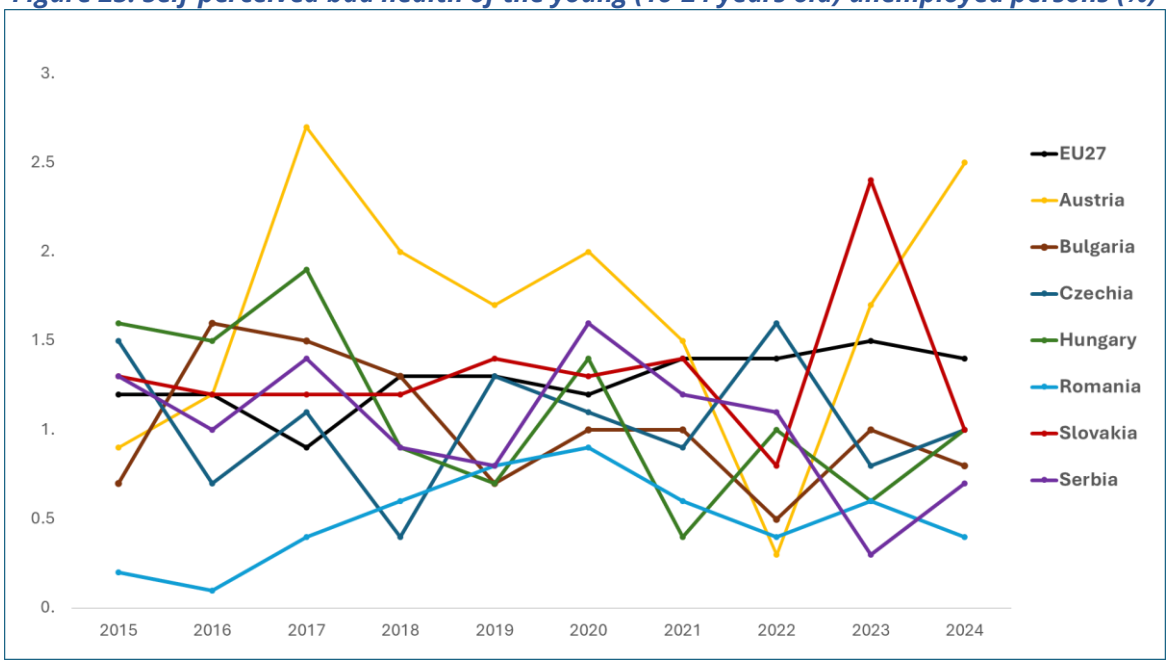
These problems are particularly acute in the pilot areas: demographic decline, economic constraints, limited educational opportunities, and, in Ukraine, the war situation. Together, these factors increase the risk of educational disruption and labour market exclusion. This suggests that regional differences in educational participation and outcomes are closely linked to young people's health, financial circumstances, and social vulnerability, and will be discussed in more detail in the following sections of this chapter. These findings are particularly relevant for the project's focus on vulnerable young people, as they highlight how territorial disparities in education contribute to unequal labour market opportunities.

# 3.6. Health, poverty and social exclusion

## 3.6.1. Health issues

The current section describes the general trends regarding the perceived health status of the countries and pilot areas. According to the Eurostat definition the self-perceived health is "the concept is operationalized by a question on how a person perceives his/her health in general using one of the answer categories very good/ good/ fair/ bad/ very bad" (Eurostat, 2024).

***Figure 25. Self-perceived bad health of the young (16-24 years old) unemployed persons (%)***




*Source: Eurostat [hlth_silc]*

Among young people aged 16–29 in **Bulgaria**, self-perceived bad health remains low overall. In 2024, only 0.5% of young people reported bad health, but the situation worsens for vulnerable groups: the rate rises to 0.8% among youth who are not employed and reaches 1.0% among those with low educational attainment (ISCED 0–2). Even though these shares are small, they consistently show that labour-market exclusion and low education are linked to poorer perceived health.

Young people in **Czechia** aged 16–29 generally report high perceived health. For unemployed youth in this period (2015–2024), self-perceived health tends to be lower than for employed peers, with a higher share rating their health as fair rather than very good or good.

In **Hungary**, the percentage of young people (aged 16–29) who perceive their health as "bad" or "very bad" remains generally low, typically staying below 1%, which is consistent with broader European trends for this age group. However, a distinct disparity exists based on employment

status: unemployed youth in **Hungary** report higher rates of poor health compared to their employed peers, a gap that often correlates with lower educational attainment. While specific annual fluctuations for the 16–29 unemployed cohort show some variability, the overall health perception among **Hungarian** youth has remained relatively stable over the last decade.

Unemployed young people in **Austria** over this period tend to report lower shares of "very good/good" health compared with employed youth, consistent with EU-wide patterns of health disadvantage linked to unemployment.

Between 2015 and 2024, the self-perceived bad health of young **Romanians** (ages 16-24) remained low, slightly improving by the end of the period. However, rates were consistently higher for unemployed youth. This disparity was most significant among the least educated young people, whose reported bad health was often double the general youth average, peaking in 2020 before declining.

Self-perceived health issues in **Serbia** show strong socio-economic and demographic patterns. Absence from work due to health problems follows similar trends, affecting women, older workers and the lower-educated more frequently, highlighting the need for targeted health policies and workplace support.

During the 2015–2024 period, evidence from EU-SILC microdata and European public health literature consistently shows that unemployed young people aged 16–29 in **Slovakia** report poorer self-perceived health than their employed counterparts, even though overall youth health remains relatively good. Across these years, unemployment among youth is associated with a higher likelihood of reporting "fair" rather than "very good/good" health, particularly among those with lower educational attainment. Research for this period also indicates emerging functional limitations and mental-health–related problems among unemployed youth, which can hinder labour-market entry and increase the risk of long-term health and employment scarring.

Health indicators in **Ukraine** have experienced significant deterioration in recent years, influenced by long-term underfunding and the impact of the war. According to WHO and national statistical updates, the prevalence of mental-health disorders has increased by more than 30% since 2022, driven by chronic stress, displacement and trauma exposure. Access to healthcare services has become more uneven: over 1,200 medical facilities have been damaged or destroyed, reducing territorial coverage of primary and specialised care. Electricity shortages and disrupted supply chains have resulted in a measurable decline in preventive services, including vaccinations and routine check-ups. Life expectancy dropped by several years compared to pre-2020 levels, reflecting increased health system pressure and population-level vulnerability.

The analysis of the selected countries provides a comprehensive overview of the broader **EU** trends, which demonstrate a correlation between labour status and socio-economic conditions with subjective health, even among relatively healthy young populations.

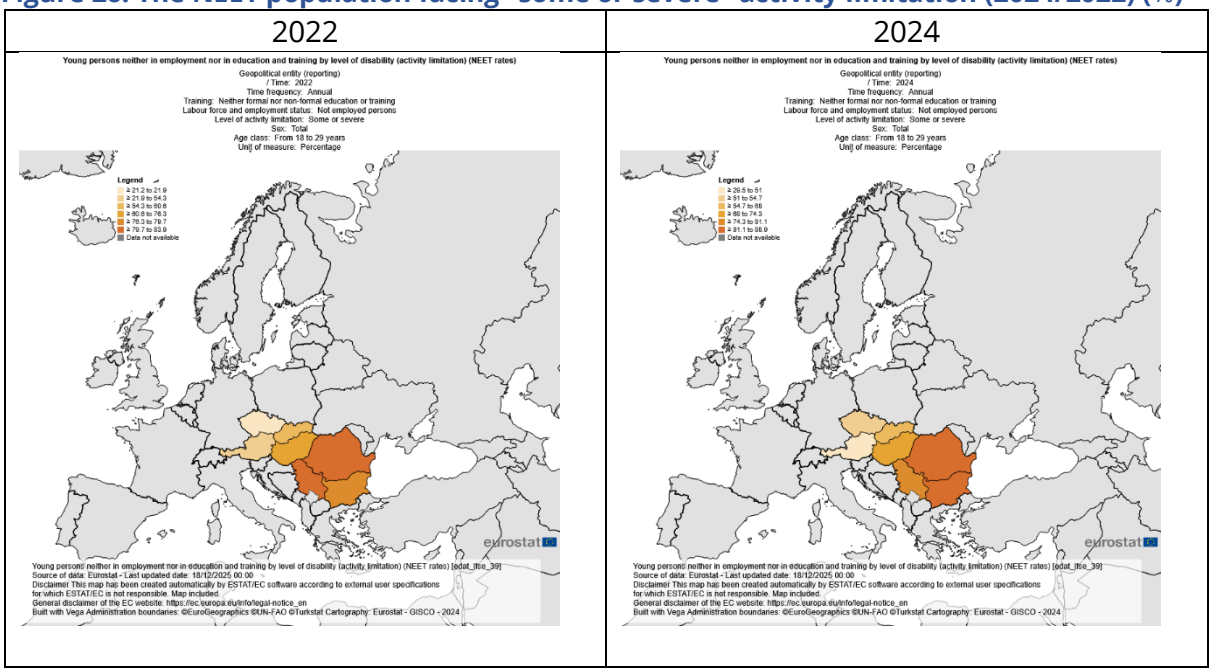
Concerning the NUTS II and pilot level area, it can be concluded that the results demonstrate convergence, as they exhibit a higher level of health-related problems than that observed in the country as a whole.

As evidenced in the country reports of **Hungary, Romania, Serbia, Slovakia** and **Ukraine**, a further variable exerting influence on the health status of the population is identified: namely, the settlement type. In urban areas, health facilities are much more accessible than in rural areas.

## 3.6.2. Disability - Access to education and training

Despite the evident disparities among the countries under scrutiny, it can be deduced that young people living with disabilities encounter significant impediments to accessing education and training when compared to their peers.

**Figure 26. The NEET population facing "some or severe" activity limitation (2024/2022) (%)**




*Source: Eurostat [edat_lfse_39]*

Drawing upon the Eurostat database (edat_lfse_39), it is evident that between 2022 and 2024, this phenomenon experienced a pronounced exacerbation. During this period, the proportion of the NEET population encountering "some or severe" activity limitations within the entire EU-27 framework escalated from 31.6% to 33%. Notably, within the countries under scrutiny, the situation is characterised by a marked severity. A notable exception is Austria, where the rate remains below the **EU-27** average. However, even in **Austria**, there was an 8-percentage point increase, a result comparable to that observed in **Bulgaria** and **Hungary**. In **Romania** and **Serbia**, there was a marginal decline in this field, while **Slovakia** maintained stability. In **Czechia** the above presented ratio increased by more than 100%, rising from 21.2% to 50%. In **Ukraine**, however, the ongoing

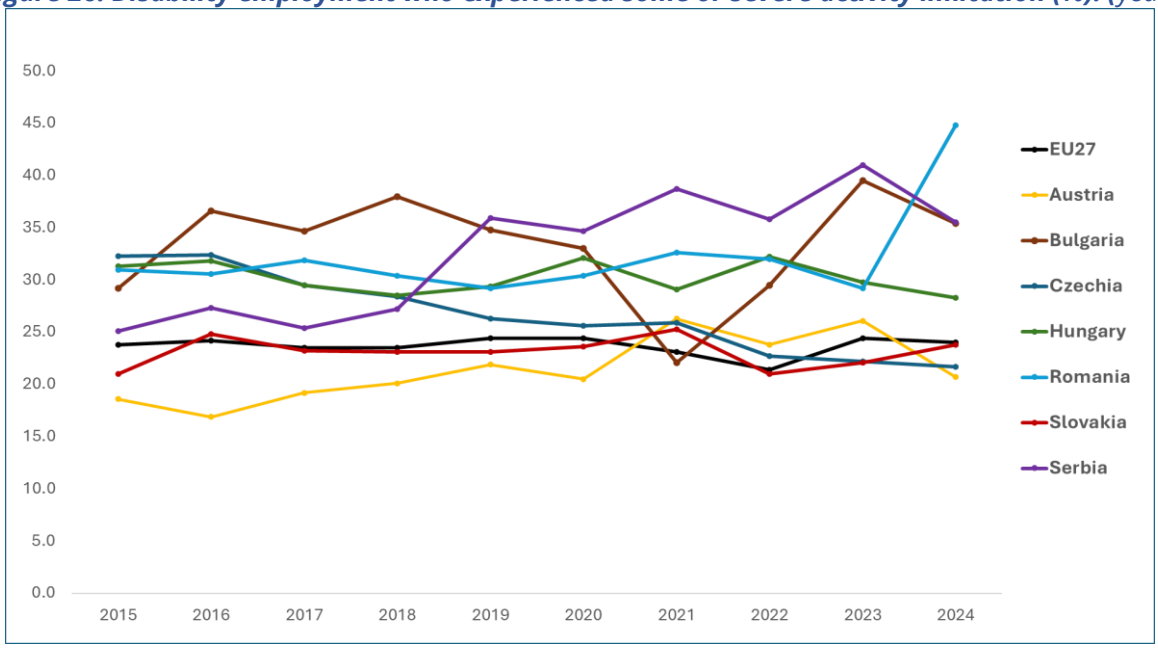
war has had a detrimental effect on the education levels and labour market participation of young people.

It is evident that the limitations encountered in NUTS II and pilot level areas are more pronounced than the national average. This observation suggests that interventions designed to address these issues could yield significant benefits for the population residing in these areas.

## 3.6.3. Disability - Access to the labour market

This chapter focuses on young people with activity limitations as a distinct dimension of vulnerability. Activity limitation is measured using the Global Activity Limitation Indicator (GALI), defined by Eurostat as the extent to which people are restricted in activities they would usually perform due to health problems lasting at least six months. The indicator distinguishes three categories: severely limited, limited but not severely, and not limited at all (Eurostat, 2024).

***Figure 26. Disability employment who experienced some or severe activity limitation (%). (year)***




*Source: Eurostat [hlth_dlm200]*

Young people with disabilities in **Bulgaria** face deep and persistent labour-market exclusion. The disability employment gap is large, reaching 35.4% for those with some or severe activity limitations, with little difference for women, indicating that disability is the main source of disadvantage. While recorded unemployment among people with disabilities is moderate (7.5%), this masks widespread inactivity: over half are available for work but not seeking it. Exclusion is most severe among low-educated young people aged 15–29 with activity limitations, whose labour-force participation falls to 14%, and to just 10.7% among young women, highlighting the compounding effects of disability and educational disadvantage.

In the **Czech Republic**, people with disabilities have access to legal protections, employment quotas, and state-supported measures such as vocational rehabilitation, job training, and subsidies for employers, but despite these frameworks, they continue to face lower employment rates and structural barriers, making full labour-market integration dependent on consistent implementation and broader employer engagement.

People with disabilities in **Hungary** face marked labour-market disadvantages compared with both the general population and the EU average. Although the disability employment gap has narrowed to 27% (vs. 24% in the EU), disabled people remain strongly underrepresented, accounting for only 2.7% of total employment (8.3% in the EU). Unemployment and long-term unemployment are higher than the EU average, while labour-force participation among people with disabilities is very low (38.5% vs. 55% in the EU). Educational attainment improves outcomes, but large employment gaps persist at all levels, indicating sustained disadvantage even among highly educated disabled workers.

In **Austria**, people with disabilities benefit from a relatively strong legal framework and active labour-market support measures, but they still face a clear employment gap compared to the non-disabled population, reflecting persistent barriers such as limited accessibility, lower educational attainment, and incomplete employer uptake of inclusion incentives.

Living with a disability in **Romania** entails substantial social and economic disadvantage. In 2024, Romania recorded the highest EU share of people reporting some or severe disability (44.8%). Labour-market exclusion is pronounced: 32.6% of all people with disabilities are outside the labour force, rising sharply to 71% among those with some or severe disabilities, placing Romania among the worst-performing EU countries in terms of inclusion.

People with disabilities in **Serbia** face persistent labour-market inequalities. A large employment gap remains, especially for those with severe activity limitations. Employment rates are low, and those in work are often concentrated in lower-skilled, informal or part-time jobs due to structural barriers, discrimination, and limited access to education, training and workplace accommodations.

In **Slovakia**, people with disabilities face a persistent employment gap, with women slightly more disadvantaged than men. Severe activity limitations are associated with very low employment and high inactivity, while those with mild limitations are better integrated. People with disabilities are concentrated in lower-skilled jobs, experience higher and longer-term unemployment, and face greater risks of underemployment and temporary work, especially at lower education levels. Higher education improves employment prospects, but access to training and workplace accommodations remains limited despite ongoing policy efforts to support vocational rehabilitation and supported employment.

In **Ukraine** employment rates among persons with disabilities remain low. According to national labour statistics, only around 15–20% of working-age persons with disabilities are formally employed, a figure that has not significantly improved over the past decade. The war further

reduced accessible employment options due to workplace destruction, relocation of enterprises, and reduced employer capacity to provide adaptations. Vocational rehabilitation and supported.

The following synthesis presents a clear overview of the common patterns and differences across the countries under discussion regarding young people and people with disabilities and labour-market access:

.Across all studied countries - **Bulgaria**, the **Czech Republic**, **Hungary**, **Austria**, **Romania**, **Serbia**, **Slovakia**, and **Ukraine** - young people with activity limitations consistently face lower employment rates than their peers without limitations. These gaps are particularly pronounced among those with severe limitations and represent a persistent structural challenge across the region.

Education appears to be a pivotal factor, because higher levels of educational attainment have been demonstrated to enhance employment prospects in a number of countries, including **Hungary**, **Slovakia** and **Bulgaria**. Conversely, low levels of education have been shown to exacerbate social exclusion.

The phenomenon of concentration in lower-skilled or unstable employment has been observed. In the context of employment, individuals with disabilities frequently occupy lower-skilled, part-time, informal, or temporary positions (**Serbia**, **Slovakia**, **Hungary**).

Despite the implementation of policies, structural barriers continue to persist. Protective measures encompass legal provisions, quotas, subsidies, and vocational rehabilitation programmes in **Austria**, the **Czech Republic**, **Hungary**, and **Slovakia**. However, labour-market integration remains deficient due to employer non-participation, accessibility challenges, and systemic discrimination.

Inactivity is a significant concern: A significant proportion of disabled individuals are not included in the unemployment statistics due to their lack of active job seeking (**Bulgaria**, **Romania**, **Hungary**, **Slovakia**), thus underscoring a hidden form of exclusion that extends beyond the scope of official unemployment figures.

Some country reports highlighted that women experience a marginal disadvantage in specific contexts. In the case of **Slovakia** and **Bulgaria**, women with disabilities demonstrate participation rates that are marginally lower, a phenomenon that is frequently exacerbated by social roles and care responsibilities.

Several differences between the two countries are worth noting.

**Romania** has been identified as a country with a particularly high level of inactivity among individuals living with severe disabilities (71%), which is among the highest rates recorded within the European Union.

In the context of **Bulgaria**, there is a notable exclusion of young, low-educated disabled individuals, with participation rates as low as 14%, including 10.7% among young women.

The following countries are to be considered: **Austria** and the **Czech Republic**. While there are stronger legal frameworks and support measures in place, the practical integration of these measures is still lagging.

Whilst there has been a narrowing of the employment gap in **Hungary**, the underrepresentation of disabled individuals within the workforce remains significant, with data indicating that a mere 2.7% of employed persons currently identify as disabled.

Based on the above describes situations, we can conclude that across Europe, individuals with disabilities encounter persistent challenges in achieving employment, including elevated levels of inactivity and a tendency to be concentrated in lower-skilled or unstable occupations. The influence of educational attainment and the severity of disability on these outcomes is significant. While legal frameworks and support programmes are in place in certain countries, the presence of structural barriers, discrimination, and inadequate employer engagement continues to impede meaningful labour-market inclusion.

The employment gap is particularly pronounced in Romania, Bulgaria, and Ukraine, the latter also facing the additional strain of ongoing conflict. In Ukraine, the war has further constrained employment opportunities for young people with activity limitations, compounding pre-existing structural barriers to labour market participation

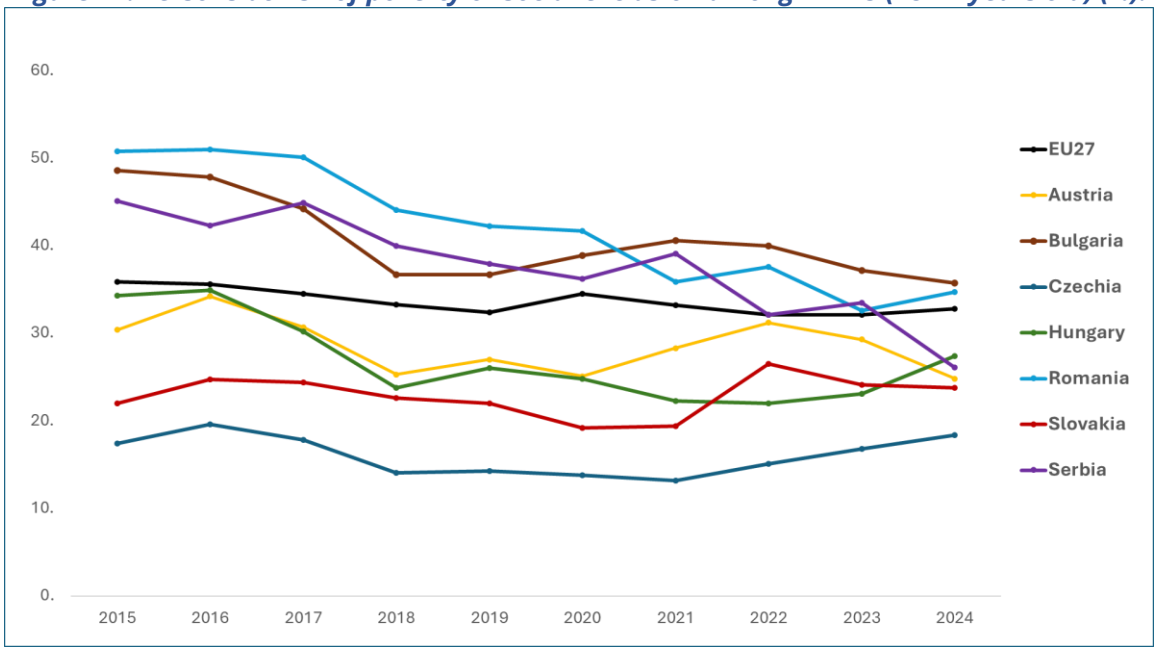
In **Serbia** and **Slovakia** individuals living with disabilities are predominantly employed in the informal sector and occupy roles that are less prestigious and lucrative. They encounter entrenched systemic barriers that impede their ability to fully participate in and contribute to the workforce.

In conclusion, it is imperative to reiterate our previous observations. It appears evident that the limitations encountered in NUTS II and pilot level areas are more pronounced than the national averages; therefore, the above-described situations at country level appears more pronounced in the areas which were chosen to conduct the pilots.

### 3.6.4. Risk of poverty

Social exclusion and poverty risk are measured using the AROPE indicator (At Risk of Poverty or Social Exclusion), which captures three overlapping dimensions: the risk of income poverty, severe material and social deprivation, and living in a (quasi-)jobless household with very low work intensity. A person is classified as AROPE if they meet at least one of these criteria, and each person is counted only once regardless of how many conditions apply (Eurostat, 2025).

*Figure 27. Persons at risk of poverty or social exclusion among NEETS (18-24 years old) (%).*




*Data source: Eurostat [ilc_peps02n]*

At the **EU-27** level, the share of NEET individuals at risk of poverty or social exclusion remained broadly stable throughout the period. Among the studied countries, however, the data reveal a clear convergence trend: the gap between the highest and lowest national rates narrowed from 33.4 percentage points in 2015 to 17.3 percentage points in 2024, indicating a gradual reduction in cross-country disparities.

At the country level, the analysis highlights the following patterns.

**Bulgaria** has seen a gradual decline in poverty and social exclusion risk, falling from 40.6% in 2015 to 32.2% in 2024, but levels remain high and uneven, with people who have low education and low work intensity still most affected.

Between 2015 and 2024, the **Czech Republic** kept a consistently low and stable poverty risk (around 9–10% of the population), well below the EU average, but NEETs – though a relatively small share (about 4.6% in 2024) – remain a vulnerable group whose lack of engagement in work or education can be linked to higher poverty exposure compared with the broader population

**Hungary's** overall poverty risk has declined since 2015 to about 20% in 2024, slightly below the EU average, but disparities persist. Risks have risen sharply for pensioners, the unemployed, rural residents, and the low-educated, while employed and highly educated groups have fared better, highlighting growing inequality among vulnerable groups despite overall improvement.

Over the analysed period, **Austria's** risk of poverty stayed fairly stable and moderate, with the at-risk-of-poverty rate around 13 - 14%, generally close to or slightly below the EU average and not showing major long-term swings. However, vulnerable groups such as children, single-parent households and unemployed people face higher poverty exposure, and a modest share of NEETs

about 8.7% of those aged 15 - 24 in 2024—represents a group that is more exposed to labour market exclusion and related income risks compared to the general population.

The general tendency in **Romania** was a decrease, in the past ten years, of the persons living within the risk of poverty. Beside this decrease, there are still huge gaps between different segment of the population, as gender, education, degree of urbanization and employment status all influences the value of this risk.

In **Serbia**, the risk of poverty and social exclusion varies widely by demographic and socio-economic factors, with higher risks among older adults, women, people with low education, and residents of rural areas compared to urban populations.

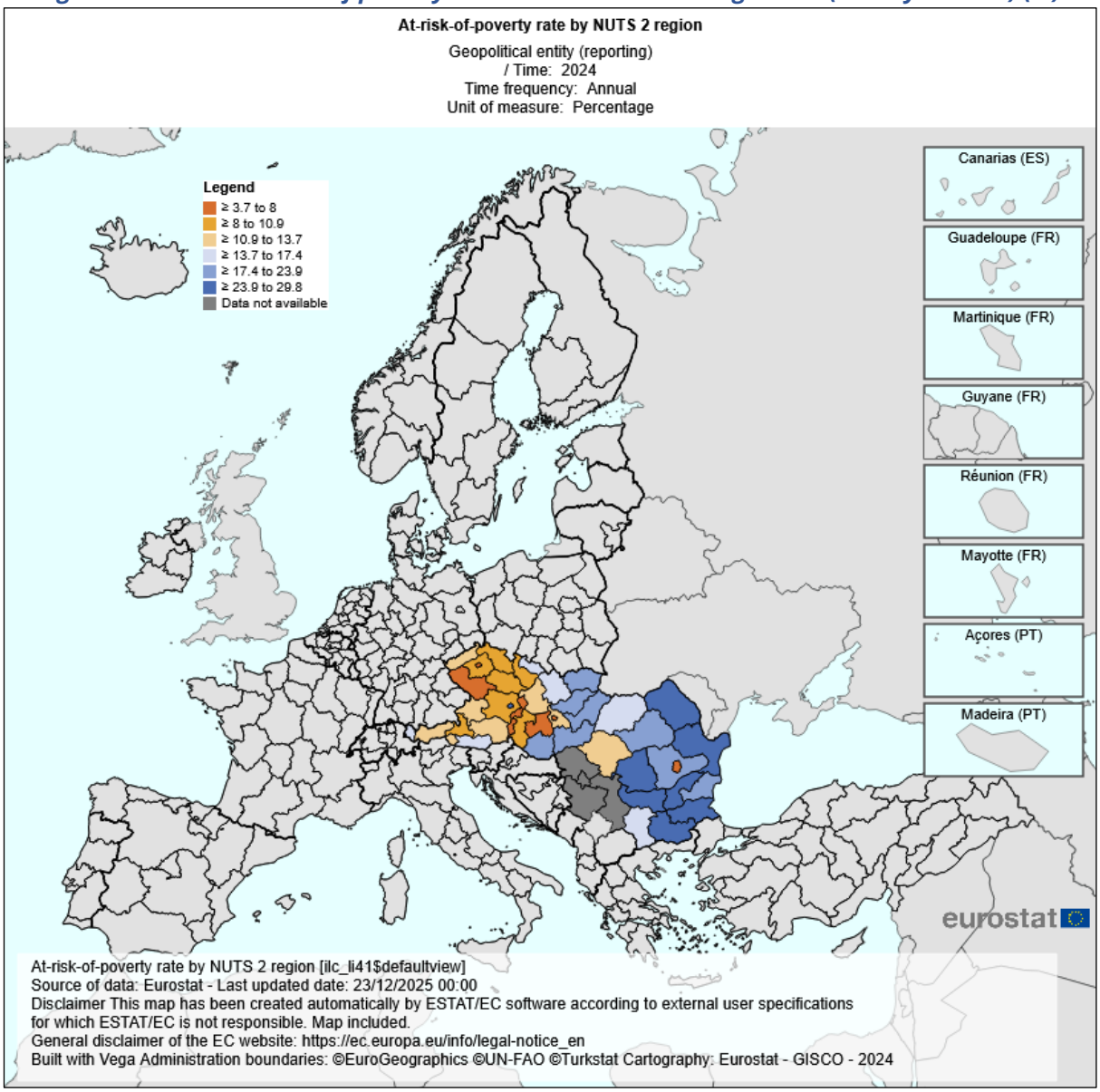
In **Slovakia**, poverty and social exclusion risk is highest among children, young adults, seniors, women, unemployed or inactive people, low-income and low-education households, with single-parent and large families particularly affected, while employment, higher education, and home ownership reduce risk.

Poverty in **Ukraine** surged after the full-scale invasion, rising from about 5% in 2020 to over 24–25% in 2022. Inflation, job losses, and higher living costs have hit households hard, especially families with children, single parents, older adults, and internally displaced people, while inequality has grown most in war-affected regions.

Across the countries analysed, certain vulnerable groups are found to be consistently exposed to elevated risks of poverty or social exclusion. The demographic groups encompassed by these categories include children, single-parent households, older adults, the unemployed, individuals with limited educational attainment, and rural populations. Higher education and active employment have been shown to serve as protective factors, reducing poverty risk. However, in several countries, including **Hungary**, **Slovakia**, **Serbia**, and **Romania**, women are often more exposed than men. Furthermore, young people who are not in employment, education, or training (NEETs) represent a particularly vulnerable group in both **Austria** and the **Czech Republic**.

Despite these commonalities, the countries differ significantly in overall poverty levels and trends. The **Czech Republic** and **Austria** have been observed to maintain relatively low and stable poverty rates, with figures standing at approximately 9–10% and 13–14%, respectively. In contrast, **Hungary** and **Ukraine** have been noted to have higher rates, with **Hungary** recording around 20% and **Ukraine** experiencing a surge from approximately 5% in 2020 to over 24–25% in 2022, a development that has been attributed to the war. Over the past decade, both **Bulgaria** and **Romania** have witnessed a gradual decline in poverty and social exclusion risk. However, the levels of these risks remain high, and significant disparities across social groups have been observed.

*Figure 28. Persons at risk of poverty or social exclusion among NEETS (18-24 years old) (%)*




*Source: Eurostat [ilc_li41]*

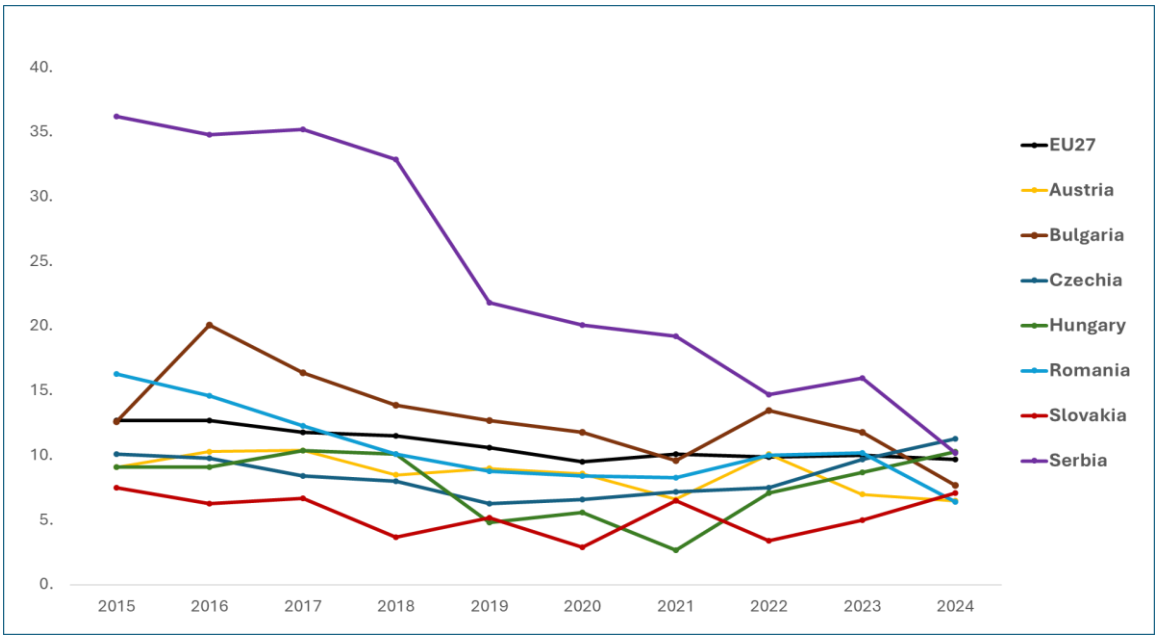
The impact of crises and structural factors is also subject to variation. **Ukraine**, in particular, has experienced a sharp increase in poverty due to war, inflation, job losses, and rising living costs. In contrast, other countries have seen more gradual changes primarily linked to structural factors such as education, employment, household type, and regional disparities. It is evident that countries such as **Hungary** and **Ukraine** are experiencing an increase in inequality between different regions or social groups. In contrast, the **Czech Republic** and **Austria** demonstrate a reduction in inequality and a more even distribution of poverty risk. The impact of these policies has been particularly acute on children and families in **Slovakia**, **Austria**, and **Ukraine**, while single-parent households continue to be a vulnerable group in several countries, including **Hungary**.

At the NUTS 2 and pilot area level, all participating regions consistently record higher at-risk-of-poverty rates than their respective national averages, mirroring the pattern observed in the AROPE indicators. Where local-level statistical data are unavailable, country reports compiled with input from local experts provide additional evidence of these elevated vulnerabilities.

## 3.6.5. Housing cost overburden rate

In accordance with the Eurostat definition *"the housing cost overburden rate is the percentage of the population living in households where the total housing costs ('net' of housing allowances) represent more than 40 % of disposable income ('net' of housing allowances)"*, where "housing costs refer to the monthly expenses associated with the right to live in a dwelling".

***Figure 29. Housing cost overburden rate among young (15-29 years old) persons (%)***




*Source: Eurostat [ilc_lvho07a]*

The housing cost overburden rate among young people aged 15–29 also shows a convergence trend over the analysed period, despite some country-level fluctuations. The most notable reduction was recorded in Serbia, which achieved a substantial decrease in this rate among its young population within a relatively short timeframe.

Across the countries analysed, young people consistently face higher housing cost pressures than the general population. Low-income households, particularly those in the lowest income quintile, are most affected, and single-person as well as single-parent households are particularly vulnerable. It is evident that individuals who are renting, particularly those who are paying market rents, and mortgage holders experience a greater burden than those who own their homes outright. Urban residents, particularly those residing in major cities such as **Bratislava**, **Prague**, and **Hungarian** urban centres, often face higher housing costs, while rural areas demonstrate

more variable trends. The extent of housing cost overburden in each country is strongly influenced by structural factors, including local income levels, housing availability and quality, and urbanisation trends.

Despite the prevalence of these common patterns, the countries differ in both the overall level of housing cost overburden and its evolution over the past decade. It is evident that **Austria** and the **Czech Republic** have both demonstrated a consistent and sustained capacity to maintain relatively stable housing cost overburden rates. This is despite the fact that members of the younger demographic and other vulnerable societal groups continue to experience elevated levels of exposure in comparison to the broader population. **Romania** and **Bulgaria** have experienced substantial improvements, with the housing cost overburden rate among young people and single-person households falling significantly between 2015 and 2024, particularly in rural areas. **Slovakia** has also witnessed a gradual improvement in this regard, attributable in part to the implementation of housing support policies. However, low-income families, young adults, and single-parent households continue to be the most affected demographic groups. Conversely, **Hungary** has witnessed an escalation in housing vulnerability, particularly since 2022, with low-income renters, single-person households, and urban residents encountering a marked increase in housing cost pressures. **Ukraine**, similarly affected by displacement and housing destruction, has experienced a substantial deterioration in housing affordability in recent years.

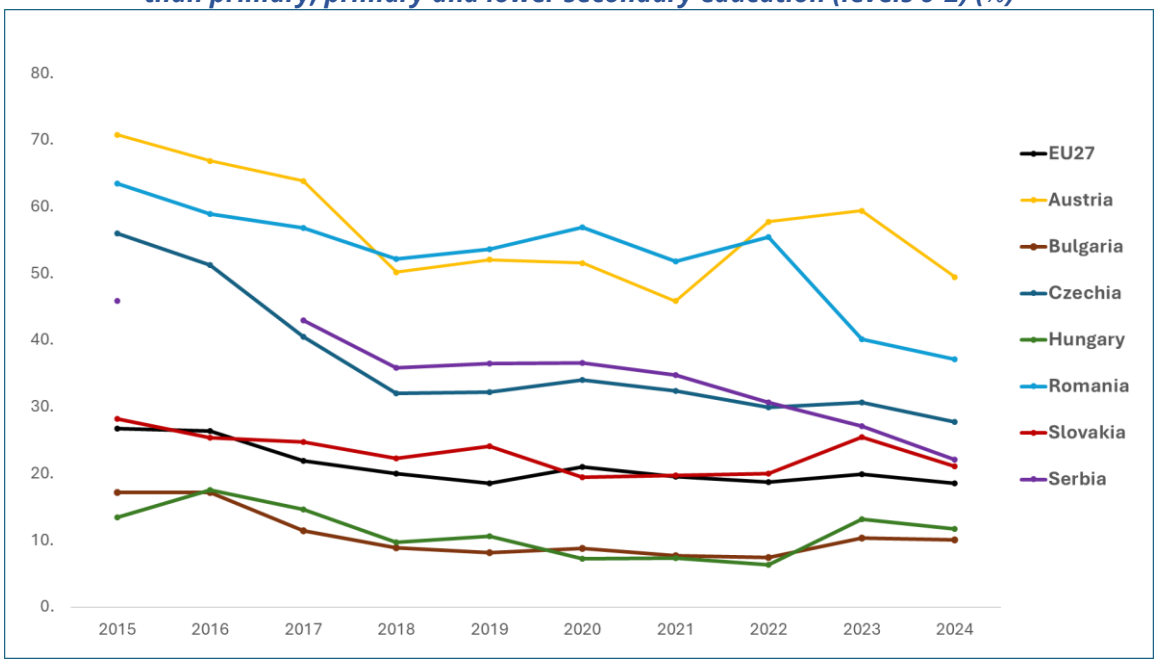
In summary, although housing cost overburden affects young people, low-income households, single-person households, single-parent households and renters more than other groups, the severity of the problem, trends over the past decade and effects of crises differ between countries. **Austria** and the **Czech Republic** have remained stable, **Serbia**, **Romania** and **Bulgaria** have shown significant improvements and **Hungary** and **Ukraine** have experienced pronounced increases in vulnerability.

As in previous cases, the areas selected for pilot implementation are disadvantaged results that the country specific ratios are higher in these areas than the countries average. In conclusion, the housing cost overburden ratio is higher in these areas, that at national level.

### 3.6.6. Material and social deprivation

Material deprivation refers to a state of enforced economic strain in which individuals are unable — rather than unwilling — to meet basic living standards. As measured by Eurostat, the material deprivation rate captures the inability to afford items considered necessary for an adequate life, including covering unexpected expenses, adequate home heating, durable goods such as a washing machine or telephone, and avoiding payment arrears on rent, utilities, or loans (Eurostat, 2025).

*Figure 30. Material and social deprivation rate among young (16-29 years old) persons with less than primary, primary and lower secondary education (levels 0-2) (%)*




*Source: Eurostat [ilc_mdsd03]*

Across the studied countries, material deprivation among young people shows a gradual declining and converging trend over the analysed period, though notable cross-country differences persist and are discussed below.

Country reports consistently highlight that young people with low educational attainment are significantly more exposed to material and social deprivation. Employment status is a strong determining factor, with unemployed or inactive young people facing considerably higher deprivation risks than those in work. Household composition further compounds these risks: children in single-parent households or those whose parents have low educational attainment are disproportionately affected. Rural areas consistently show worse outcomes than urban centres, reflecting limited access to services, employment, and infrastructure. Across all countries, severe deprivation remains concentrated among those combining multiple disadvantages — low income, low education, unemployment, and rural residence.

Despite these common patterns, countries differ considerably in terms of the level and evolution of deprivation. While **Austria** and **Romania** have maintained relatively high rates of youth deprivation (even if there was a constant decrease during the presented period), **Czechia** and **Serbia** have made substantial progress over the past decade, yet still shows high levels of deprivation among unemployed young people, those with low levels of education, and rural residents. **Hungary** and **Bulgaria** continue to experience high levels of deprivation among young people, particularly the unemployed and those with low levels of education, although gradual improvements have been observed over time. **Ukraine** has experienced a sharp increase in material and social deprivation in recent years due to conflict, displacement, and the destruction of housing and livelihoods. The severity of deprivation also varies; **Romania**, **Bulgaria** and

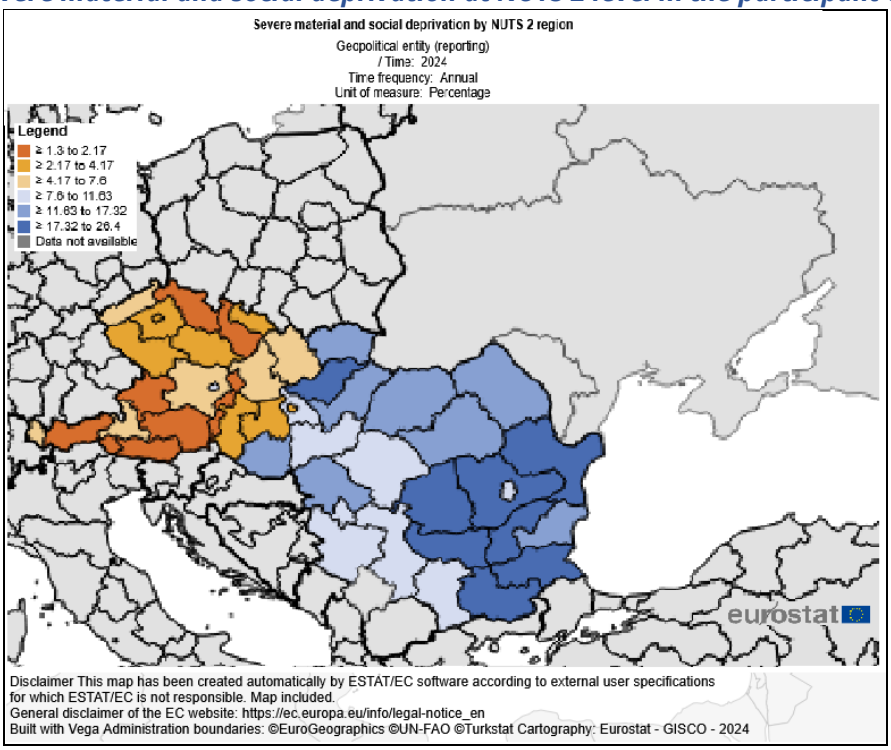
**Ukraine** report alarmingly high rates among vulnerable young people, while **Austria** and the **Czech Republic** remain among the lowest in the EU. Gender differences are present in some countries, such as **Slovakia**, where young women experience slightly higher levels of deprivation than men. However, this pattern is less pronounced in other countries.

In summary, while young, low-educated, unemployed and rural youth are universally the most at risk of material and social deprivation, the intensity of deprivation, the impact of crises and the trends observed over the past decade differ between countries.

All six countries – **Bulgaria**, **Hungary**, **Romania**, **Serbia**, **Slovakia** and **Ukraine** – which have proposed a pilot project, show significant regional disparities in material and social deprivation. Deprivation is generally distributed unevenly, with urban areas experiencing lower levels due to better access to services, education, and employment opportunities. Rural areas, small towns, and peripheral regions, however, face higher levels of deprivation.

Rural populations are particularly disadvantaged in all of these countries. In **Slovakia**, for instance, small towns and villages in eastern Slovakia report the highest levels of deprivation. In **Serbia**, meanwhile, rural areas surrounding **Niš** experience more severe material and social hardship than the urban centre. Similarly, rural counties and small villages in **Hungary** show persistent deprivation. In **Ukraine**, rural regions suffer from weak infrastructure, low wages, and limited access to essential services. **Romania** also indirectly highlights rural challenges, as seen in counties with lower average incomes, such as Harghita.

***Figure 31. Severe material and social deprivation at NUTS 2 level in the participant countries*** *(%)*




*Source: Eurostat [ilc_mdsd18]*

Another common feature is that material and social deprivation is multidimensional, extending beyond income. All countries recognise the importance of access to essential goods and services such as housing, education, healthcare and social participation. Key factors influencing deprivation include household composition, age, gender and employment status. For example, **Slovakia** emphasises the vulnerability of women, children from families where the parents have low levels of education, the unemployed, and older adults, while **Serbia** highlights that rural residents face higher risks due to limited access to services and infrastructure.

Most countries also report some degree of improvement over time, although progress varies. **Romania** has experienced a significant reduction in severe deprivation over the past decade; **Bulgaria** has noted gradual improvement since 2015; and **Hungary** has reported declining regional rates between 2015 and 2024, although deprivation remains above the national average. In contrast, **Ukraine** and **Slovakia** emphasise that structural challenges and regional inequalities maintain high levels of deprivation despite national improvements.

The countries differ considerably in terms of the availability and granularity of their data. **Romania** and **Slovakia**, for example, provide detailed multi-indicator data, tracking specific aspects of deprivation such as access to food, heating, household income, education, and social participation. **Serbia** also monitors multiple indicators, including age, sex, urbanisation and the mean number of deprivation items, although regional data is limited. In contrast, **Bulgaria** only reports a single general material and social deprivation rate, while **Ukraine** focuses on community-level observations and the impact of infrastructure destruction and conflict. **Hungary** combines regional and county-level data with multidimensional indicators, but acknowledges that data for small localities is limited.

The severity of deprivation varies substantially. **Bulgaria** shows the highest levels, with regional deprivation fluctuating between 34% and 40%. **Romania** and **Hungary** report lower levels, though these are still significant, particularly in rural and structurally disadvantaged areas. Rather than reporting exact percentages, **Slovakia** and **Serbia** highlight significant deprivation among specific vulnerable populations, while **Ukraine** emphasises chronic deprivation in frontline and rural regions due to economic collapse and infrastructure challenges.

The urban-rural dynamics in **Serbia**, **Slovakia** and **Hungary** are analysed in detail. In these countries, cities mitigate deprivation due to stronger access to employment, education and services. For instance, **Niš**, the largest city in southern **Serbia**, experiences lower levels of deprivation than the surrounding rural areas. Similarly, **Košice** and **Prešov** in **Slovakia** demonstrate comparable urban advantages. Rural disadvantage is particularly severe in **Hungary**, where small villages show much higher levels of deprivation than urban centres. This divide is noted to be larger than the EU average. In **Romania**, the differences between urban and rural areas are not discussed as explicitly, while **Bulgaria's** regional data do not distinguish between them.

The groups most affected by deprivation vary somewhat across countries. In **Slovakia**, for instance, it is women, children from low-educated families, unemployed individuals, and older adults who are most affected. In **Serbia** and **Hungary**, it is rural residents with limited access to services, low levels of education and unstable employment who are most affected. **Romania** highlights households facing unexpected financial problems and difficulty securing adequate nutrition and heating. **Ukraine** emphasises small communities, older adults and low-income families who experience social isolation and limited access to services, particularly in regions affected by conflict.

Finally, the causes of deprivation vary. In most countries, structural socioeconomic factors such as low income, high unemployment, limited access to services and household composition are the main drivers of deprivation. However, in **Ukraine**, conflict, infrastructure destruction and economic collapse are major contributors, resulting in severe regional disparities that are not seen in other countries.

In summary, all six countries exhibit regional disparities in material and social deprivation, with rural areas and structurally disadvantaged regions bearing the brunt of it. Deprivation is multidimensional, encompassing income, housing, education, employment, and social participation. While most countries report gradual improvement over time, structural and regional inequalities persist, leaving certain populations, such as the elderly, women, children from families where the parents are not well educated, and rural residents, especially vulnerable.

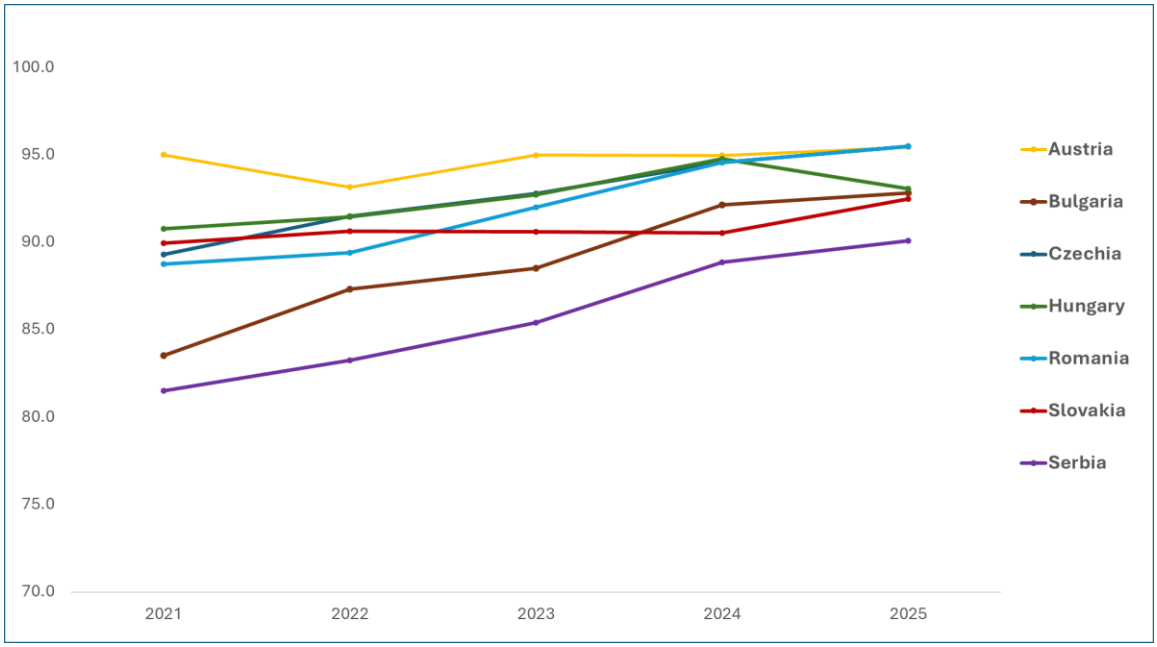
The main differences lie in the severity of deprivation, the availability of detailed data, the urban–rural divide, and contextual drivers, such as the war in **Ukraine** and entrenched rural disadvantage in **Hungary** and **Slovakia**. **Bulgaria** stands out for having the least detailed regional data, while **Romania** and **Slovakia** provide nuanced insights into multiple indicators.

# 3.7. Digital economy and society

## 3.7.1. Personal and household access

Access to digital infrastructure is a prerequisite for participation in an increasingly digitalised economy and society.

*Figure 32. Households with access to the internet at home (%)*




*Source: Eurostat [isoc_r_iacc_h]*

Across the countries considered, household internet access has become widespread, with most now approaching or exceeding 90% coverage at a national level. **Austria**, **Romania**, **Hungary**, **Slovakia**, the **Czech Republic**, **Bulgaria** and **Serbia** all demonstrate significant convergence towards high connectivity, primarily due to the expansion of broadband and the development of infrastructure, albeit late but efficient. A common trend is that urban areas consistently achieve near-universal access, while rural and peripheral regions tend to lag behind, albeit by a shrinking margin. In most countries, broadband, rather than basic connectivity, is now the main factor in digital inclusion.

**Romania** stands out for its very high coverage and early adoption of broadband; this pattern appears consistent even at a regional level, and is assumed to extend to counties such as **Harghita**. **Bulgaria** and **Serbia** have slightly lower national averages, but both demonstrate steady growth and regional convergence. The remaining gaps are largely explained by urban–rural divides, as seen in the **Yugoiztochen** region and rural parts of the **Nišava** district. Although **Slovakia** and the

**Czech Republic** have well-established infrastructure and high-quality broadband, they still exhibit persistent regional disparities, particularly in eastern **Slovakia** and rural districts, where slower technologies and affordability constraints are commonplace.

While **Hungary** mirrors the EU average for basic internet access, even in disadvantaged regions and small settlements such as **Tállya**, it differs in terms of the depth of digitalisation. Advanced smart technologies are far less common, particularly outside major urban centres. This highlights the distinction between countries in terms of access to and the effective use of digital tools. Although coverage gaps are narrowing, usage gaps related to income, age and education persist, particularly in rural communities.

Similar to **Eastern Slovakia** or rural **Hungary**, **Austria** fits this broader pattern: while household internet access is very high at a national level and broadband is widely available, regional and local disparities persist. Urban areas and lowland regions enjoy faster fibre-based connections, while remote Alpine and rural communities often rely on slower technologies and face higher costs. This means that the challenge lies less in access itself and more in connection quality and effective digital use at a local level.

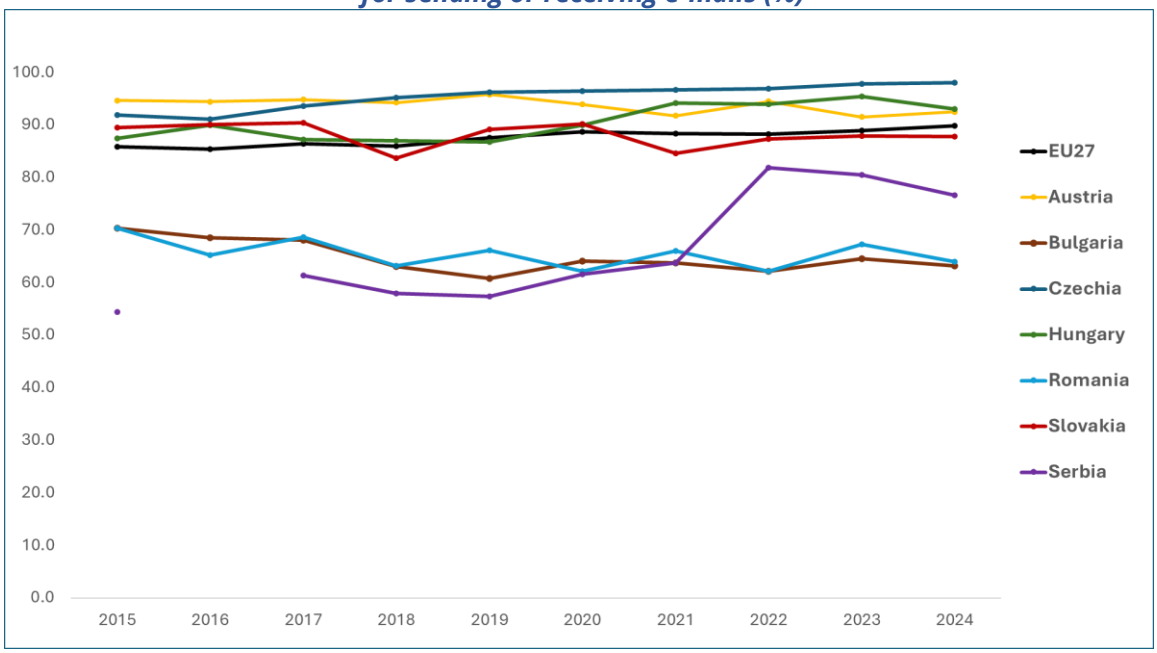
**Ukraine** represents a clear contrast. Although access levels were improving pre-war and mobile coverage was high, the war has severely disrupted infrastructure, creating sharp regional and local inequalities. Urban–rural divides are exacerbated by conflict-related damage, power outages, and displacement, leaving small communities particularly vulnerable and dependent on mobile-only or shared access.

Overall, countries are moving towards near-universal household internet access, but regional and local circumstances continue to be important. Urban centres benefit from reliable, high-speed broadband that supports education, e-government, and remote working. In contrast, small towns and rural communities — such as those in eastern **Slovakia**, rural **Serbia**, and villages in **Hungary** — often face slower connections, affordability barriers, and lower uptake of advanced digital technologies. Therefore, today's main differences lie less in whether households are connected and more in how well, how quickly and to what extent connectivity enables full digital participation at a regional and local level.

## 3.7.2. Information society

Even if internet infrastructure is in place, this does not necessarily mean that inhabitants can access the services it provides. In this chapter, we will identify the level of internet usage knowledge in the participating countries. The main focus will be on the communication skills necessary for sending or receiving information online.

*Figure 33. Young (16-29 years old) individuals who used the internet for sending or receiving e-mails (%)*




*Source: Eurostat [isoc_ci_ac_i]*

A common pattern emerges across the countries considered: digital infrastructure is increasingly well developed, but actual internet use, especially for communication, education and advanced digital activities, varies significantly by country, region and local context. Austria is at the high end of this spectrum. Internet usage for communication, including email, is deeply embedded in everyday life, particularly among young people (aged 16–29), whose usage rates are close to saturation and among the highest in Europe. Regional differences exist, but they are relatively modest, with even rural areas benefiting from strong connectivity and high digital literacy.

**Romania**, however, shows a contrasting situation where infrastructure availability does not automatically translate into widespread use. Nationally, internet usage remains low, even among young people, though some regions perform far better, reaching levels comparable to those in Western Europe. This suggests significant regional disparities, likely driven by urban concentration and socio-economic factors. At a local level, such as in **Harghita** County, usage appears much closer to the regional average than the national average, highlighting the importance of local development paths.

**Bulgaria** occupies an intermediate position. Significant reductions in national and regional gaps have been achieved through rapid improvements in household internet and broadband access, with regions such as **Yugoiztochen** closely tracking national trends. However, as in **Romania**, infrastructure growth has outpaced the development of digital skills and usage, particularly among vulnerable groups and in smaller settlements, where access does not necessarily lead to active participation in the information society.

**Serbia**, **Slovakia**, **Hungary**, the **Czech Republic** and **Ukraine** all have one thing in common: a strong urban presence as digital hubs. Cities such as **Niš**, **Bratislava**, **Budapest** and **Prague**, as well as major **Ukrainian** urban regions, demonstrate higher levels of internet usage for education, communication, e-government and commerce. Rural and peripheral areas tend to lag behind due to lower digital literacy, affordability constraints, and limited institutional capacity. While **Hungary** and the **Czech Republic** demonstrate relatively high youth engagement in education-related internet use, socio-economic inequalities remain pronounced, particularly at a local level in disadvantaged municipalities such as **Tállya**.

**Ukraine** stands apart due to conflict-related disruptions. Although digitalisation, especially in e-government and online communication, was advanced pre-war, regional and community-level inequalities have widened sharply since 2022. Small and rural communities, particularly in frontline and energy-affected regions, face unstable connectivity and reduced access to digital services, which reinforces existing divides.

Overall, the key similarity across countries is that young people are the most frequent internet users, particularly for communication and learning purposes. The main differences lie not in basic access, but in how evenly digital practices are embedded across regions and small communities. While **Austria** and, to a lesser extent, the **Czech Republic** demonstrate relatively balanced territorial integration, **Romania**, **Bulgaria**, **Hungary**, **Serbia** and **Ukraine** exhibit stronger regional and local contrasts, where the benefits of digital connectivity are increasingly determined by place of residence.

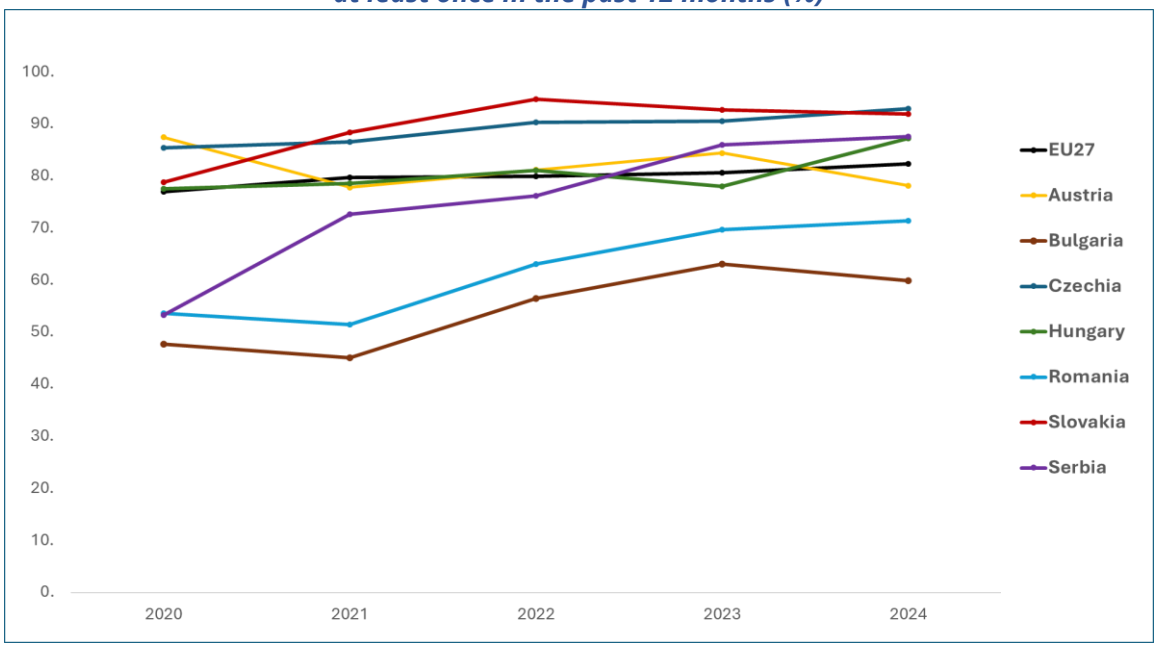
### 3.7.3. Digital economy

This metric assesses the share of individuals engaging in online shopping, accounting for both the timing and regularity of their e-commerce transactions. It underscores the depth of digital consumer involvement, which has become a cornerstone of modern economic and social integration.

Across the countries examined, online purchasing by individuals – especially young people – has expanded significantly, but the intensity and territorial balance of e-commerce vary widely. Austria represents the most advanced model: online shopping among young people (16-29) is nearly universal and deeply embedded in everyday consumption. Regional differences exist but are limited, as even smaller and rural areas benefit from high digital literacy, reliable infrastructure, and mature logistics systems.

**Romania** shows a more uneven pattern. While a majority of the population has engaged in online shopping, uptake is clearly higher among young people, indicating a generational divide. At the same time, enterprise e-commerce remains modest and relatively uniform across regions, suggesting that regional convergence in business digitalisation is occurring at a low level, with limited spillover into local economies. Counties such as **Harghita** are likely closer to regional than national averages, highlighting the role of local socio-economic context.

*Figure 34. Young (16-29 years old) individuals who used the internet for purchasing goods online at least once in the past 12 months (%)*




*Source: Eurostat [isoc_ec_ib20]*

**Bulgaria** and **Serbia** illustrate cases where infrastructure expansion has not yet translated into strong e-commerce participation. In **Bulgaria**, limited data point to gradual growth, but overall e-commerce adoption remains below the EU average and uneven across sectors and firm sizes. In **Serbia**, high household connectivity contrasts with persistent regional inequalities: urban centres such as **Niš** are better positioned to engage in online consumption and digital business, while rural municipalities face structural barriers linked to skills, income, and service availability.

**Serbia**, **Slovakia**, **Hungary**, the **Czech Republic** and **Ukraine** all have one thing in common: a strong urban presence as digital hubs. Cities such as **Niš**, **Bratislava**, **Budapest** and **Prague**, as well as major **Ukrainian** urban regions, demonstrate higher levels of internet usage for education, communication, e-government and commerce. Rural and peripheral areas tend to lag behind due to lower digital literacy, affordability constraints, and limited institutional capacity. While **Hungary** and the **Czech Republic** demonstrate relatively high youth engagement in education-related internet use, socio-economic inequalities remain pronounced, particularly at a local level in disadvantaged municipalities such as **Tállya**.

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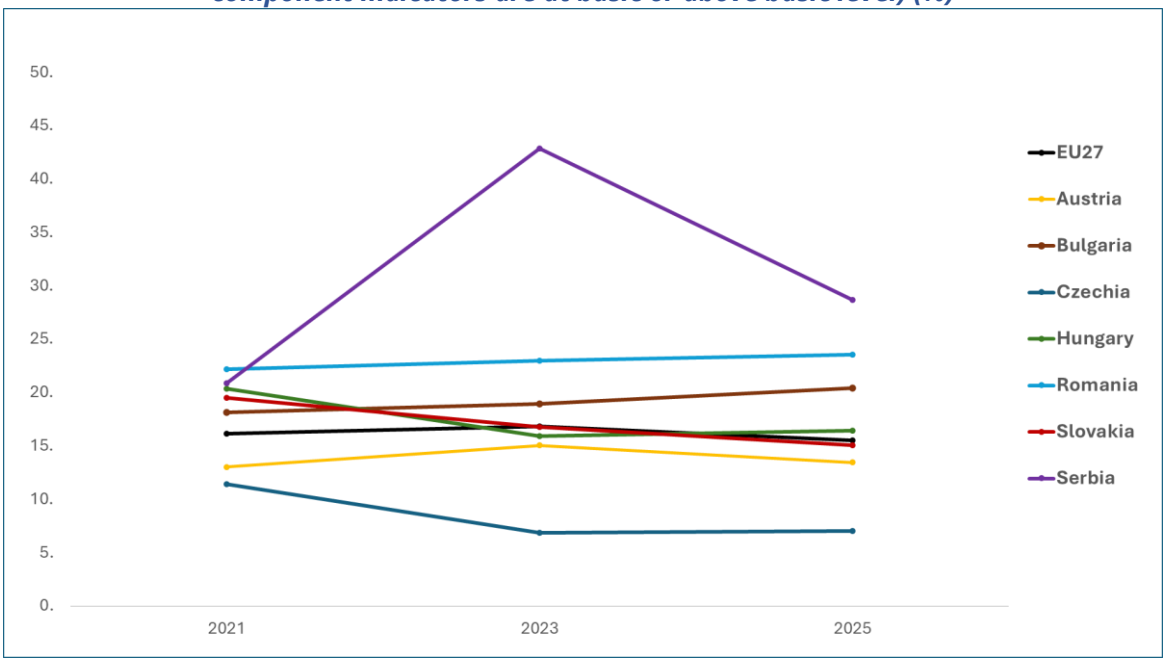
## 3.7.4. Personal digital skills

Personal digital skills are operationalised in the EU around five main skill areas: information and data literacy, communication and collaboration, digital content creation, safety, and problem-solving (Eurostat, ESS survey). These skills are essential in the modern, digitalised era and, consequently, lacking most of them will inevitably lead to weak integration not only into the labour market but also to reduced participation in social life. This chapter is dedicated to reviewing the situation from this perspective in the participating countries.

***Figure 35. Young (16-29 years old) individuals with low overall digital skills (four out of five component indicators are at basic or above basic level) (%)***




*Source: Eurostat [isoc_sk_dskl_i21]*

Across **Austria**, **Romania**, **Bulgaria**, **Serbia**, **Slovakia**, **Hungary**, the **Czech Republic**, and **Ukraine**, young people (16–29) generally demonstrate stronger digital skills than older adults, while urban areas outperform rural regions due to better infrastructure, education, and labour-market demand for ICT competencies. Basic digital skills—such as online communication, browsing, and email use—are increasingly widespread, but advanced competencies like

programming, data analysis, and digital problem-solving remain below EU averages in most countries.

In **Austria**, young people have mostly basic or above-basic skills, but advanced competencies are limited. **Romania** and **Bulgaria** show strong internet access, yet effective use of digital tools lags, with **Bulgaria** improving in basic engagement but still facing gaps in skill-intensive tasks. In **Serbia**, nearly half the population lacks basic digital skills, with rural areas and older adults most affected, though urban hubs like **Niš** show higher competence. **Slovakia** demonstrates near-universal basic skills among youth, but older and rural populations lag, particularly in **Eastern Slovakia** and **Prešov**. **Hungary** performs slightly above the EU average overall, with persistent local disparities in rural or economically disadvantaged areas. The **Czech Republic** shows strong basic digital literacy, with advanced skills concentrated among young and educated citizens.

**Ukraine** presents a unique case: 53% of the population has basic digital skills, but only 23% have above-basic skills. War-driven reliance on digital tools has highlighted deficiencies, particularly among older adults, rural populations, and those with lower education. Urban areas maintain higher skill levels, while war-affected and rural regions face disruptions in education and infrastructure, widening regional gaps.

Overall, common patterns include generational and urban–rural divides, widespread basic literacy, and limited advanced skills. Differences are shaped by infrastructure, education, economic development, and, in **Ukraine's** case, conflict-related disruptions. Urban youth hubs drive progress, while older adults, rural populations, and disadvantaged groups remain at risk of digital exclusion across all countries.

# 4. From Structural Challenges to Intervention Rationale

The preceding chapters documented, in considerable detail, the socio-economic, demographic, educational, and labour-market conditions shaping young people's lives across the six partner countries and their respective pilot territories. This chapter draws on those findings to construct an analytical bridge between the evidence base and the design logic of the six pilot interventions. Rather than summarising statistics already presented, it reads the structural analysis through the lens of intervention: what do the patterns of disadvantage tell us about why these particular pilots were designed, and why a cooperative, place-based approach is the appropriate response?
The chapter is organised in four steps. Section 4.1 identifies the cross-country patterns and regional regularities that emerge from the structural analysis. Section 4.2 organises the most significant barriers into a typology relevant to intervention design. Section 4.3 maps the fit between each country's dominant structural challenges and the logic of its pilot. Section 4.4, finally, articulates the shared rationale — grounded in the project's own objectives — that justifies a cooperative, integrated, and territory-sensitive approach across all six interventions.

## 4.1. Cross-country patterns of youth vulnerability

Despite significant national differences in economic development, institutional capacity, and historical trajectories, the structural analysis reveals a set of recurring patterns that cut across country boundaries. These shared features are not incidental: they reflect common structural processes shaping youth transitions in the Danube region and beyond.

The first and most consistent pattern is **the divergence between national averages and regional realities**. In virtually every country examined, macro-level indicators — whether NEET rates, early leaving from education and training (ELET), risk of poverty, or digital skills — systematically understate the challenges faced in the specific pilot territories. The Hungarian national NEET rate has been improving, yet the Northern Hungary region, and Tállya municipality in particular, face NEET rates more than double the national figure. Bulgaria's national ELET indicator has fallen impressively, yet the Yugoiztochen region continues to record exceptionally high dropout rates. Romania's national AROPE figures are high, but Harghita county faces compounded social and economic vulnerabilities that are not visible in national data. This pattern of internal territorial divergence is not exceptional: it is the rule across all six countries. It underscores that national-level policy progress does not automatically translate into improved conditions in structurally disadvantaged regions.

The second recurrent pattern is the **concentration of disadvantage** along multiple dimensions simultaneously. The pilot territories are not affected by single, isolated problems. In Nišava District (Serbia), high inactivity, a severely misaligned vocational training system, and fragmented outreach infrastructure co-occur and mutually reinforce each other. In Harghita County (Romania), elevated NEET rates are compounded by early family formation, limited local mobility, and weak labour-market absorption of graduates. In the Prešov Region (Slovakia), structural unemployment and limited local career pathways overlap with demographic decline and an educational system that does not produce skills matched to the local economy. This multidimensionality is critical: it means that single-axis interventions — addressing either skills, or motivation, or institutional coordination in isolation — are structurally insufficient.

The third pattern is **demographic fragility**. Across all six partner regions, the share of young people in the population is declining, while ageing is accelerating at a pace faster than EU averages. In several territories, demographic decline is compounded by selective outmigration: it is precisely the younger, better-educated, and more mobile young people who leave. This creates a paradox: the pool of young people most likely to benefit from employment-oriented interventions is simultaneously the most likely to exit the region. For remaining youth, this translates into fewer local role models, weaker peer networks, and reduced social infrastructure to support transitions. In Ukraine, the war has further accelerated these dynamics, adding forced displacement to structural emigration. Together, these demographic processes narrow the window of opportunity for interventions and heighten the urgency of reaching young people at the right moment — typically during or immediately after their educational trajectories.

A fourth cross-cutting pattern concerns **the fragmentation of local support systems**. While most partner countries have formal youth employment and social support frameworks at the national level, the structural analysis consistently reveals that these systems are less effective — or less present — in the pilot territories. Local employment services have limited capacity to reach discouraged or "hidden" NEETs. Schools and vocational training institutions often operate without systematic links to local employers. Social services and youth organisations function in parallel rather than in coordination. In Bulgaria and Serbia in particular, the gap between registered and actual NEET populations points to a structural failure of outreach: the young people most in need of support are systematically not in contact with any service. This fragmentation is itself a structural barrier that compounds educational and socio-economic disadvantage.

## 4.2. Structural barriers to youth transitions: a typology

Building on the patterns identified above, this section organises the structural barriers to youth transitions into four analytically distinct — though practically overlapping — types. This typology is not a descriptive classification: it is designed to make visible the different mechanisms through

which structural conditions translate into individual-level disadvantage, and to map these mechanisms onto the intervention logics of the pilots.

### Skills and qualification mismatches

Across all six pilot territories, some form of mismatch between the competencies that young people acquire and those demanded by the local labour market is present. In Bulgaria (Burgas district), the tourism and services sector requires practical skills that the formal educational system does not systematically develop. In Slovakia (Prešov Region) and Ukraine (Ivano-Frankivsk), the qualifications young people hold — including tertiary degrees in Ukraine — do not map onto the specific technical and transversal skills required by local employers. In Serbia (Nišava District), vocational schools formally prepare graduates in occupational fields for which there is limited local demand, while the skills most needed by active employers go unaddressed. The result in each case is a structural inefficiency: young people invest in education that does not reliably produce employability in the local context.

This mismatch operates not only at the level of formal qualifications but also at the level of transversal and work-readiness competencies. Soft skills — communication, teamwork, problem-solving — and digital competencies are consistently identified across country reports as gaps that formal education fails to close. In disadvantaged territories where exposure to professional environments is limited, young people frequently lack the practical experience and behavioural readiness that employers expect even for entry-level positions.

### Weak career orientation and low educational persistence

A second barrier concerns the informational and motivational dimensions of educational and career transitions. In Hungary (Szerencs district), evidence shows that young people — particularly in rural areas — make educational and career decisions with limited information about local labour market realities, available pathways, and the returns to different qualifications. The absence of systematic career guidance at the secondary level means that pathway choices are often shaped by family tradition, peer influence, or simple inertia rather than informed deliberation.

In Romania (Harghita County), a distinct but related mechanism operates. The core challenge is not primarily mismatch, but persistence: a significant proportion of young people leave the education system before completing upper secondary education. ELET rates in the region are well above both national and EU averages. Early school leaving in this context is driven by a combination of socio-economic pressures, limited local role models, weak family support for continued education, and early family formation — particularly among young women. The consequence is a structural reduction in young people's future employability, since upper secondary completion is a de facto prerequisite for stable labour market entry in the modern economy.

**Socio-economic and territorial disadvantage**

A third type of barrier is constituted by the socio-economic conditions and territorial characteristics of the pilot areas themselves. AROPE rates, housing cost overburden, material deprivation, and health-related disadvantages are not uniformly distributed across the territories analysed: they cluster in the specific localities where the pilots will operate. In Romania, Serbia, Bulgaria, and Ukraine, poverty risk and material deprivation compound educational and labour-market disadvantages, reducing the effective capacity of young people to invest in transitions even when formal opportunities exist.

The territorial dimension reinforces these effects. Peripheral location, limited transport infrastructure, and the low density of economic activity in rural and semi-rural pilot areas reduce young people's practical access to education, training, and employment opportunities. In Tállya (Hungary), geographic isolation and the absence of local apprenticeship or vocational training infrastructure leaves young people with few realistic pathways into the labour market without leaving the community entirely. In Ivano-Frankivsk (Ukraine), the war has dramatically intensified pre-existing territorial vulnerabilities, disrupting educational trajectories and generating psychosocial barriers to engagement.

**Institutional fragmentation and weak outreach capacity**

The fourth barrier type is institutional rather than individual. It concerns the organisational architecture of local youth support systems: the degree to which schools, employment services, social providers, and employers are able to operate in a coordinated manner and reach the young people who most need support. In Serbia (Nišava District), the structural analysis points clearly to a fragmented service landscape: outreach is limited, referral pathways between organisations are poorly defined, and the "hidden NEET" population — young people who are disengaged from both education and employment services — is substantial. Similar patterns, though in varying degrees, are visible in Bulgaria and Ukraine, where local institutional capacity is insufficient to identify, reach, and maintain contact with the most vulnerable young people.

This institutional barrier is not simply a matter of resource scarcity, though that plays a role. It reflects an underlying coordination problem: each institution — school, employment office, NGO, local authority — operates within its own mandate, with limited incentives to invest in the kind of joint case management, shared data, and collaborative outreach that would be necessary to address the multidimensional needs of the most disadvantaged young people. The consequence is a service system that works reasonably well for moderately disadvantaged young people who actively seek support, but fails systematically for those who are most disengaged.

# 4.3. Intervention logic

The structural analysis makes visible a clear correspondence between the dominant barrier type in each pilot territory and the intervention logic chosen. This alignment is not coincidental: it reflects a systematic application of place-based diagnostic reasoning in the pilot design process. The following table summarises this correspondence, drawing on the comparative matrix presented in Chapter 5.

***Table 9. The dominant barriers of each pilot intervention***

| Country / Pilot | Dominant barrier | Intervention type | Core mechanism |
|---|---|---|---|
| **Bulgaria (Burgas)** | Skills-market mismatch; limited work experience | Skills Alignment | Employer-co-designed training; on-the-job learning |
| **Hungary (Szerencs)** | Weak career orientation; uninformed pathway choices | Career Orientation | Mentoring; career guidance; self-awareness development |
| **Romania (Harghita)** | ELET risk; low educational persistence | Education Persistence | Near-peer mentoring; dropout prevention; exam motivation |
| **Slovakia (Prešov)** | Qualification-employment mismatch; weak local economy | Skills Alignment | Training materials; entrepreneurship; school-employer links |
| **Serbia (Nišava)** | Institutional fragmentation; hidden NEETs | Coordination Activation | Referral systems; joint outreach; partnership development |
| **Ukraine (Ivano-Frankivsk)** | Multi-dimensional employability barriers; war context | Skills Alignment (integrated) | Modular skills; psychosocial support; employer engagement |

In **Bulgaria**, the dominant structural challenge — as identified in the analysis of the Burgas district — is the mismatch between the skills that young people with low qualifications possess and those required by the local economy, particularly in tourism and services. The intervention logic of the Upskilling Youth for Sustainable Tourism Employment pilot responds directly to this: rather than delivering generic training, it grounds skill development in a process of joint needs identification with employers, then links training to on-the-job learning, soft skills, and direct job-matching. The intervention addresses not only the content gap but also the experience gap that prevents young people from accessing entry-level positions.

In **Hungary**, the structural analysis of Szerencs district and the wider Northern Hungary region highlights a specific form of educational vulnerability: young people make uninformed, often constrained choices about their educational and career trajectories, and these early decisions limit their labour-market prospects. The Mentorship Program pilot addresses this not through skills training, but through the informational and motivational dimensions of transition: personality assessments, co-creation of career plans, mentoring, and exposure to local labour-market realities strengthen the capacity for informed self-direction. The intervention is appropriate because the primary structural failure here is not in skill supply but in guidance and decision-making.

In **Romania**, Harghita County stands out for its elevated ELET rates and the concentration of risks around early school leaving at the upper secondary level. The From School to Opportunity pilot is explicitly designed around education persistence: it uses near-peer mentoring, school-based career events, and voluntary mentoring structures to reduce dropout risk and strengthen commitment to completing secondary education. This is the most indirect of the six pilots in its relationship to employment — it acts on the prerequisite condition (educational completion) rather than on employability directly — but the structural evidence makes this logic entirely appropriate.

In **Slovakia**, the Prešov Region faces a combination of low higher-education attainment, NEET rates above the national average, and a structural disconnect between the educational system and local economic opportunities. The pilot addresses this through the development of training materials for students and teachers, webinars on entrepreneurship, and the strengthening of school-to-employer connections. The skills alignment logic is appropriate because the primary barrier is the inadequate preparation of young people — and their teachers — for the specific competence demands of local labour markets.

In **Serbia**, the structural analysis of Nišava District produces a distinct diagnosis: the dominant problem is not individual skill deficits but institutional fragmentation and the inadequate capacity of the local support system to identify and reach the most disengaged young people. The Serbian pilot responds with a Coordination Activation logic: rather than delivering services directly to individuals, it focuses on establishing and strengthening the referral pathways, partnership structures, and joint outreach mechanisms that would enable existing services to function more effectively and reach the hidden NEET population. This systemic focus is justified by the structural evidence — improving individual skills or motivation is insufficient if young people cannot be reached in the first place.

In **Ukraine**, the Ivano-Frankivsk Skills Future for Youth pilot operates in the most complex structural context of the six: the already-existing vulnerabilities of a post-industrial regional economy, compounded by the disruption caused by the war, produce a multi-dimensional barrier profile. Young people face not only skills deficits and weak career orientation, but also psychosocial barriers, reduced employer engagement, and heightened economic uncertainty. The integrated character of this pilot — combining thematic skill modules, individual coaching, wellbeing sessions, and career talks with employers — reflects the necessity of addressing multiple barrier types simultaneously.

# 4.4. A shared rationale for cooperative, integrated, and territory-sensitive action

While the six pilots address different dominant barriers through different operational logics, they share a common rationale — one that is deeply grounded in the structural analysis and that constitutes the foundational premise of the project as a whole. This shared rationale rests on four interconnected arguments.

**Disadvantage is multidimensional and mutually reinforcing**

The structural analysis consistently shows that the young people targeted by the project do not face isolated, single-axis disadvantages. Educational vulnerability, labour-market vulnerability, and socio-economic vulnerability co-occur and amplify each other. A young person who leaves school early is also more likely to face material deprivation, limited access to career information, and weak integration into local social networks. A young person who is socio-economically disadvantaged faces structural barriers — geographic distance, family obligations, lack of equipment — that compound whatever informational or motivational limitations they experience. Institutional fragmentation means that each of these co-occurring disadvantages is addressed, if at all, by a different service operating in isolation.

This multidimensionality has a direct implication for intervention design: integrated approaches are not optional enhancements to more focused interventions — they are structurally necessary. The comparative matrix in Chapter 5 confirms this: all six pilots are classified as using an integrated approach, combining individual-level support with institutional-level change. This convergence is not coincidental; it reflects the shared diagnosis that single-axis interventions cannot adequately address the complexity of disadvantage in the pilot territories.

**Structural context is place-specific and requires territory-sensitive responses**

A second foundational argument concerns the territorial specificity of disadvantage. The structural analysis demonstrates that regional and local conditions diverge systematically from national averages, and that this divergence is consequential: the barriers facing young people in Tállya are not identical to those in Budapest, nor are the institutional resources available in Nišava equivalent to those in Belgrade. Place matters — not as background context but as an active determinant of the opportunities available to young people and the effectiveness of support systems.

This argument grounds the **project's place-based orientation**, which is aligned with the Interreg Danube Region Programme's emphasis on integrated territorial development. Each pilot is designed not as a generic intervention to be replicated uniformly, but as a response calibrated to the specific structural conditions, institutional landscape, and demographic profile of its territory.

The training curriculum in Burgas is shaped by the specific skill needs of the Burgas tourism economy; the near-peer mentoring model in Harghita is adapted to the social dynamics and cultural norms of the county. This calibration is not merely about local ownership, though that is important: it reflects the structural finding that effective interventions must be designed in relationship with the specific mechanisms through which disadvantage operates in each place.

At the same time, place-sensitivity does not mean fragmentation. The value of comparative analysis — and of the cooperation model underlying the project — lies precisely in the ability to identify what is common across places, to learn from diversity, and to develop transferable knowledge. The typology of barriers presented in Section 4.2, and the alignment between barrier types and intervention logics in Section 4.3, are themselves products of cross-territorial comparison that would not be possible without a systematic, multi-country analytical framework.

**Institutional cooperation is a precondition, not a supplement**

A third element of the shared rationale concerns the role of institutional cooperation. As the analysis in Section 4.2. demonstrates, the fragmentation of local support systems is itself a **structural barrier to youth transitions** — not simply an inefficiency in service delivery. This means that strengthening cooperation among schools, employment services, social providers, and employers is not a peripheral activity that accompanies the "real" intervention: it is, in several cases, the core of the intervention, and in all cases a structural precondition for its sustainability.

The coordination activation logic of the Serbian pilot represents the clearest expression of this argument: in Nišava District, no amount of skills training or career guidance will be effective if the young people who most need it cannot be identified and reached. But the same logic applies, in a less extreme form, to every other pilot. The Bulgarian pilot's sustainability depends on whether the employer partnerships it builds outlast the intervention period. The Slovak pilot's replicability depends on whether the methodological tools and cooperation practices it develops become embedded in routine school-employer relations. The Hungarian pilot's impact depends on whether the mentoring relationships it creates connect into a broader local support ecosystem.

This understanding of institutional cooperation as a structural necessity — rather than an added value — is directly embedded in the project design. The commitment to transnational exchange, joint strategy development, and the co-creation of solutions is grounded in the structural diagnosis that isolated, single-institution responses are insufficient to address the systemic character of the barriers identified.

**Transnational cooperation generates structural learning value**

The fourth element of the shared rationale concerns the added value of transnational cooperation specifically. The structural analysis demonstrates that the challenges facing vulnerable young people in the Danube region are neither purely national nor idiosyncratic to individual territories:

they reflect common structural processes — demographic ageing, skills-economy misalignment, territorial inequalities, institutional fragmentation — operating at regional and European scale. These shared structural drivers mean that the solutions developed in one territory have potential relevance for others, and that the diversity of intervention logics across the six pilots constitutes a source of comparative learning.

Transnational cooperation, in this context, is not simply a mechanism for scaling individual interventions: it is **a method for generating structural knowledge**. By comparing how the same type of barrier — for example, skills mismatch — is addressed differently in Bulgaria, Slovakia, and Ukraine, the project produces insights about which elements of an intervention are context-specific and which are transferable. By comparing how the coordination activation logic of the Serbian pilot relates to the institutional dimensions of the other five, the project generates evidence about the relationship between systemic change and individual-level outcomes that no single country could produce on its own.

Together, these four arguments constitute the shared rationale of the project: that addressing the complex, multidimensional, territory-specific, and institutionally embedded barriers to youth transitions in disadvantaged regions of the Danube area requires integrated, place-based, cooperative interventions — and that the transnational character of the cooperation is itself a structural asset in the generation of evidence and the development of transferable knowledge. This rationale underpins the design of each individual pilot, as analysed in Chapter 5, and provides the conceptual foundation for the monitoring and evaluation framework developed in Chapter 6.

# 5. Comparative analysis of pilot interventions

To address the various barriers hindering the employability of vulnerable youth, pilot interventions will be implemented across six countries. Each pilot primarily targets vulnerable young people aged 15–30 living in disadvantaged territories who face difficulties in entering the labour market due to educational and/or socio-economic factors. The pilots pursue this objective through different approaches; therefore, they may differ in terms of specific target groups, intervention logic, and operational design. This diversity reflects the differing structural conditions identified in the previous chapters and highlights the need for a structured comparative framework. The following analysis, therefore, examines these interventions through a common analytical lens to identify emerging intervention patterns and cooperation models (see Table).

In support of the interpretation of the comparative matrix, two key analytical dimensions warrant clarification.

As all pilots aim to enhance intersectoral cooperation, institutional collaboration is embedded across interventions. The *Level of Intervention*, therefore, indicates the primary locus of change pursued by the pilot, rather than the scope of its operations. While all pilots involve elements at the individual, institutional, and systemic levels, this dimension highlights the dominant focus level for each pilot. For example, a "Mixed" level indicates that the pilot combines efforts across multiple levels, targeting both individual participants and institutional or systemic practices.

The *Primary Intervention Focus* captures the main operational logic through which the pilot seeks to improve youth employability. While all pilots incorporate elements of cooperation, they differ in their dominant pathway of change, such as activating disengaged youth, developing skills, improving coordination between actors, strengthening employer engagement, or applying an integrated approach.

In addition to these two fundamental aspects, the matrix includes descriptive elements that highlight key features of each pilot intervention. These relate to the specific problem addressed, the main activities implemented, the expected short-term outcomes and the anticipated medium-term outcomes. The medium-term outcomes refer to expected changes beyond the immediate pilot period, such as improved cooperation practices, enhanced service availability, or increased employer commitment. Together, these dimensions enable a structured yet flexible comparison of different pilot models.

From the table7., it can be seen that all six pilot interventions use an integrated approach, which represents a complex model in which, in addition to individual-level intervention, institutional cooperation also plays a significant role. Based on the dominant pathway through which each pilot seeks to improve youth employability, four analytical types can be distinguished.

**Type 1 – Skills Alignment Pilots: Bulgaria, Slovakia, Ukraine**

These interventions will promote youth employability by developing skills that are relevant, practical, and transferable in the labour market. They are grounded in the belief that the obstacle to stable employment is limited access to adequate competencies. Thus, training, experiential learning, and job-related skill development are prioritised. Institutional cooperation supports this approach.

**Type 2 – Education Persistence Pilot: Romania**

This approach addresses employability indirectly by strengthening education persistence and supporting successful completion of upper secondary education. The intervention is based on the premise that a lack of upper secondary education is an obstacle to stable employment. Therefore, the pilot aims to reduce the risk of dropping out and strengthen motivation to take the final exam, thereby improving future employability.

**Type 3 – Career Orientation Pilot: Hungary**

This pilot aims to improve labour market outcomes by supporting more informed and realistic educational and career decisions. The intervention takes place in an environment where young people's choices are often constrained by limited information and guidance. The dominant mechanism of change is strengthening self-awareness, career guidance and decision-making ability. This pilot aims to improve labour market transitions by deepening the understanding of educational pathways and labour market realities.

**Type 4 – Coordination Activation Pilot: Serbia**

The model emphasises strengthening institutional cooperation to identify better, reach, and support vulnerable young people. The core mechanism of the pilot intervention is to strengthen coordination among stakeholders involved in youth employment support. The pilot aims to achieve more consistent engagement of disengaged young people through referral practices and joint outreach efforts.

Together, these models illustrate how cooperative employment practices can operate through distinct yet complementary pathways, ranging from direct skill development to system-level coordination and education retention. This typology provides a structured framework for understanding how different intervention logics address barriers to youth employability. It also supports the interpretation of pilot outcomes and the application of the common monitoring framework presented in the following chapter.

*Table 10. Structured comparison matrix of pilot designs*

| Dimension | Upskilling Youth for Sustainable Tourism Employment | Mentorship Program | Near-peer mentoring and career guidance to prevent ELET | From School to Opportunity – Building Future Pathways in the Prešov Region | Local Cooperation Incubator (LCI) and TEAME-like programme in Niš | Skills Future for Youth |
|---|---|---|---|---|---|---|
| **Country / Pilot area** | **Bulgaria**<br>**Burgas district** | **Hungary**<br>**Szerencs district** | **Romania**<br>**Harghita county** | **Slovakia**<br>**Prešov Region** | **Serbia**<br>**Nišava District** | **Ukraine**<br>**Ivano-Frankivsk LTC** |
| **Target Group** | Youth with low qualifications (15–29) | Students in the final two years of secondary education | Final-year students in the lowest-graduation-rate schools | Students in the final year of lower secondary education | 16-24 years-old NEETs | Youth aged 15–29 who are not in stable employment or full-time formal education and are motivated to participate |
| **Core Problem Addressed** | Skill mismatch between labour-market demand and young people's skills | Lack of career guidance and informed educational pathways in rural areas | Risk of non-completion of upper secondary education contributing to ELET | Limited local employment and training opportunities for youth | Fragmented local outreach and support system for NEET youth | Employability barriers and weak transition pathways in a war-affected context |
| **Level of Intervention** | Mixed | Mixed | Mixed | Mixed | Mixed | Mixed |
| **Primary Intervention Focus** | Skills-led integrated | Guidance-led integrated | Prevention-led integrated | Skills-led integrated | Coordination-led integrated | Skills-led integrated |
| **Main Activities** | Skills needs identification with employers; co-designed training; recruitment & profiling; soft skills & work-readiness workshops; on-the-job learning & mentoring; job-matching & referral | Personality assessments, co-creation sessions, workshops and study trips, individual mentorship, career-lab | School-based career events; class-based career guidance; voluntary near-peer mentoring | Development of training materials for students and the teacher's methodological handbook; student training program; webinars or workshops about entrepreneurship | Local labour-market validation and partnership development; NEET youth outreach, recruitment and training; Work-readiness, employer engagement and transition support | Thematic skill modules; group & individual coaching sessions; career profiling & guidance; wellbeing sessions; individual psychological consultations; career talks with employers |
| **Expected Short-Term Outcomes** | Strengthened alignment of training with labour-market needs; increased engagement in structured employability pathways; improved technical, soft, and work-readiness skills; strengthened links with potential employers; facilitated transition to employment | Increase in career-related knowledge; improved understanding of the labour market; enhanced career-related self-awareness; greater awareness of the importance of lifelong learning | Strengthened understanding of the value of completing secondary education; clearer personal action plans; reduced dropout risk; increased exam attendance; stronger commitment to final exams | Improved student self-awareness; ready-to-use materials; exposure to local role models; enhanced relevance to local economic opportunities; opportunities for continued entrepreneurial development | Improved trust and coordination among actors with clearer referral pathways; increased youth motivation, confidence; sustained engagement in structured support activities; strengthened access to coordinated support services | Increased motivation and confidence; improved soft skills; practical entrepreneurial and digital skills acquired; clearer career direction and personal plan; reduced anxiety and psychosocial barriers; increased interaction with employers and professionals |
| **Medium-Term Outcomes / Contribution** | Improved relevance of local training and employer engagement; increased employability and adaptability across seasonal roles; enhanced job retention and repeat employment opportunities | Enhanced career-related knowledge and decision-making skills; Increased awareness of lifelong learning and transversal competences; Improved responsibility, proactiveness, and self-expression; reduced risk of disengagement | Improved employability through increased motivation and persistence; greater secondary completion; documented and adaptable career guidance model; strengthened cooperation | Replication of methodology and materials in rural schools; sustained entrepreneurial mindset and informed career decisions; stronger connection to the local economy and opportunities | Sustained cooperation among local youth support actors; improved readiness for education, training and employment; transferable local cooperation model | Transition to employment, entrepreneurship or further education/VET; sustained participation in community life; replication of the cooperation model; reduced NEET rate; strengthened local institutional capacity for youth support |

# 6. Baseline indicator framework

Previous analyses identified structural challenges and the rationale behind pilots' interventions. This chapter aims to establish a common framework for measuring change and assessing the programme's impact. While the comparative analysis underscores the diversity of pilot approaches across target groups, intervention logic, and operational design, it also uncovers a set of common intended outcomes. Across countries, pilots aim to increase young people's engagement, improve their orientation and preparedness for education or employment pathways, and strengthen local actors' capacity to deliver coordinated support. To evaluate whether these interventions lead to meaningful progress beyond their immediate activities, a structured baseline indicator framework is necessary. The next section **translates the identified challenges and intervention pathways into observable dimensions of change at the macro, project, and pilot levels**. This allows for future monitoring of progress and facilitates cross-country learning within the project. The baseline indicator framework is organised across three analytical levels to reflect both the wider socio-economic context and the project's intended areas of change. At the macro level, indicators address structural challenges in youth transitions across all participating countries. At the meso level, project-level indicators show changes in cooperation, accessibility, and responsiveness of youth support pathways. At the pilot level, a set of expected change indicators ensures comparability across the six pilot interventions despite their thematic diversity.

## 6.1. Structural context indicators

The project's structural baseline is defined by macro-level indicators presented in Chapter 2, including NEET rates, early leavers from education and training (ELET), and youth at risk of poverty or social exclusion (AROPE). These indicators establish the broader socio-economic context within which the pilots operate, highlighting the structural challenges shaping young people's transitions from education to employment across all participating countries. While the pilots are not expected to generate measurable change at this macro level, these structural conditions frame both the necessity and the scope of intervention. A more detailed description of these structural conditions and their impact on young people's transition is provided in Chapter 3. Building on this foundation, the next section presents the project-level baseline, which translates these structural realities into measurable dimensions for the interventions implemented across countries.

## 6.2. Project-level framework

Building on the macro-level structural context presented in Chapter 2, the project-level indicators translate these broader socio-economic conditions into measurable outputs and results across all

participating countries. While the macro indicators frame the structural challenges faced by vulnerable youth, the project-level indicators focus on what the project itself can deliver: transnational cooperation, joint strategies and solutions, staff training, pilot implementation, and dissemination of resources. These indicators provide a comprehensive overview of the project's expected outputs and short-term results, forming a bridge between the structural context and the more detailed pilot-level change indicators presented in the following section.

***Table 11. The core project-level expected change indicators***

| Dimension | Indicator | Description | Measurement unit | Target value |
|---|---|---|---|---|
| **Participation** | Number of young people informed | The total number of young people who receive information about opportunities, services, or rights. | number of participants | 1500 |
| | Number of young people reached | The total number of people contacted and who take part once or briefly, usually as participants or beneficiaries. | number of participants | 800 |
| | Number of young people involved | The total number of people who participate more than once in activities and can express opinions or preferences, with the potential to shape design. | number of participants | 300 |
| | Number of young people engaged | The total number of people who take part actively and continuously, showing commitment and initiative within the activities. | number of participants | 150 |
| **Staff training** | Number of staff trained | Total number of teachers, mentors, or coordinators who receive project-related training across all countries. | number of staff | |
| **Actions** | Pilot actions jointly developed and implemented. | Total number of pilot actions developed collaboratively and implemented across all project countries. | number of pilot actions | 6 |
| **Cooperation** | Strategies and action plans jointly developed | Total number of strategies or action plans developed collaboratively by project partners. | number of joints strategy/action plan | 9 |
| | Jointly developed solutions | Total number of solutions taken up or up-scaled by project partners to address project objectives. | number of solutions | 6 |
| | Organisations cooperating across borders | Total number of organisations actively cooperating across national borders within the project framework. | number of organisations | 50 |
| **Dissemination** | Number of dissemination events organised | Total number of events (workshops, webinars, conferences) organised to share project results with stakeholders. | number of events | |
| **Sustainability** | Number of tools/resources developed | Total number of documented guides, manuals, curricula or tools prepared for continuation. | number of documents | |

## 6.3. Pilot-level expected change indicators

The comparative analysis of the pilots highlighted both the diversity of the interventions and the presence of a shared change logic across countries. Despite differences in target groups and local challenges, the pilots share a common focus on strengthening young people's orientation, confidence and preparedness for education or employment transitions. Building on this shared framework, the baseline study defines a set of pilot-level indicators that operationalise the intended areas of change. These indicators primarily focus on participant-level changes and also capture improvements in the local support environment.

Monitoring project outcomes builds on a baseline–endline logic that allows changes to be observed during the implementation of the pilot interventions. Baseline measurements capture the initial situation of participants and local support systems at the start of the pilots. In contrast, endline measurements provide information on developments observed during or after the intervention period.

The monitoring approach combines participation rates and completion levels with information gathered through surveys, feedback forms, and activity reports. This mixed approach allows for the recording of both quantifiable results and changes in participants' motivation and competencies.

By applying a shared set of indicators across all pilot countries, the framework supports comparability and cross-country learning while still allowing pilots to reflect their specific local contexts.

Together, the macro-level context indicators, project-level monitoring framework, and pilot-level change indicators provide a coherent structure for tracking progress during the implementation phase. This framework allows both the monitoring of project activities and the assessment of how pilot interventions contribute to improved youth transitions across participating regions.

*Table 12. The core pilot-level expected change indicators*

| Dimension | Indicator | Description | Baseline measurement | Endline measurement | Data source |
|---|---|---|---|---|---|
| **Engagement** | Young people participate in structured support activities | The extent to which participants actively take part in structured support activities | Number of participants enrolled in the pilot and initial participation rate in the first activities. | Number and proportion of participants regularly attending activities during the pilot. | Attendance lists, participation records |
| **Career orientation** | Increased clarity of future education or career direction | The extent to which participants are familiar with available education and career options | Self-assessment questionnaire measuring participants' awareness of education and career pathways at entry. | Follow-up questionnaire measuring perceived clarity of future education or career plans. | Pre- and post-participation survey |
| **Self-efficacy** | Improved confidence regarding education or labour-market pathways | The extent to which participants feel confident in their ability to make educational or career decisions and take the necessary steps. | Initial self-reported confidence level regarding education or employment decisions. | Self-reported confidence level at the end of the pilot, compared with baseline responses. | Participant surveys |
| **Skills/competences** | Improvement in transversal or labour-relevant competences | The extent to which participants develop transferable skills such as communication, teamwork, and problem-solving. | Initial self-assessment or facilitator assessment of key transversal competences. | Follow-up self-assessment and facilitator observation of competence development. | Surveys, facilitator observation notes |
| **Structured support** | Access to guidance or mentoring | The extent to which participants have access to structured support, such as mentoring, coaching, or guidance sessions. | Mapping of available support mechanisms and planned guidance activities at the start of the pilot. | Number of mentoring or guidance sessions delivered and participants' feedback on usefulness. | Activity reports, mentoring logs, participant feedback |
| **Local support coordination** | Strengthened cooperation among local actors supporting youth transitions | The extent to which local actors involved in youth support cooperate to provide coordinated guidance and resources. | Initial mapping of existing cooperation among schools, NGOs, employment services, and other actors. | Evidence of strengthened cooperation (e.g. joint meetings, joint activities, coordination mechanisms). | Meeting minutes, cooperation agreements, and activity reports |
| **Motivation for participation** | Increased motivation to engage in education, training, or employment pathways | The extent to which participants demonstrate motivation to pursue further learning or employment opportunities. | Initial participant self-assessment regarding motivation and future engagement. | Follow-up self-assessment capturing changes in motivation and aspirations. | Pre- and post-participation survey |
| **Retention** | Participants complete the pilot activities. | The extent to which participants remain engaged throughout the pilot implementation period. | Number of participants initially enrolled in the pilot. | Number and proportion of participants completing the pilot activities. | Participation and completion records |
| **Satisfaction with support** | Participants report satisfaction with the support received | The extent to which participants perceive the pilot activities as useful and relevant to their needs. | Not applicable or initial expectations collected at the start of participation. | Participant satisfaction survey conducted at the end of the pilot. | Participant feedback surveys |

# 7. Conclusions

This baseline study set out to analyse the structural conditions shaping young people's transitions from education to employment across the participating countries and regions. The analysis highlighted persistent challenges affecting vulnerable youth, including unequal access to education and training, difficulties navigating career pathways, and fragmented support systems across local contexts. These structural conditions underline the importance of coordinated interventions that strengthen both individual capacities and institutional cooperation.

The comparative analysis of the six pilot interventions demonstrates that, despite differences in local contexts and target groups, the pilots share a common ambition: to support young people in disadvantaged situations through structured guidance, mentoring, and coordinated support services. The diversity of approaches reflects the different institutional environments and needs identified in the baseline analysis. At the same time, the shared focus on engagement, orientation, and capacity-building provides a common foundation for learning across countries.

The baseline indicator framework developed in this study provides a structured approach for monitoring the progress and outcomes of these pilot interventions. By combining macro-level contextual indicators with project-level outputs and pilot-level expected change indicators, the framework enables a multi-level understanding of how the project contributes to improving youth support pathways. This approach also ensures comparability across pilots while leaving space for context-specific implementation.

Looking ahead, the baseline findings serve as a reference point for the implementation and evaluation of the pilot actions. The indicators defined in this framework will support the systematic observation of changes in young people's engagement, competencies, and career orientation, as well as developments in cooperation among local actors involved in youth support systems.

Ultimately, the lessons generated through the pilot implementations and their monitoring will help identify promising practices and policy-relevant insights that may inform future strategies to improve the transition from education to employment for vulnerable youth across Europe.

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