

SEER

JOURNAL FOR LABOUR AND SOCIAL AFFAIRS IN EASTERN EUROPE

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Union Institute

Economic and social developments in south-east Europe

- Economic and social developments in south-east Europe: between growth, opportunities and the erosion of social rights
(Sanja Paunović and Bruno S. Sergi)
- The Bulgarian path to the euro and the expected effects of its introduction
(Maria Prohaska)
- Human capital in the 21st century: structure, challenges and economic growth
(Lyuboslav Kostov)
- Bulgaria: empowering base-level trade union leaders to ensure growth in membership numbers
(Lyuboslav Kostov and Rositsa Makelova)
- The importance of job quality characteristics for current and prospective employees
(Martin Serreqi and Xheni Rusi)
- The use of artificial intelligence and discrimination in the labour market
(Biljana Chavkoska)
- Making sense of globalised AI in the context of the workplace
(Julejda Aliaj and Abela Lame)
- The role of online platforms in shaping tourism and labour dynamics in northern Albania
(Fatjona Kroni and Ermira Kalaj)

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Economic and social developments in south-east Europe

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The ETUI conducts research in areas of relevance to the trade unions, including the labour market and industrial relations, and produces European comparative studies in these and related areas. It also provides trade union educational and training activities and technical support in the field of occupational health and safety. Through its expertise, scientific publications, specialist journals and training programmes, the ETUI provides European trade unions with the tools to participate in the European debate and to contribute actively to achieving Social Europe. Its current work programme is built around the following five priorities: worker participation, social dialogue, the Lisbon/sustainable development strategies and their follow-up, trade union renewal and the economic and financial crisis.

The European Trade Union Institute is supported by the European Union. For more detailed information on the ETUI please see the homepage www.etui.org

Aims and objectives of the SEER Journal for Labour and Social Affairs in Eastern Europe

SEER aims to stimulate an exchange of information between researchers, trade unionists and people who have a special interest in the political, social and economic development of the region of eastern Europe.

It seeks to draw attention to new research results and the latest analysis about the ongoing process of political and social changes in the broader eastern European region, and tries to create deeper understanding of the importance of the elaboration of democratic structures within industrial relations.

SEER combines contributions from different disciplines and schools of thought into an information package intended to be of interest to policy-makers, researchers, academics and trade unionists from various backgrounds.

The editors would like to point out that it is the authors who are responsible for the content of their own articles and that neither the editors nor the publisher, the European Trade Union Institute, necessarily share the opinions of the authors whose work is featured in the SEER.

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Editorial

This second issue of the *SEER Journal for Labour and Social Affairs in Eastern Europe* for 2025 focuses on ‘Economic and social developments in south-east Europe’.

The first block of articles devoted to this particular theme starts with an account by Sanja Paunović and Bruno S. Sergi, two economists from the Southeast Europe Trade Union Economic Experts network, of the prospects for economic growth alongside an exploration of the erosion of social rights in the region. They present the latest developments on macroeconomic stability, income levels and labour productivity, contrasting these with social protection and workers’ rights. They point to the significant challenges that the region continues to face, despite periods of growth and partial alignment with EU standards, including structural weaknesses, low productivity, demographic pressures and persistent inequality compared to the EU average. The international financial institutions and the European Union have prioritised fiscal consolidation and structural reforms that have often come with pressures on labour rights and the wearing away of systems of social protection. They conclude that, in order to ensure inclusive growth with macroeconomic stability, policies should be developed with stronger social dialogue and for better labour protection for the region’s workers.

The article by Maria Prohaska ‘The Bulgarian path to the euro and the expected effects of its introduction’ reviews Bulgaria’s long and politically burdensome path towards the adoption of the euro, finally achieved on 1 January 2026 after almost twenty years of membership of the EU. The author also analyses the degree of social and economic convergence when member states have adopted the euro in the past, pointing to the largely positive impact for those joining the euro area after 2004. The article explores the public discourse in Bulgaria on adopting the euro and the impression that has made on the development of public opinion, concluding with some thoughts on the lessons which may be drawn from Croatia.

Lyuboslav Kostov’s contribution ‘Human capital in the 21st century: structure, challenges and economic growth’ examines demographic change, both globally and in the context of the wider region of Europe, paying specific attention to the situation in Bulgaria which has been experiencing a deteriorating demographic position. He warns that, if Europe continues to rely solely on its own human capital, it will lead to uneven economic development and to significant changes in its demographic structure. As regards Bulgaria, its population has decreased by approximately 30 % since 1989 (and by 17 % since its EU accession in 2007), indicating a lasting and deepening demographic crisis. This should be seen as a threat of a national nature.

In their article ‘Bulgaria: empowering base-level trade union leaders to ensure growth in membership numbers’, Lyuboslav Kostov and Rositsa Makelova examine innovative practices of trade union renewal in Bulgaria. Drawing on desk-based research and in-person interview research contributions, the authors deliver both quantitative and qualitative data for the sectoral context and its implications for organising.

The open section of this issue is devoted to job quality under the growing influence of platform economy and artificial intelligence.

Martin Serreqi and Xheni Rusi look at the importance of job quality characteristics for current and prospective employees. They address the diversity of the workforce by age, ethnicity, educational background and professional experience. They conclude that multigenerational or cultural perspectives should be employed to improve knowledge about workforce diversity and work characteristics.

In her account, ‘The use of artificial intelligence and discrimination in the labour market’, Biljana Chavkoska uses desk-based research to explore the effects of artificial intelligence in the labour market on vulnerable groups already experiencing discrimination, such as women, older workers and disabled people. Her article examines the EU’s AI Act and the Council of Europe’s Framework Convention on the issue, the first attempts to develop institutional regulation in the field, as well as the situation across the western Balkans and expressly in North Macedonia. She finds that the vast majority of jobs now require basic digital skills, but there are huge gaps with regard to the number of women accessing career roles within STEM. Based on employer perceptions, gaps are also appearing in the ability of older people to understand new technology and there is a lack of involvement of disabled workers in the design of adaptive technology.

The article by Julejda Aliaj and Abela Lame, ‘Making sense of globalised AI in the context of the workplace’, takes a perspective from Albania to review the current legislative framework introduced within the EU on artificial intelligence, workplace applications of which are transforming the dynamics of employee-employer relations. It seeks to develop understanding within Albania of how employment legislation can adapt to the new challenges in the sense of ensuring a fair, inclusive and ethical working environment which serves the preservation of the rights and dignity of workers.

In their contribution, Fatjona Kroni and Ermira Kalaj examine ‘The role of online platforms in shaping tourism and labour dynamics in northern Albania’. Based on secondary data, literature reviews and sectoral reports, they take a closer look at the role of digital tourism in driving labour market changes and economic development. Their results suggest that digitalisation is lowering entry barriers for small businesses, enhancing competitiveness and supporting micro-entrepreneurship, particularly among young people and women. Yet, persistent skills gaps, weak infrastructure and a reliance on unstable demand risk reinforcing insecurity and exclusion.

Finally, a review article by Christophe Solioz closes the issue: Giustina Selvelli’s 2024 publication ‘Understanding the border. Gorizia and Nova Gorica: an anthropologist’s perspective on the border’. Prepared in the context of GO!2025, a cultural and artistic programme celebrating both those cities being jointly named European Capital of Culture, the review emphasises and celebrates the multiple identities that take shape when borders are no longer seen as dividing lines.

November 2025

Béla Galgóczi
Calvin Allen

Economic and social developments in south-east Europe: between growth, opportunities and the erosion of social rights

Abstract

This article, prepared by economists from the Southeast Europe Trade Union Economic Experts network, analyses the main economic and social developments within south-east Europe over the past decade, focusing on macroeconomic stability, income levels, labour productivity, social protection and workers' rights. Despite periods of growth and partial alignment with EU standards, the region continues to face significant challenges including structural weaknesses, low productivity, demographic pressures and persistent inequality compared to the EU average. The international financial institutions and the European Union have strongly influenced the shaping of economic policy in the region, often prioritising fiscal consolidation and structural reforms. However, it should be noted that, from the perspective of workers and trade unions, these processes frequently coincide with pressures on labour rights and the erosion of social protection. The study highlights the need for policies to ensure inclusive growth, stronger social dialogue and better labour protection for the region's workers, alongside macroeconomic stability.

Keywords: macroeconomic stability; minimum wage; social protection and pensions; labour rights, social dialogue; migration and human capital

Introduction

South-east Europe has undergone profound economic and social transformations over the past decade, driven by both internal dynamics and external pressures. Countries in the region have faced the dual challenge of consolidating macroeconomic stability while attempting to align with European Union standards in fiscal policy, social protection and labour rights. Although inevitable progress has been achieved, particularly in infrastructure development, trade integration and foreign direct investment, the region continues to lag behind the EU average in terms of living standards, productivity and institutional capacity (Eurostat 2025a).

Economic growth in these countries has generally been positive, yet uneven and vulnerable to global shocks. Structural weaknesses such as a reliance on remittances, limited industrial diversification, high levels of informal employment and low innovation capacity continue to constrain long-term development. At the same time, demographic challenges exacerbate existing vulnerabilities including population ageing and the large-scale emigration of skilled workers. The region's population has de-

clined by 1.4 % since 2020, with fertility rates averaging 1.45 children per woman while over 18 % of tertiary-educated citizens live abroad (Eurostat 2025b).

The role of the international financial institutions, particularly the International Monetary Fund (IMF) and the World Bank, has been highly influential in shaping economic strategies across the region. Their emphasis on fiscal discipline and structural reforms has often clashed with social needs, particularly regarding wage dynamics, public sector employment and social spending. The European Union, through accession processes and alignment with the *acquis*, remains the most significant external anchor. Still, the pace of integration has been slow and uneven, leaving many reforms incomplete.

These developments carry both opportunities and risks for trade unions and workers. On the one hand, EU-oriented reforms and economic modernisation have opened space for higher standards and greater convergence with European practices. On the other, the weakening of collective bargaining, limited respect for labour rights and the erosion of social protection mechanisms point to a deepening of socioeconomic inequalities. In the first half of 2025 alone, over 142,000 people arrived in south-east Europe via mixed migration routes, adding further complexity to labour market and social policy debates. Against this backdrop, examining south-east Europe's key economic and social trends is both a valid scientific exercise and an urgent necessity as regards the policy debate and the development of trade union strategies.

Macroeconomic stability and growth

Macroeconomic stability has been one of the most significant achievements in south-east Europe, with countries maintaining moderate GDP growth, reduced inflation compared to earlier periods and relatively stable levels of public debt. However, disparities remain large within the region compared to the EU average.

According to the latest World Bank reports, economic growth in the western Balkans is expected to reach 3.2 % in 2025, with an anticipated acceleration to 3.5 % in 2026. Although modest, this points to a certain degree of resilience in the region despite global risks and weaker European demand (World Bank 2025). Similar projections from October 2024 had forecast growth of 3.7 % for 2025, indicating changes in the economic environment and downward revisions of growth expectations (Reuters 2024).

On the basis of Eurostat (2024) figures, average GDP growth in the EU amounts to 2 %. With south-east European countries expected to grow 3–4 % in 2025, albeit with lower real wages and higher unemployment than across the EU as a whole, this points immediately to a cumulative problem: formal economic convergence does not automatically translate into social convergence.

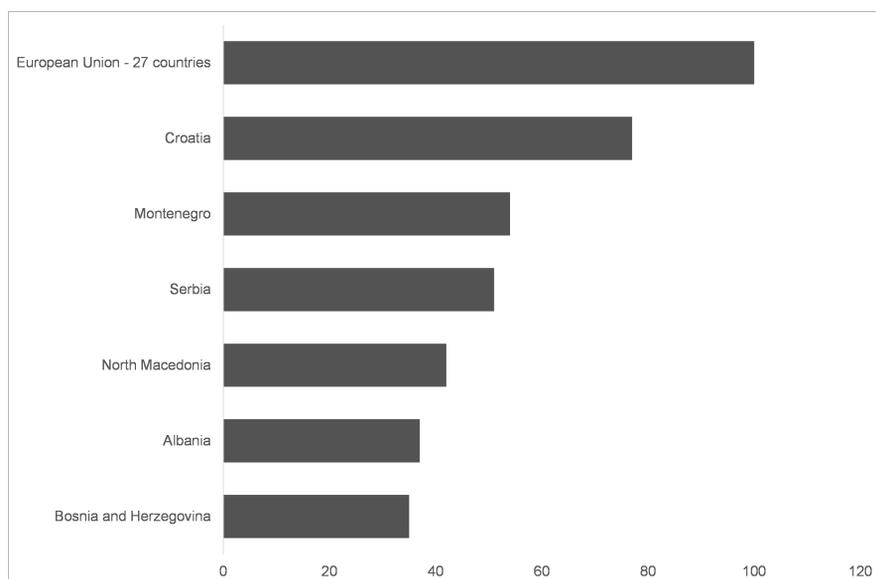
- in most cases, inflation in the region is higher than the EU average (EU 2.4 %; Serbia 4.5 %, Bosnia and Herzegovina 4.8 %), reducing workers' real purchasing power
- unemployment, particularly among young people, is significantly above the EU average (EU: 6.3 % in 2024; region: 8–12 %), which further limits the effect of formal convergence with EU standards.

This growth is being driven by rising consumption, increasing purchasing power and public investment, alongside some relief from inflationary pressures. However, significant risks continue to be present, these being linked to external shocks, political instability and climate change.

GDP per capita in south-east Europe

The western Balkan economies continue to show a considerable gap in living standards compared to the European Union average. In 2024, GDP per capita in purchasing power standards (PPS) ranged from about 35 % of the EU average in Bosnia and Herzegovina to 54 % in Montenegro. Serbia (51 %), Albania (37 %) and North Macedonia (42 %) remain in the mid-range, reflecting structural constraints in productivity, investment and institutional development. Despite gradual progress, the region as a whole lags behind the EU, underscoring both the scale of the convergence challenge and the significant potential for catch-up growth.

Figure 1 – GDP per capita in PPS (% of EU average), western Balkans (2024)



Source: Eurostat (2025).

GDP per capita (PPS) is an indicator measuring economic output per person, adjusted for the differences in price levels between countries. Unlike nominal GDP per capita expressed in euros or dollars, which only reflects market exchange rates, GDP per capita in PPS eliminates the impact of price level differences. This makes it possible to compare real living standards and the volume of goods and services people can purchase across countries. This indicator is significant because it:

- provides a more accurate picture of material wellbeing across economies
- allows for a comparable convergence assessment between EU member states and candidate countries
- helps policymakers and researchers evaluate economic development, regional disparities and cohesion policy needs.

Table 1 – GDP per capita (PPS): volume indices of real expenditure per capita (in PPS, EU-27 = 100)

	2015	2020	2023	2024
EU-27	100	100	100	100
Albania	30	30	36	37 ^e
Bosnia and Herzegovina	31	33	36	35
Croatia	61	66	76	77 ^p
Montenegro	42	44	52	54 ^p
North Macedonia	39	42	41	42 ^e
Serbia	40	44	49	51 ^p

Source: Eurostat. Data extracted on 15 September 2025.

Note: (e) estimated; (p) provisional.

Population

The region is characterised by depopulation, emigration (especially of young and skilled workers) and demographic ageing.

According to the United Nations Department of Economic and Social Affairs (UNDESA n.d.), the stock of migrants from the WB6¹ living abroad in 2024 was about 4.41 million; corresponding to a total emigration rate of well above 25 %, with the great majority of these being people of working age. Serbia, Bosnia and Herzegovina, North Macedonia and Albania are experiencing a continual outflow of people to EU countries (substantially Germany, Austria, Italy) and Scandinavia. This trend reduces the labour force, increases the pressure on pensions systems and creates shortages of workers in specific sectors (healthcare, construction, IT). As a result, the region is increasingly importing labour from Asia and Africa, often under even worse working conditions.

1 That is, Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia and Serbia.

Table 2 – Population (total, 000)

	1990	2000	2024	2024 population as % of 1990 population
Albania	3,286.5	3,089.0	2,714.6	82.6
Bosnia and Herzegovina	4,448.6	4,159.7	3,164.2	71.1
Croatia	4,777.3	4,468.3	3,866.3	80.9
Montenegro	6.064	6.049	6.238	102.9
North Macedonia	2,063.7	2,026.4	1,792.1	86.8
Serbia	7,897.9	7,516.3	6,587.2	83.4

Source: World Bank (n.d.). Last updated: 7 January 2025.

The data in the table shows clear demographic trends across the western Balkans from 1990 to 2024:

- Albania faced major population loss, dropping by more than half a million people, primarily due to mass emigration after the fall of communism
- Bosnia and Herzegovina experienced a sharp population decline, losing more than 1.2 million people. This is strongly linked to the war in the 1990s, post-war emigration and low birth rates
- Croatia also shows a significant population decrease of nearly 1 million, reflecting emigration to western Europe and prolonged negative natural growth
- Montenegro is the only country in the region that shows relative stability, with its population in 2024 slightly higher than in 1990
- North Macedonia shows a smaller but steady decline, with the population shrinking by around 270,000 since 1990
- Serbia lost over 1.3 million people, with depopulation driven by emigration, ageing and declining fertility.

The region is experiencing significant and persistent temporary and permanent outflows of people which is shaping labour markets, public finances and long-term growth prospects. The economic effects of these flows are mixed and contingent on policy, sectoral structure and migrants' skill composition.

The positive channels include:

- remittances – stable foreign currency inflows that raise household consumption and can finance human capital investments (education, health), potentially have long-term benefits if channelled efficiently. In several western Balkan economies, remittances remain a major macroeconomic factor: in 2020, they amounted to roughly 9.9 % of GDP in Albania, 10.1 % in Bosnia and Herzegovina, 15 % in Montenegro, about 3.2 % in North Macedonia and approximately 8.6 % in Serbia. These inflows support household consumption, ease poverty and – in some places – finance investment in housing, education and small businesses.

- skills circulation and diaspora networks – emigrants can generate knowledge transfer, networks for trade and foreign direct investment (FDI) and return migration that may, under favourable conditions, bring human capital and entrepreneurship back to origin countries (a potential ‘brain gain’, or circulation effect). The recent literature highlights that skilled migration can produce nuanced outcomes: a ‘brain drain’ in one sense, but circulation and gain in another, depending on institutional absorptive capacity.

At the same time, substantial costs and risks arise:

- ‘brain drains’ and sectoral skill shortages. Large-scale emigration of healthcare workers, IT specialists or other high-skill groups causes immediate capacity constraints (for example, in hospitals or in high-value manufacturing) and long-term productivity losses if skills are not replaced or knowledge transfer is weak. The OECD and regional studies document notable skill shortages and the risk that these may hamper long-run productive investment
- labour market distortions. Outflows can push up labour costs in specific segments, forcing firms towards automation or contraction, while contributing to imbalances (youth unemployment coexisting with unfilled vacancies in care, construction, health and agriculture)
- dependence on remittances. Heavy reliance on remittance income can create macro-level vulnerabilities (exposure to shocks in destination economies) and reduce incentives for domestic structural reform if used predominantly for consumption rather than productive investment.

Empirical evaluation, therefore, requires a balancing of the short-term stabilising effects (remittances, poverty reduction) with the medium and long-term structural risks (the loss of skilled human capital, demographic decline, the heterogeneity of sectoral impacts). Recent cross-country and causal studies emphasise that the net outcomes depend strongly on:

- a) the share of emigrants who later return with enhanced skills or networks
- b) whether remittances finance productive investment
- c) the capacity of institutions to absorb and put to use diaspora knowledge.

The most significant policy implications – towards countries harnessing migration rather than being harmed by it – would thus be these:

1. activate the development potential of remittances. A pairing of remittance inflow channels with financial instruments that encourage saving and productive use (matched savings schemes, diaspora bonds, targeted credit lines for SMEs) would reduce the vulnerability of remittances to uses geared towards consumption and would increase their contribution to capital formation
2. mitigate ‘brain drain’ through mobility management. Promoting circular migration schemes, incentives for temporary labour mobility and return-and-reintegration programmes would make it easier for skilled emigrants to return with experience and capital. Bilateral and EU-level labour agreements can help manage legal pathways and skills matching
3. close the domestic skills gaps. Investing in targeted upskilling and vocational education tied to market needs (health, digital, green sectors) and the use of public-private partnerships to link training to employer demand would both

- reduce the push factors for migration and improve the absorptive capacity in terms of returning talent
4. strengthen statistical monitoring and coordination. Given the heterogeneity of available data and the scale of mobility, were countries to improve the collection of migration statistics (labour permits, social security records, remittance tracking) this would assist in the design of calibrated, timely policy responses
 5. regional cooperation. Migration is a regional reality, so the deployment of co-ordinated western Balkan and EU-level policies (labour mobility frameworks, skills recognition, diaspora engagement platforms) would produce better outcomes than isolated national measures.

Labour migration is neither a simple ‘loss’ nor a pure ‘gain’. In the context of south-east Europe, it is – simultaneously – a safety valve, a source of foreign income, a driver of demographic change and a potential brake on productivity if skilled outflows are permanent and institutions fail to capture the advantages potentially brought by the diaspora. Policy, therefore, needs to shift from reactive containment to proactive management: to the design of incentives and institutions that convert migration-related flows (of people, money and knowledge) into durable development assets for origin countries.

Labour productivity in south-east Europe: state and challenges

Labour productivity, expressed as output per hour worked, is a key measure of economic efficiency and competitiveness. Figure 2 shows OECD data for 2020–23, averaged across these four years, which demonstrate significant variation across the western Balkans: from \$18 in Albania to \$33 in Montenegro, with Bosnia and Herzegovina standing at \$23, Serbia and Croatia at \$25 and North Macedonia at \$31 (OECD 2025). In comparison, the EU average in this period was a little over \$68 per hour worked. This means that productivity levels in the western Balkans amount to only 26–49% of the EU average, at an average of c. 39% (around \$27 per hour worked), underlining the substantial development gap and the potential for convergence. The individual results compared to the EU average are set out in Table 3 and in Figure 2:

Table 3 – Labour productivity, western Balkans, and as % of EU average

Country/region	Labour productivity (USD PPP per hour, 2020–23)	% of EU average
Albania	17.55	25.7
Bosnia and Herzegovina	24.16	35.4
Croatia	25.50	37.4
Montenegro	33.11	48.6
North Macedonia	31.43	46.1
Serbia	23.55	34.5
Western Balkans (average)	26.70	39.2
European Union (average)	68.19	-

Source: OECD (2025).

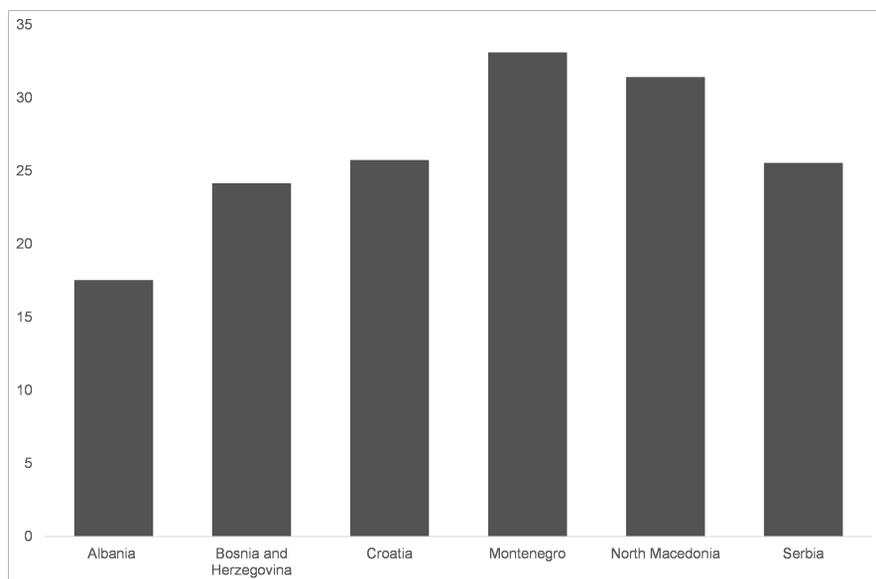
Note: these figures refer to the whole economy (i.e. all sectors combined) and are expressed at purchasing power parity (PPP), which adjusts for differences in price levels across countries. Regional averages are calculated as unweighted means of available country data. Figures for the western Balkans (WB6) are indicative and may be subject to revision as statistical capacities and data coverage improve.

Interestingly, Croatia's labour productivity is on a par with Serbia's and lower than those of both Montenegro and North Macedonia, despite it having a much higher GDP per capita. The OECD explains this apparent paradox by pointing to the heavy reliance of Croatia's economic structure on tourism and other low-productivity sectors. While these sectors contribute significantly to GDP, they employ large numbers of people in seasonal or low-wage jobs, keeping average productivity relatively low. In contrast, countries like Montenegro and North Macedonia have relatively higher shares of manufacturing and export-oriented industries which, typically, are more productive per hour worked.

Given that a high GDP per capita does not necessarily equate to high labour productivity if low-productivity sectors dominate the economy, a more accurate assessment of economic efficiency and competitiveness means that it is crucial to consider both GDP per capita and labour productivity alongside the structure of the economy.

The OECD's findings suggest that, while Croatia has made significant strides in economic development, the dominance of low-productivity sectors like tourism may be limiting its overall productivity growth. To enhance labour productivity, Croatia might consider diversifying its economic base, investing in higher value-added industries and fostering innovation and skills development across various sectors.

Figure 2 – Labour productivity per hour in south-east European countries, 2020–23



Source: OECD (2025).

Note: see footnote to Table 2.

Despite some progress, south-east Europe thus continues to lag significantly behind the EU average in terms of productivity and competitiveness. This persistent gap has narrowed only marginally over the past decade, reflecting structural bottlenecks such as low capital intensity, limited technological adoption and underdeveloped innovation ecosystems (EIB 2025).

A paper for the IMF (2025) has noted that firm-level productivity in the region is hampered by a ‘missing middle’ of dynamic, high-growth companies. Frontier firms are underperforming their EU peers due to smaller domestic markets, weaker integration in global value chains and restricted access to market-based financing. Young, high-potential firms face skill shortages, insufficient venture capital and regulatory barriers that slow the scaling-up process (Adilbish et al. 2025).

Meanwhile, human capital is a critical constraint. Eurostat data (2025b) shows tertiary attainment among those aged 25–34 in those states of the region that are already members of the EU reached 47.2 % compared to 38.5 % in neighbouring non-EU states, while early school-leaving rates stand at 10–12 % in parts of the Balkans (UNHCR 2025). Skills mismatches are widespread, with manufacturing, ICT and healthcare employers reporting persistent shortages. Research & development (R&D) expenditure averages just 0.6 % of GDP, far below the EU’s 2.3 % target, limiting innovation-led growth.

Bridging this gap requires a multi-pronged strategy:

- human capital investment through education reform, vocational training and targeted reskilling to align with emerging sectors
- innovation and research support, including public-private partnerships, tax incentives for R&D and stronger intellectual property frameworks
- economic diversification to reduce reliance on low value-added sectors and remittances, while deepening integration into EU supply chains
- reform of labour relations to strengthen collective bargaining, improve working conditions and formalise informal employment, thereby boosting productivity and social cohesion.

Looking ahead, the prospect of EU accession – now back on the political agenda – offers a unique window for reform. The European Commission's 2025 Growth Plan for the western Balkans proposes accelerated access to the single market, increased pre-accession funding and sectoral integration in energy, transport and digital services. EIB modelling suggests that, if coupled with domestic reforms, this could catalyse productivity gains of 1–1.5 percentage points annually over the next decade.

However, without decisive action, the region risks entrenching a two-speed Europe, with south-east Europe remaining a low-productivity periphery. Therefore, the next policy cycle must prioritise not just meeting the benchmarks of the *acquis*, but embedding reforms that foster innovation, attract high-quality investment and ensure inclusive growth. Only then can south-east Europe realistically converge with EU living standards and secure sustainable prosperity.

Investments, infrastructure and human capital

Foreign direct investment and its structure

Over the past decade, south-east European countries have recorded increased levels of FDI, with Serbia as the region's largest recipient. According to UNCTAD (2023) on the basis of data from the National Central Bank, FDI has predominantly been directed toward the manufacturing industry (automotives, electronics and textiles), real estate and telecommunications. While these investments contribute to employment growth, their structure reflects a model based on low labour costs and subsidies rather than on developing high value-added activities.

Such an investment model raises questions about long-term sustainability – workers often continue to be confined to low-wage segments with limited opportunities for trade union organising.

Public investments and infrastructure projects

In the last ten years, all countries in the region have made significant use of international financial arrangements to improve infrastructure, primarily in the fields of transport and energy. The European Union, through the Economic and Investment Plan for the Western Balkans (2020–27), has provided substantial funding for regional connectivity, while the World Bank and the European Bank for Reconstruction and

Development (EBRD) have financed infrastructure projects focusing on the green transition and energy efficiency.

However, trade union reports point to several weaknesses:

- lack of transparency in the selection and implementation of projects
- limited effects on local employment (projects often engage foreign contractors and temporary labour)
- unequal regional distribution – larger cities and the main corridors receive most of the investment while rural areas are neglected.

Corruption trends in the western Balkans

Corruption remains a pervasive issue in the region, eroding trust and integrity, and having a major impact on both the public and the private sectors. In particular, corruption hinders economic development and fuels social inequality. Addressing it requires a comprehensive approach including transparent policies, accountability measures and an engaged citizenry dedicated to fostering ethical practices. In the words of François Valérien, chair of Transparency International, there is no doubt that the:

International community and every nation must make tackling corruption a top and long-term priority.²

Transparency International's Corruption Perceptions Index scores countries from 0 (highly corrupt) to 100 (very clean) and offers a comparative lens on governance quality. It captures a difficult situation in the western Balkans. While the EU average is 64, the western Balkans are below this benchmark. In the late 2000s and early 2010s, EU accession prospects spurred legislative reforms, anti-corruption strategies and the creation of oversight bodies in countries including Montenegro, Serbia and North Macedonia. By the mid-2010s, however, momentum had faltered. Analysts began warning of state capture, eroding public trust and weakening accountability. Indeed, from 2015 onward, most countries' scores have plateaued or worsened. The 2024 version of the Index paints a troubling picture for the western Balkans, where entrenched political control, weak institutions and insufficient anti-corruption safeguards are undermining democratic governance.

Montenegro remains the region's best performer (with a score of 46), although this is still lower than the global average of 43. Recently, it has made only partial progress. Its Special State Prosecution has pursued some high-level cases, but the judiciary continues to be vulnerable to political capture, threatening to reverse the gains. Kosovo's three-point improvement to 44 reflects incremental institutional strengthening, while Albania's five-point jump (to 42) – the largest in the region – is linked to judicial reforms and high-profile prosecutions. The latter's specialised anti-corruption prosecution and courts (SPAK) have earned public trust by prosecuting former ministers, MPs and mayors, and even investigating a former president and

2 Taken from the webpage documenting the release of the 2024 Corruption Perceptions Index report, accessed 23 September 2025 at: <https://www.transparency.org/en/cpi/2024>.

prime minister. North Macedonia's drop to 40 follows renewed political scandals, while Serbia's decline to 35 reflects concerns over opaque procurement and politicised institutions. Public outrage over the fatal collapse of a Novi Sad railway station canopy in 2024 exposed opaque procurement practices and possible corruption in significant infrastructure projects. Large-scale initiatives, such as the EXPO and 'Serbia 2027' programmes, are being advanced through interstate agreements and special legislation that, together, bypass standard anti-corruption controls. Bosnia and Herzegovina, at 33, records its lowest score since 2012, hampered by fragmented governance, deep political divisions, systemic corruption and weak conflict of interest laws. Moreover, in Republika Srpska, the reintroduction of a 'foreign agent' law targeting independent media and civil society threatens to shrink the civic space still further. Judicial reforms intended to secure independence still fall short, lacking clear merit-based appointment rules and robust asset disclosure mechanisms.

Across the region, common patterns emerge: ruling parties are exploiting legal loopholes, weakening oversight bodies and using restrictive laws to target dissent. While the prospects of EU accession offer leverage for reform, progress depends on genuine political will to strengthen the rule of law, ensure judicial independence and implement transparent governance. Without these, the western Balkans risk remaining trapped in a cycle in which weak democracy enables corruption to flourish which, in turn, weakens democracy.

In September 2025, Albania made global headlines by appointing 'Diella', an AI-generated virtual minister tasked with overseeing public procurement in the attempt to make tenders '100 % free of corruption' by removing human discretion from contract awards. 'Diella' will review, approve and publish procurement decisions in real time, aiming to close one of the region's most persistent channels for corruption. Such innovations are unprecedented; however, technology alone cannot dismantle entrenched patronage networks without parallel reforms in enforcement, transparency and judicial independence.

While Albania's experiment may serve as a test case for other states grappling with similar procurement vulnerabilities, systemic corruption is deeply embedded in the region despite over a decade of EU-driven reform agendas. Political will often falters once initial reforms are enacted, anti-corruption bodies are frequently undermined by political interference and, while civil society and investigative journalism play a vital role in exposing abuses, they too have their own weaknesses and are under attack. Progress is fragile without a stronger rule of law and an independent judiciary.

Data connected with the Index suggest that isolated improvements — such as in Albania and Kosovo — are possible, but reversing long-term stagnation will require more concerted efforts. Otherwise, the western Balkans risks further democratic backsliding, diminished EU accession prospects and the continued erosion of public trust.

Human capital and labour force development

Human capital remains one of south-east Europe's most critical challenges in the context of realising sustainable economic development. Despite gradual progress in

education reform and some EU-supported initiatives, the region still faces systemic weaknesses:

- high emigration rates, particularly among young and highly educated workers, leading to a persistent ‘brain drain’
- mismatches between education systems and labour market needs, especially in technical and digital skills
- underinvestment in research, innovation and lifelong learning programmes.

International institutions such as the World Bank, OECD and the European Commission emphasise the importance of human capital to economic convergence, but trade unions in the region highlight instead the social dimension of this issue. The loss of skilled labour reduces economic competitiveness and undermines the potential for strengthening workers’ rights and social dialogue.

Here, the sustainability of growth based on foreign investment and public infrastructure depends primarily on whether south-east European countries can invest more systematically in education, training and workforce retention. Without such measures, the gap between the EU averages in productivity and also in wages are likely to persist.

Education and labour productivity in south-east Europe: causes and consequences

One of the central structural challenges for south-east Europe lies in the persistent link between educational outcomes and labour productivity performance. The essential background is that the region systematically underinvests in education, resulting in outdated curricula, insufficient infrastructure and limited professional development for teachers, all of which reduce the quality of learning at both primary and secondary levels. Moreover, early childhood education is underdeveloped, with enrolment rates significantly below EU averages, undermining the foundation for lifelong skills acquisition.

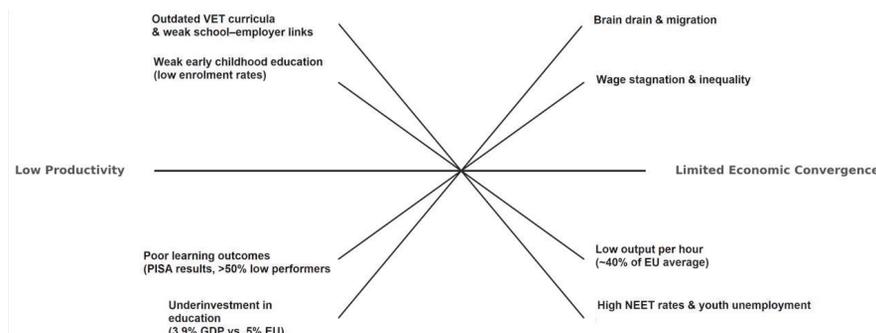
The consequences of these systemic weaknesses are visible in international assessments such as PISA (Programme for International Student Assessment). Alarmingly, more than half of students are ‘low performers’ in core skills (mathematics, reading, science) compared to about 27 % in the OECD/EU. This indicates that a large share of the future workforce is entering the labour market without adequate foundational skills. Similarly, vocational education and training often fails to equip graduates with competencies that correspond to the demands of a modern economy due to weak ties with employers and insufficient practical training.

These educational deficits translate directly into low labour productivity. Even when employment rates improve, the economic value generated per worker is low, limiting the prospects for wage growth, improved living standards and overall convergence with the EU. The mismatch between labour market needs and available skills also exacerbates unemployment, underemployment and high rates of particularly young people not in employment, education or training (NEET).

At macroeconomic level, weak productivity growth constrains the region’s ability to attract investment and integrate effectively into global value chains. At societal

level, it perpetuates inequality, accelerates labour migration and undermines social cohesion. In this sense, the cycle of low educational investment → poor learning outcomes → low productivity → limited economic convergence represents a structural trap that the western Balkans must urgently address.

Figure 3 – Link between education and labour productivity in south-east Europe



Source: authors' own elaboration.

Challenges and structural gaps

There are a number of issues which need to be highlighted when it comes to developing the policy agenda around the issues raised by an underdeveloped labour force:

- basic and secondary education outcomes remain below EU standards: PISA results show regional performance at around 80–82 % of EU averages in mathematics, for example, alongside general low proficiency in core skills
- public investment in education is insufficient: the region allocates about 3.9 % of GDP to education, well below the EU average of 5 %
- early childhood education and care continue to be underdeveloped: only around half of children aged between three and the start of compulsory schooling are enrolled in some form of provision, more than 40 percentage points below the EU level
- the proportion of NEET youth is high at about 21.6 %, although it has declined compared to earlier periods
- vocational education and training (VET) faces persistent structural weaknesses: the outdated curricula, insufficient technical equipment, limited practical training and weak links between schools and businesses also reduce graduates' ability to acquire market-relevant skills
- lifelong learning and adult education are increasingly present in policy strategies, but participation rates continue to be low
- limited investment in R&D further constrains the region's capacity to adapt and innovate in line with labour market and technological shifts.

Implications for economic development and EU integration

The main development issues that arise from these challenges and structural gaps are as follows:

- persistently low labour productivity suggests that, even with rising employment rates, economic growth is modest regarding value added per worker or per hour worked. This constrains convergence in income per capita with EU levels
- skills shortages hinder firm competitiveness, the ability to attract foreign investment and capacity within the region in terms of adapting to the digital and green transitions, risking marginalisation within the European integration process
- high NEET rates and insufficient early education coverage risk long-term social and economic exclusion, weaker adaptability to labour market demands and greater inequality.

Policy directions

Trade unions in the western Balkans need to think about articulating a set of policy recommendations that centre on workers and their rights in connection with the skills agenda. From a labour movement perspective, priority should be given to ensuring adequate public investment in education, particularly at primary and secondary levels. This includes modernising curricula and infrastructure, and providing continuous professional development for teachers to guarantee equitable access to quality education for all children.

Unions should also stress the importance of expanding early childhood education, recognising it as a crucial foundation for lifelong learning and addressing long-term inequalities in access to skills and employment opportunities. Furthermore, trade unions can actively strengthen the linkages between education and the labour market, particularly through vocational education and training. By advocating practical training, apprenticeships and that curricula be aligned with real labour market needs, unions can help ensure that young people acquire the skills that translate into decent work.

The labour movement is also responsible for promoting lifelong learning and adult education. In the context of rapid digitalisation and the green transition, unions should support policies that make reskilling and upskilling more accessible, especially for vulnerable workers who risk exclusion. Equally important is the call for greater investment in research and development, which directly affects innovation capacity, industrial policy and, ultimately, the sustainability of employment in the region.

Finally, trade unions should advocate the development of targeted youth employment and skills programmes to reduce the existing persistently high NEET rates. Such programmes should be inclusive and forward-looking, and be designed to facilitate smoother transitions from school to work, strengthening social cohesion and economic resilience.

Innovation in south-eastern Europe: untapped potential compared to the European average

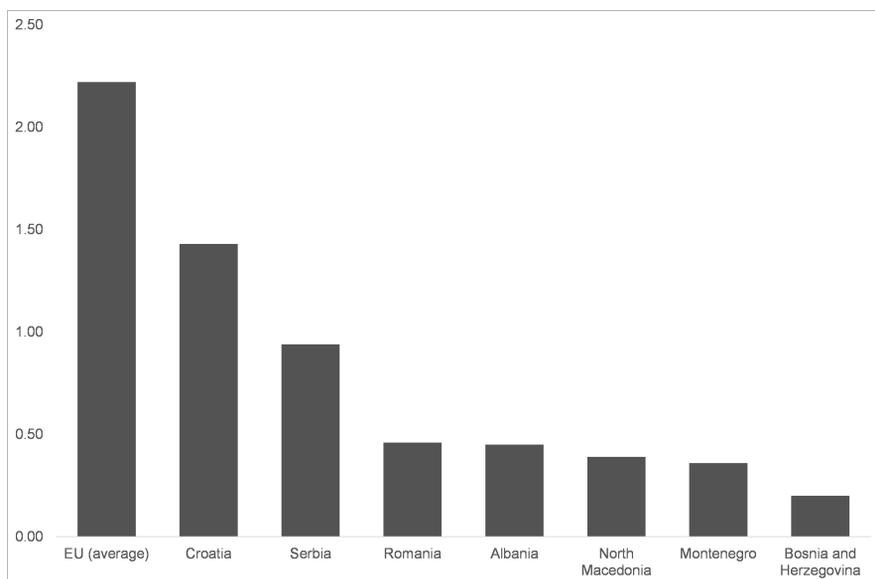
When examining the landscape of innovation in south-eastern Europe, a narrative of duality emerges. On the one hand, the region shows signs of momentum – an increasing number of firms adopting new technologies, a growing interest in digital and green projects, and selective examples of thriving start-up ecosystems. On the other, structural weaknesses and historical imbalances are preventing this momentum from transforming itself into making a broad and sustained contribution to productivity and competitiveness. Compared to the European Union average, where R&D expenditure reached about 2.2 % of GDP in 2023, most south-east European countries operate at significantly lower levels – often around or below 0.5 % (see Figure 4). This numerical gap is not just a statistic: it reflects insufficient institutional resources, a weaker role for the private sector in funding R&D, limited networks of venture capital and a persistent disconnect between universities and industry that hampers the commercialisation of research.

Most south-east European countries thus have R&D intensity significantly below the EU average; some exceptions (e.g. Croatia) are closer to the EU average but still fall well short of the more robust European leaders. Differences in years and data sources also reflect the problem of uneven statistical monitoring in the region – one of the practical challenges in policy formulation.

As a result, even when innovation does occur in the region, its multiplier effect on productivity and growth is weaker than in the EU. Foreign direct investment often brings technology and managerial practices – which are valuable – but too often follows a ‘silo model’,³ in which added value is concentrated in the hands of large investors while local academic and entrepreneurial actors remain marginal. Hence, policies that deliberately expand investment in human capital (via education and lifelong learning), and which also create channels for academia-industry cooperation and broader access to venture capital, are crucial not as mere costs but as investments capable of reshaping the region’s development trajectory.

- 3 In the context of innovation systems, the silo model refers to a fragmented and isolated mode of organisation in which institutions, sectors or policy domains operate independently with limited interaction and knowledge exchange. Such a structure often leads to inefficiencies, duplication of effort and a lack of constructive collaboration between the key actors – universities, industry and government – that are essential for fostering innovation. South-east European countries, much like other transition economies, frequently face challenges rooted in this silo-based approach where ministries, agencies and research institutions pursue separate agendas without effective coordination. Overcoming the silo model and moving toward a networked or ecosystem-based model of innovation is widely recognised as a prerequisite for enhancing competitiveness and achieving sustainable economic growth.

Figure 4 – R&D expenditure as % of GDP (latest available data)



Sources: EU (average), Eurostat,⁴ 2023; Croatia, DZS/GII,⁵ 2022/23; Serbia: Statistical Office of Serbia,⁶ 2023; Romania, World Bank,⁷ 2022; Albania, World Bank/EIS/GII,⁸ 2021–23; North Macedonia, World Bank/GII,⁹ 2022–23; Montenegro, GII/national sources,¹⁰ 2019–20; Bosnia and Herzegovina, World Bank/GII, 2023.¹¹

Note: data drawn from national statistics, international databases and the Global Innovation Index/WIPO country profiles. The reported percentages are each country’s most recent available indicators, with the reference year specified; where national data series are limited (e.g. Albania, Montenegro), international estimates and reports documenting trends have been used.

In the short and medium term, narrowing the gap with the EU requires a combination of measures: raising, and better allocating, public R&D expenditures; stim-

- 4 Eurostat ‘R&D expenditure’ accessed 12 December 2024 at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=R%26D_expenditure.
- 5 Croatian Bureau of Statistics (DZS) ‘Research and Development, 2023’ accessed 15 November 2024 at: <https://podaci.dzs.hr/2024/en/76946>. GII – Global Innovation Index.
- 6 Statistical Office of the Republic of Serbia (RZS) ‘Research and development activity, 2024’.
- 7 World Bank ‘Research and development expenditure (% of GDP)’, accessed 23 September 2025 at: <https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS>.
- 8 *ibid.*
- 9 *ibid.*
- 10 ‘Montenegro ranking in the Global Innovation Index 2024’ accessed 16 September 2024 at: <https://www.wipo.int/edocs/gii-ranking/2024/me.pdf>.
- 11 World Bank ‘Research and development expenditure (% of GDP)’ accessed 23 September 2025 at: <https://data.worldbank.org/indicator/GB.XPD.RSDV.GD.ZS>.

ulating private investment through tax incentives and public-private programmes; strengthening regional innovation systems; and focusing on sectors where south-east European countries already show comparative advantages (IT, specific high value-added manufacturing segments and green technologies). Innovation can only move from sporadic, episodic examples to becoming a permanent driver of competitiveness and inclusive economic growth in the region through the application of such a multilayered strategy.

EU integration and structural reforms

The EU integration process has served as a key anchor for reforms in south-east Europe, providing political and economic incentives. Countries in the region have made varying degrees of progress toward EU membership: Croatia joined in 2013, while others remain candidates or potential candidates.

Table 4 – Western Balkan countries' EU accession progress

Country	SAA: entry into force	Membership application	EU candidate status	Decision to open accession negotiation	Status of accession process, September 2025
Albania	2009	2009	2014	2020/2022	4/5 clusters open; hoping to join by 2030
Bosnia and Herzegovina	2015	2016	2022	2024	Preparatory stage
Croatia	2005	2003	2004	2005	EU member since 1 July 2013
Montenegro	2010	2008	2010	2012	All clusters opened and some chapters closed; hoping to join by 2028
North Macedonia	2004	2004	2005	2020/2022	Initial phase
Serbia	2013	2009	2012	2013	All clusters opened (though not all chapters); two chapters closed

Source: authors' own elaboration.

The convergence process has required substantial reforms in governance, the rule of law and economic policy. These reforms have included market liberalisation, privatisation and improvements in regulatory frameworks. However, the pace of reforms has often been uneven and subject to political instability.

FDI has been a major driver of modernisation, particularly in manufacturing, banking and telecommunications. Infrastructure development, supported by EU funds and international donors, has improved regional connectivity. Yet, human capital continues to be a constraint and there are persistent challenges – as explored above – particularly in terms of education systems, skills mismatch and the emigration of highly skilled workers.

The EU has made significant regional investments through the Instrument for Pre-Accession Assistance (IPA funds) and the Economic and Investment Plan for the Western Balkans. The focus has been on:

- improving infrastructure and regional connectivity
- strengthening institutions and the rule of law
- promoting the green and digital transitions.

However, the social dimension of European integration continues to be under-developed. Although the EU promotes the European Pillar of Social Rights, in negotiations with the region’s countries the emphasis is placed more on economic competitiveness and market liberalisation than on labour rights.

Trade union implications:

- a critical approach must be developed towards the programmes of the international financial institutions and the inclusion of trade unions in decision-making must be insisted on
- trade unions must use the European integration process to advocate strengthening social standards and moving closer to the EU welfare state model, rather than focusing solely on economic criteria
- strengthening regional cooperation among trade unions is crucial to mitigating the adverse effects of policies encouraging competition between countries by reducing labour costs.

Wages, employment and labour rights

Wage dynamics in south-east Europe remain heavily influenced by minimum wage policies, a critical instrument of social policy in the region. While minimum wages have been increasing nominally, they are well below EU averages and are often insufficient to secure decent living standards.

Table 5 – Minimum (gross) wage in south-eastern Europe, 2020–25 (euro/month)

Country	2020	2021	2022	2023	2024	2025
Albania	209.1	242.5	268.6	375.8	398.7	407.6
Croatia	546.1	562.8	622.5	700.0	840.0	970.0
Montenegro	331.3	331.3	532.5	532.5	532.5	670.4

North Macedonia	342.1	358.9	430.0	484.0	542.0	584.0
Serbia	344.4	366.1	401.9	460.6	544.2	618.7

Source: Eurostat; data downloaded 12 August 2025.

Wages and productivity in south-east Europe

An important dimension in assessing labour market performance in south-east Europe is the relationship between productivity and wage levels. While the productivity indicators show a gradual convergence of the Western Balkans toward the EU27 average (see above), wage levels are disproportionately low. This discrepancy suggests that the remuneration of labour in the region does not correspond to its productive potential.

Table 3 and Figure 2 reported average output per hour data across the region, amounting to less than 40 % of the EU average. At the same time, average net wages are approximately 578 euros in Albania, 915 in Serbia, 1,003 in Montenegro and 1,028 in Croatia, while the average gross monthly wage in the EU27 exceeds 3,400 euros. In relative terms, this means that, while productivity in the region stands at 25–50 % of the EU benchmark, wage levels are often below 30 % of the EU average. This suggests the existence of a structural wage gap, reflecting weak collective bargaining, limited institutional enforcement of labour rights and labour market segmentation.

The implication is twofold. First, the region's competitive advantage based on low wages is being sustained at the expense of workers, rather than reflecting genuine productivity differences. Second, underpayment relative to productivity discourages labour force participation and contributes to the persistence of emigration pressures. Reducing this misalignment – through stronger wage-setting institutions, productivity-linked collective agreements and gradual alignment with EU labour standards – would not only improve social outcomes but also support long-term convergence by retaining human capital within the region.

Table 6 – Productivity and wages in south-east Europe relative to EU27

Country	Productivity (USD/hour)	Productivity (% of EU27)	Average wage (€/month, net or gross*)	Wage (% of EU27 average)
Albania	17.60	~25 %	~€578 (net)	~17 %
Bosnia and Herzegovina	24.20	~35 %	~€650 (net)	~19 %
Croatia	25.50	~40 %	€1,476 (gross) / €1,028 (net)	~43 %
Montenegro	33.10	~50 %	~€1,003 (net)	~29 %
North Macedonia	31.40	~50 %	~€700 (net)	~20 %

Serbia	25.60	~35 %	~€915 (net)	~27 %
EU27 average	68.20	-	~€3,417 (gross)	-

Sources: OECD (2025); Eurostat (2023).

* Wage data for the western Balkans are generally reported in net terms, while EU27 averages are gross. This implies that the relative wage ratios shown for the WB countries are somewhat understated.

Collective bargaining coverage varies significantly, with relatively higher levels in Croatia compared to minimal coverage in Albania. The weakening of collective bargaining institutions reflects broader challenges to trade union influence.

Labour markets in the region are characterised by persistent unemployment, particularly among young people, and high levels of informal and precarious employment.

Migration has further reduced the available labour force, with significant numbers of workers leaving for better opportunities in EU countries. This dynamic is creating additional pressure on pensions systems and social protection.

The International Trade Union Confederation, in its Global Rights Index (ITUC 2024), classifies most countries in the region as having ‘systematic violations of workers’ rights’.

As regards the policy response, trade unions within the region ought to take close account of the following points:

- regional trade union cooperation must be strengthened in order to reduce the effects of ‘social dumping’ and mutual competition between countries based on low labour costs
- a priority is the extension of collective bargaining coverage and the insistence on its *erga omnes* application
- trade unions must develop new forms of organising in sectors with precarious and migrant workers.

Fiscal systems, pensions and social protection

South-east Europe’s taxation and social contribution systems are generally regressive: they heavily rely on indirect taxes and high social contributions on labour. This structure disproportionately burdens low income workers and limits disposable incomes.

Pensions systems across the region face sustainability challenges due to demographic decline, high levels of emigration and limited fiscal space. Reforms have often included raising retirement ages and tightening eligibility; this reduces benefits adequacy and increases social tensions.

Social protection systems are underdeveloped and inadequately funded everywhere. The share of GDP taken by public expenditure on social protection ranges from 12–15 % in Albania and North Macedonia to around 20 % in Croatia, whereas the EU average exceeds 25 %.

The main challenges include:

- low coverage of poor households by social benefits
- fragmentation of assistance programmes
- lack of effective mechanisms for protecting the unemployed and vulnerable groups.

In some countries (e.g. Serbia, Bosnia and Herzegovina), trade unions warn that social benefits do not reach the level required for a decent standard of living.

Coverage gaps persist, especially for informal workers, while benefit levels are frequently insufficient to reduce poverty or ensure social inclusion. The erosion of welfare state functions highlights the social costs of the development model which has been adopted.

It is clear that international financial institutions such as the IMF and the World Bank have played a decisive role in shaping economic and fiscal policies in south-east Europe. Their recommendations have often emphasised fiscal discipline, privatisation and labour market flexibility which, while contributing to macroeconomic stability, have also resulted in social costs. Meanwhile, the EU accession process has reinforced many of these policy directions, conditioning financial and technical assistance on implementing fiscal consolidation and structural reforms. However, the social impact of these measures has been less considered, leading to a tension between economic convergence and social cohesion.

Trade unions have criticised fiscal dominance over social priorities, arguing that such a policy mix has tremendous costs in terms of social and human capital, not least in that it undermines collective bargaining, weakens social protection and accelerates migration.

Artificial intelligence as a key driver of productivity and economic growth

South-eastern Europe continues to face deep structural challenges that hinder its economic convergence with the European Union, yet the region's economies possess significant untapped potential. Their geographic proximity to the EU, relatively flexible labour markets and growing ICT sectors provide a foundation for technological leapfrogging – provided that transformative technologies are strategically adopted. Among these, artificial intelligence (AI) represents the most promising lever for accelerating productivity growth, fostering economic modernisation and enabling structural transformation.

AI offers three key advantages which are particularly relevant to south-eastern Europe:

1. closing productivity gaps: By automating routine processes, enhancing decision-making and enabling data-driven efficiency, AI could substantially raise productivity in low efficiency sectors such as agriculture, construction, healthcare, public administration and logistics. This is crucial in economies where large employment sectors are technologically outdated
2. addressing demographic decline: AI-enabled automation and augmentation can help offset labour shortages occasioned by shrinking workforces due to ageing and migration. For example, AI applications in healthcare could alleviate

pressure on limited medical staff, while digital learning tools could mitigate shortages in the education system

3. boosting competitiveness and integration: Widespread adoption of AI could strengthen the region's integration into European and global value chains by modernising industries and services. In a context where EU firms are restructuring supply chains closer to home, the western Balkans could position themselves as attractive nearshoring destinations if they were to embrace advanced digital solutions.

Despite these opportunities, the region currently lags in AI readiness. The digital infrastructure is uneven, regulatory frameworks are fragmented and most small and medium-sized enterprises – the backbone of employment – lack the resources and knowledge to adopt advanced technologies. Without proactive policies, there is a serious risk that AI adoption will remain concentrated in a few ICT hubs, exacerbating inequalities and reinforcing the structural gap with the EU.

Therefore, south-eastern Europe should recognise AI as a strategic development priority. If supported by targeted investment in infrastructure, digital skills and innovation ecosystems, AI could unlock an extraordinary opportunity for rapid modernisation, productivity convergence and sustainable economic growth. Conversely, failure to adopt and diffuse AI broadly across sectors would leave the region further marginalised in the European and global economy.

Conclusion

Over the past decade, south-east Europe has charted a path of economic expansion that is both notable and uneven. While integration into European and global value chains, infrastructure upgrades and rising foreign direct investment have driven convergence in some economies, others remain constrained by structural weaknesses, limited innovation capacity and persistent institutional gaps. This divergence has been compounded by demographic decline, skills outflows and labour market segmentation, eroding the region's traditional social model and straining welfare systems.

The past ten years have also revealed the fragility of social cohesion when growth is not inclusive. Wage disparities, high informal employment and weakened collective bargaining have deepened inequalities, while underinvestment in education and healthcare risks locking in the productivity gaps. Yet, these challenges coexist with significant opportunities. The EU's renewed enlargement momentum, alongside targeted 'Growth Plans' and pre-accession funding, offer a unique policy window to embed structural reforms that strengthen competitiveness, rebuild social protections and align governance with EU standards.

For policymakers, the imperative is clear: develop accession-driven reforms which meet the requirements of the *acquis* and which, at the same time, craft a forward-looking development strategy that balances economic dynamism with social resilience. This means investing in skills, fostering innovation ecosystems and ensuring that the benefits of growth are broadly shared. In doing so, south-east Europe can transform its uneven progress into sustainable convergence, positioning the region as a resilient and competitive part of the European project.

References

- Adilbish O, D. A. Cerdeiro, R. A. Duval, G. H. Hong, L. Mazzone, L. Rotunno, H. H. Toprak and M. Vaziri (2025) *Europe's productivity weakness: firm-level roots and remedies* IMF Working Paper No. 2025/040, accessed 23 September 2025 at: <https://www.elibrary.imf.org/view/journals/001/2025/040/001.2025.issue-040-en.xml?cid=561771-com-dsp-crossref>.
- Agency for Statistics of Bosnia and Herzegovina (BHAS) (2024) *Gross domestic product and labour indicators* Sarajevo: BHAS.
- Blanchard, Olivier and Daniel Leigh (2013) 'Growth forecast errors and fiscal multipliers' *American Economic Review* 103(3): 117–120.
- Croatian Bureau of Statistics (DZS) (2024) *GDP and Employment Statistics* Zagreb: CBS.
- European Trade Union Confederation (ETUC) (2024) *ETUC position on EU enlargement and social standards* Brussels: ETUC.
- Eurofound (2023) *Minimum wages, collective bargaining and minimum income protection* Dublin: Eurofound.
- European Bank for Reconstruction and Development (EBRD) (2024) *Transition Report 2024–25* London: EBRD.
- European Commission (2024) *Enlargement country reports* Brussels: European Commission.
- European Investment Bank (2023) *Regional investment report: western Balkans* Luxembourg: EIB.
- European Investment Bank (EIB) (2025) *Growth and competitiveness in central, eastern and south-eastern Europe: The role of innovation* Working Paper 2025/01, accessed 23 September 2025 at: https://www.eib.org/attachments/lucalli/20240356_economics_working_paper_2025_01_en.pdf.
- Eurostat (2024) *Eurostat database* accessed 23 September 2025 at: <https://ec.europa.eu/eurostat>.
- Eurostat (2025a) 'Regional economic indicators: GDP per capita and life expectancy' Luxembourg: European Commission.
- Eurostat (2025b) 'Education and training statistics: tertiary attainment and early school leavers' Luxembourg: European Commission.
- Eurostat (2025c) 'GDP per capita, consumption per capita and price level indices' accessed 23 September 2025 at: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=GDP_per_capita,_consumption_per_capita_and_price_level_indices
- Institute of Statistics (INSTAT) (2024) *GDP and labour force data* Tirana: INSTAT.

- International Labour Organization (ILO) (2023) *World social protection report 2023–25* Geneva: ILO.
- International Monetary Fund (IMF) (2024) *Republic of Serbia: fourth review under the policy coordination instrument* Washington DC: IMF.
- International Monetary Fund (IMF) (2025) *Albania: Article IV Consultation – press release; staff report* Washington DC: IMF.
- International Organization for Migration (IOM) (2023) *Migration trends in the western Balkans* Berlin: IOM.
- International Trade Union Confederation (ITUC) (2024) *Global Rights Index* accessed 23 September 2025 at: <https://ituc-csi.org/ituc-global-rights-index-2024-en>.
- Lindert, Peter (2004) *Growing public: social spending and economic growth since the eighteenth century* Cambridge: Cambridge University Press.
- Organisation for Economic Cooperation and Development (OECD) (2023) *Productivity and jobs in a globalized world* Paris: OECD Publishing.
- Organisation for Economic Cooperation and Development (OECD) (2024) *Employment outlook* Paris: OECD Publishing.
- Organisation for Economic Cooperation and Development (OECD) (2025) *Economic convergence scoreboard for the western Balkans 2025: skills cluster* Paris: OECD Publishing, accessed 23 September 2025 at: https://www.oecd.org/en/publications/economic-convergence-scoreboard-for-the-western-balkans-2025_bc0babf3-en/full-report/skills-cluster_92fcced8.html
- Organisation for Economic Cooperation and Development (OECD) and United Nations Children’s Fund (UNICEF) 2025 *Transforming education in the western Balkans* Paris: OECD Publishing.
- Paunović, Sanja and Rajko Kosanović (2019) ‘Further milestones in the economic development of south-eastern Europe’ *SEER Journal for Labour and Social Affairs in Eastern Europe* 22(1): 33–52.
- Piketty, Thomas (2014) *Capital in the twenty-first century* Cambridge MA: Harvard University Press.
- Reuters (2024) ‘Western Balkan countries to grow 3.7 % collectively in 2025, World Bank says’ 17 October 2024, accessed 23 September 2025 at: <https://www.reuters.com/markets/europe/western-balkan-countries-grow-37-collectively-2025-world-bank-says-2024-10-17/>
- Rodrik, Dani (2011) *The globalization paradox: democracy and the future of the world economy* New York: W. W. Norton & Company.
- Sergi, Bruno S, Enisa Salimović, Sanja Paunović and Rajko Kosanović (2019) ‘Wage developments in south-east Europe and the influence of economic policy’ *SEER Journal for Labour and Social Affairs in Eastern Europe* 22(2): 189–215.

- Sergi, Bruno S, Sanja Paunović and Rajko Kosanović (2018) 'Analysis of the main trends in wages, employment and poverty in south-eastern Europe' *SEER Journal for Labour and Social Affairs in Eastern Europe* 21(2): 201–218.
- State Statistical Office of North Macedonia (SSO) (2024) *Economic Accounts and Survey Results* Skopje: SSO.
- Statistical Office of Montenegro (MONSTAT) (2024) *Macro and Labour Statistics* Podgorica: MONSTAT.
- Statistical Office of the Republic of Serbia (RZS) (2024) *National Accounts and Labour Force Data* Belgrade: RZS.
- United Nations Conference on Trade and Development (UNCTAD) (2023) *World investment report 2023: investing in sustainable recovery* Geneva: UNCTAD.
- United Nations Department of Economic and Social Affairs (UNDESA) (n.d.) International Migrant Stock 2024, accessed 23 September 2025 at: <https://www.un.org/development/desa/pd/content/international-migrant-stock>.
- United Nations High Commissioner for Refugees (UNHCR) (2025) *Mixed migration routes – mid-year update 2025* Geneva: UNHCR.
- Viebrock, Elke and Jochen Clasen (2009) 'Flexicurity – a review of the literature' *Transfer: European Review of Labour and Research* 15(1): 25–43.
- World Bank (2024) *Human Capital Index 2024: unlocking the power of education* Washington DC: World Bank.
- World Bank (2025) *Adapting for sustainable growth* Western Balkans Regular Economic Report, Washington DC: World Bank.
- World Bank (n.d.) *World development indicators* accessed 23 September 2025 at: <https://data.worldbank.org>.



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The Bulgarian path to the euro and the expected effects of its introduction

Abstract

This article reviews Bulgaria's long and politically burdensome path towards the adoption of the euro, finally achieved on 1 January 2026 after almost twenty years of membership of the EU. It commences with a broad introduction to the key events in the chronology over those decades, and contrasts the significant consensus between the social partners, as expressed in statements from the Economic and Social Council, with the varying nature of public opinion as exploited by political parties given the divide in Bulgarian politics. It next turns to the degree of social and economic convergence on which the data on the effects of the introduction of the euro is mixed other than for member states joining the euro area after 2004, where the impact is largely positive. The article explores the public discourse in Bulgaria on adopting the euro and the impact on public opinion, concluding with some thoughts on the lessons which may be drawn from Croatia. The overall outcomes are expected to be positive, but it is clear that these will not materialise automatically and that further efforts, including via providing people with clear information, do need to be made.

Keywords: euro, euro area, Maastricht criteria, economic and social convergence, European integration, resilience

Introduction

Bulgaria's long and difficult path to introducing the single European currency began back in 2005 with the signing of the Treaty of Accession of Bulgaria and Romania to the European Union, followed by the start of actual EU membership on 1 January 2007. Bulgaria's obligation in this direction stems from the Treaty on the Functioning of the EU (TFEU) and has no pre-set deadline other than the requirement, at some point, to meet the Maastricht criteria. Formally, this process was completed on 8 July 2025 when the European Parliament and the Council of the EU took the final necessary decisions for the introduction of the euro in Bulgaria on 1 January 2026. Thus, Bulgaria became the 21st EU member state to adopt the single European currency, and it is an exemplar of how long the process can take in terms of the period of preparation and in meeting the formal criteria for doing so: in November 2007, the country's formal goal was to meet the criteria by 2009 and to adopt the euro by 2012. By comparison, Croatia's candidacy (explored alongside that of Bulgaria in previous articles carried in the *SEER Journal* – see Darvas (2022) and Bobeva (2022)) lasted only 10 years – from 2013 to 2023.

This has indeed been a long period, during which a number of international and domestic events and processes have taken place that have had an impact on the adoption of the euro. In this sense, it is difficult to summarise this period with all its diversity and complexity. Nevertheless, this article starts by seeking to explain how the process unfolded in the case of Bulgaria. In presenting the chronology, an attempt has been made to highlight the main political and socioeconomic characteristics of the period leading up to the adoption of the euro.

The timeline

In 1997, Bulgaria introduced a currency board regime subsequent to a severe financial and hyperinflationary crisis. This established a fixed exchange rate for the Bulgarian lev, initially set against the German mark and later against the euro.¹ One of the distinctive features of the currency board arrangement is that the national bank lost the right to conduct an independent monetary policy so, when the country joined the EU, Bulgaria had a fixed exchange rate of its national currency against the euro. Under these conditions, the adoption of the euro was seen as a natural continuation of, as well as providing a smooth exit from, the currency board regime.

At the same time, Bulgarians have become accustomed to the pricing of many goods and services in euros. In this sense, 1 January 2026 will not drastically change the situation in Bulgaria. In practice, what has been happening in the euro area has had an indirect impact on the Bulgarian economy. What is new in this case is that Bulgaria will now participate fully in the decision-making process.

Despite relatively favourable domestic political and economic conditions, the global financial crisis of 2008–2009 and the ensuing crisis with Greece's external debt postponed indefinitely the issue of Bulgaria's adoption of the euro. The period between 2012 and 2018 was marked by strong political fluctuations on the issue, with some governments raising the issue of the euro from time to time. Overall, however, there was neither broad political consensus nor sufficient public support at this time.

Ultimately, in 2018, the GERB ('Citizens for the European Development of Bulgaria') government officially declared Bulgaria's desire to join ERM II (the exchange rate mechanism, known as the 'euro area waiting room'). In 2020, Bulgaria officially joined ERM II and the European Banking Union, a formal prerequisite for joining the euro area in the future.

The following two years – 2021 and 2022 – were years of political instability, accompanied by a series of regular and extraordinary parliamentary elections, during which time it proved extremely difficult to form governing coalitions, governments ruling for only a short time. Under these conditions, it was impossible to expect significant progress in preparing for membership of the euro area. Nevertheless, the euro then became one of the most important domestic political issues, actively used for electoral purposes and narrow party interests.

1 The peg was set at 1 euro = 1.95583 BGN (the accepted currency symbol for the lev).

The traditionally pro-European parties ('We Continue the Change', GERB and Democratic Bulgaria) have consistently advocated the adoption of the euro in the near future as a strategic commitment to the EU and an instrument for financial and macroeconomic stability. In contrast, Eurosceptic parties formed around nationalist and populist ideas, represented by 'There is Such a People', Vazrazhdane ('Revival') and parts of the Bulgarian Socialist Party (BSP), have openly opposed it, deliberately sowing fears among the population about the severe economic and social consequences of doing so and exploiting Bulgarians' fears of inevitable price increases and loss of national sovereignty.

As far as public opinion is concerned, support for the adoption of the euro has prevailed for most of the preparation period, although it has at times given way to the opposite opinion, depending on the influence of certain short-term factors and considerations.

Against this backdrop, unsuccessful attempts were made to hold a referendum on the adoption of the euro, attempts which were, once again, were made entirely subordinate to party interests and intentions. In this regard, the issue was referred to the Constitutional Court which rejected such a possibility, citing the EU Accession Treaty.²

All this hindered the smooth progress of the preparation process, delaying it and diverting public attention from the achievement of an important national goal. The topic of the euro has thus largely become a dividing line in Bulgarian politics and an element of geopolitical polarisation along pro-European versus pro-nationalist (and frequently, in this era, characterised as pro-Russian) orientation and sentiments.

Over the next two years – 2023 and 2024 – the political disputes continued in parliament and society amidst clear signs of public support remaining insufficient. The initial target date for the introduction of the euro – 1 January 2024 – had to be postponed. Despite the progress made by Bulgaria in meeting the criteria for membership of the euro area, as noted by the European institutions (the European Commission and the ECB) in their regular convergence reports, it became clear that efforts needed to be continued to achieve the inflation target, adopt the planned legislative changes and achieve a higher degree of public consensus on the euro. In this regard, it is worth noting the good cooperation between GERB and the 'We Continue the Change'-Democratic Bulgaria coalition in uniting around this strategically important goal.

Against this general backdrop, it is worth highlighting the consistent position of the employer organizations, trade unions and organised civil society in Bulgaria in favour of adopting the euro. This position is expressed in a series of documents issued by the Economic and Social Council (ISS, in the Bulgarian acronym) after 2022, when the Council of Ministers adopted the National Plan for the Introduction of the Euro. Central among these is a resolution on accelerated accession, adopted in February 2025 (ISS 2025), which provides a detailed analysis of the expected economic and social benefits of adopting the euro. It also provides a number of

2 The Accession Treaty mandates states joining the EU to adopt the euro (and, in addition, the Schengen free movement area).

examples and evidence from the experience of other countries that have already done so (the Baltic states, Croatia and Slovenia) in support of the thesis that any increase in the price of goods and services will be insignificant, especially in the initial months after the change. The 2025 Resolution came on the back of another adopted previously in 2023, on Bulgaria's membership of the eurozone (ISS 2023). This Resolution called for the rapid introduction of the euro, describing the currency board as a temporary measure implemented under pressure, and was accompanied by several analyses and opinions including on the impact on economic development, inflation and incomes (ISS 2022b). ISS has also provided analysis and commentary on the National Plan for the Introduction of the Euro, including an own-initiative Opinion drawn up prior to the 2022 Resolution (ISS 2022a).

Bulgaria's path to the euro has thus been a long and politically burdensome one. The main obstacles to achieving this important strategic goal have not so much been economic as political and social including, among others, unsatisfactory progress on reforms in a number of important areas, frequent political changes and instability, a lack of public confidence, and artificially instilled fears of price increases and loss of national identity.

Economic and social convergence

One of the most important issues related to the accession of new EU member states to the euro area is their degree of economic and social convergence with the other countries of the Union.

The question of convergence has existed since the very beginning the EU as an economic community. In theory, the more the integration process develops and deepens, the more the participants in it should converge in terms of their socioeconomic development. Moreover, this issue has not only theoretical and academic dimensions, but also very practical aspects from the point of view of the policies implemented by the Union as a whole and by individual member states.

This issue has become particularly relevant in the light of the establishment of economic and monetary union and the adoption of the euro as a common currency. Over the years, with the gradual accession of member states to the euro area, an extensive body of scientific literature on the subject has accumulated, on top of which there is a wealth of empirical data on the trends which may be observed. However, it is important to note that there are no specialised studies that highlight solely the impact of the adoption of the euro on the processes of nominal and real convergence between euro area countries. Cyclical economic factors have an impact, and it is particularly difficult, if not impossible, to assess the degree of influence of several other individual factors.

In general, the use of the single currency and the liberalisation of capital flows imply accelerated economic growth and are intended to contribute to nominal and real convergence between the members of the euro area which, in turn, supports more intensive growth in labour productivity and income. These opportunities can be summarised as follows:

- the elimination of currency risk – a prerequisite for encouraging investment in poorer countries
- free movement of people puts pressure on wages within new euro area members
- the single currency encourages trade and helps countries achieve economies of scale.

In addition to the indisputable benefits and favourable conditions for economic and social convergence, the introduction of the euro also entails potential risks/challenges. These include the inability to pursue an independent monetary policy and to devalue the national currency in order to stimulate exports and support competitiveness, especially in times of economic turmoil and crisis. The European Central Bank determines monetary policy in the euro area by taking into account the overall situation without considering in detail the specific circumstances of individual member states. In this context, there is a risk of a stronger and asymmetrical impact of adverse economic processes on weaker economies.

Easier access to credit within the euro area carries risks of a credit boom and debt problems. In this regard, the problems of Greece, Spain and Portugal are usually cited. After the introduction of the euro in 2000, taking Greece as an example, significant inflows of capital triggered a credit boom focused on consumer spending, real estate and construction, rather than encouraging an increase in labour productivity. The global financial crisis of 2008–2009 further reinforced these adverse trends and imbalances, making the country's exit from the debt crisis particularly painful.

Nominal convergence is monitored on the basis of the Maastricht criteria and countries' compliance with these; real convergence is observed when less developed countries catch up with more developed ones in terms of income, productivity and standard of living. A summary measure of this level of process is gross domestic product per capita at purchasing power parity. Sustainable real convergence occurs when the level of real GDP per capita in lower income countries approaches that of higher income ones, and where this is a sustainable trend.

The first examples and analyses on the impact of the introduction of the euro on real convergence cover the group of 12 member states in the period after 2000. Studies by the International Monetary Fund (Franks and Schölermann 2017) and the European Central Bank (2015; see also Diaz del Hoyo et al. 2017) do not confirm expectations of convergence within the EU; they show accelerated convergence in the 1990s, but insignificant change after 2000 and a widening of the gap during the economic crisis of 2008–2009.

For Bulgaria – as well as for other countries in south-east Europe – the most interesting cases are, however, those of the new member states that joined the euro area after 2004; that is: Slovenia (2008); Slovakia (2009); Estonia (2011); Latvia (2014); Lithuania (2015); and Croatia (2023) (year of euro adoption indicated in brackets). Here, Eurostat statistics clearly show that these countries are converging in terms of income levels with more developed ones. Convergence is measured by an average increase of 10–12 percentage points in the GDP per capita index over a period of approximately ten years or slightly more. The same trend is observed in Bulgaria, but from a much lower base and at a significantly slower pace. The

economic crisis in 2008–2010 and the uneven pace of economic recovery have had a negative impact on this process (Eurostat 2025).

All the countries under review, with the exception of Slovakia, show a steady convergence trend for the period 2014–2024. In Slovakia, in contrast, there has been a prolonged stagnation in convergence since 2011 while, since 2016, it has been on a negative trajectory with a sharp decline and a gradual negative trend. From 2022, Slovakia has seen a recovery in the positive trend and a degree of catch-up, although without reaching the 2014 level. In other words, convergence is not necessarily an automatically linear process for euro area countries. Targeted and consistent efforts and policies are needed for coordinated economic reforms and institutional strengthening.

Along with the gross domestic product per capita indicator, the actual individual consumption per capita indicator is often used to analyse and assess the degree of convergence. This provides more information about changes in the standard of living and wellbeing of households, the first indicator being more general in terms of economic and social development as a whole.

The table below clearly shows that, following the introduction of the euro, all member states have achieved an improvement in this other indicator – a trend which is widespread and sustained. Even in the years of the Covid-19 pandemic and subsequently, this trend has continued. In isolated cases, some individual years do show a decline from previous values, most likely due to specific national factors, without affecting the overall trend.

Table 1 – Indices of actual consumption per capita (PPP) in the EU (EU27=100), 2008–2024

20...	08	09	10	14	15	16	17	20	22	23	24
EA20	109	109	108	107	107	106	106	104	104	104	104
Lithuania	70	63	61	81	82	84	87	91	91	88	89
Slovakia	82	82	80	77	76	77	77	81	86	85	85
Croatia	60	58	56	63	62	63	64	69	74	76	78
Slovakia	70	72	71	74	74	69	67	75	77	77	79
Latvia	59	50	50	62	63	64	66	68	73	75	76
Estonia	64	58	57	71	73	74	75	79	78	75	74
Bulgaria	45	43	42	54	55	56	57	62	69	70	74

Source: Eurostat (online data code: *pre_ppp_ind*).

Note: the table shows the years closest to the date of adoption of the euro. The value for Estonia for 2011 was 58.

Public discourse and public opinion in Bulgaria

During the period of preparation for the adoption of the euro, public debate in Bulgaria has been dominated by the issue of the rising prices of goods and services, especially in 2025 when the prospects of the imminent introduction of the euro became clearer. Unfortunately, the debate in the media has been dominated by a number of commentators, analysts and politicians who, without any serious arguments, have painted apocalyptic scenarios, fuelling people's occasionally well-founded fears. In contrast, a group of real experts have put forward theoretical and empirically proven theses, citing numerous examples and statistical data from the experience of countries that have already gone down this path (see, for instance, Avramov 2025).

Public talk of an inevitable jump in prices feeds speculative inflationary expectations, thereby becoming a factor in the actual increase of many prices beyond the objectively determined price increase. This phenomenon is partly due to the information and awareness campaign on the introduction of the euro starting rather late and being not particularly convincing. Furthermore, the media in Bulgaria seem to prefer to spread negative and fearmongering messages without realising their responsibility at such an important moment, giving a platform to certain politicians who readily use the topic of the euro for narrow party goals and interests, instead of actively seeking out other points of view (Ganev 2025b). In a market economy, such mass hysteria can easily lead to price increases, which seems to be happening in Bulgaria on the eve of the adoption of the euro. However, this process cannot continue for long because the mechanism of supply and demand will eventually balance prices. Effective and efficient regulators are also needed but, unfortunately, they act extremely slowly in Bulgaria and without much result.

The role of nationalist and populist political parties represented in parliament, such as Vazrazhdane, is particularly negative. Its representatives in parliament are calling for the criminal prosecution and sanctioning of the chair of the National Statistical Institute on the grounds that the data on inflation in Bulgaria have been falsified and are inaccurate. In such a situation, when such claims are spread via a parliamentary platform, it is especially easy for ordinary citizens to believe in the 'inevitability' of a rise in prices.

Experience in those EU member states that adopted the euro at an earlier stage shows a slight increase in prices in the short term (immediately after adoption), mainly due to rounding-up effects and psychological factors related to expectations of higher prices. The introduction of the euro is also likely to entail some initial technical costs (the replacement of accounting software, recalibration of cash registers, etc.) which some traders will try to pass on to the end consumer through higher prices. On the other hand, the broad impact of the euro is more likely to be greater price stability than higher inflation. The real effect depends more on domestic economic policy and the global economic situation than on the currency change itself.

Against this backdrop, what are the attitudes among the public in Bulgaria towards the introduction of the euro?

The most complete picture is provided by the results of national representative surveys of citizens and businesses conducted in April-May 2025. Between April 8 and 16 and May 22 and 28, Alfa Research (2025) conducted two national representative surveys of public attitudes towards the introduction of the euro on behalf of the Ministry of Finance. A total of 1,200 citizens over the age of 16 were surveyed in their homes through a direct standardised interview. Separately, again in two waves in April and May, 500 owners or representatives at the management level of businesses responsible for making decisions about the development of the company were also surveyed.

The main conclusion from the surveys is that there is growing support for joining the euro area, but also concerns about the short-term economic effects. Both surveys additionally show that, after 18 years of EU membership and Bulgaria's accession to the Schengen free movement area, joining the economic and monetary union is seen as a logical step in the process of European integration. Fifty-six per cent of citizens and 64 per cent of businesses believe that the country should continue this process in accordance with the EU Accession Treaty.

Alfa Research Agency had conducted a similar survey in 2022. A comparison of the results shows an increase in support for joining the euro area among ordinary citizens. In 2022, the percentages of those in favour to those against stood at 33:50, while in April 2025 it was 45:49. In May, there was almost complete parity between the two groups – 46.5 % in favour of joining and 46.8 % against. In April-May, President Rumen Radev proposed holding a referendum on the country's readiness to adopt the euro. This did not sway supporters of joining the euro, but rather reinforced the positions of both camps.

Business attitudes are traditionally positive and unchanged – 66 % in support in 2025 versus 34 %.

Neither the proposal for a referendum nor the protests organised by Vazrazhdane have not significantly affected overall attitudes towards joining the euro area; attitudes remain somewhat more stable. However, they have acted as a catalysis for certain concerns and fears, mainly economic and social which, in the first place, often stem from manipulative statements on social media or from poor information and communications.

The main ones are related to the short-term effects of the introduction and the country's adaptation to the new currency. With regard to the near future, 56 % of citizens fear negative consequences for themselves, while 35 % who do not. Optimistic expectations prevail among businesses, but there are also concerns about a number of practical aspects of the euro introduction process. In the long term, this trend runs in the other direction. Both citizens and businesses alike have positive expectations about the effects of joining the euro area: 48 % of citizens are rather positive compared to 39 % who are rather negative, while the respective figures among businesses are 61 % and 35 %.

The positive effects of the introduction of the euro which are expected boil down to three main areas:

- greater convenience when traveling and making payments abroad (61 %)
- elimination of currency exchange losses (44 %)
- facilitation of trade with other European countries (33.8 %).

In addition, businesses expect a reduction in transaction costs (39 %) and more favourable conditions for investment in Bulgaria (38 %).

The negative consequences which are expected are quite diverse and multifaceted. The most significant concerns for both citizens and businesses are related to rising the prices of goods. Also in this vein are concerns about fraud/artificial price increases from unscrupulous traders. Between four and six out of ten Bulgarians share these fears. Among them are included not only those with a negative attitude towards the adoption of the euro, but also more than a third of those with a positive attitude. In addition, 39 % of Bulgarian citizens believe various rumours about reductions in salaries/pensions and 20 % expect a change in the fixed lev:euro exchange rate.

Meanwhile, concerns specific to businesses include the expected difficulties for small and medium-sized businesses in adapting to the new conditions (30 %) and higher prices of both raw materials (35 %) and manufactured goods (43 %).

The Alpha surveys reveal numerous gaps in citizens' and businesses' knowledge of the practical steps involved in introducing the euro. Every second respondent (that is, over 50 %) indicated that they did not have sufficient knowledge on key issues such as: at what exchange rate will the lev be converted to the euro; how long after approval will Bulgaria actually introduce the euro; where it will be possible to exchange levs; and others. Between 60 and 70 per cent do not know for how long prices in stores will continue to be displayed in levs and euros; in which currency change will be given for retail purchases in cash; whether fees will be charged for currency exchanges; how long it will be possible to pay in both currencies; what will happen to savings in banks; how loan/lease obligations will be recalculated; and many other issues. That between half and two-thirds of the population is unclear about such fundamental issues opens the door wide to speculation, misconceptions and fears. Furthermore, fears of fraud, speculation and unscrupulous traders bring to the fore the question of who will monitor possible abuses and to whom and how such cases could be reported. Over 78 % of those surveyed still do not know the answer to this question and thus possess legitimate concerns.

The Croatian example

In just a few months, Bulgarians will be replacing the Bulgarian lev with the euro. We will start using the euro everywhere, unlike before when only larger transactions were priced in euros and payments were made in the equivalent amount in levs (i.e. for the purchase and sale of real estate, cars, mortgage loans, etc.).

The expected major changes are most likely to be mainly positive, but there may also be some potential negative effects and there are some important recommenda-

tions to consider as regards the measures and policies which may need to be taken in the intervening period.

The summary assessment of Boris Vujčić (2024), Governor of the Croatian Central Bank, is apposite:

If I had to sum up the impact of the euro on the Croatian economy and society as a whole in one sentence, it would be this. We have seen all the benefits we expected and announced in advance. The Croatian economy has become stronger and more resilient, especially given the specific conditions of the crisis during which we introduced the euro.

Croatia's immediate preparations for adopting the euro took place amid the Covid-19 pandemic and a period of high inflation across western Europe which was unprecedented since the late 1970s. No other EU member state had introduced the euro during a period of restrictive monetary policy. Meanwhile, the international geopolitical and economic environment was characterised by tension and great uncertainty. All of these are factors which are unfavourable to any change of the national currency.

In terms of the short-term positive effects of introducing the euro, the primary focus needs to be on avoiding currency risk and lowering the risk premium. In Croatia, the cost of borrowing on international markets fell sharply compared with the period before the introduction of the euro, while there has also been a reduction in interest rates due to lower risk premiums alongside lower regulatory costs for banks under the common European monetary policy. These are important factors that have acted to increase the competitiveness of the Croatian economy and businesses.

Moreover, membership of the euro area has also meant that Croatia has access to support from the European Central Bank and the European Stability Mechanism, ensuring macroeconomic stability and increased investor confidence.

The elimination of the need to exchange currency for international trade reduces transaction costs for local businesses. This is particularly important for the development of international tourism, which is central to Croatia's economy. Tourists pay directly in euros which, in practice, means convenience and price transparency. At the same time, there are additional incentives for full international trade and financial integration and foreign investment. Croatia has also seen an accelerated integration of export-oriented industries into euro area supply chains.

The social consequences in Croatia are rather more nuanced than the economic ones and include issues such as prices and inflation, incomes and the purchasing power of the population, and social inequality.

In all countries that have replaced their national currency with the euro, politicians have faced the same fears: rising prices and speculation. At the time of the currency changeover, inflation in Croatia was around 10 % due to the war in Ukraine and problems with energy supplies. However, data show that the effect of the introduction of the euro on prices was minimal – around 0.2 to 0.4 percentage points. International comparisons of inflation for the same period show that inflation in Croatia was actually lower than in EU member states that are not members of the euro area (Hungary, the Czech Republic and Poland). This insignificant inflationary pres-

sure is mainly due to rounding-up effects and is concentrated in services (restaurants) and retail trade. The psychological factor also plays a significant role at such times, people believing that prices rising significantly is a result of the introduction of the euro. The changes are most easily noticed are those which are felt in everyday small purchases (so-called 'subjective inflation'). However, official statistics tell a different story.

Again, using Croatia as an example, it should be emphasised that the effect of higher prices in that time was felt more strongly by households with lower incomes. This is a factor that exacerbates social inequality. As a compensatory measure, the Croatian government introduced focused support measures (social assistance for energy support). Despite the initial, often negative, public perception and fears of inflation, public attitudes are, however, normalising against the backdrop of greater financial security, easier payments, opportunities for more travel and, in general, greater convenience for citizens and businesses.

Separately, the long-term expectation is that the introduction of the euro in Croatia will support economic growth and income convergence between EU member states. Equally, a process of price convergence is also taking place, with prices in poorer countries catching up with those in richer countries, especially for real estate and services.

The forecasts and expectations surrounding the impact of the introduction of the euro in Bulgaria are similar to those in Croatia. The positive effects are mainly associated with the elimination of currency conversion costs for businesses and households. Preliminary estimates have this at an amount of approximately 1 billion BGN per year. With accession to the euro area, easier access to financing for businesses and households is expected, while Bulgaria will move into the group of lower-risk countries, resulting in expanded lending opportunities for a larger number of borrowers.

Similar to Croatia, more foreign investment and, in general, faster capital accumulation are expected, with an inevitably positive impact on economic growth.

As expected, there will also be some negative consequences. The most likely of these is a small increase in the price of some goods and services due to rounding up when setting new prices in euros. There will also be attempts by unscrupulous traders to defraud consumers. In order to minimise these adverse effects, state authorities and consumers should be particularly vigilant and active in exposing abuses. As part of the preparations for the introduction of the euro, the prices of all goods and services must already be displayed in both levs and euros, allowing citizens and businesses to get used to prices in euros gradually. It also enables them to monitor the appropriateness of the behaviour of sellers and service providers and to report any irregularities to the National Revenue Agency and the Consumer Protection Commission in a timely manner.

Conclusion

With the introduction of the euro, Bulgaria is fully integrating into the single European market. Although this may sometimes seem like a symbolic step in the course of the country's European integration, it will have many practical benefits

for the economy. It removes uncertainty about future economic policy, improves the credit rating and, as a result, is expected to increase investment activity, improve labour market characteristics and, ultimately, lead to higher economic growth and higher incomes. The long-term positive effects are related to stable prices and the resilience of the economy to sudden economic shocks.

However, as the experience of other EU member states teaches, these potential opportunities will not materialise automatically: efforts are needed to complete institutional reforms, hold financial discipline and develop political wisdom and responsibility in order for the step taken with the adoption of the euro to be successful. Only then will Bulgaria be able to reap the benefits of euro area membership.

In the time remaining until 1 January 2026, it is vital that an even more comprehensive and properly targeted information campaign, one that has a practical focus and seeks to address citizens' fears and outstanding questions with the aid of plain language, is rolled out.

References

- Alfa Research (2025) 'Public attitudes towards the introduction of the euro in Bulgaria', Sofia: Alfa Research, accessed 13 October 2025 at: <https://alpharesearch.bg/post/1037-obshtestveni-naglasi-za-vuvejdaneto-na-evroto-v-bulgaria.html> (in Bulgarian).
- Avramov, Yosif (2025) *Bulgaria and the Euro* Sofia: Ciela (in Bulgarian).
- Bobeva, Daniela (2022) 'It's not about Croatia and Bulgaria: it is about the fundamentals of membership of the euro area' *SEER Journal for Labour and Social Affairs in Eastern Europe* 24(2): 195–202.
- Darvas, Zsolt (2022) 'Discretion lets Croatia in the euro area in 2023, but leaves Bulgaria out' *SEER Journal for Labour and Social Affairs in Eastern Europe* 24(2): 183–194.
- Diaz del Hoyo, Jean Luis, Ettore Dorrucci, Frigyes Ferdinand Heinz and Sona Muzikarova (2017) 'Real convergence in the euro area: a long-term perspective' ECB Occasional Paper Series No. 203, December, Frankfurt: ECB.
- Dombrovskis, Valdis (2025) 'The euro does not wipe out the obligation for fiscal discipline' *economic.bg*, 8 July, accessed 13 October 2025 at: <https://www.economic.bg/bg/a/view/dombrovskis-evroto-ne-otmenja-zadyljenieto-za-fiskalna-disciplina> (in Bulgarian).
- Economic and Social Council (ISS) (2022a) 'Opinion on the "National Plan for the Introduction of the Euro"', May, accessed 13 October 2025 at: https://esc.bg/wp-content/uploads/2025/08/esc_4_016_2022-opinion-on-introduction-of-the-euro-1.pdf.
- Economic and Social Council (ISS) (2022b) 'Impact of Bulgaria's accession to the eurozone on economic development, inflation and income in the country' 22 June, accessed 13 October 2025 at: <https://esc.bg/document/vazdejstvie-na-prisa>

ediniavaneto-na-balgariia-kam-evrozonata-varhu-ikonomiceskoto-razvitie-inflatsiia-i-dohodite-v-stranata/ (in Bulgarian).

Economic and Social Council (ISS) (2023) 'Resolution of the Economic and Social Council on Bulgaria's membership in the eurozone' 13 October, accessed 13 October 2025 at: <https://esc.bg/document/rezolyutsiia-na-iss-otnosno-chlenstvoto-na-balgariia-v-evrozonata/> (in Bulgarian).

Economic and Social Council (ISS) (2025) 'Resolution of the Economic and Social Council on the need to accelerate the process of Bulgaria's accession to the eurozone', 24 February, accessed 13 October 2025 at:

<https://esc.bg/en/document/resolution-of-the-economic-and-social-council-on-the-need-to-accelerate-the-process-of-bulgarias-accession-to-the-eurozone/>.

European Central Bank (2015) 'Real convergence in the euro area: evidence, theory and policy implications' *ECB Economic Bulletin* 5: 30–45.

Eurostat (2025) 'GDP per capita, consumption per capita and price level indices' Statistics Explained, 2 September, accessed 13 October 2025 at:

<https://ec.europa.eu/eurostat/statistics-explained/SEPDF/cache/1809.pdf>.

Franks, Jeffrey and Hanni Schölermann (2017) 'Drifting apart: income convergence in the euro area' *IMF blog* 13 September, accessed 13 October 2025 at:

<https://www.imf.org/en/Blogs/Articles/2017/09/13/drifting-apart-income-convergence-in-the-euro-area>.

Ganev, Georgi (2025a) 'The benefits of the euro for people and businesses' *actualno.com* 17 June, accessed 13 October 2025 at:

https://www.actualno.com/interview/polzite-ot-evroto-za-horata-i-za-biznesa-ikonomichestvo-georgi-ganev-objasni-video-news_2460265.html (in Bulgarian).

Ganev, Georgi (2025b) 'Expectations and prices', *Forbes Newsletter* August 14, accessed 13 October 2025 at: <https://forbesbulgaria.com/2025/08/14/ochakvaniya-i-tseni/> (in Bulgarian).

Vujčić, Boris (2024) 'Boris Vujčić: One year with the euro' speech given to the Bank for International Settlements in Zagreb, 30 January, accessed 13 October 2025 at: <https://www.bis.org/review/r240131a.htm>.



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Human capital in the 21st century: structure, challenges and economic growth

Abstract

This article examines demographic change, both globally and in the context of the wider region of Europe, paying specific attention to the situation in Bulgaria which has been experiencing a deteriorating demographic situation. Uneven economic development between will lead to significant changes in demographic structure and, if Europe continues to rely solely on its own human capital, it will face severe demographic decline in contrast to Africa and Asia whose influence and relevance will increase. Meanwhile, the idea that artificial intelligence will benefit everyone is controversial: historical evidence shows that significant growth occurs only in the presence of specific, favourable conditions and in a specific demographic environment. Currently, limited competition between employers, workers having weak collective power, and massive and continuous digitalisation being carried out with neither strategic planning nor control, mean that those with access to cutting edge technologies will gain competitive advantage and that this is likely to result in a further entrenchment of global inequality and wealth concentration.

Keywords: *human capital, economic growth, demographic change, inequality, artificial intelligence*

Introduction

The Doomsday Clock is a symbolic construct illustrating the assessment of the risk of global catastrophe caused by human activity. The concept was created in 1947, shortly after the end of World War II, by scientists involved in the Manhattan Project (Bulletin of the Atomic Scientists n.d.). The clock functions as a metaphor, not a literal prediction, and serves to visualise the threats to humanity arising from the uncontrolled development of science and technology.

The metaphor is statistical and hypothetical in nature, with the symbolic hour of ‘midnight’ indicating the onset of global catastrophe. The distance to midnight – expressed in minutes or seconds – is updated annually in January based on an assessment of various threats. Among the factors considered in the analyses are nuclear war and climate change, but the risks associated with artificial intelligence have also been added to them as have, subsequently, additional components such as demographics and demographic trends.

When it was first set in 1947, the Doomsday Clock read that it was seven minutes to midnight, since which time its hands have been moved back eight times and forward seventeen, reflecting the dynamic changes in global security and sustainabil-

ity. The greatest deviation from the symbolic hour was recorded in 1991, when the hand was positioned at 17 minutes to midnight – a period coinciding with the end of the Cold War and the signing of a number of key arms control agreements. By comparison, as of January 2025, the time to midnight has been reduced to just 89 seconds – the closest value recorded to date.

In view of the growing global challenges, the symbolism of the clock is becoming increasingly relevant. While the risk of nuclear war is increasingly central to existential threat scenarios, demography – a less discussed but extremely important factor – also deserves attention. In the long term, demographic processes have the potential fundamentally to transform the existing global social, economic and ecological order. Under certain conditions, demographic processes could even contribute to the evolutionary decline or extinction of the human species if they are not adequately analysed and addressed.

The purpose of this article is to examine changes in human capital across continents and globally. Before that, however, it undertakes a brief theoretical overview of what human capital is and how it has evolved over the years.

Literature review

There are different types of capital – physical, financial and human – with each of the types having different characteristics. At its core, human capital deals with the state of demography in which it represents a unity between biological, social and psychological forms of organisation, marked by the sign of scarcity in resource terms (Kazakov 2001). Human capital is invariably linked to economics as well as to demography, with economists using it to denote those personal qualities which are considered useful in the production process, including knowledge, skills, know-how, good health, education, etc. both at individual level and at aggregate/collective level. In other words, human capital corresponds to any of the stock of knowledge or characteristics that a person possesses – regardless of whether they are innate or acquired – that contribute to his or her ‘productivity’ (Kazakov 2001).

Adam Smith (1776) considered the concept of capital as “the acquired and useful abilities of all the inhabitants or members of society”, defining capital as a stock that brings income to its owner. Alfred Marshall (Cavalieri 1992) made a similar statement, according to which capital includes all economic goods that bring income. Refracted through the prism of demography, Smith’s and Marshall’s statements can be interpreted as follows – the economic well-being of a given country is directly dependent on the availability and condition of human capital (i.e. the condition of demography).

According to Marshall (Cavalieri 1992):

... the development of the human race is an increase in its numbers, strengthening of health and strength, multiplication of knowledge and abilities, enrichment of the characteristics of its character.

Marshall’s judgment examines the relationship between the reproduction of people as a biological species and the related economic activity, which determines the

reproduction of the labour force and the formation of human capital. From this it should be concluded that human reproduction is a fundamental factor in economic and social development.

However, when the process of reproduction is not balanced (i.e. when there is overpopulation or underpopulation), problems arise, in particular the impossibility of achieving an economic optimum (Becker 1993). Qualitative and quantitative human capital is necessary for the development of any economy. In other words, for an economy to grow, it must have an educated and qualified resource of people that is capable of productivity (Dulevski et al. 2016). However, when a country is in a demographic crisis, the following problem is observed – the quantity of human capital decreases significantly and, with it, so does the percentage of the workforce that has the potential to become highly educated and highly qualified (i.e. the quality decreases).

New technologies and the ever-increasing standard of living are often accompanied by changes in the total labour force due to population ageing and declining birth rates (Galor et al. 2000). There is a change in the ratio between adolescents, workers and pensioners, which is an expression of one of the most important and objective macroeconomic characteristics for the respective society. Thus, nations which are ageing are forced to place a higher burden on their pension, health insurance and social security systems insofar as the specific problems associated with the ‘third’ age objectively require this. However, the lower number of adolescents increases their marginal utility according to basic microeconomic theory (Goldin et al. 2008).

The growth of human capital can be captured as an increase in the qualifications, status and/or skills of an individual, such increases making humans more valuable in terms of various economic, social and personal plans (Becker 1964). But, in an ageing nation this is difficult to implement due to the ongoing processes of the depreciation of human capital, which is a significant problem: the depreciation of human knowledge – a core component of human capital – occurs every 4–6 years.

The depreciation of human capital is also related to difficulties in quickly perceiving new information, often related to the age characteristics of individuals (Blundell et al. 1999). Young and unencumbered individuals are generally capable of perceiving new paradigms in science and new views/phenomena in the political sphere. Dynamic life requires constant change and adaptation, which are associated with the rapid acquisition of new knowledge and/or skills, characteristics that are challenges for nations with ageing populations and negative demographic growth.

Another key issue in nations with these problems is the mobility of human capital, which is related to its formation and use, and the investments which are made in facilitating geographic mobility – all essential elements of human capital theory (Mayo 2012).

The main trouble that states encounter in their efforts to form and preserve/retain human capital relates to the problem of emigration, or the practice of ‘brain theft’ (Becker 1983). Here, the ‘thieves’ are those highly developed countries that aim to attract high quality, and highly qualified, specialists by offering them better financial, living, creative, etc. conditions in exchange for their labour. This process of ‘theft’ cannot be limited or regulated because it is economically determined on an entirely

bilateral basis – ‘thieves’ are looking for high quality human capital; and highly qualified specialists are looking for opportunities to express themselves and improve their standard of living.

Consequently, a person who decides to emigrate to a country with a highly developed market structure does the following:

1. he or she creates a conflict of interest between him/herself and the original investor (usually, this is the state)
2. she or he increases the return on her/his own investment because s/he then pursues a career in a society with a high level of income
3. he or she realises external benefits because he or she ends up in a highly developed society to whose prosperity he or she had not contributed up to the moment of emigration (Kazakov 2010).

Human capital is an element of national wealth on which powerful emigration flows have a detrimental impact.

The twenty-first century is one of rapidly emerging technological innovations. Technologies are increasingly used both in the work environment and in everyday life, and their optimal use requires technically literate human capital (Huseinovic 2017). In the context of high technologies, including AI, the discrepancy between individual representatives of human capital is of essential importance.

‘High’ technologies and human capital can be considered in two directions. The first is related to the limitations that arise for some people as a result of these ‘high’ technologies. High-tech innovations created by talented and highly intelligent workers limit the development of (less) talented and (less) educated individuals (Huseinovic 2017) as a result of the potential of ‘smart’ technologies to replace a number of activities performed by (less) educated labour. At the same time, the low-skilled and lesser-educated may hinder the spread and widespread use of ‘high’ technologies mainly due to low educational achievement preventing them from operating such technologies and maximising the benefits of their creation (Pogatsnik 2021). In this case, even if a given technology is useful for the wider community, if a majority oppose its use and implementation then the benefits will be insignificant in terms of improving the level of human wellbeing.

Population and population growth

If we assume that humans have been around for approximately 50,000 years, the assumption of a constant rate of demographic growth throughout different historical eras – in conjunction with an awareness that the available data on ancient populations are approximate – it has been calculated that the total number of people born who have ever lived is about 106 billion (Population Reference Bureau n.d.). The current living population, amounting to approximately eight billion people, thus represents only about 6 % of all those who have ever existed. This statistical view is the broad basis for a more in-depth analysis that needs to be developed in view of the structural, social and biological consequences of our demographic dynamics.

The global population reached one billion people for the first time in 1804, an achievement that resulted from millennia of biological, cultural and technological

evolution which gradually created the conditions for the sustainable and simultaneous coexistence of such a number of people. Despite slow demographic growth in previous eras, population dynamics are now undergoing a drastic transformation. In the main, this transition is due to deep structural changes brought about by industrial revolutions, subsequent digitalisation and the processes of globalisation and accelerated urbanisation. It is these factors that are contributing to a significant increase in productivity, an extension of life expectancy and the intensification of migration flows which, together, are leading to an exponential growth in the global population.

The accelerated demographic expansion in the modern era is shown by the time interval required for the global population to rise from one to two billion people. This increase occurred within a mere 126 years, with the two billion threshold being reached in 1930. Subsequently, demographic growth accelerated significantly, while the years required for each subsequent billion have decreased dramatically – 30 years to reach three billion (1960), 14 years to reach four billion (1974) and then just 12 years to reach five billion (1986).

Contrary to these trends, however, 1986 marked a turning point after which the rate of positive growth stopped increasing and stabilised in a demographic ‘plateau’. Empirical evidence for this transition is the uniform period of 12 years required to reach each subsequent billion: six billion people in 1998, seven billion in 2010 and eight billion in 2022.

Recent United Nations population projections show that this demographic ‘plateau’ is expected to be surpassed in the current century: models indicate that the rate of growth will gradually slow down, leading to an extension of the time required for the population to increase. It is projected that it will take about 15 years to reach nine billion people (around 2037) and approximately 23 to move to ten billion (around 2060) a trend which is driven by a steady fall in the rate of positive natural economic growth. Whereas in the middle of the 20th century, global annual growth varied between 2 % and 2.5 %, by 2025 it had fallen to about 0.8 % – i.e. a threefold decrease within a few decades.

It seems that, by the end of the 21st century, humanity will enter a new demographic phase marked by negative demographic growth. According to the estimates of the UN, the global population will begin to decline, for the first time since systematic demographic statistics have been kept, at a rate of approximately -0.1 % to -0.2 % per year. In other words, upon reaching the threshold of ten billion people the human population will enter a phase of gradual numerical decline, which is likely to deepen towards the end of the century.

In the light of these demographic projections, a number of classical economic theories are being rethought. One of the most influential early works in this field was *An Essay on the Law of Population*, published in 1798 by Thomas Robert Malthus. His theory was that, if limits were not imposed on demographic growth, humanity would face an inevitable catastrophe since, while population grows geometrically, food supplies grow arithmetically. This discrepancy, in his opinion, would lead to mass starvation, poverty and social upheaval.

However, modern data highlights that Malthusian logic was either only partially valid or applicable only within a limited historical context – that is, approximately until the end of the 21st century. The main factor that Malthus did not take into account is the impact of technological and economic progress – industrialisation, the modernisation of agriculture, improvements in health and education, and global urbanisation. It is this progress that is leading to significant structural changes in demographic behaviour, including a decline in fertility and an increase in life expectancy, which is ultimately causing the reversal of the demographic curve. In addition, such processes are giving rise to an increasingly pronounced global polarisation – with sharply contrasting demographic trends emerging between developed and developing regions.

Digitalisation, the main driver of the fourth industrial revolution, is arising as a factor having a profound impact on the global dynamics of demographic change. Unlike previous industrial revolutions, which were accompanied by exponential population growth due to improvements in healthcare, agriculture and living conditions, the current technological era – built on artificial intelligence, automation, the internet of things and biotechnology – is likely to lead to the opposite effect: a decline in fertility and the onset of negative demographic growth. The reasons for this are complex and include increasing levels of education (especially among women), greater labour mobility, changing life priorities, the growth of individualist culture and the replacement of traditional social structures by digital technologies. As a result of these factors, demographic trends are changing not only on a global scale, but also with clear regional differentiation.

Table 1 – World population by region, 1950–2050

	Population (1950)	% of global population	Population (2050)	% of global population
Asia	1,368,075,415	54.9	5,280,378,401	54.6
Europe	548,867,473	22.0	703,027,759	7.3
Africa	227,776,419	9.1	2,466,647,618	25.5
North America	168,009,338	6.7	426,579,885	4.4
Latin America and the Caribbean	167,782,158	6.7	730,056,747	7.6
Oceania	12,582,044	0.5	57,668,178	0.6

Source: UN demographic database; author's own calculations.

As presented in Figure 1, the relative share of the world's population living in Europe is expected to decrease significantly – from 22 % in 1950 to only 7.3 % in 2050. Demographic dynamics are developing in the opposite way in Africa where, it is predicted, 25.5 % of the world's population will live by 2050 compared to just 9.1 % in 1950. By the middle of the 21st century, over 80 % of the global population will live in Africa or Asia.

Table 2 – Projections of population change in the first half of the 21st century, by region

	2000 (bn)	2050 (bn)	Percentage increase
Asia	3.7	5.3	43
Africa	0.8	2.5	212
Europe	0.7	0.7	0
Latin America and the Caribbean	0.5	0.7	40
North America	0.3	0.4	33
Oceania	0.03	0.06	100
Total	6.1	9.7	60

Source: UN demographic database; author’s own calculations.

Figure 2 reveals distinct differences in expected demographic growth between continents in this period. Globally, positive demographic growth is observed in all regions with the exception of Europe: the population of Europe is characterised by staticity – both in terms of absolute numbers and in terms of growth rate.

The population in Europe is expected to remain practically unchanged within these five decades. The average age of the European population is currently around 42, with only 16 % of the population under 15 years of age. Moreover, by the end of the 21st century, the average age in Europe is expected to reach between 48 and 50. These demographic trends put Europe in a unique position: not only is the continent the fastest shrinking in the world, it is also the only one that stopped recording positive natural growth at the end of the 20th century. In addition, an ageing Europe faces serious challenges related to its social, economic and health systems.

Meanwhile, the opposite trend is observed in Africa, where extremely intense demographic growth is predicted with the continent’s population projected to grow by approximately 212 %, an unprecedented rate in modern demographic history. This rapid growth is also accompanied by a very low median population age: by 2025, the median age in Africa will be approximately 18 years, while the proportion of people under 15 will amount to 45 % of the total, indicating not only a very young population but also raised expectations of future demographic reproduction.

In Asia, the demographic profile is showing signs of a transition towards a more mature (i.e. ageing) population. The median age on the continent is around 31, with 24 % under the age of 15 – a significantly lower proportion than in Africa, but still indicative of a youthful demographic structure.

In North America, the median age is reaching 35 years, reflecting an advanced stage of the transition towards population ageing. Similar values are observed in Latin America (31 years), as well as in Oceania (32 years), where the trends are similar – moderate ageing accompanied by a stabilisation of the birth rate.

These differences highlight a global demographic asymmetry which is becoming increasingly apparent: developing regions, especially Africa, will play a more and more central role in the future structure of the world population; while developed and ageing societies will face significant socioeconomic challenges related to maintaining sustainable growth, balanced labour markets and adequately resourced social systems.

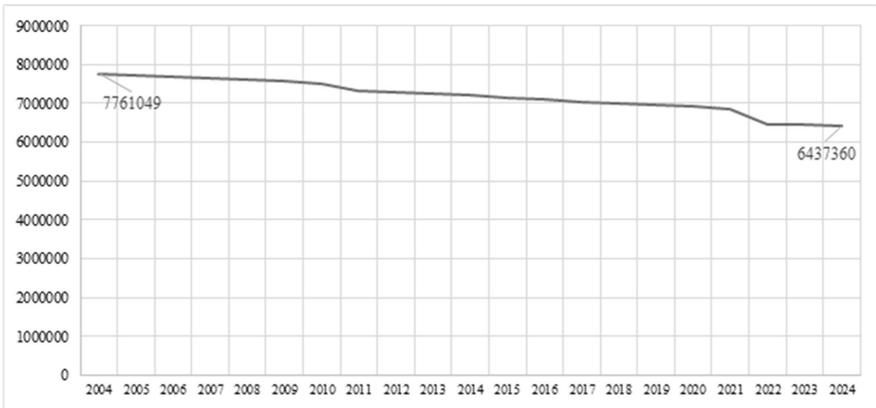
The Bulgarian context

In different historical periods, Bulgaria has recorded significant demographic growth. During the reign of Prince Alexander Battenberg (1879–1886), the population increased by 57 %, under Tsar Ferdinand (1887–1918) by 54 % and under Tsar Boris III (1918–1943) by 45 %; during the period of socialist rule (1944–1989), there was an increase of 18 %.¹

In sharp contrast, since 1989 the country's population has decreased by approximately 30 %, ² indicating a lasting and deepening demographic crisis. This should be seen as a threat of a national nature. It represents a long-term structural problem, the roots of which can be traced back more than three decades. Over the twenty years to 2024, the population of Bulgaria decreased by 17.1 % (Figure 1), with the country's population dropping by approximately 60,000 people per year – equivalent to a city the size of Veliko Tarnovo. This comparison emphasises the scale and dramatic nature of these processes.

- 1 Data sources: 'A look into the archives: the population of Bulgaria', accessed 8 September 2025 at: <https://profit.bg/article/2024012510151018852>; Bulgarian population (1887–2011), accessed 8 September 2025 at: <https://www.infograf.bg/article/1496042439000>; author's own calculations.
- 2 All demographic stats in this para.: National Statistical Institute, 'Demographic Statistics', accessed 8 September 2025 at: https://infostat.nsi.bg/infostat/pages/module.jsf?x_2=4; author's own calculations.

Figure 1 – Population of Bulgaria (2004–2024)



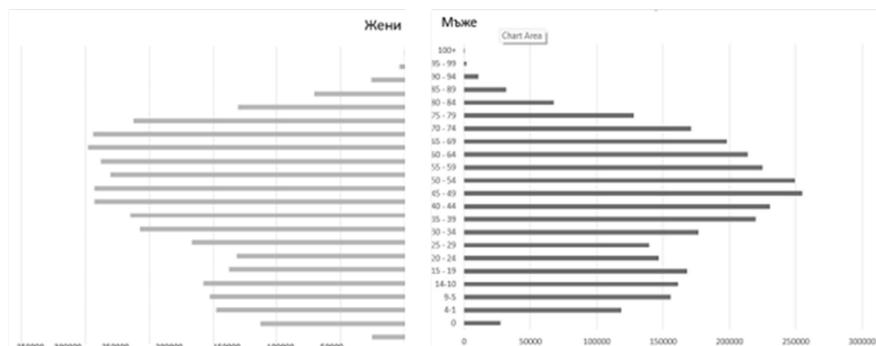
Source: National Statistical Institute demographic statistics; author's own calculations.

Furthermore, in 2024, a total of 100,736 people died in Bulgaria: 275 people per day (366 days in 2024), or 11 per hour. In comparison, live births were just 53,428: 145 babies per day, or six per hour. Twenty years earlier, in 2004, the number of deaths was 110,110: 301 people per day, or 13 per hour. The number of live births in Bulgaria in this year was 69,886: 191 babies per day, or eight per hour. The number of deaths was higher in 2004 than in 2024 (9.3 % more) – but there were 30.8 % more live births.

When examining the age pyramid of the population (Figure 2) – women on the left, men on the right – it is striking that the largest share of the population falls in the age range of 45–49, with the number of men in this group being greater than that of women. There is also a trend for the number of newborns to be the third smallest, ahead only of the age group of people over 100 years old and that of those aged 95–99.

The age pyramid expresses the worrying trend of a country with an ageing population and negative demographic growth. If timely measures are not taken to address the demographic crisis, these negative trends will become irreversible, putting Bulgaria on the verge of a national catastrophe. Despite the urgency of the problem, effective political measures to address the problem are not being taken since the time horizon of a single government mandate (usually 4–5 years) does not coincide with the long-term nature of demographic processes.

Figure 2 – Age pyramid of the population (2024)



Source: National Statistical Institute demographic statistics, author's own calculations.

Why is it important for a nation to be young?

This has importance because a significant proportion of discoveries, breakthroughs and achievements are made by people under the age of 40. A few examples will suffice:

- Thomas Edison invented a carbon filament light bulb that burned for 40 hours in 1876, when he was only 32
- James Watt improved the steam engine and gave impetus to the entire industrial revolution in 1765 at the age of 29
- Eugenio Barsanti created the internal combustion engine in 1853, when he was 32
- Johannes Gutenberg, the father of the printing press, invented it when he was 39
- Alexander Graham Bell invented the telephone in 1876, when he was 29
- Nikola Tesla invented the alternating current electrical system and wireless radio at 37. A few years earlier, when he was 31, Tesla had also invented the induction motor (1887)
- Charles Goodyear discovered the process for vulcanizing cast iron at the age of 39
- Albert Einstein created the theory of relativity (1905) when he was just 26
- Dimitri Mendeleev created the Periodic Table of Chemical Elements (1869) at 35
- Niels Bohr discovered the model of the atom in 1913 when he was 28
- James Watson and Francis Crick discovered the structure of DNA in 1953 when they were 25 and 37 respectively
- Blaise Pascal discovered the principle of hydraulics in 1647 when he was just 24
- Michael Faraday made his discoveries in electromagnetism in 1821 at the age of 30
- Guglielmo Marconi, the father of radio, was 21 when he invented it (1895)

- John Atanasoff began work on the first computer when he was 36 and, by the age of 39, he had built it (in the late 1930s)
- Robert Oppenheimer created the atomic bomb between the ages of 36 and 40.

Very many of the most significant scientific and technological discoveries that have driven the world forward and enabled consistent economic development and transformation over the past few centuries have been made by individuals below the age of 40. Human capital depreciation means that, as people age, many gradually experience physical and cognitive decline, increasingly limiting their ability to innovate and be productive.

On the continents of Africa, Asia, South America, North America and Australia, the median age of the population is below 40. In addition to a low median age, Africa also reports an annual natural growth rate of over 2 %.

In Bulgaria, neither factor – median age nor economic growth rate – is met; a worrying factor that raises uncertainties about Bulgaria's demographic, economic and social wellbeing and, ultimately, concerns related to the future of the country.

Conclusion

These data raise important questions of global significance: while the present belongs to well-developed regions, who will own the future? Are the observed processes reversible? Moreover, what will be the role of artificial intelligence by the end of the 21st century?

Global gross domestic product (GDP) in 2025 is estimated at approximately 110 trillion dollars, of which approximately 38 trillion are concentrated in the US and the EU27. Mathematical calculations show that less than 10 % of the world's population currently owns 36 % of the world's GDP, with all 2,700 billionaires in the world combined owning approximately 14 trillion dollars (approximately 12 % of global GDP). If we take into account official forecasts for the number and structure of the population by the end of the 21st century, by 2100 some 5–6 % of the world's population will own approximately 45 % of its GDP. This means increasing concentration of capital in the hands of fewer and fewer people, regional and global inequalities and an intensification of contradictions and conflicts of all kinds.

The idea that artificial intelligence will benefit everyone is not only false but dangerous: significant economic growth, or 'economic miracles', occur only in the presence of specific, favourable conditions. Such processes do not occur in environments characterised by limited competition between employers, workers having weak or absent collective power, and where massive and continuous digitalisation is being carried out with neither strategic planning nor control. It is those economic entities that gain first access to cutting-edge technologies that will have a significant competitive advantage over other participants in the global economy.

Uneven economic development between continents will inevitably lead to significant changes in the global demographic structure. If Europe continues to rely solely on its own human capital, it will face serious demographic decline by the end of the 21st century, unlike Africa and Asia, whose importance will increase. This trend carries a number of risks, including the possibility of increased migration flows,

economic shocks and even military conflicts arising from growing tensions between regions with different demographic and economic potentials.

References

- Becker, Gary (1993) *Human capital: a theoretical and empirical analysis with special reference to education* third edition, Chicago: University of Chicago Press.
- Blundell, Richard, Lorraine Dearden, Costas Meghir and Barbara Sianesi (1999) 'Human capital investment: the returns from education and training to the individual, the firm and the economy' *Fiscal Studies* 20(1): 1–23.
- Bulletin of the Atomic Scientists (n.d.) *The clock shifts*, accessed 8 September 2025 at: <https://thebulletin.org/doomsday-clock/timeline/>
- Cavaliere, Duccio (1992) 'Alfred Marshall on the theory of capital' *Quaderni di storia dell'economia politica* 10(1): 601–626.
- Dulevski, Lalko (2009) 'Methodological challenges human capital faces and the return on investment put into it' *Nauchni trudove* (Scientific papers) 2: 171–208.
- Dulevski, Lalko, Lyubomir Stefanov, Margarita Atanasova, Maria Paunov, Neno Pavlov and Hristo Maleshkov (2016). *Labour economics* (in Bulgarian), Sofia: University of National and World Economy.
- Galor, Oded and David Weil (2000) 'Population, technology, and growth: from the Malthusian stagnation to the demographic transition and beyond' *American Economic Review* 90(4): 806–828.
- Goldin, Claudia and Lawrence F. Katz (2008) *The Race between Education and Technology* Cambridge, MA: Belknap Press.
- Huseinov, Baki (2017) 'Human capital development – economic effects and market aspects' *Economic Archive* 1/2017: 38–56.
- Kazakov, Atanas (2001) *Human capital* (in Bulgarian), Sofia: University of National and World Economy.
- Malthus, Thomas (1798) *An Essay on the Principle of Population* London: J. Johnson.
- Mayo, Andrew (2012) *Human resources or human capital? Managing people as assets* London: Routledge.
- Pogatsnik, Monika (2021) 'Dual education: connecting education and the labor market' *Opus et Educatio* 8(3): 304:313.
- Population Reference Bureau (n.d.) 'How many people have ever lived on Earth?' accessed 8 September 2025 at: <https://www.prb.org/articles/how-many-people-have-ever-lived-on-earth/>.
- Shishmanova, Penka (2008) *Economic aspects of human capital in Bulgaria* (in Bulgarian) Veliko Tarnovo: Abagar.
- Smith, Adam [1776] (2006) *The Wealth of Nations* Sofia: Rata Publishing House.

United Nations (n.d.) Global issues: population, accessed 8 September 2025 at:
<https://www.un.org/en/global-issues/population>.



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Bulgaria: empowering base-level trade union leaders to ensure growth in membership numbers

Abstract

This article outlines the empowerment of base-level trade union leaders in the agricultural sector in Bulgaria as an innovative strategy towards attracting new members and retaining existing ones. The approach has been adopted by the Federation of Independent Trade Unions in Agriculture (FNSZ) with the aim of creating proactive union structures that not only defend workers' interests but also engage in meaningful initiatives defined by the members themselves. Empowering workers to interact and to deal with such topics positions unions at the heart of civil society. Thus organising can be initiated through base-level structures and a bottom-up organising strategy can complement the top-down strategy already applied within FNSZ. The empowerment of members has already contributed to some positive outcomes and is believed to be a major weapon against a spreading individualist workplace culture and stagnating membership figures over the last decade. Information for this article has been gathered through desk research and an in-depth interview with the chair of FNSZ.

Keywords: *organising, trade union membership, collective organisation, empowerment,*

Introduction

Following the fall of the socialist regime in 1989, union membership sharply decreased (ImproCollBar Project 2023). However, the density rate differs from sector to sector leading to discrepancies in terms of bargaining power and the existence of sectoral agreements. Among the sectors most severely affected by the falling number of trade union members is agriculture, where specific work and employment patterns in the sector make it difficult to organise.

Despite these negative developments, there is a union federation within agriculture that has stabilised its membership numbers and even achieved some progress in gaining new members during the 2020s. This article aims to analyse the practices of attracting and retaining union members currently applied by Federatsia na nezavisimite sindikati ot zemedelieto (FNSZ; Federation of Independent Trade Unions in Agriculture). To achieve this goal, the authors used both desk research analysis and a semi-structured in-depth interview with the chair of FNSZ.

Through a literature review, the overall context of industrial relations in the country is first described, following which a specific focus is put on the agriculture sector and its problems in terms of organising and bargaining. The article concludes after the development of a consideration of FNSZ's organising practices.

Industrial relations in Bulgaria

The industrial relations scene in Bulgaria currently includes seven key players at national level: two trade union confederations and five employer organisations were recognised as nationally representative after the last census in 2020 (KNSB 2021). The census procedure for the recognition of social partner representativity is conducted once every four years, with the social partners proving their representative status through a counting of their members. Trade unions must have at least 50,000 members spread across one-quarter of economic activities in the country to pass the census threshold. Once approved as nationally representative bodies, unions have the right to interact with the state in order to regulate labour and insurance relationships alongside any issue concerning the standard of living. To do so, they use the main body for consultation and cooperation; that is, the *Natsionalen soviet za tristranno sutrudnichestvo* (NSTS; National Council for Tripartite Cooperation). Tripartism also exists at sectoral and regional/municipal level.

Over the years, there have been significant changes in the legal provisions concerning the representativity criteria. The most recent amendments, in 2016, allowed for a lower entry threshold for unions while raising the threshold for employer organisations (Hristov 2016). The new census procedure was announced in July 2024 and continued until the following November (BNR 2024). Months before the start of the procedure, KT ‘Podkrepa’ (Confederation of Labour ‘Podkrepa’) grew alarmed that some amendments had been proposed which increased the legal entry thresholds for unions. This was perceived as a threat and as leading to the elimination of nationally representative unions (KT ‘Podkrepa’ 2024) at a time when employment rates were stagnating and restructuring processes were underway in the energy sector. Due to the requirements of the Green Deal, thousands of workers are threatened with the loss of their jobs. The energy sector is highly unionised and unions are now mapping the skills and qualifications of their members with a view to providing them with new employment opportunities. The re-employment of redundant union members can sustain labour market participation rates in the affected regions (KNSB 2024a).

In the context of the recurring national debates on the representativity criteria and of the impending dismissals within highly unionised workplaces, unions are being pushed towards adopting more efficient organising strategies in order to sustain membership numbers and assist them in the future to surpass the minimum census threshold.

Data on union density and the collective bargaining coverage rate suggests that organising actions are urgently required. Between 1990 and 1998, the collective bargaining coverage rate ranged between 60 % and 70 %, given the existence of sectoral collective agreements covering most economic activities. Since 2000, however, there has been a sharp decline, with the overall coverage rate stabilising after 2008 at a level of around 30 % although major sectoral differences can be found: in 2022, the brewery sector has a 100 % coverage rate; water supply and sewage about 78 % and education about 67 %. In contrast, some sectors – such as construction and hotels and restaurants cannot attain even a 2 % coverage rate (ImproCollBar Project 2023). The coverage rate across all activities in the agriculture sector (NACE 01–03) is 12 % while in agriculture alone (NACE 01) it is 8 % (FNSZ 2023).

The 2022 union density rate in Bulgaria is estimated to be 15 %, declining from over 80 % in the early 1990s. This is due to some difficulties in organising certain sectors, types of companies (including small and micro enterprises) and particular population groups (young people) (ImproCollBar Project 2023).

Organising challenges in the Bulgarian agricultural sector

Konfederatsia na nezavisimite sindikati v Bulgaria (KNSB; Confederation of Independent Trade Unions in Bulgaria) is the umbrella organisation which associates 34 sectoral federations and unions. One of these is FNSZ, which was established in April 1990 as the successor to a longstanding trade union in agriculture and forestry dating back to the 19th century. In the last few years, FNSZ has managed to record some increase in the number of its base (company-level) union structures after years of declining trade union power among agriculture workers. The agricultural sector has undergone significant transformation since the 1990s with the deindustrialisation of rural areas and the privatisation of production sites. The sector used to have more than 700 000 people employed on labour contracts in the 90s, although the current number has dropped to about 60 000 (FNSZ 2020) which, inevitably, has had an impact on union membership figures as well.

The sector tends to be hard to unionise due to sector-specific work and employment patterns. About 90 % of agriculture farms are small (farming up to ten hectares of land), with a very low number of employees since most are typically run by family workers. Not surprisingly, almost 90 % of those who are employed in the sector are self-employed and family workers; formal employees constitute the remaining 10 % with these being targeted by unions which do not represent the self-employed or own account workers in Bulgaria (FNSZ 2020). The major part of the union's membership is concentrated in the public sector organisations which implement national agricultural policies; trade union organisations in private sector enterprises represent just a fraction of FNSZ member structures. One of the reasons for this is the application of temporary seasonal work arrangements along with undeclared work¹ during the harvesting season. Low union penetration is also related to the process mechanisation stemming from attempts to optimise workplace utilisation.

In the early 1990s, FNSZ represented 672 000 trade union members across 2,356 trade union organisations. Subsequent structural reforms led to huge layoffs in the sector. In 2020, FNSZ encompasses about 4,645 workers spread across 103 trade unions (compared to 4,785 workers in 108 trade unions in 2016). Currently, the membership number reaches over 5,000 members, while the coverage rate of collective bargaining within unionised agriculture organisations is almost 100 %. Despite

1 Significant progress towards tackling undeclared work in agriculture can be observed. Thanks to the 2015 amendments to the labour code, one-day labour contracts can be offered by registered farmers. These contracts can be easily accessed online and used for hiring workers for between four and eight hours per day (FNSZ 2018). FNSZ is also contributing to the tackling of undeclared work through a number of initiatives. At EU level, FNSZ uses a range of alliances to inform seasonal workers from Bulgaria on their labour and social rights in host countries. At national level, collective agreements by FNSZ structures bring transparency to hiring and dismissal procedures so that no undeclared practices can be applied.

excellent social dialogue in individual branch structures, the sector still lacks a sectoral agreement and thus cannot arrange an encompassing framework for the negotiating cycles within all sites and sub-branches (FNSZ 2020). Collective bargaining at sectoral level functioned up until 1998 with the Ministry of Agriculture and Food as the employer organisation which was party to the agreement. With the overall transformation of the sector and the restitution of private property, sectoral bargaining ceased.

Nowadays, sectoral bargaining is hindered by multiple challenges. First, there is no employer organisation(s) to represent all branch activities in the agriculture sector. There are also no rules to decide which sectoral employer organisation is representative, and thus existing organisations cannot form a single representative structure which will be a party to a sectoral agreement. Second, the low share of employees in the sector and the predominantly seasonal and undeclared work arrangements make for substantial difficulties for unions in organising workers and representing them.

FNSZ participates in all discussions² related to the drafting of the government budget and argues resolutely for proper spending to be made on public structures in the sector. Government spending has proved to be inadequate over the years and has led to widespread redundancies and low wage increases in agriculture. In this area, FNSZ has actively supported its member organisations in seeking to mitigate lay-off processes by signing collective agreements reviewing vacancy numbers and dismissal policies while allowing for the compensation of certain categories of dismissed workers (FNSZ 2020).

Once the state budget for public agricultural structures has been adopted, FNSZ keeps track of expenditure via participating in the sectoral council for tripartite cooperation organised by the Ministry of Agriculture and Food. This council includes FNSZ and three other union federations along with several employer organisations which are members of nationally representative employer structures.³ The council appears to be highly politicised and renews its members and activities once a new minister has been elected subsequent to the electoral cycle. As a result, its activities have occasionally ceased over a lengthy period with certain efforts needing to be made by unions to restore its functioning. Covid-19 also negatively affected the schedule of council meetings alongside the introduction of virtual communication

- 2 For instance, FNSZ submits its positions on the state budget to multiple institutions like the ministry of agriculture and food, NSTS, the sectoral council for tripartite cooperation, the ministry of finance and the National Assembly (FNSZ 2020).
- 3 Trade union representative structures are FNSZ, the Federation of Trade Union Organisations from the Forestry and Wood Processing Industry within KNSB, the National Agriculture and Forestry Federation at KT 'Podkrepa' and the National Federation of Technical Industry, Science and Informatics at KT 'Podkrepa'. The employers are represented by the Association of Agricultural Producers in Bulgaria at the Confederation of Employers and Industrialists in Bulgaria; the National Union of Agricultural Cooperatives in Bulgaria at the Bulgarian Industrial Capital Association; the Bulgarian Association of Farmers; and the Bulgarian Association for the Circular Economy and Biotechnologies at the Bulgarian Chamber of Commerce and Industry.

channels which, however, did not prove as effective as in-person ones (FNSZ 2023). Other problems observed within the council include meetings that are too narrowly focused and little actual dialogue on the emerging labour and social security issues which affect the sector.

Apart from the tripartite council, social dialogue also takes place in the branch councils encompassing both public and private entities which offer some good examples of continuing annual negotiations leading to the signing of collective agreements (FNSZ 2020). In this way, FNSZ has achieved better wage rates and improved working conditions for its members across the country.

FNSZ has identified a framework of actions leading towards greater bargaining coverage and has argued persistently for legal amendments which recognise civil servants' right to collective bargaining.

The bargaining problem affecting civil servants in the state administration has been caused by gaps and imperfections in the regulatory framework. The presence of two categories of worker in the state administration (workers employed under the provisions of the labour code; and workers employed under the Civil Servant Act) requires negotiations to follow different legal provisions. The Civil Servant Act does not provide for collective bargaining for civil servants (FNSDUO 2017). Although there is no legally regulated right for civil servants to collective bargaining, FNSZ has managed to enforce the practice of agreements being concluded on behalf of civil servants. In this way, civil servants are granted the same rights as those employed under the labour code once a collective agreement has been concluded. Good practice here represents a sustainable union strategy for retaining and attracting trade union members in public enterprises.

Empowering base-level structures as an innovative organising strategy: insights from an interview with the FNSZ chair

FNSZ's membership of over 5,000 members has stood stable since 2010 subsequent to the lengthy period of restructuring and resulting layoffs in the Bulgarian agricultural sector. The years after the Covid-19 pandemic proved successful ones as the union began to extend to many non-organised workplaces in the public sector despite the widespread belief among workers that they had no right to unionise.

FNSZ's innovative approach towards organising has been developed through its well-functioning committees representing women and young people. Along with these, a newly created programme developing cultural, sport and tourism activities for union members was created in 2024. These structures were recognised as a priority area for development by the newly elected chair of FNSZ, Valentina Vasilyonova, who was elected in 2022 during the regular FNSZ congress. She replaced the former leader with the unanimous support of delegates representing FNSZ company-level members. During her five-year mandate, she aims to strengthen basic company-level structures so that they not only sustain membership numbers but also become attractive for non-union members.

The sectoral committees and the programme provide members with a field of self-realisation in which they can interact and 'speak about topics of their interest

in the field of labour rights and other sector-related issues'. Empowering each union member to deal with topics of his/her own interest and to search for solutions across a range of (labour) topics turns both FNSZ structures and its company-level unions into units that are 'lively' and 'recognised' by workers in the sector. That way, bottom-up activities for membership growth can potentially appear in good time as members act as another organising actor (along with initiatives led by the FNSZ management team itself).

According to the chair's observations, this approach has had highly positive initial outcomes. Existing members 'feel excited and grateful for the attention they receive when in-person meetings are arranged' within the committees or under the programme funds. The exchange of 'first hand' experience during union-led events appears to be a good tool for motivating non-unionised employees to consider joining the union. At the same time, the FNSZ office gains recognition as a partner to its member structures, while ideas towards the achievement of the agenda items during its mandate are continually being generated and submitted to the chair. Such an overarching approach (a combination of top-down and bottom-up activities) for managing change in organizations is associated with the delivery of synergistic advantage and greater employee support (Ansari 2017).

Committees representing women and young people

Over the last ten years, FNSZ has invested substantial effort into the development of its Youth Committee and its Women's Committee with the aim of establishing active and engaged union leaders that deal with union issues and who are proven as active participants in Bulgarian civil society. With the constantly expanding boundary of activities undertaken by the two committees, the FNSZ chair believes that:

... a strong team of future generation trade union leaders is being created who recognise social and civil dialogue as a tool for applying the union agenda and maintaining membership numbers.

In Vasilyonova's view, these committees are creating 'second echelon leaders', or well-educated union leaders capable of carrying out their duties in a sustainable way. Thus unions can also 'back their generational transitions' while staying attractive to younger workers. The current understanding of FNSZ is that these committees should be dealing with the problems identified by union members themselves, and that they should become 'proactive' and subsequently contribute to the FNSZ agenda and its future organising plans. Vasilyonova perceives the committees as 'supportive' structures to sector-level union policy, able to contribute to finding 'sector level solutions' to resolve company cases.

Since 2014, the Women's Committee has traced gender discrimination in terms of remuneration, pensions and workplace harassment and violence. Though these issues are dealt with by 'discrimination' clauses in collective labour agreements, Vasilyonova sees that a greater number of awareness raising initiatives are being undertaken by the Women's Committee which is hosting seminars, roundtables and conferences or otherwise participating in those organised by partner organisations.

The Committee also has started to support its female members by expanding the thematic scope of its events. It now gives the floor to showcasing and developing ‘talented women’, including the collection and publication of poems by women trade unionists, carried out with the support of FNSZ.

The Youth Committee has been functioning with the aim of ensuring the ‘succession of union structures’ and the engagement of young workers in union work. FNSZ holds an electronic register of its organisations and traces the statistics of their demographic profile. Today, the average age of members is over 48. In consequence, Vasilyonova expounds on the need to deploy a strategy of empowerment for each company-level union so that they can:

... support the entry and retaining of younger trade union members and promote its leaders in taking care of generational policies on site.

FNSZ has established ‘solid relationships’ with different youth-related initiatives. Thus Youth Committee members can benefit from personal development training (like the annual programme undertaken by the Friedrich-Ebert-Stiftung called ‘leaders of change’) and engage with other stakeholders to deal with issues of interest to young union members. For instance, Vasilyonova points out that the Youth Committee is now engaged with sustainable consumption practices and in giving support to the EU ‘Stop Glyphosate’ campaign in agriculture activities. To spread the word on these issues, FNSZ and its Youth Committee have organised many in-person meetings with business, school and university representatives across the country.

‘Culture, sport, tourism’ programme

In the view of Valentina Vasilyonova, this programme has been created to ‘revive trade unionism as a value’ and to ‘oppose attacks on collective actions’. FNSZ administrates the programme’s fund which is supported by the membership fees collected from all company-level basic organisations. The fund has written rules on the amounts that can be granted to each applicant. This provides for greater clarity in structural administration since one of the prerequisites for obtaining funding is the regular payment of membership fees to FNSZ. Company-level unions are stimulated to report their member numbers in full and to request back a part of the fees submitted.

FNSZ also requires some proof of the activity undertaken, which are checked to ensure the resources have been spent on the claimed purpose. All the activities funded in this way are promoted on the FNSZ website. The main objective is to enable union members to gather and communicate outside the workplace, whether this be cultural, sport or tourism based as long as it is of interest to union members. This allows members to cooperate on topics that are outside the union’s ordinary thematic scope. The initiatives supported through the programme facilitate the advertisement of membership as part of a ‘lively community’ in which the ultimate goal is to ‘unite team members’. The programme also highlights another aspect to joining unions and paying membership fees. FNSZ also envisages cooperating with other sectoral

structures within KNSB (which deal with cultural events, for instance) so as to be able to support as many applicants as possible.

Other empowering top-down practices being developed during the current mandate: further interview insights

Alongside these practices, FNSZ envisages enhancing membership activities and union engagement through top-down activities that can contribute to the growth in membership numbers. Vasilyonova identifies as such:

- a) constant contact with the media and partner organizations
- b) greater cooperation with KNSB regional councils
- c) wider use of online tools for establishing communication with company-based workers.

FNSZ is involved in many awareness raising campaigns about union activities and invests substantially in media coverage of its activities in resolving sector-specific problems. It also engages in various social media groups and spreads word of the advantages of joining the union and the accomplishments of unions over time. Furthermore, it invests time in developing partnerships with various organisations from outside government, relying on its network to reach non-unionised organisations in the sector. This level of cooperation allows it to be provided with support for its ongoing campaigns⁴ and to upgrade the union agenda regarding new issues of interest to those working in agriculture. To cooperate successfully, FNSZ has established training programmes for its affiliates that are focused on the development of communications and interpersonal skills with different stakeholders: both state and private bodies as well as non-governmental organisations. Vasilyonova identifies that it is worth:

... reaching structures that are relevant to our cause and which would contribute to a positive change in attitudes towards the sector and which will contribute to making it attractive and understandable for citizens and society.

Teamwork and close cooperation with regional KNSB councils is proving to be another efficient method for sustaining members and reaching new ones. Vasilyonova is aware of the KNSB agenda item on improving social dialogue at all levels⁵ by safeguarding the right to organise and promoting collective bargaining. FNSZ now

- 4 There are numerous campaigns that FNSZ has upheld and maintained over time, including: decent work and countering exploitation in the agricultural sector; equality and the empowerment of working women and young people in the sector; unfolding the potential of the sector for green and digital transformation and the circular economy; fair work and fair food; and banning glyphosate and pesticides in order to protect a clean environment – water, air, soil. Among FNSZ’s main partners are the Friedrich-Ebert-Stiftung Bulgaria, the Center for Sustainable Communities Development and the Foundation for Organic Agriculture BIOSE-LENA.
- 5 According to the Bulgarian labour code, collective bargaining can take place at different levels and thus separate collective agreements can be concluded at company, sector and municipality level.

benefits from better support from the regional councils. Vasilyonova describes the councils as a key partner in resolving labour-related issues at enterprise level. The councils are allowed to attend FNSZ coordination meetings in order to get to know the union's way of functioning and the policies which it applies. She perceives that the councils are aware of local workers' problems and demands in the region and have already helped in creating new union structures by disseminating FNSZ policies and achievements in terms of workplace regulation. The councils are, therefore, valuable partners in organising as they initiate meetings with non-unionized workers and efficiently present FNSZ activities as bringing 'the long-sought solution to workers' problems'.

Transformation of unionising practices to the digital environment is a new way quickly to reach workers that are willing to join the union. Online meetings and the filling in of anonymous questionnaires allow FNSZ not only to gather information on existing problems but also to get to know which solution scenario receives most support. Having this type of information allows the union to establish efficient dialogue with workers and employer representatives. The ultimate goal is the establishment of a new trade union structure that contributes to a better workplace environment.

Conclusions

Though organising in agriculture is restricted by sectoral patterns, unions are still active and seeking out innovative organising strategies. The analysis in this article focuses on a specific sectoral federation that has reported recent membership growth. FNSZ applies a holistic approach to organising that recognises both top- down and bottom-up activities. It uses its committees for women and young people and its newly adopted funding programme as an innovative empowerment tool for creating engaged union members. Moreover, it aims to facilitate the greater involvement of trade union leaders on sites as a prerequisite for future organising successes. The Federation's chair recognises each interaction between company- based shop stewards as a self-realising tactic that eventually builds confident leaders capable of articulating what an individual can gain by joining the union. Stimulating the building of strong intra-union ties between existing union structures and targeted non-unionised organisations can provide for the consolidation and sustainability of membership interest.

Note on method and data

Both desk-based research data and an in-person interview have been used in the elaboration of this article. Several research contributions were analysed to obtain both quantitative and qualitative data for the sectoral context and its implications for organising. In order to examine the organising policies which are currently applied in the sector trade union structure in focus (FNSZ), an in-depth interview was conducted with its chair in August 2024. Following a semi-structured interview instrument, data was collected and then described within sections dealing with the empowerment of the union's base-level structures and the top-down organising strategies which have been implemented.

References

- BNR (2024) ‘The so-called “counting” of the trade unions has began’, accessed 28 August 2024 at: <https://bnr.bg/post/102024782/zapochna-t-nar-prebroavane-na-sindikatite> (in Bulgarian).
- Doucouliaagos, Hristos, Richard Freeman and Patrice Laroche (2017) *The economics of trade unions: a study of a research field and its findings* London: Routledge.
- FNSDUO (2017) ‘Collective bargaining in the state administration’, accessed 15 November 2024 at: <https://fnsduo.com/index.php/резолуции/57-резолуция-№6-колективно-трудова-договаряне-в-държавната-администрация> (in Bulgarian).
- FNSZ (2018) ‘Undeclared labour in agriculture. Problems, challenges, fixing approaches’, accessed 28 August 2024 at: <https://www.fnsz.org/pdf/2019/Analiz-Nedeklariran-trud-fin.pdf> (in Bulgarian).
- FNSZ (2020) ‘Agriculture sector. Social partnership and collective bargaining, history and opportunities’, accessed 28 August 2024 at: <https://www.fnsz.org/pdf/2020/Analiz-FNSZ-Social-Dialog-Fin.pdf> (in Bulgarian).
- FNSZ (2022) ‘Accounting report on the activity of FNSZ for the period 2017–2021’, accessed 15 November 2024 at: <https://fnsz.org/pdf/2022/kongres/otchetten-doklad-20kongres.pdf> (in Bulgarian).
- FNSZ (2023) ‘Good practices in social dialogue, collective bargaining and social policy in the agriculture sector and its service units’, accessed 28 August 2024 at: https://www.fnsz.org/pdf/2023/Narachnik_KTD_2023_%D0%904.pdf (in Bulgarian).
- Heyden, Mariano, Sebastian Fourné, Bastiaan Koene, Renate Werkman and Shazad (Shaz) Ansari (2017) ‘Rethinking “top-down” and “bottom-up” roles of top and middle managers in organizational change: implications for employee support’ *Journal of Management Studies* 54(7): 961–985.
- Hristov, Chavdar (2016) ‘The latest changes in the Labour Code regarding the criteria for representativeness of workers’ and employers’ organizations’, accessed 28 August 2024 at: <https://trudipravo.bg/izbrani-statii/poslednite-promeni-v-kt-otno-sno-kriteriite-za-predstavitelnost-na-organizacziite-na-rabotnitzite-i-sluzhitelite-i-na-rabotodatelite/> (in Bulgarian)
- ImproCollBar Project (2023) ‘Desk research Bulgaria’, accessed 28 August 2024 at: https://improcollbar.eu/wp-content/uploads/2023/09/desk-research_bulgaria.pdf.
- KNSB (2021) ‘The government recognised KNSB as a nationally representative organisation of workers and employees’, accessed 28 August 2024 at: <https://knsb-bg.org/index.php/2021/01/13/pravitelstvoto-prizna-knsb-za-nacionalno-predstavitelna-organizacziya-na-rabotniczite-i-sluzhitelite/> (in Bulgarian).

- KNSB (2022) ‘KNSB Programme 2022–2027’, accessed 28 August 2024 at: https://www.9.knsb-bg.org/wp-content/uploads/2022/04/programa-knsb_print.pdf (in Bulgarian).
- KNSB (2024a) ‘KNSB launched a project to map the skills of employees at the Contour Global – Maritsa East 3 thermal power plant’, accessed 28 August 2024 at: <https://knsb-bg.org/index.php/2024/03/29/knsb-zapochna-proekt-za-karto-grafirane-na-umeniyata-na-zaetite-v-tecz-kontur-global-maricza-iztok-3/> (in Bulgarian).
- KNSB (2024b) ‘Sectoral analysis of the agriculture sector in Bulgaria’, CITUB paper for project *Sustainable development through social partnership*.
- KT ‘Podkrepa’ (2024) ‘KT Podkrepa strongly opposes the proposed changes to the criteria for representativeness of workers and employers’, accessed 28 August 2024 at: <https://podkrepa.org/кт-подкрепа-застава-твърдо-против-на/> (in Bulgarian).
- Lex.bg (2024) ‘Labour Code’, accessed 15 November 2024 at: <https://lex.bg/laws/ldoc/1594373121> (in Bulgarian).
- Tali, Mohmad, Numan Wani and Afifa Ibrahim (2021) ‘The power of branding influencing consumer purchase decision: a comprehensive literature review’ *Elementary Education Online* 20(6): 5362–5387.



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The importance of job quality characteristics for current and prospective employees

Abstract

Organisations require effective human resource (HR) management policies to address the diversity of a workforce which varies by age, ethnicity, educational background and professional experience. Multigenerational or cultural perspectives should be employed to improve knowledge about workforce diversity and work characteristics. Understanding the significance of various of the latter and how people perceive them in the context of job quality is critical for reducing stress, increasing motivation and improving job performance. The purpose of this article is to determine the significance of job quality for both current and future employees. It reveals a difference in how this is perceived or valued when viewed from the perspective of a student considering employment compared to that of an existing employee. Managers must evaluate which characteristics influence an employee's or student's perception of meaning; and they should also create environments that foster individual performance in their respective roles. Furthermore, identifying variations in work characteristics can lead to the future design or enhancement of human resource tasks.

Keywords: work characteristics, human resource management, job quality, motivation, job enrichment

Introduction

Demographic developments, together with economic, technical and cultural changes, need parallel improvements in how employment is structured and performed (Egri and Ralston 2004). Over the last few decades, organisations have seen a significant transition in their workforce characteristics (Kundu et al. 2016). Multigenerational lenses should be employed in both theory and practice to acquire a deeper understanding of workforce diversity in general and the nature of job characteristics in particular (Hernaus and Vokic 2014). Moreover, job characteristics may influence an employee's opinion of job meaningfulness as they are an acceptable concept for enriching jobs in organisational contexts (Michael et al. 2012), with a corresponding impact on job quality.

Employees' regard for job meaningfulness may optimise organisational outcomes based on task orientation and the presence of reliable, fulfilling and relationship-based actions (Corley and Gioia 2011). Research demonstrates that well-designed jobs are a positive influence on work attitudes and behaviours (Hossam 2009). Knowledge of employee attitudes is therefore crucial for the creation and functioning of HR practices since these influence employee characteristics in the workplace

(Armstrong and Brown 2019). Researchers argue that job characteristics have some explanatory power regarding transformative leadership and employees' in-role behaviours and work-related outcomes (Gillet and Vandenberghe 2014).

Additionally, job characteristics tend to affect mental health and engagement via two psychological pathways: the health impairment process; and the motivational process (Bakker and Demerouti 2017). Job characteristics are particularly acknowledged as an essential work environment predictor of turnover intention (Griffeth et al. 2000) and have a crucial role in explaining work-life conflict (Michel et al. 2011).

This article's main goal is to assess the desired traits of the workplace from the viewpoints of current and future employees. It also assesses whether these two differing views on workplace traits can be consistent with each other. Today's organisations face various challenges, one of which is retaining talented employees. Identifying workplace characteristics helps managers understand what employees value in their organizations. Additionally, evaluating these characteristics provides a basis for developing HR policies and procedures that reflect the values and preferences of current employees and students as they get ready to become future employees or entrepreneurs. The article thus aims also to explore these issues to assist organisations in Albania develop modern HR policies, and quality jobs, that contribute to Albania's integration in the EU and enhance the experience of work for employees.

It is important to note that studies of this nature are lacking in developing countries like Albania, despite significant sociodemographic inequalities and the high migration rates which prevail in the country.

Literature review

The issue of job characteristics has attracted widespread research study during the last few decades. The job characteristics model (JCM), developed by Hackman and Oldham in 1975, is among the most recognised frameworks for understanding job adjustment and enhancement (Hossam 2009). According to Hackman and Oldham (1975), job characteristics can influence job outcomes by affecting an employee's perception of the value and responsibility of their job, as well as their control over job results, which in turn can influence employee work motivation. The authors highlight five 'core' job characteristics (skill variety, task significance, task identity and autonomy, and feedback) as possible motivating factors at work. Employees perform better, experience greater satisfaction and motivation, and are less likely to exhibit absenteeism or withdrawal behaviours when their jobs are designed with a focus on these five characteristics (Fraccaroli et al. 2017).

Humphrey and colleagues (2007) present a meta-analytic analysis of the JCM model, identifying a positive correlation between all five motivational characteristics and job satisfaction, growth satisfaction and intrinsic work motivation. Furthermore, their study reveals a strong relationship between these five characteristics of organizational commitment and involvement at work, along with a significant, albeit smaller, correlation with absenteeism. In conclusion, the employment characteristics that have a positive impact on employees' psychological states can enhance intrinsic

motivation at work, improve work performance quality and increase job satisfaction (Han et al. 2020).

Karasek's 1979 job-demand-control (JDC) model is recognised for its significant theoretical and practical contributions to organisational understanding of job quality. The model suggests that psychological strain comes not just from one part of the work environment, but also from how the demands of a job and the freedom that workers have to make decisions together affect them. The central assumption of the JDC model is that having control can reduce the impact of job demands on psychological strain and contribute to increased employee job satisfaction (Kain and Jex 2010).

The extended job-demands-control-support (JDACS) model explains how job characteristics influence employees' psychological wellbeing (Karasek and Theorell 1990). The JDACS model suggests that social support can help reduce stress (Rodríguez et al. 2001), while Hausser et al. (2010) conducted a meta-analysis, finding that jobs characterised by high demands, limited control and minimal social support were associated with lower job satisfaction. Research utilising the JDC and JDACS models has primarily focused on examining the relationship between job characteristics and negative indicators of workplace wellbeing (Chambel et al. 2017).

Demerouti et al. (2001) propose a job demands-resources (JDR) model, originally developed to investigate the causes of employee burnout and disengagement, as well as their effects on organisations. Job characteristics can be categorised as either demands or resources based on an individual's evaluation (Annink et al. 2016). Job demands refer to:

... aspects of the job that require sustained physical or mental effort and are therefore associated with certain physiological and psychological costs (Demerouti et al. 2001);

while job resources are defined as:

... aspects of the job that may aid in achieving work goals, alleviate job demands, and foster personal growth and development. (Demerouti et al. 2001).

Job demands and job resources are typically inversely related. High job demands, such as excessive work pressure and emotionally taxing interactions with clients, can hinder the effective utilisation of job resources (Hill et al. 2012). The JDR model makes a valuable practical contribution by analysing the occupational and personal characteristics that influence employee health and wellbeing and their associated consequences, such as job performance (Schaufeli and Taris 2014).

Methodology

The study reported on in this article was part of a larger research project examining interactions among a wider set of organisational and human resources issues, the goal being to provide a descriptive analysis of the importance of work and work characteristics to Albanian employees. For a better cross-generational perspective and a more thorough analysis, data was collected from both current employees

and university students as prospective employees, using the International Social Survey Programme (ISSP) Work Orientation module. ISSP has run continuous cross-national surveys over the years, covering several important topics related to work, including work centrality, work characteristics, social inclusion, work-life conflict and job satisfaction.

The first part of the study provides an overview of the importance of work in people's lives based on the following statements:

A job is just a way of earning money – nothing more

and:

I would enjoy having a paid job even if I did not need the money.

Respondents indicate their level of agreement or disagreement on a five-point Likert scale ranging from 'strongly disagree' (1) to 'strongly agree' (5).

After completing a look at the overall centrality of work, the study then turned to an examination of work characteristics which respondents regarded as desirable. Current and prospective employees were asked how important they considered the following work characteristics:

- job security
- a high income
- good opportunities for advancement
- an interesting job
- a job that allows someone to work independently
- a job that allows someone to help other people
- a job that is socially useful
- a job that involves personal contact with other people.

Respondents again indicated their level of importance on a five-point Likert scale ranging from 'not important at all' (1) to 'very important' (5).

Analysis

The study involved 287 participants, consisting of 142 students and 145 employees (see Table 1). Fifty-five per cent were women and 45 % were men; while 63 % were 18–30 years old, followed by 26 % who were 31–45. Around 48 % have completed or were pursuing master's degrees, while the same percentage had bachelor degrees. Though few, the remaining participants had secondary education or doctoral degrees, specifically among the sub-sample of employees.

Most of the students surveyed (68 %) were in their first year. The survey revealed that 41 % were studying finance and accounting, 34 % were focusing on business administration and 25 % were pursuing degrees in economics.

The data regarding employees indicate that the majority, 37 %, were employed in the information and communications sector, followed by 23 % who worked in financial and insurance activities. Sectors such as health, education and public services account for much of the remainder. More than half of employees, 55 %, were in non-

managerial roles while 14 % held low-level managerial positions, 20 % were middle managers and 10 % high-level ones.

Table 1 – Demographic data

Participants	
Students (n=)	142
Employees (n=)	145
Gender	
Female	55 %
Male	45 %
Age	
18–30	63 %
31–45	26 %
46–60	9 %
Over 60	1 %
Education level	
High school	2 %
Bachelor	49 %
Master's degree	48 %
Doctorates	1 %
Year of study (students)	
First year	68 %
Second year	5 %
Third year	27 %
Field of study (students)	
Finance	41 %
Business administration	34 %
Economics	25 %
Employment (employees)	
Information and communications	37 %
Financial and insurance activities	23 %
Health	10 %

Education	13 %
Public sector	8 %
Private services	9 %
Type of work (employees)	
Specialist roles below management	55 %
Low-level managers	14 %
Middle managers	20 %
High-level managers	10 %

Employers and students exhibit differing perceptions when analysing the average values of the significance of employment. Students had a greater average degree of agreement with the statement that ‘A job is merely a means of earning, nothing more’, achieving a mean score of 2.35 compared to one for employees’ of 2.09. However, such a low score indicates a broad level of disagreement with the statement, suggesting that a job is significant for both groups of respondents (students and employees alike).

Centrality of work

Responses to the statement ‘I would enjoy having a paid job even if I didn’t need the money’, reveal a similar, yet reversed, average, indicating notable consensus. Students have a mean score of 4.04, slightly exceeding that of employees (3.91). Many individuals thus express a desire to work for personal development or to gain experience, even when financial necessity is absent. Employees, however, who have typically achieved a certain level of professional success, exhibit less enthusiasm than students. Employees tend to adopt a realistic perspective on work that considers both intrinsic and extrinsic benefits, while students often maintain an aspirational viewpoint that prioritises the intrinsic rewards.

The centrality of work for both employees and students is connected to Albania’s long communist history which has left a permanent mark on the value of work in society. A study by Volk and Halder (2018) nevertheless highlights a growingly significant difference in such perceptions. In stark contrast to the value placed on work during the communist era, people in most former socialist countries in eastern Europe now view employment merely as a means to earn income.

Table 2 – Centrality of work

Statements	Mean	
	Students	Employees
A job is just a way of earning money – nothing more	2.35	2.09
I would enjoy having a paid job even if I didn’t need the money	4.04	3.91

Desirable work characteristics

Table 3 highlights the four most significant job characteristics for both students and employees: job security; having a high salary; opportunities for career advancement; and having an interesting job. Each group ranked these characteristics differently in terms of their importance.

Students rate career advancement (4.64) as their top priority, closely followed by job security (4.63), having a high salary (4.44) and having an interesting job (4.36). Students view career development as an essential aspect of work because it directly aligns with their long-term professional goals and aspirations. They aim to establish a stable career that provides opportunities for long-term growth and security. Professional development offers the chance for personal growth, increased responsibility, enhanced skills and knowledge, and potentially higher salaries in the future. These results align with the results of the study by Rosch and Collins (2020) which indicates that the younger generation aims to become workplace leaders in the future. According to Carnegie (2023), the younger generation mainly prioritises financial gain. For Generation Z, salary and compensation are more important than workplace engagement as their parents' struggles during the financial and economic recession of 2008–09 have fostered a strong desire for financial security.

In contrast, employees place job security (4.39) as their top priority, followed by having a high salary (4.35), an interesting job (4.32) and then opportunities for career advancement (4.23). The minimal variations in these results indicate that employees consider all of these characteristics important, although they prioritise them in a specific order. Compared to students, employees favour job security and higher pay as the main characteristics of job quality. Employees are active participants in the labour market and are faced with uncertainties arising from economic fluctuations and market dynamics. For them, job security and financial stability take precedence over career advancement as these are the factors that have a direct impact on their personal and family lives. Such findings correspond with research conducted by Volk and Hadler (2018) suggesting that high income holds less significance in western European countries like Norway while it is more important in eastern European ones like Albania.

Table 3 presents the ranking of job characteristics based on the priorities established by students and by employees. Students rated 'socially useful' as the fifth most valued characteristic (3.94), followed closely by 'working independently' (3.93), 'helping other people' (3.76) and 'contact with others' (3.51). Employees also placed 'socially useful' as the fifth most valued characteristic (4.16), followed by 'helping other people' (4.15), 'working independently' (4.10) and 'contact with others' (3.88).

When examining what students and employees seek in a career, it is evident that their perspectives on work values share both similarities and differences. Generally, employees place greater emphasis on the social and intrinsic aspects of work compared to students. Conversely, students typically favour extrinsic and future-oriented factors. Whereas employees value social interaction, autonomy and interpersonal relationships in their work, students focus more on job attributes which are related to security, compensation and opportunities for future career advancement.

Table 3 – Desired job characteristics

Statements	Mean	
	Students	Employees
Job security	4.63	4.39
High income	4.44	4.35
Good opportunities for advancement	4.64	4.23
An interesting job	4.36	4.32
A job that allows people to work independently	3.93	4.10
A job that allows people to help others	3.76	4.15
A job that is socially useful	3.94	4.16
A job that allows personal contact with others	3.51	3.88

Conclusion

This study has examined the characteristics of job desirability between two groups: current employees and recent university graduates. The findings reveal that, while these groups share some priorities, they also have distinct preferences regarding particular job characteristics.

The results indicate that both students and workers recognise the overall importance of having a job, but they differ in their views on what contributes to job satisfaction. Students are focused on their professional development and actively seek opportunities for growth, placing a strong emphasis on building their careers and achieving stability. In contrast, employees tend to prioritise security and salary over career advancement. According to research on generational and career stage differences (Zaniboni et al. 2013), students favour job security, a competitive salary and opportunities for advancement in their selected fields.

This outlook suggests a future-oriented mindset that stems from economic concerns and aspirations for consistency in an ever-evolving work landscape. Conversely, current workers with actual work experience place a higher emphasis on the intrinsic and social aspects of their jobs such as the ability to work independently, assist others, have a positive impact on society and get along with colleagues. Consistent with previous research (Perry et al. 2012; Truxillo et al. 2012), evidence shows that individuals benefit from the help of experienced colleagues who build relationships within the organisation and with other employees.

Human resource management policies and practices are significantly influenced by generational differences in how individuals assess both the intrinsic and extrinsic aspects of a job. To develop and implement work tasks and HR operations effectively, companies must take these differences into account. For example, younger employees or those considering making job applications may favour positions that

provide clear opportunities for career advancement and financial stability. Conversely, strategies to retain current employees might include the creation of a more welcoming workplace, offering greater flexibility in work schedules and designing roles that contribute positively to society. As workers progress through their careers, their needs and aspirations evolve, and this two-pronged approach addresses that dynamic. Additionally, enhancing employees' intrinsic motivation can be achieved by implementing feedback systems, promoting collaboration and allowing individuals to work in ways that align with their preferences.

Human resource management strategies that address both the immediate needs of new employees and the long-term goals of existing ones can enhance workplace morale, retention and productivity. As Albania continues to integrate into the European labour market, future research could build on these findings by exploring changes in employment preferences over time or the differences across various industries.

The study has a couple of limitations worth mentioning in conclusion. First, a larger sample size, which includes students from various fields of study or employees from different industry sectors, could enhance the generalisability of the results. Second, incorporating qualitative analysis, such as would be achieved by conducting interviews, might provide more in-depth information about participants' choices regarding job characteristics and the overall nature of their perspectives on job quality. These limitations can serve as a foundation for future research.

References

- Annink, A., L. den Dulk and J. Amorós (2016) 'Different strokes for different folks? The impact of heterogeneity in work characteristics and country contexts on work-life balance among the self-employed' *International Journal of Entrepreneurial Behaviour & Research* 22(6): 880–902.
- Armstrong, M and D. Brown (2019) *Armstrong's handbook of reward management Practice* Kogan Page.
- Bakker, B and E. Demerouti (2017) 'Job demands-resources theory: taking stock and looking forward' *Journal of Occupational Health Psychology* 22(3): 273–285.
- Carnegie, A (2023) 'Why Gen Z are so motivated by pay' *BBC Worklife* 31 May, accessed 11 November 2025 at: <https://www.bbc.co.uk/worklife/article/20230530-why-gen-z-are-so-motivated-by-pay>.
- Chambel, M. J., V. S. Carvalho, F. Cesário and S. Lopes (2017) 'The work-to-life conflict mediation between job characteristics and well-being at work: part-time vs full-time employees' *The Career Development International* 22(2): 142–164.
- Corley, G and A. Gioia (2011) 'Building theory about theory building: what constitutes a theoretical contribution?' *The Academy of Management Review* 36(1): 12–32.
- Demerouti, E., A. Bakker, F. Nachreiner and W. Schaufeli (2001) 'The job demands-resources model of burnout' *Journal of Applied Psychology* 86(3): 499–512.

- Egri, P and A. Ralston (2004) 'Generation cohorts and personal values: a comparison of China and the United States' *Organization Science* 15(2): 210–220.
- Fraccaroli, F, S. Zaniboni and D. Truxillo (2017) 'Job design and older workers' in S. Profili, A. Sammarra and L. Innocenti (eds) *Age diversity in the workplace. An organizational perspective* Emerald Publishing, pp. 139–159.
- Gillet, N and C. Vandenberghe (2014) 'Transformational leadership and organizational commitment: the mediating role of job characteristics' *Human Resource Development Quarterly* 25(3): 321–347.
- Griffeth, R. W, P. W. Hom and S. Gaertner (2000) 'A meta-analysis of antecedents and correlates of employee turnover: update, moderator tests, and research implications for the next millennium' *Journal of Management* 26(3): 463–488.
- Han, H, G. Oh and P. Kang (2020) 'The link between transformational leadership and work-related performance: moderated-mediating roles of meaningfulness and job characteristics' *Leadership & Organization Development Journal* 41(4): 519–533.
- Hernaus, T and P. Vokic (2014) 'Work design for different generational cohorts: determining common and idiosyncratic job characteristics' *Journal of Organizational Change Management* 27(4): 615–641.
- Hill, C, K. Mostert and P. De Bruin (2012) 'Job characteristics and work-home interaction: does race moderate the relationship for South African police members?' *Policing: An International Journal* 35(3): 566–592.
- Hossam, A (2009) 'Job characteristics, work attitudes and behaviors in a non-western context' *Journal of Management Development* 28(5): 457–477.
- Humphrey, S, J. Nahrgang and F. Morgeson (2007) 'Integrating motivational, social, and contextual work design features: a meta-analytic summary and theoretical extension of the work design literature' *Journal of Applied Psychology* 92(5): 1332–1356.
- Kain, J and S. Jex (2010) 'Karasek's (1979) job demands-control model: a summary of current issues and recommendations for future research' in P. Perrewe and D. Ganster (eds) *New developments in theoretical and conceptual approaches to job stress* Emerald Publishing, pp. 237–268.
- Kanfer, R and L. Ackerman (2004) 'Aging, adult development, and work motivation' *The Academy of Management Review* 29(3): 440–458.
- Karasek, R. A. (1979) 'Job demands, job decision latitude, and mental strain: implications for job redesign' *Administrative Science Quarterly* 24(2): 285–308.
- Karasek, R. A. and T. Theorell (1990) *Healthy work. Stress, productivity, and the reconstruction of working life* Basic Books.
- Kundu, S, R. Phogat, S. Datta, and N. Gahlawat (2016) 'Impact of workplace characteristics on work-family conflict of dual-career couples' *International Journal of Organizational Analysis* 24(5): 883–907.

- Michael, S, D. Bryan and D. Ryan (2012) 'Measuring meaningful work: the work and meaning inventory (WAMI)' *Journal of Career Assessment* 20(3): 322–337.
- Michel, J. S, L. M. Kotrba, J. K. Mitchelson, M. A. Clark and B. B. Baltes (2011) 'Antecedents of work-family conflict: a meta-analytic review' *Journal of Organizational Behavior* 32(5): 689–725.
- Perry, J, G. Chandler and G. Markova (2012) 'Entrepreneurial effectuation: a review and suggestions for future research' *Entrepreneurship Theory and Practice* 36(4): 837–861.
- Rodríguez, I, M. J. Bravo, J. M. Peiró and W. Schaufeli (2001) 'The demands-control-support model, locus of control and job dissatisfaction: a longitudinal study' *Work & Stress* 15(2): 97–114.
- Rosch, D. M and J. D. Collins (2020) 'Validating the ready, willing, and able leader scale of student leadership capacity' *Journal of Leadership Education* 19(1): 84–98.
- Schaufeli, W. B and T. W. Taris (2014) 'A critical review of the job demands-resources model: implications for improving work and health' in G. Bauer and O. Hämmig (eds) *Bridging occupational, organizational and public health: a transdisciplinary approach* Springer, pp. 43–68.
- Truxillo, D, J. Rineer, D. Cadiz and S. Zaniboni (2012) 'A lifespan perspective on job design: fitting the job and the worker to promote job satisfaction, engagement, and performance' *Organizational Psychology Review* 2(4): 340–360.
- Volk, H and M. Hadler (2018) 'Work orientations and perceived working conditions across countries: results from the 2015 ISSP Survey' *International Journal of Sociology* 48(2): 103–123.
- Zaniboni, S, D. Truxillo, T. Bodner and J. Rineer (2013) 'Relating age, decision authority, job satisfaction, and mental health: a study of construction workers' *Work Aging and Retirement* 2(4): 428–435.



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The use of artificial intelligence and discrimination in the labour market

Abstract

This article uses desk-based research to explore the issues raised by artificial intelligence in the labour market concerning its potential impact on vulnerable groups already experiencing discrimination such as women, older workers and disabled people. It looks at the EU's AI Act and the Council of Europe's Framework Convention on the issue, the first attempts to develop institutional regulation in the field, as well as the situation across the western Balkans and expressly in North Macedonia. The vast majority of jobs now require basic digital skills, but there are huge gaps with regard to the number of women accessing career roles within STEM, as well as in terms of employer perceptions of the ability of older people to understand new technology and the lack of involvement of disabled workers in the design of adaptive technology. All these represent major issues for society in ensuring that the economic development potential of AI is realised in full. The article concludes that, despite progress at institutional level, further measures are needed to adapt and create a new working environment in the era of AI.

Keywords: artificial intelligence, regulation, discrimination, labour markets, Digital Europe, workplace learning, training

Introduction

Up to now, there has been no single accepted definition of artificial intelligence (AI) and, consequently, it has been very hard for lawmakers to adopt legally binding regulation in this field. Despite that, international organisations have accepted that AI should be regulated within a compulsory legislative framework. Policymakers have encountered significant challenges in balancing the need to safeguard citizens and governments from the potential risks posed by AI with the imperative of ensuring that each can still benefit from these growing technologies. Regarding the European Union (EU), the AI Act is the name of the forthcoming EU regulation on artificial intelligence that has been discussed and negotiated since 2021.

The EU's AI Act

In 2022 all 27 member states of the European Union reached a compromise agreement under the Czech presidency of the EU Council. In March 2024, the European Parliament (2024) approved the final agreed version of the AI Act, with a view to protecting fundamental rights, democracy, the rule of law and environmental sustainability from high risk applications of AI while boosting innovation and estab-

lishing Europe as a leader in the field.¹ The AI Act seeks to regulate AI as a product, setting up horizontal rules applicable in both the public and the private sectors for all AI systems placed on the European Union's internal market.

Additionally, private organisations, in line with the UN Guiding Principles on Business and Human Rights, are under a corporate responsibility to respect human rights across their operations, products and services. Indeed, there are a number of international instruments which directly focus on the need for businesses to comply with human rights and ensure responsible technological research and innovation. Over the past years, such organisations have shown a strong interest in advancing the responsible development and use of AI systems, acknowledging not only the opportunities but also the risks raised thereby. They have not only contributed to the proliferation of guidelines on AI ethics, but some have also explicitly argued in favour of a regulatory framework which enhances legal certainty in this domain.²

The AI Act entered into force on 1 August 2024 and will be fully applicable two years later, with some exceptions: prohibitions will take effect after six months; the governance rules and the obligations for general purpose AI models become applicable after 12 months; and the rules for AI systems embedded in regulated products will apply after 36 months. To facilitate the transition to the new regulatory framework, the Commission has launched the AI Pact, a voluntary initiative that seeks to support future implementation and which invites AI developers from Europe and beyond to comply with the key obligations of the Act ahead of time. The European AI Office, established in February 2024 within the auspices of the Commission, is to oversee the Act's enforcement and implementation in member states. It aims to create an environment where AI technologies respect human dignity, rights and trust (European Commission 2025).

In order to distinguish AI from simpler software systems, Art. 3(1) of the Act defines an AI system as:

... a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments.

The Act establishes obligations for providers, importers, distributors and product manufacturers of AI systems with links to the EU market (Hickman et al. 2024), and classifies AI according to its level of risk:

- 1 European Parliament (2024) Legislative resolution of 13 March 2024 on the proposal for a regulation of the European Parliament and of the Council on laying down harmonised rules on Artificial Intelligence (Artificial Intelligence Act) and amending certain Union Legislative Acts, accessed 30 September 2025 at: https://www.europarl.europa.eu/doceo/document/TA-9-2024-0138_EN.html.
- 2 See UN Guiding Principles on Business and Human Rights, particularly principles 18 and 19. See also the OECD Due Diligence Guidelines for Multinational Enterprises and the OECD Due Diligence Guidelines for Responsible Business Conduct.

- unacceptable risk is prohibited (e.g. social scoring systems and manipulative AI)
- most of the text addresses high-risk AI systems, which are regulated
- a briefer section handles limited-risk AI systems, which are subject to lighter transparency obligations
- those systems posing minimal risk are unregulated.

Providers of high-risk AI systems must (Future of Life Institute n.d.):

- establish a risk management system throughout the system's lifecycle
- conduct data governance, ensuring that training, validation and testing datasets are relevant, sufficiently representative and, to the best extent possible, free of errors and complete according to the intended purpose
- draw up technical documentation to demonstrate compliance and provide authorities with the information to assess that compliance
- design their system around record-keeping to enable it automatically to record events relevant to identifying national level risks and substantial modifications throughout the system's lifecycle
- provide instructions for use to downstream deployers to enable the latter's compliance
- design their system to allow deployers to implement human oversight
- design their system to achieve appropriate levels of accuracy, robustness and cybersecurity
- establish a quality management system to ensure compliance.

Regulation within the Council of Europe

The Council of Europe (2020b) also started a process of regulation in 2020 with its ad hoc Committee on Artificial Intelligence and, in March 2024, its Parliamentary Assembly adopted a proposal for an AI Framework Convention on artificial intelligence and human rights, democracy and the rule of law (Council of Europe 2024), drafted also in line with a risk-based approach. However, the Convention establishes general principles for states rather than for developers, manufacturers or users of AI systems, as is the case in the EU's AI Act. The Convention – which is a milestone globally for a harmonised AI regulation – is open for signing not only among members of the Council of Europe but also among non-members and the European Union. It was adopted in Strasbourg during the annual ministerial meeting of the Council of Europe's Committee of Ministers, which brings together the ministers for foreign affairs of the 46 member states of the Council of Europe. In order to ensure its effective implementation, the Convention establishes a follow-up mechanism in the form of a Conference of the Parties, while also requiring each party to establish an independent oversight mechanism to ensure compliance, raise awareness, stimulate informed public debate and carry out multi-stakeholder consultation on how AI technology should be used. The Convention was opened for signature in Vilnius, Lithuania, on 5 September on the occasion of a conference of justice ministers. Regarding implementation, activities within the lifecycle of AI systems must comply with the following fundamental principles:

- human dignity and individual autonomy
- equality and non-discrimination

- respect for privacy and personal data protection
- transparency and oversight
- accountability and responsibility
- reliability and safe innovation.

The European Court of Human Rights has not yet developed any specific case law on AI systems and currently it has no known relevant cases that are pending. Existing case law in connection with this topic concerns algorithms in general and violations of Article 8 of the European Convention on Human Rights (right to respect for private and family life), Article 10 (freedom of expression) or, in a more indirect way, Article 14 (prohibition of discrimination) on cases dealing with, for example, mass surveillance, the editorial responsibility of platforms and electoral interference. In *Egill Einarsson and others v. Iceland*,³ a prosecuting authority used statistical data processing techniques to process large amounts of information and establish evidence in an economic and financial case. The question raised concerned access by the defence to data from which incriminating evidence had been inferred. Other decisions of the Court have dealt with the consequences of the algorithmic mechanisms used to prevent the commission of infringements. In 2006, the Court stated in *Weber and Saravia v. Germany*⁴ that any potential abuse of the state's supervisory powers was subject to adequate and effective safeguards and that, in any event, Germany had a relatively wide margin of appreciation of the matter.

The use of AI in the context of workplace discrimination

In this new era of the increasing use of artificial intelligence, women, the elderly and disabled people may face multiple challenges and discrimination. With the rise of the digitalisation of the economy and the rapid transformation of the labour market, almost 90 % of jobs require basic digital skills.

Looking first at women, it is unfortunate that women represent only 17 % of ICT students in the EU (Eurostat 2020) and only 36 % of STEM graduates (European Parliament 2021), even though the latest evidence is that girls at 14 years old perform better than boys in digital literacy (European Commission 2024). This gap was intended to be addressed in a 2019 declaration on Women in Digital (European Commission 2019), while the updated Skills Agenda for Europe should have helped tackle horizontal segregation, stereotypes and gender gaps in education and training. The Commission's proposal for a recommendation on vocational education and training, made as part of its 2020–25 Equality Strategy (European Commission 2020), also sought to improve gender balance in traditionally male or female-dominated professions and to tackle gender stereotypes. The share of men working in the digital sector is 3.1 times higher than the share of women, while only 22 % of AI developers are

3 Judgement, *Egill Einarsson v. Iceland* (Application no. 24703/15), accessed 30 September 2025 at: <https://hudoc.echr.coe.int/eng#%7B%22itemid%22:%5B%22001-178362%22%7D>.

4 Decision as to the admissibility of Application no. 54934/00 by Gabriele Weber and Cesar Richard Saravia against Germany, accessed 30 September 2025 at: <https://hudoc.echr.coe.int/fre#%7B%22itemid%22:%5B%22001-76586%22%7D>.

women. This confirms that, with the rise of modern technologies, gender inequality is also increasing and that greater efforts and measures are needed.

Furthermore, more women in these subjects would improve Europe's competitiveness: if Europe increased the share of women working in the electrical engineering field to around 45 % by 2027, this would significantly increase GDP – estimates vary by between 260 and 600 billion euros (McKinsey & Co 2023a). This would lead to a more competitive and prosperous Europe for all: in principle, everyone in Europe should be able to thrive in the digital world, regardless of their background, while diverse and gender-balanced teams are more likely to produce better, fairer and more inclusive digital technology and solutions (European Commission 2019). The Digital Decade aims to double the number of such professionals in Europe from 10.3 million in 2024 to 20 million by 2030.

One of the main problems with emerging technologies is that more than four billion people, or over half the world's population, are still offline. About 75 per cent of this offline population is concentrated in 20 countries including Bangladesh, Ethiopia, Nigeria, Pakistan and Tanzania; moreover, it is disproportionately rural, low income, elderly and illiterate.

A substantial amount of work has been put in at the Berkeley Haas Center for Equity, Gender & Leadership into mitigating gender bias in AI (Smith and Rustag 2020⁵). In addition, during 2024, the negotiations on the UN's Global Digital Compact offered a unique opportunity to build political momentum and place gender perspectives on digital technology at the heart of a new digital governance framework. Without it, the risk is that AI applications will overlap existing gender gaps, causing gender-based discrimination and harm to remain intact – and even to be amplified and perpetuated. To address these risks, the Council of Europe has been consulting on a recommendation on equality and artificial intelligence, offering specific, albeit non-binding, guidance on integrating the principles of equality and non-discrimination into AI systems. The aim is to ensure that AI fosters and enhances gender equality, rather than exacerbating discrimination or violating women's rights.

Older workers also face challenges in using and adopting AI. New research has found that, among older workers in 2025, only about one in seven (16 %) say they use AI to a great or some extent while the vast majority (77 %) describe their use as not very much or not at all (Perron 2025). In contrast, the most common uses of AI among older workers include finding information (48 %), analysing data or information (28 %) and creating content (text, images, audio, videos) (25 %).

Nevertheless, there are natural fears, based around an assumption that older workers are resistant to change or less willing to adapt to new technologies. As leaders strive to integrate generative AI tools and AI agents, the general belief is that younger workers will be better equipped to seamlessly integrate these new tools into their work processes. In the US, the Equal Employment Opportunity Commission,

5 See also 'When good algorithms go sexist: why and how to advance AI gender equity' by the same authors in the *Stanford Social Innovation Review*, accessed 30 September 2025 at: https://ssir.org/articles/entry/when_good_algorithms_go_sexist_why_and_how_to_advance_ai_gender_equity.

a federal agency, took out an action on the grounds of employment discrimination against iTutorGroup for using AI software that discriminated against older candidates (US EEOC 2023). iTutorGroup, a consortium of three companies that offer English language tutoring services to students in China, consequently had to pay \$365,000 and other damages to settle the case. Such instances highlight the need for inclusive practices in the implementation of artificial intelligence, with mid-career and older workers finding it increasingly difficult to find jobs based on their previous work experience. Actively acquiring AI skills and knowledge can help them achieve a successful combination of experience and relevant contemporary skills. Employers also need to do more to get the most out of their experienced workers. Developing use cases that combine work experience with AI tools in the workplace, incentivising employees who are already using these tools to mentor colleagues, and tracking data can lead to greater productivity (Generation 2024). Artificial intelligence is seen as crucial to the future success of business, yet there are significant barriers to its adoption. Ultimately, therefore, the rise of AI adoption is as much about people as it is about technology (De Freitas 2025).

Despite similar potential for greater discrimination, AI offers good job opportunities for disabled people who are 2.3 times more likely to be unemployed than those who are not disabled (OECD 2023). Furthermore, the OECD reports a gap of 27 percentage points in employment rates between these groups. While AI has the potential to deepen inequalities if not managed properly, the report identifies that it also offers opportunities to create a more inclusive work environment and break down barriers.

The most frequently cited barrier to the adoption of AI in the context of disabled people is their lack of involvement in the development of AI-based solutions. This results in the development of solutions that are irrelevant because they do not meet real needs and which may be impractical where they are not connected to existing policies, actors and support systems. By improving assistive technologies, however, AI can improve personal mobility, for example by helping to identify accessible routes. Moreover, AI enables communication through eye-tracking and voice recognition software, allowing access to information and education. Digital assistants, speech-to-text software, automatically generated video captions and image descriptions, sign language avatars, prosthetic limbs and even mental health support are a few further examples of how AI may help advance the rights of disabled people.

Even so, there are also significant risks. Some AI tools can create biases and new barriers while the future of work in an AI-driven world can also be difficult and challenging in some sectors for disabled people. The risks of bias and exclusion are likely to continue if artificial intelligence is not properly regulated – in particular, untested algorithms can exacerbate social prejudices and create new obstacles for people looking for work (Akbaraly 2024). The EU's AI Act is the first comprehensive regulation of AI, overseeing the responsible development of AI and the deployment of AI-based technologies in the EU. It is particularly important for disabled people and other marginalised groups as it aims to prevent harm such as discrimination, unfair treatment or the loss of privacy. The EU, as a signatory to the

United Nations Convention on the Rights of Persons with Disabilities, has a legal obligation to protect disabled people from discrimination and to ensure equal access to information and communications technologies (UNRIC 2024).

Digital Europe and western Balkans countries

The Digital Europe programme is focused on bringing digital technology to businesses, citizens and public administrations. With an overall budget of over €8.1 billion, Digital Europe aims to shape the transformation of Europe's society and economy, in line with the EU's goals defined in the communication '2030 Digital Compass: the European way for the Digital Decade' and in the accompanying policy programme – 'Path to the Digital Decade'.

As the digital landscape continues to evolve, the western Balkans have demonstrated significant progress towards integrating digital priorities into their Reform Agendas (2024–2027), marking a key step on their path to EU accession. Notably, the EU's Growth Plan for the Western Balkans (2024–2027) places digital transformation as a central priority for regional integration. All six western Balkans economies are now associated with Digital Europe. By 2025, each country will host European Digital Innovation Hubs to drive the region's twin green and digital transition: as of 1 January 2025, the Digital Innovation Hubs Network has officially expanded to welcome new hubs from Albania, Kosovo, Montenegro, North Macedonia, Serbia, Ukraine and Türkiye. This marks a major milestone in strengthening digital transformation in the EU's enlargement region. These hubs will help local businesses, startups and public institutions access cutting-edge technology, AI expertise and capacities, and funding which will allow them to drive innovation and growth with a particular focus on AI. Furthermore, regional cooperation is likely to be taken a step higher as a result of the programme (Mrdović 2023). The participating countries in the Open Balkan initiative – Albania, North Macedonia and Serbia – have already agreed on starting e-government services related to the electronic identification of their citizens. The European Commission's Economic and Investment Plan for the WB will co-fund up to €9 billion worth of digital transition projects, although western Balkan countries need to be assisted with examples of good practice and successful monitoring of the implementation of projects from inception to completion.

In the Republic of North Macedonia, the Ministry for Digital Transformation is the institution responsible for development, promotion and technical culture including communications, delivering digitalisation courses, security and information systems. In January 2025 a new cyber security strategy was adopted for 2025–2028, while a new strategy for information and computer technologies 2025–2030 is being drafted in which the four main areas for intervention are: information society and audiovisual politics; digitalisation of public administration; common standards for cyber security; and strong digital skills and digital literacy.

North Macedonia is part of Digital Europe, having signed a participation agreement with the EU. It has also developed an international project, within the framework of the programme, which will write an app for a digital wallet collecting the major documents of Macedonian citizens and connecting with an electronic database.

In order to participate, North Macedonia is obliged to pay an annual sum of 200,000 euros. North Macedonia was the host of the 7th Western Balkan Digital Summit on 1–2 October 2025 with a special focus on the digitalisation of public services with a presentation of the digital wallet alongside other panels including cyber security, connected citizens, data protection in an AI context and the future of work.

The main future challenges for artificial intelligence and the labour market are:

- adapting educational programmes for the use of AI, with an eye to the benefits and the risks
- developing company training programmes, mainly in the IT sector, for the learning of new skills online and remotely
- adapting company organisational learning departments, including additional training for skills and new jobs
- developing strategic company-level plans concerning the impact of AI, including partnerships with educational institutions and other stakeholders
- creating strong management and leadership programmes that can analyse the potential of AI, plan strategic workforce changes and establish dedicated human resources offices for workforce transformation through AI and generative AI (the use of models to generate further data)
- developing government role models in public services, which could be an important means of showing the way towards human capital development. For example, the French government recently introduced ‘Albert’, a language model assistant designed to help civil servants search for information and formulate specific responses
- implementing new EU and Council of Europe regulations on AI to protect human rights, including workers’ rights, by 2026 and adopting new laws regulating AI and other technologies
- creating inclusive work environments by implementing artificial intelligence technologies that support women in STEM, older people and disabled workers
- taking national measures to combat multiple discrimination in the era of AI for vulnerable groups.

Conclusions

AI systems can provide major opportunities for individual and societal development as well as in terms of human rights, democracy and the rule of law. At the same time, they may have a negative impact on several of the human rights protected by the ECHR and other Council of Europe instruments. Due to the technologies themselves undergoing rapid change, there is no generally accepted definition of artificial intelligence, increasing the challenges to policymakers in adopting legislation.

Recently, however, the Council of Europe adopted its Framework Convention on artificial intelligence and human rights, democracy and the rule of law – the first international legally binding treaty in this field – while the European Union adopted its AI Act, providing mandatory regulation for the first time on the use of AI. The Framework Convention is an enormous step forward in regulating AI in many areas including privacy, data collection, justice, non-discrimination and equality, and the labour market.

With the vast majority of jobs now requiring basic digital skills, there are huge gaps with regard to the number of women accessing career roles within STEM, as well as in terms of employer perceptions of the ability of older people to understand new technology and the lack of involvement of disabled workers in the design of adaptive technology. Since the share of men working in the digital sector is 3.1 times higher than the share of women, while only 22 % of AI developers are women, this confirms that, with the rise of modern technologies, gender inequality is also increasing and that greater efforts and measures are needed. The Council of Europe has been consulting on a further recommendation on equality and artificial intelligence, offering specific, albeit non-binding, guidance on integrating the principles of equality and non-discrimination into AI systems. The aim is to ensure that AI fosters and enhances gender equality, rather than exacerbating discrimination or violating women's rights.

Older workers also face challenges in using and adopting AI; and, indeed, research has found that few are doing so. The result is that there are natural fears, based around an assumption that older workers are resistant to change or less willing to adapt to new technologies, that possible discrimination is on the horizon. Even though there are some benefits for disabled people through using new applications, they are insufficiently involved in the process of adapting these applications.

As set down in the Digital Compass, by 2030 at least 80 % of all adults should have basic digital skills, and there should be 20 million employed ICT specialists in the EU – while more women should take up such jobs.

As regards the western Balkans, there are three integration-rooted initiatives that will assist, at least at the institutional level:

- the EU's Growth Plan for the Western Balkans (2024–2027), which places digital transformation as a central priority for regional integration
- the association of all six western Balkans economies with Digital Europe
- the establishment by 2025 of European Digital Innovation Hubs to drive the region's twin green and digital transition: as of 1 January 2025, the associated network has officially expanded to welcome new hubs from seven different countries from the wider region.

Even so, it is clear that measures in the labour market and education systems are needed to adapt and create a new working environment in the era of AI.

References

- Aboulezz, Omar (2021) How Zoom won the pandemic, HBS Digital Initiative, accessed 30 September 2025 at: <https://d3.harvard.edu/platform-digit/submission/how-zoom-won-the-pandemic/>.
- Akbaraly, Moise (2024) 'The impact of AI on employment for people with disabilities', accessed 30 September 2025 at: <https://www.docaxess.com/en/blog/the-impact-of-ai-on-employment-for-people-with-disabilities/>.
- Chavkoska, B (2023) 'Work from home – challenges in the period of global pandemic' *Journal of Law and Politics* 4(1): 13–19.

- Costa Rui, Zhaolu Liu, Christopher Pissarides and Bertha Rohenkohl (2024) ‘Old skills, new skills: what is changing in the UK labour market?’ Institute for the Future of Work, accessed 3 September 2025 at: <https://www.ifow.org/publication/s/old-skills-new-skills---what-is-changing-in-the-uk-labour-market>.
- Council of Europe (2019) ‘Declaration by the Committee of Ministers on the manipulative capabilities of algorithmic processes’ accessed 30 September 2025 via: <https://www.coe.int/en/web/data-protection/-/declaration-by-the-committee-of-ministers-on-the-manipulative-capabilities-of-algorithmic-processes>
- Council of Europe (2020a) Recommendation CM/Rec(2020)1 of the Committee of Ministers to member states on the human rights impacts of algorithmic systems, accessed 30 September 2025 at: <https://rm.coe.int/09000016809e1154>.
- Council of Europe (2020b) Ad Hoc Committee on artificial Intelligence (CAHAI) Feasibility Study Council of Europe, 17 December, accessed 30 September 2025 at: <https://rm.coe.int/cahai-2020-23-final-eng-feasibility-study-/1680a0c6da>
- Council of Europe (2024) *Framework Convention on Artificial Intelligence and Human Rights, Democracy and the Rule of Law. Explanatory Report* CM(2024)52-final, accessed 30 September 2025 via: <https://www.coe.int/en/web/portal/-/council-of-europe-adopts-first-international-treaty-on-artificial-intelligence>
- De Freitas, Julian (2025) ‘How to increase AI adoption in the workforce’ webinar summary, Harvard Business Review, 28 May, accessed 30 September 2025 at: <https://hbr.org/webinar/2025/06/how-to-increase-ai-adoption-in-the-workplace>.
- European Commission (2019) ‘EU countries commit to boost participation of women in digital’, Shaping Europe’s digital future news release, 9 April, accessed 30 September 2025 at: <https://digital-strategy.ec.europa.eu/en/news/eu-countries-commit-boost-participation-women-digital>.
- European Commission (2020) ‘A Union of Equality: Gender Equality Strategy 2020–2025’ accessed 30 September 2025 via: ‘Gender equality strategy’ (webpage) at: https://commission.europa.eu/strategy-and-policy/policies/justice-and-fundamental-rights/gender-equality/gender-equality-strategy_en.
- European Commission (2024) ‘Lagging digital literacy among 14-year-olds across the EU, study finds’, European Education Area news release, 13 November, accessed 30 September 2025 at: <https://education.ec.europa.eu/en/news/lagging-digital-literacy-among-14-year-olds-across-the-eu-study-finds>.
- European Commission (2025) AI Act (webpage), accessed 30 September 2025 at: <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>
- European Parliament (2021) ‘Tackling the under-representation of women in science and engineering’, Briefing 3 June 2021, accessed 30 September 2025 at: <https://www.europarl.europa.eu/news/en/agenda/briefing/2021-06-07/20/tackling-the-under-representation-of-women-in-science-and-engineering>.

- Eurostat (2020) ‘Girls and women among ICT students: what do we know?’ accessed 30 September 2025 at: <https://ec.europa.eu/eurostat/web/products-eurostat-news/-/EDN-20200423-1>.
- Future of Life Institute (2025) EU Artificial Intelligence Act ‘High level summary’ (webpage), accessed 30 September 2025 at: <https://artificialintelligenceact.eu/high-level-summary/>.
- Generation (2024) ‘Age-proofing AI: enabling an intergenerational workforce to benefit from AI’, accessed 30 September 2025 at: https://www.generation.org/wp-content/uploads/2024/10/AgeProofingAI_Generation_FINAL.pdf.
- Henneborn, Laurie (2023) ‘Designing generative AI to work for people with disabilities’ *Harvard Business Review*, 18 August, accessed 30 September 2025 at: <https://hbr.org/2023/08/designing-generative-ai-to-work-for-people-with-disabilities>.
- Hickman, Tim, Sylvia Lorenz, Constantin Teetzmann and Aishwarya Jha (2024) ‘Long awaited EU AI Act becomes law after publication in the EU’s Official Journal’, *White & Case* (webpage), accessed 30 September 2025 at: <https://www.whitecase.com/insight-alert/long-awaited-eu-ai-act-becomes-law-after-publication-eus-official-journal>.
- Kambovski, Igor and Elena Stojanova (2024) ‘Research of the effect of new technologies, with special reference on artificial intelligence and human rights and developing ethical standards for the protection of human rights to the Internet in automatic decision-making’ *Fondacija za internet i opstevstvo Metamorphosis: Skopje* (in Macedonian) accessed 30 September 2025 at: https://eprints.ugd.edu.mk/34289/1/finalno_istrazivanje-za-efektot-na-veshtackata-inteligencija-vrz-ch-ovekovite-prava.pdf.
- McKinsey & Co (2023a) ‘Women in tech: the best bet to solve Europe’s talent shortage’ accessed 30 September 2025 at: <https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/women-in-tech-the-best-bet-to-solve-europes-talent-shortage>.
- McKinsey & Co (2023b) ‘The economic potential of generative AI: the next productivity frontier’ accessed 30 September 2025 at: <https://www.mckinsey.com/capabilities/mckinsey-digital/our-insights/the-economic-potential-of-generative-ai-the-next-productivity-frontier>.
- McKinsey & Co (2023c) ‘Generative AI and the future of work in America’ accessed 30 September 2025 at: https://www.mckinsey.com/mgi/our-research/generative-ai-and-the-future-of-work-in-america#.
- McKinsey & Co (2024) ‘Jobs lost, jobs gained: what the future of work will mean for jobs, skills, and wages’, accessed 30 September 2024 at: <https://www.mckinsey.com/featured-insights/future-of-work/jobs-lost-jobs-gained-what-the-future-of-work-will-mean-for-jobs-skills-and-wages>.

- Mrdović, Petar (2023) 'The role of digitalisation in transforming Western Balkan societies', WB2EU policy brief 6 July, accessed 30 September 2025 at: <https://www.oegfe.at/policy-briefs/the-role-of-digitalisation-in-transforming-western-balkan-societies/>.
- OECD (2023) 'Using AI to support people with disability in the labour market. Opportunities and challenges', OECD Artificial Intelligence Papers, accessed 30 September 2025 at: https://www.oecd.org/en/publications/using-ai-to-support-people-with-disability-in-the-labour-market_008b32b7-en.html.
- Perron, Rebecca (2025) 'How AI is impacting the future of work among adults age 50-plus', article updated 25 May 2025, accessed 30 September 2025 at: <https://www.aarp.org/pri/topics/work-finances-retirement/employers-workforce/workforce-trends-older-adults-artificial-intelligence/>.
- Smith, Genevieve and Ishita Rustag (2020) 'Mitigating bias in artificial intelligence: an equity fluent leadership playbook', accessed 30 September 2025 at: https://haas.berkeley.edu/wp-content/uploads/UCB_Playbook_R10_V2_spreads2.pdf.
- UN Regional Centre for Western Europe (UNRIC) (2024) 'Building an accessible future for all: AI and the inclusion of persons with disabilities', 2 December, accessed 30 September 2025 at: <https://unric.org/en/building-an-accessible-future-for-all-ai-and-the-inclusion-of-persons-with-disabilities/>.
- US Equal Employment Opportunity Commission (EEOC) (2023) 'iTutorGroup to pay \$365,000 to settle EEOC discriminatory hiring suit', accessed 30 September 2025 at: <https://www.eeoc.gov/newsroom/itutorgroup-pay-365000-settle-eeoc-discriminatory-hiring-suit>.
- Vinuesa, R, H. Azizpour, I. Leite, M. Balaam, V. Dignum, S. Domisch, A. Falländer, S. D. Langhans, M. Tegmark and F. F. Nerini (2020) 'The role of artificial intelligence in achieving the Sustainable Development Goals' *Nature Communications* 11, 233, accessed 30 September 2025 at: <https://www.nature.com/articles/s41467-019-14108-y>.
- World Economic Forum (2023) 'The future of jobs report 2023' Geneva: World Economic Forum, accessed 30 September 2025 at: <https://www.weforum.org/publications/the-future-of-jobs-report-2023/>.



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Making sense of globalised AI in the context of the workplace

Abstract

From the perspective of Albania, a country currently outside the EU but which is taking steps to join it, this article reviews the current legislative framework introduced within the EU on artificial intelligence, workplace applications of which are transforming the dynamics of employee-employer relations. It seeks to develop understanding within Albania of how employment legislation can adapt to the new challenges in the sense of ensuring a fair, inclusive and ethical working environment which serves the preservation of the rights and dignity of workers. In reviewing the details of the framework, both technically and in the context of international jurisprudence, and how this applies in the workplace, the article points to the need for inclusivity and social dialogue with the dignity of workers remaining non-negotiable. It concludes with a series of recommendations that are intended to achieve a balanced approach to AI in the context of workplace relations and which recognises the new perspectives it offers but which does not ignore the real concerns that exist about what happens to equality, transparency and job security.

Keywords: *employee relations, digitalisation, artificial intelligence, just transition, equal treatment, transparency, job security*

Introduction

In the last decade, artificial intelligence (AI) has developed rapidly, becoming a key factor that is profoundly changing the way human activity, society and the global economy function as a whole. In some respects, AI may appear as an ally in complex organisational processes, while in others it may be perceived as constituting a potential risk that threatens the jobs and livelihoods of workers. The transformation that this technology brings is no longer simply of a technical nature but one that directly affects the social and legal frameworks that regulate labour relations. It is now widely accepted that continuous advances in this field have transformed the way professional activities are organised and managed in the 21st century, where AI has become an integral part of human resources (HR) processes such as staff selection, performance evaluation and the supervision of workers at work. Essentially, this changes not only the structures of organisations but also the dynamics of the relationships between employees and employers at an individual level but also, collectively speaking, the employment relationship itself with all its legal and social implications.

Statistically, referring to data in a report compiled for UNI Europa and the Friedrich-Ebert-Stiftung Competence Centre on the Future of Work, a significant

share of companies in the European Union, around 42 %, are already negotiating on themes related to the use of AI (Brunnerová 2023: 9). Despite these technologies bringing obvious benefits in terms of productivity and in the reduction of operating costs, they raise at the same time serious concerns about the protection of employees' fundamental rights, mainly in respect of privacy, the prevention of discrimination and preservation and the non-infringement of human dignity in the workplace, or even in avoiding the loss of the job itself. This refers, in part, to the use of algorithms that help in the selection of candidates or the measurement of efficiency at work, but also refers to the elimination of jobs (suppression) due to 'restructuring by AI'.

In order to address these challenges, the European Commission has passed the Artificial Intelligence Act,¹ which emphasises the importance of transparency, accountability and the presence of human control in systems that pose high risk, in particular those that affect decision-making related to employment relationships. The aim of this legal instrument is to create a sustainable balance between technological innovation and the protection of human interests (i.e. in this specific case, workers). The European Union's Digital Strategy for 2020 also highlights the need for an 'open, fair, inclusive and people-centric internet' on the basis that 'people are entitled to technology that they can trust' (European Commission 2020) and which also respects the principles and rights set out in the EU Charter of Fundamental Rights. This also goes for the development of artificial intelligence and of digital technology in general.

In this context, it is essential to understand how current employment legislation can adapt to the new challenges posed by the use of AI in order to propose measures that ensure a fair, inclusive and ethical (Eurofound 2023) working environment which is in the service of the preservation of the rights and dignity of workers. The aim is to deliver legal regulation which, on the one hand, balances the development of technology and, on the other, ensures that employment relations are not undermined.

The contemporary framework in the European Union in relation to artificial intelligence

The AI Act

The European Union's Regulation (EU) 2024/1689 in the attempt to recognise current developments in AI and to regulate the sphere in the interests of people. The Regulation is considered essential in creating a common and standardised framework for the use of artificial intelligence in the European legal space. At its core, there is an approach built on classification according to the level of risk, categorising AI systems into four distinct groups, as follows:

1 Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence (AI Act). *Official Journal of the European Union* accessed 11 November 2025 at: <https://eur-lex.europa.eu/eli/reg/2024/1689/oj/eng>.

1. minimal risk: systems that do not pose any significant risk to the rights of citizens (workers/employees) and are permitted without special restrictions
2. limited risk: transparency is required, such as notification of the use of artificial intelligence in communications (automatic communications) (such as chatbots)
3. high risk: technologies that can profoundly affect the lives and rights of individuals, such as those used in recruitment, education or public safety – for these applications, strict obligations are foreseen such as compliance control, human oversight, technical documentation and incident reporting and accountability
4. unacceptable risk: uses that violate fundamental principles and are categorically prohibited – such as emotional assessment in the workplace, systems which deploy ‘subliminal techniques beyond a person’s consciousness or purposefully manipulative or deceptive techniques’ (which refers to the use of technology to influence a person’s behaviour or decision-making without their awareness) or ‘social scoring’ (an AI system that rates or ranks people based on their behaviour, social actions or personal data to determine whether or not they are trustworthy or desirable).

In the context of the employment relationship, while not without debate concerning some of its provisions, the Regulation brings new guarantees and a fresh approach, specifically as regards:

- prohibiting the use of AI for emotional assessment at work (unacceptable risk)
- requiring direct human intervention in any decision-making that affects the professional status of an employee – including hiring, promotions or dismissals
- establishing clear responsibilities for developers and users of AI systems (legal liability arising from the misuse of AI through obligations on technical security, auditing and cooperation with independent supervisory authorities).

As a legal instrument, the Regulation is not only technical-legal in its language but it also conveys an ethical philosophy that aims to guarantee respect for human dignity and rights by adapting to new technological realities such as those encompassing evolving AI applications. In its legal idea and concept, it thus frames and establishes the foundations of a legal philosophy combining ethics with law, thereby protecting human interests without hindering the continued development of the technology.

Directive on employment relationships on digital platforms

Conditioned by the significant increase in work through platforms structured around deployments of AI, especially in sectors such as distribution, transportation and freelance services, the European Union has undertaken a legal initiative that addresses the challenges of employment mediated by algorithms or other means of artificial intelligence. This directive – the Platform Work Directive (PWD) – is designed to establish clearer legal boundaries and increased protection adapted to the situation of workers in such forms of employment. The Directive includes several essential elements, the most important of which are:

- review of employee status: under the Directive’s presumption of employment, platform workers who were previously treated as self-employed may now bene-

fit from the right to reclassification, gaining access to insurance, paid leave and legal protection from the unfair termination of employment

- increased algorithmic transparency: AI platforms are required to explain the functioning of their algorithms, how tasks are allocated, how performance is measured and how decisions that affect employees' income or status are made
- a conditioning of automated decision-making by human control: decisions originating within AI applications must be supervised, explicable and contestable and always with the prior consent of workers themselves.

Since many of the technologies used by digital platforms fall into the category of high-risk systems, and are therefore regulated in parallel by both legal instruments, the PWD naturally complements the AI Act and comes as a legal guarantee which forms a tool in the hands of workers.

Opinion of the European Economic and Social Committee (EESC)

The EESC, as an advisory body with an important consultative role in the formulation of EU policies, has stressed the importance of an approach that places people at the centre of the digital environment. In its recent opinions, the Committee has outlined several basic principles for a fair regulation of AI, such as:

- sustainable and ethical development, in which technology should serve people and not become a means of control or exclusion, i.e. technology at the service of the individual
- awareness of the risk of algorithmic bias, highlighting the need to avoid the reproduction of unconscious discrimination in historical, confidential data, etc.
- the sphere should be influenced by the organised participation of workers, through the involvement of trade unions and representative groups in the drafting and implementation of regulations affecting the workplace
- the establishment/creation of independent complaint and oversight mechanisms, guaranteeing that workers can appeal against automated decisions that negatively affect them.

According to the EESC, the digital transformation must be inclusive and built on the principle of social dialogue and that AI systems must serve to enhance, not replace, workers (EESC 2025).

Practical implications of AI in employer-employee relations

The gradual incorporation and inclusion of AI in the labour law armour has opened a new front in relations between employees and employers. Alongside the positive effects such as improved efficiency or reduced operational costs, serious issues arise regarding the rights of individual employees in the workplace – including the right to confidentiality, equal treatment and the guarantee of fair and just relationships in the workplace.

Automation, the changing structure of occupations and the employee-employer relationship

Analysed at macro level, it is evident that technological developments are fundamentally transforming the landscape of the labour market. Automation, supported by AI systems, has replaced traditional roles, especially in sectors with a high intensity of repetitive processes such as manufacturing, logistics and essential services. This structural shift has brought about the need for adapted legal responses to ensure sustainable protection for workers at risk as well as to safeguard the principles of the employee-employer relationship itself.

In this context, the European Pillar of Social Rights emphasises, in its very first principle, the right to good education and training throughout professional life. Furthermore, any lack of measures for retraining or retraining may constitute a deviation from the standards set out in articles 14 and 15 of the EU Charter of Fundamental Rights, guaranteeing the right to work and to access vocational and continuing training.

Referring to international jurisprudence, the European Court of Human Rights (ECtHR) in *Kjeldsen, Busk Madsen and Pedersen v. Denmark*² emphasised the need for training that reflects technological progress and social developments – an approach that strongly supports investment in new capacities to meet the challenges of the digital era.

Employee management through algorithmic systems

AI in itself and specifically in the deployment of algorithms to manage key and crucial aspects of employment relationships – such as candidate selection, productivity tracking or disciplinary decision-making – is increasingly becoming a reality. This development, although often justified with reference to efficiency, raises logical and legal questions about respect for fundamental human rights, in particular privacy (confidentiality) and non-discrimination.

Article 22 of the General Data Protection Regulation (GDPR)³ sets out that individuals have the right not to be subject to decisions based entirely on automated processing that has legal consequences for them or which otherwise affects them. As we have seen above, the AI Act seeks to reinforce this approach, classifying the use of AI for employee management as a ‘high risk’ or ‘unacceptable risk’ and requiring a strict approach to technical documentation, transparency, human oversight and regular auditing. Moreover, regarding the question of privacy in the workplace,

2 ECtHR judgment in *Kjeldsen, Busk Madsen and Pedersen v. Denmark*, application nos. 5095/71, 5920/72 & 5926/72, 7 December 1976, accessed 11 November 2025 at: <https://hudoc.echr.coe.int/eng?i=001-57509>.

3 Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data. *Official Journal of the European Union* accessed 11 November 2025 at: <https://eur-lex.europa.eu/eli/reg/2016/679/oj/eng>.

the ECtHR in *Barbulescu v. Romania*⁴ established an important standard: workers enjoy the right to a reasonable level of privacy in the workplace and any form of monitoring must be lawful, proportionate and foreseeable by law (via specific regulations, etc.). Furthermore, the Court of Justice of the European Union (CJEU), in the *Schrems II* case,⁵ prohibited the transfer of personal data to jurisdictions that do not offer an equivalent level of protection – including data processed by AI for work purposes.

Given that the development of AI is taking place on a global basis, as are its applications, other countries have also taken legal steps regarding the interface between the employee-employer relationship and AI. In Canada, the AIDA Bill aims to establish an ethical and verifiable system for the use of AI systems in order to maintain a balance between innovation and human rights. Meanwhile, Australia has prepared a voluntary framework that emphasises transparency, fairness and accountability in the use of AI in the public and private sectors. In contrast, and returning to the discussion above on continuing professional development, in the USA there is no (federal) legal framework that would oblige employers to offer retraining opportunities to employees affected by applications of technology. Nevertheless, some states such as California have launched initiatives towards the provision of educational support and technical training, representing an example of a decentralised response to this global phenomenon.

The impact of artificial intelligence on employment relationships is therefore complex and multifaceted. It requires not only new legal and regulatory mechanisms, but also a reconceptualisation of the role of humans in relation to technology in which the value of human dignity remains non-negotiable.

Contemporary challenges of AI and the need for legal reform

Interaction between AI and fundamental human rights

The reflection and implementation of artificial intelligence in both public and private spheres has confronted legal systems with new situations, issues and challenges, often hypothetically unforeseen in the law. Among these, the most sensitive are the conflicts that arise between the use of advanced technologies and the preservation of fundamental rights. Algorithmic systems, in the way they function, are often invisible to users, making it difficult to understand the basis on which decisions are made that directly affect the lives and wellbeing of individual workers.

The lacunae between real-life situations and the law, arising in response to a lack of transparency, not only undermines the right to full and clear information but also creates a favourable terrain for the emergence of implicit discrimination, especially in employment relationships. The intervention of AI in the selection, assessment and treatment of employees, when not accompanied by strong protective mechanisms,

4 ECtHR judgment in *Barbulescu v Romania*, application no. 61496/08, 5 September 2017, accessed 11 November 2025 at: <https://hudoc.echr.coe.int/eng/?i=001-177082>.

5 CJEU judgment in *Data Protection Commissioner v. Facebook Ireland and Maximilian Schrems* (Case C-311/18) [Schrems II], 16 July 2020, accessed 11 November 2025 at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62018CJ0311>.

potentially contradicts standards of equality and the right to a fair hearing. These concerns have been addressed at judicial level by the European courts. In *Big Brother Watch v. the United Kingdom*,⁶ it was clearly emphasised that the use of surveillance technologies, including those which deploy algorithms, must be justified, proportionate and equipped with effective guarantees for the individual. Also, in the *Schrems II* case,⁷ the importance of considering the protection of personal data as an essential component of human freedom and dignity in the digital age was underlined.

In parallel with this legal framework, it is evident that vacuums in the legal framework not only increase legal uncertainty for actors using or developing AI systems, but also create space for arbitrary or unmanaged uses that can fundamentally and directly infringe fundamental freedoms.

Towards a standard, appropriate and internationally aligned legal framework

Faced with the accelerated pace of technological innovation, the traditional model of legislation (which often reacts late to changes) seems insufficient, not least alongside its typically parochial locus. In such conditions, there is a need for a new legal approach, adapted to the situation and applicable across all countries. Of course, the law must not only respond to the existing problems but also anticipate and guide future developments in a responsible manner; when the latter is missing or unclear, it is definitely ‘time to create a new legal framework’.

As explored above, the European Union has already taken concrete steps in this direction, through efforts to build a stable legal framework that is sensitive to fundamental rights. Its AI Act aims to create a clear system for classifying the risks arising from the use of AI and to impose specific obligations on systems that pose a high or unacceptable risk; but the Commission’s ‘Digital Omnibus’ proposal, due later in November 2025 but about which leaks have suggested an intention to water down important rights and privacy protections set down in the EU Charter of Fundamental Rights,⁸ point to a deregulatory intent which is particularly disappointing, coming not least as soon as it does following the passing of the AI Act in the first place.

It is worthwhile re-emphasising in this context that the approach originally adopted in that Act does not aim to curb technological development but to ensure that it does not come at the expense of individual freedom and social rights.

6 ECtHR judgment in *Big Brother Watch and others v. The United Kingdom*, application nos. 58170/13, 62322/14 and 24960/15, 13 September 2018, accessed 11 November 2025 at: <https://hudoc.echr.coe.int/eng?i=001-186048>.

7 CJEU judgment in *Data Protection Commissioner v. Facebook Ireland and Maximillian Schrems* (Case C 311/18) [Schrems II], 16 July 2020, accessed 11 November 2025 at: <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:62018CJ0311>.

8 See ‘Social democrats lay down red lines on revamping EU’s digital rulebook’, *Euractiv* 12 November 2025, accessed 13 November 2025 at: <https://www.euractiv.com/news/social-democrats-lay-down-red-lines-on-revamping-eus-digital-rulebook/>.

In addition, the Court of Justice of the EU has also stressed in its case law the importance of judicial review and effective mechanisms to protect citizens against the risks of new technology.

To be as effective as possible, legal reform must be open and inclusive. This means the active engagement of different actors – from civil society organisations and trade unions to experts in technical and academic fields. Only through open interdisciplinary dialogue can rules be built that reflect the complex reality of the digital age and that protect human dignity at all levels, including globally where, ultimately, a response will have to be made which reflects the globalised nature of AI.

Conclusions and recommendations

Artificial intelligence is fundamentally changing the way the labour market operates, opening up new perspectives but also raising real concerns about equality, transparency and job security. It is not enough to assess this transformation only from an economic or technological perspective; analysis and action must start from the principle that technological development should serve people and not vice versa.

This requires an integrated approach in which legislation, public policies and organisational practices work together to set clear standards and to ensure that new technologies do not reinforce existing inequalities but rather mitigate them.

Cooperation between public institutions, the private sector, employee organisations and civil society is a prerequisite for building a sustainable and ethical model for the use of AI.

The European Union has the opportunity to lead this process not only through regulatory instruments but also by setting standards that can serve as a point of reference on a global scale. Only through a vision in which technology and humanity coexist in a balanced way can we build a fairer, safer and more inclusive future of work for all and with AI at the service of people.

Achieving such a balanced approach to AI in the context of legal workplace relations will not be straightforward but can be built around the following series of recommendations:

Building a European legal framework for the use of AI in the workplace

To create a common basis that guides the use of artificial intelligence in the employment sector, it is necessary to draft a code of ethics that applies throughout the European Union. Such a document should not be merely declarative but should provide clear guidelines and specific obligations on how AI technologies should be applied in accordance with human dignity and workers' rights. It should address issues such as respect for privacy, protection from discrimination, ensuring transparency in decision-making processes and the obligation of institutional accountability. Such an initiative would contribute to mitigating legal inconsistencies between EU Member States and would significantly strengthen legal certainty in employer-employee relations.

Increasing the powers of supervisory and inspectorate institutions

The implementation of ethical and legal standards cannot rely solely on the goodwill of private actors. It is therefore essential that the authorities responsible for data protection and rights at work have sufficient resources, expertise and independence to exercise effective control over the use of AI. The role of the European Data Protection Supervisor should be strengthened through reinvigorated auditing and investigatory powers in the processing of employee complaints and the ability to impose sanctions when legislation is breached. Proactive supervision by each country and by the international jurisprudential institutions is essential to prevent abusive uses of AI and to maintain the balance between innovation and social ethics.

Legal guarantees for the right to explanation and human intervention

Automated decision-making that affects individuals' lives in the workplace must not be unreasonable or disproportionate. Every employee must have the right to understand the rationale behind a decision that has particular consequences for his or her position, benefits or assessment at work. The right to review by an independent human authority, which can correct or revoke unfair decisions, must also be guaranteed. These principles are not only technical but part of a broader right to fair and dignified treatment in employment relationships. The role of trade unions and employee representatives in this process must be strengthened, giving them a real voice in defining acceptable limits for the use of AI by directly providing for such a role both within the international legal framework and in each country individually.

Vocational education/training in response to the technological transformation of the labour market

The emergence of artificial intelligence has brought about structural changes in the way work is organised and what skills are required of the workforce. For this reason, it is essential to invest in vocational education and continuous training that help individuals adapt to new demands. Programmes should be inclusive and accessible, targeting not only current employees but also young people entering the labour market for the first time. Technology should not be perceived as a threat to jobs, but as an opportunity for personal and professional development. This can be achieved as long as – and perhaps only if – there is the political and strategic will to manage its introduction fairly and in a way that openly recognises the need for justice.

References

- Brunnerová, S, D. Cecon, B. Holubová, M. Kahancová, K. Lukáčová and G. Medas (2024) *Collective bargaining practices on AI and algorithmic management in European services sectors* Brussels: Friedrich-Ebert-Stiftung.
- European Commission (2020) 'Shaping Europe's digital future: Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions' (COM(2020) 67 final), Brussels: European Commission.

European Economic and Social Committee (EESC) (2025) *Pro-worker AI: levers for harnessing the potential and mitigating the risks of AI in connection with employment and labour market policies* Own-initiative Opinion, adopted on 22 January 2025, accessed 11 November 2025 at:

<https://www.eesc.europa.eu/en/our-work/opinions-information-reports/opinions/pro-worker-ai-levers-harnessing-potential-and-mitigating-risks-ai-connection-employment-and-labour-market-policies>.

Eurofound (2023) *Ethical digitalisation at work: from theory to practice* Luxembourg: Publications Office of the European Union.



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The role of online platforms in shaping tourism and labour dynamics in northern Albania

Abstract

The digital transformation of tourism is reshaping labour markets and regional economies. Northern Albania, rich in natural and cultural resources but limited by infrastructure and workforce challenges, has adopted online platforms such as Booking.com, TripAdvisor and Airbnb, opening up new opportunities for employment, entrepreneurship and income diversification while also creating pressures linked to seasonality, informality and unequal digital skills. Based on secondary data, literature and sectoral reports, this article examines the role of digital tourism in driving labour market changes and economic development. Results suggest that digitalisation lowers entry barriers for small businesses, enhances competitiveness and supports micro-entrepreneurship, particularly among young people and women. Yet, persistent skills gaps, weak infrastructure and a reliance on unstable demand risk reinforcing insecurity and exclusion. The study concludes that, while digital tourism offers strong potential for inclusive and sustainable growth, its benefits depend on targeted policies in digital training, the formalisation of work and regional development.

Keywords: digital tourism, economic development, northern Albania, ICT adoption, sustainable tourism

Introduction

The global tourism sector is undergoing a structural transformation under the impact of digitalisation. Online platforms, electronic booking systems and social media are transforming the way tourists search, plan and experience destinations. This process, widely conceptualised as e-tourism, reflects the integration of information and communications technologies (ICT) throughout the tourism value chain (Buhalis and Law 2008). Albania, although a developing destination, is no exception to these global trends. The Albanian government's 'Digital Agenda Albania 2022–2026' demonstrates a strategic commitment to advancing society towards the digital age, including the tourism sector. Nowadays, tourism constitutes one of the principal pillars of the economy (Watkins et al. 2018); therefore, its modernisation through digitalisation is of critical significance.

Northern Albania is a region distinguished by unique natural and cultural assets, yet it simultaneously confronts significant infrastructural and geographical constraints. The mountainous terrain and distance from urban centres have historically limited the promotion and accessibility of these areas to tourists. However, recent technological developments offer new opportunities to overcome these limitations.

Through digital platforms, information about destinations in the north of the country becomes accessible ‘in one click’ from every corner of the world. Tourists can now discover the natural beauty of Theth or Valbona through websites, blogs, social networks and mobile apps, without being limited by the physical lack of promotional infrastructure on the ground. This enhances the global visibility of destinations in northern Albania and diversifies their visitor base by attracting adventure-seeking tourists.

Nevertheless, the full-scale utilisation of ICT in Albanian tourism remains challenging. Previous studies have highlighted that the provision of digital services for tourists in Albania remains at an early stage. Adoption of technology across the sector is limited and digital marketing remains underdeveloped. This creates a gap between urban and rural destinations in the north in terms of online presence and access to global markets. Previous literature (e.g. Gjika and Pano 2020) has integrated interviews with specialists to deepen understanding of the drivers and barriers to digitalisation. In the absence of robust primary data on businesses in northern Albania, this article draws carefully on existing secondary sources and analyses from other authors to assess the current situation and ongoing trends.

The article enriches these existing studies by providing a broader theoretical and regional context and a more comprehensive review of the literature alongside extended analyses and discussion on the impact of digital platforms on the hotel industry. In conclusion, detailed findings and recommendations are provided for policymakers and local stakeholders, aiming to facilitate the adoption of ICT and enhance the competitiveness of tourism in northern Albania in the digital era.

Methodology

This study employs a qualitative and exploratory approach, relying primarily on secondary data due to the scarcity of primary datasets on northern Albania. The analysis draws on academic literature, institutional statistics (e.g. INSTAT, Ministry of Tourism and the Environment), and reports from international organisations (UNDP, EU) to capture trends in digital tourism and their economic and labour market effects. Empirical findings from earlier studies in Albania, as well as data from online platforms such as Booking.com, TripAdvisor and Airbnb, are integrated to provide specific illustrations of how digitalisation is shaping business practices and competitiveness.

Thematic content analysis was applied to organise the data in five dimensions:

- global and national digitalisation trends
- adoption of online platforms in Albania
- economic impacts
- labour market implications
- sustainability challenges.

This method allows for the identification of connections between digital transformation, tourism development and labour market restructuring, while situating northern Albania within broader international debates.

The main limitation of this study is its reliance on secondary data, which reduces the depth of its insights into local businesses. To address this, the article combines information from multiple sources to strengthen reliability. Future research should complement this approach with primary methods such as surveys, interviews and sentiment analysis of online reviews to provide more granular evidence.

ICT in Albanian tourism

The impact of ICT on tourism is becoming increasingly evident in Albania, where the tourism sector has experienced significant growth, particularly after 2010, positioning itself as a regional competitor. The use of digital channels is considered essential in sustaining this momentum (Noti and Trebicka 2016). Entrepreneurs and managers in the Albanian tourism sector have begun to diversify their services through the internet, expanding online channels for marketing and booking tourism services. The growing use of social media and travel platforms has contributed to improving the international image of Albanian tourism, making information about destinations more accessible and transparent. However, the degree of full ICT adoption by Albanian tourism businesses has been relatively slow compared to global trends, due to a range of structural and cultural constraints.

The role of online platforms in tourism

One of the most transformative aspects of digital tourism is the rise of online platforms that connect travellers with information, services and other travellers. Platforms – including, among many others, TripAdvisor, Booking.com, Airbnb and Expedia – have profoundly reshaped both tourist decision-making and destination marketing. This section examines the impact of these online platforms on tourists' decision-making processes and how destinations and tourism businesses are managing their marketing and services, with illustrative references to northern Albania.

The increased use of online platforms has transformed the way tourism services are evaluated. Empirical studies indicate that tourists increasingly trust the reviews and ratings left by other visitors rather than official tourism recommendations. Braimllari (2017), analysing the online reviews of 132 hotels in Tirana and Durrës, found that the average rating of these accommodations was 8.65/10, with factors such as hotel category, number of online reviews and year of registration on the platform exerting a positive influence on overall customer ratings. This finding highlights the significance of online reputation, indicating that hotels with more reviews and higher ratings tend to attract a larger number of potential clients. The widespread presence of leading Albanian tourism businesses on platforms demonstrates that operators are adapting to this new distribution model. However, certain characteristics, such as business size or location outside major centres, may still influence ratings in different ways (Braimllari 2017).

Impact on tourist decision-making

Online platforms have empowered travellers to adopt a 'do-it-yourself' approach to trip planning. Before the digital era, a tourist interested in northern Albania might

have relied on a travel agent or a guidebook which could only offer limited information. Today, that same tourist can read dozens of reviews of guesthouses in Theth on TripAdvisor, compare hotel prices in Shkodër on Booking.com, browse photos on Instagram and even watch hiking vlogs from the Valbona Valley on YouTube, all of which strongly inform their decisions about where to go, where to stay and what to do. Research consistently shows that user-generated content and peer reviews have a significant influence on travel decisions. Sparks and Browning (2011), for example, found that positive online reviews increase consumers' intentions to book a specific hotel, whereas negative reviews discourage them, even overriding brand reputation or price considerations. In Albania, online reviews have become a critical factor in shaping reputation. Spaho and Sala (2017) emphasise the importance of online ratings, showing that factors such as the number of reviews can enhance a hotel's credibility and attractiveness to potential clients. Many tourists equate a high volume of reviews with greater reliability; for instance, a hotel with 200 reviews averaging 8.5/10 on Booking.com may be preferred over one with only 10 reviews averaging 9/10, as the larger sample size builds greater trust in the rating.

Smart tourism and emerging trends

The concept of 'smart tourism' has also entered the Albanian academic discourse. Gjika and Pano (2020) observed that tourism operators in Albania, particularly those linked to international markets, have begun to adopt elements of smart tourism. Their findings suggest that the use of ICT by Albanian tourism operators is at a higher level compared to the average among businesses in the national economy, reflecting that the very nature of tourism activity requires continuous innovation. Certain characteristics of smart tourism are already evident, including personalised communication with clients via social networks, the use of databases for economic decision-making and the application of digital marketing tools (Gjika and Pano 2020). Nevertheless, the authors emphasise that the sector still lags in implementing the more advanced technologies of 'Tourism 4.0', such as cloud computing, Big Data, the internet of things (IoT) and virtual reality. Although awareness of their potential benefits exists, the lack of investment and capacity continues to constrain full digital transformation.

A 2022 study notes that, following shocks such as the 2019 earthquake¹ and the Covid-19 pandemic, Albanian tourism businesses placed increased importance on technology as a tool for recovery and promotion, adopting new digital solutions in their offerings (Muça et al. 2022). In addition, major domestic companies have launched technological platforms to support the development of e-tourism in the country, indicating that market actors are innovating to adapt to global trends. Official statistics confirm that the trend of digitalisation among Albanian tourism businesses is on the rise. According to INSTAT (2024), 24.5 % of enterprises sold products or services in 2024 through websites, dedicated applications, e-commerce platforms and applications used by other businesses for product trade, a figure which

1 An earthquake of magnitude 6.4 struck north-western Albania on 26 November 2019, causing 51 deaths.

represents a 9.7 % increase on 2023. Moreover, 92.9 % of tourism operators in Albania reported using social networks, such as Facebook and Instagram, as their primary marketing tools for attracting new clients (Gjika and Pano 2020). This indicates that online communication channels have become indispensable for tourism businesses targeting the modern market.

Furthermore, some 78.6 % of operators reported using e-banking in their financial activities and nearly 43 % offered card payment options as a service. This demonstrates that digitalisation extends beyond marketing to affect operational and economic aspects in addition (Gjika and Pano 2020). Overall, the existing literature suggests that the adoption of ICT by Albanian tourism businesses, although progressing at varying rates depending on size and location, is yielding tangible benefits in terms of efficiency, market access and competitiveness.

The impact of digital platforms on the hotel sector

Northern Albania, renowned for its mountainous landscapes, national parks and rich cultural heritage, was once a ‘hidden secret’ of tourism, frequented mainly by adventurous travellers informed through traditional channels such as guidebooks and personal recommendations. Today, this perspective has undergone significant changes due to the expansion of digital platforms. Family-run hotels and guesthouses in areas such as Theth and Valbona have benefited from the opportunity to appear on the global tourism map through the internet. Online booking platforms have enabled them to reach tourists from around the world without the need for intermediaries. For example, on Booking.com, one can find dozens of guesthouses in these localities, with hundreds of reviews from international visitors sharing their experiences. These positive reviews often function as a form of ‘viral advertising’ for the destination, generating interest among new travellers seeking authentic nature-based experiences.

One effect of digital platforms is an increase in the number of tourists visiting northern destinations. According to official data, the number of visitors to the Theth and Valbona national parks has nearly tripled over only a short timescale. This tourism boom is closely linked to the rise in online and media exposure of these areas following the pandemic, with travellers increasingly looking for open-air destinations in which to enjoy nature.

Online visibility and marketing

For local businesses, visibility translates into increased demand and opportunities to expand their activity. Small hotels and family-run guesthouses report a significant rise in direct online bookings compared to a decade ago, when clients had to contact them by telephone or upon physically arriving at the destination. Today, through updated platform profiles, guesthouse owners can manage room availability, price seasonally and communicate with clients before their arrival. Some guesthouses in Theth have created dedicated Facebook and Instagram pages where they post photos of the property and surrounding landscape, share information about activities and respond to inquiries from potential tourists. This active form of digital marketing has proven effective in building a local brand and establishing trust with visitors. As a result, the tourism season in northern Albania has been extended, with online-informed

tourists visiting the region not only in the summer months but also in spring and autumn (when weather conditions permit), thereby lengthening the active tourism period and improving local economic sustainability.

Improving quality and competitiveness

Another positive impact of digital platforms concerns the enhancement of competition and the stimulation of service quality. Since every tourist can now leave a public review, accommodation owners in the north of the country are paying closer attention to service standards to obtain the best possible feedback. This has led to improvements in infrastructure – for example better physical conditions of rooms – as well as in the attitudes shown toward clients. A guesthouse with high ratings on online platforms is more likely to be chosen by future visitors, making online reputation a primary asset. For instance, a guesthouse in Valbona that receives a rating above nine due to cleanliness and the high quality of its service will hold an advantage over a rival guesthouse with lower scores, leading the latter to reflect and raise its service standards to remain competitive in the market. In this way, online platforms function not only as marketplaces but also as self-regulating mechanisms which increase the overall quality of the tourism offer in the region. More broadly, technology has significantly lowered entry barriers for northern Albanian destinations, integrating them more equally into the national tourism economy.

Economic impact

Digital transformation in tourism has a significant economic impact, manifesting through both direct and indirect channels. Filipiak et al. (2023) find a strong correlation between digitalisation and growth in the tourism industry across EU countries, suggesting that embracing digital tools can enhance tourism's economic performance.

Direct financial contributions stem from increased tourist arrivals, higher revenues generated through digital marketing channels and an expanded capacity for online booking and payment systems, the latter simplifying transactions and attracting international visitors (Gjika and Pano 2020). Empirical evidence suggests that digital tourism has enhanced Albania's attractiveness to foreign investment, thereby stimulating economic activity through improved GDP growth and incremental value added in local economies (Broz et al. 2020).

Direct effects also include the improvement of operational efficiency in tourism businesses, leading to increased productivity and profitability. Enhanced ICT penetration, in terms of mobile network coverage, broadband subscriptions and household internet access, enables a more harmonised digital environment that contributes to integration into the broader digital economy and enhances service quality (Broz et al. 2020). For instance, digital tools deployed in tourism operations, such as self-service kiosks, real-time customer feedback systems and data-driven marketing strategies, have improved decision-making and product customisation, thereby broadening market appeal and driving higher revenue per visitor (Kordha et al. 2019).

The indirect effects of the digital transformation on economic growth are multifaceted. First, digital tourism catalyses the development of ancillary sectors such as ICT, digital marketing and the creative industries, indirectly stimulating local economies by promoting cluster formations and business networking (Dionizi and Kercina 2025). Second, digital-enabled agritourism and rural tourism are contributing to income diversification in rural areas, reducing emigration by creating stable employment opportunities and raising the overall standard of living (Kortoci 2017). Third, the spillover effects of successful digital tourism strategies have fostered regional economic cooperation by facilitating cross-border marketing and promoting integrated tourism experiences that span multiple countries in the western Balkans (Broz et al. 2020).

Labour market impact

The transition to digital tourism has significant implications for the labour market in northern Albania. On the one hand, digital transformation is creating new job categories related to ICT, digital marketing, data analytics and online customer service, thereby replacing traditional roles that are increasingly automated or outsourced (Pazari et al. 2025). For tourism businesses, this means that the workforce must adapt to meet the evolving demands of a more technologically advanced industry. New positions in remote work management, digital content creation and cybersecurity are emerging which are not only enhancing employment opportunities within the sector but also contributing to the development of a more diversified labour market (Gjoni and Elezi 2023).

In northern Albania, the labour market is witnessing an upskilling trend driven by the need to adopt advanced digital competencies. The rapid integration of digital solutions in tourism has necessitated continual training and reskilling programmes, positioning institutions to invest in digital literacy and technical education in collaboration with the private sector (Satka et al. 2023). This drive towards enhanced digital capabilities is particularly beneficial for younger workers and women, who are more likely to benefit from flexible, digitally enabled job opportunities that offer higher income levels and improved career prospects (Gjoni and Elezi 2023).

Digital technologies have also contributed to changes in work organisation and employment structures, with an increasing shift towards remote and freelance work models. Digital transformation enables the creation of efficient online platforms that connect service providers with tourists in real time, thereby facilitating more agile staffing arrangements and bridging regional employment gaps. As tourism-related enterprises expand their digital infrastructure, they generate rising demand for employees skilled in e-commerce, digital project management and ICT maintenance, ultimately fostering local and regional employment growth (Kalaj and Merko 2021).

Digital tourism as a driver of sustainable development

The development of sustainable tourism is a key goal for many destinations, ensuring that tourism growth does not come at the expense of environmental degradation, cultural loss or social inequality. In the context of northern Albania, sustainability is essential given the pristine natural environments, including mountains, rivers

and lakes, and the unique cultural heritage that together underpin its attractiveness as a destination.

Digitalisation and digital tourism can serve as catalysts for sustainable development, with a specific focus on the role of big data and other digital tools in tourism planning for sustainability. When applied carefully, digital technologies can contribute to all three pillars of sustainability: economic, environmental and sociocultural. From a financial perspective, digitalisation often improves efficiency and market reach, potentially leading to more stable and broadly distributed tourism revenues. In Albania, digital tourism can in this way help extend the tourist season by enabling off-season marketing, thereby generating additional income throughout the year, particularly for rural communities. Moreover, small local producers such as artisans, as well as tour guides and related actors, can reach tourists directly online, creating livelihood opportunities and fostering inclusive growth in line with the social dimension of sustainability.

Challenges and limitations

Despite the promising benefits of digital tourism transformation, several challenges must be addressed to harness in full its potential in northern Albania. One notable challenge is the existing gap in digital infrastructure between urban centres and rural regions. In many northern areas, poor internet connectivity, limited technical expertise and a lack of skilled personnel are hindering the effective implementation of digital initiatives (Karafili 2021; Kalaj and Merko 2021).

Additionally, the cost of digital transformation, particularly for the small and medium enterprises (SMEs) that dominate the Albanian tourism sector, poses a significant barrier. Many tourism businesses face resource constraints that inhibit investments in advanced ICT solutions, digital marketing and staff training programmes (Kalaj and Merko 2021). This financial challenge is compounded by a generational digital divide wherein older employees and those with lower educational qualifications may struggle to adapt to new technologies, potentially leading to displacement or segmentation in the labour market (Satka et al. 2023).

Another limitation is the fragmented nature of policy and institutional support. Although several cross-border and national initiatives have been launched to support digital transformation, the lack of a coherent and integrated policy framework can cause inefficiencies while slowing down the adoption process (Mkiyes 2023). Furthermore, technological innovations such as artificial intelligence, IoT and virtual reality require constant updates and considerable maintenance, adding to operational costs and necessitating continuous investment in technical training and infrastructure upgrades (Gjika and Pano 2020).

Cultural factors also play a role in the adoption of digital tourism. In regions where traditional tourism practices are deeply rooted, stakeholders may exhibit a resistance to digital innovations, preferring established business models that rely on face-to-face interactions and conventional marketing methods. Overcoming this resistance requires not only technological investment but also a shift in mindset through awareness campaigns and demonstrative success stories that highlight the tangible benefits of digital engagement (Gjika and Pano 2020).

Conclusions and recommendations

The digitalisation of tourism is emerging as a transformative factor, even for developing destinations such as northern Albania. A review of the literature reveals that online platforms have played a crucial role in enhancing the visibility of destinations in the north of the country, driving increased tourist flows and integrating these areas into the national and global tourism economy. Local hotels and guesthouses, although mostly small family-run businesses, have begun to use ICT tools more effectively for marketing, sales and operational management. Meanwhile, social networks and review sites have given tourists a voice, too, fostering a culture of transparency and quality improvement in services.

Nevertheless, challenges remain evident. The lack of digital knowledge and skills among some operators in northern Albania may limit the optimal use of the opportunities offered by the internet. Certain accommodation businesses are still absent from online platforms, thereby missing out on potential clients. In addition, the digital infrastructure, despite recent improvements, still requires additional investment to support the development of tourism more fully.

The digital transformation of tourism in northern Albania is emerging as a critical driver of economic growth and labour market modernisation. New digital technologies and platforms are enhancing operational efficiency, increasing market access through personalised marketing and e-commerce, and driving significant improvements in customer engagement. These advances have resulted in economic benefits both directly, such as in terms of higher tourist revenues, and indirectly via a boost to related industries and the promotion of regional economic integration. Concurrently, the impact on the labour market is profound, as digital transformation creates new job opportunities, transforms traditional roles and necessitates the upskilling of the workforce in digital competencies.

Institutions such as the Ministry of Tourism and Environment, the National Agency for the Information Society (AKSHI), universities and international development partners should organise ongoing training programmes to enhance digital skills in the tourism sector. These sessions should address practical aspects such as the use of online booking platforms, the effective management of social media profiles, digital marketing techniques and online reputation management. Every accommodation structure or local attraction in northern Albania should ensure its presence on those platforms most widely used by tourists when searching for information. If a business is not yet registered on these, it should be prioritised for registration without delay. A multi-channel presence increases visibility and makes it easier for tourists to access the services on offer. While social media represents a powerful tool, standing out requires the addition of authentic and engaging content.

In conclusion, the digitalisation of tourism in northern Albania presents a horizon full of opportunities but requires coordinated action. Implementing these recommendations would help bridge the current gap, empowering local actors by helping them acquire the tools and knowledge necessary to compete in the modern market. Through this approach, northern Albania can develop a model of sustainable tourism that utilises technology to preserve and promote both natural and cultural heritage while simultaneously enhancing the wellbeing of local communities. This would

ensure that destinations such as Shkodra, Theth and Valbona serve as examples of how economic development and identity preservation can progress hand-in-hand in the digital era.

Overall, this analysis provides a solid foundation for understanding the interdependencies between digital tourism transformation, economic growth and labour market dynamics in northern Albania. Through coordinated efforts at policymaking, industry and community levels, digital transformation can catalyse the revitalisation of the tourism sector, create new opportunities for the workforce and foster sustainable regional development in the digital age.

References

- Braimllari, A (2017) 'Online ratings of hotels in Tirana and Durrës, Albania: an econometric analysis' *Universal Journal of Computational Mathematics* 5(4): 93–100.
- Buhalis, D and R. Law (2008) 'Progress in information technology and tourism management: 20 years on and 10 years after the internet – the state of tourism research' *Tourism Management* 29(4): 609–623.
- Dionizi, B and D. Kercini (2025) 'Sustainable business models in agritourism: an opportunity for achieving SDGs and circular economy' *Journal of Lifestyle and SDGs Review* 5(1): e03957.
- Filipiak, B. Z., M. Dylewski and M. Kalinowski (2023) 'Economic development trends in the EU tourism industry. Towards the digitalization process and sustainability' *Quality & Quantity* 57(Suppl 3): 321–346.
- Gjika, I and N. Pano (2020) 'Effects of ICT in Albanian tourism business' *Academic Journal of Interdisciplinary Studies* 9(6): 252–258.
- Gretzel, U, M. Sigala, Z. Xiang, Z and C. Koo (2015) 'Smart tourism: foundations and developments' *Electronic Markets* 25(3): 179–188.
- Instituti i Statistikave (INSTAT) (2024) *TIK – Përdorimi i teknologjisë së informacionit dhe komunikimit në ndërmarrje, 2024* Tiranë.
- Kalaj, Ermira and Flora Merko (2021) 'How digital are Albanian enterprises: a microeconomic analyses' Proceedings of the 62nd International Scientific Conference on Economics and Entrepreneurship (SCEE 2021), 4–11.
- Karafilii, Elona (2021) *Cluster dynamics in transition economies: the case of Albania* Springer: Cham.
- Kordha, E, K. Gorica and K. Sevrani (2019) 'The importance of digitalization for sustainable cultural heritage sites in Albania' in: U. Stankov, S. N. Boemi, S. Attia, S. Kostopoulou and N. Mohareb (eds) *Cultural sustainable tourism. Advances in science, technology & innovation* Springer: Cham.
- Kortoci, Y (2017) 'The assessment of the rural tourism development in the Valbona Valley National Park' *Tourism Economics* 23(8): 1662–1672.

- Ministria e Turizmit dhe Mjedisit (2023) *Buletini i Sstatistikave të turizmit – Prill 2023* Tiranë.
- Mkiyes, H (2023) ‘Catalysing economic growth in Balkan countries’ *Pressburg Economic Review* 3(1): 1–32.
- Muça, E, I. Boboli, I. Kapaj and A. Kapaj Mane (2022) ‘The impact of smart technology on tourism development in Albania’ *Journal of Environmental Management and Tourism* 13(8): 2113–2121.
- Nikopoulou, M, P. Kourouthanassis, G. Chasapi, A. Pateli and N. Mylonas (2023) ‘Determinants of digital transformation in the hospitality industry: technological, organizational and environmental drivers’ *Sustainability* 15(3): 2736.
- Noti, E and B. Trebicka (2016) ‘Innovations and online marketing services trends in the Albanian tourism sector’ *European Journal of Multidisciplinary Studies* 1(1): 22–26.
- Pazari, F, B. Avdia and E. Mamoci (2025) ‘Cultural heritage and experiential tourism: opportunities and challenges in Greece-Albania cross-border area (Berat, Gjirokastra and Ioannina)’ *Geojournal of Tourism and Geosites* 61(3): 1656–1667.
- Satka, E, F. Zendeli and E. Kosta (2023) ‘Digital services in Albania’ *European Journal of Development Studies* 3(4), 6–14.
- Veseli-Kurtishi, T and E. Ruci (2023) ‘The impact of digital marketing on the development of tourism in the Republic of Albania’ *Eurasian Journal of Social Sciences* 11(1): 1–11.
- Watkins, M, S. Ziyadin, A. Imatayeva, A. Kurmangalieva and A. Blembayeva (2018) ‘Digital tourism is a crucial factor in driving economic development’ *Economic Annals-XXI* 169(1–2): 40–45.



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Capire el confine. Gorizia e Nova Gorica: lo sguardo di un'antropologa indaga la frontiera

Giustina Selvelli (2024) *Capire el confine. Gorizia e Nova Gorica: lo sguardo di un'antropologa indaga la frontiera* [Understanding the border. Gorizia and Nova Gorica: an anthropologist's perspective on the border] Udine: Bottega Errante, 184 pp, price: €20.00. ISBN 979-1-255-67030-8

An anthropologist, sociolinguist and, until recently, postdoctoral researcher at the University of Ljubljana, Giustina Selvelli works on minorities, nationalism and the environment, with a particular focus on the Balkans. Her recent publications include *The alphabet of discord. the ideologisation of writing systems in the Balkans since the breakup of multiethnic empires* (Ibidem, 2021) and *Language attitudes. Collective memory and (trans)national identity construction among the Armenian diaspora in Bulgaria* (Peter Lang, 2024), not to mention her contribution to the collective work *Capire i Balcani occidentali* [Understanding the western Balkans] (Bottega Errante, 2021).

Published in 2024, her new book is timely: Gorizia in Italy and Nova Gorica in Slovenia are jointly European Capital of Culture for 2025.¹ What makes *Capire il confine* both unique and interesting is that it effectively combines a personal story with the history of this border region. Giustina Selvelli, born in Trieste, skilfully unravels the threads of these two intertwined stories. She vividly remembers how, in her childhood years in Pieris (near Monfalcone), she crossed the 'Iron Curtain' that first separated Yugoslavia, then Slovenia, from Italy; and how she bridged the Isonzo/Soča river – a linguistic and cultural frontier separating the Bisiac and Friulian worlds.² Later on, the political border became truly porous in 2007 when Slovenia joined the Schengen Area, before closing temporarily during the Covid-19 pandemic (2020–2021). In 2025, the former high school student from Gorizia (1998–2003) and lecturer at the University of Nova Gorica (2020–2021) sees these two cities united, hence this particularly successful book.

In the author's own words, *Capire il confine*

... is a tribute to this journey that began in my early childhood but of which I have only recently become aware. It is also a eulogy to what is often referred to as 'the margins' and an invitation to exploit their potential to develop new centres that are non-exclusive,

- 1 For a comprehensive overview on Gorizia/Nova Gorica, focusing notably on crossborder cooperation, see Alberto Gasparini (ed) (2010) 'Gorizia. Il futuro del momento prima' *ISIG Quarterly of International Sociology* XIV (1–4), accessed 23 October 2025 at: <https://isig.it/wp-content/uploads/2012/11/45.-GORIZIA-IL-FUTURO-DEL-MOMENTO-PRIMA-XIX-1-4-2010-2011.pdf>.
- 2 Bisiac is a dialect spoken in Friuli in the area between the lower course of the Isonzo river and the Karst plateau, as distinct from those who use Friulian. Both are of different branches of the essentially five types of Northern Italo-Romance dialects.

non-centralising, multiple and indomitable – a foreshadowing of a better Europe. The stories I tell you are drawn from my direct experiences, from the socio-cultural, geographical, linguistic and political dynamics that characterise the places I have travelled throughout my life; as a result, my subjectivity plays a particularly important role. I would like to define this type of writing as a kind of ‘auto-ethnography’ based on the collection of qualitative data relating to my life, in which the barriers between the observer and the observed situation become fluid and influence each other to become a true borderland, to be explored and experienced with complete sincerity and freedom. In this sense, this process helps me to realise how much I myself have been determined by the border described here and how much this border is determined by myself and my experience. (p. 7)

Here, the anthropologist is informally addressing the poet Gino Brazzoduro (1925–1989): the border is not only political, it is also intimate:

In each of us is the border
a clear outline
that cuts through the air
the horizon
an imperceptible line
like the fleeting hour that separates
day from shadow

silence and sound
memory and annunciation

death and life
a single flower.³

This is important, as the former often serves as a fig leaf for the latter:

Borders – real ones – do not run between states or nations or, worse still, between ‘races’. They run through each of us, through every consciousness, every soul, every existence, every individual destiny.⁴

Capire il confine is constituted precisely of this material.

This intense experience of the Friuli-Venezia Giulia region and Slovenia – as mentioned the author has lived on both sides of the border – will be complemented by other borders that serve as levers for anthropological reflection:

It was essential to discover other dynamics, other borderlands that resembled in some ways those I had experienced in my places of reference. On the Greek side of the border [between Greece and Albania], I saw certain characteristics in issues concerning the Albanian minority that reminded me, for example, of the role of Mexicans in California or Slovenians

- 3 Gino Brazzoduro, *Poetic Works I. Frontière suivi de au-delà des lignes*, translated from Italian by Laurent Feneyrou and Pietro Milli, Paris: Triestiana, 2023, p. 95. The translation into English here is that of Christophe Solioz, our reviewer, who has retained Brazzoduro’s layout and punctuation.
- 4 Gino Brazzoduro, unpublished letter to Biagio Marin dated 2 December 1979, in Gino Brazzoduro, *Poetic Works I*, p. 10.

in Friuli-Venezia Giulia, although all the differences were taken into account, and which I would have declined in other contexts even further east. (p. 36)

As we know, depending on the language, words and their meanings are multiple and do not overlap. One word in German, 'Grenze', and in French, 'frontière'; two in Italian, 'confine' and 'frontiera'; at least three in English, 'boundary', 'frontier' and 'border' – the first emphasising social construction by individual actors, the other two referring to a collective scale.

In this Babel of language, the author takes a clear stance:

In this book, the two words are used in accordance with the semantic distinction that still exists in the English language. While on the one hand, the border (confine) is associated with a threshold demarcating and delimiting territories, serving to close off and clearly define what lies 'beyond', on the other hand, the border (frontiera) takes on the opposite meaning, that of opening up to an unknown space, or a key to exploring other possible ways of cultivating relationships and sociality. (p. 40)

As the pages speed by, the word 'frontier' (confine) gives way to the notion of 'margins': no longer just dividing lines, but territories with multiple identities.

In the company of Giustina Selvelli, we explore the Gorizia/Nova Gorica region in every direction. Her book offers a sumptuous display: the genesis of a border identity, languages, minorities and borders, spaces and practices of encounter, the ecology of borders, and, in closing, beyond Italian-Slovenian dualisms, migration. All this is crowned by a chronology tracing the history of the Italian-Slovenian border alongside an intelligent bibliography for further reading.

Possessed of a rare quality of insight, this book is both scholarly and concise. It is also educational, thanks to its numerous boxes that travel with the reader throughout: readers will learn the essentials about the founding of Nova Gorica, the Yugoslav era, the languages and dialects of the region, the place of the Slovenian language but also German, not to mention the various places of meeting.

Capire il confine is a wonderful invitation to explore the territory during and beyond Go! 2025: Nova Gorica/Gorizia European Capital of Culture.

Christophe Solioz was involved from the early 1990s in various citizens' initiatives in the former Yugoslavia, most notably in the Helsinki Citizens' Assembly (hCa). Founder of the Association Bosnia and Herzegovina 2005 (2003–05) and, later on, of the Centre for European Integration Strategies (2005–14), he was Professor of Philosophy and German literature at the College de Genève (2013–22) and, in 2022, initiated the Multiplex Approach (MAP) Nomad Seminar. He has written extensively on transition and democratisation as well as on EU integration and regionalism in south-east Europe. <https://christophesolioz.exposed/>

This review appeared in its original language in *Le Courrier des Balkans*, the French-speaking portal on the Balkans, on 23 October 2025, accessed 23 October

2025 at: <https://www.courrierdesbalkans.fr/Blog-o-Nova-Gorica-Gorizia-le-territoire-partage>. It has been specially translated into English and updated for inclusion in the *SEER Journal* by Christophe Solioz.



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