

KEY POLICY DEVELOPMENTS IN EDUCATION, TRAINING AND EMPLOYMENT

BOSNIA AND HERZEGOVINA

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EXECUTIVE SUMMARY

This document offers a detailed analysis of key policy developments in Bosnia and Herzegovina (BiH) across education, training, and employment sectors. It explores demographic challenges such as population decline and youth emigration, the economic landscape, the education system, and governance of employment policies. The report highlights pressing issues such as youth unemployment, the informal labour market, and the country's complex, decentralised governance system.

Key findings emphasise the need for policy interventions to encourage youth retention, improve transitions from education to employment, and invest in vocational education and training (VET) to align with labour market needs. Additional recommendations include expanding adult learning opportunities and enhancing data collection for informed decision-making.

Since the Dayton Peace Agreement in 1995, BiH has operated under a complex governance structure split into the Federation of BiH, Republika Srpska (RS), and Brčko District. Political instability persists, especially with RS seeking greater autonomy, fuelling concerns about separatism and its close ties to Russia. BiH's 2022 EU candidate status is promising, but ethnic divisions and political gridlock hamper progress on reforms and economic growth.

In 2023, BiH's population was estimated at 3.21 million, marking a decrease from 3.23 million in the previous year. The major ethnic groups include Bosniaks (50%), Serbs (30%), and Croats (15%). The country faces significant challenges due to a shrinking workforce, youth emigration, and a declining population. Despite GDP growth of 42.8% between 2010 and 2022, economic progress slowed in 2023, with real GDP growth at 1.9%. Inflation, particularly in food, energy, and housing, hit lower-income groups hardest, with government interventions resulting in a fiscal deficit of 0.9% of GDP.

BiH's education system operates under a decentralised framework, with 14 institutions managing the education policy. The 2021 vocational education and training (VET) strategy aimed at improving the relevance of VET to labour market needs. International collaborations, such as those with UNESCO and UNICEF, are helping to shape long-term plans to enhance education quality. However, challenges remain, and include low adult learning participation, gender disparities in school completion, and poor student performance in international assessments.

The labour market presents a mixed outlook. While the overall employment rate for individuals aged 15 and above reached 41.5% in 2023, significant gender disparities and youth joblessness persist. The Youth Guarantee is an important policy development goal aimed at supporting comprehensive policy approach for young people not in employment, education or training (NEETs). State and entity stakeholders collaborate in the elaboration of the Youth Guarantee Implementation Plan. Successful implementation of the Youth Guarantee requires strong collaboration and close coordination between the education and employment sectors, together with the expansion of the capacity of public employment services, including digitalisation efforts to significantly improve the delivery of labour market measures and enhance support for jobseekers.

Despite these challenges, BiH is making progress in tackling labour market disparities, particularly through the EU4Employment program, launched in 2023 to support vulnerable groups such as women, youth, and long-term unemployed. The Public Employment Services (PES) are improving all the time but face resource constraints and high caseloads, hindering their overall effectiveness.

The recent developments in Bosnia and Herzegovina highlight several areas for potential policy action. Encouraging young people to stay in BiH by offering education and training that match labour market demands, along with work-based learning and employment opportunities, is crucial. Improving youth transition to work and aligning NEET support programs with the EU's 'Youth Guarantee' recommendation can enhance job and skills development opportunities. Additionally, investing in the quality and relevance of Vocational Education and Training (VET) to make it more attractive to students and employers is important. This includes establishing a state-wide VET quality assurance

system based on EQAVET and collaborating with industry stakeholders to design curricula that address labour market needs.

Expanding opportunities for adult learners to acquire new skills and adapt to changing job requirements will contribute to a more flexible and resilient workforce. Improving data collection and analysis related to education and the labour market will provide policymakers with accurate information for evidence-based decision-making and help monitor progress towards VET goals. Participation in international assessments such as PISA and PIRLS is recommended to accurately assess the quality of education in BiH. Establishing a system for monitoring and evaluating the effectiveness of VET policies and courses, prioritising resource allocation for VET, and ensuring inclusivity and gender equality in VET are also important. Strengthening career guidance in schools and VET institutions, extending and updating the action plan for the national qualification framework (NQF), developing mechanisms for recognising prior learning, and addressing high PES counsellor caseloads through hiring more staff and implementing technology-driven solutions are additional recommended actions.

1. KEY POLITICAL, DEMOGRAPHIC, ECONOMIC AND SOCIAL CHARACTERISTICS

Political developments

Since the signing of the Dayton Peace Agreement 25 years ago, which marked the end of the war in Bosnia and Herzegovina, the country has been navigating a complex governance framework that poses ongoing challenges. Bosnia and Herzegovina is a federal republic made up of two entities: the Federation of Bosnia and Herzegovina (BiH), the Republika Srpska (RS) and a self-governing district, Brčko. The Federation comprises 10 cantons. Responsibility for education and employment is spread across 13 ministries and a few executive agencies. At national level, education and employment developments are coordinated by the Ministry of Civil Affairs.

In 2023, Bosnia and Herzegovina faced ongoing political tensions and challenges stemming from deep ethnic divisions and external influences. In 2023, the Republika Srpska entity increased its efforts to assert greater autonomy from state institutions, raising concerns about possible separatist intentions. The RS's government introduced legislation, such as criminal penalties for defamation and a draft law on foreign agents, which sparked debates about their implications for civil liberties and governance in the region. Its close relationship with Russia has drawn attention amid the broader geopolitical context, especially given the ongoing war in Ukraine and its potential to influence stability in the Western Balkans.

Bosnia and Herzegovina also achieved a significant milestone by receiving EU candidate status in December 2022. However, despite Bosnia's desire to move closer to European Union membership, progress remained slow. While there have been some positive legislative developments, such as amendments to laws on access to information and human rights, the country's overall reform process has stagnated. Economic challenges, including high unemployment and labour out-migration, persist, and the political gridlock at various governmental levels has hindered economic growth.

Demographics

The demographics of Bosnia and Herzegovina are a complex tableau. As of 2023, the estimated total population stands at around 3.21 million, based on the 2013 census. The country is characterised by a diverse ethnic makeup, with three major ethnic communities: Bosniaks, constituting approximately 50% of the population, Croats making up around 15%, and Serbs, accounting for about 30%. This ethnic distribution is also reflected in the governance structure, where the Bosniak and Croat communities form the Federation of Bosnia and Herzegovina, while the Serb community is concentrated in Republika Srpska.

However, the country faces demographic challenges, including a natural decrease in population and significant emigration of young people, particularly to EU Member States. This trend poses challenges to the country's human capital development, which is crucial for fostering economic growth and competitiveness. The Labour Force Survey of 2022 (BHAS 2023a) reveals a shift in age distribution within the labour force. The 25-49 age group accounts for 65.5% of the total labour force, followed by the 50-64 age group (25.8%). Significantly, the 15-24 age group constitutes only 7.5%, reflecting a significant reduction on previous years, which has implications for education planning and new labour market entrants.

In terms of population growth, the number of live births recorded in 2022 represented a decrease of 2.16% compared to the previous year. Additionally, the trend of emigration among young people is on the rise, with nearly 47% of young people expressing a desire to leave the country for better opportunities elsewhere (UNFPA, 2021). Ongoing emigration has significant implications for the country's labour market and the makeup of the overall workforce.

Key economic developments

Over the past decade, Bosnia and Herzegovina has witnessed a notable expansion in its Gross Domestic Product (GDP), reflecting a positive trajectory in its economic development. In 2010, the country's GDP was USD 17.18 billion, and by 2022, this figure had surged to USD 24.53 billion (according to World Bank data). This substantial growth of approximately 42.8% over a ten-year period highlights the resilience and dynamism of Bosnia and Herzegovina's economy.

However, in 2023, Bosnia and Herzegovina's economic growth slowed significantly, with real GDP growth halving to 1.9% due to a decline in exports and nearly stagnant investments (World Bank, 2024). Despite a significant slowdown in economic growth, Bosnia and Herzegovina's labour market showed improvement in 2023. The employment rate rose to 41.5% in 2023, up from 40.2% the previous year, while the unemployment rate fell to 13.2%. According to data from the Agency for Statistics of Bosnia and Herzegovina (2023), Services play a significant role in BiH's economy, accounting for 58.1% of employment. The industrial sector is a source of employment for 34.3% of the workforce. Agriculture, forestry, and fishing employ only 7.6% of the workforce.

BiH still faces challenges related to weak productivity in all sectors. Labour productivity, measured as output per worker, remains significantly lower than the EU average across the board. Although efforts have been made to increase formal employment and labour market regulations, the informal sector continues to have a significant impact, estimated to contribute up to one-third of the GDP. This highlights the need to enhance productivity, formalise employment and address the informal economy to foster sustained economic growth and competitiveness.

Key social issues

The inflationary pressure seen in 2022, attributed to global supply chain disruptions, energy market volatility, and ongoing inflationary trends continue to impact the region. The price fluctuations have broader implications, particularly for vulnerable and less affluent segments of the population. In 2023, Bosnia and Herzegovina experienced an average price level increase of 6.1% compared to 2022, with significant contributions from rising costs in essential sectors. The most notable increases were in Food and non-alcoholic beverages, which saw a 10.6% price hike, followed by Housing, water, gas, and other fuels (7.4%), and Furniture and maintenance (9.3%) (BHAS 2024).

The rising prices of essential goods, particularly food and energy, tend to disproportionately affect individuals with lower incomes. This is because people with limited financial means allocate a larger proportion of their budgets towards these basic necessities, leaving them more exposed to the negative effects of price hikes. Consequently, in 2023, higher government spending contributed to a fiscal deficit of 0.9% of GDP, nearly double that of the previous year. This was driven by a 16% rise in subsidies, social benefits, and transfers in the Federation of Bosnia and Herzegovina, and an 11% increase in Republika Srpska. Despite the growing deficit, Bosnia and Herzegovina's public debt remained relatively low, around 35% of GDP, reflecting a stable fiscal position despite the spending increases (World Bank 2024).

2. EDUCATION AND TRAINING

2.1 Trends and challenges

Education strategy and the legal framework for education

Bosnia and Herzegovina has a complex governance arrangement for education, comprising 14 institutions responsible for overseeing education developments (13 ministries and a state-level education agency), decentralised in two entities, Republika Srpska (RS) and the Federation of Bosnia and Herzegovina (FBiH), both of which have an education ministry. The Federation further comprises 10 cantons, each with an education ministry. Education affairs in a third administrative area – Brčko District – are overseen by a dedicated education department. At the state level, the Ministry of Civil Affairs sets out the basic principles of how to coordinate education work, consolidates planning for the various authorities and defines the international strategy.

In 2021, the Ministry of Civil Affairs released a document titled 'Improvement of Quality and Relevance of Vocational Education and Training (VET) in Bosnia and Herzegovina in the Light of the EU Riga Conclusions (for the period 2021-2030)' (MoCA & OeAD, 2021). This document, developed in collaboration with Austria's Agency for Education and Internationalisation (OeAD) and international experts, focuses on enhancing the competitiveness and attractiveness of vocational education and training in the country between 2021 and 2030. The plan encompasses short-term (2021-2023), medium-term (2024-2026), and long-term (2026-2030) priorities, along with assigned responsibilities for each objective.

Moreover, in 2023, UNESCO and UNICEF in Bosnia and Herzegovina, in partnership with the EU, OSCE and the Council of Europe, are supporting the development of the Education Sector Action Plan in Bosnia and Herzegovina — consisting of a 10-year EU-assisted roadmap for the education sector in Bosnia and Herzegovina. The action proposes a series of complementary measures at policy, grassroots, and regional levels to further improve the quality of education in Bosnia and Herzegovina (Council of Europe).

Education expenditure

Throughout 2020 to 2021, Bosnia and Herzegovina witnessed a discernible upward trend in expenditure on formal education. Specifically, total spending increased from KM 1.476 billion in 2020 to KM 1.634 billion in 2021. However, despite this increase, there was a slight decrease in the proportion of education expenditure relative to Gross Domestic Product (GDP), dropping from 4.3% in 2020 to 4.2% in 2021.

The detailed breakdown of public and private expenditures and foreign funds for educational institutions provides further insights. In 2020, the aggregate amount was KM 1.574 billion, rising to KM 1.776 billion in 2021. While the total amount increased, the percentage of GDP allocated to educational expenditure saw a marginal decline from 4.6% in 2020 to 4.5% in 2021.

Examining the composition of total expenditure, a noteworthy shift is observed. Public funds remained the primary source, accounting for 91.4% in 2020 and decreasing slightly to 89.5% in 2021. Conversely, private expenditure on education increased from 8.2% in 2020 to 9.4% in 2021. Additionally, there was a significant rise in the contribution of foreign funds from 0.4% in 2020 to 1.1% in 2021, signifying a growing role of non-domestic financial support in the education sector.

The distribution of funds across different levels of education also changed. Expenditure on preschool education increased its share from 5.0% in 2020 to 7.0% in 2021. Meanwhile, primary education experienced a slight reduction in its share from 49.6% to 47.8%. Secondary education maintained a relatively stable share, hovering around 23-24%. Higher education saw an increase in its share from 21.6% in 2020 to 22.3% in 2021.

Access, participation and early school leaving

The ETF KIESE data (Key Indicators on Education, Skills, and Employment) – see data in the Statistical Annex below – reveals that the net enrolment rate for upper secondary education has seen slight fluctuations, peaking at 79.0% in 2019 before slightly decreasing to 78.6% in 2022. Notably, the share of vocational education and training (VET) students in upper secondary education has generally increased, reaching 79.0% in 2022 before a slight drop to 75.7% in 2023. There is a noticeable gender gap in VET participation: according to the KIESE 2021 data, the percentage of VET students in upper secondary education was 85% for males and 72% for females (total 78%). However, participation in adult learning remains consistently low, with a participation rate of only 2.2% in both 2022 and 2023.

The KIESE data also highlight dropout rates and early leavers from education and training. The percentage of early leavers aged 18-24 has generally decreased, from 5.2% in 2015 to 3.6% in 2022, before a slight increase to 4.2% in 2023. The gender gap for early school leavers has reversed: the rate for males was 4.8% in 2015 and 5.2% in 2023, whereas for females, it was 5.6% in 2015 and decreased to 3.1% in 2023. These figures indicate that while progress has been made in reducing early school leaving, significant challenges remain, particularly in addressing gender disparities.

Overall, the data collected by ETF KIESE underscore the need for targeted interventions to improve access and participation in education across all levels. While there have been improvements in certain areas, such as the increase in the share of VET students and the decrease in early leavers, challenges remain. Low participation in adult learning and a gender disparity in dropout rates highlight the need for comprehensive policies and programmes to address these issues. By focusing on these areas, Bosnia and Herzegovina can further enhance its educational outcomes and ensure that all individuals have the opportunity to succeed.

PISA results

Bosnia and Herzegovina's performance in the Programme for International Student Assessment (PISA) of 2018 revealed serious concerns about the quality of education in the country. The data highlighted that more than half of 15-year-olds had low achievement in reading, writing, and mathematics, in stark contrast to the European Union's lowest band of students (OECD). This PISA assessment reveals deficiencies in primary education that carry forward into secondary education, ultimately impacting student outcomes (APOS0, 2019). The data suggest a trend where underperforming students from primary education are directed towards vocational streams, which further exacerbates their disadvantage due to the notably lower quality of teaching and learning in vocational education compared to general secondary education.

The country did not participate in the 2021 Progress in International Reading Literacy Study (PIRLS) or the 2022 PISA assessments. This lack of participation highlighted issues in coordinating processes related to international assessment studies, pointing to a need for significant improvement in this area.

Young people not in employment, education or training (NEETs)

The situation of youth not in employment, education, or training (NEETs) in Bosnia and Herzegovina has shown some notable trends over recent years. According to the Labour Force Survey (LFS) data, the percentage of NEETs aged 15-29 has gradually decreased. In 2015, the NEET rate was 32.8%, which dropped to 22.2% in 2023.

This decline can be attributed to various factors, including improved access to education and training programmes and efforts to enhance employment opportunities for young people. However, despite this positive trend, the NEET rate remains relatively high, indicating that a significant portion of the youth population is still at risk of social and economic marginalisation.

The data also reveal disparities based on gender and educational attainment. For instance, in 2023, the NEET rate for males was 18.8%, while for females, it was significantly higher at 25.9%. This gender gap suggests that young women face more barriers when trying to enter the labour market or continue their education. On the other hand, for the same year, the NEETs rate for the age group 15-

24 was 17.4% for men and 15.5% for women, further reinforcing that it is the school-to-work transition phase that puts women at a disadvantage, leading more often to inactivity or unemployment. Additionally, the NEET rate varies by educational level, with those having lower educational attainment being more likely to be NEETs. In 2023, the NEET rate for those with low education was 3.1%, for those with medium education, it was 16.4%; and for those with high education, it was 2.7%.

Overall, while there have been improvements in reducing the NEET rate, targeted interventions are still needed to address the underlying issues that prevent young people from engaging in employment, education, or training. This includes addressing gender disparities, enhancing vocational training programmes, and creating more inclusive labour market policies.

Strategic and legal framework for initial VET and adult learning

Given the decentralised governance, education legislation is addressed at three levels: a) state-level (framework legislation); b) entity level (Republika Srpska and the Federation of Bosnia and Herzegovina); and c) cantonal level, including for Brčko District. Vocational education is addressed within general education.

The Ministry of Civil Affairs has overseen five framework education laws. More specifically for VET, the 2003 Framework Law on Primary and Secondary Education defines the principles, levels and structure of secondary education. The 2008 Framework Law on Secondary VET addresses: a) the role of company and union representatives and the demands of the economy; b) the autonomy vocational schools have to respond to local economic needs; c) the potential for schools to form partnerships whilst retaining their autonomous legal status; and d) diversification of the training offered to new target groups (e.g. adults) and the potential for schools to generate income. The VET framework legislation has been passed or adapted into local legislation in Republika Srpska, seven cantons of the Federation, and in the Brčko District (ETF, 2020).

VET governance and financing arrangements

At state level, the Ministry of Civil Affairs coordinates education areas that are common to the two political entities and Brčko. The Ministry has no policy or legislative decision-making powers. It puts forward legislation and a state-wide strategy to the BiH Council of Ministers. A Conference of Education Ministers then provides a forum for exchange on issues common to all education authorities. The Conference of Education Ministers is an important instrument of governance, although it meets irregularly.

Most of the education budget is used to pay staff salaries, with little funding available for technology, equipment and other resources. According to the OECD (2022), 'this disproportionately impacts VET institutions, which generally have higher costs in these areas than general education institutions. In fact, lack of equipment and materials, along with the lack of practical training, is considered the most significant constraint to VET in Bosnia and Herzegovina' (p. 146). The VET system still strongly relies on financial support from international donors such as the EU or GIZ.

Qualifications, validation and recognition

Bosnia and Herzegovina's approach to qualifications, validation, and recognition is governed by the Baseline Qualifications Framework, adopted by the Council of Ministers in March 2011. Although initial progress has been made with the Baseline and the Action Plan 2014-2020, these have now become outdated, and further work is urgently needed to be able to reference them to the EQF.

As the development of the qualifications framework in Bosnia and Herzegovina is one of the main priority actions highlighted in the Progress Report of 2023, a working group has been established with representatives from all administrative units, including Cantons, Brčko District, Republika Srpska, the Ministry of Education of the Federation, and the Ministry of Civil Affairs, to develop a concept for the Qualifications Framework in Bosnia and Herzegovina. This concept includes specifications on the quality assurance of qualifications, a register, validation of non-formal and informal learning, links to

the EQF and the Qualifications Framework for the European Higher Education Area (QFEHEA), and implementation arrangements involving all administrative units and existing agencies. The EU Technical Assistance for VET education in Bosnia and Herzegovina supports the working group.

The concept aims to ensure that qualifications are comparable, based on learning outcomes and common denominators, quality-assured, and registered in a common register. It also includes the development and implementation of validation for non-formal and informal learning, recognition of validation results, and the establishment of implementation mechanisms. The qualifications framework will be referenced to the EQF and self-certified to the Qualifications Framework for Higher Education. Bosnia and Herzegovina actively participate in the EQF, and diplomas and certificates will state the EQF levels, with the common register linked to the EQF.

Quality assurance

While there is a legal framework for data collection and systematisation in place, the education system lacks a systematic mechanism to measure and monitor the quality of educational inputs, outputs and outcomes. This deficiency hinders effective policymaking based on data-driven insights. Aligning legislation at all levels with framework laws on education is essential for addressing these gaps. The absence of common standards for the different education levels or for teacher training, and the lack of systematic approach to applying the common-core curriculum based on learning outcomes, further compounds the quality challenges in the education system. Addressing these issues, improving teacher training, and ensuring a consistent approach to following the curriculum are vital for enhancing the overall quality of education.

In the last few years, Bosnia and Herzegovina has taken steps towards establishing a quality assurance system for vocational education and training (VET), based on the European Quality Assurance in VET (EQAVET) framework. It developed a VET Quality Assurance Manual as part of this work, covering various aspects including quality assurance standards, self-evaluation and external evaluation manuals for institutions, systemic evaluation, external evaluator training standards and guidelines on the European Credit System for Vocational Education and Training (ECVET). However, despite these advancements, there is a need for further progress to make them systematic and to fully implement this quality assurance framework. The document 'Improvement of Quality and Relevance of VET in Bosnia and Herzegovina in the Light of Riga Conclusions (for the period 2021-2030)' highlights the significance of quality assurance in VET and emphasises the need for legal approval and a legal basis for the state-wide framework. Staff development measures are also essential for addressing the practical implementation of quality assurance in VET.

Work-based learning arrangements

Work-based learning (WBL) arrangements in Bosnia and Herzegovina take several forms. One common approach involves alternate learning at both schools and businesses. This entails students spending one to three days per week in practical training at companies throughout the school year, with the school's and companies' rights and obligations set out in a contract. Another form of WBL occurs within school premises, where students use workshops, laboratories, kitchens, or virtual companies that mimic real-life situations to develop practical skills. Additionally, WBL takes place during summer and winter holidays, with students spending a specified period at a company for intensive training.

According to the recent ETF Torino Process report on Bosnia and Herzegovina (ETF, 2023), WBL is a priority for the country, but its implementation has varied across regions. For example, in the Gorazde canton, formal agreements between schools and companies ensure that education aligns with labour market needs. Noteworthy developments include the increase in practical training hours in IVET subjects and the introduction of experimental curricula, which has stepped up practical work hours in Republika Srpska. Efforts are being directed towards improving the practical aspects of VET education and fostering collaboration with industry partners, evidenced by enhanced coordination with chambers of commerce and protected crafts and employer associations.

Enhancing work-based learning is important, and it features in the document 'Improvement of Quality and Relevance of VET in Bosnia and Herzegovina in the Light of Riga Conclusions (for the period 2021-2030)'. It states that the main priorities for work-based learning rely on promoting its attractiveness for both companies and students. Recognising the challenge of aligning educational content with job requirements emphasises using the workplace as a conducive learning environment. Close collaboration between schools and companies is essential, and there is a need for strong partner relationships to facilitate effective work-based learning. Involving the business sector, including employers and employer associations, in vocational education and training (VET) policymaking is crucial for increasing understanding and implementing work-based learning formats.

Additionally, tripartite advisory committees would ensure well-structured and efficient dialogue between the education and employment sectors. Pre-requisites and support mechanisms, such as mentorship and insurance, were identified as necessary to ensure the quality and relevance of work-based learning. Coordinating work between local communities, educational institutions and businesses is also highlighted for identifying labour market needs and implementing policies that respond swiftly to economic requirements. The document also refers to the importance of cost-sharing arrangements, where companies bear responsibility for supervising and training students during practical training, as a sign of the shared commitment to creating a qualified workforce to underpin economic growth.

Bosnia and Herzegovina is now actively engaged with the European Alliance for Apprenticeships (EAfA). The involvement began with the submission of the National Commitment to join the EAfA, which was followed by participation in various seminars and events organised by the European Commission and the European Training Foundation. The collaboration aims to strengthen the apprenticeship system in Bosnia and Herzegovina by aligning it with European standards and best practices, thereby improving the country's overall vocational education and training (VET) landscape.

Digital education and skills

In Bosnia and Herzegovina achieving digital access in education presents significant challenges, particularly concerning internet connectivity, teachers' digital skills, and the overall digitalisation of teaching and learning.

According to the Eurostat digital skills indicator 2023, 31% of men and 29% of women in Bosnia and Herzegovina have basic or above basic overall digital skills. In 2022, ICT graduates accounted for more than 5% of all graduates in Bosnia and Herzegovina, which is above the EU average of 4%, but below the World Bank average of 6%. ICT specialists constitute 1.4% of all employees (compared to 4.5% in the EU), and only 0.6% of this amount are female (EU 19%) (RCC, DESI 2022).

The EU Technical Assistance for VET education in Bosnia and Herzegovina is supporting the digitalisation of education in the country. The project situational analysis of digital competencies in Bosnia and Herzegovina (BiH) vocational education and training (VET) schools highlights several critical areas requiring attention. A notable digital divide exists, with disparities in the ICT infrastructure and access to resources among schools, hindering equitable digital learning opportunities. The PISA 2018 data indicate limited computer access in Bosnian schools, with slightly over 0.3 computers per pupil, compared to an average of over 0.8 in the OECD countries. A UNICEF-UNESCO report revealed that over 53% of primary schools do not have a permanent internet connection, and about 66% lack a dedicated computer classroom (United Nations Bosnia and Herzegovina 2021).

The analysis also emphasises the importance of enhancing teacher and student competencies in digital skills. Despite efforts to integrate digital competencies into the curriculum, challenges remain in embedding these skills effectively within pedagogical practices. Regarding teachers' digital skills and usage, the PISA 2018 data also reveal that teachers in Bosnia and Herzegovina use digital devices and instructional materials less frequently compared to both the OECD average and other Western Balkan countries. Collaborative learning opportunities within school-based teacher groups are not consistently available, and it is reported that the teacher capacity to support teaching and learning is underused.

Statistics on education and training

Key sources of education statistics are the Agency for Statistics of Bosnia and Herzegovina, and the Agency for Pre-Primary, Primary and Secondary Education (APOSO). The principal aim is to provide reliable and internationally comparable statistical data on several areas of interest, such as economics, demographics and social aspects, the environment and natural resources. APOSO is responsible for setting learning standards, evaluating learning achievements, developing common-core curricula in pre-primary, primary and secondary education. It also drives further work on learning standards and evaluating education quality as defined by special laws and other regulations.

Much work has been done through various projects and partnerships to enhance the quality and reliability of education statistics. For instance, the Twinning project 'Further Support to the Reform of Statistics System in BiH', funded by the European Union, has the aim of transitioning the statistical system towards using administrative data sources to align it with European standards. This project involves collaboration between key statistical institutions and partner countries, with the aim of improving the accuracy and readability of education-related data.

The UNESCO Regional Bureau for Science and Culture in Sarajevo has supported collaboration between statistical agencies and education authorities. The aim of this support is to enhance the reliability and quality of statistical data for secondary and higher education, particularly concerning the International Standard Classification of Education. This involves reviewing and improving education classifications in statistics and data quality, thus catering to domestic and international reporting requirements set by organisations such as the OECD and Eurostat.

3. LABOUR MARKET AND EMPLOYMENT

3.1 Trends and challenges

Labour market characteristics

The labour market conditions in Bosnia and Herzegovina present a mixed picture, reflecting both challenges and opportunities (see Statistical Annex below). In terms of employment, the overall employment rate for those aged 15-89 was 41.5% in 2023 (32% in 2015). The gender employment gap is the second highest in the Western Balkans after Kosovo. The employment rate in 2023 for males was 53.3%, while for females it was 30.3%.

The employment rate for individuals (15-89) with low educational attainment remains limited (only 11.5%). In contrast, individuals with medium educational attainment have a significantly higher employment rate, standing at 50.7% in 2023. This points to better job prospects for those with more education. Interestingly, the employment rate for individuals with high educational attainment is the highest among the three groups, at 70.2% in 2023.

Unemployment remains a significant issue, with an overall unemployment rate of 13.2% for individuals aged 15-74 in 2023. The unemployment rate for males was slightly lower at 12.1%, while for females it was higher at 14.5%. This indicates that females face greater challenges in securing employment. The rate of youth unemployment is particularly concerning, with a total rate of 38.7% for those aged 15-24. The youth unemployment rate for males was 36.5%, and for females, it was 41.2%. High youth unemployment rates suggest difficulties in the transition from education to the labour market and highlight the need for effective youth employment policies and programmes.

After unemployment, the next biggest challenge in BiH is the significant level of inactivity. The inactivity rate for those aged 15-89 in Bosnia and Herzegovina has slightly fluctuated over the years, standing at 52.2% in 2023. This indicates that more than half of the population in this age group is neither employed nor actively seeking employment. When we examine the inactivity rate by gender, a significant disparity becomes evident. The inactivity rate for males was 40.2% in 2023, suggesting that a substantial portion of men are not participating in the labour market. In contrast, the inactivity rate for females was markedly higher at 63.6%, highlighting the considerable challenges faced by women in accessing employment opportunities. This gender gap underscores the need for targeted interventions to promote female labour market participation and address the barriers that contribute to their higher inactivity rates.

It is worth noting that the employment and unemployment data highlight disparities based on factors such as educational attainment and gender. While there are positive signs of reduced unemployment rates, particularly among women and young people, the overall employment situation still poses challenges. The data suggest that improving educational opportunities and aligning skills with labour market needs could play a significant role in addressing unemployment and fostering economic growth in Bosnia and Herzegovina.

Statistics on the labour market and employment

The Agency for Statistics of Bosnia and Herzegovina, in cooperation with the Federal Institute of Statistics (responsible for collecting statistics in the cantons) and the Institute of Statistics of Republika Srpska undertake annual labour force surveys. The survey follows the International Labour Organization (ILO) definitions and methods and the standards of the European Statistical Office (Eurostat), ensuring that the data can be compared internationally.

Furthermore, the state-level Labour and Employment Agency collects and summarises administrative employment statistics on a monthly basis from the various competent authorities. More sophisticated

data analyses, including ad-hoc surveys (e.g. skills forecasts) are provided mainly through internationally financed technical assistance projects.

3.2 Employment policy and institutional settings

Strategy and legal framework in employment policy

BiH faces challenges in aligning employment policies across its various levels of governance. Being able to adopt comprehensive employment strategies, implement the Youth Guarantee, and improve the capacity of public employment services are key areas of focus for the country.

The governance of employment policy involves multiple levels of responsibility, with primary policy competence resting with the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District. The Ministry of Civil Affairs provides overall coordination at the state level. Public institutions at various levels support employment developments, reflecting the complex governance structure from state to entity down to local levels.

According to the ETF Torino Process Review of Lifelong Learning Policies in Bosnia and Herzegovina (ETF 2024), the Youth Guarantee¹ is the only state-level employment policy currently being implemented in Bosnia and Herzegovina. The Ministry of Civil Affairs has a limited coordinating role for the Youth Guarantee, while all practical initiatives are the responsibility of the Entities and Brčko District.

The Employment Strategy 2021-2027 of Republika Srpska includes proposals for a Youth Guarantee (European Commission, 2023). In the Federation of Bosnia and Herzegovina, the Youth Guarantee was initiated in 2020, and in 2022 a Working Group for the Youth Guarantee Action Plan was set up to manage its development and implementation. The Employment Strategy in the Federation of Bosnia and Herzegovina (2023–2030) recognises the Youth Guarantee as a new model of employment for young NEETs.

Unlike in other countries, three separate Implementation Plans will be drawn up in each Entity and in Brčko District and these will then be compiled into a single document for Bosnia and Herzegovina. The Action Plan for the Brčko District was adopted in November 2023 and the Action Plan for Republika Srpska was adopted at the end of 2023. The Implementation Plan for the Federation of BiH, and its associated Action Plan, has been delayed by coordination problems. It was expected that the Implementation Plan for the Youth Guarantee in the Federation of BiH would be completed by the end of 2023 – the expectation is that this process will now be concluded by the end of 2024.

The implementation of the Youth Guarantee in Bosnia and Herzegovina will provide a strong impetus for structural reforms and policy innovation with a focus on reaching out to NEETs. It will require efforts by relevant authorities as well as cross-sectoral cooperation. Social dialogue and the participation of all the social partners in the design, implementation and execution of relevant measures should play an essential role. Cooperation agreements should be forged with employers' organisations, trade unions, schools and training centres, and non-governmental organisations.

Initiatives to boost employment

According to the State Employment Agency of BiH, in 2023⁽²⁾ there were 343 500 people registered as jobseekers across the regional Public Employment Services (PES), of which 200 672 were women and over 205 191 had medium-level education. The total number of jobseekers in counselling services has grown strongly over the years and reached 128 433 in 2023. Job matching service directing

¹ The Youth Guarantee for Bosnia and Herzegovina aims to give all young people under the age of 30, who are neither in employment nor in education or training (NEET), a good quality offer of employment, a traineeship or an apprenticeship within four months of either leaving formal education or of becoming unemployed.

⁽²⁾ Data source for this and subsequent paragraphs of this sub-chapter is ETF ALMP data collection 2024, based on figures reported by ETF Partner Countries Public Employment Services or data collected from public sources (PES activity reports, published statistics, etc.).

jobseekers to employers includes persons referred to employers via mediation services, advertisements published in employment offices or via advertisements from different sources. 48 487 people were referred to employers in 2023 (i.e. 28 335 males and 20 126 females). Overall, the growing numbers of unemployed people benefiting from labour market services reveal an improvement in PES outreach and service delivery by the three main Bosnia and Herzegovina administrations.

In 2023, 29% of the registered unemployed transitioned from unemployment into employment, significantly lower than the pre-Covid 19 crisis level of 35.8% (2019). As a trend, the percentage of women gaining jobs is much lower – 26.1% of women versus 33.1% of men in 2023. By level of educational attainment, the percentage of registered unemployed who made the leap from unemployment into employment in 2023 is the highest for people with higher education (69.1%) and lowest for those with a low level (11.4%). The total number of vacancies according to the PES in the Federation of Bosnia and Herzegovina and Republika Srpska was 46 550 in 2023, a much lower number than 57 069 in 2022, and quite below the number of vacancies prior to the Covid-19 crisis (over 62 000 in 2019).

Against this background, according to Western Balkans Competitiveness Outlook 2024 (OECD 2024), the EU4Employment programme, launched in February 2023, has the aim of tackling labour market challenges that disproportionately impact vulnerable groups in Bosnia and Herzegovina, including women, youth, long-term unemployed individuals, people with disabilities, and members of the Roma community. Funded with €5 million by both the EU and the Swedish Government, the initiative is set to run for three years.

The programme's goal is to boost employment opportunities for these groups through grants and technical assistance. The International Labour Organization (ILO), with expert support from PES in the EU, France, and Belgium, will provide the technical assistance. This support will focus on creating and improving access to training and retraining opportunities for those traditionally considered 'hard to employ'. By the programme's end in 2026, the goal is to secure employment for at least 625 individuals and involve 1 200 people in activation and job search programmes.

Initiatives to increase the public employment service capacity

According to the Regional Cooperation Council (2022), Public Employment Services (PES), including the PES FBiH (Federation of BiH), PES RS (Republika Srpska), and PES BD (Brčko District), offer various services to jobseekers and employers. These services encompass registration, profiling, segmentation, and developing Individual Action Plans for jobseekers. Different levels of data are used for profiling across the various PES, resulting in varying methods of segmentation based on jobseekers' proximity to the labour market. The PES FBiH provides services such as vocational counselling, career guidance and work permits for jobseekers. Employment incentives, start-up incentives, direct job creation, and various training courses constitute the range of Active Labor Market Policies (ALMPs) offered by the PES FBiH. PES RS also provides similar services and ALMPs, with some differences such as predefined characteristics for profiling and a clear segmentation of jobseekers based on their labour market proximity. The PES RS is preparing to implement the Youth Guarantee. The PES BD also offers careers counselling and guidance for younger jobseekers. ALMPs provided by the PES BD include various training courses, start-up incentives, employment incentives and externally run training courses.

According to the OECD (2024), no significant progress has been made in improving public employment services (PES) in Bosnia and Herzegovina, which remain underdeveloped and poorly resourced. Although PES in both entities (FBiH and RS) offer a range of services, including registering unemployed individuals and vacancies, their profiling tools for jobseekers are not well-suited to varying levels of employability. High caseloads, with around 337 jobseekers per counsellor in RS and 1 160 in FBiH, further hinder their effectiveness.

Efforts to digitalise PES have been initiated, particularly in FBiH, where some cantons have introduced online registration for jobseekers. However, only six out of ten cantonal employment services are

connected to a system that matches jobseekers with vacancies. In RS, online registration has also been introduced, but a lack of digital skills limits the overall efficiency. Coordination between the PES and key stakeholders, such as training organisations, remains weak, and performance measurement tools have only been piloted in a few cantonal PES supported by the Swiss Government.

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STATISTICAL ANNEX – BOSNIA AND HERZEGOVINA

The Annex includes annual data from 2015, 2019, 2020, 2021, 2022 and 2023 or the last available year.

	Indicator	2015	2019	2020	2021	2022	2023	
1	Total population (in thousands) ⁽¹⁾	3524.3	3360.7	3318.4	3270.9	3233.5	3210.8	
2	Relative size of youth population (age group 15-24 and denominator age 15-64, %) ^{(1) c}	18.2	17.2	16.9	16.5	16.1	15.9	
3	GDP growth rate (%)	4.3	2.9	-3.0	7.4	4.2	1.7	
4	Gross value added by sector (%)	Agriculture	6.0	5.5	5.9	5.0	4.8	4.3
		Industry	21.7	23.2	23.8	24.8	24.7	23.3
		Services	54.9	54.6	54.7	53.9	54.5	56.4
5	Public expenditure on education (as % of GDP)	M.D.	M.D.	M.D.	M.D.	M.D.	M.D.	
6	Public expenditure on education (as% of total public expenditure)	M.D.	M.D.	M.D.	M.D.	M.D.	M.D.	
7	Adult literacy (%)	M.D.	M.D.	M.D.	M.D.	98.3	M.D.	
8	Educational attainment of total population (aged 15+) (%) ⁽⁵⁾	Low ⁽²⁾	39.5	36.4	30.9	29.7	29.6	29.9
		Medium ⁽³⁾	51.1	54.1	56.6	57.4	57.4	56.8
		High ⁽⁴⁾	9.5	9.6	12.4	12.9	13.0	13.3
9	Early leavers from education and training (aged 18-24) (%) ⁽⁵⁾⁽⁶⁾	Total	5.2	3.8	4.7	4.7	3.6	4.2
		Male	4.8	4.0	4.8	4.9	3.9	5.2
		Female	5.6	3.5	4.6	4.4	3.3	3.1
10	Total NET enrolment rate (%)	Lower secondary	91.8	93.3	93.8	93.5	93.8	M.D.
		Upper secondary	77.4	79.0	77.9	77.2	78.6	M.D.
11	Share of VET students in upper secondary education (ISCED level 3) (%)	74.2	77.2	78.0	78.4	79.0	75.7	
12	Low achievement in reading, mathematics and science – PISA (%) ⁽¹³⁾	Reading	N.A.	53.7	N.A.	N.A.	N.A.	N.A.
		Mathematics	N.A.	57.6	N.A.	N.A.	N.A.	N.A.
		Science	N.A.	56.8	N.A.	N.A.	N.A.	N.A.

	Indicator		2015	2019	2020	2021	2022	2023
13	Activity rate (aged 15+) (%) ⁽⁵⁾⁽⁷⁾	Total	44.4	42.7	47.8	48.0	47.6	47.8
		Male	55.4	52.3	59.4	59.7	59.6	59.8
		Female	33.8	33.3	36.9	36.8	36.1	36.4
14	Inactivity rate (aged 15+) (%) ⁽⁵⁾⁽⁷⁾	Total	55.6	57.3	52.2	52.0	52.4	52.2
		Male	44.6	47.7	40.6	40.3	40.4	40.2
		Female	66.2	66.7	63.1	63.2	63.9	63.6
15	Employment rate (aged 15+) (%) ⁽⁵⁾⁽⁷⁾	Total	32.0	35.6	40.1	39.6	40.2	41.5
		Male	41.0	44.7	50.9	51.1	52.1	53.3
		Female	23.3	26.9	29.9	28.7	28.9	30.3
16	Employment rate by educational attainment (aged 15+) (%) ⁽⁵⁾⁽⁸⁾	Low ⁽²⁾	14.4	15.7	15.2	12.4	11.4	11.5
		Medium ⁽³⁾	40.3	44.6	47.8	47.8	48.9	50.7
		High ⁽⁴⁾	59.3	59.3	66.8	66.2	67.3	70.2
17	Employment by sector (%) ⁽⁵⁾⁽⁸⁾	Agriculture	17.9	18.0	12.0	9.5	7.3	7.6
		Industry	29.5	31.7	33.4	33.5	34.6	34.3
		Services	52.6	50.3	54.7	57.0	58.2	58.1
18	Incidence of self-employment (%) ⁽⁵⁾⁽⁸⁾		24.2	24.9	18.4	14.9	13.1	13.3
19	Incidence of vulnerable employment (%) ⁽⁵⁾		20.2	19.1	12.7	9.1	8.7	8.9
20	Unemployment rate (aged 15+) (%) ⁽⁵⁾⁽⁹⁾	Total	27.9	15.9	15.9	17.4	15.4	13.2
		Male	25.9	13.8	14.2	14.4	12.6	10.9
		Female	30.9	19.0	18.6	22.0	19.8	16.7
21	Unemployment rate by educational attainment (aged 15+) (%) ⁽⁵⁾⁽¹⁰⁾⁽¹¹⁾	Low ⁽²⁾	27.3	14.1	18.3	24.8	25.0	22.9
		Medium ⁽³⁾	30.0	16.9	16.5	17.9	15.4	13.1
		High ⁽⁴⁾	18.4	12.0	12.0	12.0	10.8	9.2
22	Unemployment rate (aged 15-24) (%)	Total	62.3	33.8	36.6	38.3	35.1	30.1
		Male	59.5	31.3	32.5	35.0	31.2	28.5
		Female	67.3	37.9	42.8	44.5	42.1	33.2
23	Proportion of people aged 15-24 not in	Total	27.7	21.0	21.6	19.9	18.2	16.5
		Male	29.2	20.7	20.3	19.5	17.7	17.4

	Indicator		2015	2019	2020	2021	2022	2023
	employment, education or training (NEETs) (%) ⁽⁵⁾	Female	26.0	21.4	23.0	20.4	18.6	15.5
	Proportion of people aged 15-29 not in employment, education or training (NEETs) (%) ⁽⁵⁾	Total	32.8	25.0	25.9	25.1	23.5	22.2
		Male	32.4	22.6	22.0	21.6	19.8	18.8
		Female	33.3	27.9	30.1	28.8	27.4	25.9
24	Participation in training/lifelong learning (% aged 25-64) ⁽⁵⁾⁽¹²⁾	Total	M.D.	M.D.	M.D.	2.4	2.2	2.2
		Male	M.D.	M.D.	M.D.	2.3	2.0	1.9
		Female	M.D.	M.D.	M.D.	2.4	2.4	2.5
25	Human Development Index		0.757	0.780	0.776	0.776	0.779	M.D.

Last update: 05/08/2024

Sources:

Indicators 1, 2, 3, 4, 5, 6, 7: The World Bank, World Development Indicators database

Indicators 10, 11: UNESCO, Institute for Statistics

Indicators 12: OECD PISA 2018 Results (Volume I) Annex B1

Indicators 8, 9, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24: BHAS, LFS

Indicator 25: UNDP

Notes:

(1) Estimation.

(2) Low - 2015 - 2020: ISCED 0-2; 2021-2023: Primary school and less

(3) Medium - 2015 - 2020: ISCED 3-4; 2021-2023: Secondary school and specialisation

(4) High - 2015 - 2020: ISCED 3-4; 2021-2023: College, university, masters, doctoral degrees

(5) 2020, 2021: Break in series

(6) 2018, 2019, 2023: data unreliable; 2020, 2021, 2022, 2023: data for Male and Female unreliable

(7) refers to age group 15-89

(8) 2021-2023: refers to age group 15-89

(9) refers to age group 15-74

(10) 2021-2023: refers to age group 15-74

(11) 2021: data for low (total, female) and high (male, female) unreliable

(12) 2015, 2018, 2019, 2020 data are not available

(13) PISA: 2019 refers to 2018

Legend:

C = ETF calculations

N.A. = Not Applicable

M.D. = Missing Data

ANNEX: KEY DONOR PROJECTS IN EDUCATION, TRAINING AND EMPLOYMENT

Recent and on-going support for developing employment in Bosnia and Herzegovina include:

- EU Technical Assistance for VET Education in BiH (2023-2026): The project aim is to improve how the education sector responds to labour market needs and enhance the quality of Vocational Education and Training (VET) in Bosnia and Herzegovina, specifically targeting Qualification Framework levels 2-5.
- EU Support to Improved Quality of VET Education (2023-2026). The project aim is to improve how the education sector responds to labour market needs. Key outputs include designing and bringing in new occupational and qualification standards, updating VET teacher training courses on digital training content creation, and integrating entrepreneurship and self-employment training.
- The Sustainable Economic Development and Employment Promotion Project led by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (July 2023 – June 2026). The project aim is to improve employment in Bosnia and Herzegovina, focusing on digital and green economic transformations. Co-funded by the Swiss Agency for Development and Cooperation (SDC) for Strengthening Vocational Education and Training (SVET).
- The Regional Cooperation Facility (RCF) (2020 – 2027), organised by KfW Development Bank and WB6 Chamber Investment Forum. The project objective is to increase youth employability and enhance companies' competitiveness in the Western Balkan 6 through cooperative training projects. RCF is financed through the German Federal Ministry of Economic Cooperation and Development and co-financed by the Swiss Government.
- The 'Improvement of the Quality and Relevance of VET in Bosnia and Herzegovina 2021-2030' project run by the OeAD, and the MoEs in Bosnia and Herzegovina. The project aims to implement a strategic document based on Riga recommendations. Develop action plans in collaboration with development partners, focusing on vocational education and training system priorities.
- New law on VET in the Westherzegowina canton (2023-2024): Backed by the OeAD, the Ministry of Education in Westherzegowina started to develop a new law on VET in the canton in 2023, which has been fully supported by the canton's government.
- The Enhancing the Quality of In-Company Learning: (OeAD) (2022-2024) project aim is to improve the quality of vocational education and training by strengthening the role of vocational practice coordinators. Priorities include needs-based roles, standardised procedures, skills development and quality assurance mechanisms.
- Strengthening Vocational Education and Training (SVET) - Phase 2: (OeAD) (July 2023-2026). Objective: Enhance employability by improving the Technical Vocational Education and Training System (TVET) in Bosnia and Herzegovina. Focus on on-the-job practical training and collaboration between employers, TVET schools and education authorities.
- Strengthening TVET Systems. Organisation: GOPA Worldwide Consultants GmbH. Duration: Inception Phase (Dec 2023-Nov 2024), Full project (Dec 2024-Nov 2028). Objective: Improve TVET governance to enable relevant actors to lead the changes for a dual-oriented TVET system in a coordinated manner. Confidence and know-how to implement evidence-based policy changes for financially sound TVET systems.

ABBREVIATIONS

ALMPs	Active Labour Market Policies
APOSO	Agency for Pre-Primary, Primary and Secondary Education
BHAS	Agency for Statistics of Bosnia and Herzegovina
BiH	Bosnia and Herzegovina
BD	Brcko District
EaFA	European Alliance for Apprenticeships
ECVET	European Credit System for Vocational Education and Training
EQAVET	European Quality Assurance in VET
EQF	European Qualifications Framework
ETF	European Training Foundation
EU	European Union
Eurostat	European Statistical Office
FBiH	Federation of Bosnia and Herzegovina
GDP	Gross Domestic Product
GIZ	German Development Cooperation - Deutsche Gesellschaft für Internationale Zusammenarbeit
ILO	International Labour Organization
IVET	Initial Vocational Education and Training
KIESE	Key Indicators on Education, Skills, and Employment
LFS	Labour Force Survey
NEET	Not in Education, Employment or Training
OeAD	Austria's Agency for Education and Internationalisation
OSCE	Organisation for Security and Co-operation in Europe
PES	Public Employment Services
PIRLS	Progress in International Reading Literacy Study

QFEHEA	Qualifications Frameworks in the European Higher Education Area
RS	Republika Srpska
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
VET	Vocational Education and Training
WBL	Work-based learning

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