



# KEY POLICY DEVELOPMENTS IN EDUCATION, TRAINING AND EMPLOYMENT – NORTH MACEDONIA 2023

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### **EXECUTIVE SUMMARY**

The 2023 Economic Reform Programme for North Macedonia<sup>1</sup> identifies the main challenge for the education sector as the need to improve the quality, relevance, and responsiveness of education to address the skills mismatches that lead to persistent unemployment and underutilisation of young people's potential, and to provide young people with the key competences and skills they need to actively participate in the labour market.

The Education Strategy 2018-2025 has already identified these goals and how they will be achieved through improved standards, assessment, teacher training and investment in the teaching and learning environment. In addition, the government aims to improve the generally low and uneven educational attainment of the population by creating learning pathways in the context of lifelong learning and improving support for students with special educational needs. The Strategy has been implemented through the development of policy documents, action plans and legislative changes. The reforms have been supported by a large package of ongoing projects funded by the EU and other international donors and are accompanied by increased funding for capital investment in education infrastructure. However, the level of spending on education resulting in partial institutional capacity, the limited intersectoral coordination and the pending adoption of key legislation appear to be hampering the successful implementation of the Strategy.

Progress on reforms has been moderate over the past 12 months. The laws on VET, adult education, and NQF, proposed in 2021, have not yet been adopted, although this would be necessary to implement the pending reforms. The revision of the Secondary Education Act and the Higher Education Act is still ongoing.

The core of the reforms in the vocational education and training (VET) has been and will be the establishment of Regional VET Centres (RVETCs), in cooperation with local employers. RVETCs are expected to become regional centres of excellence, optimising resources and providing more training opportunities relevant to regional labour markets. They will cater to learners with special needs as well as those in need of reskilling and upskilling, offering flexible learning options and VNFIL arrangements. Three schools in Kumanovo, Tetovo and Ohrid have been selected to become RVETCs and preparatory work for the selection of two new centres has been completed. The operationalisation of the centres is being held up by delays in the adoption of the necessary laws and by bottlenecks in the implementation of projects to upgrade the requisite infrastructure.

Good progress has been achieved in increasing work-based learning in VET programmes, with more VET schools and companies involved. There has also been notable progress in inclusive education, and the professional development of teachers in this area.

The North Macedonian labour market shares its key characteristics with other Western Balkan economies: low participation rates, especially among women and young people, high structural unemployment, and a high share of long-term unemployment.

The strategic objectives of the National Employment Strategy 2021-2027 and the accompanying Action Plan for Employment 2021-2023 relate to: (1) improving the quality of education and learning outcomes; (2) enhancing the role of economic and enterprise development policies in creating decent jobs; and (3) strengthening the inclusiveness of labour market policies.

North Macedonia was the first non-EU country to implement the Youth Guarantee (YG) scheme. This has helped to reduce the proportion of young people aged 15-29 years who are not in employment, education or training (NEET). However, it is still much higher than the EU average, and challenges remain, especially for women. In this context, North Macedonia's commitment to continue working on YG will be crucial to further improve the capacity of public employment services and other providers to deliver key services. The government is committed to further improve the implementation of the Youth

<sup>&</sup>lt;sup>1</sup> European Commission, <u>2023 Economic Reform Programmes of Albania, Montenegro, North Macedonia, Serbia,</u> <u>Turkey, Bosnia and Herzegovina and Kosovo\*: The Commission's Overview and Country Assessments</u> (<u>europa.eu</u>) Luxembourg: Publications Office of the European Union, 2023.



Guarantee in line with the 2020 Council Recommendation 'A Bridge to Jobs — Reinforcing the Youth Guarantee'. The new implementation plan for the period 2023-2026 has been adopted.



### 1. KEY POLITICAL, DEMOGRAPHIC, ECONOMIC AND SOCIAL CHARACTERISTICS

#### Political developments

Following a heavy defeat in local elections, Prime Minister Zoran Zaev stepped down in December 2022 and was replaced by former Deputy Finance Minister Dimitar Kovacevski. The pro-EU Social Democrats remain in power with a slim majority.

North Macedonia has been an EU candidate country since 2005. The end of the dispute with Greece over the country's name in 2018 (the 'Prespa agreement') and comprehensive reform progress have positively influenced the country's prospects for international integration. In 2020, North Macedonia became a full member of NATO, and the European Commission presented a draft framework for EU accession negotiations. However, the opening of accession talks was blocked for two years by Bulgaria, which demanded recognition of the Bulgarian origin of the Macedonian language and identity. In the summer of 2022, the two countries reached an agreement, the Bulgarian veto was conditionally lifted, and EU accession negotiations were officially launched on 19 July 2022. However, the constitutional changes required from North Macedonia to fulfil the agreement are being contested by the opposition (Deutsche Welle, 2022). The EU enlargement process appears to be hampered by identity conflicts<sup>2</sup>.

North Macedonia faces parliamentary elections in 2024.

#### **Demographics**

A long-awaited census took place in September 2021 (the last one was carried out in 2002). The results showed that the population has decreased by a significant 9.2 % in the last 20 years. The total number of residents is 1 836 713. The ethnic composition has not changed much since the 2002 census. Of the total resident population, 58.4 % identified as ethnic Macedonians, 24.3 % as ethnic Albanians, 3.86 % as Turks, 2.53 % as Roma, 0.47 % as Vlachs, 1.3 % as Serbs and 0.87 % as Bosnians. In addition, 3 504 persons identified as Bulgarian.

North Macedonia is an ageing society. The share of young people aged 15-24 years in the age group 15-64 years decreased from 21.8 % in 2010 to 17.6 % in 2022. Over the next 30 years, the working age population (i.e. people aged 15-64 years) is expected to decrease by 21 % (MoLSP, 2021).

The ETF study on migration (ETF, 2021a) indicates that, based on the Macedonian migrant stock from destination countries, 658 000 Macedonians lived abroad at the end of 2019, which corresponds to 32 % of the domestic population. Despite fears of a 'brain drain', most migrants have a low level of education, followed by people with a medium level of education. However, some professions, such as those in the medical sector, are currently experiencing a severe shortage of highly skilled personnel. It is mainly young people who migrate in search of jobs and better public services. The same study also registered signs of a 'brain gain', with young people returning to North Macedonia after studying abroad. Nevertheless, migration is widespread and is depleting the Macedonian labour force.

#### Key economic developments

The government has pursued an export-led growth strategy. Tax exemptions, free trade zones and various forms of government subsidies to businesses have attracted higher levels of foreign direct investment. By attracting foreign companies from a wide range of industries, North Macedonia has established itself as a regional manufacturing hub. In 2021, industry accounted for 22.4 % of the gross value added and almost 31 % of employment. The manufacturing activities of foreign companies have positively influenced the share of higher-value goods and the use of medium to medium-high technology in total production. Nevertheless, the economy is dominated by labour-intensive industries



<sup>&</sup>lt;sup>2</sup> <u>https://europeanwesternbalkans.com/2023/09/28/osmani-north-macedonia-the-most-harassed-country-in-eu-enlargement-process/</u>

and low productivity. Linkages between investors and domestic firms remain low and the production in the economic zones remains largely dependent on imported goods. Innovation performance remains modest at 45.3 % of the EU average but the gap with the EU is narrowing (European Innovation Scoreboard, 2023).

In 2021, the services sector accounted for 56.9 % of gross value added and 58 % of employment. Exports of services are on an upward trend, with tourism and transport being the main contributors. Exports of services in the areas of telecommunications, IT and business services have some growth potential. The share of agriculture in the economy is gradually declining. In 2021, agriculture accounted for 7.2 % of gross value added and 11.1 % of employment.

In the pre-pandemic years, North Macedonia had a good record of fiscal stability. Both the budget deficit and public debt declined, allowing for some expansion of State support to enterprises and socially disadvantaged groups. Employment rates and wages rose slowly, although wage increases were not matched by corresponding productivity growth.

In 2021, GDP during the post-Covid recovery stood at 3.9 % and was lower than in other Western Balkan economies. In 2022, Russia's war of aggression against Ukraine hit the country's economy hard. Annual GDP growth fell to 2.1 % in 2022 (European Commission, 2023) amid rising inflation, which peaked at a two-decade high in autumn 2022 (World Bank, 2023), further disruptions in global supply chains, the energy crisis (North Macedonia is a net energy importer), and political instability. The World Bank forecasts a further slowdown of growth in early 2023, but a gradual decrease in inflation and a moderate acceleration of growth in the medium term (ibid).

The State Statistical Office (MAKSTAT) estimates that the informal economy accounts for 17 % of GDP and 18 % of total employment (MoF, 2022). The informal economy undermines the tax base and the government's efforts to improve productivity. Government support measures adopted during the pandemic required businesses to register, which may have led to some reduction in undeclared work. Improving tax compliance and broadening the tax base remains an important policy objective. The National Bank estimates that, before the pandemic, remittances averaged more than EUR 1 billion per year, equivalent to 16 % of GDP (NBRM, 2021). They contribute to poverty alleviation and act as an informal social protection buffer.

The North Macedonian Economic Reform Programme 2023-2025 identifies four key structural reform measures: (1) strengthening human capital for inclusive development; (2) promoting the green transition; (3) improving the competitiveness of domestic enterprises, their integration in global value chains and the formalisation of the economy; (4) improving public finance management (MoF, 2023).

In 2022, North Macedonia became the first country in the Western Balkans to adopt a National Energy and Climate Plan, which foresees the closure of coal-fired power plants by 2027 and their replacement mainly with renewable energy (The Energy Community Secretariat, 2022), using gas as a transition fuel.

As in other Western Balkan economies, a skilled population is seen as a prerequisite for productivity growth, innovation uptake, increased competitiveness, and the digital and green transition.

#### Key social issues

Poverty rates have fallen in recent years but remain significant. According to Eurostat data (ILC\_PEPS01N, 2020) the share of people at risk of poverty or social exclusion stood at 32.6 % in 2020 (EU average 21.6%), with the unemployed being most exposed to this risk (more than 63 % in 2020). The post-Covid decline in poverty continued in 2021 but was interrupted by the energy crisis and Russia's war against Ukraine. According to the World Bank 'poverty is estimated to have declined only moderately in 2022' (World Bank, 2023b). Inequality, as measured by the Gini coefficient, is at levels comparable to those in the EU.

In North Macedonia, the Guaranteed Minimum Assistance (GMA) scheme has been in place since 2019. Its introduction has lowered the fragmentation of the social assistance programme. During the pandemic, additional amendments to the Social Protection Act were adopted, allowing for an automatic relaxation of GMA eligibility in the case of a national emergency. Nevertheless, the COVID-19 crisis had a particularly negative impact on the most vulnerable population. In 2021, the

poverty rate was 17.2 % and has not yet returned to pre-pandemic levels (16.5 % in 2019), although it is projected to continue to gradually decline (World Bank, 2022).

In 2019, 27.8 % of children were at risk of poverty. Other vulnerable groups include those with low levels of education and ethnic communities, especially the Roma, who are the most vulnerable group and face discrimination. Their disposable income is less than half that of Macedonians, and significantly lower than that of ethnic Albanians and Turks (Petreski, 2020). In 2021, the government launched a EUR 2 million fund to support Roma businesses with loans, coaching and business development (EBRD, 2021).

Income inequalities are correlated with inequalities in education, labour market access and health (ibid). Differences in educational outcomes persist depending on ethnic group (OECD, 2020).

Female participation in the labour market is one of the lowest in the region: in 2022, it stood at 44.5 %, 21.6 percentage points lower than that of men (for the age group 15+ years). In 2019, the gender pay gap was the highest in the region (Nikoloski, 2019).



# 2. EDUCATION AND TRAINING

### 2.1 Trends and challenges

#### Education strategy and legal framework for education

The main framework strategy for education and VET comprises the Education Strategy 2018-2025 and the Action Plan for its implementation. The latter covers six pillars of education and several objectives: increasing the proportion of children in pre-school education; reforming compulsory education programmes and focusing them on learning outcomes; supporting quality teaching materials; aligning VET with labour market needs; strengthening teacher competences; improving management and leadership at central and local level; and improving assessment systems, particularly for VET students (MoES, 2018). The strategy highlights the need for increased funding for the education sector.

The regulatory framework is still under review. The adoption of the new draft NQF Act, Adult Education Act and VET Act has been delayed. Work on amending the Secondary Education Act and the Higher Education Act is ongoing.

Concept papers have been prepared for Regional VET Centres, adult education, and post-secondary education. However, these do not constitute a sufficient legal basis for the implementation of a comprehensive reform.

#### **Education spending**

Public spending on education is below the average for EU-27 and other Balkan countries. In 2021, public spending on education accounted for 3.76 % of GDP, compared to an EU average of 5 % (European Commission, 2022). The central government is responsible for capital expenditure on education, and local government is responsible for recurrent costs, including staff salaries. Municipalities receive funding through block grants. There have been no developments on the new financing formula for primary and secondary education, which would have combined standard input parameters and variable components, the latter also including school performance.

The 2022 budget prioritised investments to improve the quality of primary and secondary education. However, their management and implementation are proving challenging for the administration.

#### Access, participation and early school leaving

North Macedonia has made satisfactory progress in widening access to education, particularly in improving access to VET. The share of students enrolling in VET increased from 60 % in the school year 2020/21 to 64 % in the school year 2022/23. The share of the population with a low level of education (age group 15+ years) decreased from 37.2 % in 2015 to 27.3 % in 2022. Over the same period, the share of the population with a medium level of education decreased by 3.9 %, and the share of those with a high level of education increased by 0.8 %. Although the younger population is generally better educated, the gross enrolment ratio in secondary education remains below that in other Western Balkan countries, and well below the European average. In 2021, the gross enrolment ratio in secondary education 96.89 % in Albania, 92.61 % in Montenegro, and 92.24 % in Serbia (UIS, 2023<sup>3</sup>).

The early school-leaving rate fell from 11.4 % in 2015 to a record low of 4.6 % in 2021, which was below the EU average of 9.7 %. In 2022, it increased to 6.2 % (EU average 9.6 %), with some gender differences: 6.9 % for women, and 5.5 % for men (the opposite of the EU average of 8 % for women and 11.1 % for men). Between 2019 and 2020, participation in early childhood education dropped by more than 10 percentage points: from 34.8 % to 24.3 %, far behind the EU average of 86.6 % in 2020 (Eurostat database, EDUC\_UOE\_ENRP07) and the rates of some of North Macedonia's regional

<sup>&</sup>lt;sup>3</sup> <u>http://data.uis.unesco.org/index.aspx?gueryid=3812</u>



peers such as Montenegro or Serbia (65.6 % and 59.9 %, respectively). However, between 2020 and 2021, this rate increased to 31.2 %.

Other Western Balkan countries achieve better outcomes with similar levels of spending on education. The OECD argues that there is a need to adjust the school network and increase efforts to reach out to disadvantaged students who do not participate in secondary education and are underrepresented at the tertiary level (OECD, 2019). The World Bank's adjustment of years of schooling by quality of learning indicates a learning gap of 3.7 years in North Macedonia (World Bank, 2020).

Adult learning participation in North Macedonia increased slightly to 2.8 % in 2019, but decreased again to 2.5 % in 2021, which compares poorly with the steadily increasing EU average of 10.8 %. The current provision of adult training by public VET institutions is limited. In a recent survey conducted by Eurofound and the ETF, more than half of the respondents in North Macedonia reported insufficient access to education and training opportunities (Eurofound-ETF, 2022).

According to the European Skills and Jobs Survey 2023, 'around half of Macedonian workers participated in job-related education or training last year, which is lower than the EU average. At the same time, many respondents still recognise the need to develop their computer/IT and social skills. Overall, participation in further education and training is higher among women, younger workers, or those with higher levels of education or in skilled occupations, suggesting a need for targeted initiatives to support specific groups of workers, such as those with lower levels of education and skills, to enable them to adapt to future technological advances' (ETF, 2023b).

#### **PISA results**

The PISA results (schoolchildren aged 15 years) for VET students have traditionally been lower compared those of their peers in general education. However, according to the MoES, students' performance will continue to decline due to Covid, despite substantial improvements and the lower percentages of underachievement in reading, mathematics and science in 2018 compared to the results achieved in 2015. The next PISA results will be published in 2023. The Ministry of Education is working with UNICEF and the World Bank to develop an action plan by the end of 2023, which will be implemented in 2024. The aim is to prepare and motivate students and teachers to achieve better results.

#### Young people not in employment, education or training (NEET)

Following the introduction and subsequent rollout of the Youth Guarantee scheme (for the first time in a non-EU country), the NEET rate for the 15-29 age group fell significantly: from 29.8 % in 2018 to 24.3 % in 2021 (12.2 % inactive), and 22.8 % in 2022 (10.9% inactive). However, it is still much higher than the EU average of 11.7 %.

Female NEET rates are higher than the male rates (24.5% compared to 21.1% in 2022). Inactivity rates were lower for female NEETs (8.7%) than for male NEETs (13%). However, the proportion of inactive NEETs (both sexes) has decreased overall.

### 2.2 Initial VET and adult learning

#### **VET** governance and financing arrangements

The Ministry of Education and Science oversees the VET system, which falls under the responsibility of the sector of secondary education. The Council for Vocational Education and the Council for Adult Education have an advisory role and ensure consultation with stakeholders.

The National Centre for Vocational Education and Training is responsible for developing occupational, qualification and assessment standards, setting curricula for VET levels 1–5, conducting teacher training and organising counselling activities. The Centre cooperates with national and international partners on issues relating to the development and monitoring of the VET system. However, its staffing is very limited relative to its mandate and the number of experts is expected to further decrease in the coming year.



The Centre for Adult Education accredits adult education programmes and providers.

The State Education Inspectorate carries out inspections on VET based on the quality indicators developed for schools, while the Bureau for the Development of Education (BDE) is responsible for the general education subjects, which are also taught in secondary vocational schools.

VET in North Macedonia is financed through block grants to the municipalities. The grants are calculated on the basis of a formula, which includes the number of pupils, a 20 % bonus for vocational education and a weighting factor for pupils with special needs. Schools are allowed to generate additional income, but few do so in practice. A substantial part of the planned investment will be channelled to RVETCs, which will have a new governance and funding model and greater autonomy.

In recent school years, the Minister and Deputy Minister for Education and Science have conducted a nationwide campaign to promote partnerships between VET schools, businesses and municipalities, and to encourage students to participate in work-based learning programmes.

The NQF Act provides for the establishment of 16 sectoral qualifications councils to analyse labour market trends and propose and evaluate qualifications, of which 15 have been established to date. No sectoral qualifications council for the arts has been set up (ETF, 2023).

#### Strategic framework and recent developments for initial VET and adult learning<sup>4</sup>

The Education Strategy and Action Plan 2018-2025 includes chapters on education, VET and adult learning. The main objectives revolve around increasing the attractiveness, quality and relevance of VET, introducing standards based on learning outcomes and labour market information, increasing work-based learning and investing in human resources and infrastructure. Adult learning is recognised as key to improving the overall educational attainment of the working age population. The strategy prioritises the development of flexible, modular education and training provision for adults, the validation of non-formal and informal learning (VNFIL) and awareness-raising activities. These priorities are also reflected in the country's choice of thematic areas in the National Implementation Plan developed for the purpose of monitoring the 2020 Osnabrück Declaration and Recommendation on VET. The VET Act adopted in 2006 is still the main legal framework for VET. The new draft, drawn up and submitted for adoption to Parliament in 2021, has not yet been adopted.

However, practical measures and initiatives have been taken in 2021 and 2022 in the areas that will be governed by the new laws.

- Inclusion of pupils with special needs:
  - In 2022, a roadmap policy paper on the professional development of school principals was developed with a view to creating an inclusive school culture by a team of experts under the project HEAD 'Empowering School Principals for Inclusive School Culture 5', financed by the Erasmus+ Programme.
- In 2021 and 2022, the UNDP office in Skopje supported training activities in the area of inclusive education for 130 teachers and principals from the regional VET Centres<sup>6</sup>.

<sup>&</sup>lt;sup>6</sup> Initiatives have also been developed to make primary education more inclusive. 'In North Macedonia, the curricula, revised in 2021, among other aims, strengthen the principles of inclusiveness and gender equality/sensitivity, which are integrated across all subjects in the first, second, fourth and fifth grades of primary education.' The curricula specify that 'the teacher ensures inclusiveness by including all students in all activities during the lesson. [...] During the implementation of the activities, the teacher treats both girls and boys equally, taking care not to assign them gender-stereotyped roles. When forming the work groups, the teacher tries to ensure a balance in terms of gender. When choosing additional teaching materials, he or she uses illustrations and examples that are gender and ethnically/culturally sensitive and encourage gender equality, that is, promote interculturalism' (EACEA, 2023, page 59). 'The training programme for professional development of teachers for 2022, includes some of the following themes: multiculturalism in monolingual and multilingual schools; breaking down barriers – building an inclusive school culture; gender equality and gender sensitivity in school; inclusion



<sup>&</sup>lt;sup>4</sup> Content of this section largely relies on the monitoring of the Osnabrück Declaration and VET recommendation. See country brief for North Macedonia, ETF 2023 (forthcoming).

<sup>&</sup>lt;sup>5</sup> Source: <u>https://head.edupolicy.net/</u>.

- Increased levels of work-based learning and apprenticeships:
  - Despite the pandemic, the number of schools and companies involved in VET programmes with 'an increased number of practice classes', rose significantly between the school years 2020/21 and 2022/23: from 8 to 61 VET schools (out of 75) and 16 companies involved to 450 (see section on work-based learning).
  - Approximately 1 000 employees have trained to become in-company trainers for students in work placements.
- Regional Vocational Education and Training Centres (RVETCs):
  - These will be the focus of VET reform efforts in the coming years. RVETCs are expected to become regional centres of excellence. They should cater for learners with special needs as well as those in need of reskilling and upskilling. The centres are expected to optimise their resources and enhance training provision in areas of relevance to regional labour markets, which have been identified in collaboration with local employers. RVETCs will include flexible learning options, as well as VNFIL arrangements.
  - Following the establishment of the first three RVETCs, steps have been taken to operationalise them. Construction works have been completed in Kumanovo and are underway in Ohrid, while tenders for reconstruction works in Tetovo have not yet been published. The tenders for the supply of equipment for the three RVETCs are expected to be launched in October 2023. Overall, development of the three RVETCs has been slower than expected.
  - Two new schools, one in the Vardar region and one in Strumica, have been identified to become RVETCs. The decision on their selection is subject to government approval, which is currently pending.
- Post-secondary education:
  - An information campaign will be launched at the end of 2023 to promote two new level 5B programmes for computer administrators and tailors of women's clothing (Master of Craft programme). These programmes should be open to applicants in the first quarter of 2024.
  - A working group of 40 experts has been established to develop a new concept of postsecondary education.

Over the last decade, the proportion of VET students in upper secondary education (ISCED level 3) has remained stable at around 60 %, with a slight increase between the school years 2020/21 (60 %) and 2022/23 (64 %), especially in dual programmes among VET students. The overall increase in enrolment in VET may also be due to restrictions on enrolment in general education. Forty percent (40 %) of all VET students were enrolled in only two sectors — healthcare, and business and law, and the remaining 60 % in all other VET sectors. Most VET students follow 4-year programmes, and 9 % to 10 % of students are enrolled in 3-year programmes.

Since the school year 2022/23, the modular curricula based on the new qualification standards, which include competence-based learning outcomes and an increased share of practical training, have been incorporated into the fourth year of study, marking the completion of the reform of 4-year VET programmes.

Over the period 2022-2023, a tracer system to follow the careers of VET students after graduation was implemented (see section on quality assurance).

The Adult Education Strategy 2019-2023 aims to improve the attractiveness and quality of adult education, strengthen the quality of training provision, develop VNFIL arrangements and improve

and approaches to teaching students with special educational needs or disabilities; cooperation between family and school in preventing peer violence, cyber violence and the like; and inclusive education in practice.' (European Commission/EACEA/Eurydice, 2023, page 81).



partnerships. Adult learning participation in North Macedonia increased slightly to 2.8 % in 2019, but decreased again to 2.5 % in 2021, which compares poorly with the steadily growing EU average of 10.8 %.

The Adult Education Act adopted in 2008 has been amended. The main objective was to harmonise it with the National Qualifications Framework (NQF) Act. The proposed amendments aim to streamline the process of verification of adult education programmes and provide a favourable framework for VNFIL, which is not yet operational. The main recent developments in adult education are:

- The 'Beyond Europe with Micro Credential project', which will produce ten micro-credentials. A 'Skills Bank' linked to Europass has been established, where all micro-credentials will be made publicly available. The participating countries are North Macedonia, Georgia, Montenegro, Germany, Norway, Serbia, Ukraine, and Moldova. Work on the project methodology will be completed in October 2023.
- A strategic plan for remedial education at the level of secondary education up to the age of 18 years is being developed.
- In November 2022, a 'Concept paper on secondary education for adults in the Republic on North Macedonia' (MoES, 2022b) was adopted. It places a strong focus on key competencies and outlines how these could be further integrated into the national standards and expected learning outcomes. The concept paper identifies the validation of non-formal and informal learning as one of the main pillars of adult secondary education, setting out concrete arrangements both in formal and non-formal education.

#### **Qualifications, validation and recognition**

The reform of the qualifications system is supported by the ongoing EU Twinning project 'Further support to the implementation of the National Qualifications Framework'<sup>7</sup> which supports the operationalisation of the Macedonian NQF. The project's recommendations concern improvements in the governance mechanism and advice to support the linking of the NQF register with the European online platforms (Europass, the Qualification Dataset Register). It has a strong focus on the modernisation of qualifications in the sector of higher education, which has progressed at a somewhat slower pace than in the VET sector. By 2023, 110 VET qualifications were included in the NQF register (ETF, 2023).

Other developments include work on the new qualifications standards for primary and secondary schoolteachers, school support staff and educational service professionals (pedagogues and psychologists), and the development of qualification standards for the tourism and hospitality sectors.

The VET Centre is working on a Diploma Supplement for general education and 4-year VET, which should be available in 2024, if the NQF Act and the VET Act are adopted.

The new draft VET Act provides for a vocational examination after each level of VET (NQF II, III or IV), and after four years of study (i.e. VET 'matura' examination). The National Examination Board is currently developing a concept paper on the VET 'matura' exam, which should first be piloted and then introduced in practice from the school year 2025/26.

The VNFIL system is at an advanced stage of development but is not yet operational. The main methodological documents are in place and pilot validation activities have been carried out in 2021 for two occupations (ETF, 2021b). The introduction of validation services is subject to the adoption of the Adult Education Act by Parliament.

In the meantime, several initiatives have taken place as preparatory measures:

In 2020 and 2021, the Adult Education Centre developed standards for occupations and qualifications 'Counsellor for VNFIL' and 'Assessor in VNFIL'.



<sup>&</sup>lt;sup>7</sup> More information about project MK IPA 17 SO 01 21 is available at: <u>https://mon.gov.mk/en/content/?id=4539</u>.

- As part of the IPA project 'Increasing the attractiveness, inclusiveness and relevance of VET and adult education', the MoES and the VET Centre have selected five qualifications to be revised and adapted with a view to validating non-formal and informal learning. However, validation providers cannot yet be accredited. Alternative activities are planned in early 2024 to support the development of the validation system until the adoption of a dedicated law:
  - Capacity building training (teacher training) on the revision of the five qualifications standards identified. The beneficiaries are the Ministry of Education, Adult Education Centre, VET Centre, all RVETCs, the Inspectorate and selected VET schools.
  - Training for guidance counsellors and assessors.
  - Awareness-raising campaign.

By the end of 2024, the three RVECTs are expected to make validation services available for six qualifications.

#### **Quality and quality assurance**

Two reforms have been promoted by the MoES, in consultation with the VET Centre and the State Education Inspectorate (SEI), with a view to improving the quality of skills acquired through VET and closing the gap with the skills needed in the labour market: regulation of the continuous improvement of standards for qualifications; and reforms in the methodology of evaluation of VET schools.

Regarding the improvement of qualifications standards, the draft of the new NQF Act proposes that qualifications standards should be revised (at least) every five years. The VET Centre is responsible for developing qualifications standards or validating standards if they are proposed by other institutions. The usual practice is for VET counsellors from the Centre to develop or oversee the development of the standards. However, this process is hampered by staff shortages at the VET Centre and is perceived as burdensome by employers.

To improve the methodology of evaluation of VET schools, the draft VET Act will introduce a new integral evaluation' approach that takes into account the specificities of VET schools and will be based on cooperation between schools and the labour market.

In addition, specific initiatives have been taken under various projects:

- The development of a modern quality assurance system in higher education is being supported by the Twinning project 'Further support to the implementation of the National Qualifications Framework'<sup>8</sup>, which is currently being implemented. The project aims to support NQF effectiveness by further developing QA procedures, transparency, the governance of skills and qualifications in a lifelong learning perspective, and better adaptability of education and training to labour market needs. A 3-day training for representatives of higher education institutions on improving internal QA systems was held in March 2023 (Twinning, 2023).
- As part of the 'EU for Youth' project, the MoES has launched the 'Study for evaluation of the employability of VET school graduates' (Tracer study)<sup>9</sup>. The aim is to introduce a system for monitoring the pathways of graduates after completing their education in terms of further training or employment, which will serve as evidence for the formulation of educational policies. Its implementation has been slowed down by a low response rate in the first phase of implementation. In January 2023, the MoES launched an information campaign on the tracer study, while the next phase is planned for the first semester of the school year 2023/24.
- In the context of IPA Technical Assistance Project 'Increasing the attractiveness, inclusiveness and relevance of VET and adult education', a short concept note on training needs analysis and the implementation of a QA-related training was completed in August 2023. Three EQAVET indicators were selected for further development:
  - EQAVET Indicator 3. Participation rate in VET programmes



<sup>&</sup>lt;sup>8</sup> For more information about the MK IPA 17 SO 01 21 project, see: <u>https://mon.gov.mk/en/content/?id=4539</u>.
<sup>9</sup> <u>https://eu4youth.mk/en/objectives-pourpuses-expected-results/</u>.

- EQAVET Indicator 4. Completion rate in VET programmes
- EQAVET Indicator 10. Schemes used to promote better access to VET and provide guidance to (potential) VET learners.

The roadmap for the implementation and monitoring of EQAVET indicators has been developed to enable the introduction of a more holistic approach to the further development of the VET Quality Assurance system in line with EQAVET. A need has been identified for indicators that are specifically focused on VET providers.

#### Work-based learning arrangements

According to MoES figures, participation in dual VET, as opposed to school-based VET, increased in 2022/23, with North Macedonia making notable progress in scaling up dual education arrangements, as shown by the figures below:

- The number of VET colleges offering dual education programmes was 61 out of 75 (in 2021 such programmes were available from only 8 VET colleges).
- The number of companies offering dual training increased to 450 (from 16 in 2021).
- The total number of students enrolled in dual training nationwide was 3 228 out of 11 446 students enrolled in VET colleges countrywide.
- The total number of dual classes in State upper secondary vocational schools was 225 out of 559 (compared to 11 in the school year 2020/21 and 97 in the school year 2021/22).

The government incentivises the participation of students in dual programmes with monthly scholarships in the amount of MKD 3 500 (approx. EUR 55). According to the new Vocational Education and Training Act, students in apprenticeships will sign contracts with the employer and receive a monthly allowance of at least 10 %, 15 % and 20 % of the national minimum monthly wage in the second, third and fourth year of study, respectively. In addition, institutions which provide dual training will need to be verified by the MoES.

The number of hours per week for work-based training will gradually increase from 4 hours in the second year, to 8 hours in the third year, and 10 hours in the fourth year. In addition, the minimum number of days for summer internships has been set at 10 days in the first year, 15 days in the second year, and 20 days in the third year.

The main focus in this area is currently on the further training of vocational teachers and company mentors, the adaptation of curricula to accommodate work-based learning components, and the promotion of the new programmes among ninth grade students in general education. The VET Centre has conducted 18 workshops with all schools that offer dual education. Approximately 300 teachers/mentors (from companies that have signed MoCs with schools opening dual classes) participated and learned how to design training programmes with learning outcomes. With support from the Chamber of Commerce, the Centre has sought to involve around 900 companies, most of them micro and small/medium enterprises.

Work-based learning arrangements are supported by the long-term Swiss-funded project 'Education for Employment in North Macedonia', implemented by Helvetas. The current promising progress in the introduction of work-based learning arrangements is reflected in the growing number of young people (aged 15-29 years) who participate in formal education and work.

Stakeholders are working with Helvetas to monitor the implementation of the WBL process with a view to developing a quality assurance tool for WBL. The project is currently in the pilot phase, with draft tools being developed and reviewed. A working group with representatives of the Chamber of Commerce and the VET Centre is working on this.

Helvetas is also working on updating a programme to review the initial training of mentors, leading to a certification for mentors in enterprises.

#### **Digital education and skills**



As confirmed in the 2020 Concept for the Development of a Distance Education System in Primary and Secondary Schools<sup>10</sup>, the government adheres to the EU's Digital Competence Framework (DigComp) and the <u>2017 European Framework for the Digital Competence of</u> <u>Educators/Teachers</u> (DigiEduComp), which applies to educators at all levels of education.

The National Education Strategy 2018-2025 <sup>11</sup> under Priority III 'Ensuring digital literacy and widespread use of ICT in education and training', sets out measures to increase the effectiveness of the education process through the use of ICT. It envisages the necessary conditions and environment for the digital literacy and professional self-development of teachers. The strategy refers to the need to improve the efficiency of provision of didactic materials for teachers and learning materials for learners, and the availability of pedagogical innovations, which will ultimately lead to greater interest in ICT among the younger generation. It also sets out guidance on how to create the necessary conditions for the preparation of future highly qualified ICT specialists and ICT technicians (mid-level professionals), available for the development, promotion, participation, and use of the information society.<sup>12</sup>.

Building on recent initiatives to promote digitalisation in various sectors in the country<sup>13</sup>, the National ICT Strategy 2023-2027 <sup>14</sup>, developed by the Ministry of Information Society and Administration, formulates recommendations for the country, including the revision of strategies, policies, and regulations to align the education curriculum with industry and future needs.

Recent actions in this area include the following:

- In order to modernise and diversify the methods of learning and expand them to incorporate digital opportunities, some 800 teachers participated in a training on distant learning/teaching in 2022, using an internet app and a learning platform. The INOVET platform (www.inovet.edu.mk), launched under the domain of the VET Centre, provides an e-library, information on professional development courses, conferences and opportunities for academic exchange among teachers. The ongoing reform of the digitalisation of administrative work and pedagogical evidence from schools actively supports teachers and trainers in this transition.
- The Ministry of Education has developed a digital tool for career guidance (BIPO), which offers three tests to identify professional values, interests and attitudes. The Employment Agency has already been trained to use this tool. The national VET team under the Agency is working on a new programme for 2024 (http://www.bipo.mon.gov.mk/).

#### Statistics on education and training

There is a need to strengthen education planning and policymaking through improved data management and analysis.

In 2015, the Education Management Information System was revised and renamed Electronic System for the Administrative Work of Schools. The Faculty of Computer Science and Engineering (FINKI) has been entrusted with hosting and maintaining the system. It contains information about schools, classes, students and staff, syllabi and curricula. There are other systems in place such as: E-Gradebook, the NQF Register, the National Platform of Adult Education Programmes (<u>http://cov.gov.mk/all-courses/</u>) and the National Platform for Distance Learning (<u>https://lms.schools.mk</u>), which was used during the pandemic.

In the period 2021-2023, the EU IPA action 'Development of a new Education Management Information System' was implemented in response to problems with low levels of data consistency and

<sup>11</sup> planipolis.iiep.unesco.org/sites/default/files/ressources/macedonia-education-strategy-for-2018-2025-andaction-plan-strategija-za-obrazovanie-eng-web-1.pdf.

Presence/Europe/Documents/Publications/2023/Digital%20Innovation%20Profile%20-%20North%20Macedonia.pdf.

<sup>&</sup>lt;sup>10</sup> Koncept za dalecinsko obrazovanie-design-MK-with logos.pdf (mon.gov.mk).

<sup>&</sup>lt;sup>12</sup> North Macedonia | Technology | Education Profiles (education-profiles.org).

<sup>&</sup>lt;sup>13</sup> The 2018-2020 Open Data Strategy, the 2018-2022 National Cyber Security Strategy, the 2018-2022 Public Administration Reform Strategy, the 2019-2029 National Operational Broadband Plan, and the 2018-2025 Education Strategy.

<sup>1414</sup> https://www.itu.int/en/ITU-D/Regional-

accuracy, data redundancy and low levels of use. The aim was to streamline the currently disparate education data systems, migrate data and train end-users, namely administrators from all relevant education institutions, in data collection, processing and reporting.



### 3. LABOUR MARKET AND EMPLOYMENT

### 3.1 Trends and challenges

#### Labour market characteristics

North Macedonia continues to show poor labour market outcomes in terms of activity and rates of employment/unemployment. Low activity and high unemployment, especially among young people, point to persisting structural challenges.

The pandemic has slowed down some of the positive labour market trends observed in the years before 2020. Since then, the activity rate of the population (aged 15+ years) first fell from 55.5 % in 2019 to 54.1 % in 2021 before registering a slight increase to 55.2 % in 2022. However, it has not yet recovered to pre-pandemic levels. In 2022, the activity rate for women was only 44.5 % compared to 66.1 % for men.

The employment rate (age group 15+ years) registered a slight decrease from 45.7 % in 2020 to 45.6 % in 2021. The World Bank estimated that it would reach about 47 % in the last quarter of 2022 (World Bank, 2023). The employment gap between men and women remains high, with men being 18 percentage points more likely to be employed than women.

The employment rate of those with tertiary education is significantly higher than that of those with low education (70.8 % and 21.5 % respectively in 2021). The gap between these two groups widened over the last 5 years. Although the employment rate of persons with mid-level qualifications increased before the pandemic, it has since declined. In 2021, it stood at 54.4 %, 0.6 percentage point lower than in 2020. The structure of employment by occupation shows a growing demand for workers with secondary vocational or tertiary education.

At the same time the employment rate for recent VET graduates aged 20-34 years (ISCED levels 3-4) has fallen sharply, from 57.1% in 2019 to 49.1% in 2020, and remains one of the lowest employment rates for VET graduates in Europe, indicating a very difficult transition from education to work. However, the employment rate for recent VET graduates is significantly higher than that of general education graduates (33.2 % in 2019 and 26.5 % in 2020), indicating better employment outcomes for VET graduates.

The unemployment rate (age group 15-70 years) continued to decline from 26.1 % in 2015 to 15.7 % in 2022. The decline has been more pronounced for women, but this was rather on account of their falling activity rate. The unemployment rate remains more than twice as high as the EU average (6.2 % in 2022). Regarding youth unemployment (age group 15-29 years), the downward trend has continued: from 30.5 % in 2019 to 24.7 % in 2022.

In 2021, the unemployment rate was 23.2 % for people with low education 11.7 % for people with higher education and 15.6% for those with medium education.

In 2020, long-term unemployment stood at 12.4 % of the labour force (age group 15+ years), compared to 2.7 % in the EU. Workers with low education are at the highest risk of long-term unemployment, followed by those with intermediate non-vocational qualifications.

The labour market is characterised by strong regional disparities, with a large employment gap between the best performing south-east and the worst performing north-east.

In 2022, the Employment Service Agency of the Republic of North Macedonia (ESARNM) registered 402 439 vacancies in total, an increase compared to the previous year. The largest number of vacancies were in (i) manufacturing; (ii) wholesale and retail trade; repair of motor vehicles and motorcycles; and (iii) accommodation and food services. In terms of major occupational groups, the largest number of vacancies were for service and sales workers (ISCO group 5), elementary occupations (ISCO group 9) and professionals (ISCO group 2). As noted by the World Bank, 'rising labour shortages due to out-migration and population ageing pushed the vacancy rate up to a decade high, particularly for services and construction workers' (World Bank, 2023).



The quality of available jobs remains a matter of concern, with inadequate earnings, unstable and unequal working conditions, and a lack of security, all of which may contribute to emigration. However, the incidence of precarious employment has been steadily decreasing and reached 12.8 % in 2021.

#### Labour market and employment statistics

The statistical system of North Macedonia is well developed and provides data in line with Eurostat methodologies. The Employment Service Agency of the Republic of North Macedonia (ESARNM) conducts regular surveys to identify skills needs in the labour market. Survey results are used to inform ESARNM's employment programmes and services.

A system for collecting data on labour demand and forecasting future skills needs is still under development. In 2021, the Economic Chamber of North Macedonia, with support from Helvetas, published an analysis of skills supply and demand in five planning regions (Vardar, East, Pelagonija, South-East, and Skopje) to provide evidence for the establishment of regional vocational education and training centres<sup>15</sup>.

Tracer studies are not carried out on a regular basis. The only exception is the pilot tracer study carried out under IPA action EU4Youth (see section on quality assurance). This limits evidence-based evaluation and policymaking.

### **3.2 Employment policy and institutional settings**

#### Strategy and legal framework in the employment policy field

The National Employment Strategy 2021-2027 and the Employment Action Plan 2021-2023 continue to define the improvement of the quality of education and training outcomes for all as the first employment policy objective. This policy objective includes three targets: reduce the vertical skills mismatch for the age group 15-64 years by 5 %; increase the average score of North Macedonian students in the PISA 2025 assessment by at least 10 percentage points; and increase the share of adults (age group 25-64 years) in training to 16 %.

The second policy objective relates to the role of economic and enterprise development policies in the creation of decent jobs and targets innovation, competitiveness, a reduction of informal employment and increased female participation in the labour market.

The third policy objective focuses on inclusive labour market policies and sets targets for the share of people at risk of poverty (18 % by 2027) and the share of workers in informal employment (10 % by 2027).

The cost of the strategy is estimated to be EUR 135 million (MoLSP, 2021).

#### Initiatives to boost employment

The Employment Service Agency of the Republic of North Macedonia (ESARNM) provides a comprehensive range of modern services, divided into labour market services and labour market measures.

Labour market services refer to labour market interventions where the main activity of the participants is job search and where participation does not normally lead to a change in labour market status, and include:

- employment mediation
- information and counselling on employment
- information and counselling: 'Motivation training' service
- active job search, vocational orientation and career guidance.



<sup>&</sup>lt;sup>15</sup> <u>https://www.mchamber.mk/upload/publications/4/793\_2.pdf</u>.

A total of 65 552 persons benefited from labour market services in 2022, which is slightly less than in 2021.

Labour market measures include:

- entrepreneurship or support for self-employment
- measures aiming to support the creation of new jobs
- education and training for the development of digital skills
- internships
- public work
- community work
- youth allowance.

The total number of participants in labour market measures participants has increased over the years, reaching 11 631 in 2022. However, participation in skills development opportunities such as (re)training or internships remained rather limited (approx. 2 300 in 2022).

North Macedonia was the first country outside the EU to introduce the Youth Guarantee (YG) scheme, which provides support to young people aged 15-29 years who register as unemployed for the first time. Support takes the form of employment, continuous education and training or inclusion in active employment programmes within a period of 4 months after registration. The scheme is coordinated by the Ministry of Labour and Social Policy, while the Public Employment Agency is responsible for its implementation. The implementation of the scheme also included plans for outreach activities in cooperation with civil society organisations and partnerships with the Ministry of Education and Science on early intervention measures.

The introduction of the Youth Guarantee was followed by a significant reduction in the NEET rate (aged 15-29 years), which fell from 29.8 % in 2018 to 24.3 % in 2021, and 22.8 % in 2022. Most of this positive trend can be attributed to falling unemployment, while the reduction in the share of the inactive youth among NEETs was modest.

The YG Implementation Plan for 2020-2022 focused on early intervention, outreach and improving the quality of provision. It was supported by the IPA II 'EU for Youth' programme and focused on the Polog, the Northeast and the Southwest regions, where the share of NEETs is the highest. In 2021, more than 19 200 NEETs registered with the scheme, which represents approximately 20 % of the total NEET population (MoLSP, 2022). Further increases in annual registrations will not be possible without increasing the ESARNM's budget and staff capacity.

Since 2018, over 70 000 NEETs registered with the scheme and 38 % received an offer of employment, training, or a traineeship. According to the draft YG Implementation Plan 2023-2026 approximately 40 % of NEETs who received a YG offer were in a positive situation 18 months after leaving the scheme. However, 20 % of the beneficiaries returned to the system, which highlights the need for further improvement in the quality of offers. The new plan provides for improving the quality and increasing the quantity of offers. This will be done through an in-depth analysis of data on service delivery, including research into achieving a better work and family life balance (which is relevant in light of the higher share of inactive young women) and the influence of the welfare system, and the provision of additional resources to the ESARNM.



#### **Target beneficiaries**

The Employment Service Agency of the Republic of North Macedonia (ESARNM) has a welldeveloped approach to individual profiling. Services are tiered according to the type of client: standard services are provided to ordinary clients, while clients with major employability problems receive tailored, more intensive services. The ESARNM has a good record of meeting the targets set out in its annual plans and evaluating and revising specific programmes and services on a regular basis. Targeting could be improved through multiple eligibility criteria to reduce the 'creaming' effect (ETF, 2021).

In 2022, 112 733 persons registered as unemployed with the ESARNM, which is lower than in the previous year, while 47 090 people were registered as other jobseekers, also slightly lower than in the previous year.

As a trend over the years, slightly more women than men registered as unemployed, and in 2022 the pattern remained the same with a small gap (57 763 women against 54 763 men). There is also a difference between the unemployed under the age of 29 years and those aged over the age of 29 years. The latter category is more than three times larger than the under 29 category every year, and 2022 will be no exception (21 304 under 29 years and 91 429 over 29 years). As regards the level of education, the lowest number of registered unemployed in 2019-2022 had tertiary education. In 2022, there were 8 268 registered unemployed in this category. The highest number of registered unemployed had the lowest level of education, 76 042 persons in 2022 — a number that has been decreasing since 2020.

In 2022, 25.1 % of registered unemployed transited from unemployment into employment, with a slightly higher rate for women, and for people under the age of 29 years (44.8 %) compared to those over the age of 29 years (20.5 %).

In terms of educational attainment, the percentage of registered unemployed who moved from unemployment to employment in 2022 was the highest for those with higher education (82.3 %) and lowest for persons with a low level of education (only 12.3 %).

#### Initiatives to increase the capacity of the public employment services

The total expenditure of the Employment Service Agency has increased in recent years, rising from 0.44 % of GDP in 2019 to 0.46 % in 2021<sup>16</sup>. Spending on active employment programmes and measures also increased in recent years, rising from 0.17 % of GDP in 2019 to 0.21 % of GDP in 2021.

However, the capacity of the ESARNM is limited not only by insufficient government investment in active labour market policies, but also by staff shortages (European Commission, 2022). The progress achieved does not yet allow for a higher coverage rate (in 2022 ESARNM provided services to 41 % of all registered persons). Coverage also remains uneven between regional offices, which have a disproportionate workload. The latest strategy report challenges related to low staff-to-beneficiary ratios (1 226 in 2019, twice the international benchmark), limited funding, reliance on donor projects for staff training and limited investment in IT infrastructure. Staff shortages relate in particular to the lack of psychologists. These challenges result in an uneven service delivery across the country (MoLSP, 202).

For further information please contact Lisa Rustico, European Training Foundation, email: Lisa.Rustico@etf.europa.eu.

<sup>&</sup>lt;sup>16</sup> Source: The Employment Service Agency of the Republic of North Macedonia (<u>https://av.gov.mk</u>): information about expenditure of the Employment Service Agency is extracted from Annual reports. ETF calculations

# NORTH MACEDONIA: STATISTICAL ANNEX

The Annex includes annual data from 2010, 2015, 2019, 2020, 2021 and 2022 or the last available year.

|    | Indicator   |             | 2010   | 2015                | 2019                | 2020   | 2021   | 2022              |
|----|---|-------------|--------|---------------------|---------------------|--------|--------|-------------------|
| 1  | Total Population ('000) <sup>(1)</sup>  |             | 2055.0 | 2070.2              | 2076.7              | 2072.5 | 2065.1 | 2057.7            |
| 2  | Relative size of youth population (age group 15-24 and denominator age 15-64, %) <sup>(1) C</sup> |             | 21.8   | 20.1                | 18.8                | 18.4   | 17.9   | 17.6              |
| 3  | GDP growth rate (%)   |             | 3.4    | 3.9                 | 3.9                 | -6.1   | 5.5    | 2.1               |
| 4  | Gross value added by sector (%)   | Agriculture | 10.1   | 9.7                 | 8.1                 | 8.6    | 7.2    | 8.1               |
|    |   | Industry    | 21.0   | 23.9                | 23.7                | 22.7   | 22.4   | 22.9              |
|    |   | Services    | 55.1   | 53.7                | 55.0                | 56.6   | 56.9   | 58.8              |
| 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 (%) C  |             | M.D.   | 97.8 <sup>(5)</sup> | M.D.                | M.D.   | M.D.   | M.D.              |
| 8  | Educational attainment of total population (aged 15-74) (%)                                       | Low(2)      | 42.1   | 37.2                | 32.8                | 31.8   | 31.9   | 27.3              |
|    |   | Medium(3)   | 43.0   | 46.6                | 49.4                | 48.7   | 48.9   | 42.7              |
|    |   | High(4)     | 12.8   | 16.2                | 17.9                | 19.4   | 19.3   | 17.0              |
| 9  | Early leavers from<br>education and training<br>(aged 18-24) (%)                                  | Total       | 15.5   | 11.4                | 7.1                 | 5.7    | 4.6    | 6.2               |
|    |   | Male        | 13.7   | 10.0                | 5.9                 | 5.7    | 4.7    | 5.5               |
|    |   | Female      | 17.5   | 12.9                | 8.4                 | 5.8    | 4.6    | 6.9               |
| 10 | Net enrolment rates in secondary education (ISCED level 2-3) (%)                                  |             | M.D.   | M.D.                | M.D.                | M.D.   | M.D.   | M.D.              |
| 11 | Share of VET students in u education (ISCED level 3) (  |             | 60.0   | 59.5                | 60.2                | 60.2   | 61.2   | 62.1 <sup>C</sup> |
| 12 | Low achievement in reading, mathematics and science – PISA (%)                                    | Reading     | N.A.   | 70.7                | 55.1 <sup>(7)</sup> | N.A.   | N.A.   | N.A.              |
|    |   | Mathematics | N.A.   | 70.2                | 61.0 <sup>(7)</sup> | N.A.   | N.A.   | N.A.              |
|    |   | Science     | N.A.   | 62.9                | 49.5 <sup>(7)</sup> | N.A.   | N.A.   | N.A.              |
| 13 | Activity rate (aged 15+)<br>(%)   | Total       | 55.7   | 55.4                | 55.5                | 54.6   | 54.1   | 55.2              |
|    | (70)  | Male        | 68.6   | 67.4                | 66.1                | 65.4   | 65.5   | 66.1              |
|    |   | Female      | 42.9   | 43.5                | 44.9                | 44.0   | 42.9   | 44.5              |





|    | Indicator  |                       | 2010                | 2015                | 2019                | 2020                | 2021              | 2022 |
|----|--|-----------------------|---------------------|---------------------|---------------------|---------------------|-------------------|------|
| 14 | Inactivity rate (aged 15+)<br>(%) °  | Total                 | 44.3                | 44.6                | 44.5                | 45.4                | 45.9              | M.D. |
|    |  | Male                  | 31.4                | 32.6                | 33.9                | 34.6                | 34.5              | M.D. |
|    |  | Female                | 57.1                | 56.5                | 55.1                | 56.0                | 57.1              | M.D. |
| 15 | Employment rate (aged 15+) (%)   | Total                 | 37.9                | 40.9                | 45.9                | 45.7                | 45.6              | M.D. |
|    | 13+) (70)  | Male                  | 46.7                | 49.4                | 55.2                | 54.5                | 54.7              | M.D. |
|    |  | Female                | 29.1                | 32.6                | 36.7                | 37.0                | 36.6              | M.D. |
| 16 | Employment rate by educational attainment  | Low <sup>(2)</sup>    | 23.5 <sup>(6)</sup> | 25.6 <sup>(6)</sup> | 26.1 <sup>(6)</sup> | 25.3 <sup>(6)</sup> | 21.5°             | M.D. |
|    | educational attainment<br>(aged 15+) (%)   | Medium <sup>(3)</sup> | 47.8 <sup>(6)</sup> | 50.1 <sup>(6)</sup> | 56.1 <sup>(6)</sup> | 55.0 <sup>(6)</sup> | 54.4°             | M.D. |
|    |  | High <sup>(4)</sup>   | 65.0 <sup>(6)</sup> | 65.2 <sup>(6)</sup> | 71.0 <sup>(6)</sup> | 71.3(6)             | 70.8°             | M.D. |
| 17 | Employment by sector<br>(%) <sup>c (8)</sup>   | Agriculture           | M.D.                | 17.9                | 13.9                | 12.0                | 11.1              | M.D. |
|    |  | Industry              | M.D.                | 30.5                | 31.1                | 30.9                | 30.9              | M.D. |
|    |  | Services              | M.D.                | 51.6                | 55.0                | 57.0                | 58.0              | M.D. |
| 18 | Incidence of self-employme   | ent (%) °             | 28.5                | 26.1                | 21.1                | 18.1                | 17.0              | M.D. |
| 19 | Incidence of vulnerable employment (%) c   |                       | 23,1                | 21.8                | 17.2                | 14.3                | 12.8              | M.D. |
| 20 | Unemployment rate (age<br>group 15-70 years) (%)   | Total                 | 32.0 (6)            | 26.1                | 17.3                | 15.8                | 15.7              | 15.7 |
|    |  | Male                  | 31.9 <sup>(6)</sup> | 26.8                | 16.5                | 16.3                | 16.5              | 16.0 |
|    |  | Female                | 32.2 (6)            | 25.1                | 18.4                | 15.0                | 14.6              | 12.1 |
| 21 | Unemployment rate by<br>educational attainment<br>(age group 15+ years)<br>(%)                           | Low <sup>(2)</sup>    | 39.0 <sup>(6)</sup> | 29.9 <sup>(6)</sup> | 23.4 (6)            | 21.4 (6)            | 23.2 °            | M.D. |
|    |  | Medium <sup>(3)</sup> | 32.1 (6)            | 26.6 (6)            | 16.6 <sup>(6)</sup> | 16.2 <sup>(6)</sup> | 15.6 <sup>c</sup> | M.D. |
|    |  | High <sup>(4)</sup>   | 21.8 (6)            | 21.1 (6)            | 14.3 <sup>(6)</sup> | 13.7 <sup>(6)</sup> | 11.7 °            | M.D. |
| 22 | Unemployment rate (age<br>group 15-24 years) (%)   | Total                 | 53.7                | 47.3                | 35.6                | 35.7                | 36.4 °            | M.D. |
|    |  | Male                  | 53.9                | 49.7                | 33.4                | 34.0                | 33.5 °            | M.D. |
|    |  | Female                | 53.3                | 43.3                | 38.9                | 38.6                | 41.5 °            | M.D. |
| 23 | Proportion of people age<br>group 15-24 years not in<br>employment, education or<br>training (NEETs) (%) | Total                 | 26.0                | 24.7                | 18.1                | 19.6                | 17.9              | 18.0 |
|    |  | Male                  | 25.0                | 24.5                | 17.1                | 19.4                | 18.3              | 17.6 |
|    |  | Female                | 26.0                | 24.9                | 19.2                | 19.8                | 17.6              | 18.4 |
| 24 | Proportion of people age group 15-29 years not in  | Total                 | M.D.                | M.D.                | 24.5                | 26.2                | 24.3              | 22.8 |
|    | employment, education or<br>training (NEETs) (%)   | Male                  | M.D.                | M.D.                | 20.9                | 23.6                | 22.6              | 21.1 |



|    | Indicator   |        | 2010  | 2015  | 2019  | 2020  | 2021  | 2022 |
|----|---|--------|-------|-------|-------|-------|-------|------|
|    |   | Female | M.D.  | M.D.  | 28.3  | 29.0  | 26.1  | 24.5 |
| 25 | Participation in<br>training/lifelong learning<br>(% age group 25-<br>64 years) | Total  | 3.5   | 2.6   | 2.8   | 2.6   | M.D.  | M.D. |
|    |   | Male   | 3.4   | 2.7   | 2.8   | 2.5   | M.D.  | M.D. |
|    |   | Female | 3.6   | 2.5   | 2.7   | 2.7   | M.D.  | M.D. |
| 26 | Human Development Index   |        | 0.738 | 0.762 | 0.784 | 0.774 | 0.770 | M.D. |

Last update: 31/07/2023

#### Sources:

Indicators 1, 2, 3, 4, 5, 6, 7, 11: The World Bank, World Development Indicators database.

Indicators 7, 10, 11: UNESCO, Institute for Statistics.

Indicators 13 (2021), 14 (2021), 15 (2021), 16 (2021), 17 (2021), 18 (2021), 19 (2021), 20 (2021), 21 (2021), 22 (2021): ILOSTAT-LFS.

Indicators 8, 9, 13 (2010-2020), 14 (2010-2020), 15 (2010-2020), 16 (2010-2020), 17 (2015-2020), 18 (2010-2020), 19 (2010-2020), 20 (2010), 21 (2010-2020), 22 (2010-2020), 23 (2010, 2015), 24: Eurostat data.

Indicators 13 (2022), 20 (2015-2022), 23 (2019-2022): MK Labour Force Survey.

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

Indicator 25: UNDP.

#### Notes:

- <sup>(1)</sup> Estimation.
- (2) Low ISCED 0-2.
- <sup>(3)</sup> Medium ISCED 3-4.
- (4) High ISCED 5-8.
- <sup>(5)</sup> applies to 2014.
- <sup>(6)</sup> age 15-74.
- <sup>(7)</sup> applies to 2018.
- <sup>(8)</sup> Totals do not add to 100 due to economic activities not allocated by sector.

<sup>(9)</sup> does not include 'Activities of households as employers; undifferentiated goods- and services-producing activities of households for own use' and 'Activities of extraterritorial'.

#### Legend:

C = ETF calculations N.A. = Not Applicable M.D. = Missing Data

### **Annex: definitions of Indicators**

|   | Description  | Definition   |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| 1 | Total population ('000)  | The total population is estimated as the number of people having their usual residence in a country on 1 January of the respective year. When information on the usually resident population is not available, countries may report legal or registered residents.   |  |  |  |  |  |
| 2 | Relative size of youth<br>population (age group 15–<br>24) (%)           | This is the ratio of the youth population (aged 15–24) to the working-age population, usually aged 15–64 (or 15–74 or 15+).  |  |  |  |  |  |
| 3 | GDP growth rate (%)  | Annual percentage growth rate of GDP at market prices based on constant local currency. Aggregates are based on constant 2010 US dollars. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.   |  |  |  |  |  |
| 4 | Gross value added by   | The share of value added from Agriculture, Industry and Services.  |  |  |  |  |  |
|   | sector (%)   | Agriculture corresponds to ISIC divisions 1–5 and includes forestry, hunting, and fishing, as well as cultivation of crops and livestock production. Value added is the net output of a sector after adding up all outputs and subtracting intermediate inputs. It is calculated without making deductions for depreciation of fabricated assets or depletion and degradation of natural resources. The origin of value added is determined by the International Standard Industrial Classification (ISIC), revision 3 or 4. |  |  |  |  |  |
|   |  | Industry corresponds to the International Standard Industrial Classification (ISIC) tabulation categories C-F (revision 3) or tabulation categories B-F (revision 4) and includes mining and quarrying (including oil production), manufacturing, construction, and public utilities (electricity, gas, and water).  |  |  |  |  |  |
|   |  | Services correspond to ISIC divisions 50-99 and they include value added in wholesale and retail trade (including hotels and restaurants), transport, and government, financial, professional, and personal services such as education, health care, and real estate services. Also included are imputed bank service charges, import duties, and any statistical discrepancies noted by national compilers as well as discrepancies arising from rescaling.   |  |  |  |  |  |
| 5 | Public expenditure on education (as % of GDP)                            | Public expenditure on education expressed as a percentage of GDP.  |  |  |  |  |  |
|   | education (as % of GDP)  | Generally, the public sector funds education either by directly bearing the current<br>and capital expenses of educational institutions, or by supporting students and their<br>families with scholarships and public loans as well as by transferring public<br>subsidies for educational activities to private firms or non-profit organisations<br>(transfer to private households and enterprises). Both types of transactions together<br>are reported as total public expenditure on education.                        |  |  |  |  |  |
| 6 | Public expenditure on<br>education (as % of total<br>public expenditure) | Public expenditure on education expressed as a percentage of total public expenditure.   |  |  |  |  |  |
|   |  | Generally, the public sector funds education either by directly bearing the current<br>and capital costs of educational institutions, or by supporting students and their<br>families with scholarships and public loans as well as by transferring public<br>subsidies for educational activities to private firms or non-profit organisations<br>(transfer to private households and enterprises). Both types of transactions together<br>are reported as total public expenditure on education.                           |  |  |  |  |  |
| 7 | Adult literacy (%)   | Adult literacy is the percentage of the population aged 15 years and over who can both read and write a short simple statement on his/her everyday life, and   |  |  |  |  |  |

|    | Description   | Definition  |
|----|---|---|
|    |   | understand it. Generally, 'literacy' also encompasses 'numeracy' – the ability to make simple arithmetic calculations.  |
| 8  | Educational attainment of<br>total population (age<br>groups 15+ years/ 15-74<br>years) (%) (6) | Educational attainment refers to the highest educational level achieved by individuals expressed as a percentage of all persons in that age group.  |
|    |   | This is usually measured in terms of the highest educational programme successfully completed, which is typically certified by a recognised qualification. Recognised intermediate qualifications are classified at a lower level than the programme itself.  |
| 9  | Early leavers from<br>education and training<br>(age group 18-24 years)<br>(%)                  | Early leavers from education and training are defined as the percentage of the population aged 18-24 with lower secondary education at most who were not in further education or training during the four weeks preceding the survey. Lower secondary education refers to ISCED 1997 levels 0-2 and 3C short (i.e. programmes lasting under two years) for data up to 2013 and to ISCED 2011 levels 0-2 for data from 2014 onwards. |
| 10 | Net enrolment rates in secondary education (ISCED levels 2-3) (%)                               | This indicator covers the enrolments in a given level of education of children/youths belonging to the official age group corresponding to the given level of education.  |
| 11 | Share of VET students in<br>upper secondary<br>education (ISCED level 3)<br>(%)                 | Total number of students enrolled in vocational programmes at a given level of education (in this case, upper secondary), expressed as a percentage of the total number of students enrolled in all programmes (vocational and general) at that level.  |
| 12 | Low achievement in reading, maths and science – PISA (%)  | Low achievers are the 15-year-olds who are failing to reach level 2 on the PISA scale for reading, mathematics and science.   |
| 13 | Activity rate (age group<br>15+ years) (%)  | The activity rate is calculated by dividing the active population by the population of the same age group. The active population (also called 'labour force') is defined as the sum of employed and unemployed people. The inactive population consists of all people who are classified as neither employed nor unemployed.  |
| 14 | Inactivity rate (age group<br>15+ years) (%)  | The inactivity/out of the labour force rate is calculated by dividing the inactive population by the population of the same age group. The inactive population consists of all people who are classified as neither employed nor unemployed.  |
| 15 | Employment rate (age<br>group 15+ years) (%)  | The employment rate is calculated by dividing the number of employed people by<br>the population of the same age group. Employed people are all people who worked<br>at least one hour for pay or profit during the reference period or were temporarily<br>absent from such work. If a different age group is used, this should be indicated.  |
| 16 | Employment rate by<br>educational attainment<br>(age group 15+ years) (%)                       | The employment rate is calculated by dividing the number of employed persons by<br>the population of the same age group. Employed persons are all persons who<br>worked at least one hour for pay or profit during the reference period or were<br>temporarily absent from such work. If a different age group is used, this should be<br>indicated.  |
|    |   | Educational levels refer to the highest educational level successfully completed.<br>Three levels are considered: Low (ISCED level 0-2), Medium (ISCED level 3-4) and<br>High (ISCED 1997 level 5-6, and ISCED 2011 level 5-8).   |
| 17 | Employment by sector (%)  | This indicator provides information on the relative importance of different economic activities with regard to employment. Data are presented by broad branches of economic activity (i.e. Agriculture/Industry/Services) based on the International Standard Industrial Classification of All Economic Activities (ISIC). In Europe, the NACE classification is consistent with ISIC.  |



|    | Description   | Definition   |
|----|---|--|
| 18 | Incidence of self-<br>employment (%)  | The incidence of self-employment is expressed by the self-employed (i.e. employers + own-account workers + contributing family workers) as a proportion of the total employed.   |
| 19 | Incidence of vulnerable employment (%)  | The incidence of vulnerable employment is expressed by the own-account workers and contributing family workers as a proportion of the total employed.  |
| 20 | Unemployment rate (age<br>groups 15+ years / 15-70<br>years) (%)                              | The unemployment rate represents unemployed people as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed people comprise those aged 15-64 or 15+ who were without work during the reference week; are currently available for work (were available for paid employment or self-employment before the end of the two weeks following the reference week); are actively seeking work, i.e. had taken specific steps in the four-week period ending with the reference week to seek paid employment or self-employment, or had found a job to start later (within a period of, at most, three months).   |
| 21 | Unemployment rate by<br>educational attainment<br>(age group 15+ years) (%)                   | The unemployment rate represents unemployed people as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed people comprise those aged 15-64 or 15+ who were without work during the reference week; are currently available for work (were available for paid employment or self-employment before the end of the two weeks following the reference week); are actively seeking work (had taken specific steps in the four-week period ending with the reference week to seek paid employment or self-employment, or had found a job to start later (within a period of, at most, three months)). Educational levels refer to the highest educational level successfully completed. Three levels are considered: low (ISCED level 0-2), medium (ISCED level 3-4) and high (ISCED 1997 level 5-6, and ISCED 2011 level 5-8). |
| 22 | Unemployment rate (age<br>group 15-24 years) (%)  | The unemployment rate represents unemployed people as a percentage of the labour force. The labour force is the total number of people who are employed or unemployed. Unemployed people comprise those aged 15-24 who were without work during the reference week; are currently available for work (were available for paid employment or self-employment before the end of the two weeks following the reference week); are actively seeking work, i.e. had taken specific steps in the fourweek period ending with the reference week to seek paid employment or self-employment, or had found a job to start later (within a period of, at most, three months).   |
| 23 | Proportion of people aged<br>15-24 not in employment,<br>education or training<br>(NEETs) (%) | The indicator provides information on young people aged 15-24 who meet the following two conditions: first, they are not employed (i.e. unemployed or inactive according to the ILO definition); and second, they have not received any education or training in the four weeks preceding the survey. Data are expressed as a percentage of the total population of the same age group and gender, excluding the respondents who have not answered the question on participation in education and training.  |
| 24 | Participation in<br>training/lifelong learning<br>(% age group 25-64 years)                   | Participants in lifelong learning refers to persons aged 25-64 who stated that they received education or training in the four weeks preceding the survey (numerator). The denominator is the total population of the same age group, excluding those who did not answer the question on participation in education and training. The information collected relates to all education or training, whether or not it is relevant to the respondent's current or possible future job. If a different reference period is used, this should be indicated.   |
| 25 | Human Development<br>Index  | The index is a summary measure of average achievement in key dimensions of human development: a long and healthy life, being knowledgeable and have a decent standard of living.   |



### **KEY DONOR PROJECTS IN EDUCATION, TRAINING AND EMPLOYMENT**

The reforms of the education system are supported by a large package of EU IPA II actions:

- The 'EU for Youth' Sector Reform Performance Contract, with a value of EUR 16 million (2020-2023), aims to improve the quality, relevance and inclusiveness of the national VET system and increase employment opportunities for young men and women. It supports the establishment of RVETCs and the further implementation of the Youth Guarantee scheme.
- The Twinning Project entitled 'Further support to the implementation of the NQF' (EUR 1.5 million; 2021-2024).
- The Technical Assistance project 'Increasing attractiveness, inclusiveness and relevance of VET and adult education' (2021-2024) supports the identification and establishment of two additional RVETCs. Additionally, it includes components on the validation of non-formal and informal learning and on improving the system for post-secondary education.
- The 'Development of the new education management information system' (2021-2023) project aims at consolidating and upgrading the existing databases towards improved capacity for evidence-based policymaking.

The 'Education for Employment in North Macedonia (E4E)' project (2018-2028), funded by the Swiss government and implemented by Helvetas, supports formal and non-formal VET, in particular work-based learning.

The World Bank 'Primary Education Improvement Project', with a budget of EUR 21.5 million, was launched in 2021 and is scheduled to run until 2026. It supports improvements in the learning environment and the quality of primary education.

The United Nations Development Programme (UNDP) provides support for inclusiveness policies, mainly in primary education, to support vulnerable groups through counselling and guidance.





# **ABBREVIATIONS**

| BDE    | Bureau for Development of Education                          |  |  |  |
|--------|--|--|--|--|
| ESARNM | Employment Service Agency of the Republic of North Macedonia |  |  |  |
| ETF    | European Training Foundation.                                |  |  |  |
| EU     | European Union   |  |  |  |
| GMA    | Guaranteed Minimum Assistance                                |  |  |  |
| ILO    | International Labour Organization                            |  |  |  |
| MoES   | Ministry of Education and Science                            |  |  |  |
| NEET   | Person not in education, employment or training              |  |  |  |
| NQF    | National Qualifications Framework                            |  |  |  |
| PISA   | Programme for International Student Assessment               |  |  |  |
| RVETC  | Regional Vocational Education and Training Centre            |  |  |  |
| UNDP   | United Nations Development Programme                         |  |  |  |
| VET    | Vocational Education and Training                            |  |  |  |
| VNFIL  | Validation on non-formal and informal learning               |  |  |  |
| YG     | Youth Guarantee  |  |  |  |



# LIST OF REFERENCES

Council of the European Union (2020), Council recommendation of 30 October 2020 *on A Bridge to Jobs – Reinforcing the Youth Guarantee* and replacing the Council Recommendation of 22 April 2013 on establishing a Youth Guarantee 2020/C-372/01, Official Journal of the European Union, C-372/1, 4.11.2020, available at <u>https://eur-lex.europa.eu/legal-</u>content/EN/TXT/?uri=uriserv%3AOJ.C .2020.372.01.0001.01.ENG.

Deutsche Welle (2022), North Macedonia: *Parliament approves deal to start EU bid*. Deutsche Welle, 16 July 2022, <u>https://www.dw.com/en/north-macedonia-parliament-approves-deal-to-start-eu-bid/a-62499177</u>, last accessed on 6.10.2022.

EBRD (2022), North Macedonia Overview <u>https://www.ebrd.com/where-we-are/north-macedonia/overview.html</u>, last accessed on 6.10.2022.

EBRD North Macedonia Transition Report 2021-22, <u>Countries | EBRD TR2021 (tr-ebrd.com)</u>, last accessed on 6.10.2022.

Economic Chamber (2021), Analysis of the supply and demand of skills in five planning regions (Skopje, East, Pelagonija, South-East, And Vardar) of The Republic of North Macedonia). Economic base for establishing Regional Vocational Education and Training Centers, <a href="https://www.mchamber.mk/upload/publications/4/793\_2.pdf">https://www.mchamber.mk/upload/publications/4/793\_2.pdf</a>.

ETF (2021a), The European Training Foundation, Petreski M. *How migration, human capital and the labour market interact in North Macedonia*, Turin, 2021, available at: <a href="https://www.etf.europa.eu/en/publications-and-resources/publications/how-migration-human-capital-and-labour-market-interact-0">https://www.etf.europa.eu/en/publications-and-resources/publications/how-migration-human-capital-and-labour-market-interact-0</a>, last accessed on 6.10.2022.

ETF (2023), The European Training Foundation, *National Qualifications Framework - North Macedonia*, Turin, 2023, available at <u>https://www.etf.europa.eu/sites/default/files/2023-06/North%20Macedonia%202023.pdf</u>.

ETF (2023b), North Macedonia statistical profile (forthcoming).

ETF (2021c), The European Training Foundation, A. Onosimoski, *Effectiveness and innovation* potential in the area of active labour market policies, with focus on ETF Partner Countries, Country Report North Macedonia, Unpublished report, 2021.

Eurofound-ETF (2022), *Living, working and COVID-19 in the European Union and 10 EU neighbouring countries*, Publications Office of the European Union, Luxembourg, 2022 available at: <a href="https://www.eurofound.europa.eu/publications/report/2022/living-working-and-covid-19-in-the-european-union-and-10-eu-neighbouring-countries">https://www.eurofound.europa.eu/publications/report/2022/living-working-and-covid-19-in-the-european-union-and-10-eu-neighbouring-countries</a>.

European Commission (2022), COMMISSION STAFF WORKING DOCUMENT North Macedonia 2022 Report Accompanying the document Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions 2022 Communication on EU Enlargement policy, SWD(2022) 337 final, <u>https://neighbourhoodenlargement.ec.europa.eu/system/files/2022-10/North%20Macedonia%20Report%202022.pdf</u>.

European Commission/EACEA/Eurydice, 2023. Promoting diversity and inclusion in schools in Europe. Eurydice report. Luxembourg: Publications Office of the European Union. European Education and Culture Executive Agency Unit A6 – Platforms, Studies and Analysis Avenue du Bourget 1 (J-70 – Unit A6) B-1049 Brussels Website: <u>http://eurydice.eacea.ec.europa.eu</u>.

European Commission (2023), 2023 Economic Reform Programmes of Albania, Montenegro, North Macedonia, Serbia, Turkey, Bosnia and Herzegovina and Kosovo\*, The Commission's Overview & Country Assessments Economic and Financial Affairs Neighbourhood and Enlargement Negotiations Employment, Social Affairs and Inclusion, Institutional Paper 252. May 2023. Brussels, available at: <a href="https://economy-finance.ec.europa.eu/system/files/2023-05/ip252\_en.pdf">https://economy-finance.ec.europa.eu/system/files/2023-05/ip252\_en.pdf</a>, last accessed on 20.09.2023.



European Innovation Scoreboard, 2022, North Macedonia Country Profile, available at: <u>https://ec.europa.eu/assets/rtd/eis/2022/ec\_rtd\_eis-country-profile-mk.pdf last accessed on 6.10.2022</u>.

Twinning (2023) Contract No: 12-6698/1 Reports. Twinning Reference No: MK IPA 17 SO 01 Title: 'Further support to the implementation of the National Qualifications Framework', unpublished.

IMF (2019), International Monetary Fund, *Explaining the Shadow Economy in Europe: Size, Causes and Policy Options*, *Working Paper no.19/278,* <u>https://www.imf.org/en/Publications/WP/Issues/2019/12/13/Explaining-the-Shadow-Economy-in-</u> Europe-Size-Causes-and-Policy-Options-48821.

MAKSTAT (2021), State Statistical Office of the Republic of North Macedonia, *Census of Population, Households and Dwellings in the Republic of North Macedonia, 2021 - first dataset* available at: <a href="https://www.stat.gov.mk/PrikaziSoopstenie">https://www.stat.gov.mk/PrikaziSoopstenie</a> en.aspx?rbrtxt=146 last accessed on 6.10.2022, also <a href="https://www.stat.gov.mk/PrikaziSoopstenie">'Census 2021 - first dataset available at: <a href="https://www.stat.gov.mk/PrikaziSoopstenie">https://www.stat.gov.mk/PrikaziSoopstenie</a> en.aspx?rbrtxt=146 last accessed on 6.10.2022, also <a href="https://www.stat.gov.mk/PrikaziSoopstenie">'Census 2021'</a> retrieved on 6.10.2022, also

MAKSTAT (2022) State Statistical Office, Republic of North Macedonia, *North Macedonia in figures* 2022, June 2022, available at: <u>https://www.stat.gov.mk/publikacii/2022/MK-brojki-2022-en.pdf</u>.

MoES (2018), Ministry of Education and Science, Education Strategy for 2018-2025 and Action Plan.

MoF (2023), Ministry of Finance, Republic of North Macedonia, ECONOMIC REFORM PROGRAMME 2023-2025 January 2023, <u>https://finance.gov.mk/wp-content/uploads/2023/02/ERP-2023-2025.pdf</u> last accessed on 4.10.2023.

MoLSP (2021), Ministry of Labour and Social Policy, *National Employment Strategy 2021-2027 with Employment Action Plan 2021-2023*, Government of the Republic of North Macedonia, Skopje, 2021 available at: <u>https://www.mtsp.gov.mk/content/pdf/2021/trud/strategija\_vrabotuvanje\_2021\_eng.pdf</u>, last accessed on 5.10.2022.

MoLSP (2022), Youth Guarantee Implementation Plan 2023-2026, May 2022, Draft (unpublished).

NBRM (2020), National Bank of the Republic of North Macedonia, *Angelovska Bezhoska: Foreign currency remittances from emigrants and persons temporarily working abroad are important for the Macedonian economy*, Skopje, 5 August 2020, <u>https://www.nbrm.mk/ns-newsarticle-soopstenie-05082020-en.nspx</u>.

NBRM (2022), National Bank of the Republic of North Macedonia, *Angelovska Bezhoska: Remittances Returned to pre-crisis levels with 44% growth in 2021*, Skopje, 9 April 2022, available at: <u>https://www.nbrm.mk/ns-newsarticle-soopstenie-09042022-1-en.nspx</u>.

Nikoloski, D. (2019), "The gender pay gap in North Macedonia: Assessing the difference between lowpaid and high-paid employees", *SEER Journal for Labour and Social Affairs in Eastern Europe*, Vol. 22/No. 1, available at: <u>https://doi.org/10.5771/1435-2869-2019-1-117</u>, last accessed on 5.10.2022.

OECD (2018), Programme for International Student Assessment (PISA), Volume III.

OECD (2019), *Reviews of Evaluation and Assessment in Education: North Macedonia, 4 June 2019,* <u>https://www.oecd.org/education/oecd-reviews-of-evaluation-and-assessment-in-education-north-macedonia-079fe34c-en.htm</u>.

OECD (2019), *Reviews of Evaluation and Assessment in Education: North Macedonia*, 4 June 2019, <u>https://www.oecd.org/education/oecd-reviews-of-evaluation-and-assessment-in-education-north-macedonia-079fe34c-en.htm</u>.

OECD (2020) *Education in the Western Balkans: Findings from PISA*, PISA, OECD Publishing, Paris, <u>https://doi.org/10.1787/764847ff-en</u>, last accessed on 4.10.2022.

OECD (2021) *Multi-dimensional Review of the Western Balkans: Assessing Opportunities and Constraints*, OECD Development Pathways, OECD Publishing, Paris, 2021, available at: <a href="https://doi.org/10.1787/4d5cbc2a-en">https://doi.org/10.1787/4d5cbc2a-en</a>, last accessed on 15.09.2022.

ESARNM (2021), Employment Service Agency of the Republic of North Macedonia, *Operational Plan 2021,* available at: <u>https://www.mtsp.gov.mk/content/pdf/2021/OP%202021%20(ENG).pdf</u> last accessed on 6.10.2022.

Petreski Marjan, 2020. '*Beyond income inequality in North Macedonia: An overview*,' Finance Think, UNDP, Policy Studies 2020-04/27, Finance Think - Economic Research and Policy Institute. p.19, available at: <u>https://www.financethink.mk/wp-content/uploads/2020/11/Beyond-income-inequality-in-NM\_An-overview-ENG-.pdf</u>, last accessed on 4.10.2022.

The Energy Community Secretariat, 2022, *North Macedonia adopts National Energy and Climate Plan, commits to accelerate energy transition during Secretariat's visit to Skopje*, 31 May 2022, available at: <a href="https://www.energy-community.org/news/Energy-Community-News/2022/06/01.html">https://www.energy-community.org/news/Energy-Community.org/news/Energy-Community-News/2022/06/01.html</a>.

UNICEF (2020), *North Macedonia: Early Childhood Education*, webpage, UNICEF, North Macedonia, Skopje, <u>http://www.unicef.org/northmacedonia/early-childhood-education</u>.

UNICEF 2022, Press release: Statement by UNICEF calling for measures to prevent a lost generation, April 2022, available at <u>https://www.unicef.org/northmacedonia/press-releases/unicef-raises-alarms-extended-disruptions-learning-and-negative-impact-childrens</u>, last accessed on 4.10.2022.

WIIW (2022), Vienna Institute for International Economic Studies, *Overshadowed by War and Sanctions, wiiw Forecast Report No. Spring 2022*, April 2022, available at: <u>https://wiiw.ac.at/overshadowed-by-war-and-sanctions-p-6138.html</u>.

World Bank (2020), North Macedonia Needs to Continue Investing in Education and Health in Order to Improve Its Human Capital, press release, Washington, September 16, 2020, available at: <a href="https://www.worldbank.org/en/news/press-release/2020/09/16/north-macedonia-needs-to-continue-investing-in-education-and-health-in-order-to-improve-its-human-capital">https://www.worldbank.org/en/news/press-release/2020/09/16/north-macedonia-needs-to-continue-investing-in-education-and-health-in-order-to-improve-its-human-capital</a>.

World Bank (2023), *Testing Resilience, Western Balkans Regular Economic Report No. 23:* Spring 2023, available at:

https://documents1.worldbank.org/curated/en/099042023104012719/pdf/P179478085f70601a0aac30 35c4560691ca.pdf, last accessed on 4.10.2023.

World Bank (2023 b) *Poverty and equity brief, Europe and Central Asia, North Macedonia, April 2023,* <u>https://databankfiles.worldbank.org/public/ddpext\_download/poverty/987B9C90-CB9F-4D93-AE8C-750588BF00QA/current/Global\_POVEQ\_MKD.pdf</u>.



