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European Training Foundation

THE EU AGENCY SUPPORTING COUNTRIES TO DEVELOP THROUGH LEARNING

EDUCATION, SKILLS AND EMPLOYMENT — TRENDS AND DEVELOPMENTS

An ETF cross-country monitoring report

2025

This report has been prepared by the European Training Foundation (ETF).

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REGIONAL AND COUNTRY ACRONYMS

Country acronyms

Acronym	Country name	Regional aggregation
KGZ	Kyrgyz Republic	CA
KAZ	Kazakhstan	CA
TJK	Tajikistan	CA
TKM	Turkmenistan	CA
UZB	Uzbekistan	CA
ARM	Armenia	EaP
AZE	Azerbaijan	EaP
GEO	Georgia	EaP
MDA	Moldova	EaP
UKR	Ukraine	EaP
ALB	Albania	SEET
BIH	Bosnia and Herzegovina	SEET
MKD	North Macedonia	SEET
MNE	Montenegro	SEET
SRB	Serbia	SEET
TUR	Türkiye	SEET
XXK	Kosovo*	SEET
DZA	Algeria	SEMED
EGY	Egypt	SEMED
ISR	Israel	SEMED
JOR	Jordan	SEMED
LBN	Lebanon	SEMED
MAR	Morocco	SEMED
PSE	Palestine*	SEMED
TUN	Tunisia	SEMED

Acronyms regional aggregations

Acronym	Region name
CA	Central Asia
EaP	Eastern Partnership
EU27 or EU	European Union
SEET	Southeastern Europe and Türkiye
SEMED	Southern and Eastern Mediterranean

Technical acronyms (excluding indicators)

Acronym	Description
ALMP	Active Labour Market Policy
CPD	Continuing Professional Development

Acronym	Description
CVET	Continuing Vocational Education and Training
ETF	European Training Foundation
EU	European Union
EUROSTAT	European Statistical Office
HDI	Human Development Index
ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
IVET	Initial Vocational Education and Training
KIESE	Key Indicators on Education, Skills, and Employment
LLL	Lifelong Learning
LMP	Labour Market Policy
MoE	Ministry of Education
MoF	Ministry of Finance
NSO	National Statistical Office
OECD	Organisation for Economic Co-operation and Development
PES	Public Employment Service
PISA	Programme for International Student Assessment
SPI	System Performance Index
UIL	UNESCO Institute of Lifelong Learning
UIS	UNESCO Institute of Statistics
UNESCO	United Nations Educational, Scientific, and Cultural Organization
USD	United States Dollar
VET	Vocational Education and Training

KEY TAKEAWAYS

- **Scope of reporting:** This report examines the extent to which learners can benefit from accessible, high-quality and well-managed lifelong learning opportunities. It describes who the learners are, presents evidence on how well countries address their learning needs and discusses whether this support is distributed equitably. The focus is on young people and adults, both men and women, who are socioeconomically disadvantaged or at risk due to having no or low education.

  All data presented seeks to answer the same set of key questions: Who participates in education and training? What do they achieve in terms of learning and employment outcomes? How do education and training systems support them? The report covers the 26 ETF partner countries in Central Asia, Eastern and Southeastern Europe, the Caucasus, and the Southern and Eastern Mediterranean regions.

- **Sources and quality of data:** As in 2024, the current edition of the cross-country report draws on indicators from ETF's KIESE database. It also draws on the Torino Process System Performance Indices (SPIs) — composite metrics derived from a curated selection of KIESE indicators. These metrics are used to quantify the effectiveness with which education and training systems deliver on key commitments to learners and other stakeholders in different areas of lifelong learning. In addition to quantitative data, the monitoring also relies on evidence collected through structured country questionnaires. In 2025, these were designed as expert surveys.

  In 2025, the availability of data varies widely across ETF partner countries, with the share of internationally comparable KIESE indicators ranging from below 5 per cent in some Southern and Eastern Mediterranean and Central Asian countries, to above 70 per cent in parts of Southeastern Europe and the Eastern Partnership. Several countries show clear improvements over time, partly owing to multiannual international data releases, such as those under the OECD Programme for International Student Assessment (PISA). This diversity in terms of comparability reflects different levels of participation in international statistical initiatives, underlining the importance of continued cooperation and peer learning across the region.

- **Socioeconomic context:** Population trends in the monitoring sample point to two broad pressures. Some countries are experiencing declining or ageing populations, leading to fewer learners entering education and training and fewer young people entering the labour market. Other countries have growing populations and sizeable youth cohorts, which increases demand for schooling, vocational programmes and support for entry into first employment. Income levels, inflation and GDP growth also vary widely, shaping the resources that governments and households can allocate to learning.

  Across partner countries, large shares of the population have low or unstable incomes and poverty is widespread in many contexts, including several middle-income and high-HDI countries. Income inequality is moderate in much of the sample but is significantly higher in some cases. In others, the main constraint is the low overall level of earnings rather than their distribution. These conditions influence the affordability of education or training and determine the scale of support that public authorities need to provide.

- **Education context:** Access to compulsory education is almost universal across ETF partner countries, but progression beyond this point varies considerably. Participation in upper secondary education ranges from almost full coverage in the Western Balkans to less than half in several SEMED systems. In a handful of countries, vocational programmes enrol most upper-secondary learners, whereas in others they account for only a modest proportion of enrolment. In most contexts, tertiary attainment and participation in adult learning remain below EU levels. Foundational skills are a major concern, with high rates of underachievement in mathematics. Infrastructure deficits are also widespread, even in countries where spending levels are comparatively high.

- **Employment context:** Across ETF partner countries, labour market outcomes often fall short of EU reference levels and vary widely. Employment rates for adults and young people remain low in many countries, with youth unemployment often reaching two to three times the level of unemployment for adults, and NEET rates often exceeding 20 %. The occupational structure differs from that of the EU, with a higher proportion of workers in elementary occupations and a lower proportion in high-skilled roles. Job quality remains a concern, with vulnerable employment affecting up to half of workers in some countries. Skills mismatch is widespread, with many adults working in roles that do not make full use of their qualifications.
- **Demand for learning:** There is a substantial variation across ETF partner countries in both the size of youth cohorts and the proportion of young people who are NEET. In several countries, up to one-fifth of young people are not in education, employment or training. In some countries, such as Egypt, Jordan, Lebanon, Palestine[1] and Kosovo,[2] the proportion is considerably higher, particularly among young women. Overall, countries with larger youth populations tend to have higher levels of youth disengagement, particularly among young women. Countries with smaller youth cohorts, including Moldova, Serbia and Ukraine, tend to have lower NEET rates.

  As to adults, in all countries in the monitoring sample, learning and upskilling appear to be important tools for mitigating prospective employment disadvantage. Thereby, higher levels of educational attainment are associated with better employment prospects, while lower educational attainment substantially reduces those prospects. In most countries, the group of adults with low or no education (ISCED 0–2) who can benefit from this type of learning, is sizeable. Women usually make up a larger share of that group, which places them at heightened risk unless appropriate learning opportunities are available.
- **Access and participation:** System performance supporting access to IVET for young people is uneven across ETF partner countries, although most of them have open admission and broadly inclusive eligibility rules. Participation is often modest, with limited attractiveness, geographic disparities and cost-related obstacles among the key reasons. In several countries, fewer than 15 % of upper-secondary school students enrol in VET. Gender gaps and horizontal segregation are present even in education systems with comparatively strong overall results. Policies to widen participation are in place in many contexts, but their impact is mixed. Available data and contextual information suggest that improving access to IVET requires both expanding provision and addressing cultural perceptions, geographic inequalities and affordability issues.

  In most ETF partner countries, opportunities for adult education rarely translate into meaningful engagement with learning among adults. Even in countries where provision is broad and accessible, participation remains modest. Many adults face practical, financial and information barriers, and opportunities are often concentrated in urban areas or designed in a way that does not suit the schedules or needs of prospective learners. Gender gaps also exist in terms of access, particularly where social norms and caregiving responsibilities limit women's ability to participate in learning. Active labour market measures provide important entry points to training, but their reach and effectiveness vary widely between countries.
- **Student retention and completion:** Monitoring results show that, as in previous years, the ability of systems to support learners from enrolment to graduation is closely related to the extent to which they provide flexible pathways, timely support and meaningful incentives to encourage persistence. Strong performance is usually the result of coherent programme architecture, financial and psychosocial support and relevant, achievable pathways. Weaker results occur where structural rigidity, socioeconomic hardship or external pressures erode learner continuity. The data also highlights that, in many countries, challenges to completion arise long before entry into IVET, and

[1] This designation must not be construed as recognition of a State of Palestine and is without prejudice to the individual positions of the Member States on this issue – hereinafter 'Palestine'.
[2] This designation is without prejudice to positions on status, and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo declaration of independence.

that expanding access to supportive environments within VET can only partially offset learning gaps accumulated earlier in the system.

- **Quality of foundational skills and competences:** System performance in supporting quality remains low in most ETF partner countries. Data shows widespread underachievement in reading and mathematics among 15-year-old students, many of whom enrol or are already in VET without basic proficiency. Although a small number of countries stand out, their stronger results often reflect contextual factors or qualitative assessments rather than consistently robust competences. Gender differences are generally modest, and the analysis suggests that IVET rarely provides systematic remedial support. Consequently, many learners progress through vocational programmes without acquiring the necessary skills for further education or employment.

  Although adults are more likely than young people to possess basic literacy and other foundational competences, monitoring results show significant cross-country variation and substantial gaps in digital and higher-order skills. Although literacy levels are high in most countries, limited participation in adult learning and low tertiary attainment restrict the acquisition of more advanced skills. This is partly because many adults lack the prerequisites needed to develop these skills. The level of competence adults possess varies by gender, often to the disadvantage of women. Many adults are also unable to apply their skills fully at work, while digital divides reduce opportunities to use more advanced or productive digital skills.

- **Relevance and labour market outcomes:** Across ETF partner countries, adults with higher levels of education tend to have better employment outcomes, although the size of this advantage varies depending on context. The data also suggests that employment outcomes at different levels of attainment often depend as much on labour-market conditions as on the relevance of education. In several countries, upper-secondary qualifications, including VET, add little to employment prospects and can even be associated with weaker outcomes than lower levels of education. In some countries, however, tertiary education offers only a limited comparative advantage, with employment rates only marginally higher than those of adults with lower levels of education. In most countries, adults at all levels of educational attainment appear less likely to be employed than their EU peers.

- **Financial resources:** Most countries in the ETF monitoring sample allocate only limited financial resources to VET, and even fewer convert these funds into adequate facilities, equipment or teaching materials. Even in countries where more is spent on education, such as Albania, Serbia, North Macedonia, Montenegro and Uzbekistan, there are still shortages of laboratories, workshops and ICT capacity. This suggests that stronger material conditions cannot be ensured by increased inputs alone. In many other countries, public funding is low and not diversified. It is largely absorbed by salaries, leaving little room for investment in infrastructure or consumables. Although donor support helps to address some of the gaps, such interventions often remain limited in scale since the gaps are system wide.

- **Human resources:** Monitoring evidence suggests that ETF partner countries face broadly similar challenges in managing human resources in education and VET, such as shortages of qualified teachers and trainers, gaps in pedagogical and occupational preparation, uneven deployment and limited access to continuous professional development. What differs is the capacity of their systems to mitigate these problems. Some countries have clearer qualification rules, more structured CPD, and more stable staffing arrangements, which mitigate the impact of shortages. Elsewhere, weaker institutional mechanisms mean that similar structural problems lead to considerably lower performance outcomes.

- **System management and organisation – quality assurance:** Quality assurance is more formalised and procedurally defined than many other areas of VET governance. This is reflected in the relatively large number of systems with strong results in this domain. However, SPI data shows wide differences in how consistently these arrangements operate in practice. Some countries combine high SPIs with near-universal use of core school-level processes, such as internal self-

evaluation, external evaluation and systematic recording of student results, while others apply similar frameworks less consistently. A third group remains at an early stage, with limited coordination and weak public reporting.

- **System management and organisation – school leadership:** Monitoring evidence suggests that while some ETF partner countries have introduced structured leadership frameworks and professional development pathways, most countries face significant constraints in the domain of school leadership. There are widespread gaps in leadership preparation, recruitment, and the availability of opportunities for professional development. These weaknesses limit the ability of VET institutions to steer improvement processes, respond to local needs and leverage other governance strengths, such as structured quality assurance frameworks, to create better teaching and learning conditions.
- **System management and organisation – the internationalisation of VET:** Across ETF's partner countries, the internationalisation of VET tends to be shaped less by formal strategies than by prevailing conditions and the opportunities that shape engagement. International engagement may be driven by participation in structured EU programmes, donors and project-based cooperation, links to labour mobility or diaspora networks, and forms of South–South collaboration, particularly in the SEMED region. In some countries, internationalisation policies exist without the necessary mechanisms to support their implementation. In others, factors such as fragmented governance, limited institutional capacity and resource shortages limit the depth and sustainability of international cooperation.

1. INTRODUCTION

1.1 Background

Every year, the ETF collects and analyses information and data to monitor developments in education, skills and employment across all of its partner countries.[3] The results help understand what is working well and what needs improvement. They also support countries in making informed decisions on how to manage and adapt their policies to support vocational education and training (VET) and lifelong learning.

The ETF has three complementary monitoring initiatives: the KIESE (Key Indicators on Education, Skills, and Employment) data collection; the Torino Process; and monitoring under the Copenhagen Process — a flagship EU initiative in VET[4].

All three initiatives are annual, but they differ in terms of their scope. The KIESE and the Torino Process cover all ETF partner countries, whereas monitoring under the Copenhagen Process applies to a smaller group of EU candidate countries.

KIESE data collection

The KIESE data collection forms the quantitative backbone of ETF monitoring activities. In close cooperation with international partners and national statistical offices, the ETF compiles a comprehensive dataset each year from national and international sources such as UNESCO, Eurostat and the OECD. This data is then used for reporting on trends and developments in education, skills and employment.

Torino Process

The Torino Process (TRP) is a long-standing flagship initiative of the European Training Foundation (ETF). It tracks developments in education, skills and employment in countries in Eastern and Southeastern Europe (including Türkiye), Central Asia, and the Southern and Eastern Mediterranean.

Since 2023, the monitoring framework of the Torino Process selects a subset of KIESE indicators, aggregates them into 'system performance indices' and combines them with qualitative evidence to track how well partner countries' VET systems deliver on key commitments to learners, such as access, quality, relevance and system efficiency.

In addition, the Torino Process enables countries to perform voluntary reviews of their VET policies. These reviews help to contextualise monitoring results and identify ways to improve VET performance through targeted policy interventions.

Copenhagen process

The ETF facilitates the participation of a select group of EU candidate countries in key EU VET initiatives, such as the Copenhagen Process.

The Copenhagen Process is a long-standing, structured framework for voluntary international cooperation in VET. Established in 2002, its purpose is to foster the development of high-quality, inclusive and flexible VET systems across Europe. The monitoring cycle up to 2024 began with the Osnabrück Declaration in 2020, which emphasises several priorities: sustainable competitiveness, social fairness, resilience, lifelong learning, digital transformation and aligning VET with the green

[3] In 2025, the ETF partner countries included in the annual monitoring are: Albania, Algeria, Armenia, Azerbaijan, Bosnia and Herzegovina, Egypt, Georgia, Israel, Jordan, Kazakhstan, Kosovo, Kyrgyzstan, Lebanon, Libya, Moldova, Montenegro, Morocco, North Macedonia, Palestine, Serbia, Tajikistan, Tunisia, Turkey, Turkmenistan, Ukraine, Uzbekistan. The full list of ETF partner countries as of 2025 can be found here: https://www.etf.europa.eu/it/where-we-work.

[4] For more information see https://www.etf.europa.eu/en/what-we-do/torino-process-policy-analysis-and-progress-monitoring

transition. Albania, Montenegro, North Macedonia, Serbia and Türkiye have signed the declaration, and the ETF systematically monitors their progress in close cooperation with its sister agency, CEDEFOP.

In September 2025, EU countries launched the next Copenhagen Process monitoring cycle by signing the Herning Declaration under the Danish Presidency of the European Union. This new cycle will run until 2030.

Monitoring deliverables

For the two monitoring initiatives that cover all ETF partner countries — the KIESE data collection and the Torino Process — the ETF produces deliverables in three main categories: country-level reporting, cross-country reporting and thematic reporting.

Country reporting currently includes two deliverables for each country: a country fiche and a Torino Process monitoring report. From 2025 onwards, these two outputs will be combined into a single country fiche presenting the annual monitoring results for each country in relation to education, skills and employment.

In addition, the ETF publishes a small number of Torino Process policy review reports each year. These analyse the impact of policies on the performance of the VET system in a given country and provide recommendations for improvement.

Cross-country reporting like the present report summarises the monitoring results for all countries from a comparative perspective and maps regional and cross-country trends and developments.

Finally, the thematic reports use selected subsets of KIESE and Torino Process data to examine specific cross-country issues in greater detail, often focusing on particular groups or characteristics, such as gender, socioeconomic disadvantage or the availability of evidence.

For the five EU candidate countries – Albania, Montenegro, North Macedonia, Serbia and Türkiye – the ETF also produces Copenhagen Process-specific deliverables in the form of concise monitoring summaries detailing policy developments and progress towards the priorities defined in the Osnabrück Declaration. These summaries are based on evidence collected specifically for this purpose, as well as on KIESE and Torino Process indices and indicators. However, the results are published separately due to the specific EU-level mandate of the Copenhagen Process.

1.2 About this report

Scope and purpose

This report presents the 2025 edition of the cross-country monitoring output described in the previous section. It summarises the monitoring results for the year from a comparative perspective by bringing together the main findings of the 2025 monitoring cycle in a single, consolidated publication and mapping regional and cross-country trends and developments.

The report retains much of the focus of the previous edition. As in 2024, it examines the extent to which learners can benefit from accessible, high-quality and well-managed lifelong learning opportunities. It describes who the learners are, presents evidence on how well countries address their learning needs and considers whether this support is distributed equitably. In 2025, the focus is on young and adult learners, both men and women, who are socioeconomically disadvantaged or at risk due to having no or low education.

All data presented seeks to answer a set of guiding questions shared across the different monitoring domains and evidence sources used in this report. These concern the extent to which countries deliver on their commitments to provide equitable access to learning, quality and relevant learning outcomes, and effective management of education and training systems for all learners; how these

results are shaped by the broader demographic, socioeconomic, education and labour-market context in which education and training systems operate; and the availability, comparability and reliability of the evidence used to answer these questions.

In 2025, the cross-country analysis covers 26 ETF partner countries in Central Asia, Eastern and Southeastern Europe, the Caucasus, and the Southern and Eastern Mediterranean[5]. The countries included in the 2025 round of ETF monitoring are as follows: Albania, Algeria, Armenia, Azerbaijan, Bosnia and Herzegovina, Egypt, Georgia, Israel, Jordan, Kazakhstan, Kosovo, Kyrgyzstan, Lebanon, Libya, Morocco, Moldova, North Macedonia, Montenegro, Palestine, Serbia, Tajikistan, Turkmenistan, Tunisia, Türkiye, Ukraine and Uzbekistan.

1.3 Availability and reliability of cross-country evidence

Types and sources of evidence

As with the 2024 edition, this cross-country report draws on indicators from ETF's KIESE database, which covers areas such as demographics, educational attainment and labour market data, resource allocation in education systems and participation in lifelong learning.

Some of these indicators were obtained directly from ETF partner countries through active collaboration with members of the KIESE data network, which comprises national statistical offices and authorities responsible for active labour market policies, including Public Employment Services (PES) and line ministries responsible for education, training and/or employment data. Most of the other indicators were obtained from international repositories, including UNESCO, the World Bank, OECD, Eurostat and the ILO. Table 1 sets out an overview of the sources of the indicators[6].

Table 1. Provenience of KIESE data in 2025

Data repository	No. of indicators	Data repository	No. of indicators
UIS UNESCO	54	UN DESA	5
OECD PISA	42	UNDP	5
World Bank	30	European Social Survey	4
Eurostat	21	ILOSTAT	3
National: LFS	20	OECD DIOC	3
TIMSS	13	Cornell University, INSEAD, and WIPO	1
National: PES	8	IMF	1
UNHCR	6	Portulans Institute, Oxford Saïd Business School	1
National: NOS, MoF, MoE	5		

Source: ETF KIESE database

The cross-country monitoring report also draws on the Torino Process System Performance Indices (SPIs). These are composite metrics derived from a curated selection of KIESE indicators and are used to quantify the effectiveness with which education and training systems deliver on key commitments to learners and other stakeholders in different areas of lifelong learning[7]. In this context, 'performance' refers to the extent to which countries fulfil these commitments. 'Lifelong learning' refers

[5] The number of countries may vary by theme, as evidence is not always available for every country across all themes.
[6] The full selection of KIESE indicators for 2025 can be found here https://bit.ly/4j6taZW.
[7] The subset of KIESE indicators used for the calculation of the Torino Process SPIs in 2025 can be found here: https://bit.ly/433OR8j. The methodology for the calculation of the SPIs can be found here: https://bit.ly/3XJg101.

to all learning activities undertaken throughout an individual's life with the aim of improving knowledge, skills, competences and qualifications for personal, social or professional reasons.

In 2025, through its Torino Process initiative, the ETF has tracked a total of 32 SPIs, covering system outcomes against commitments in three broad areas: access, quality and system organisation. As noted, these SPIs assess how well these commitments are met for several broad groups of learners, including young people and adults, men and women, socio-economically disadvantaged young people, and adults with no or low education[8]. Each SPI corresponds to a specific combination of an outcome and a learner group. This combination is referred to as a **monitoring target (MT)**.

Table 2 provides an overview of all outcomes and the learner groups they cover, with each monitoring target marked by an 'X'.

Table 2. Outcomes and learner groups covered by Torino Process monitoring, 2025

Areas	Monitoring dimensions	Outcomes in focus of monitoring	Learner groups			
			MT1 - youth and/or adults	MT2- Gender	MT3- Disadv. youth	MT4- Adults at risk
A. Access	A.1 Access	**A.1.1** Access IVET	X	X	X	
		A.1.2 Access CVET	X	X		X
		A.1.3 Access other AL	X	X		X
	A.2 Participation	**A.2.3** Completion IVET	X	X	X	
B. Quality	B.1 Quality and relevance	**B.1.1** Skills: youth	X	X	X	
		B.1.2 Skills: adults	X	X		X
		B.1.3 WBL	X			
		B.1.4 Employability	X	X		
		B.1.5 Career guidance	X			
	B.4 Responsiveness	**B.4.1** Green transition	X			
		B.4.2 Digital transition	X			
		B.4.3 Programme content	X			
C. System	C.1 Steering and management	**C.1.1** Data availability	X			
		C.1.3 Quality assurance	X			
		C.1.4 School leadership	X			
		C.1.5 Internationalisation	X			
	C.2 Resourcing	**C.2.1** Fin. resources	X			
		C.2.2 Human resources	X			
		C.2.3 Material base	X			

In addition to KIESE data, the Torino Process monitoring relies on evidence collected through structured country questionnaires. These were designed as expert (monitoring) surveys in 2025. National experts used these questionnaires to provide contextual information and assess policy performance for each monitoring target on a scale from 1 (worst) to 5 (best). Their responses are provided independently, although in many cases they also drew on consultations with national authorities[9].

[8] For a full overview of the Torino Process system performance monitoring framework, see https://bit.ly/47YGA6l.
[9] The full set of monitoring surveys can be found here: https://bit.ly/418jfwC

The expert survey approach serves two main purposes. Firstly, it fills gaps in KIESE data, enabling SPI calculation even when quantitative indicators for a given monitoring target are incomplete or unavailable. Secondly, it provides qualitative insights that allow for a more nuanced and context-sensitive interpretation of SPI results. Each monitoring target corresponds to one questionnaire item, resulting in a total of 32 questions per country.

Each question in the monitoring survey comprises two mandatory components: a narrative explanation and a qualitative assessment using a Likert scale. The questions are identical across countries to ensure consistency in the assessment process[10].

Report structure

As in previous editions, the structure of the report is organised around the main areas of ETF monitoring: the context and demand for learning; policy and system performance in support of access and participation; performance in support of quality and relevance; and performance in support of system management. Together, these areas describe the environment in which learners pursue education and training, their ability to enter and complete programmes, the quality and relevance of the learning path pursued, and the countries' capacity to sustain and manage the systems delivering results in these areas.

The **first chapter** provides background information on the monitoring process. It introduces ETF's flagship data collection initiatives, such as the KIESE and the Torino Process, and describes the main monitoring deliverables. It also discusses the quality and reliability of the cross-country evidence used in this report, including the types and sources of data, their availability, the risk of bias, and the steps taken to ensure that the evidence is as robust as possible.

The **second** chapter examines the context and demand for learning in ETF partner countries. It first describes the countries and their education and labour market sectors. It then turns to gauging demand for learning by age and vulnerability, paying particular attention to young people who are not in employment, education or training (NEETs), and adults at risk of disadvantage.

The **third** chapter examines performance in relation to access and participation. It presents evidence on access to learning opportunities by age and gender, distinguishing between young people and adults, and reports on the extent to which learners in initial VET (IVET) are able to remain in education and training and complete their programmes.

Chapter four focuses on performance in support of quality and relevance. It reviews evidence on the quality of learning for different age groups, considering how aligned education and training outcomes are with labour market needs. In particular, it examines employment rates by educational attainment and, where data allows, other labour market indicators such as employment by occupation and the situation of jobseekers.

Finally, the **fifth chapter** discusses performance in the context of managing and organising education and training systems. It brings together evidence on financial resources in VET and lifelong learning, the allocation, use and professional capacity of human resources, and system steering and management. This includes data and capacity for informed decision-making, quality assurance arrangements, school leadership and the internationalisation of VET.

Reliability of evidence

In addition to messages about system performance, the monitoring also provides information on the international comparability of results for each country and the extent to which these results may be susceptible to bias. It also indicates the degree to which the qualitative assessments in the monitoring survey tend to be critical (biased negatively) when reporting its policy and system performance for external monitoring purposes. This is possible because the monitoring methodology requires accurate

[10] The full list of questions used in the 2025 round of Torino Process system performance monitoring can be found here: https://bit.ly/3YUIbXE.

records to be kept of the availability, origin and type of evidence used to calculate the 32 system performance indices and the corresponding results for each country.

The three reliability indicators below summarise this information and support the interpretation of monitoring results.

International comparability is captured by the 'International Comparability Index' (ICI), it reflects the extent to which the KIESE indicators foreseen in the Torino Process monitoring framework are internationally comparable and available for calculating the SPIs for each country. A higher share indicates that a larger proportion of system performance results can be reliably compared with those of other countries.

Risk of bias: the monitoring tracks the balance between quantitative indicators and qualitative assessment responses when calculating the 32 SPIs. This is also called the 'risk of bias index'. Countries whose SPIs rely more heavily on qualitative assessments face a higher risk of bias in their overall results.

Tendency to be critical: the monitoring also captures t he extent to which the results of the Torino Process monitoring questionnaire tend to be negatively biased when reporting on policy and system performance. This index is called the 'response tendency index'.

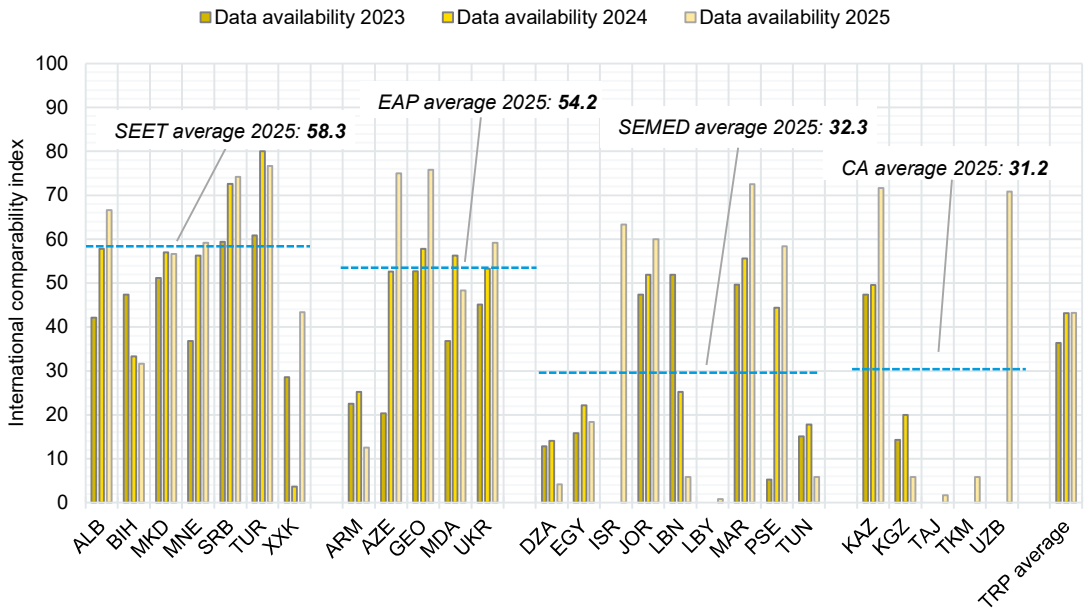
International comparability

This section provides an overview of the availability of monitoring data in 2025. It describes the extent to which internationally comparable KIESE indicators were accessible for each theme and country. This shapes the empirical basis on which the cross-country results in this report are based.

Figure 1 shows the value of the international comparability index. This shows the proportion of internationally comparable KIESE indicators that were available each year between 2023 and 2025, compared to those foreseen in the monitoring framework for calculating the SPIs in each country and for contextualising the monitoring findings.

Figure 1. Availability of internationally comparable KIESE data for system performance monitoring, ETF partner countries (2025)

Percentage of indicators available out of total



Source: ETF KIESE and Torino Process databases.

The data show that the availability of internationally comparable evidence varies considerably across ETF partner regions. Countries in Southeastern Europe and the Eastern Partnership generally have better coverage, often exceeding 55–75 % between 2024 and 2025. For instance, Serbia recorded 74 % in 2025, while Türkiye and Georgia recorded at 77 % and 76 %, respectively. In contrast, several Southern and Eastern Mediterranean countries record much lower shares of internationally comparable indicators, sometimes below 20 % (e.g. Algeria with 4 % in 2025 and Tunisia with 6 %). However, such low values do not imply an absence of national data. Rather, they reflect the limited availability of evidence that is aligned with international standards, as well as lower participation in international statistical initiatives. Similarly, stronger availability of internationally comparable evidence in certain countries and regions likely reflects a greater alignment with EU statistical and reporting processes, which often goes hand in hand with better financial and technical support for statistics.

Figure 1 also shows that the availability of evidence improves over time in many countries, albeit not uniformly. In some countries, notably Albania (rising from 42 % in 2023 to 67 % in 2025), Azerbaijan (rising from 20 % to 75 %) and Palestine (rising from 5 % to 58 %), the improvement is substantial. The increase in data availability for the 2025 round of monitoring coincides with the release of multiannual datasets, such the OECD's Programme for International Student Assessment (PISA), which temporarily boosts comparability for many countries participating in the ETF monitoring. In a minority of countries, the availability of data is stagnating or even declining, depending on their participation in such initiatives, changes in national reporting, or both (for example, Bosnia and Herzegovina declined from 47 % in 2023 to 32 % in 2025 and Lebanon declined from 52 % to 6 %).

The high degree of heterogeneity in internationally comparable evidence across ETF partner countries can present challenges when reporting on progress and developments. At the same time, experiences from the annual ETF Monitoring Forums suggest that these differences can create opportunities for cooperation and peer learning. Although countries with stronger international data foundations and those with more limited coverage face different, clearly identifiable challenges, the discussions in these forums — often involving representatives from national statistical offices as well as other data and monitoring institutions — show that this diversity creates opportunities for practical exchanges on evidence generation, reporting and system monitoring. This is because, despite their differences, these systems still converge around common concerns and learning needs[11].

Risk of bias

The risk-of-bias index reflects the proportion of SPI results based solely on qualitative assessments from monitoring surveys, as opposed to internationally comparable quantitative data. It is calculated at country level and for each learner group. Its purpose is to track the extent to which the monitoring results for young people and adults (MT1), male and female learners (MT2), disadvantaged young people (MT3) and adults at risk (MT4) are susceptible to bias. The results for countries and learners with higher values are more susceptible to bias and may therefore require more careful interpretation.

Table 3 indicates that, across countries, the system performance results for learners of different ages tend to be less prone to bias than those for other learner groups covered by the monitoring. For instance, in Serbia, Türkiye and Georgia only about 6 % of the relevant system performance indices (MT1) relied on a qualitative assessment of performance in 2025. In Albania, North Macedonia, Montenegro and Azerbaijan, the index was slightly higher, at around 12 %. However, these results coexist with considerably higher values elsewhere, such as 35 % in Bosnia and Herzegovina, 47 % in Armenia, 76 % in Algeria, 82 % in Tajikistan and 88 % in Libya.

The results of monitoring system performance by gender are more prone to bias than those by age. While the risk-of-bias index is relatively low in several countries, at around 12.5 % in North Macedonia, Montenegro and Serbia, for example, it reaches much higher values in many other settings due to the limited availability of quantitative evidence and disproportionate reliance on subjective performance

[11] The 2025 edition of the ETF Monitoring Forum took place on 29 October in Milan, Italy. A selection of materials is available at https://bit.ly/3Kdayfh.

assessments. Consequently, the insights about system performance in support of male and female learners presented in this report are more sensitive to reporting practices and therefore require somewhat more careful interpretation.

Table 3. Risk of bias index: share of SPIs based on quantitative vs. qualitative data, by learner group and country, 2025

0 indicates no risk; 100 indicates the highest risk

Country	Bias risk MT1 – youth and adults	Bias risk MT2 – male and female	Bias risk MT3 – disadvantaged youth	Bias risk MT4 – adults at risk
ALB	11.8	25	75	33.3
BIH	35.3	25	100	66.7
MKD	11.8	12.5	75	66.7
MNE	11.8	12.5	75	66.7
SRB	5.9	12.5	75	66.7
TUR	5.9	12.5	75	66.7
XXK	23.5	50	75	66.7
ARM	47.1	37.5	100	66.7
AZE	11.8	37.5	75	66.7
GEO	5.9	25	75	66.7
MDA	17.6	37.5	75	66.7
UKR	17.6	37.5	75	66.7
DZA	76.5	75	100	100.0
EGY	47.1	50	100	100.0
ISR	5.9	12.5	75	66.7
JOR	17.6	37.5	75	66.7
LBN	58.8	37.5	100	66.7
LBY	88.2	100	100	100
MAR	17.6	50	75	66.7
PSE	17.6	37.5	75	66.7
TUN	70.6	62.5	100	66.7
KAZ	17.6	62.5	75	66.7
KGZ	58.8	62.5	100	66.7
TAJ	82.4	100	100	100
TKM	76.5	75	100	100
UZB	23.5	50	75	100
TRP average	**36.3**	**43.2**	**84.6**	**73.1**

Source: ETF KIESE and Torino Process databases.

The SPI results for socioeconomically disadvantaged young people (MT3) and adults at risk due to low or no formal education (MT4) are based primarily on qualitative assessments and are therefore the most susceptible to bias. On average across the monitoring sample, the risk-of-bias index is 84.6 % for MT3 and 73.1 % for MT4.

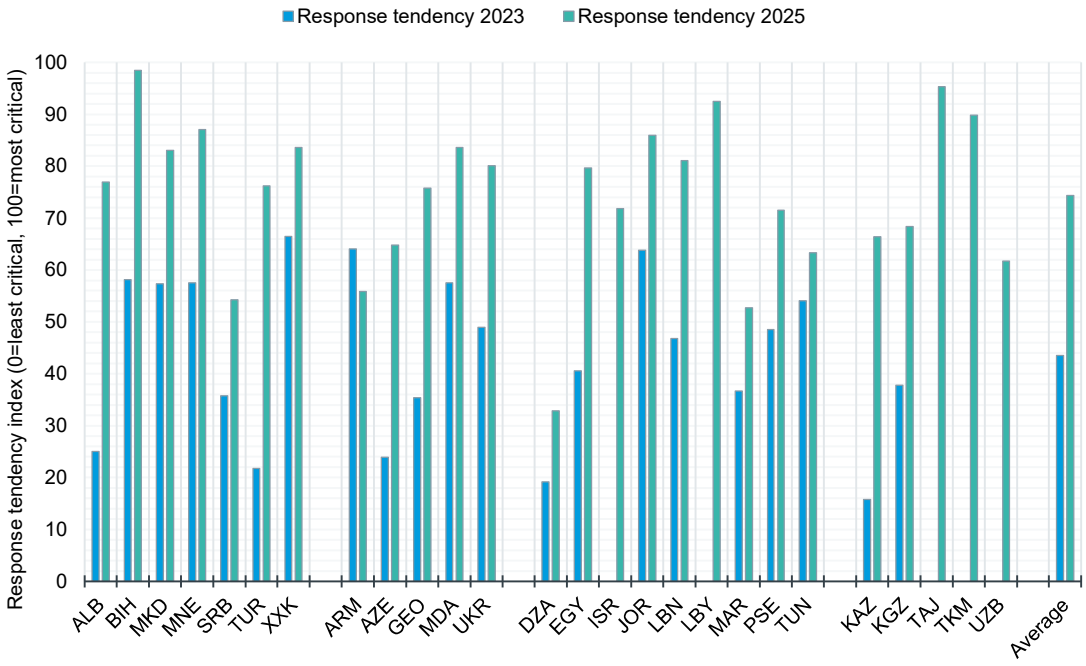
While these averages conceal some variation at country level, all results fall at the higher end of the risk-of-bias index. In most contexts, such as Albania, Serbia, Montenegro, Ukraine and Azerbaijan, the risk for MT3 is at 75 %, whereas in all others, it is at 100 %. Similar results are seen for the performance indices focusing on adults at risk (MT4). With the exception of Albania, where the risk is 33 %, it is 67 % in most countries and 100 % in a few, such as Egypt or Tajikistan.

Response tendency

In addition to the availability and source of evidence, the monitoring also records the overall tendency of respondents to be critical or complimentary when assessing policy and system performance. This is captured through the response tendency index (RTI), which is derived from the qualitative assessment scores provided for the 32 monitoring questions in the Torino Process expert survey. Each score reflects an assessment of performance on a five-point scale, and the set of 32 scores is converted into a single value between 0 and 100 that indicates whether the overall assessment is more critical or more positive (Figure 2).

Figure 2. Response tendency index: tendency to be critical in qualitative assessments of policy and system performance, by country (2023 and 2025)

0 indicates least critical; 100 indicates most critical



Source: Torino Process database.

The extent to which this tendency influences the monitoring results depends on the degree to which a country's SPIs rely on qualitative assessments due to a lack of quantitative evidence. This aspect is measured separately through the risk-of-bias index, which was presented in the previous section. In countries where fewer SPIs rely on qualitative assessments, the RTI has more limited explanatory power in interpreting SPI results.

Nevertheless, the RTI is a useful metric for all countries because it provides an indication of the respondents' general tendency to be critical or complimentary when monitoring progress in education and training. In 2023, this tendency reflected the views of the national authorities, which completed the questionnaire. In 2025, however, it reflects the views of independent national experts.

This shift helps to explain why the qualitative assessment results in 2025 tend to be more critical than those in 2023 (Figure 2). The average score for the monitoring sample increased from 43.6 in 2023 to 74.3 in 2025. While most qualitative assessments in that year were at the critical end, in some countries the index was particularly high. Examples include Bosnia and Herzegovina (98.4), Libya (92.5), Tajikistan (95.3) and Turkmenistan (89.8). More moderate, but still high, RTI values can be seen in the questionnaire responses for North Macedonia (83.1), Moldova (83.6), Ukraine (80.1),

Egypt (79.7), Georgia (75.8) and Albania (77.0). Overall, lower RTI values (i.e. less critical tendencies) remain rare, with examples including Algeria (32.8), Serbia (54.3) and Morocco (52.7).

As shown in Figure 2, the 2025 results also suggest that neither country nor region is a strong predictor of response tendency. High, moderate and low RTI values appear across all regions. For example, there are values above 90 in Bosnia and Herzegovina, Libya, and Tajikistan, alongside considerably lower values, such as around 33 in Algeria. This indicates that the profile of the individual expert who completed the questionnaire may play a greater role in shaping the assessment than broader regional or systemic factors. The 2023 results, on the other hand, show more internal clustering within regions and a narrower range of values. This may reflect more stable, institutionally anchored views, given that the questionnaires were completed by national authorities rather than individual experts.

2. CONTEXT AND DEMAND FOR LEARNING

2.1 Country and sector context

Country context

This section of the report brings together *a selection of* indicators that describe the demographic, economic and social conditions in the ETF partner countries *included in this cross-country report*. The *data forms the basis* of three short subsections on the demographics, economy, income and living standards *in these countries*. This focus on these aspects reflects the assumption that they shape demand for education and training, the available resources to meet this demand, and the living conditions in which learners and workers make decisions.

The first subsection, on demography, uses indicators that describe the size and age structure of the population, as well as the extent to which inward and outward migration influences population levels and the availability of skills (Table 4). Emigrant stock counts nationals living abroad, while immigrant stock refers to foreign-born residents living in the country. Differences between the two therefore capture the net direction of long-term migration flows over time.

Further, the total population and the relative size of the youth population indicate the number of young people who may enter upper secondary, tertiary or vocational education, or enter the workforce early. The dependency ratio shows the balance between the working-age population and dependants, which has implications for public finances and the sustainability of education spending. Indicators on immigrant and emigrant stocks offer insight into how migration reshapes the size and composition of the resident population.

Table 4. Demographic and socio-economic context: key indicators, ETF partner countries

Country	Total population (in thousands)	Relative size of youth population (%)	Population growth rate	Dependency ratio	Immigrant stock as % of total population	Emigrant stock as % of total population
KAZ	20 330.1	21.4	1.5	60.9	10.1	13.6
KGZ	7 099.8	25.3	1.8	61.5	2.7	7.5
TAJ	10 389.8	28.8	2.0	67.1	2.6	4.9
TKM	7 364.4	22.5	1.8	56.1	2.6	4.9
UZB	35 652.3	22.9	2.0	57.6	3.2	5.8
ARM	2 990.9	18.2	0.7	48.7	9.2	21.4
AZE	10 154.0	19.1	0.1	43.6	NA	7.8
GEO	3 715.5	17.9	0.1	57.1	2.1	13.0
MDA	2 457.8	16.7	-2.8	55.3	6.2	28.5
UKR	37 732.8	14.2	-8.4	48.9	13.4	25.8
ALB	2 746.0	19.8	-1.2	50.0	1.7	43.6
BIH	3 185.1	16.3	-0.6	53.5	1.1	50.8
MKD	616.2	19.1	-0.2	55.8	14.5	14.2
MNE	1 827.8	17.5	-0.2	52.8	8.3	29.3
SRB	6 623.2	16.2	-0.6	58.0	10.6	14.3
TUR	85 326.0	22.0	0.4	46.7	8.1	3.6

Country	Total population (in thousands)	Relative size of youth population (%)	Population growth rate	Dependency ratio	Immigrant stock as % of total population	Emigrant stock as % of total population
XXK	1 602.5	25.0	-0.7	44.8	NA	NA
DZA	46 164.2	21.7	1.5	58.8	0.6	3.8
EGY	11 4535.8	28.0	1.7	59.8	1.0	4.1
ISR	9 756.6	25.6	2.1	66.8	22.3	3.5
JOR	11 439.2	28.4	1.6	55.2	45.7	5.7
LBN	5 773.5	27.0	0.5	57.6	24.5	11.7
LBY	7 305.7	25.7	1.1	48.9	12.2	2.1
MAR	37 712.5	24.3	1.0	51.2	0.3	9.5
PSE	5 165.8	33.1	2.4	72.9	5.0	77.0
TUN	12 200.4	20.5	0.7	50.6	0.5	5.8
Source	UN DESA, World Bank	UN DESA	UN DESA, World Bank	UN DESA, World Bank	UN DESA	UN DESA

Country	GDP growth rate	GDP per capita (PPP)	Migrant remittance inflows (US$ mil.) as % of GDP	Inflation rate	Poverty headcount ratio ($8.30/day)	Gini coefficient (Income inequality)
KAZ	5.1	38 515.2	0.1	14.7	15.2	29.2
KGZ	6.2	7 106.5	20.4	10.8	76.8	26.4
TAJ	8.3	4 963.6	38.4	6.0	74.2	34.0
TKM	6.3	19 828.9	NA	NA	NA	NA
UZB	6.3	11 107.0	14.0	11.5	24.6	31.2
ARM	8.3	21 342.5	6.0	2.0	56.9	27.9
AZE	1.1	23 597.8	2.6	8.8	35.9	NA
GEO	7.8	25 072.0	13.7	2.5	49.1	33.5
MDA	0.8	17 596.9	12.2	13.4	19.7	25.7
UKR	5.3	17 630.1	8.4	12.9	7.1	25.6
ALB	3.9	21 263.2	8.7	4.8	19.9	29.4
BIH	2.2	22 449.2	10.3	6.1	8.1	33.0
MKD	6.3	30 966.7	10.7	8.6	14.5	34.3
MNE	2.1	24 390.5	2.9	9.4	20.5	33.5
SRB	3.9	28 748.5	7.1	12.4	10.3	33.1
TUR	5.1	42 326.2	0.1	53.9	10.8	44.4
XXK	4.1	15 141.3	17.5	4.9	47.0	29.0
DZA	4.1	16 824.5	0.8	9.3	41.8	27.6
EGY	3.8	18 524.6	4.9	33.9	58.5	31.9
ISR	2.4	54 057.1	0.2	4.2	4.2	37.9
JOR	2.7	10 391.0	8.8	2.1	15.3	33.7
LBN	-0.6	12 292.8	30.7	221.3	5.5	31.8

Country	GDP growth rate	GDP per capita (PPP)	Migrant remittance inflows (US$ mil.) as % of GDP	Inflation rate	Poverty headcount ratio ($8.30/day)	Gini coefficient (Income inequality)
LBY	10.0	13 848.8	NA	2.4	NA	NA
MAR	3.4	9 842.9	8.1	6.1	49.0	39.5
PSE	-5.4	5 896.7	18.6	5.9	28.6	33.7
TUN	0.0	13 931.9	5.9	9.3	20.7	33.7
Source	World Bank	World Bank	World Bank	IMF	World Bank	World Bank

The second subsection, which focuses on the economy, summarises the macroeconomic context in terms of GDP growth, GDP per capita (PPP), remittance inflows and inflation (Table 4). GDP growth indicates the economy's overall performance and its ability to sustain investment in education and related services. GDP per capita provides a general indication of average income levels. Remittance inflows illustrate the contribution of diaspora transfers to household consumption and, therefore, to participation in learning, albeit indirectly. Inflation describes changes in prices, influencing both household purchasing power and the cost environment in which education and training take place.

The third subsection, on income and living standards, presents indicators showing how income is distributed and how well it meets basic needs (Table 4). The poverty headcount ratio indicates the share of the population living below a defined threshold, thereby revealing the scale of economic vulnerability. The Gini coefficient measures income inequality, helping to clarify whether economic gains are concentrated or distributed more evenly distributed.

Demography

As can be expected in a large sample of countries, the data in Table 4 shows that the direction and pace of demographic changes differ between regions and national contexts, but all ETF partner countries are undergoing these changes. In Southeastern Europe and parts of the Eastern Partnership region, for example, Albania, Bosnia and Herzegovina, and Moldova, population levels are falling, primarily due to low fertility rates and outward migration. Ukraine recorded a steep reduction of 8.4% as a result of war-related displacement. In contrast, the size of the population in Georgia and Azerbaijan is broadly stable, while several countries in the SEMED region and Central Asia, including Algeria, Egypt, Jordan, Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan and Türkiye, report annual increases of about 1–2 %.

The proportion of young people in the population also varies considerably. As shown in Table 4, *and as will be discussed at length in Section 2.2,* Kosovo and Palestine have some of the largest youth cohorts in the monitoring sample. In contrast, Armenia, Moldova and Ukraine have much smaller youth cohorts due to population ageing and sustained migration. Similar patterns emerge in dependency ratios, which range from moderate levels in countries such as Tunisia, Morocco and Albania, to considerably higher ratios in Israel and Palestine.

Migration also plays a significant role in determining population size and age structure. Jordan and Libya host large foreign-born populations that influence both population levels and the age distribution. Montenegro and Armenia have recently experienced inflows linked to the war in Ukraine, while Albania, Bosnia and Herzegovina, Moldova and Palestine are significantly influenced by sizeable diasporas. In Palestine, 77 % of the population are migrants.

Economy

The economic data shown in Table 4 suggests that ETF partner countries broadly fall into three income groups based on GDP per capita. The top group comprises higher-income and relatively diversified economies, such as Israel and Türkiye (with per capita incomes of around USD PPP 54 000 and USD PPP 42 000 respectively). This is followed by a group of upper-middle-

income economies, including Montenegro, Serbia, Georgia, North Macedonia, Armenia and Azerbaijan. The majority of the other countries in the monitoring sample, including Albania (USD 21 263), Jordan (USD 10 391), Morocco (USD 9 843), Egypt (USD 18 525), Tunisia (USD 13 932) and the countries of Central Asia, as well as Palestine (USD 5 897), form a broad middle-income group.

When interpreting these income groups, it is important to note that GDP per capita does not always accurately reflect the distribution of income gains. In several contexts, high average output is generated mainly in a few capital-intensive sectors that employ relatively few people rather than through broad-based economic activity. For example, oil and gas production raises GDP per capita in Azerbaijan and Libya without translating into widespread employment or economic diversification.

Inflation is a metric that, by design, has much closer links to the well-being of households. As shown in Table 4, inflation remains a major challenge in many countries in the monitoring sample. Very rapid increases in the cost of living continue to affect several economies, including Türkiye (53.9 %), Egypt (33.9 %), Serbia (12.4 %), Moldova (13.4 %) and, in particular, Lebanon (221.3 %), where price instability has been severe. Several other economies face moderate but still considerable inflationary pressures, for example North Macedonia (9.4 %), Montenegro (8.6 %), Morocco (6.1 %), Albania (4.8 %) and Bosnia and Herzegovina (6.1 %). Lower inflation is reported in Armenia (2 %), Georgia (2.5 %), Jordan (2.1 %) and Libya (2.4 %), although price stability in some of these contexts is maintained through subsidies, price controls or a tightly managed currency.

Remittances continue to play an important role in many ETF partner countries. In Kosovo, Tajikistan, Kyrgyzstan, Lebanon and Palestine, remittances account for a significant proportion of national income (17.5 %, 38.4 %, 20.4 %, 30.7 % and 18.6 % of GDP, respectively). They also remain significant in Georgia (13.7 %), Moldova (12.2 %), Montenegro (10.7%), Bosnia and Herzegovina (10.3 %) and Ukraine (8.4 %). Conversely, in countries such as Türkiye (0.1 %), Kazakhstan (0.1 %), Algeria (0.8 %), Israel (0.2 %) and Libya (0 %), remittances account for a small share of economic activity (Table 4).

Against this broader backdrop, GDP growth also differs across the monitoring sample. Economic output increased only modestly in much of the Western Balkans and parts of the Eastern Partnership. For example, it increased by 2.2 % in Bosnia and Herzegovina, 2.1 % in North Macedonia and 3.8 % in Serbia. Meanwhile, the economies of Armenia (8.3 %) and Georgia (7.8 %) expanded much more strongly, partly due to inflows of people, firms and capital linked to the war in Ukraine. Moldova saw only limited improvement (0.8 %). Ukraine's output has begun to recover (5.3 %) following the severe wartime contraction, although it remains well below pre-war levels. Growth was generally modest in the SEMED region. Tunisia showed no real improvement, and Lebanon remained affected by deep macroeconomic instability.

Income and living standards

ETF partner countries have different standards of living and levels of income. The poverty rate varies widely. It is relatively low in Serbia (around 10 % below the USD 8.30 poverty line) and Israel (4.2 %), to mid-range in Albania (20–22 %) and North Macedonia (around 20 %), and very high in Kosovo (47 %), Egypt (58.5 %), Morocco (nearly half the population according to the latest available figures), and several Central Asian countries, including Kyrgyzstan (76.8 %) and Tajikistan (74.2 %).

The data in Table 4 shows that widespread poverty can pose a challenge even in middle-income countries with comparatively high levels of human development. In several countries, geographic disparities and the urban–rural divide play an important role. Moldova and Georgia are a good example in this respect: economic vulnerability affects 19.7 % and 49.1 % of the population, respectively, with large proportions living above the level of extreme poverty but below a threshold required for stable living conditions (see poverty headcount ratio in Table 4).

Although many partner countries have Gini coefficients in the low-to-mid 30s (Table 4), which represents a moderate level in an international context, income inequality also differs across partner

countries. Some cases stand out. With a Gini coefficient of 44.4, Türkiye has a more uneven distribution of income. Recent estimates in Bosnia and Herzegovina suggest disparities wider than those implied by official Gini data, with a ratio of around 20:1 between the richest and poorest quintiles (ETF, 2026a). In countries where measured inequality is low, such as Armenia (Gini 27.9) and Kosovo (around 29), the main concern is not the distribution of income, but rather the low level of earnings. This leaves large parts of the population exposed to inflation and labour-market shocks. At the higher end of the inequality scale, modelled estimates for Libya suggest a Gini coefficient close to 0.44, reflecting widening gaps in living standards amid prolonged conflict and institutional fragmentation (ETF, 2026b).

The Human Development Index (not included in Table 4) is a key metric used by the ETF to monitor this domain and is broadly consistent with these income-related findings. However, across most countries in the monitoring sample, there is considerable variation between the different HDI components. A minority of countries, such as Montenegro (0.862), Serbia (0.833), Georgia (0.844) and Albania (0.810), are classified as having 'high' or 'very high' human development, primarily due to strong performance in education and health. Other countries, such as Tunisia (0.746), Egypt (0.754) and Morocco (0.710), also have solid results with regard to schooling and life expectancy. However, due to more modest income growth, they are somewhat behind in terms of improving living standards.

In contexts that are more economically vulnerable or more strongly affected by crises, HDI scores reflect long-term development trajectories, but do not yet capture the full extent of recent deterioration in welfare. In Ukraine (0.779), for example, the sharp increase in poverty (to approximately 24–33 %) and the rise in inequality since the start of the war are not fully reflected by the index. A similar situation exists in Palestine, where an HDI score of 0.674 reflects the comparatively better conditions in the West Bank, without yet capturing the depth of the humanitarian crisis in Gaza.

Education sector context

This section of the report brings together a selection of indicators that describe the educational context in the ETF partner countries included in this cross-country report. The indicators provide a consolidated overview of participation and access, attainment and outcomes, and the resources that support learning (Table 5).

Indicators under **participation and access** measure the extent to which learners are involved in education and training at different stages of life. Net enrolment rates at lower- and upper-secondary levels show how close education systems are to achieving full participation among children and adolescents. The proportion of students enrolled in upper-secondary VET reflects the importance of vocational pathways within the overall education and training offer. The gross enrolment ratio at the tertiary level shows how many young people transition into higher education. Adult participation rates in lifelong learning illustrate how actively the adult population (aged 25–64) engages in continuous skills development.

The headline indicators under **attainment, completion and outcomes** focus on learner progression and on learning outcomes. The share of adults with tertiary qualifications (ISCED levels 5–8) is an indicator of the country's pool of higher-level knowledge and specialised skills, bearing in mind that formal credentials do not always directly translate into advanced competencies. The rate of early leavers from education and training (aged 18–24) indicates the number of young people who leave education prematurely, without completing upper secondary school. The percentage of 15-year-old students underperforming in mathematics provides insight into basic proficiency during compulsory schooling and indicates learning quality.

The third group of indicators — **system metrics** — focuses on some of the enabling conditions that support the functioning of the education and training system. Public expenditure on education, measured as a percentage of GDP, serves as an indicator of the relative importance of education in terms of financial resources. Meanwhile, data on inadequate or poor-quality infrastructure highlights physical constraints that may affect teaching effectiveness and learners' experiences.

Table 5. Headline indicators: education and VET, ETF partner countries and EU average, 2024 (or latest available year)

Country	Total net enrolment rate (lower secondary)	Total net enrolment rate (upper secondary)	Students in VET as a % of total upper secondary students	Gross enrolment ratio (tertiary)	Participation in training/lifelong learning in the previous 4 weeks (% aged 25-64)	Educational attainment of total population: % with ISCED 5-8
KAZ	92.2	62.8	36.9	53.2	NA	31.9
KGZ	95.7	99.2	38.3	53.5	NA	32.7
TAJ	NA	NA	7.9	35.6	NA	NA
TKM	94.2	86.0	NA	18.8	NA	NA
UZB	97.0	94.1	17.8	56.2	NA	NA
ARM	93.9	89.2	28.6	56.3	8.8	26.7
AZE	90.7	84.3	7.1	41.4	NA	25.4
GEO	98.2	98.3	9.1	78.3	1.6	30.3
MDA	100.0	NA	44.5	68.1	2.9	20.4
UKR	NA	NA	26.6	NA	0.5	44.9
ALB	94.6	88.7	17.5	64.7	1.7	17.0
BIH	98.3	77.2	79.5	45.5	1.6	13.7
MKD	100.0	86.7	68.9	55.2	3.6	24.2
MNE	NA	NA	62.9	53.0	2.8	20.7
SRB	99.9	88.3	72.7	73.2	5.5	23.4
TUR	99.9	94.0	37.5	127.6	7.9	20.7
XXK	NA	NA	NA	NA	2.3	16.3
DZA	96.9	80.3	1.9	55.5	NA	NA
EGY	92.2	69.8	46.9	39.0	NA	14.6
ISR	96.8	95.6	40.6	57.6	7.2	39.8
JOR	95.4	82.6	10.7	33.1	NA	19.9
LBN	67.3	45.3	25.4	54.4	NA	15.7
LBY	NA	NA	NA	NA	NA	NA
MAR	95.3	77.1	11.9	47.5	NA	6.5
PSE	94.0	75.9	4.1	44.5	NA	23.0
TUN	NA	NA	NA	38.1	1.2	16.3
Source	UIS UNESCO	UIS UNESCO	UIS UNESCO	UIS UNESCO	LFS	LFS

Country	Early leavers from education and training (% aged 18-24)	Underachievers in mathematics (% aged 15)	Public expenditure on education (as % of GDP)	Inadequate or poor-quality physical infrastructure	Availability of internationally comparable data on education
KAZ	NA	NA	6.8	NA	20.0
KGZ	NA	49.6	4.9	36.7	49.6
TAJ	NA	NA	5.4	NA	NA

TKM	NA	NA	2.8	NA	NA
UZB	NA	80.7	5.5	39.2	NA
ARM	2.2	NA	2.4	NA	25.2
AZE	NA	61.9	3.6	47.8	52.6
GEO	6.4	66.5	3.7	34.4	57.8
MDA	16.4	55.8	6.6	28.5	56.3
UKR	NA	42.4	5.9	45.4	53.3
ALB	15.4	73.9	2.9	37.1	57.8
BIH	3.8	NA	3.0	NA	33.3
MKD	4.9	59.5	NA	33.8	56.3
MNE	3.7	66.2	NA	24.1	57.0
SRB	6.2	43.1	3.2	35.1	72.6
TUR	18.7	38.7	3.1	14.6	80.0
XXK	6.2	85.0	3.0	48.7	39.5
DZA	NA	NA	5.6	NA	14.1
EGY	47.5	NA	NA	NA	22.2
ISR	9.1	37.3	6.5	47.1	NA
JOR	NA	82.8	3.2	53.5	51.9
LBN	33.8	NA	NA	NA	25.2
LBY	NA	NA	NA	NA	NA
MAR	NA	81.6	6.0	57.5	55.6
PSE	33.8	79.9	NA	68.6	44.4
TUN	28.9	NA	6.7	NA	17.8
Source	LFS	PISA OECD	UIS UNESCO	PISA OECD	ETF Torino Process

Across ETF partner countries, access to compulsory education is almost universal, yet the extent to which learners continue their education beyond the compulsory years, whether into upper secondary or tertiary programmes, varies greatly between education systems. In the SEET region, enrolment in lower-secondary school is almost universal (99 % or above in Bosnia and Herzegovina, Montenegro, and Serbia, 95 % in Albania), and most countries maintain participation rates of 77–88 % at upper-secondary level. By contrast, participation drops considerably after compulsory schooling in several SEMED countries: enrolment in upper secondary school stands at 82.6 % in Jordan, 77.1 % in Morocco and just 45.3 % in Lebanon. Participation in tertiary education also varies widely between countries, ranging from up to 73 % in Serbia to only 33.1 % in Jordan and 39.0 % in Egypt — well below the EU average of 79.7 % (Table 5).

At the same time, early school leaving is higher in several SEMED countries, including Lebanon, where recent survey evidence suggests levels well above one-third of the youth population (UNICEF, 2022); Tunisia (around 29 %; ETF, 2024); Palestine (around 30–34 %, ETF, 2025); and Egypt, where only around half of adolescents progress to upper secondary level, implying an early school leaving rate close to 50 % (Ministry of Education and Technical Education, 2022).

There are also significant disparities also in attainment and learning outcomes. Tertiary attainment exceeds the EU average only in Israel, where close to half of the adult population has higher education (World Bank, 2025) and comes close in Georgia (around 30 %; World Bank, 2025) and Kazakhstan (just above 30 %; World Bank, 2025). It is far lower in Albania (around 20 %; Institute of

Statistics Albania, 2023), Serbia (around 18 %; Statistical Office of the Republic of Serbia, 2023), Tunisia (in the mid-teens; UNESCO Institute for Statistics, 2021) and Morocco (around 10 %; Haut-Commissariat au Plan, 2024).

The relative importance of VET as a pathway choice also varies considerably between countries. Bosnia and Herzegovina, Montenegro and Serbia have comparatively high levels of VET participation, with 69–80 % of upper-secondary learners enrolled, whereas Albania (17.5 %), Georgia (9.1 %), Jordan (11 %), Morocco (11.9 %), Azerbaijan (around 28 %, with a sharp fall in 2024) and Uzbekistan (17.8 %) have comparatively low VET enrolment rates. Türkiye is in the middle, with 37.5 % of students in upper secondary school enrolled in vocational programmes.

It is important to note that, in some countries, typically in the SEET region, differences in VET participation are mainly shaped by structural factors. In contrast, in other countries, including several in the SEMED region, these differences are more closely linked to the perceived attractiveness of vocational options. Therefore, without context, enrolment rates do not necessarily show how important or appealing VET is to learners.

The low quality of foundational skills is a widespread challenge across the monitoring sample. A significant proportion of 15-year-old students lack basic numeracy skills in several ETF partner countries, including Montenegro (close to 60 %), North Macedonia (66.2 %), Albania (73.9 %), Jordan (82.8 %), Morocco (81.6 %), Palestine (around 80 %), Azerbaijan (61.9 %) and Uzbekistan (80.7 %). These results strongly suggest that in many contexts, broad participation in education does not necessarily translate into adequate learning and learning outcomes.

Public investment in education varies widely between countries. Morocco (6.0 % of GDP), Tunisia (around 6.8 %), Kyrgyzstan and Moldova (both around 7 %) allocate comparatively high shares of their national income to education. In contrast, other countries, including Serbia (3.2 %), Albania (2.9 %), Jordan (3.2 %) and Türkiye (3.1 %), spend well below the EU average of 4.7 %.

Nevertheless, gaps in the quality and adequacy of infrastructure for teaching and learning remain widespread, regardless of spending levels: more than half of students in Palestine (69 %), Morocco (57.5 %) and Azerbaijan (47.8 %) attend schools that report inadequate or poor-quality facilities. Similar issues arise in Montenegro (more than one third), Serbia (35 %), and Georgia (34.4 %). According to KIESE data sourced from OECD's Programme for International Student Assessment (PISA), many school leaders in these countries consider material constraints to be a continuing and significant barrier to effective teaching and learning.

Labour market context

This section of the report compiles a series of indicators describing employment and labour market conditions in the ETF partner countries. Taken together, these indicators provide an overview of how effectively economies generate jobs, how different population groups engage with the labour market and what types of employment opportunities are available. The indicators cover both labour market outcomes for specific groups, as well as the broader structure and quality of jobs. This provides essential context for understanding the relationship between education and training systems and the world of work (Table 6).

The employment and labour market outcome indicators measure the capacity of the economies of ETF partner countries to provide jobs and the extent to which different population groups can easily enter and remain in employment. They demonstrate who is, and who is not, successfully finding employment across selected population segments.

This group of indicators includes the overall employment rate (for the age group 15+), which reflects the economy's general ability to create jobs for the working-age population. The employment rates for young people (aged 15–24) and recent graduates (aged 20–34, ISCED 3–8) show how well young people transition from education to employment, and whether their qualifications lead to suitable job opportunities. Unemployment rates for the overall population (aged 15+) and for young people (aged 15–24) can indicate whether structural challenges are affecting people's ability, particularly that

of young people, to find and maintain employment. Finally, the share of young people (aged 15–29) who are not in employment, education or training (NEET) is an indicator of disengagement, highlighting the risk of long-term economic and social exclusion among the working-age youth population.

The indicators in the 'Demand for Skills' group describe the structure and quality of available jobs, as well as how these jobs relate to the skills and qualifications of workers. They clarify the types of jobs available, and the skills required for them and provide context for interpreting employment and unemployment data. Specifically, the share of employment by broad economic sector (agriculture, industry, and services) reflects the overall structure of the economy and indicates the types of skills most likely to be in demand. The incidence of vulnerable employment measures the prevalence of jobs characterised by low security or informality, serving as an indicator of job quality. Finally, educational mismatch shows how closely workers' qualifications align with job requirements, helping to assess how effectively the labour market uses available skills.

Table 6. Headline indicators: employment, ETF partner countries and EU average, 2024 (or latest available year)

Country	Employment rate (% aged 15+ or similar age group)	Employment rate (% aged 15-24 or similar age group)	Employment rate of recent graduates aged 20–34 (ISCED 3–8)	Unemployment rate (% aged 15+ or similar age group)	Unemployment rate (% aged 15-24 or similar age group)	NEET rate (% aged 15-29 or similar age group)
KAZ	57.1	30.2	NA	3.7	8.0	19.3
KGZ	65.2	39.0	NA	4.7	3.8	7.3
TAJ	36.4	17.8	NA	11.6	27.1	36.4
TKM	45.6	26.3	NA	4.3	9.6	14.2
UZB	53.3	30.8	NA	4.5	10.9	14.9
ARM	49.4	25.5	49.2	12.4	27.2	24.4
AZE	64.2	38.0	NA	5.3	12.9	19.1
GEO	47.1	23.6	59.7	13.9	28.9	24.1
MDA	42.7	17.6	NA	4.0	9.8	21.9
UKR	49.3	24.8	NA	9.8	19.1	19.8
ALB	58.2	30.2	66.2	8.5	22.8	22.2
BIH	42.9	16.5	63.5	12.6	30.2	20.1
MKD	56.4	29.6	75.4	11.5	26.0	16.5
MNE	45.3	19.0	62.3	13.1	29.3	24.1
SRB	51.4	24.9	73.1	8.6	23.0	14.9
TUR	49.5	39.5	64.5	8.7	16.3	25.9
XXK	33.5	19.4	NA	10.9	19.5	31.4
DZA	37.4	17.7	NA	11.4	26.9	26.2
EGY	41.3	21.6	44.3	6.6	17.1	24.6
ISR	60.8	42.4	79.3	3.0	4.7	17.0
JOR	26.8	11.5	NA	21.4	46.6	30.2
LBN	30.6	17.9	37.8	29.6	47.8	36.0
LBY	45.2	6.4	NA	15.3	23.1	NA
MAR	38.0	15.4	NA	13.0	35.8	32.9
PSE	31.6	19.2	NA	31.4	43.0	39.4

Country	Employment rate (% aged 15+ or similar age group)	Employment rate (% aged 15-24 or similar age group)	Employment rate of recent graduates aged 20–34 (ISCED 3–8)	Unemployment rate (% aged 15+ or similar age group)	Unemployment rate (% aged 15-24 or similar age group)	NEET rate (% aged 15-29 or similar age group)
TUN	38.7	13.7	NA	16.0	41.5	29.3
Source	LFS	LFS	LFS	LFS	LFS	LFS

Country	Employment by broad economic sectors (%): agriculture	Employment by broad economic sectors (%): industry	Employment by broad economic sectors (%): service	Incidence of vulnerable employment (%)	Employment by 'educational mismatch': % matched
KAZ	15.7	25.8	58.5	30.0	NA
KGZ	11.9	19.4	68.7	22.3	NA
TAJ	63.2	9.1	27.7	23.3	NA
TKM	NA	NA	NA	28.6	NA
UZB	23.9	23.8	52.3	33.7	NA
ARM	19.4	23.3	57.4	31.6	NA
AZE	35.4	16.1	48.5	54.0	NA
GEO	16.1	21.7	62.2	28.3	NA
MDA	18.1	20.9	61.0	18.6	66.2
UKR	13.9	25.5	60.6	14.9	NA
ALB	36.7	20.5	42.8	51.0	69.8
BIH	7.7	33.7	58.7	9.2	68.1
MKD	4.3	19.1	76.6	11.1	72.1
MNE	7.8	31.0	61.2	10.0	NA
SRB	12.8	29.0	58.2	18.5	64.0
TUR	14.8	27.3	57.9	24.4	54.7
XXK	2.8	27.0	70.2	10.4	61.7
DZA	NA	NA	NA	27.5	NA
EGY	18.7	28.8	52.5	23.9	49.9
ISR	0.8	15.7	83.5	9.4	63.5
JOR	1.8	16.4	81.8	10.5	45.0
LBN	4.1	21.9	73.8	19.2	NA
LBY	0.1	6.0	98.0	NA	NA
MAR	27.8	23.8	48.3	44.6	NA
PSE	6.8	27.0	66.2	27.5	59.2
TUN	15.9	29.2	53.6	21.4	NA
Source	LFS	LFS	LFS	LFS	ILOSTAT

There are significant variations in the capacity of labour markets in ETF partner countries to provide employment opportunities. Most Western Balkan countries have employment rates ranging from 34 % to 58 %. Several SEMED countries have comparatively low employment rates. For example, Jordan's rate is 26.8 %, while Palestine's is 31.6 %. Labour market conditions are even more uneven for young

people. Youth employment remains below 20 % in Bosnia and Herzegovina, North Macedonia, Moldova and Palestine. It is even lower in Jordan (11.5 %) and Libya (6.4 %). Only Israel and Türkiye report youth employment levels at or above the EU reference point (Table 6).

Similarly, there are large differences in unemployment rates. In Kazakhstan and Uzbekistan, for example, unemployment is comparatively low at 4.9 % and 5.9 % respectively, but in many other countries it remains high or very high. Adult unemployment exceeds 12 % in Bosnia and Herzegovina, North Macedonia, Armenia, Tunisia, Georgia and Palestine, rising above 20 % in some countries such as Jordan. Youth unemployment is often two to three times higher than adult unemployment. Rates reach 30 % in Bosnia and Herzegovina, 29–32 % in North Macedonia, 41.5 % in Tunisia, 31.4 % in Palestine and 46.6 % in Jordan. Even in countries with relatively low overall unemployment rates, significant proportions of young people are neither in employment nor in education or training (NEET), as reflected in NEET rates often exceeding 20 %.

In some ETF partner countries, recent graduates make the transition into employment relatively smoothly. Examples include Serbia, which has a graduate employment rate of 73 %; Georgia, which has a rate of 60 %; and Albania, which has a rate of 66 %. However, in other countries the transition to work is more difficult. For instance, the employment rate for recent graduates is 44 % in Egypt and 49 % in Armenia. However, these rates, whether at the higher or lower end within a region, remain well below the EU-27 average of 82.4 %.

How is employment distributed across the main sectors of the economy? Agriculture continues to employ large proportions of the workforce in several countries, including Tajikistan (over 60 %), Uzbekistan and Moldova (around 20–25 %), and Armenia (19 %). By contrast, agriculture accounts for only a small proportion of employment in Jordan, Palestine and most Western Balkan countries. The service sector dominates in Israel (over 83 %), Jordan (82 %), Kosovo (70 %), Georgia (62 %) and Türkiye (58 %). However, in several of these countries, it still represents a smaller proportion of employment than in the EU (72 %). Industry remains a significant employer in Bosnia and Herzegovina (34 %), Serbia (29 %), and Türkiye (27 %).

Job quality is a widespread issue in ETF partner countries. Vulnerable employment affects between a quarter and a third of workers in Armenia, Uzbekistan, Kazakhstan, Kyrgyzstan, Tajikistan, Tunisia, Palestine and Türkiye, which is often double or triple the EU average. In Albania, more than half of all jobs are classified as vulnerable. Skills mismatch is also widespread. Around 30–40 % of workers in Albania, Serbia, Egypt, Kosovo, Jordan, and Palestine are in jobs that do not correspond to their qualifications, highlighting inefficiencies in the interaction between education systems and labour markets.

2.2 Demand for learning

Who are the learners in focus of monitoring

As in previous years, the ETF monitoring retains a learner-centred perspective. This means that countries' fulfilment of educational commitments is assessed from the perspective of learners, focusing on how policies and systems meet the specific lifelong learning needs and expectations of different groups of learners in various educational settings and employment contexts.

The concept of lifelong learning recognises that age is an inherent characteristic with a decisive influence on the educational needs of learners and on the pathways they choose. It also influences the policies that countries put in place to address these needs. For example, age determines whether individuals are still subject to compulsory education, have reached working age or are considered adults in the labour market. Therefore, the most fundamental learner characteristic guiding the ETF monitoring is the learner's age.

For the purpose of monitoring and indicator selection, learners are grouped into two main categories: **youth** and **adults**. The *youth* category includes young people who have not yet reached the minimum

working age (typically aged 15 or under) and who are still in formal, often compulsory, education. It also includes young people of working age (15–24, or 15–29, depending on indicator definition), who are no longer in compulsory education in most countries and whose situations may therefore be more diverse. The category *adults* includes individuals who are older than this group and are more commonly employed or seeking to update or acquire job-related skills.

When considering demand for learning and potential participation in education and training, monitoring indicators refer to working-age young people as a whole. This is because participation in education and training is no longer guaranteed after the end of compulsory schooling and is more strongly shaped by personal aspirations, labour-market conditions, and the availability of opportunities. Age is therefore the key characteristic that determines the size and structure of the population requiring learning opportunities, regardless of whether they are currently in formal education, employed, unemployed or inactive.

Conversely, the next chapter assesses the performance of education and training systems and what they deliver to young learners. The focus is on young people who have not yet reached working age and are predominantly in compulsory education. For this group, performance monitoring focuses on segments of education where universal participation is intended and responsibilities are clearly defined. Governance arrangements are in place, delivery structures are established, and policies can be traced to specific institutions and authorities. In most countries, this corresponds to compulsory schooling for learners below the minimum working age. This clarity is essential, because meaningful monitoring of performance requires a clear understanding of who is being assessed.

Another key consideration when defining the learners who are the focus of ETF monitoring is that certain groups may be vulnerable due to demographic or socioeconomic factors that increase their risk of being excluded from education or employment. These vulnerabilities may also affect the realisation of key policy and system outcomes.

The notion of vulnerability encompasses a wide range of characteristics, several of which are widely recognised in education and employment policy as they align with national and international priorities aimed at reducing disadvantage. These include socioeconomic disadvantage (for young people), gender (for both young people and adults), and risk factors such as low or no educational attainment (for adults).

Gauging demand for learning

Currently, there is no single international metric for measuring demand for education and training. Instead, existing data can be used to approximate learning needs using indirect indicators. Demographic trends, enrolment rates, socioeconomic factors and labour market indicators are all commonly used to this end. Among these, indicators that capture the size of relevant learner populations are useful for approximating potential educational demand.

The number of learners in specific groups, such as young people, adults or vulnerable populations, directly affects the potential need for infrastructure, teachers, facilities and learning materials. Larger populations require greater system capacity, so the size of each group is a key indicator of resource needs. While demand can take many forms, the most feasible estimate based on available data concerns these resource and capacity requirements.

ETF monitoring therefore prioritises learners by age, gender and vulnerability. For the purposes of this report, demand for learning has been approximated by examining the size and, where possible, the distribution of specific groups of vulnerable learners across ETF partner countries.

The KIESE indicators selected for this report include the share of young people in the population, the share of young people who are not in education, employment or training (NEET), and the share of adults with low or no education. The sections below provide a snapshot of the extent to which ETF partner countries face diverse learning needs related to age, socioeconomic disadvantage and migration status.

Youth and youth at risk

The relative size of the youth population (15–24) gives an idea of the size of the cohort of young people and prospective learners of working age, while the NEET rate (15–24) indicates the share of young people who are at risk and may need targeted learning and re-engagement measures. In most ETF partner countries, both indicators cover young individuals aged 15 and over. Taken together, the two indicators help to contextualise the scale and nature of the demand for learning among young people, including those at risk.

While these two indicators do not capture all aspects of learning demand among young people, such as gender disparities, socioeconomic inequalities or regional differences, they can still serve as a useful proxy for understanding how many young people, including those at risk, may seek or require learning opportunities and support beyond compulsory schooling. As already noted, monitoring demand at this stage is essential because participation is no longer guaranteed, and disparities in access and engagement become more apparent.

The data in Figure 3 shows that there is a substantial variation in the relative size of the youth population across ETF partner countries. These differences matter because they indicate how many young people are moving beyond compulsory education and may require opportunities for upper-secondary and post-secondary learning, vocational programmes, re-engagement measures, and career guidance.

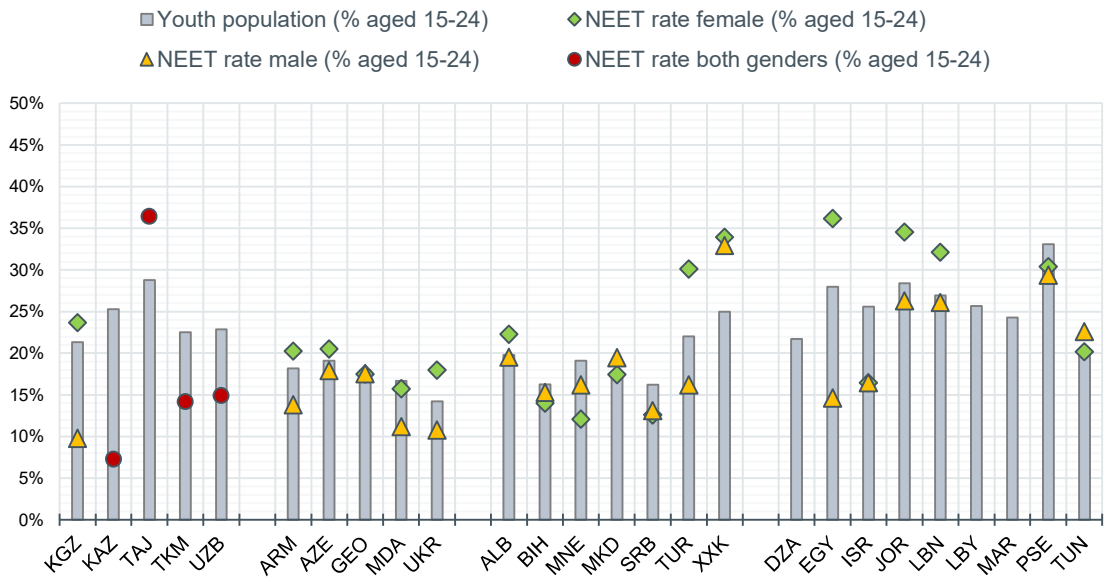
The share of young people in a population can range from around 14 % in Ukraine and 16 % in Bosnia and Herzegovina to more than a quarter in countries such as Tajikistan (28.8 %), Palestine (33.1 %), Kosovo (25 %) and Lebanon (27 %). However, many countries fall between these two extremes. For example, countries in the Eastern Partnership region report that young people account for around a fifth or less of their populations. Examples include Armenia (18.2 %), Georgia (17.9 %) and Moldova (16.7 %). The proportion in SEET countries, such as Albania (19.8 %) or Montenegro (19.1 %) is also mid-range. Conversely, partner countries in Central Asia and the SEMED region have larger youth cohorts in relative terms, including Kyrgyzstan (21.4 %), Kazakhstan (25.3 %), Turkmenistan (22.5 %), Uzbekistan (22.8 %), Egypt (28 %) and Jordan (28.4 %).

How many of these young people have disengaged and therefore require targeted learning and re-engagement measures because they are NEETs (not in education, employment or training)?

Figure 3 shows that the extent of youth disengagement differs considerably between countries and, in most cases, between young women and young men. In several countries, the share of young of both genders who are not in education, employment or training is relatively low, for example in Montenegro, Serbia and Moldova. In each of these countries, the NEET rate is in the lower teens – which is not trivial, but still modest compared to the levels observed in many other countries in the monitoring sample. In Georgia, the NEET levels for young women and young men are similar.

In most ETF partner countries, a more sizeable proportion of young people are NEET, reaching around one-fifth of the youth population, particularly among young women. Examples include Armenia, Azerbaijan and Kyrgyzstan, where young women are up to twice as likely to be NEET as young men. Similar magnitudes are seen in several other countries, including Ukraine, Albania and Tunisia, where the figures for young women and young men also lie within this range.

Figure 3. Relative size of youth population (%) by country, and percentage of population aged 15-24 identified as NEET by country and gender, ETF partner countries (2024 or latest available year)



Source: ETF KIESE database
Notes: 1. Gender disaggregated data is missing for Kazakhstan, Tajikistan, Turkmenistan, and Uzbekistan; 2. Year of reference for Kyrgyzstan, Armenia, Montenegro, Kosovo, Egypt, Jordan, and Tunisia: 2023; 3. Year of reference for Lebanon: 2022; 4. Year of reference for Ukraine: 2021.

In several Southern and Eastern Mediterranean countries, a much higher proportion of young people are NEET. In Egypt, Jordan and Lebanon, around one-third of young women are not in education, employment or training, whereas the corresponding figure for young men is much lower. The situation in Türkiye is similar, with the proportion of young women in the NEET category being roughly twice that of young men. These differences highlight gender-based barriers that make it more challenging for young women to continue their education or to enter the labour market.

However, there are also countries where NEET rates are high for both genders. Kosovo and Palestine stand out in this regard, with the shares of both females and males approaching or exceeding 30 %. Tunisia shows a comparable pattern, albeit at lower levels. In these countries, the available data suggest that the challenges of staying engaged in education or entering employment affect young women and young men to a similar degree.

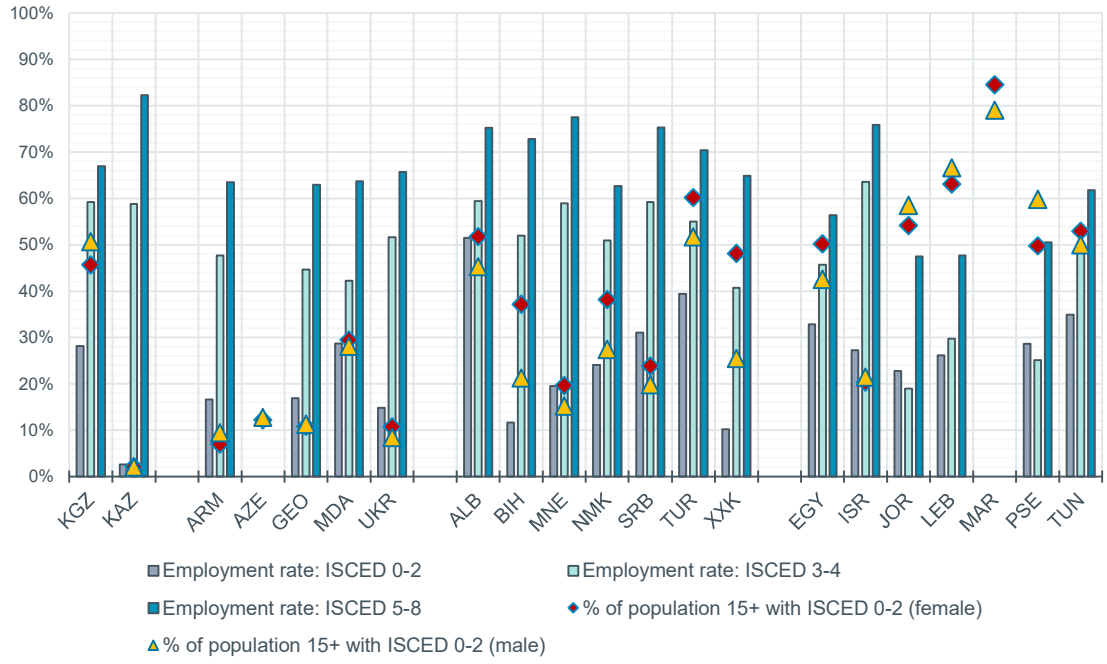
The data in Figure 3 also suggests that demographic pressure and the prevalence of disengagement among young people often go hand in hand. Comparing the two datasets (share of young people in the population and share of young people who are NEET) suggests that, in most countries, there is a relationship between the size of the youth cohort and the proportion of young people who are not in education, employment or training.

Countries with larger youth populations tend to have higher proportions of young people who are NEET, particularly young women. Egypt, Jordan, Lebanon, Palestine and Kosovo fall into this group, where sizeable youth cohorts coincide with elevated NEET rates for one or both genders. In contrast, countries with smaller youth cohorts, such as Moldova, Serbia and Ukraine, tend to have lower proportions of young people with NEET status. Several countries sit between these two groups. Armenia and Azerbaijan, for example, have moderately sized youth cohorts, and the proportion of young people who are NEET is in the middle of the regional distribution rather than at either of the extremes.

Adults and adults at risk

Demand for learning among adults can depend on many factors, but two are particularly relevant and can be tracked through readily available international indicators: the number of adults with low qualifications and their level of participation in the labour market. These aspects are captured by two indicators: the proportion of adults with low educational attainment (ISCED 0–2) and their employment rate. These indicators do not capture the motivation of adults to learn or the availability and quality of provision. They are used here solely as proxies for the scale of potential need arising from skills-related labour-market disadvantage. Together, they provide insight into the size of the group in need of learning opportunities and the extent to which their limited qualifications hinder their employment prospects.

Figure 4. Employment rate by educational attainment (15+) by country, and population 15+ with ISCED 0-2 by country and gender, ETF partner countries (2024 or latest available year)



Source: ETF KIESE database

The employment rate for adults with ISCED 0–2 reflects the position of individuals with limited qualifications in the labour market. In contexts where adults with ISCED 0–2 achieve significantly poorer employment outcomes compared to those of adults with higher levels of education, these disparities can be reasonably interpreted as reflecting, at least in part, a skills-related disadvantage rather than merely a general shortage of jobs. In such circumstances, adults with low or no education may benefit from learning opportunities that could improve their employment prospects.

Taken together with this interpretation, the indicator showing the share of adults with ISCED 0–2 helps approximate the scale of the challenge by indicating how many adults are situated in a position of skills-related disadvantage. It therefore serves as a proxy here for the number of adults whose risk of exclusion could potentially be reduced through learning and upskilling opportunities.

Figure 4 shows that, in most countries, employment among adults with ISCED 0–2 is low, often ranging from 15 % to 30 %. In several cases, the proportion is extremely small. In Bosnia and Herzegovina, it is around 12 %; in Kosovo it is 10.2 %; and in Kazakhstan it is only around 3 %. Very few countries report higher values, for example Albania, where the proportion is around 51 %.

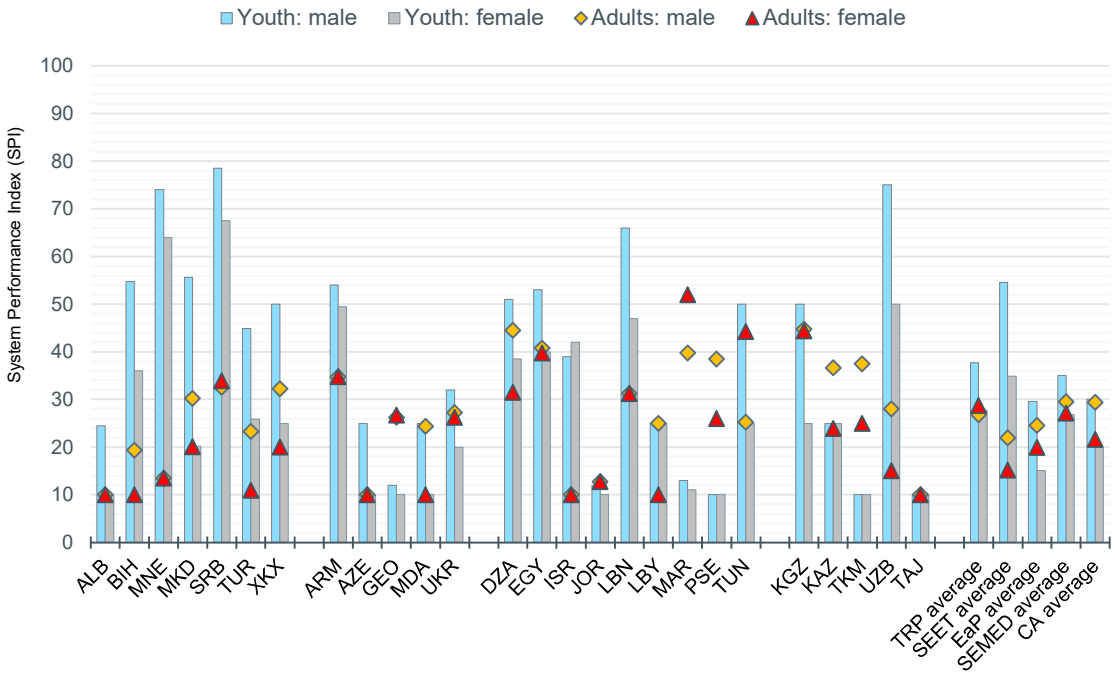
The data also suggests that, in general, countries where adults with ISCED 0–2 struggle to find employment tend to be those where higher educational attainment translates into significantly better employment outcomes. This disadvantage related to educational attainment is present across the monitoring sample, although the size of the gap varies between countries. In Kyrgyzstan, for example, employment rises from 28 % among adults with ISCED 0–2 to 59 % among those with ISCED 3–4, and to 67 % among those with ISCED 5–8. Similar patterns can be seen in other contexts, for example in Georgia, Armenia, Bosnia and Herzegovina, Kosovo and Israel, where adults with higher levels of education have significantly higher employment rates.

In such settings, opportunities for learning and upskilling could play a key role in improving the chances of adults at an educational disadvantage to enter and remain in the labour market. Figure 4 suggests that the share of those adults is high in all countries in the monitoring sample and, in many cases, very high. In Türkiye, Jordan, Albania and Egypt, more than half of adult women fall into this category, while in Morocco, the proportion is 83 % for women and 79 % for men. In most countries, except for Armenia, Jordan, Lebanon and Palestine, women are more likely than men to have low or no education, despite the fact that there are no significant gender gaps in enrolment in primary and secondary education. This places women at a heightened risk of being excluded from employment and limits their opportunities to engage in learning, unless targeted support is available.

3. PERFORMANCE IN SUPPORT OF ACCESS AND PARTICIPATION

Building on the thematic areas outlined above, which trace the pathways of learners from entry to completion of education or training, this chapter of the cross-country monitoring report focuses on access to learning opportunities. It aims to present evidence on whether different groups of learners in ETF partner countries have equal opportunities, or whether inequalities in access and participation persist.

Figure 5. Access to learning opportunities by country, age and gender of learners - system performance index, ETF partner countries, regional and monitoring sample averages (2025)



Note: Theoretical[12] system performance index (SPI) range: min/low performance=0, max/high performance=100
Source: ETF Torino Process database

The analysis draws on indicators from the ETF KIESE database and system performance indices (SPIs) from the Torino Process database. It also considers the results of a Torino Process monitoring survey (see Section 1.3). These sources enable an assessment of two policy outcomes: support for equitable access and participation of young people and adults, and support for young people in initial VET (IVET) to enable them to progress and complete their programmes.

Access-related SPIs differ according to the target group. For young people, the SPI specifically refers to access to IVET. For adults, it captures access to continuing VET (CVET) and other adult learning opportunities, including those provided through active labour market policies (ALMPs). A separate SPI assesses the extent to which young learners in IVET are supported in progressing and completing their programmes. In all cases, the results reflect the policies, structural arrangements and measures

[12] The Torino Process makes a distinction between theoretical (full) index range and index range used for reporting purposes. For reporting purposes, instances of extreme values on the low end (SPI < 10) and on the high end (SPI > 90) of the index scale are truncated at the lower (10) and upper (90) decile end. This means that the reporting does not discriminate SPI values below 10 and above 90.

that a country has put in place, as these shape the opportunities, incentives and guidance available to learners.

Figure 5 illustrates how education and training systems in ETF partner countries perform in providing access to learning for young people in IVET and adults in C/VET and ALMPs, disaggregated by country and gender. For each country, it presents three SPI scores: one for the youth population, disaggregated by gender; one for the adult population, also disaggregated by gender; and one for the regional average and the monitoring sample (Torino Process – TRP) average.

3.1 Access by age and gender

Access for youth by gender

Across ETF partner countries, the data and monitoring survey results suggest that formal eligibility rules are rarely the main barrier to access. While most national systems allow universal entry after lower secondary education and many offer tuition-free provision, actual participation is often modest. In several contexts, such as Georgia, Moldova, Palestine and Jordan, participation in IVET remains low despite open admission. In some countries, fewer than 15 % of students in upper secondary school enrol in vocational programmes (KIESE SPI Indicator 4) and system performance in support of access is similarly poor (for example, Georgia has an SPI of 12 for boys and 10 for girls, and Palestine has an SPI of 10 for both genders).

The reasons for underperformance vary, but the more common ones include limited attractiveness, geographical imbalances and cost-related factors. Even in countries with extensive provider networks, such as Algeria, Egypt, Montenegro and Kazakhstan, remote and rural areas tend to be underserved, restricting the opportunities available to young people who are unable to relocate or commute.

Gender disparities cut across most countries and, according to the monitoring surveys, reflect both entrenched social norms and segregation by field of study. In some contexts, the system's performance in terms of supporting girls is substantially weaker than that for boys (Figure 5). For example, Albania (SPI of 25 for boys and 10 for girls), Moldova (25 and 10), Türkiye (45 and 26), Kosovo (50 and 25) and Uzbekistan (75 and 50) all exhibit substantial gender gaps, which are also evident in highly gendered enrolment. Girls often tend to cluster in commercial, service or care-related fields, while boys tend to dominate technical and industrial programmes.

This pattern is evident even in countries where overall access is relatively favourable, such as Uzbekistan (SPI of 75 for boys and 50 for girls), Montenegro (74 and 64, respectively), Serbia (79 and 68), Lebanon (66 and 47) and Bosnia and Herzegovina (55 and 36). This suggests that horizontal segregation is a systemic feature of VET provision. Only a few countries perform better in terms of gender parity in access, with a difference of 5 points or less in the scores for the two genders. Examples include many countries in Central Asia, such as Tajikistan, Turkmenistan and Kazakhstan, as well as Palestine, Jordan, Libya, Morocco, Armenia and Georgia. However, even in these countries, the monitoring surveys indicate that the distribution of workers across different fields is still heavily influenced by traditional perceptions of 'male' and 'female' occupations. In addition, system performance in support of access is low overall in all countries with fewer gender disparities, except in Armenia, Libya and Kazakhstan. Israel is the only exception to these patterns, as its system is more supportive of girls' participation in VET than boys'.

The monitoring surveys underlying the system performance data suggest that, while several countries have introduced reforms and incentives to broaden participation, the impact of these initiatives is uneven. In countries such as Türkiye, Armenia and Kazakhstan, financial support schemes, such as stipends and free textbooks, have helped to reduce cost barriers. In Armenia, targeted scholarships have driven substantial enrolment increases in priority fields. Other countries, such as Lebanon, Algeria and Israel, have introduced curriculum reforms and quality assurance initiatives, and are making efforts to strengthen guidance and labour market linkages with the aim of enhancing the

attractiveness of VET. These policies are often diluted by limited coordination, fragmented governance and weak public perceptions. In contexts affected by conflict or political instability, such as Libya, Ukraine and Palestine, operational constraints, safety concerns and donor dependency limit the extent to which young learners can meaningfully benefit from the provision that is offered to them.

In general, the data and contextual information collected in this round of ETF monitoring suggest that improving access to IVET involves addressing cultural perceptions, geographical inequalities, and affordability as much as expanding provision. Investments in infrastructure and adjustments to legal frameworks do not automatically translate into broader or improved access. While some countries underperform due to insufficient provision to meet demand, as is the case in Morocco where higher demand for VET in certain fields exceeds available places, participation is stronger where VET is perceived as relevant and leads clearly to further learning or employment. Conversely, weak social perceptions of VET tend to limit the impact of even well-designed policies. In Egypt and Jordan, for instance, VET continues to carry the stigma of being a second-choice pathway. This discourages many young people from enrolling even when provision is extensive.

In countries where the system effectively supports access, higher participation in VET reflects not only its attractiveness, but also the limited alternatives available to students. In North Macedonia, for example, the entry requirements for general academic pathways are competitive, making VET the most accessible option for many learners. A similar dynamic is present in Serbia, where vocational programmes dominate upper secondary education and general education is more selective. Both countries achieve high participation rates (SPIs of 67 and 61 in North Macedonia, and 79 and 68 in Serbia), not only because VET is well established, but also because entry to more academic tracks is more restrictive.

Access for adults by gender

Figure 5 also presents performance in support of adult participation in learning, which remains an area with comparatively weaker results in most ETF partner countries.

Adults in ETF partner countries participate in learning far less frequently than available opportunities suggest. Monitoring results and expert survey information show that most countries have generous entry conditions and an increasingly diverse range of providers. Despite this, actual participation is modest in almost all contexts, and performance in support of adult participation tends to cluster at the lower end of the SPI scale. This rarely reflects the breadth of available formal provision. Even in countries where provision has expanded or diversified, such as Georgia and Morocco where system performance in support of adult learning is also comparatively high (SPIs of 40 and 52 for men and women respectively), only a small proportion of adults engage in continuing VET or other forms of adult learning.

Where available, the KIESE data used to compile the composite SPI scores confirms limited adult participation in lifelong learning, for example in Montenegro (3.6 %, KIESE SPI Indicator 17) and Ukraine (below 1 % for both women and men, Indicator 16). Participation in adult learning is also low in Albania (below 2 % of the adult population, Indicator 16) and in Bosnia and Herzegovina (around 1.6 %, Indicator 17). For most countries shown in Figure 5, this situation results in low performance levels, for example in Albania (SPI of 10 for both genders), Bosnia and Herzegovina (SPI of 19 for men and 10 for women), and Türkiye (SPI of 23 for men and 11 for women).

According to the monitoring surveys, the barriers that adults face are strikingly similar across countries and regions. Cost is one of the main obstacles, particularly where training fees vary widely between providers or subsidised places are limited, as in Bosnia and Herzegovina. Time constraints, inflexible schedules and insufficient guidance also limit participation, even where courses are formally open to all. Adults tend to respond more readily to short, employment focused courses delivered through active labour market measures, while longer or more formal programmes attract far fewer learners.

Occasionally, there are also gender differences in access to adult learning. In several countries, men benefit from more favourable access conditions (Figure 5). This includes Bosnia and Herzegovina,

where the gender gap is 9 SPI points, as well as Türkiye and Kosovo (12 SPI points), and Uzbekistan, Turkmenistan and Kazakhstan, where the difference of around 13 SPI points. Libya has the widest gender gap in favour of men (15 SPI points).

According to the monitoring surveys, where provision is flexible, locally accessible and aligned with the personal circumstances of prospective learners, women tend to participate at levels closer to, or higher than, those of men. There are no gender-related differences in SPI scores in Albania, Montenegro, Armenia, Azerbaijan, Israel, Jordan, Lebanon, Kyrgyzstan and Tajikistan. In another group of countries, such as Georgia, Serbia, Ukraine and Egypt, the discrepancy in performance between genders is minimal. A minority of national contexts also appear to favour women over men in terms of adult learning arrangements, for example Egypt, Morocco and Tunisia (Figure 5).

In many ETF partner countries, gender parity coincides with low results on the monitoring scale. Approximately two-thirds of countries in which policy and system performance does not differ by gender, are also countries which have an SPI between 10 and 15. This suggests that equal outcomes are often a hallmark of limited access for both women and men, rather than gender balanced opportunities for learning. Gender parity is indeed found in some higher-performing countries, such as Armenia (SPI of 35 for both genders), Lebanon (SPI of 31), and Kyrgyzstan (rounded SPI of 45). However, even in these cases, the results lie in the lower half of the SPI scale.

Active labour market measures play an increasingly important role in widening access for adults, especially the unemployed and other vulnerable groups. In Montenegro (SPI of 14 for both genders), Moldova (SPI of 24 for men and 10 for women), and Algeria (SPI of 45 and 32 respectively), ALMP-linked provision reaches more learners than formal CVET and often provides an important entry point for reskilling. In Ukraine, the monitoring survey suggests that participation in adult learning remains extremely low overall, despite the existence of multiple access channels. In this context, ALMP-linked training becomes particularly relevant, as broader participation has been severely disrupted.

ALMPs play a similar role in several other countries, but their design and outreach vary considerably, and their effectiveness tends to be modest where provision is fragmented or short-term. Examples include Jordan (SPI of 13 for both genders), and Libya (SPI of 25 for men, and 10 for women), where the monitoring survey points to substantial policy activity but also notes constraints that continue to limit broader uptake.

3.2 Retention and programme completion

In addition to examining how effectively countries open learning opportunities to different groups of learners, it is also important to consider whether learners succeed once they have enrolled. To this end, several SPIs in the Torino Process focus specifically on policy and system outcomes related to learner progression and graduation. The guiding question is whether learners who have chosen a particular learning pathway are able to progress and complete it.

This section of Chapter 2 addresses this question. Alongside the SPIs that assess whether learners advance through their programmes and graduate (Figure 6), it draws on KIESE data, including the rate of early leavers, to identify the presence of challenges that may prompt learners to discontinue their studies prematurely.

Figure 6 shows that, in some countries in the monitoring sample, IVET delivers solid results in terms of programme completion. Examples include Kyrgyzstan (SPI of 81), Ukraine (SPI of 78), Egypt (SPI of 76), Algeria (SPI of 75), Uzbekistan (SPI of 74) and Armenia (SPI of 73). In other countries, however, the results are considerably weaker, as can be seen in Figure 6.

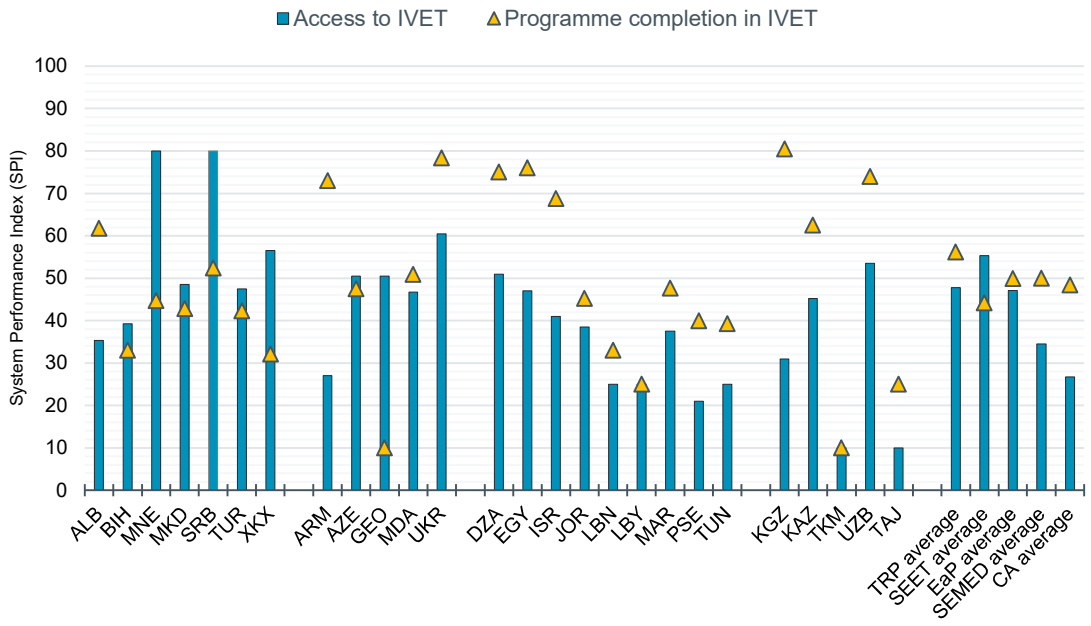
The contextual information gathered through the monitoring surveys suggests that favourable outcomes are more common in systems where learners encounter clear pathways, modular provision and flexible arrangements that support the continuity of their studies. In Armenia, for example, where there is a high level of completion across secondary education (97.2 % for girls and 90.4 % for boys, Indicator 23), very low early leaving (Indicator 19) and a comparatively low dropout rate in IVET, the

monitoring survey indicates that learners generally progress through programmes with few interruptions. They also benefit from reintegration options that allow those who have to leave temporarily, such as students who are mobilised for military service, to return and complete their studies.

Algeria is another example of the positive role that structural arrangements can play in supporting graduation. The monitoring survey highlights the diverse and flexible nature of the IVET offer, which includes full-time, residential and apprenticeship-based training; evening and part-time courses; modular curricula, recognition of prior learning; and bridging pathways. These features provide learners with various options for continuing or resuming their programmes, thereby promoting high participation and completion rates.

There are also examples from Central Asia. In Kazakhstan (SPI of 63) and Uzbekistan (SPI of 74), tuition-free programmes, stipends and increasing employer engagement have had a favourable impact on retention rates. At the same time, monitoring surveys indicate that socioeconomic disparities between rural and urban areas may impact the prospects of some learners' ability to continue their training. In Kyrgyzstan, the monitoring survey found that 94 % of students completed IVET owing to clear regulations for reinstatement and flexible progression through modular curricula.

Figure 6. Access and programme completion in IVET - system performance index, ETF partner countries, regional and monitoring sample averages (2025)



Note: Theoretical index range: min/low performance = 0, max/high performance = 100.
Source: ETF KIESE/Torino Process database

By contrast, countries with rigid programme structures, limited guidance, or socioeconomically vulnerable learner populations tend to record significantly poorer outcomes. For example, this is the case in Georgia. In that context, the IVET dropout rate reported in the monitoring survey ranges from 30 % to 35 %, despite completion rates for upper secondary being above 90 % (KIESE SPI Indicator 23). This suggests that there are barriers that are specific to IVET rather than to secondary education as a whole. In Moldova (SPI of 51), where access to scholarships and counselling to support retention in IVET is uneven, the high rate of early leaving rate (16.4 %, KIESE SPI Indicator 19) affects both general and VET pathways.

The data also show that differences in system performance in support of graduation often reflect gaps in programme organisation and in the availability of structured learner support, particularly in contexts where options for continuing or resuming studies are limited. Albania's relatively strong results (SPI of 62) are linked to stable graduation trends, scholarships, modular curricula and widespread work-based learning. However, challenges persist due to the high early leaving rate (15.4 %, KIESE SPI Indicator 19) and uneven learning support at school level.

In some IVET systems in the SEET region, such as in Serbia, relatively modest programme-level dropout rates mask sizeable cumulative attrition across multiple years of study. Although the monitoring survey reports an annual dropout rate of only 1.2 %, the overall secondary completion rate of 86.4 % suggests that cumulative attrition over several years is significant. According to the monitoring survey, this pattern reflects structural limitations, such as weak reintegration pathways and frequent grade repetition, as well as socioeconomic pressures that the system does not consistently offset.

Other systems, such as that in Montenegro (SPI of 45), face different challenges. According to the monitoring survey, rigid programme structures in the three-year tracks, uneven learner support, and limited opportunities for continuing studies after interruption hinder progression and contribute to lower survival rates in these programmes.

In SEMED countries, the conditions for programme completion are generally more challenging. In Algeria, diverse training modalities, widespread stipends and apprenticeships and efforts to introduce digital attendance-monitoring systems have begun to reduce unexcused absences. However, elsewhere in the region high dropout rates remain common. In Tunisia, for example, the average rate is 22.3 %, reaching 25.5 % in some programmes, with the early leaving rate close to 30 % (KIESE SPI Indicator 19). For Morocco (SPI of 48), the monitoring survey highlights inconsistent entry procedures, limited academic support and an absence of higher education pathways. In Lebanon (SPI of 33), significant gaps in learning outcomes are exacerbated by the reported lack of remedial provision. In Palestine (SPI of 40), the monitoring survey explores the impact of financial pressures, mobility restrictions, and security-related disruptions to attendance, including gender-specific safety concerns, on progression and completion.

As in other domains of monitoring, policy and system performance in support of completion varies depending on the gender of learners. In several IVET systems, including those in Albania, Moldova and Georgia, boys are more likely to leave school early (KIESE SPI Indicator 19), often due to behavioural factors, socioeconomic pressures or military obligations. In Jordan, Tunisia and the SEMED region more broadly, girls face specific barriers, such as transport constraints, cultural expectations and early marriage. However, these obstacles are a poor predictor of outcomes in the region, as in some contexts girls' completion rates exceed those of boys (for example, in IVET in Jordan). Many countries, such as Israel and Uzbekistan, have introduced targeted initiatives to support girls and help them graduate. However, in several cases the absence of systematic, gender-disaggregated data on completion limits the ability to reliably assess outcomes.

4. PERFORMANCE IN SUPPORT OF QUALITY AND RELEVANCE

The concept of quality in education and training is broad and can be interpreted differently by different people, in different contexts. However, when assessing quality from a cross-country perspective, two main criteria emerge.

The first one is 'quality', understood as the attainment of the basic skills and key competencies necessary for personal development and active participation in society. This often refers to the intrinsic value of education or training. It considers the level of knowledge, skills and competencies of learners and how effectively these are attained, for example by examining the standards applicable to teaching methods, content, resources and the overall learning experience.

The second criterion is 'relevance', understood as the employability of learners and graduates. This refers to the extrinsic value of education or training, that is its applicability in real-world contexts. It considers how well the learning outcomes align with external demand, such as labour market needs, societal challenges or further academic pursuits.

Quality and relevance in education are interrelated and mutually reinforcing. High-quality education that equips learners with competences and strong basic skills can improve their chances of finding a job. Conversely, policies that focus solely on immediate employability may result in learners acquiring a narrow set of skills. This leaves them less adaptable to changing circumstances than those who have received a well-rounded education. It is also important to recognise that, although these two aspects are interrelated, they do not always go hand in hand. It is possible to gain employment without necessarily having a well-rounded skill set, just as it is possible to have key competences and still face challenges in securing suitable employment.

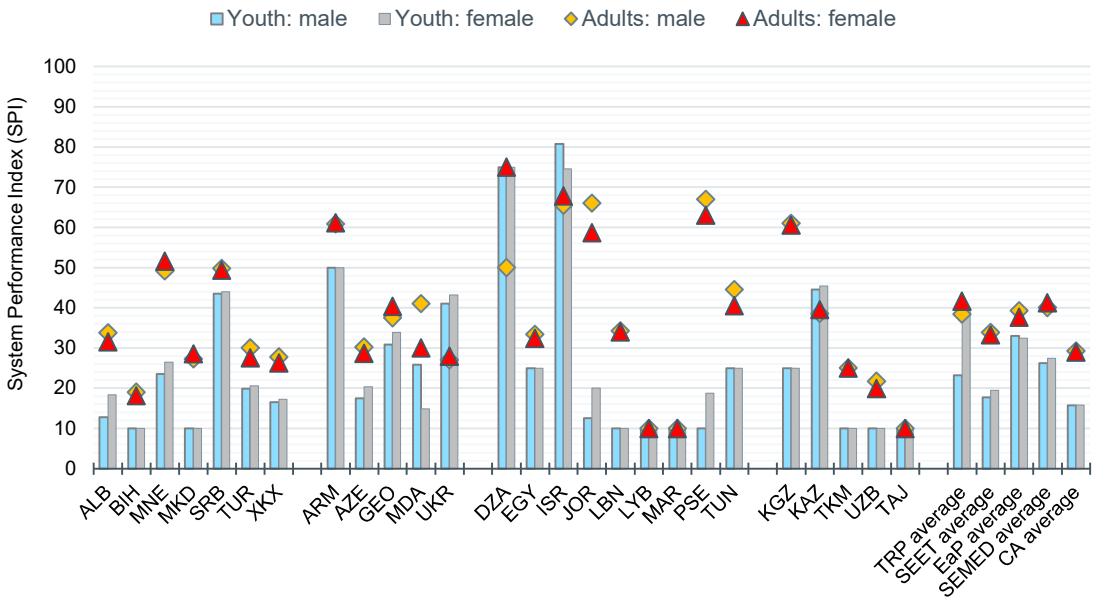
Assessing this pair of criteria — quality and relevance — poses certain challenges. Measuring the attainment of basic skills and key competences is a complex task because educational standards, cultural attitudes and individual learner needs vary between and within countries. In addition, the relevance of employability as a metric can be influenced by external factors, such as economic conditions, labour market fluctuations and regional disparities. Consequently, employability metrics may occasionally reflect broader socioeconomic conditions rather than the effectiveness of education and training systems in ensuring relevance.

In light of these measurement challenges, this chapter draws on a carefully selected combination of Torino Process system performance indices and KIESE indicators. The SPIs assess the extent to which national VET systems provide learners with basic skills and key competences, as well as the extent to which adults of working age possess foundational skills. Meanwhile, the KIESE indicators track the relevance of education in terms of employability.

4.1 Quality of learning outcomes by age and gender

This section of the monitoring framework uses SPIs to assess the effectiveness with which initial VET contributes to the acquisition of basic skills and key competences among young learners. The SPI dataset also provides information on the level of these skills among working-age adults, enabling both groups to be considered within a single analytical framework.

Figure 7. Quality of skills and competences by country, age and gender of learners – system performance index, ETF partner countries, regional and monitoring sample averages (2025)



Note: Theoretical index range: min/low performance=0, max/high performance=100
Source: Torino Process database

Figure 7 shows the monitoring results for 2025 corresponding to these skills-related SPIs. It combines the SPI scores for young people in initial VET with the results on the foundational skills of adults, with all values disaggregated by country, age and gender.

Young people

In many ETF partner countries, policy frameworks require IVET programmes to support the development of literacy, numeracy, digital competences and transversal skills. However, the data on youth in Figure 7 shows that the quality of foundational and transversal skills delivered to boys and girls in VET is rather low. In most countries, system performance in this monitoring domain is between 10 and 30 SPI points, largely due to widespread underachievement in core subjects such as reading and mathematics at around the end of compulsory schooling. International assessments of learning outcomes such as OECD's PISA, which contribute to the composite SPI results (KIESE SPI Indicators 24–26) show that many young people approaching or already in upper secondary VET do not reach even basic levels of proficiency. In several countries, including Albania, Montenegro, Jordan, Lebanon and Palestine, more than half of 15-year-olds fall into this category (KIESE SPI Indicators 24–26).

Only a few countries in the sample in Figure 7 stand out with better-than-average results. These include Israel (SPI of 81 for boys and 75 for girls), Algeria (75 for both genders), Armenia (50), Kazakhstan (45) and Serbia (44). However, these higher results should be considered in context.

In Israel, for example, monitoring evidence indicates strong labour market outcomes and a well-developed technological training sector. However, there is little direct assessment of foundational or transversal competences within VET. The information highlights structural weaknesses, including a fragmented accreditation system, limited workplace-based learning and an absence of reliable data on literacy, numeracy or digital skills acquisition among VET learners. This makes it difficult to validate the high SPI values in terms of actual learning. In Serbia, the SPI conceals significant differences between school types, with high levels of underachievement in three-year VET programmes (up to 95 % in mathematics and reading, KIESE SPI Indicators 24 and 25). Armenia's above average score is based on expert assessment in the absence of quantitative evidence and was achieved in a system where external verification of learning outcomes was limited. The result for Algeria is also based on a

qualitative assessment, which introduces an element of risk and potential bias. A set of structural factors, such as mandatory pedagogical training and curriculum breadth, may contribute to higher SPI values without necessarily reflecting uniformly strong competences among learners.

In most countries, system performance in support of quality is similar for both genders, and where differences appear, they are often slightly more favourable for girls. Yet, even in these cases, the results remain low in absolute terms. For example, the performance of girls in Montenegro (SPI of 27) and Albania (SPI of 18) is closer to the average for boys in the monitoring sample than to the international average for girls. In other contexts, such as in Moldova, the pattern is reversed: the SPI for girls is 15 points, which is well below the value for boys (26) and also below the regional average for girls (32). According to the monitoring surveys, these differences may be due to several factors, including gendered pathways within VET, uneven access to practical training in technical fields, and limited opportunities to develop higher-level competences in programmes where girls are concentrated.

Another recurrent finding across countries is the limited capacity of IVET to provide remedial support to learners who enter vocational pathways with weak foundations. In countries such as Kosovo, Georgia, Lebanon, Palestine and Jordan, the majority of young people enter VET below the required level of proficiency in core subjects, with underachievement rates often exceeding 70 % in mathematics and reading. Although VET curricula include general education components, the monitoring surveys consistently note the lack of systematic remedial mechanisms. Consequently, learners progress through their programmes without acquiring the necessary competences for further education or employment. Employers in these settings report persistent shortcomings in problem solving, communication, foreign languages and digital competences, even in programmes that include work-based learning.

Adults

On average, adults of working age have better foundational skills and competences than young people. However, the monitoring results show considerable variation across countries in terms of the extent to which these skills are acquired. They also reveal that in many countries adults have limited digital and higher-order competences.

System performance ranges from an SPI of 10 for both genders in Tajikistan, Libya and Morocco, to values between 20 and 30 in North Macedonia, Uzbekistan, Türkiye, Kosovo, Ukraine and Turkmenistan, and to an SPI of 50 or above in Armenia, Algeria, Kazakhstan, Serbia Jordan and Palestine. However, even in countries with better results, the data in Figure 7 suggests that many adults still struggle to acquire or apply the skills necessary for employment and everyday life.

Although adults in ETF partner countries generally have the basic literacy needed for everyday life, the monitoring data shows that these skills rarely extend to higher-order competences. Adult literacy is almost universal in most countries (KIESE SPI Indicator 59), including Albania (98.5 %), Armenia (99.9 % of women and 99.7 % of men), Montenegro (around 98 %) and Kazakhstan (99.8 %). However, very low participation in lifelong learning and low tertiary attainment restrict the acquisition of broader transversal competences and hinder the development of more advanced digital skills. There is a consistent pattern of weaknesses in core ICT competences: in Albania, for example, only 10.1 % of women and 8.7 % of men can use arithmetic formulas in spreadsheets (Indicator 47), and the proportion creating electronic presentations remains at 16–18 % (Indicator 45). In Bosnia and Herzegovina, the corresponding figures are even lower: 13.6 % create presentations, and fewer than 8 % configure security settings (Indicator 52). Similar patterns emerge in Georgia and Ukraine, where the vast majority use social networks (Indicators 42 and 43), yet fewer than 10 % of adults demonstrate basic data handling or productive digital skills (Indicators 44 to 48). In other words, adults across ETF partner countries appear far more confident as digital consumers than as digital problem-solvers.

In some countries, the extent to which adults possess key competences is independent of gender. This is the case in Montenegro (SPI of 52 for women and 49 for men) and Armenia (61 for both

genders). In other countries, however, gender differences are significant. In Egypt, Türkiye, Moldova and Morocco, lower levels of education levels, weaker digital competences and limited access to lifelong learning for women result in significant gender disparities which, according to the monitoring surveys, exacerbate broader socioeconomic inequalities. In Albania, for example, women have higher levels of tertiary attainment (18.9 % compared to 15 % for men, Indicator 35) yet face greater challenges in acquiring technical digital skills. In Moldova, women remain underrepresented in STEM fields, accounting for just 4.6 % of female students in higher education, and they occupy only 19 % of ICT positions. The worst outcomes for adult women are seen in Morocco, where 32.4 % lack basic literacy and the SPI values remain well below SEMED regional averages.

The difference between basic literacy and the ability to apply skills in the workplace is a recurring finding. In Armenia, for example, only 37 % of adults report using their skills fully or partially in their jobs, despite high levels of tertiary attainment (28.1 % of women and 25.1 % of men; Indicator 35). A similar mismatch exists in Serbia: although the SPI value for adults is 50, 35.6 % of unemployed adults have low or no education, while 10.1 % of employed adults are in jobs that require higher qualifications than they possess. Labour market evidence from Jordan and Lebanon also indicates structural deficits in technical and transversal competences, despite relatively high literacy rates.

Digital divides reinforce these disparities. In Türkiye, around 40 % of adults either report no computer experience or fail the basic ICT test. Only 6.6 % have taken an online course (KIESE SPI Indicator 57). In Ukraine, there is a stark contrast between the widespread consumer use of digital devices, and applications and the limited productive use of digital technology. For example, only 10.7 % of adults use spreadsheet formulas (Indicator 47), and fewer than 2 % have experience with programming or coding (Indicator 48). In Libya, the monitoring survey suggests that the divide is generational, with older adults being largely excluded in terms of digital competence. Even in countries with better monitoring results, as reflected in their SPI scores, such as Montenegro and Serbia, relatively few adults demonstrate more advanced ICT skills. Around one-third have created electronic presentations or used spreadsheet formulas (Indicators 45 to 47), and fewer than 10 % have programming experience.

The monitoring surveys describe national policies that are increasingly being adapted to address these deficits. Countries such as Tunisia, Jordan, Serbia and Uzbekistan promote training linked to ALMP, short-cycle VET and digital upskilling initiatives. Other initiatives aim to cultivate transversal and entrepreneurial skills. Examples include Egypt's TE 2.0 Strategy, Kazakhstan's lifelong learning reforms, and Armenia's growing emphasis on adult education. However, the effectiveness of these initiatives is often limited by factors such as low participation in adult learning, fragmented provision, weak quality assurance and the absence of systematic assessment of adult competences. Monitoring evidence suggests that as a result a significant proportion of working-age adults across ETF partner countries still lack the competences needed to adapt to and thrive in a rapidly evolving economic and societal landscape.

4.2 Relevance and labour market outcomes

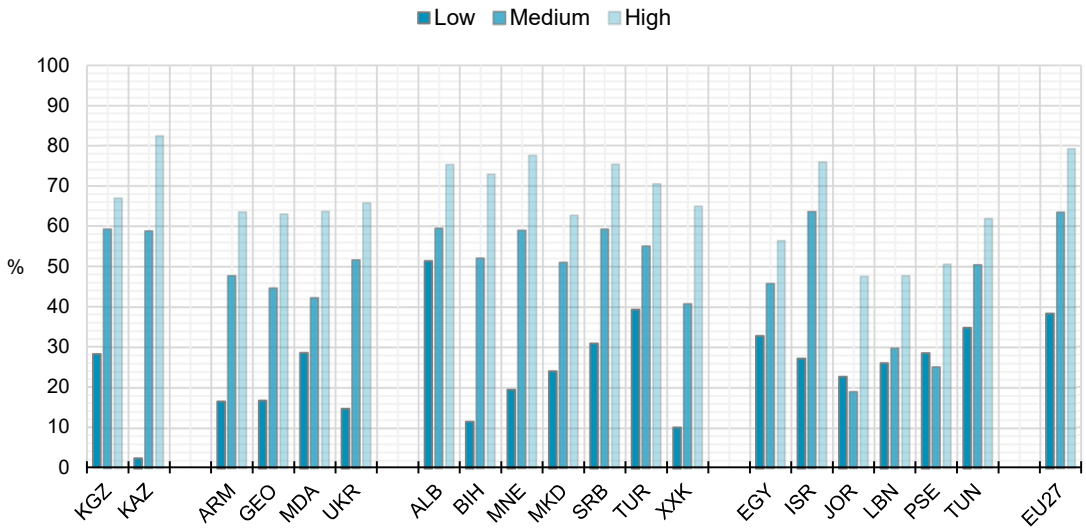
Having discussed quality, this section also examines the relevance of education and training. Drawing on labour-market statistics from the KIESE database, including the employment rate of recent graduates, employment by broad ISCO-08 sector, employment rates by educational attainment and LFS data on unemployment, it assesses the extent to which learning outcomes in ETF partner countries correspond to labour-market needs. This analysis complements the discussion on quality by examining employability as an essential dimension of the relevance of learning outcomes.

Employment rate by educational attainment

Across the ETF partner countries for which data are available, adults with higher levels of educational attainment are generally more likely to be employed, although the strength of this relationship varies between contexts. In Albania, for example, the employment rate among adults with a low a level of

education is 51.5 %, which is considerably higher than the EU-27 average of 38.4 %. Consequently, the employment gap between adults educated to a low and tertiary level is smaller than in many other countries (Figure 8). In Bosnia and Herzegovina, the gap is even wider: only 11.6 % of adults with a low level of education are employed, compared to 72.8 % of tertiary graduates. The contrast is even starker in Kazakhstan, where only 2.6 % of adults with a low level of education are employed compared to 82.3 % of those with tertiary qualifications — an employment rate for adults with tertiary education that is higher than the EU average. A similar pattern is seen in Kosovo and, to some extent, North Macedonia, although employment outcomes for adults with higher education are weaker than the EU average in both countries.

Figure 8: Employment rate (age 15+) by educational attainment, ETF partner countries (2024)



Notes: Age range for Serbia and EU27: 15-74. Year of reference for Kazakhstan, Armenia, North Macedonia, and Tunisia: 2023. Year of reference for Lebanon: 2022. Year of reference for Ukraine: 2021.
Source: ETF KIESE database (from LFS data received through Eurostat, ILOSTAT, and national statistical offices

As indicators of the relevance of education, these figures have certain limitations. In certain situations, high or low employment rates may reflect labour market characteristics rather than the relevance of education, since the size of the employment advantage often depends on a number of factors that are not related to the quality or relevance of education.

In Kazakhstan, for example, the extremely low employment rate among adults with a low level of education and the very high rate among tertiary graduates does not necessarily imply that tertiary education is highly relevant, nor that VET and other lower levels of education are weak. In some countries, it is more likely that the group of low-educated adults is small and marginalised. The labour market may be characterised by credential inflation, whereby tertiary degrees function as a default filter for stable jobs. Regional or sectoral employment may be concentrated in occupations that require formal qualifications, even though the underlying skills could be acquired outside tertiary education.

In Bosnia and Herzegovina, the opposite may be the case. The very low employment rate adults with a low level of education may reflect unfavourable developments in low-skill sectors, high inactivity among those with low qualifications, limited formal employment opportunities in rural areas and other labour market conditions not captured by available data.

With this limitation in mind, the data in Figure 8 also suggests that, on average, in several countries upper-secondary qualifications, including VET, do not raise employment prospects to the same extent as in the EU-27. In some contexts, they offer only marginal improvements, or even worse prospects, for finding employment. In Jordan, for example, adults with medium-level qualifications have an

employment rate of 18.9 %, which is lower than that of adults with low levels of education. In Lebanon, the difference in employment rates between those with primary/lower-secondary qualifications and those with upper-secondary qualifications is only 3.6 points. In Palestine, adults with medium-level qualifications (25.1 %) also have lower prospects of finding employment than those with a low level of education.

Higher education does not necessarily provide a strong employment advantage either. In many countries in the monitoring sample, such as North Macedonia, Armenia, Georgia, Jordan and Lebanon, employment among tertiary graduates is well below the EU benchmark. According to monitoring surveys, tertiary graduates in Algeria and Libya are even less likely to find a job than adults with medium-level qualifications.

The monitoring surveys also indicate that employment outcomes tend to be more positive where training programmes include substantial workplace experience, and where there are strong links between training institutions and employers. In North Macedonia, for example, more than 65 % of graduates from dual VET programmes find work within a year. In Morocco, 87.5 % of apprenticeship-based CAP programme participants find employment, and in Egypt more than 85 % of Applied Technology School graduates find employment within a year.

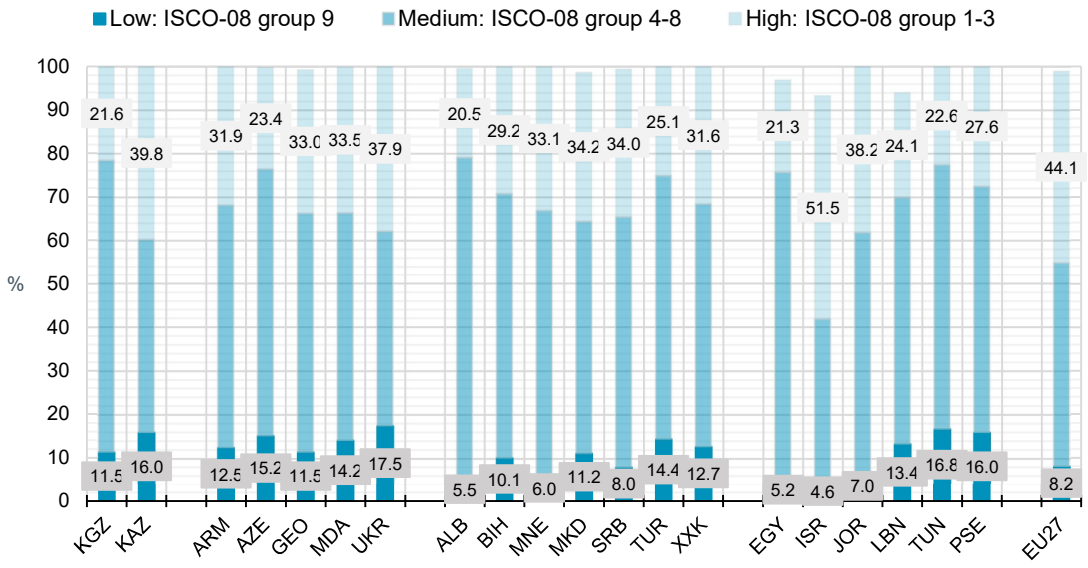
The information from the survey also shows that, in several countries, employment outcomes differ by gender. In Montenegro, employability outcomes for women are weaker and in Serbia women account for more than half of all registered unemployed adults. In Egypt, unemployment among female graduates of traditional technical schools is high and, in Tunisia, women with higher education face an unemployment rate of around 30 %. These findings suggest that labour market barriers often limit the extent to which women can benefit from their qualifications.

Employment by ISCO-08 sectors

As of 2024, the proportion of workers in elementary occupations (ISCO-08, Group 9) is higher in many ETF partner countries than in the EU-27, where this category accounts for 8.2 % of total employment. Several countries report considerably higher proportions, including Tunisia (16.75 %), Azerbaijan (15.2 %), Palestine (16.0 %), Lebanon (13.39 %, 2022), Armenia (12.5 %, 2023), Georgia (11.53 %) and Kyrgyzstan (11.5 %). The value for Kazakhstan (16.0 %) refers to 2023 (Figure 9).

The distribution of workers across high-skilled occupations (ISCO-08, Groups 1–3) also differs from the EU-27 average of 44.1 %. In several ETF partner countries, the proportion of workers employed in these groups is lower. This includes Kyrgyzstan (21.6 %), Azerbaijan (23.4 %), Lebanon (24.1 %, 2022) and Tunisia (22.6 %, 2023). Higher shares are seen in Georgia (33.0 %), Armenia (31.9 %, 2023), Palestine (27.6 %), Jordan (38.2 %) and Kazakhstan (39.8 %, 2023).

Figure 9. Employment by broad ISCO-08 sector, ETF partner countries and EU27 (2024 or last available year)



Notes: road categories may not sum to 100% due to the category 0. Armed forces occupation not included. Year of reference for Kazakhstan, Armenia, Kosovo, Egypt: 2023. Year of reference for Lebanon: 2022. Year of reference for Ukraine: 2021. Tunisia data refers to the second quarter of 2023.
Source: ETF KIESE database (from LFS data received through Eurostat, ILOSTAT, and national statistical offices).

Vertical mismatch provides a complementary perspective on these patterns, comparing the level of education of workers with the qualifications required for their jobs. Recent ETF analysis shows that in many countries, a significant proportion of adults, including those with tertiary education, work in roles that do not make full use of the competences associated with their qualifications.

Jobseekers

In addition to Labour Force Survey datasets on the unemployed, most ETF partner countries generate administrative records. These encompass the registered unemployed, vacancy monitoring, Labour Market Policy (LMP) expenditure and participation in LMP services, such as job matching, career guidance and counselling. They also encompass LMP and measures, including (re)training and other skills development initiatives, employment subsidies, direct job creation and start-up support, as well as other programmes that support the labour market integration of jobseekers.

These data sets are typically managed by Public Employment Services (PES) or labour/employment ministries, with the specific institution varying by country. It is worth noting that, due to their administrative origin, cross-country comparisons are rather limited. This constraint arises from varying legal definitions of unemployment, diverse registration conditions of the public employment services in the different countries, the design of LMP services and measures, including eligibility criteria for participation in available programmes, or the definitions and modality of vacancy data gathering.

Building on the European Commission's efforts in labour market policy statistics, the ETF collects a standard set of indicators on an annual basis to shed light on the number and characteristics of registered jobseekers, participants in LMP services and measures, as well as vacancies, employment transition rates and LMP expenditure.

The latest ETF LMP data collection exercise gathered annual data for 2024 as reported by the Public Employment Services, the employment departments of labour ministries and/or the national statistical offices. The table below summarises key trends regarding: (i) the number and profile of registered unemployed people and their transition rates to employment; (ii) the most frequently implemented activation services and measures implemented in 2024 (or the most recently available year); and (iii) vacancy trends by economic sector (NACE) and occupational group (ISCO).

In Kosovo, Moldova, North Macedonia and Türkiye, the number of male and female jobseekers registered as unemployed is relatively balanced. Conversely, Armenia, Bosnia and Herzegovina, Georgia, Montenegro, Serbia and Ukraine have higher unemployment rates among women compared to men. The unavailability of the male workforce due to war and efforts to defend the country against the Russian Federation's aggression largely explains the higher disparity between the number of unemployed men and women in Ukraine. Albania, Azerbaijan and Jordan report a lower number of unemployed women, which is also partly attributable to low activity rates among women.

An examination of educational backgrounds reveals that many jobseekers in countries such as Albania, Moldova and North Macedonia have low-level qualifications (ISCED 0-2). This highlights the influence of educational attainment on the duration of unemployment and, conversely, employment prospects. In contrast, countries such as Armenia, Bosnia and Herzegovina, Kosovo and Serbia have a significant proportion of unemployed individuals with medium-level qualifications (ISCED 3-4). This suggests a mismatch between jobseekers' skills profiles and labour market demands, as well as an overall higher proportion of medium-level qualifications in the total workforce. Montenegro, Georgia and Türkiye have relatively similar proportions of people with a low or medium level of education among the total number of people registered as unemployed. Ukraine remains an outlier, with a significant number of jobseekers holding medium-level and tertiary qualifications, reflecting a mismatch between supply and demand, as well as the overall educational profile of the population (i.e. a small proportion of people with low educational attainment).

Table 9 reveals the significant reliance of the Public Employment Services in these countries on employment incentives, or job subsidy programmes, and training in the context of labour market programmes. All countries for which data is available provide various forms of information and counselling to jobseekers, whether for employment, career or orientation for labour market insertion or preparation for participation in various labour market measures. In many countries, particularly in the Western Balkans, counselling sessions are provided as part of individual employment plans. Also, the Western Balkans PES anticipates an increase in the provision and relevance of career guidance and counselling in the context of the implementation of the Youth Guarantee, particularly during the outreach phase.

Table 9. Key trends in registered unemployment, support to jobseekers and job vacancy dynamics, ETF partner countries (2024)

Country	Registered unemployed or jobseekers (number)	Transition rate from unemployment to employment (%)	LMP services (highest participation)	LMP measures (highest participation)	Job vacancies – top three sectors (NACE)	Job vacancies – top three occupational groups (ISCO)
ALB	69 641	39.5	Counselling	Training Direct Job Creation	Manufacturing Accommodation and food service activities Wholesale and retail trade, repair of motor vehicles and motorcycles	Elementary occupations Craft and related trade workers Service and sales workers
ARM	56 575	23.6	Counselling	Employment incentives Supported employment and rehabilitation	Other services Industry Accommodation and catering	Elementary occupations Craft and related trade workers Service and sales workers
BIH	320 696	30.3	Counselling Job referral	Employment incentives	Disaggregated data not available	Disaggregated data not available

Country	Registered unemployed or jobseekers (number)	Transition rate from unemployment to employment (%)	LMP services (highest participation)	LMP measures (highest participation)	Job vacancies – top three sectors (NACE)	Job vacancies – top three occupational groups (ISCO)
				Start-up incentives		
GEO	8 479	n.a.	Counselling Job matching	Direct job creation/Public Works Vocational Training	Wholesale and retail trade, repair of motor vehicles and motorcycles Public administration and defence; compulsory social security Accommodation and food service activities	Service and sales workers Clerks Elementary occupations
XXK*	57 325	8.7	Career counselling Employment counselling	Direct job creation Training Wage subsidy	Trade, repair of motor vehicles and motorcycles Manufacturing Construction	Service and sales workers Professionals Clerks
MDA	27 688	38.1	Information and professional counselling Job matching	Training Job subsidizing Labour mobility stimulation	Other service activities Wholesale and retail trade, repair of motor vehicles and motorcycles Manufacturing	Elementary occupations Craft and related trades workers Service and sales workers
MNE	34 760	37.2	Individual Counselling Employment mediation	Supported employment and rehabilitation Public Works	Education Accommodation and food service activities Wholesale and retail trade, repair of motor vehicles and motorcycles	Elementary occupations Experts and artists Service and trade
NMK	96 828	21.8	Information and counselling for employment Employment mediation	Employment incentives (Youth allowance) Self-employment support Support for new job creation	Manufacturing Wholesale and retail trade, repair of motor vehicles and motorcycles Accommodation and food service activities	Service and sales workers Elementary occupations Professionals
SRB	371 187	40.5	Employment mediation Counselling	Entrepreneurship support Subsidized employment	Construction Information and communication	Professionals Craft and related trades workers

Country	Registered unemployed or jobseekers (number)	Transition rate from unemployment to employment (%)	LMP services (highest participation)	LMP measures (highest participation)	Job vacancies – top three sectors (NACE)	Job vacancies – top three occupational groups (ISCO)
				and self-employment Additional education and training	Manufacturing	Elementary occupations
TUR	2 239 882	64.9	Job and Vocational Counselling Employment fairs	On the job training Employment incentives Direct job creation	Manufacturing Wholesale and retail trade, repair of motor vehicles and motorcycles Administrative and support service activities	Elementary occupation Service and sales workers Craft and related trades workers
UKR	94 190	36.1	Professional orientation	Employment incentives Training Public and other types of works	Manufacturing Wholesale and retail trade, repair of motor vehicles and motorcycles Education	Plant machine operators and assemblers Elementary occupations Crafts and related trade workers

Notes: Türkiye vacancy data by ISCO groups – 2023; na – not available; For Georgia, no data has been collected for unemployed transition rate. The available transition indicator includes both unemployed and social assistance recipients who benefited from job placement programme.
Source: ETF ALMPs data collection (from Public Employment Services/MoL/NSOs)

The transition from unemployment to employment varies across countries, reflecting the economic and social contexts and the labour market's absorption capacity, as well as job seekers' readiness to take up jobs and the availability of opportunities to participate in active labour market programmes. Compared to 2023, most countries report slightly lower transition rates, possibly reflecting tighter labour markets and lower jobseeker employability levels. Kosovo reports a very low transition rate to employment (under 10 %), followed by Armenia and Bosnia and Herzegovina (around 20 %). The remaining countries report higher scores for this indicator.

Vacancy data confirms a labour demand pattern centred around services, trade and industrial job profiles in most countries, requiring a medium-level qualified workforce. An outlier is Serbia, which reports higher demand in the information and communication technology sector. A handful of countries registered higher demand in the public sector and education (Georgia, Montenegro and Ukraine), as well as demand for 'professionals', an occupational group corresponding to workers with a high level of education (Kosovo, North Macedonia and Serbia). Relatively strong demand for workers in elementary occupations remains a cause for concern, showcasing low-value economic activities and insufficient attractiveness of job offers in most countries for which datasets are available (Albania, Armenia, Georgia, Moldova, Montenegro, North Macedonia, Serbia, Türkiye and Ukraine).

5. PERFORMANCE IN SUPPORT OF SYSTEM MANAGEMENT

The final chapter of the report examines the organisation of education and training systems. Building on the previous sections, which focused on access and quality, it shifts the focus to the technical and systemic conditions necessary for ensuring accessible and effective learning for all. In the context of ETF monitoring, system organisation refers to the key components necessary for any learning environment to operate and function, regardless of where the learning takes place, the age of the learners or the type of instruction.

This chapter uses data from the KIESE and Torino Process databases to show the level of human and financial resources that ETF partner countries invest in creating and sustaining learning opportunities. It also assesses the effectiveness of these resources in supporting the functioning of education and training and considers whether they are sufficient.

In addition, the chapter reports on the management of VET systems in terms of capacity for informed decision-making, participatory governance, reliability and transparency of quality assurance, professional capacity of school leaders, and international cooperation in IVET and CVET. All of these factors have an impact on how efficiently education and training systems operate.

5.1 Financial resources in VET and lifelong learning

This section examines how effectively ETF partner countries ensure adequate funding for VET, and how well these funds are converted into practical resources such as workshops, teaching materials, and equipment — all of which are essential for effective teaching and learning.

Comparing expenditure on education and training across countries is difficult due to limited data comparability. Measuring the direct effectiveness of spending is even more challenging because educational outcomes are shaped by a number of factors. For this reason, ETF monitoring uses proxy indicators to approximate spending and effectiveness which, when combined into SPIs, provide a pragmatic point of orientation.

A number of such indicators are included in the KIESE database and used to calculate two Torino Process system performance indices: an index for system performance in the allocation of financial resources, and an index for system performance in providing adequate material conditions for teaching and learning. By assessing both the adequacy of investment in education and training, as well as the extent to which resources contribute to the learning environments that support effective teaching and learning, these combined results indicate the sufficiency of learning resources and the efficiency of resource allocation.

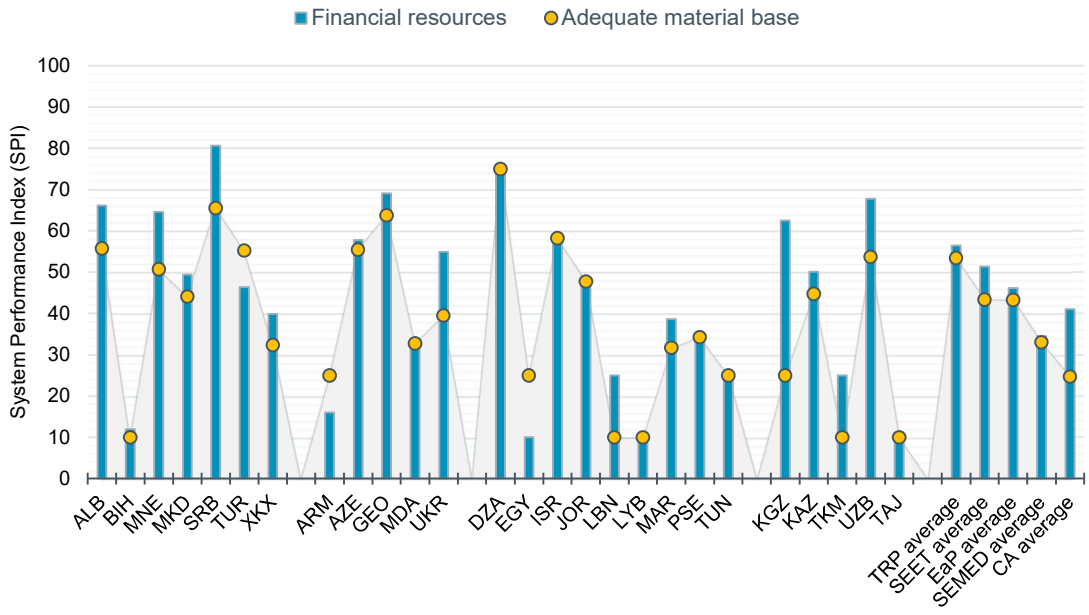
The proxies used to calculate system performance in terms of spending on education include expenditure on labour market policies (KIESE SPI Indicator 95), the share of school funding provided by the government, and government expenditure on secondary education as a percentage of GDP (Indicator 105). In addition, data on the material base is derived from the responses of principals of general schools and, in many countries, vocational schools whose students were included in the OECD PISA sample. These indicators cover the availability and quality of educational materials (Indicators 97, 98, 117 and 118) and the presence and standard of physical infrastructure (Indicators 99, 100, 119 and 120)[13]. Where data is missing, the SPIs were calculated using the results of the Torino Process expert (monitoring) surveys.

The SPI results for all ETF partner countries are shown in Figure 10. This illustrates the relationship between system performance in providing adequate financial resources for school education

[13] The subset of KIESE indicators used for the calculation of the Torino Process SPIs in 2025 can be found here: https://bit.ly/433OR8j. The full set of monitoring surveys can be found here: https://bit.ly/418jfwC.

(including VET) and adult education, and system performance in ensuring an adequate material base for teaching and learning. The height of the bars represents each country's performance in providing financial resources, while the shaded areas correspond to performance in ensuring an adequate material base.

Figure 10. Allocation and use of financial resources in education and training – system performance index, ETF partner countries, regional and monitoring sample averages (2025)



Theoretical index range: min/low performance=0, max/high performance=100.
Source: ETF KIESE/Torino Process database

Monitoring evidence suggests that very few systems allocate resources at a level that would enable providers to fully meet national policy objectives. Even fewer convert these resources efficiently into suitable facilities, equipment or teaching materials. In fact, most countries face a common double challenge: public investment is relatively modest and the ability to translate this investment into adequate learning conditions on the level of providers is constrained by structural factors related to governance, fiscal space and institutional autonomy.

According to the monitoring surveys, countries such as Albania, Serbia, North Macedonia, Montenegro and Uzbekistan allocate comparatively high levels of public funding to VET or have prioritised the sector through recent budget reforms. In 2024, annual spending on education in Albania reached about EUR 550 million (or 2.9 % of GDP), and performance in this monitoring domain was strong (SPI of 66 is above both the regional and monitoring sample averages, as shown in Figure 10). In 2022, Serbia's VET budget stood at EUR 354.6 million, supported by an additional RSD 68.7 billion in 2025 for secondary and adult education. This level of spending translates into the highest SPI for financial resources among the countries in the monitoring sample. Similarly, Algeria shows strong mobilisation of resources (SPI of 75) and a relatively effective use of these funds (SPI of 75). In Uzbekistan, which is another system with solid results in terms of funding (Figure 10), investment levels have increased, performance-based allocation models are being introduced, and infrastructure modernisation is supported through national and donor programmes.

However, across these systems funding levels do not fully translate into adequate material conditions, as indicated by the lower SPI scores for the adequacy of the material base. The monitoring surveys of these and many other countries describe contexts in which shortages of laboratory equipment, outdated workshops and uneven ICT capacity are commonplace (KIESE SPI Indicators 117–120).

In most countries, however, the challenge begins with the scale of funding. In Armenia, for example, public expenditure on education stood at only 2.8 % of GDP in 2024, with VET receiving approximately 4.8 % of this allocation. The country's SPI results are among the lowest in the monitoring sample for both funding and material base. The situation is similar in Lebanon, Tajikistan, and Turkmenistan, Moldova and other countries, where limited public funding, a high share of expenditure absorbed by wages, and modest or non-existent allocations for non-wage items, such as capital investment or consumables, result in very low monitoring outcomes. In Tajikistan, for example, 72.9 % of expenditure goes towards wages. In Kyrgyzstan, 97 % of institutional budgets in secondary VET are spent on protected salary lines, while in Lebanon, the annual allocation for equipment across more than 160 VET institutions has been as low as USD 150 000 according to the monitoring survey. This leaves little room for replacing ageing machinery, developing modern learning materials or maintaining facilities at scale. Donor support often provides the only avenue for targeted improvement, but these interventions remain limited in scope and cannot compensate for systemic underinvestment.

Resource adequacy is also closely linked to the degree of diversification in funding sources and to institutional autonomy. Monitoring surveys from Kosovo, Bosnia and Herzegovina, Georgia and Palestine suggest that centralised or fragmented financing arrangements limit both the flexibility and efficiency of investments in VET and education more broadly. In Kosovo, for instance, annual spending on VET leaves little beyond salaries and public finance rules often prevent providers from using their own income. In Bosnia and Herzegovina, 12 separate education authorities set budgets, which reinforces territorial disparities and limits economies of scale. Although Georgia has tripled its spending on VET since 2017, this had not yet translated into higher participation or improved material conditions across the system at the time of monitoring, partly due to an input-based funding model and limited institutional capacity to diversify income. In such contexts, shortcomings in infrastructure and equipment primarily reflect the constraints of the overall funding envelope rather than inefficiencies alone.

5.2 Human resources in education and VET

The ETF's monitoring framework recognises that human resources are a vital component of the broader category of resources in education and training. In most countries, human resources represent the largest expenditure in education budgets. However, teachers, trainers and leaders are not merely 'consumers' of financial investment. They are the actors who convert these resources into learning outcomes. The ETF's monitoring framework, therefore, treats financial and human resources as interrelated components of the same broader monitoring domain.

In 2025, the Torino Process monitoring examined a selection of system deliverables related to teachers and trainers. The calculation of the corresponding SPIs is based on eleven KIESE indicators from international repositories. These include measures of staff availability, such as the ratio of pupils and students to teachers in upper-secondary VET (KIESE SPI Indicator 106), the percentage of students in schools where principals report that instruction is hindered by a lack of teaching staff (Indicator 107) or a lack of staff in assistant roles (Indicator 109), and the ratio of pupils to qualified teachers in secondary education (Indicator 113). Indicators on staff quality capture the proportion of pupils in schools who report inadequately qualified teaching staff (Indicator 108) or inadequately qualified support staff (Indicator 110), as well as the proportion of fully certified teachers (Indicator 111). The dataset also includes indicators on professional development and workforce dynamics. These include the proportion of teachers who have recently participated in CPD (Indicator 112) and the teacher attrition rate in vocational secondary education (Indicator 116). Finally, the financial aspects of staffing are reflected in the proportion of total expenditure allocated to all staff (Indicator 114) and to teaching staff specifically (Indicator 115) in public institutions at secondary level.[14]

[14] The subset of KIESE indicators used for the calculation of the Torino Process SPIs in 2025 can be found here: https://bit.ly/433OR8j. The full set of monitoring surveys can be found here: https://bit.ly/418jfwC.

The findings in 2025 suggest that, in some countries in the monitoring sample, the conditions for managing human resources in education and VET are relatively favourable. Levels of teacher certification are relatively high, professional development arrangements are more structured and staffing levels and distribution are comparatively stable. Examples of such countries include Albania (SPI of 74), Montenegro (75), Serbia (80), Georgia (78) and Ukraine (72). In these settings, only a small proportion of students attend schools where instruction is hindered by shortages of teaching staff (KIESE SPI Indicator 107) or inadequately qualified staff (Indicator 108). The monitoring surveys of Serbia and Georgia also describe the presence of clear arrangements for CPD and consistent availability of in-service training opportunities. In Albania, teacher certification is widespread (Indicator 111) and recent participation in CPD is a common occurrence (Indicator 112). Despite considerable losses of personnel due to displacement and mobilisation caused by the war, teacher certification levels in Ukraine are close to 70 % (Indicator 111), and more than 45 % of teachers have taken part in recent professional development training (Indicator 112).

However, not all findings are positive. There are also challenges in this monitoring domain that are common to most ETF partner countries and affect low- and high-performing systems alike. One such challenge is the shortage of qualified teachers and trainers. Lebanon (SPI of 57) reports a significant proportion of 15-year-olds being taught by inadequately qualified staff (Indicator 108), as well as a limited number of teachers who are certified (Indicator 111). Similar shortages are faced by North Macedonia (SPI of 47), Armenia (SPI of 50), Jordan (SPI of 47) and Moldova (SPI of 38), which face similar type of shortages, as well as Kosovo (SPI of 45), Palestine (SPI of 32) and several countries in Central Asia, including Kyrgyzstan, Tajikistan and Turkmenistan, each with an SPI of 10 (Indicators 101–102). In some contexts, these shortages have even led to programme reductions or cancellations. In systems with comparatively strong results, such as Uzbekistan (SPI of 72), there are shortages of staff in technical fields where the supply of specialised instructors does not meet demand.

A second common issue is the depth and quality of the pedagogical and occupational preparation of teaching staff. In Türkiye (SPI of 46), many teachers and trainers lack either sufficient pedagogical grounding or recent occupational experience (Indicators 101–102). Similar issues arise in countries where access to advanced training is limited. According to the monitoring surveys, reliance on non-permanent trainers and the limited institutionalisation of continuous professional development restrict the acquisition and renewal of competences that are important for effective teaching in Morocco (SPI of 45) and Tunisia (SPI of 25).

There are also challenges arising from difficulties with staff deployment and structural shortcomings. Kazakhstan (SPI of 48) has regional disparities in staffing levels and the distribution of qualified teachers (Indicator 101), and in Kyrgyzstan low salaries and limited career progression opportunities reduce incentives for teachers to engage in CPD (Indicator 102).

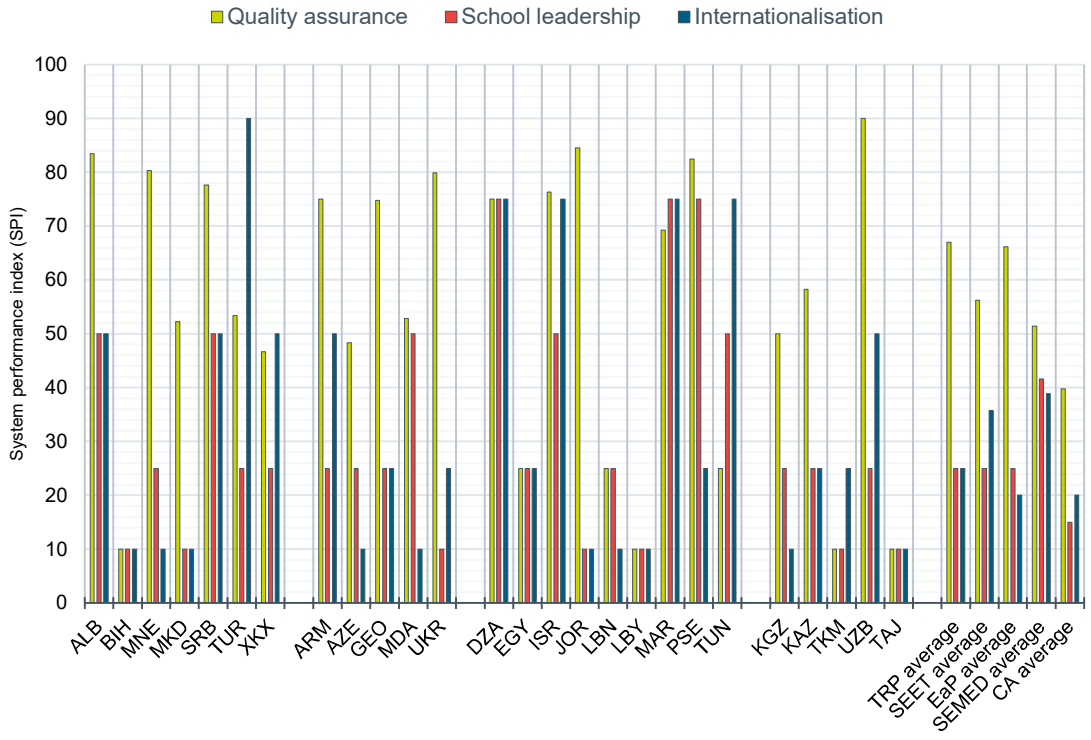
Despite shared problems in the domain of human resources in VET, why are there such wide differences in system performance among the countries in the monitoring sample? The answer lies in differences in system capacity, institutional arrangements and the presence of mechanisms that can offset pressures. According to monitoring survey information, countries with higher SPI scores, such as Albania, Montenegro, Serbia, Georgia and Uzbekistan, have structures that mitigate the effects of shortages and gaps in teacher training. Clear qualification rules, structured certification and appraisal processes, organised continuous professional development and the involvement of dedicated national agencies provide a buffer that helps maintain provision even when staffing pressures are present.

Other countries may be dealing with the same issues, but they have fewer ways to address them due to centralised or inconsistent recruitment processes, fragmented CPD that depends on external project funding, and salary structures and career opportunities that offer limited incentives. Consequently, common structural challenges result in very different performance outcomes across the monitoring sample, as reflected in the broad spread of SPI scores.

5.3 System steering and management

The final section of the report examines KIESE and Torino Process data on the steering and management of education and training. The analysis focuses on the secondary school level (including IVET), with the key areas covered including system performance in support of quality assurance in VET, the professional capacity of school leadership and VET internationalisation. These areas are based on 14 proxy indicators from the KIESE database, as well as the results of the ETF Torino Process monitoring surveys.[15]

Figure 11. System steering and management – index of system performance, selected dimensions, ETF partner countries, regional and Torino Process averages (2025)



Note: Theoretical index range: min/low performance = 0, max/high performance = 100
Source: ETF KIESE/Torino Process database

Figure 11 illustrates average system performance in 2024 for all countries participating in the Torino Process monitoring, grouped by region. The SPIs for each domain and region are plotted on the vertical axis, alongside the 2023 regional averages, which are represented by diamond markers. The results show changes in performance in all system steering and management domains, as well as in all ETF partner regions. However, as regional averages can be influenced by changes in just one or two countries, these shifts may not always reflect broad, sustained trends. Nevertheless, regional patterns can be useful for understanding broader policy shifts or shared challenges across countries.

Quality assurance

Across the ETF partner countries, quality assurance (QA) is one of the more structured areas of VET governance, meaning that the level of formalisation and procedural clarity is higher compared to other governance domains. Figure 11 shows that a relatively high number of countries have strong results in

[15] The subset of KIESE indicators used for the calculation of the Torino Process SPIs in 2025 can be found here: https://bit.ly/433OR8j. The full set of monitoring surveys can be found here: https://bit.ly/418jfwC.

this area, compared to many other areas of monitoring. However, the data behind the composite SPI scores show that there is considerable variation in the extent to which QA frameworks translate into consistent practice.

In Montenegro, for example, a representative sample of school principals reported that internal self-evaluation was universal (100 %, KIESE SPI Indicator 84, OECD's PISA), and almost all confirmed the presence of external evaluation (Indicator 85, 98.4 %). Systematic recording of attendance, professional development, student test results and graduation rates was also nearly universal (Indicators 88–89, above 98 %). Similarly to Albania, a wide range of core procedures are in place, with 99.6 % of schools reporting internal self-evaluation, 93.1 % reporting external evaluation, 95.6 % reporting written educational goals, and 97.4 % reporting teacher mentoring. These are examples of countries that combine structured frameworks (and correspondingly high SPIs) with widespread operationalisation. This results in some of the strongest monitoring outcomes in the sample.

Other countries have equally formalised networks that are, however, applied less consistently. In Türkiye, for example, the regulatory basis for QA is extensive and well-developed and schools consistently implement core processes, such as self-evaluation (99 %, KIESE SPI Indicator 84), specification of curricular profiles (96.9 %, Indicator 86), performance standards (94.9 %, Indicator 87) and systematic data recording (Indicators 88–89, both 99 %). However, some dimensions that rely on sustained external engagement, such as consulting experts (64.8 %, Indicators 92 and 94), remain less embedded, and only 10.7 % of principals report public posting of achievement data (Indicator 81). Moldova and Kosovo are in a similar situation: structures and procedures exist, but transparency and regularity remain limited, and external evaluation or accreditation often only covers a proportion of providers. In Kosovo, the monitoring survey suggests that accreditation is concentrated among private institutions, while many public providers continue to operate outside the national framework of qualifications.

A third group of countries is still in early stages of developing comprehensive arrangements, and their results are significantly below the regional and monitoring sample averages. In Tajikistan and Libya (both with an SPI of 10), the monitoring surveys describe QA activities as largely procedural, fragmented or inconsistently implemented. The results of certification or inspection processes are not publicly accessible. In Lebanon, which has an SPI of 25, processes at provider level, such as self-evaluation (98.5 %, Indicator 84), written specification of learning goals (95.4 %, Indicator 86) and schools recording student results (99.6 %, Indicator 89), are well established. However, they remain poorly coordinated at system level, with minimal coordination and low transparency. Achievement data is publicly posted in only about a fifth of schools (Indicator 81). In Azerbaijan (SPI of 48), the establishment of a modern QA agency has been reported as a sign of progress. However, concerns about independence and the limited scope of institutional and programme accreditation suggest that the system is still transitioning towards the practices and standards prevalent in countries with stronger results.

In general, both the KIESE and SPI data, as well as the monitoring surveys, suggest that internal processes are far more widely operationalised than public accountability mechanisms. Internal self-evaluation is almost universal among the countries participating in PISA (with Indicators 84–89 often above 90 %), while the public posting of achievement data is the least developed dimension. Even in countries with strong overall results such as Georgia (SPI of 75), only 6.7 % of institutions make student achievement information publicly available (Indicator 81) and fewer than one in four report the systematic tracking of this data by administrative authorities (Indicator 82).

School leadership

The professional capacity of school leadership in VET is as one of the weaker domains of system performance in all ETF partner countries (Figure 11). The monitoring results reveal a broad spectrum of outcomes, ranging from relatively strong performance in Morocco, Palestine and Algeria with an SPI of 75, to poor performance in North Macedonia, Tajikistan and Turkmenistan with an SPI of 10. Most systems fall into the lower to mid-range, typically scoring between 20 and 50 SPI points. This is

influenced by the uneven availability of qualifications, limited preparation and incomplete institutional frameworks for leadership development. Even where formal requirements exist, school leaders' capacity to plan, manage and guide institutional improvement is shaped by recruitment procedures, professional development opportunities and the broader governance environment.

A smaller group of countries has established clearer arrangements for leadership recruitment and development. According to the monitoring survey, Albania (SPI of 50) requires principals to hold advanced qualifications and complete a nine-month training programme aligned with the National Education Strategy, with recruitment procedures being based on regulated criteria. In Serbia (SPI of 50), the regulations foresee structured appointment processes involving school boards, Teachers' Councils, and ministerial approval. However, compliance with these procedures is inconsistent, and many principals fail to pass the required licensing exam within the legal timeframe. Morocco, which is one of the better performing countries in the sample, has introduced formal recruitment criteria and systematic access to professional development, including training linked to organisational reforms and international cooperation.

In several countries, the low results in this monitoring domain stem from a shortage of qualified candidates and limited access to leadership-specific training. In North Macedonia, the challenges include an absence of formal managerial training, an ageing profile of school leaders, and a scarcity of qualified applicants, particularly outside urban areas. The urban-rural divide is also present in Georgia. According to the monitoring survey, few candidates are attracted to leadership roles in rural areas, and the system does not provide VET leaders with structured preparation or opportunities for continuing development. In Armenia, despite the introduction of a certification requirement for new principals, opportunities for leadership development beyond this remain scarce.

In some VET systems, merit-based recruitment is undermined by political or administrative factors. For example, the ministerial appointment model in Montenegro has resulted in politically motivated replacements, including the dismissal of more than 500 school principals in 2020. At the time of monitoring, the situation in Serbia was similar. In Lebanon, appointments are usually made on the basis of seniority rather than leadership preparation, and there is no requirement for qualifications in educational management. The monitoring survey notes that the content of these programmes is often formalistic and does not equip principals with the competences required to manage institutions undergoing reform.

Last but not least, the monitoring surveys in several countries, including Kosovo, Bosnia and Herzegovina, Palestine, Azerbaijan, Kyrgyzstan, Tajikistan, Turkmenistan and Libya, report that leadership capacity is hampered by a combination of structural constraints. These include a small number of qualified candidates, weak or poorly defined occupational standards, reliance on donor-funded initiatives and governance arrangements that limit institutional autonomy. In Tajikistan, for example, there are no formally established minimum requirements for the position of school principal. The expert community in the country has long identified the low competence of school leaders as a central constraint, yet little progress has been achieved. In Libya, fragmented governance, political interference and mismanagement reduce the effectiveness of leadership in public training institutions.

Internationalisation of VET

VET internationalisation across ETF partner countries tends to be shaped less by formal strategies and more by underlying drivers that enable or limit engagement. The first group of countries, whose VET systems perform at a mid-to-high level, rely primarily on structured EU programmes, particularly Erasmus+, which provide predictable channels for mobility, capacity building and curriculum alignment. Examples include Albania, Serbia, Türkiye, Kosovo Armenia and others, where participation in European instruments or qualification frameworks underpins much of international activity.

Donors are another driver of internationalisation. Cooperation mainly occurs through project-based interventions supported by GIZ, the EU, ETF, or other bilateral and multilateral partners. Countries in

this category include Bosnia and Herzegovina, Moldova, Lebanon, Libya, Kyrgyzstan, Tajikistan and, to some extent, Georgia.

A third group of countries links internationalisation to labour mobility or diaspora ties. Examples include Armenia, Jordan, Tajikistan and Uzbekistan, where international engagement is connected to migration pathways or foreign demand. Finally, Morocco and Tunisia stand out with their South–South cooperation initiatives, which extend beyond mobility and involve the hosting of students and trainers from neighbouring regions, as well as establishing training centres abroad.

The contextual information also highlights the uneven distribution of internationalisation across institutional layers. Some countries focus primarily on the alignment of their qualification systems, using NQF–EQF referencing, accreditation reforms or modularisation to create transparent, comparable learning outcomes. Examples of this system-level orientation include Türkiye, Albania, Armenia, Georgia, Kazakhstan, Uzbekistan and Morocco. Others engage in internationalisation mainly through partnerships at the level of individual providers, with most activities being concentrated in a limited number of vocational schools participating in externally funded projects. This is the case in Bosnia and Herzegovina, North Macedonia, Serbia, Moldova, Lebanon and Libya.

In a limited number of countries, VET internationalisation mainly takes the form of student or staff mobility, supported by Erasmus+ programmes, bilateral agreements or regional exchanges. Examples include Kosovo, Tunisia, Kazakhstan, Armenia and Uzbekistan.

Finally, several countries have policies referencing international cooperation but lack operational mechanisms. This results in frameworks that exist on paper but not in practice. Examples can be seen in Jordan, Lebanon, Libya, Tajikistan and Turkmenistan, where the institutionalisation of internationalisation is still in its infancy.

A third set of findings on internationalisation in this monitoring round concerns factors that may limit the depth and sustainability of international engagement. Monitoring surveys of several countries in the sample report fragmented governance structures and divided mandates. For example, coordination across providers or ministries is limited and administrative responsibilities are dispersed in Bosnia and Herzegovina, Georgia, Moldova, Palestine and Libya. In some countries, there are also capacity constraints, such as limited foreign language skills, shortages of qualified staff or weak institutional capacity. Examples include Armenia, North Macedonia, Lebanon, Tajikistan, Kyrgyzstan, and Uzbekistan. In contexts where resources are limited, such as Kosovo, Moldova, Lebanon, Libya and Tajikistan, the extent to which VET providers are exposed to international practices tends to depend heavily on external support.

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