

YOUTH TRANSITION AND SKILLS MISMATCH IN EASTERN PARTNERSHIP COUNTRIES

Working Paper

Disclaimer

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PREFACE

This short paper presents patterns of youth transition in the Eastern Partnership countries (EaP) based on data available in early 2022. The analysis takes as reference some key indicators on the topic, with a focus on young people Not in Employment, Education or Training (NEET). To complement the picture of the youth situation in the region, we also include in our analysis some recent results on the incidence of skills mismatch among young people, based on the ETF pioneering work on the topic (ETF, 2022 forthcoming)

Indicators available for this analysis date before Russia's military aggression against Ukraine therefore datasets do not capture catastrophic socio-economic impact on Ukraine as well as negative effects on other Eastern European countries included in this analysis. Nevertheless, the assessment reveals several challenges concerning youth transition from school to work and employment that will most probably worsen in future.

The paper is intended for policy makers and stakeholders in the areas of education, training and employment, as input to the implementation of EU4Youth regional initiative and overall policy dialogue in the region.

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INTRODUCTION

This short paper presents patterns of youth transition in the Eastern Partnership countries (EaP) based on data available in early 2022. The analysis takes as reference some key indicators on the topic, with a focus on young people Not in Employment, Education or Training (NEET). To complement the picture of the youth situation in the region, we also include in our analysis some recent results on the incidence of skills mismatch among young people, based on the ETF pioneering work on the topic (ETF, 2022 forthcoming).

Indicators available for this analysis date before Russia's military aggression against Ukraine therefore datasets do not capture catastrophic socio-economic impact on Ukraine as well as negative effects on other Eastern European countries included in this analysis. Nevertheless, the assessment reveals several challenges concerning youth transition from school to work and employment that will most probably worsen in future.

The paper is intended for policy makers and stakeholders in the areas of education, training and employment, as input to the implementation of EU4Youth regional initiative and overall policy dialogue in the region.

Key highlights

The situation of young people remains problematic in the EaP countries where youth are overexposed to joblessness and mismatches. The EaP countries, for which data on NEET is available, are faced with persistently high numbers for the age group 15-29, with one in three young people in Armenia, Georgia and Moldova in NEET category (see Annex). Young women were more seriously affected than young men, with NEET rates approaching 40% in these three countries and some 30% in Ukraine. Only Belarus shows a more favourable situation for young people with NEET rates at some 10%. In Azerbaijan, the incidence of unemployment among young people stood at 15.1% in 2020 (Eurostat¹), almost 3 percentage points higher than previous year revealing the deep impact of pandemic on youth employment prospects.

Youth joblessness is closely linked to gender patterns observed for the NEET which will be also discussed later in this paper. As young women are more likely to be inactive, their first steps to (re) enter the labour market tend to be even more challenging. Similarly, unemployment incidence is higher among young women in Armenia, Azerbaijan and Georgia (Eurostat, 2019). This can be linked to several factors, such as socio-cultural norms, less favourable working environments, and family duties. Overall, young women are more likely to be affected by vulnerable and marginal work than men.

The NEET are at higher risk of being socially and economically excluded and so are more likely to become vulnerable in the long term. Yet, this category contains a variety of sub-groups, some of which are vulnerable and some not. The high heterogeneity of the NEET population needs to be further considered when designing policies for vulnerable groups and their re-engagement with the labour market or the education system (ETF, 2015). The EU4Youth regional initiative² can be instrumental in this respect by securing a good quality offer of employment, traineeship, apprenticeship, or continued education to all young people in the region.

As everywhere in the world, young people face more challenges than adults do in entering the labour market owing to their lack of work experience and the mismatch between the skills they have to offer and those required by employers. During their (first) transition to the labour market, young people often gain practical experience by accepting jobs requiring lower skills levels. Together with low labour

¹ enpe_lfsa_organ, data retrieved on 14/05/2022 [Statistics | Eurostat \(europa.eu\)](https://ec.europa.eu/eurostat)

² Further information available at [EU4Youth - EU NEIGHBOURS east](#) and [ETF - EU NEIGHBOURS east](#)

mobility, this leads to a higher level of observed over-qualification. ETF data shows that in Belarus at least one in ten youths aged 15-24 have held jobs requiring lower levels of formal qualifications in 2019; yet this share can be close to 40% in Georgia, Moldova and Ukraine (ETF, 2022 forthcoming).

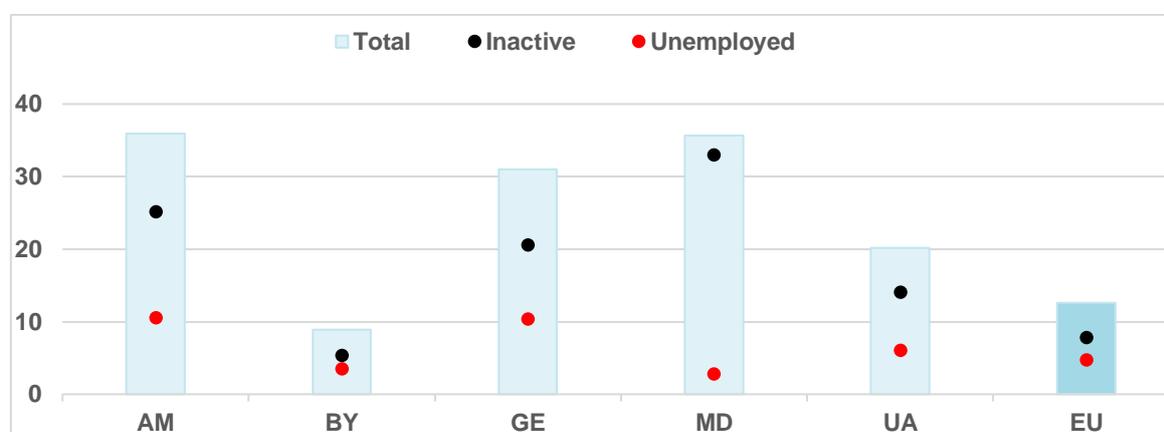
Youth transition to work in recent years has become more prolonged and somewhat unstable and less predictable. Young people are changing jobs usually more frequently (either by choice or necessity). Combining work and study is no longer an exception but rather the rule and also a common choice. However, the ETF partner countries with data available display rather different patterns compared to the EU: only one in twenty youths aged 15-29 combine study and work, while in the EU value is 13.5% (Eurostat, 2021). This difference contributes to higher NEET incidence in these countries

THE YOUTH TRANSITION IN THE EASTERN EUROPEAN COUNTRIES: KEY FINDINGS

A key indicator: youth not in employment, education or training

In 2019, at least one in ten young people aged 15-29 was not in employment, education or training (the EU value was at 12.6%). In the past five years, three countries (Armenia, Georgia and Moldova) displayed much higher NEET rates (30-35%), whereas in Ukraine the rate is close to 20% and some 10% in Belarus. Young women are typically over-represented in this group in all countries and the proportion of young women who are NEET is close to 40% Moldova and Georgia, peaking at 42% in Armenia (the EU average is 15%). A closer look at the gender patterns for NEET by their labour market status, shows a higher incidence of inactivity among young women coupled with a higher likelihood of unemployment for young men. In other words, while young men are more likely to enter the labour market, the young women more frequently remain inactive.

Chart 1: NEET by labour market status in Eastern European countries (2019)³



Source: ETF KIESE, Eurostat

This disengagement might have various reasons and explanations. It also shows a high heterogeneity of the NEET population which needs to be further considered when designing policies for vulnerable groups and their re-engagement with the labour market or the education system. ETF evidence (ETF, 2015) shows that some factors are more important than others in the determinants of NEET. The high incidence of NEET in the partner countries is often related to lower educational attainment, gender, lower employability as a result of skill gaps and socio-economic background.⁴

Age and gender are important determining factors for NEET, showing similar patterns in all EaP: the NEET rates double for young people in their 20s and are even four times higher for young women aged 20-24 compared to those aged 15-19. As young women are more likely to be inactive (see above), their first steps to (re) enter the labour market tend to be even more challenging. This can be linked to several factors, such as socio-cultural norms, less favourable working environments, and family duties.

Although VET programmes can be effective in developing skills and ensuring a smooth and successful transition to the labour market, the transition of VET graduates in the EaP remain difficult. In all

³ Statistical acronyms used throughout the paper: Armenia (AM), Belarus (BY), Azerbaijan (AZ), Georgia (GE), Republic of Moldova (MD), Ukraine (UA), European Union (EU).

⁴ This paper is based on data before the pandemic (up to 2019), when most EaP have managed to keep the NEET rate under control. ETF evidence available for other partner countries indicates that the pandemic seems to have contributed to a deterioration of the youth situation (ETF 2021c).

countries with data available, NEET rates tend to be higher among young adults who graduated from vocational education and training programmes than among those who pursued an upper secondary general programme as their highest level of educational attainment. In 2019, half of VET graduates aged 15-29 were NEETs in Armenia, Georgia and Moldova and one in four VET graduates in Ukraine.

The NEET rates for VET graduates in Georgia and Moldova were twice compared to those of graduates from general upper/post-secondary levels of education. Although the graduates from general programmes are more likely to continue to higher educational levels (explain partially these differences in the NEET rates), higher NEET rates of VET graduates in some EaP can also point to other labour market imbalances which needs to be addressed with specific measures. For example, smooth transitions require support through career guidance and career education, also in VET. Efforts should be made to equip VET graduates with the skills needed in the knowledge economy and for the twin transitions (green and digital) and to foster their key competences, in particular their digital, entrepreneurial and career management skills.

The NEET rate should not be regarded as the ultimate image of youth transition. Its behaviour is complicated by the emergence of new patterns. Whereas in the past, most young people would traditionally start work only after completing their studies (and so rarely combining school and work), this pattern is no longer valid in most European countries. Youth transition has become in recent years more prolonged and rather unstable and unpredictable; nowadays young people are usually changing jobs more frequently (either by choice or necessity) and so no longer have a clear labour market status for longer periods (Eurostat, 2021). Combining work and study is no longer an exception but rather the rule and a common choice in our days.

Other indicators used to analyse the youth's transition

Youth transition in the EaP is also characterised by persistently high youth unemployment rates. Youth unemployment remained very high in 2019, affecting about 30% of active young people⁵ aged 15-24 in Armenia and Georgia and about 15% in Ukraine (same as the EU average) and 12.4% in Azerbaijan.

This situation remains serious in EaP, with long-term economic and social consequences. Youth unemployment is more responsive than adult unemployment to the business cycle. This is because young people are more concentrated in certain economic sectors more exposed during downturn periods (e.g. hospitality) and a disproportionate number hold part-time jobs and temporary contracts. As such, they are also more affected by periods of economic crisis and are often among the first to lose their jobs (ETF, 2021b).

High inactivity coupled with relatively low employment rates in most EaP, could suggest a rather unstable transition, with most young people moving more often through various stages either by choice or necessity (Eurostat, 2021). As such, they no longer have a clear labour market status for longer periods. The analysis is also complicated somewhat by the emergence of new patterns of transition. It's becoming increasingly common to find tertiary education students taking part-time or seasonal work to supplement their income, or for young people already in employment to seek a return to education or training in order to improve their qualifications. As a result, the school-to-work transition has become less clear in Europe, with a growing share of students also working and a rising proportion of employed people also studying (ex. apprentices, who are generally considered to be employed and in formal education).⁶

Several factors could explain the precarious position of young people in the labour market. Young graduates often face a difficult transition from school to work due to insufficient employability levels caused by, among others, low education attainment, insufficient relevance of their skills for the labour market or insufficiently developed soft skills. At the same time, future graduates and young jobseekers do not receive consistent and timely support during such transition periods such as career guidance, job matching and activation measures, and socio-emotional support. Also, the unattractive working conditions, reflected in informality, low wages, insufficient protection of health and safety at work, and insufficient mentorship and/or coaching arrangements for newly hired workers or skills are not aligned with those needed in the economy or by employers (ETF, 2020). COVID-19 induced volatility on the labour market and employment opportunities which reinforce these challenges.

VET programmes can be effective in developing skills and ensuring a smooth and successful transition to the labour market. In all ETF partner countries with data available, employment rates tend to be higher among young adults who graduated from vocational education and training programmes than among those who pursued an upper secondary general programme as their highest level of educational attainment. In 2020 at least half of the recent graduates⁷ from VET programmes (ISCED 3-4 combined) were employed, and there has been good progress over recent years (ETF, 2021b). In most countries, these values are close to those recorded for recent graduates from tertiary level.⁸ This is positive, especially in countries where large proportions of upper secondary students follow vocational programmes.

⁵ The youth unemployment rate is the percentage of unemployed people in the age group 15-24 compared to the total labour force (both employed and unemployed) in that age group. However, it should be remembered that a large share of people between these ages are outside the labour market (since many young people are studying full time and are thus not available for work). For this reason, the youth unemployment ratio is also often used: the percentage of unemployed young people compared to the total population of that age group (not only the active, but also the inactive, such as students).

⁶ In 2020, one in ten young Europeans aged 15-19 and one in five aged 20-24 have combined work and studies.

⁷ Aged 20-34, no longer in education or training, 1-3 years after graduation.

⁸ One of the supplementary indicators used in the YG monitoring framework.

It shows that VET can be successful in equipping young adults with the skills demanded in the labour market, ensuring a smooth transition and a better integration into the world of work. Nevertheless, smooth transitions require support through career guidance and career education, also in VET. Efforts should be made to equip VET graduates with the skills needed in the knowledge economy and for the twin transitions (green and digital) and to foster their key competences, in particular their digital, entrepreneurial and career management skills.

SKILLS MISMATCH: WHAT IMPACT ON YOUTH TRANSITION?

Youth transition is seen to be increasingly linked to the existence of various imbalances in the labour market. Indeed, most ETF partner countries have identified skills imbalances in the labour market as one of the reasons for persistently high levels of youth unemployment. During their transition from school to the labour market, young people often gain practical experience by accepting jobs requiring lower levels of skills. Together with low labour mobility, this leads to a higher level of observed overqualification. Young people face more challenges than adults do in entering the labour market owing to their lack of work experience and the mismatch between the skills they have to offer and those required by employers.

Specifically, skills mismatch can be used to describe vertical mismatch (usually measured in terms of over-education, under-education, over-skilling and under-skilling), horizontal mismatch (usually fields of study and work are compared), skills gaps (the extension to which workers lack the skills necessary to perform their current job), skills shortages (usually measured in terms of unfilled and hard-to-fill vacancies) and skill obsolescence (skills can become obsolete due to ageing, through technological or economic change which renders certain skills unnecessary or through the underutilisation of skills).

Skills mismatches reflect changes in the labour market, some of which occur rapidly which then impact on human capital. A surplus of human capital is typically measured in terms of over-education or over-skilling.⁹ However, surplus of education may also be related to horizontal (or field of study) mismatch, whereby workers are employed in jobs that are not relevant to the skills and knowledge accumulated by them in formal education. The ETF has framed and estimated for the first time these two types of mismatches in 17 partner countries.

Evidence (ETF, forthcoming 2022) for EaP shows that in 2019, at least one in ten tertiary graduates have held jobs requiring lower levels of formal qualifications but the incidence was as high as 42% in Georgia, while approaching 40% of tertiary graduates in Ukraine and 36% in Moldova (see Annex). The ETF evidence also shows that the incidence of mismatch for upper/post-secondary graduates is lower than that of tertiary graduates.

Some countries, such as Moldova, with lower shares of high-skilled workers (i.e., with tertiary education attainment) in the workforce, have seen a sizeable and rapid increase in the size of this group in the past years. However, this increase has not always led to better employment prospects, and in some countries, holding a university degree does not always mean being employed and/or job-matched.

Recent ETF evidence in seven partner countries¹⁰ shows that many factors¹¹ can explain the variations in the incidence of horizontal/vertical mismatch (ETF, forthcoming 2023). This shows that education systems face many challenges in responding to changing demands for skills. It can also suggest that many higher-skilled graduates have to accept positions below their level of formal qualifications. High unemployment levels and limited opportunities on the labour market force especially higher-educated individuals to accept such positions.

The relatively high level of over-education, particularly among tertiary educated workers is not completely surprising as such workers are typically more exposed to (vertical) mismatch. Nevertheless, relatively high incidence of over-qualified tertiary graduates (at least one in four) in most

⁹ The policy literature tends to favour the word 'over-qualification' instead of 'over-education' on the grounds that it is always best to have more educated people than less. There is a similar aversion to the term 'over-skilling' as it is believed that having more skills on the whole is a good thing.

¹⁰ Albania, Armenia, Egypt, Georgia, Palestine, Serbia and Turkey.

¹¹ The variables included in this analysis are: educational level/field, age-groups, gender, marital status, occupational group, company size/ownership, working time, income, type of contract, degree of urbanisation.

countries included in this analysis, point out that graduation does not necessarily always lead to a matched integration in the labour market and could signal a human capital loss.

There could be many reasons behind this situation and more country specific analyses are necessary to identify the determinants and most effective solutions to prevent or counteract such imbalances.

What emerges clearly is that education systems are only in part generating such imbalances through insufficiently forward-looking enrolment policies, poor quality and relevance of educational programmes or failures in addressing social inclusiveness goals. Career guidance and career education from early schooling onwards, effective matching services and work-experience gaining programmes during transition phase from school to work are also essential (Badescu M, Mereuta, C, 2021).

CONCLUSIONS

The situation of young people remains problematic in the EaP, with increasingly high numbers of young people who are not in employment, education or training in most EaP countries. A situation expected to worsen in context of pandemic and other regional challenges, particularly Russia's aggression against Ukraine.

Clear patterns (ex. age, gender, VET graduates) are observed for the NEET in the region. For instance, young women were more seriously affected than young men in all countries, but Belarus. The high heterogeneity of the NEET population needs to be further analysed and considered when designing policies for vulnerable groups and their re-engagement with the labour market or the education system. The EU4Youth regional initiative can be instrumental in this respect.

Recent ETF data shows that skills mismatches are affecting younger employees at higher rates. This shows that education systems face many challenges in responding to changing demands for skills. Today, holding a university degree does not always mean being employed and/or job matched. What emerges clearly is that education systems are only in part generating such imbalances. A system of continuous update of skills-sets, with well-funded and relevant (re)skilling programmes accessible to all youth and adults becomes crucial in a very dynamic economic context with significant technological and environmental transformations. An intrinsic element of such a system must be career education from early primary schooling onwards and lifelong career guidance for all age groups, to empower individuals to manage their life and career (career management skills).

Graduates' tracking practices should be mainstreamed in education and training, both at upper-secondary and tertiary levels as well as for continuous training programmes. Such evidence is essential in measuring the labour market outcomes of various education programmes and pinpoint the hurdles recent graduates are facing when searching for employment or getting a first job. Results can inform career guidance and career education. Overall, countries would need to enhance their labour market and skills intelligence, combining various sources of data and research instruments for the identification of short-, medium- and long-term skills demand and supply trends. This would support moving from "marketing" of educational institutions towards evidence-based decision making for learning pathways.

Worsening labour market indicators for youth in the pandemic context, labour market transformations (e.g. digitalisation, greening of economies) and persistent social exclusion risks call for the completion of several reforms that would enable education systems to provide graduates with relevant skills and support continuous adaptation to emerging skills needs by securing access to quality assured education and training programmes (both initial and continuing).

Career guidance and counselling is a critical policy element for securing swift transitions from school to work as well as navigation in the world of work and new skills acquisition. Most challenging aspects in the Eastern Partnership countries are: the lack of use of LMI as key source for neutral, evidence-based decision making for learners; the focus on some hours of provision of information about occupations and concrete schools for continuation of learning at the last grade of primary and secondary schools which does not take account of the fact that the development of a professional identity and the development of a vision of oneself in a future professional life is a slow process that needs time, real-life exposure to work experience, evidence about opportunities beyond the well know occupations etc.; weak cooperation between PES, schools, universities, VET, and companies/employer organisations for career education and guidance; and a lack of quality standards for career guidance practitioners in education and employment and the provision of career education and guidance. Shifting from information provision about professions towards career education to develop learners' career management skills will therefore be an important measure.

Reforms of qualification systems can contribute to the development of quality proofed skills development programmes and improve their permeability. In addition, they can assure transparency of competencies and skills acquired regardless of the learning context. Despite significant steps made by Eastern Partnership countries over the last decade to build up their qualifications systems, gaps

remain in the validation of non-formal and informal learning and availability of accredited further training programmes.

Work based learning, in-company training, apprenticeships, and internships can be instrumental in building labour market relevant skills and competences, enabling young workers and jobseekers to access and remain employed. Widening the availability of on-the-job training and work experience gain is critical for swift and sustainable employment integration of young graduates.

On-going digital education reforms can improve the provision of digital skills and competence and help EaP to close the gap in digital skills against EU average and prepare graduates to face the increasing demand for digital competence in current and future labour markets. Issues of access, equity and quality of digital education and training can be systematically assessed through SELFIE¹² (covering work-based learning as well) to provide the necessary evidence basis for reforms and investments.

The important conclusion from the ETF studies implemented in partner countries is that the role of civil society in education and training is universal, diverse and valuable¹³. Civil Society Organisations (CSOs) significantly contribute to supporting the implementation of a diverse youth programmes'. Thanks to their resilience, they have adapted flexibly during the covid-19 pandemic to continue offering service to youth during difficult periods of essential services discontinuity. CSOs often play a key role in advocacy and are in a driving seat for social change. Their main activities are delivering non-formal learning to the young, conducting research and analysis in skills development and employment.

When it comes to youth transition and their re-engagement in the labour market or education system, the tools that CSOs use are diverse and range from advocacy campaigns through capacity building of their beneficiaries and target groups. There is a need to develop the capacities of the CSOs to translate evidence from skills matching studies, as well as the practical experience they have collected into preferred approaches how to support youth re-engagement in the labour market or education system. There are a number of critical elements in this process which must be identified and managed, in order to further shape the possible role that CSOs can have in the youth transition in the EaP countries.

EaP countries prioritised development of the portfolio of active labour market programmes and employment initiatives over the last decade, including with EU and other international donors' support. Still several challenges remain, increased coverage of young jobseekers in need of activation, training, and employment opportunities; stronger outreach and support of young people who are inactive and/or discouraged and not actively looking for a job or new learning opportunities; consistently increase the effectiveness and funding of ALMPs as well as address the staff and capacity development needs of the Public Employment Services. As ALMPs work differently across various groups of beneficiaries, all countries could consider expansion of their evidence-base for decision making, including regular net impact assessments, for innovation and tailoring of service packages available for young jobseekers.

¹² SELFIE (Self-reflection on Effective Learning by Fostering the use of Innovative Educational technologies) is a free tool designed to help schools embed digital technologies into teaching, learning and assessment. SELFIE has a strong basis in research and was developed based on the European Commission framework on promoting digital-age learning in educational organisations (https://ec.europa.eu/education/schools-go-digital/about-selfie_en)

¹³ [Area 5.1 - Civil society organizations | Open Space \(europa.eu\)](#)

STATISTICAL ANNEX

YOUTH DISENGAGEMENT AND MISMATCH IN THE EASTERN EUROPEAN COUNTRIES (2019)

	AM	BY	GE	MD	UA	EU
NEETs aged 15-29 (%)	35.9	8.9	31.0	35.7	20.2	12.6
<i>Men</i>	30.2	9.3	25.4	32.4	13.2	10.8
<i>Women</i>	42.0	8.5	37.2	39.1	27.5	14.6
Inactive NEETs aged 15-29 (%)	25.2	5.4	20.6	33.0	14.1	7.8
<i>Men</i>	18.5	5.0	12.7	29.8	6.2	5.4
<i>Women</i>	32.5	5.8	29.4	36.2	22.5	10.3
Unemployed NEETs aged 15-29 (%)	10.6	3.5	10.4	2.8	6.1	4.8
<i>Men</i>	11.7	4.3	12.7	2.7	7.0	5.3
<i>Women</i>	9.4	2.7	7.8	2.9	5.0	4.3
NEETs aged 15-29 (%)	35.9	8.9	31.0	35.7	20.2	12.6
<i>ISCED 3-4 general programmes (%)</i>	41.1	10.1	24.2	26.5	19.1	8.9
<i>ISCED 3-4 vocational programmes (%)</i>	51.9	11.6	50.5	51.7	26.9	15.9
<i>NEETs aged 15-19 (%)</i>	17.2	6.7	17.2	11.7	6.4	5.6
<i>Women NEETs aged 15-19 (%)</i>	11.9	7.4	16.4	10.5	6.7	5.3
<i>NEETs aged 20-24 (%)</i>	36.3	12.0	36.3	40.1	24.3	14.5
<i>Women NEETs aged 20-24 (%)</i>	44.1	9.4	43.6	40.4	32.1	15.4
Skills mismatch* (% aged 15-24)						
<i>Over-skilled-High (d,e,p)</i>	18.6	13.8	42.0	35.7	38.1	a
<i>Over-skilled-Medium (d,e,p)</i>	15.6	1.9	14.2	7.3	27.3	a
<i>Over-educated (d,e,p)</i>	32.7	23.6	19.7	23.3	22.2	a
<i>Under-educated (d,e,p)</i>	10.1	17.0	10.7	14.2	21.8	a

Source: ETF 2022 forthcoming, ETF KIESE, Eurostat

AM: Armenia, BY: Belarus, GE: Georgia, MD: Moldova, UA: Ukraine, EU: EU27 countries

Notes: a = not applicable, d = see definition, e = ETF estimate, m = missing, p = provisional

Datasets stem from ETF analysis of skills mismatch incidence in the partner countries (ETF, 2022) which covered only the following Eastern European countries: Armenia, Belarus, Georgia, Republic of Moldova, Ukraine. For this reason, Azerbaijan data is not included in the table.

*The ETF mismatch framework is made of ten indicators, namely: three core indicators measuring vertical/horizontal mismatch, three contextual and four optional indicators. Only two indicators measuring vertical mismatch are displayed.

Definitions: The **over-skilled individuals** are those holding jobs requiring lower levels of formal qualifications. Example for over-skilled - high value in Armenia: about one in five (18.6%) of tertiary graduates (ISCED levels 5-8) were employed in semi-skilled occupations (ISCO-08 groups 4-8), usually requiring lower levels of formal qualifications. Similarly, 15.6% of upper/post-secondary graduates (ISCED 3-4), held elementary jobs (ISCO-08 group 9). By adding the two values, one can conclude that some one-third of the young Armenians were mismatched in 2019 (i.e., by holding jobs requiring lower levels of their formal qualifications). The **over-educated individuals** are those having a formal educational (ISCED) level which is above the identified one for an occupation in the country. Likewise, the **under-educated individuals** are usually holding jobs for which the modal value in a job/occupation distribution in their country, is typically above their (ISCED) level of education. Also known as the 'empirical method', ETF estimations are based on a modal educational level (i.e. the one identified most frequently) in a given occupational ISCO-08 group in each country, using the most detailed level information available (i.e. ISCO-08 1/2/3 digit-level data). The ETF definition is fully harmonised with ILO recommendations.

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