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PROGRAMME  
**SLOVAKIA**

## Participation in Adult Education - Results from the 2022 Adult Education Survey

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Published: July 2025

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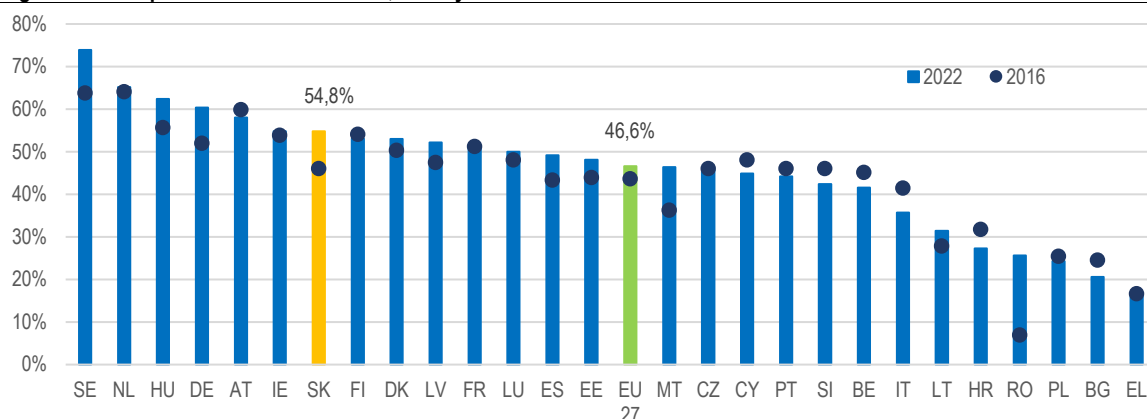
**SIOV**

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*The 2022 Adult Education Survey (AES) shows an overall moderate increase in the participation rate in adult education and training for the EU 27. However, Slovakia has improved by 9 percentage points since previous survey in 2016. The first in a series of analytical reports on adult education using data from this survey explores possible explanations for the jump in the participation rate in Slovakia. It is repeatedly confirmed that adult learning in Slovakia is almost exclusively associated with work - employment significantly increases the likelihood that an adult will participate in a learning activity. This effect has increased since 2016, most notably for the low-educated working population. The significant overall increase in the participation rate could largely be attributed to a change in the wording of questions in favour of a better recall of different learning activities in the reference period.*

Slovakia has an above-average position among EU countries in the adult participation in education and training, when the reference period of the survey is 12 months. According to the latest Adult Education Survey (AES) carried out in 2022, Slovakia ranks in the top ten countries with a total participation rate of 54.8% of the adult population aged 25-64, compared to the EU average of around 47%. This number represents the share of people in the population who have participated in at least one learning activity in the last 12 months. Since the survey in 2016, participation rate in Slovakia has increased by almost 9 percentage points, the fourth highest increase among EU countries (the top three are Romania, Sweden and Malta). The AES is a survey conducted by Eurostat every 5 years (every 6 years from 2022) focusing exclusively on adult education and training in European countries (34 countries in 2022).

**Figure 1: Participation in Adult Education, 25-64 years**



Source: Eurostat [trng\_aes\_100]

**Adult learning is important in the context of maintaining and building human capital and improving quality of life.** The indicator on participation rate in adult education and training is considered important, e.g. in the European Pillar of Social Rights it is one of the three key indicators with a target of 60% by 2030<sup>1</sup>. However, the focus on measuring participation rate does not track content of these learning activities. Thus, when interpreting this indicator, the prevailing assumption is that participation in any form and content of education is beneficial to the individual, whether for their working or personal life.

**The reasons for the jump in the participation rate in Slovakia are not revealed by the data, but the data can give an indication of which groups of participants are involved.** In the period under review, there has been no significant change in adult education policies in Slovakia, either institutional or legislative. To some extent, there may have been the impact of national employment support projects implemented by the Ministry of Labour, which financed participation in training. On the other hand, a pandemic is coming into play, the end of which coincides

<sup>1</sup> [European pillar of social rights Action Plan](#). Also [European Skills Agenda for sustainable competitiveness, social fairness and resilience](#) contains targets for the year 2025.

with the survey period<sup>2</sup>. Many training activities were suspended, either because of in-person-contact restrictions or because of budget cuts in companies and sectors affected by the pandemic. Conversely, a number of adults may have had better opportunities to participate in learning through online courses. In this analysis, we seek to uncover early data findings leading to hypotheses about events that translated into the survey results.

**Box 1: Formal, non-formal education and informal learning<sup>3</sup>**

**We consider it important to give an official definition of the three categories of adult learning.** Not only are various loose interpretations present in the media space, but it is also true that the terminology suffers from a tricky translation from English. It is important to consider that the local language mainly reflects the experience with the given concept and familiarity with the terminology. In Slovakia, much of the terminology in adult education is relatively new. As an example, we mention the problem with the translation of 'microcredentials' discussed in our publication [here](#). Finally, lifelong learning is almost conventionally used as a synonym for adult learning.

**Formal education and training is defined as “education that is institutionalised, intentional and planned through public organisations and recognised private bodies and – in their totality – constitute the formal education system of a country.** Formal education programmes are thus recognised as such by the relevant national education authorities or equivalent authorities, e.g. any other institution in cooperation with the national or sub-national education authorities. Formal education consists mostly of initial education. Vocational education, special needs education and some parts of adult education are often recognised as being part of the formal education system.” (ISCED 2011)

**Non-formal education and training is defined as “education that is institutionalised, intentional and planned by an education provider.** The defining characteristic of non-formal education is that it is an addition, alternative and/or complement to formal education within the process of the lifelong learning of individuals. It is often provided to guarantee the right of access to education for all. It caters to people of all ages but does not necessarily apply a continuous pathway-structure; it may be short in duration and/or low-intensity, and it is typically provided in the form of short courses, workshops or seminars. Non-formal education mostly leads to qualifications that are not recognised as formal or equivalent to formal qualifications by the relevant national or sub-national education authorities or to no qualifications at all. Non-formal education can cover programmes contributing to adult and youth literacy and education for out-of-school children, as well as programmes on life skills, work skills, and social or cultural development.” (ISCED 2011)

**In short:** non-formal education and training covers institutionalised taught learning activities outside the formal education system.

**For the AES,** four types of typical non-formal learning activities are singled out for data collection (these categories are not detailed in the online tables):

- Courses;
- Workshops or seminars;
- Guided on-the-job training (planned periods of education, instruction or training directly at the workplace, organised by the employer with the aid of an instructor);
- Private lessons.

**Informal learning** is defined as “forms of learning that are intentional or deliberate, but are not institutionalised. It is consequently less organised and less structured than either formal or non-formal education. Informal learning may include learning activities that occur in the family, workplace, local community and daily life, on a self-directed, family-directed or socially-directed basis”. (ISCED 2011)

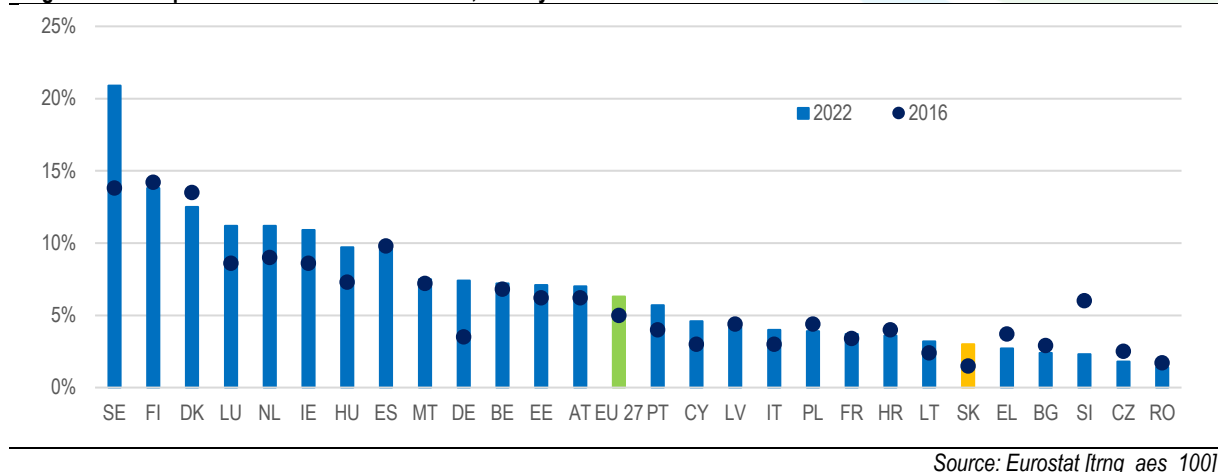
**Participation in formal education for the 25-64 age group is less frequent.** Formal education leading to a degree represents a smaller share in the age group surveyed. After the age of 25, when majority of the population has completed their planned initial education, learning activities focus on advancing skills outside the formal system. Differences between countries in the participation rate of adults in formal education may be mainly due to cultural

<sup>2</sup> The survey in Slovakia was carried out by the Statistical Office of the Slovak Republic in the period from July to November 2022. The reference period for respondents is one year (the questions refer to the last 12 months from the respondent's point of view), i.e. the period from July 2021. The last national “lockdown” was in the period from November 2021 to February 2022.

<sup>3</sup> Eurostat ([Reference Metadata](#)).

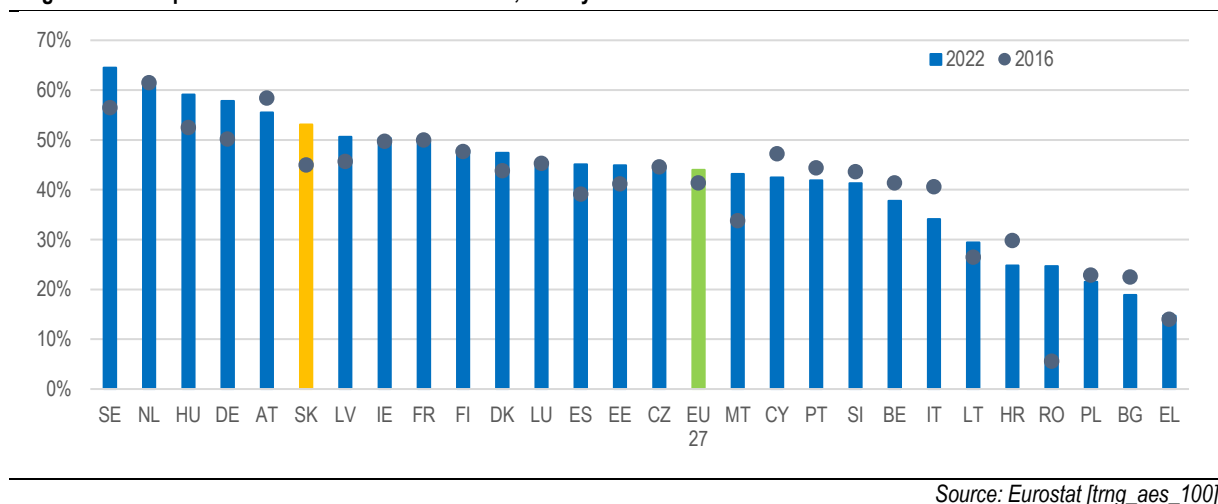
norms regarding the gaps between upper secondary and tertiary education<sup>4</sup>. In EU countries, 6% of the population aged 25-64 years has participated in formal education, compared to 3% in Slovakia. We know from previous analysis that in Slovakia these are mainly people completing their tertiary education at master level<sup>5</sup>.

**Figure 2: Participation in formal adult education, 25-64 years**



**Adult education is dominated by non-formal education.** Non-formal education includes various training activities, courses, workshops, but also private lessons and the like (see Box 1 for more details). This is the category of learning activities where Slovakia has seen a high percentage point increase (although formal education essentially doubled, it was still a small increase in p.p.). Participation in non-formal education is 53% of the adult working age population compared to 44% in the EU.

**Figure 3: Participation in non-formal adult education, 25-64 years**



**Non-formal education in Slovakia is dominated by courses, measured either by the share of participants or by the share of the total number of reported learning activities.** During the reference period of 12 months prior to the survey, individuals may have participated in more than one learning activity. In the survey, these activities are divided into four categories (see Box 2). In the figure, we report what proportion of the population participated in at least one learning activity from the defined categories. Courses and training dominate<sup>6</sup>, and the proportion of the population participating in activities in this category increased compared to the previous survey.

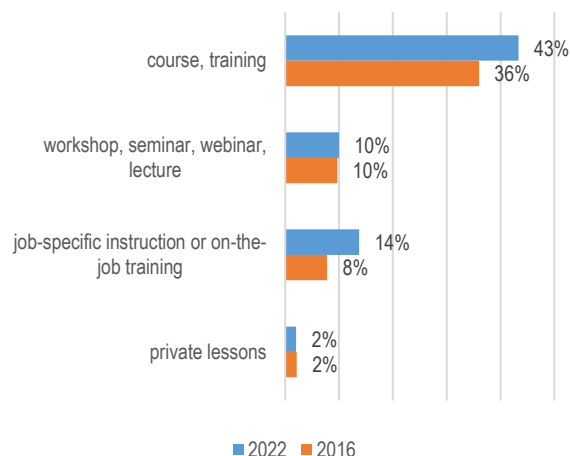
<sup>4</sup> For example [here](#).

<sup>5</sup> [Marečku, podejte mi pero!](#) (Institute of Financial Policy commentary).

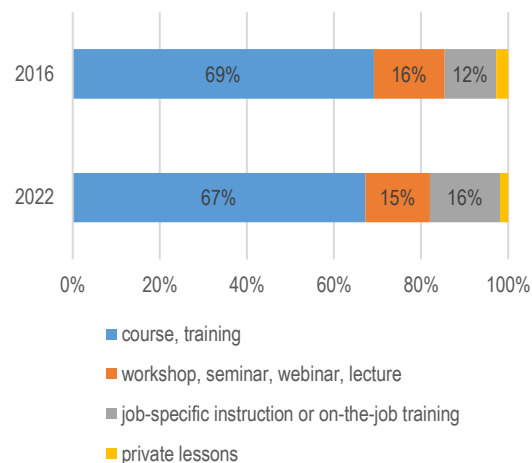
<sup>6</sup> In Slovak questionnaire the category "courses" as outlined by Eurostat methodology contains also training activities ("školenia"). These are similar to courses, but they tend to be a one-time event, i.e. not repeating learning activities like courses.

There was also an increase in the category of guided on-the-job training. It is also true that courses and training represent the largest volume of the reported number of learning activities, with a share almost unchanged from 2016<sup>7</sup>.

**Figure 4: Participation in types of non-formal education, share of population, 25-64**



**Figure 5: Distribution of the total volume of reported activities in non-formal education**



Source: AES 2022, own calculation

**From now on we are looking only at non-formal education.** As participation in formal education represents a relatively small share and also varies in other aspects (e.g. regulation, types of providers), we look only at adult participation in non-formal education in the text below. In order to get a better idea of whether the changes compared to the previous survey have occurred only in Slovakia or represent a broader trend, we present the EU average as well as the data for other V4 countries. Please note that this is a comparison of participation at the level of individuals.

**In Slovakia, the highest participation in non-formal education is in the 45-54 age category.** Typically declining age profile confirms economic theories regarding investment in human capital, specifically investment in education and skills declines with increasing age. However, this is not the case in Slovakia (and in other V4 countries). According to the latest survey, participation in education has a slightly upward trend up to the age of 54. The age category 45-54 years has also recorded the highest increase since the previous survey. The highest age category, 55-64 years, also recorded a high increase compared to the previous survey, similarly to Hungary.

<sup>7</sup> The data are weighted by the respondent characteristics.

Figure 6: Participation in non-formal education by age, 2022

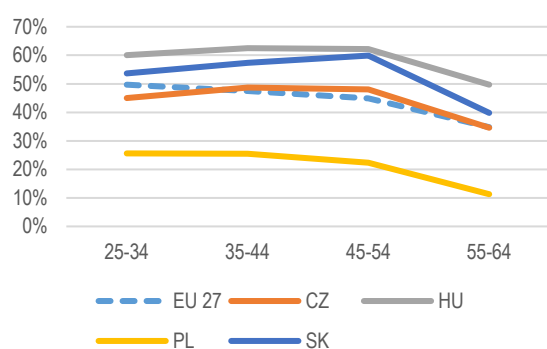
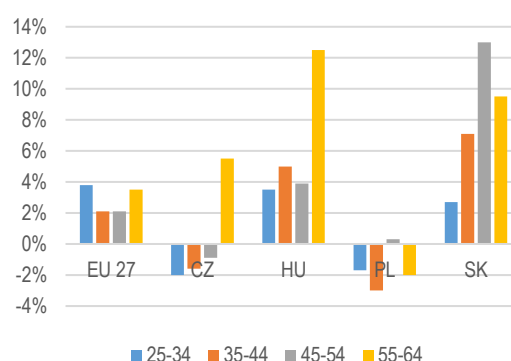


Figure 7: Change in participation in non-formal education by age, 2016 and 2022



Source: Eurostat [trng\_aes\_101]

### Various surveys repeatedly confirm that participants in adult education are not those who need it most.

This is reflected in rising participation rates with higher educational attainment. At a time of dynamic changes in the labour market, adult learning is particularly important for people with specific and less transferable skills that are typical for lower levels of education. In Slovakia, it is also particularly important to improve the skills of the low-educated, as this group has the worst labour market outcomes compared to other countries<sup>8</sup>. The AES survey shows that Slovakia has reached the level of the EU average in this group in 2022, with a significant increase compared to 2016. However, the numbers are statistically unreliable in both years, which means that it is not possible to extrapolate to the whole population.

Figure 8: Participation in non-formal education by educational attainment, 2022

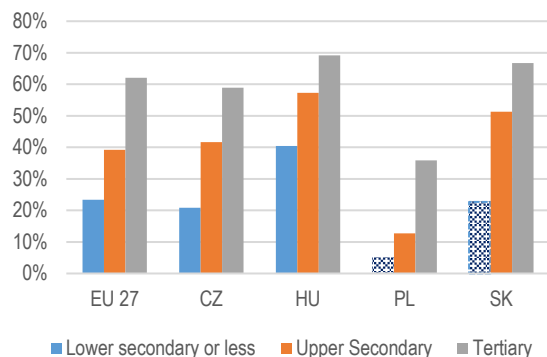
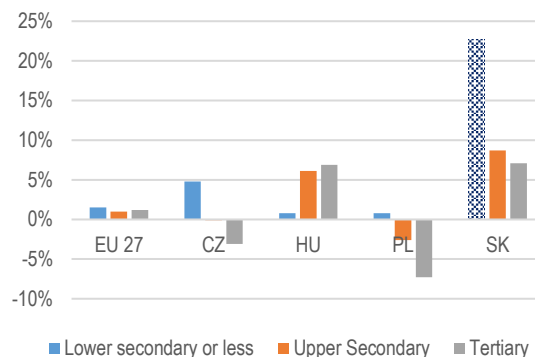


Figure 9: Change in participation in non-formal education by educational attainment, 2016 and 2022



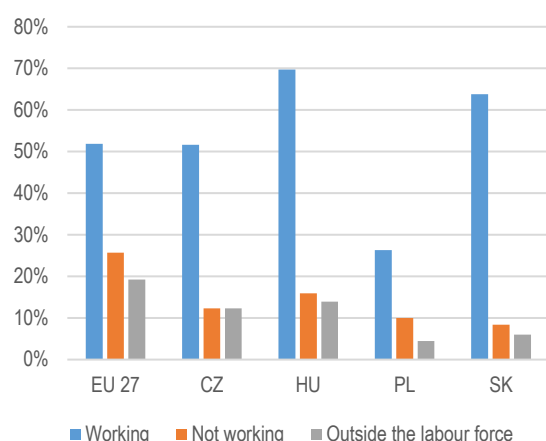
Source: Eurostat [trng\_aes\_102]

**In Slovakia, adult learning is primarily pursued by the working population.** Although it is also true that in European countries the largest group of learners is the working population, in Slovakia (together with Hungary) this proportion is significantly higher. The high participation of workers in adult learning may be related to the provision of the minimum training necessary for the job, which is usually provided by employers. The high participation of workers also means that non-workers in Slovakia<sup>9</sup> show a very low participation rate, even in comparison with the other V4 countries, and their participation declined since 2016.

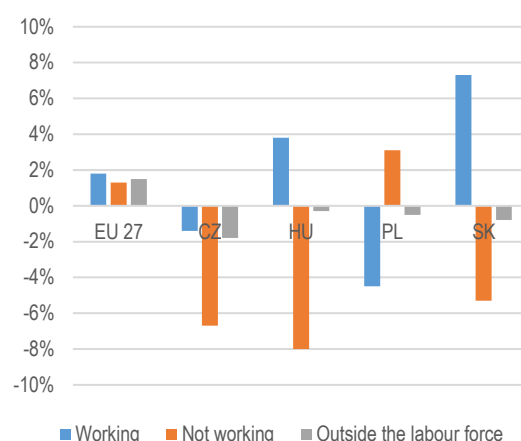
<sup>8</sup> In Slovakia, the share of working population 20-64 years old was 33,8% in year 2024 for people with the highest educational attainment ISCED 0-2. This is the worst outcome within EU 27. The EU average was 58.5%, Czech Republic 58,3%, Hungary 60% a Poland 47,7% (Eurostat, [lfsi\_educ\_a]).

<sup>9</sup> We avoid the term unemployed. The category unemployed has a specific and precise definition; identification depends on a number of questions. Since in this survey respondents self-identify their labour force status, we prefer the term "not working" for differentiation. Out of the labour force then includes students, retirees and the like.

**Figure 10: Participation in non-formal education by labour force status, 2022**



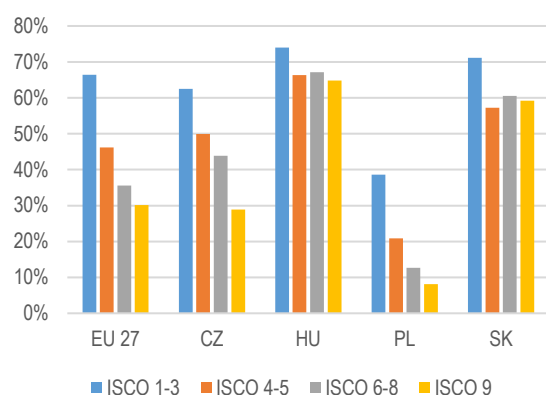
**Figure 11: Change in participation by labour force status, 2016 and 2022**



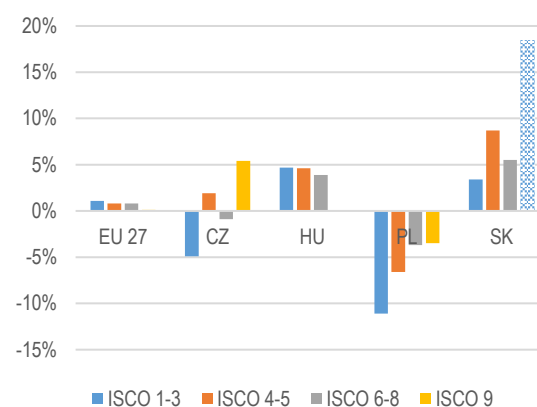
Source: Eurostat [trng\_aes\_103]

Similar to the increase in the participation rate of low-educated, the share of workers in unskilled occupations has seen a significant jump in participation since the last measurement. Compared to the 2016 survey, all occupational categories have seen an increase, but the highest increase is in the category of elementary occupations. Again, this is a statistically unreliable increase due to an unreliable baseline in 2016. In general, a similar statement to that for educational attainment applies, namely that workers in highly skilled occupations have the highest participation in non-formal education in Slovakia but also within the EU.

**Figure 12: Participation in non-formal education by occupational group, 2022**



**Chart 13: Change in participation by occupational group, 2016 and 2022**



*Note: ISCO 1-3 managers, professionals, technicians, associate professionals, ISCO 4-5 clerical, service and sales workers, ISCO 6-8 skilled workers and craftsmen, operators and assemblers of machinery and equipment, ISCO 9 elementary occupations*

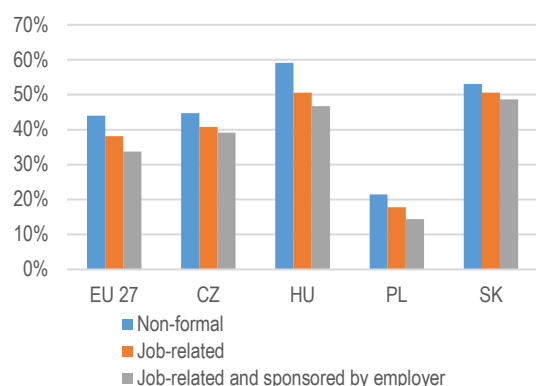
Source: Eurostat [trng\_aes\_104]

**Most non-formal education in Slovakia is work-related and at least partly sponsored by employer.** The indicator of employer-sponsored learning activity is constructed as a combination of answers to two questions: whether the learning took place at least partially during working hours and whether the employer at least partially contributed to the cost of the learning activity. It is still the case that there could have been more than one such activity for a single participant. The proportion of people who had at least one employer-sponsored learning activity is significantly higher in Slovakia than in the EU and compared to other V4 countries. In Slovakia (and in Hungary) this share has increased significantly since the survey in 2016. Paradoxically, this does not necessarily imply that Slovak employers contribute more to the financing of employee learning than the average EU employer. The average number of hours spent by an individual in Slovakia in non-formal learning activity has fallen from 36 to 32

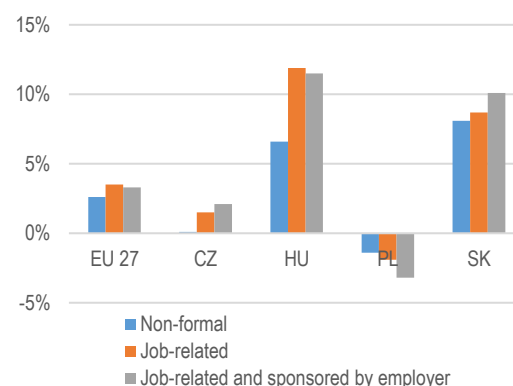


hours, while in the EU the average length of activity has risen from 75 to 84 hours<sup>10</sup>. A more detailed analysis of the reported learning activities follows in a separate study.

**Figure 14: Participation in non-formal work-related education, 2022**



**Figure 15: Change in participation in non-formal work-related education, 2016 and 2022**



Source: Eurostat [trng\_aes\_120]

**We separate the impact of individual characteristics by estimating a model.** The essence of econometric modelling is to extract the impact of each individual characteristic separately without being “confounded” by other variables. For example, if older cohorts are more educated, then looking separately at the effect of age is biased by the fact that it contains the effect of education. In other words, the impact of age needs to be separated from the impact of education. To do this “cleaning” we use a simple econometric model (probit) that estimates the probability of participating in non-formal learning activity as a function of gender, age, education and labour force status.

**Work and education have the greatest influence on the likelihood of participation in non-formal education in Slovakia.** Education and labour force status are the most important factors increasing the likelihood of participation. Results using data from 2022 show that there is no difference between men and women. Further, age does not play a role, except for the last age category, where the population aged 55 to 64 is 5% less likely to participate compared to the other cohorts. Upper secondary education increases the likelihood by 11% on average and higher education by 21.5% compared to at most lower secondary education. If an individual is not working, the probability of participating decreases by 54% and those who are out of the labour market have a lower probability of participating by up to 58.4% relative to those in work.

**The largest increase from the previous survey is in the category of low-educated workers.** Combining the individual effects of the variables, we predict the probability of participation in non-formal education for hypothetical individuals. A comparison of the model results in the two periods shows that the largest change occurred in the category of low-educated workers, where the probability of participation doubled to 50 %.

Compared to 2016, the share of low-educated workers in the sample increased from 33% to 44%<sup>11</sup>. According to Eurostat statistics from the Labour Force Survey, this share of the population increased from 27% in 2016 to 34% in 2024<sup>12</sup>. In 2022, it was at 31%. In other words, the combination of a higher share of low-educated workers and, at the same time, higher participation rates in this category similar to all categories of workers, contributed to the increase in overall participation in Slovakia.

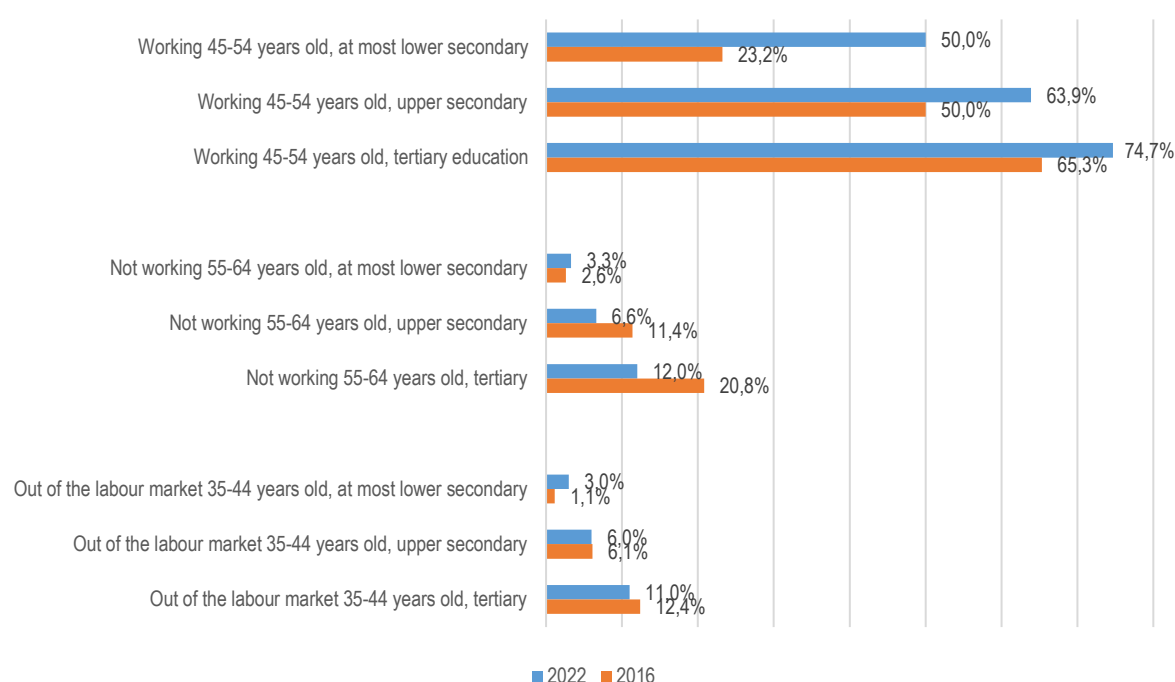
<sup>10</sup> Eurostat [trng\_aes\_151]

<sup>11</sup> Using individual weights.

<sup>12</sup> It is a slightly different age group of 20-64, which is used for labour market statistics. Eurostat [lfsi\_educ\_a].



**Chart 16: Probability of participation in non-formal education in Slovakia - selected individual characteristics**



Source: AES 2022, own estimation

### Box 2: Changes in the questionnaire – Non-formal education

**With sudden changes in the values of indicators, it is reasonable to ask whether there has been a change in the methodology of data collection.** We look at the wording of survey questions for non-formal education in the 2016 and 2022 questionnaires. If a question is worded more specifically, the change may also be due to better "recall" of learning activities over the last 12 months. As can be seen below, there has been a significant change in the wording of the question in the most recent survey by listing numerous examples that not only explain better what the survey is trying to find out, but more importantly encourage recall by giving examples of typical, perhaps temporarily popular, activities in Slovakia during the pandemic.

If this argument serves as an explanation for the increase, there is still a question of why the recall would be so pronounced for the low-educated/low-skilled. Here, it is likely to be a combination with the fact that the sample contains a higher proportion of low-educated workers than in the previous survey, and since work is a strong predictor, this was also reflected in the proportion of low-educated participants in non-formal education.

We are also inclined to hypothesize that the jump is likely attributable to the change in the wording of the questions. A similar increase was observed in the adult learning participation indicator with reference period of the last 4 weeks prior to the survey, where there was also a similar change in the wording of the question. This indicator is a part of the Labour Force Survey. Further information on the change of the LFS indicator is provided in the document [The European Skills Index \(State Institute of Vocational Education, 2025\)](#).

#### Questionnaire 2016:

**Have you participated in the last 12 months to improve your skills and knowledge in any area (including hobbies)**

- a) a course, training
- b) workshop, seminar, lecture
- c) an apprenticeship or on-the-job training with professional guidance
- d) private lessons?

#### Questionnaire 2022:

The next block of questions is focused on non-formal education. It is education that is in addition to school education and aims to improve knowledge, understanding or skills in any field. It includes courses, training, workshops, seminars, lectures, private lessons as well as on-the-job training. Learning is always with a teacher, either face-to-face or online. It can occur for work or personal reasons, during worktime or leisure time. **We are interested in the last 12 months!**

**Have you participated in any courses or training?**

*(this includes e.g. language, computer, accounting, economics, management, retraining courses, driving school, coaching or refereeing courses, hobby courses in singing, dancing, playing a musical instrument, cooking, sourdough, ceramics, University of the Third Age, health and safety training, first aid courses, vocational and on-the-job training)*

**Have you attended a workshop, seminar, webinar or lecture?**

*(e.g. workshops, experiential and creative workshops, educational seminars and lectures)*

**Have you been professionally trained at your workplace?**

*(this includes e.g. mentoring, initial orientation training to new employees about organisation, company structure, workplace safety, organizational rules, retraining due to transfer to another workplace, another position, training due to the introduction of new technology, work procedure or tool)*

**Have you had private lessons or tutoring?**

*(These are both paid and unpaid private lessons or tutoring based on a professional teacher-student relationship, such as lessons in foreign language, mathematics, painting, dance, piano, provided by a tutor or expert in the field for whom it is a source of income.)*

Source: [List of Statistical Forms, Statistical Office of the Slovak Republic](#)