

# Urban-rural Europe - education and training

Statistics Explained

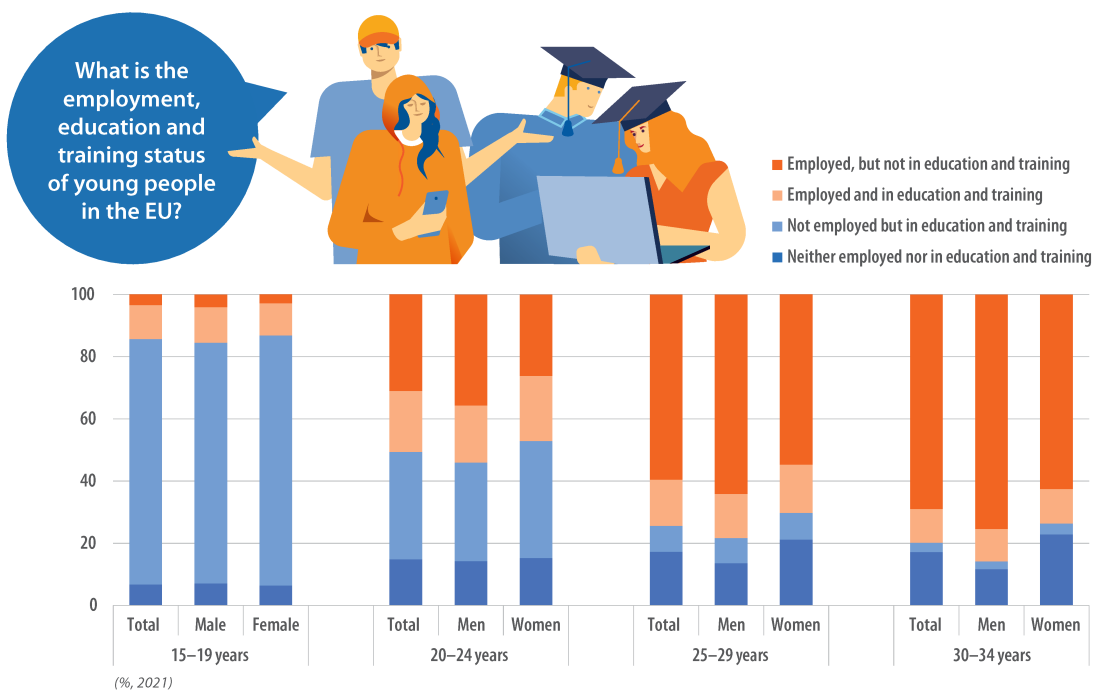
Data extracted: October 2022.

Planned article update: December 2024.

" More than half (51.4 %) of all young adults (25–34 years) living in EU cities had a tertiary level of educational attainment in 2021. "

" In 2021, the share of young people (15–29 years) neither in employment nor in education and training was higher among the subpopulation living in towns and suburbs (13.9 %) and rural areas (13.7 %), while it was lower for those living in cities (12.2 %). "

This article presents data following the natural progression of pupils and students through different levels of the education system (according to the [International standard classification of education \(ISCED\)](#) ), before analysing transitions from education into the [labour market](#) and the participation of adults in education and learning.



Source: Eurostat (edat\_ifse\_18)

Based on the latest information available, there were 93.3 million pupils and students enrolled across the [European Union \(EU\)](#) in 2020; this figure covers all levels of education from early childhood education through to doctoral (PhD) studies, as covered by ISCED levels 0–8.

Across the EU, a relatively large share of young people below the age of 20 years were outside of the labour force

in 2021. For most, this was because they continued in full-time education and/or training; as such, they were not working nor looking for work. As people move through their twenties, an increasing number are outside the education system, often in work or looking for work. The share of young women in the EU who were employed was consistently lower than the corresponding share among young men for each of the five-year age classes between 20 and 34 years. This reflects, at least in part, the impact of starting a family on female labour force participation; see the infographic above.

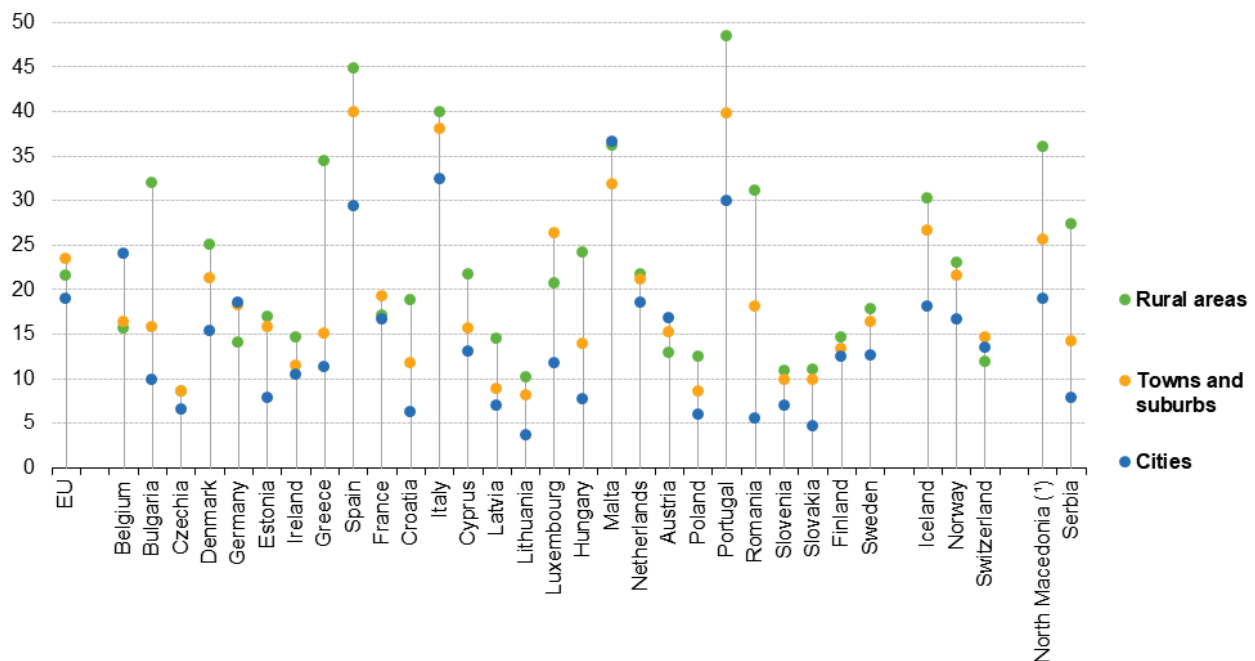
This article forms part of Eurostat's sister publications on [Rural Europe](#) and [Urban Europe](#).

## Educational attainment

The ISCED classification provides the basis for compiling internationally comparable education statistics. The 2011 version has nine different education levels from early childhood education (ISCED level 0) through to doctoral studies (ISCED level 8).

### At most lower secondary educational attainment (18–64 years) by degree of urbanisation, 2021

(%)



(\*) 2020.

Source: Eurostat (online data code: edat\_ifs\_9913)

eurostat

**Figure 1: At most lower secondary educational attainment (18–64 years) by degree of urbanisation, 2021 (%)**  
Source: Eurostat (edat\_ifs\_9913)

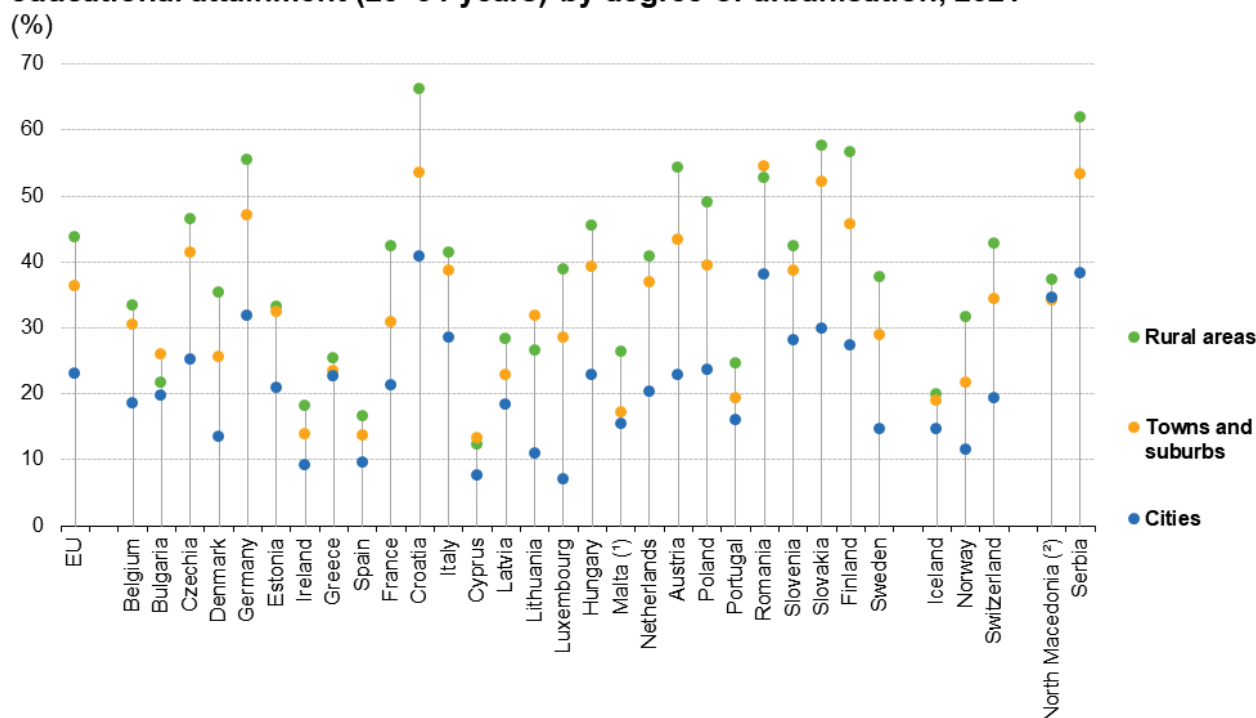
In 2021, more than one fifth (21.2 %) of the EU's working-age population (defined here as those aged 18–64 years) had, at most, a lower secondary level of educational attainment; in other words, they had a low level of education, as defined by less than primary, primary or lower secondary education (ISCED levels 0, 1 or 2). An analysis by [degree of urbanisation](#) reveals that working-age adults living in the EU's [towns and suburbs](#) were more likely (than those living in [rural areas](#) or in [cities](#)) to have, at most, a lower secondary level of educational attainment. That said, Czechia, France and Luxembourg were the only EU Member States where this overall pattern for the EU was repeated. More generally, the highest share of working-age adults with at most a lower secondary level of educational attainment was recorded among people living in rural areas. This pattern was observed for 20 Member States, with the highest shares (40.0 % or more) in Italy, Spain and Portugal. By contrast, the situation was reversed in Malta, Belgium, Germany and Austria, where the highest share of working-age adults with at most a

lower secondary level of educational attainment was recorded among those living in cities; see Figure 1.

Vocational education may be undertaken at an educational institution, as part of secondary or tertiary education, or may be part of initial training during employment, for example as an apprentice, or as a combination of formal education and workplace learning. It concerns knowledge related to a specific trade, occupation or vocation in which the student or employee wishes to participate. In 2021, almost one third (32.2 %) of the EU's population aged 25–34 years had an upper secondary or post-secondary non-tertiary vocational level of educational attainment (in other words, the highest level of vocational education they had successfully completed was ISCED levels 3 or 4); hereafter, this cohort is referred to as people with a medium level of vocational educational attainment.

More than two fifths (43.8 %) of young adults living in rural areas of the EU had a medium level of vocational educational attainment, which was considerably higher than the corresponding shares recorded for young adults living in towns and suburbs (36.4 %) or in cities (23.1 %). This pattern – the highest share of young adults with a medium level of vocational educational attainment living in rural areas and the lowest share in cities – was repeated in 22 of the EU Member States (no data for rural areas in Malta), with the only exceptions being Romania, Lithuania, Bulgaria and Cyprus (where the highest shares were recorded among young people living in towns and suburbs). More than half of all young adults aged 25–34 years living in rural areas of Croatia, Slovakia, Finland, Germany, Austria and Romania had a medium level of vocational educational attainment; this was also the case for a majority of the young adults living in the towns and suburbs of Romania, Croatia and Slovakia; see Figure 2.

### Upper secondary or post-secondary non-tertiary vocational educational attainment (25–34 years) by degree of urbanisation, 2021 (%)



(1) Rural areas: 2020, low reliability.

(2) 2020.

Source: Eurostat (online data code: edat\_ifs\_9913)

**Figure 2: Upper secondary or post-secondary non-tertiary vocational educational attainment (25–34 years) by degree of urbanisation, 2021 (%)** Source: Eurostat (edat\_ifs\_9913)

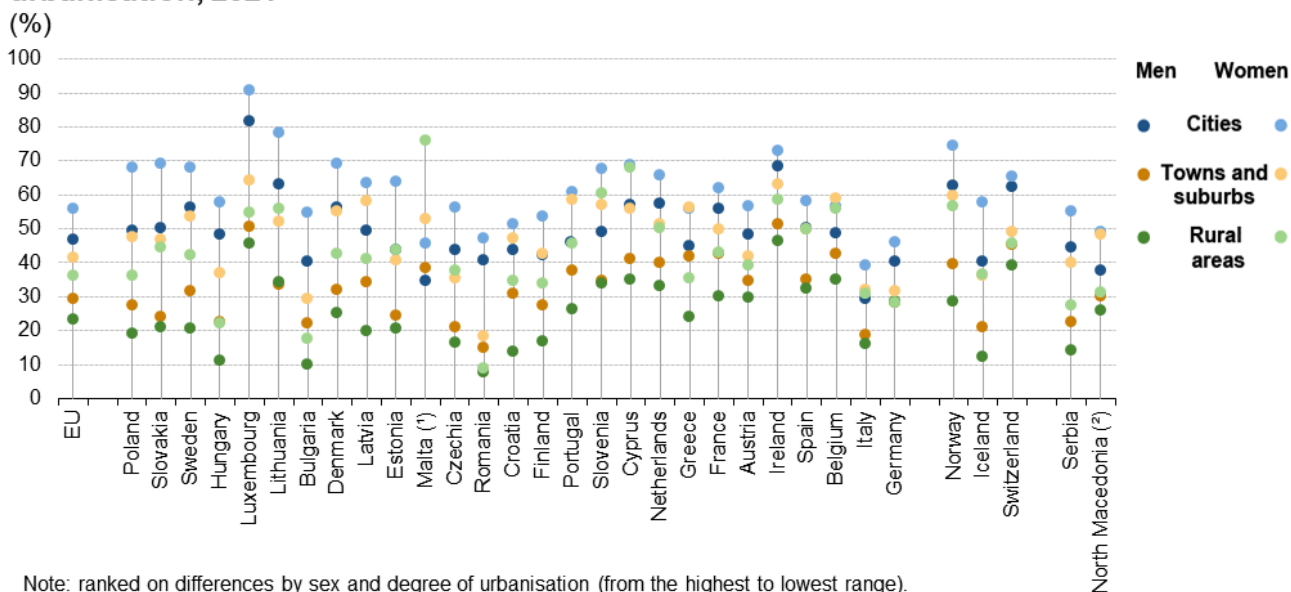
In 2021, approximately two fifths (41.2 %) of young adults (aged 25–34 years) living in the EU had a tertiary level of educational attainment (in other words, they had successfully completed a short-cycle tertiary course, bachelor's, master's or doctoral degree). The share of young women with a tertiary level of educational attainment was higher (at 46.8 %) than that of young men (35.7 %).

More than half (51.4 %) of all young adults living in EU cities had a tertiary level of educational attainment in 2021.

This figure was considerably higher than the corresponding shares recorded among young people living in towns and suburbs (35.3 %) or rural areas (29.6 %). This concentration of highly qualified young adults in cities may reflect, among other factors, more job opportunities for graduates in cities, while some young adults might choose to continue living in the city where they studied.

In 2021, most of the EU Member States (23 out of 27) reported an absolute majority of young women living in cities having a tertiary level of educational attainment. A peak of 90.7 % was recorded in Luxembourg, while shares of more than 70.0 % were also recorded in Lithuania and Ireland. Across all three degrees of urbanisation, more than half of all young women in Belgium, Ireland, Cyprus, Lithuania, Luxembourg, the Netherlands and Slovenia had a tertiary level of educational attainment. There were 10 EU Member States where an absolute majority of young men living in cities had a tertiary level of educational attainment: Luxembourg again recorded the highest share (81.8 %), followed by Ireland and Lithuania (which were the only other Member States where shares of more than 60.0 % were observed). The share of young men living in rural areas with a tertiary level of educational attainment was below half in every Member State, the share peaking at 46.5 % in Ireland.

### Tertiary educational attainment (25–34 years) by sex and degree of urbanisation, 2021



Note: ranked on differences by sex and degree of urbanisation (from the highest to lowest range).

(\*) Men in rural areas: not available.

(?) 2020.

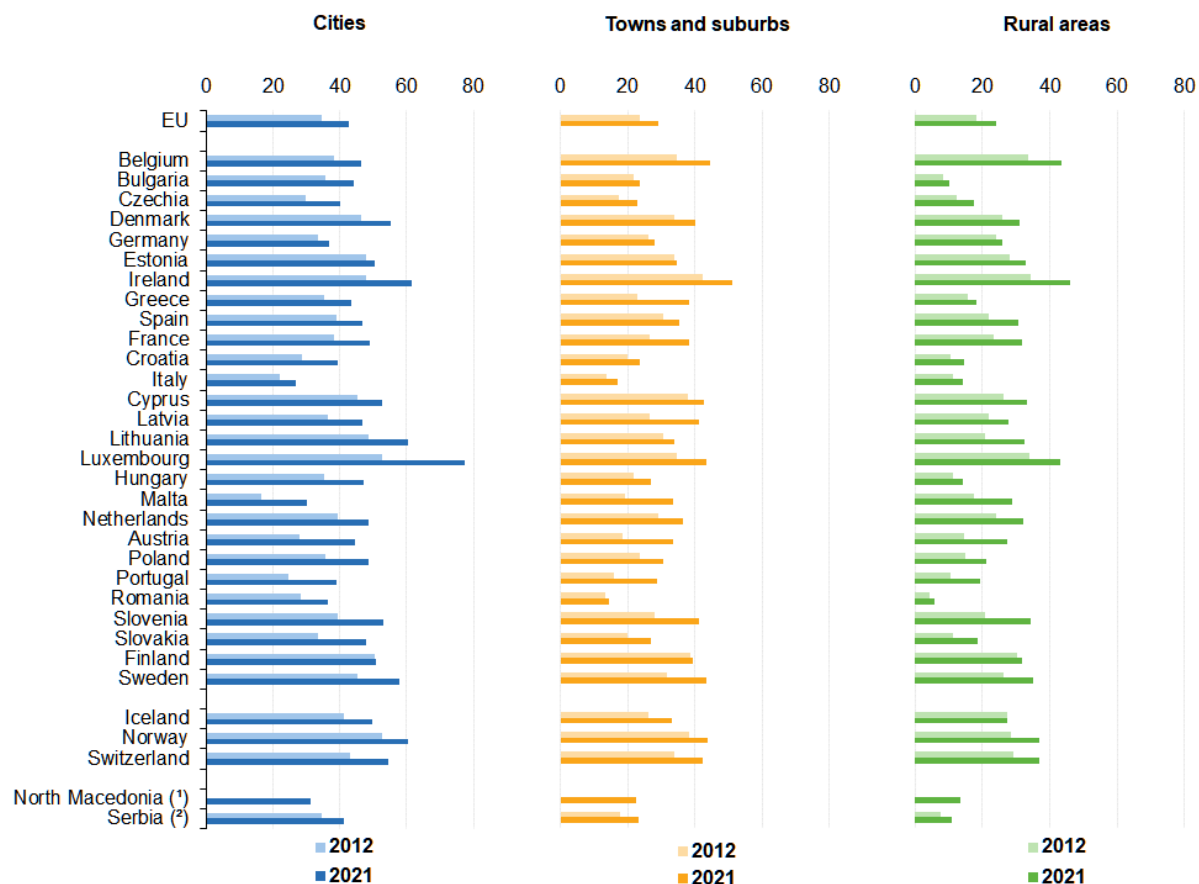
Source: Eurostat (online data code: edat\_lfs\_9913)

**Figure 3: Tertiary educational attainment (25–34 years) by sex and degree of urbanisation, 2021 (%) Source: Eurostat (edat\_lfs\_9913)**

Figure 4 extends the focus on tertiary educational attainment to cover all working-age people (between the ages of 25 and 64 years); it shows changes in attainment for this broader age group between 2012 and 2021. Note that due to a break in series, data for 2021 are not fully comparable with the previous years. The share of working-age adults in the EU with a tertiary level of educational attainment rose for all three categories within the degree of urbanisation typology: between 2012 and 2021, this share increased 8.2 percentage points for those living in cities, 6.1 points for people living in rural areas, and 5.5 points for people living in towns and suburbs.

A similar pattern was observed in each of the EU Member States, as the share of working-age adults with a tertiary level of educational attainment increased systematically between 2012 and 2021 for those living in cities, towns and suburbs, and rural areas. The largest increases by degree of urbanisation were usually recorded for working-age people living in cities (19 out of 27 Member States), with a particularly big increase in Luxembourg (up from 52.6 % to 77.5 %). In Greece, Latvia, Malta and France, the largest increase in tertiary educational attainment was recorded for working-age people living in towns and suburbs, while in Belgium, Spain, Estonia and Finland it was recorded among those living in rural areas.

## Tertiary educational attainment (25–64 years) by degree of urbanisation, 2012 and 2021 (%)



Note: due to a break in series, data for 2021 are not fully comparable with the previous years.

(\*) 2012: not available. 2020 instead of 2021.

(\*) 2014 instead of 2012.

Source: Eurostat (online data code: edat\_lfs\_9913)

eurostat

**Figure 4: Tertiary educational attainment (25–64 years) by degree of urbanisation, 2012 and 2021 (%)** Source: Eurostat (edat\_lfs\_9913)

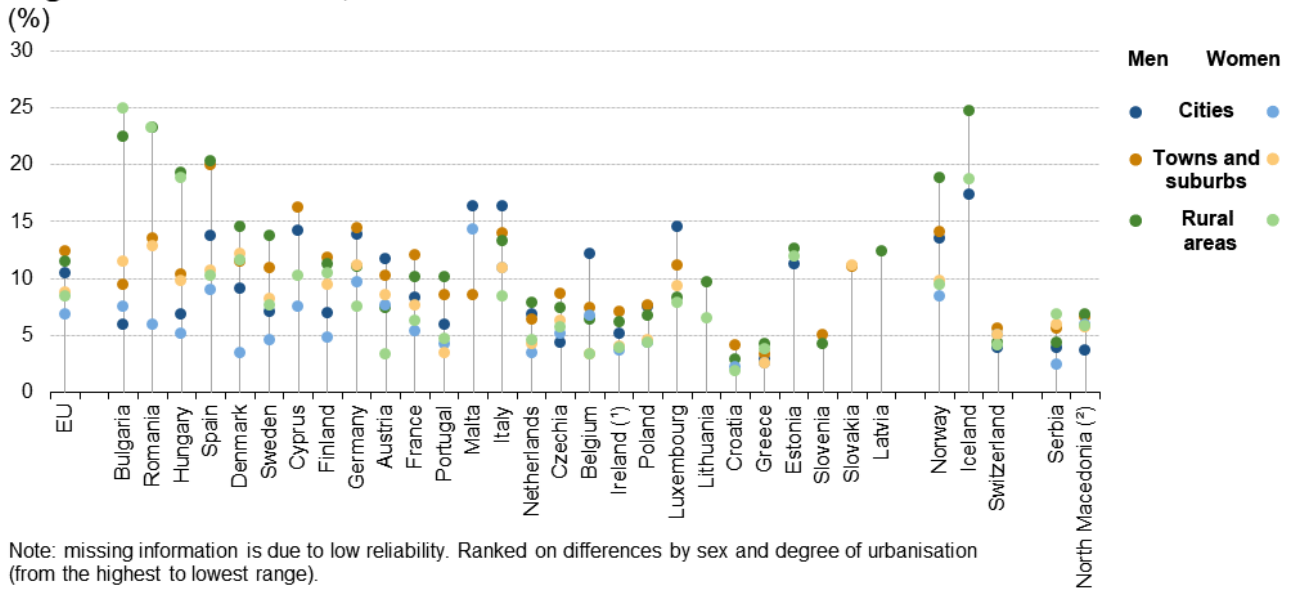
### Early leavers from education and training

The share of [early leavers from education and training](#) is one of the headline indicators for equal opportunities within the [European pillar of social rights](#). It refers to the share of young people (aged 18–24 years) who a) have completed, at most, lower secondary education and who are b) are not involved in further education or training.

In 2021, some 9.7 % of all young people in the EU aged 18–24 years were early leavers from education and training. This share was higher among the subpopulation of young people living in towns and suburbs (10.7 %) and rural areas (10.0 %), while it was lower for those living in cities (8.7 %). Across the whole of the EU, a higher share of young men (11.4 %) than young women (7.9 %) were early leavers from education and training; this pattern was repeated for all three categories when analysed by degree of urbanisation.

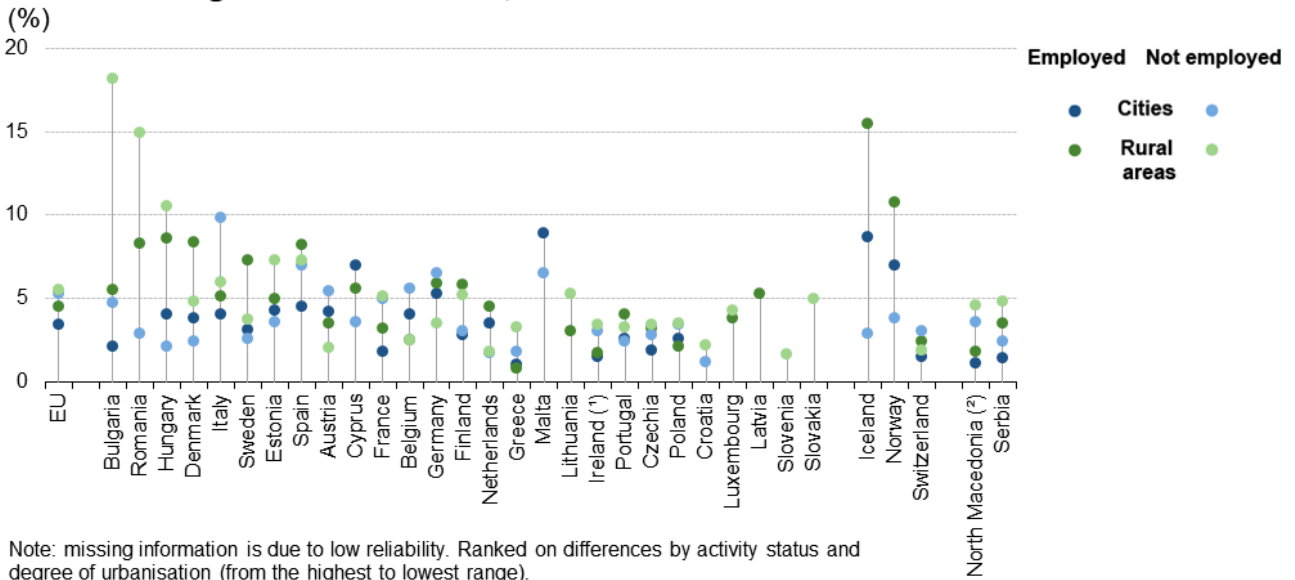
Bulgaria and Romania were the only EU Member States with shares of early leavers from education and training that were higher among young women than young men in 2021 (although their gender gaps were relatively narrow). By contrast, the widest gaps between the sexes – with higher rates for young men – were recorded in Italy, Belgium, Estonia, Cyprus and particularly Spain (where the share of early leavers from education and training among young men was 7.0 percentage points higher than that among young women).

### Early leavers from education and training (18–24 years) by sex and degree of urbanisation, 2021



**Figure 5: Early leavers from education and training (18–24 years) by sex and degree of urbanisation, 2021 (%)** Source: Eurostat (edat\_lfse\_30)

### Early leavers from education and training (18–24 years) by activity status and degree of urbanisation, 2021



**Figure 6: Early leavers from education and training (18–24 years) by activity status and degree of urbanisation, 2021 (%)** Source: Eurostat (edat\_lfse\_30)

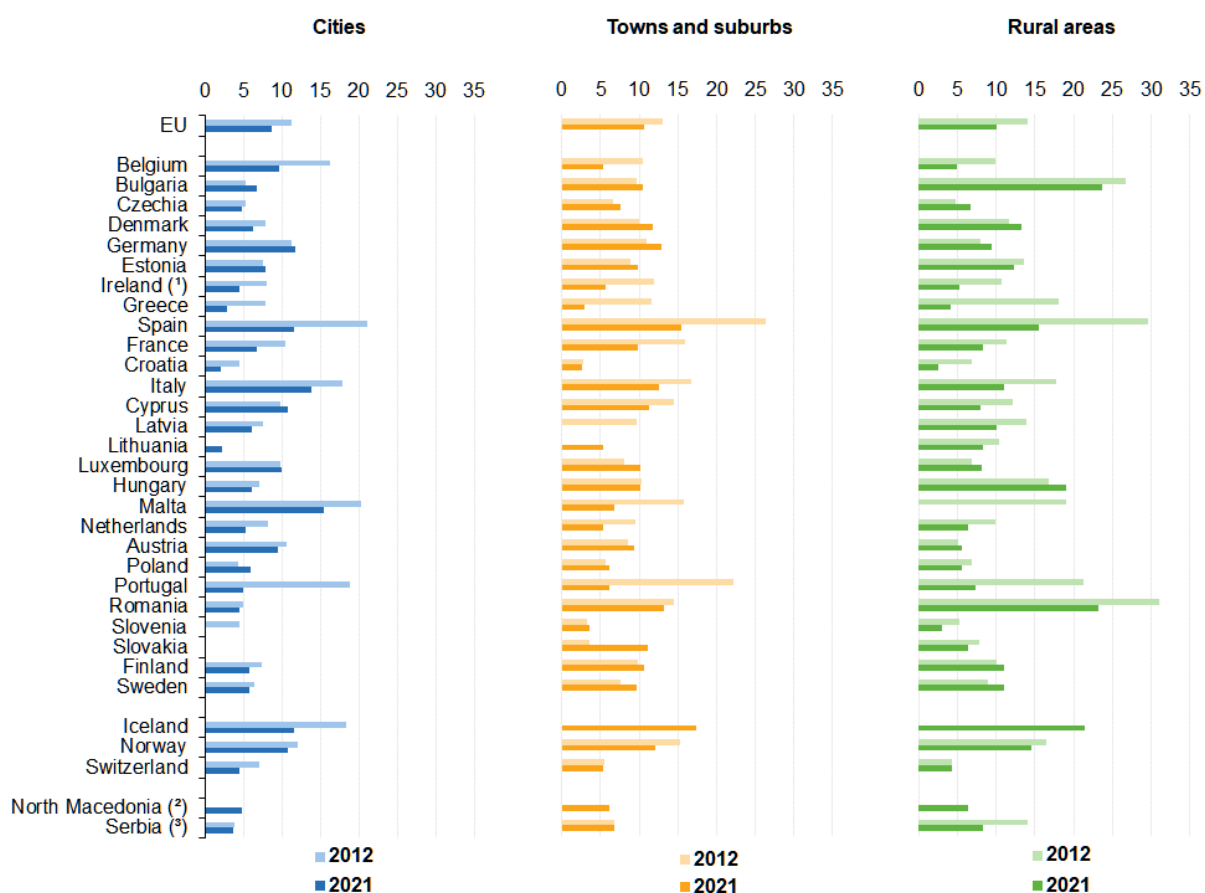
People who leave the education system at a relatively young age with a low level of educational attainment may face difficulties when looking for work. As noted above, approximately one tenth of young people in the EU were categorised as early leavers from education and training in 2021. Some 4.1 % of young people were early leavers and in employment, while the share who were early leavers and not employed was somewhat higher, at 5.6 %. This pattern – a higher share of early leavers being not employed – was repeated for those living in cities and in rural

areas (see Figure 6).

In eight of the EU Member States, a higher proportion of the early leavers from education and training living in cities were in employment (rather than being not employed); this employment gap was particularly notable in the Mediterranean islands of Cyprus and Malta. By contrast, much higher shares of early leavers from education and training living in the cities of Italy and France were not employed. A similar analysis reveals that there were also eight Member States where a higher proportion of the early leavers from education and training living in rural areas were in employment (rather than being not employed); the difference was most notable in Denmark, Sweden, the Netherlands and Germany. By contrast, much higher shares of early leavers from education and training living in the rural areas of Bulgaria and Romania were not employed.

### Early leavers from education and training (18–24 years) by degree of urbanisation, 2012 and 2021 (%)

(%)



Note: due to a break in series, data for 2021 are not fully comparable with the previous years. Missing information is due to low reliability (unless otherwise noted). (\*) 2018 instead of 2021. (\*\*) 2012: not available. 2020 instead of 2021. (†) 2014 instead of 2012. Source: Eurostat (online data code: edat\_ifse\_30)



**Figure 7: Early leavers from education and training (18–24 years) by degree of urbanisation, 2012 and 2021 (%)** Source: Eurostat (edat\_ifse\_30)

Across the EU, the proportion of early leavers from education and training fell by 2.9 percentage points between 2012 and 2021 (note again that data for 2021 are not fully comparable with the previous years due to a break in series). This reduction was repeated for all three categories when analysed by degree of urbanisation: the largest fall was for young people living in rural areas (down 4.0 percentage points), followed by those living in cities (down 2.5 points) and those living in towns and suburbs (down 2.3 points).

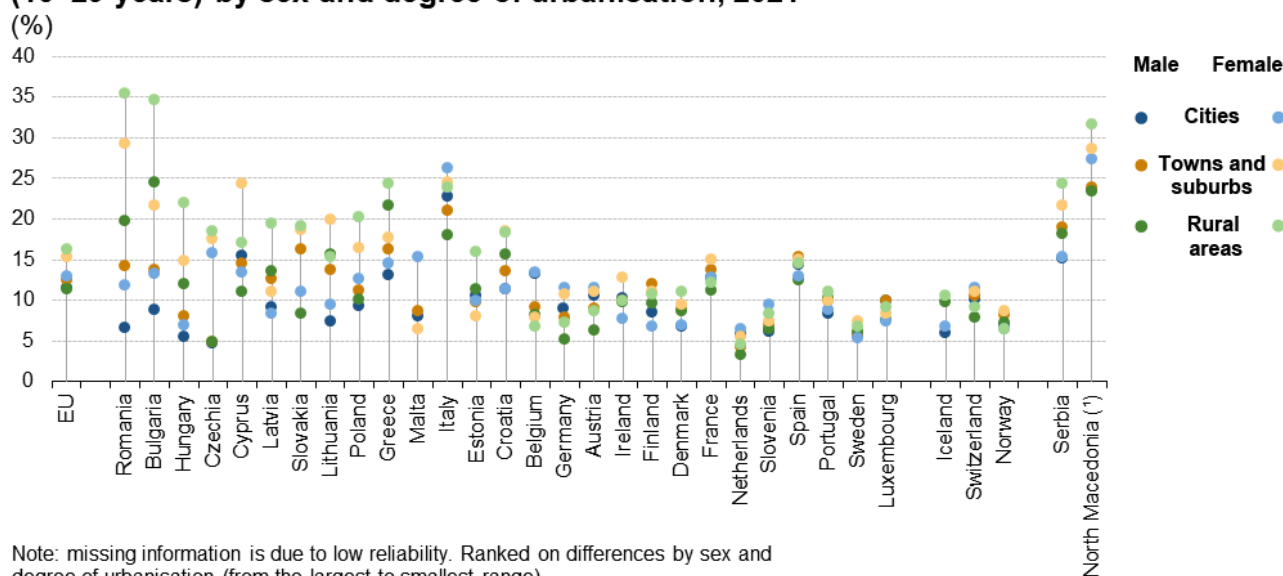
Germany and Luxembourg were the only EU Member States where the share of early leavers from education and training rose between 2012 and 2021 for all three categories covered by the degree of urbanisation; in both cases the highest increase was recorded among young people living in towns and suburbs. During the period under consideration the share of early leavers from education and training fell at a rapid pace in several southern EU Member States; note that these reductions reflect, at least to some degree, very high initial shares in 2012 when these Member States were among those most impacted by the aftermath of the global financial and economic crisis and also the sovereign debt crisis.

## Young people neither in employment nor in education and training by sex, age (NEET)

A considerable proportion of young people (defined here as those aged 15–29 years) in the EU are outside of the labour force. For some, this is because of their full-time participation in education and training, whereas others may have withdrawn from the labour market or did not enter it after leaving the education system. The magnitude of the various categories of young people in the transition from education to work is captured by statistics on [young people who are neither in employment \(in other words, either outside the labour force or unemployed\) nor in education and training \(NEET\)](#). The NEET rate is one of the headline indicators for equal opportunities within the European pillar of social rights.

In 2021, some 13.1 % of all young people in the EU aged 15–29 years were neither in employment nor in education and training. The NEET rate was higher among the subpopulation of young people living in towns and suburbs (13.9 %) and rural areas (13.7 %), while it was lower for those living in cities (12.2 %). The NEET rate was higher in the EU for young females (14.5 %) than for young males (11.8 %); this pattern was repeated for all three categories when analysed by degree of urbanisation, with the widest gender gap recorded for rural areas.

### Young people neither in employment nor in education and training (15–29 years) by sex and degree of urbanisation, 2021



Note: missing information is due to low reliability. Ranked on differences by sex and degree of urbanisation (from the largest to smallest range).

(\*) 2020.

Source: Eurostat (online data code: edat\_ifse\_29)

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**Figure 8: Young people neither in employment nor in education and training (15–29 years) by sex and degree of urbanisation, 2021 (%) Source: Eurostat (edat\_ifse\_29)**

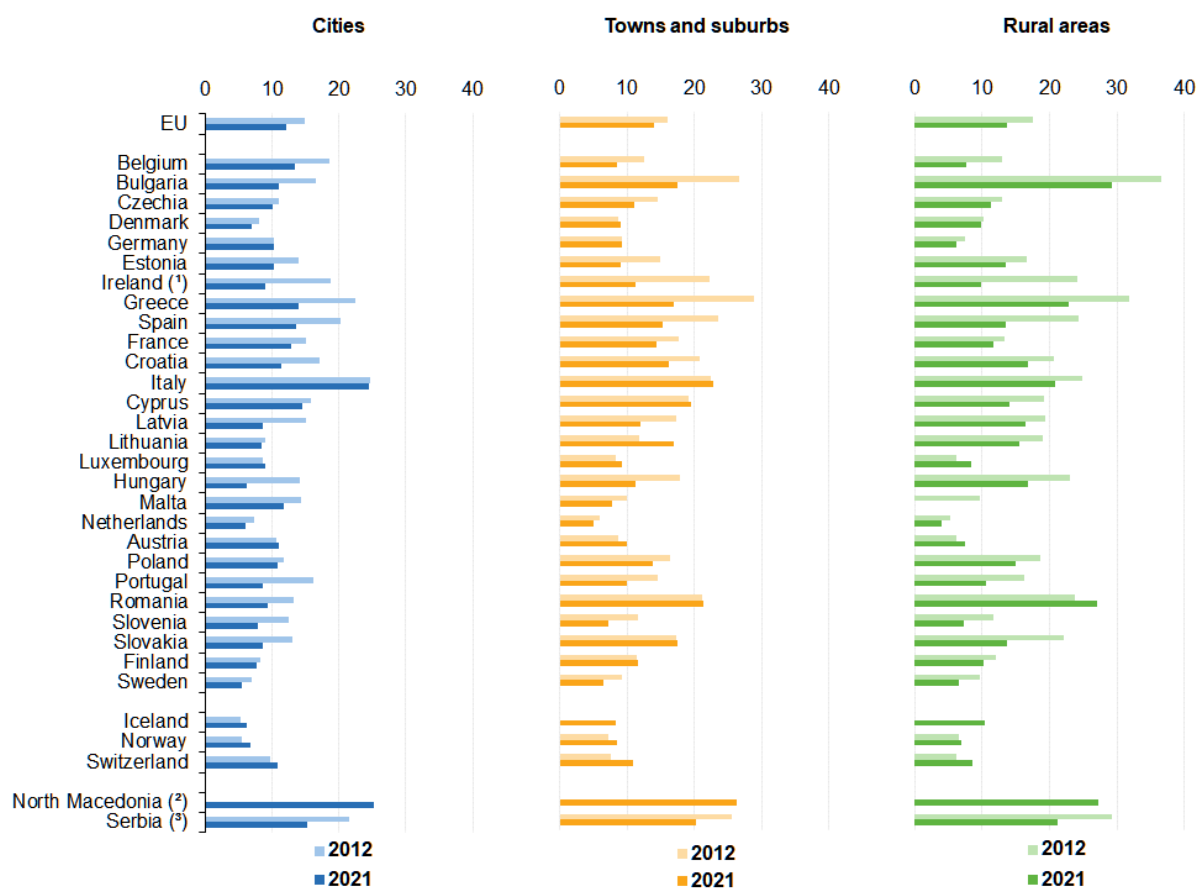
There were five EU Member States where the share of people neither in employment nor in education and training was higher among young males than young females in 2021: Finland, Belgium, Spain, Luxembourg and Ireland (although their gender gaps were relatively narrow, less than 1.0 percentage points). By contrast, the widest gaps between the sexes – with higher rates for young females – were recorded across a number of eastern EU Member States (Czechia, Romania, Poland, Bulgaria, Slovakia and Hungary).



In 2021, the highest NEET rates among the EU Member States were recorded in Italy, Romania, Bulgaria and Greece. The share of people neither in employment nor in education and training was particularly concentrated among young females living in cities (Italy), young females living in rural areas (Romania) and young males and females living in rural areas (Bulgaria and Greece).

Across the EU, the share of young people neither in employment nor in education and training fell by 2.9 percentage points between 2012 and 2021 (note again that data for 2021 are not fully comparable with the previous years due to a break in series). This reduction was repeated for all three categories covered by the degree of urbanisation: the largest fall was for young people living in rural areas (down 3.9 percentage points), followed by those living in cities (down 2.6 points) and those living in towns and suburbs (down 2.1 points).

### Young people neither in employment nor in education and training (15–29 years) by degree of urbanisation, 2021 (%)



Note: due to a break in series, data for 2021 are not fully comparable with the previous years. Missing information is due to low reliability (unless otherwise noted).

(\*) 2012: not available. 2020 instead of 2021.

(?) 2014 instead of 2012.

Source: Eurostat (online data code: edat\_ifse\_29)

eurostat

**Figure 9: Young people neither in employment nor in education and training (15–29 years) by degree of urbanisation, 2021 (%)** Source: Eurostat (edat\_ifse\_29)

Between 2012 and 2021, Austria and Luxembourg were the only EU Member States where the NEET rate rose for all three categories when analysed by degree of urbanisation. There were eight additional Member States that reported an increase in the NEET rate for young people living in towns and suburbs, although Lithuania was the only one of these to record a rise of more than 0.4 percentage points. By contrast, Romania was the only other Member State to report an increase in the NEET rate for young people living in rural areas, while the share of young

people living in cities who were neither in employment nor in education and training fell in all of the Member States during the period under consideration other than in Austria and Luxembourg.

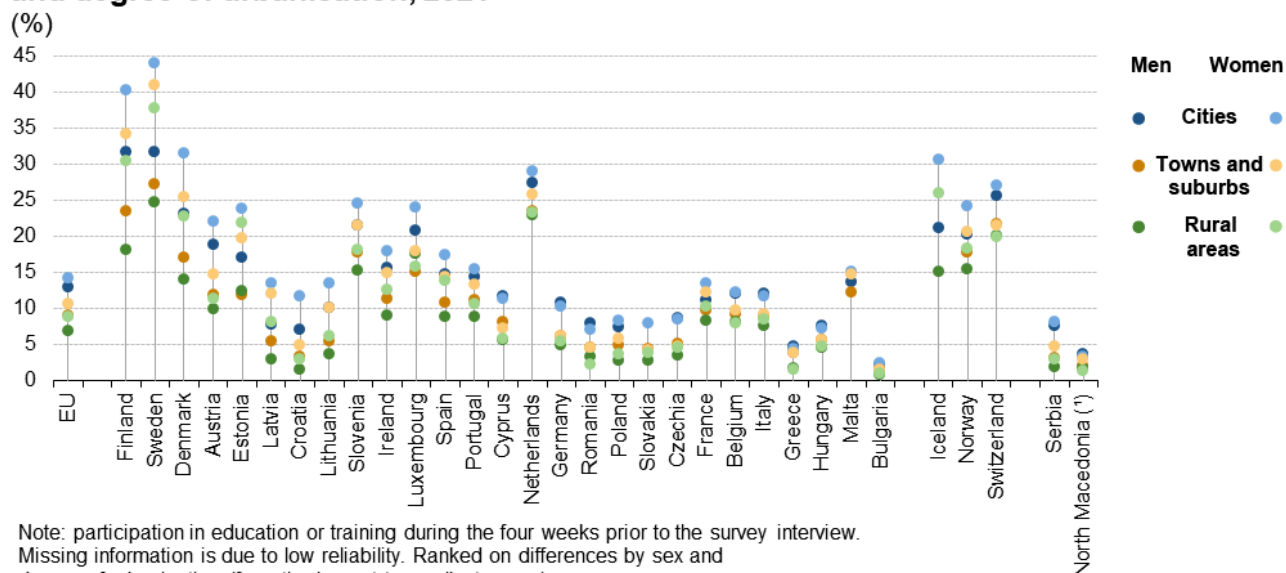
In a similar vein to the results presented above for early leavers from education and training, some of the largest reductions in NEET rates between 2012 and 2021 were recorded in Ireland and southern EU Member States (in particular, Greece and Spain). The NEET rate also fell by a relatively large amount for those people living in the towns and suburbs of Bulgaria and rural areas of Slovakia.

## Adult participation in education and training

Adult education and training is often targeted at the improvement of technical or professional qualifications, to complete a level of formal education, or to acquire, refresh or update skills and competencies in a particular field. In doing so, adult learning may help, among other benefits, to improve employability, enhance social fairness and close the digital skills gap. This is reflected in the European pillar of social rights, where an EU-level target has been set, namely, that at least 60 % of all adults should be participating in training every year by 2030.

In 2021, some 10.8 % of adults of working age (defined here as people between 25 and 64 years) participated in learning activities during the four-week period prior to the latest [labour force survey \(LFS\)](#). Note this indicator records participation in learning activities with a different recall/reference period compared with the EU target mentioned above (that uses a broader measure, the previous 12 months). The share of working-age women across the EU participating in learning during the four-week period prior to the survey was 11.6 % in 2021, which was 1.5 percentage points higher than the corresponding share for working-age men. The adult participation rate for education and training peaked among those living in cities (13.6 %), while lower shares were recorded for towns and suburbs (9.8 %) and rural areas (7.8 %). This pattern – the highest adult participation rates for education and training being recorded for people living in cities – was repeated in all but one of the EU Member States (Malta was the exception).

### Adult participation in education and training (25–64 years) by sex and degree of urbanisation, 2021



Note: participation in education or training during the four weeks prior to the survey interview. Missing information is due to low reliability. Ranked on differences by sex and degree of urbanisation (from the largest to smallest range). (\*) 2020.

Source: Eurostat (online data code: trng\_lfs\_14)

eurostat

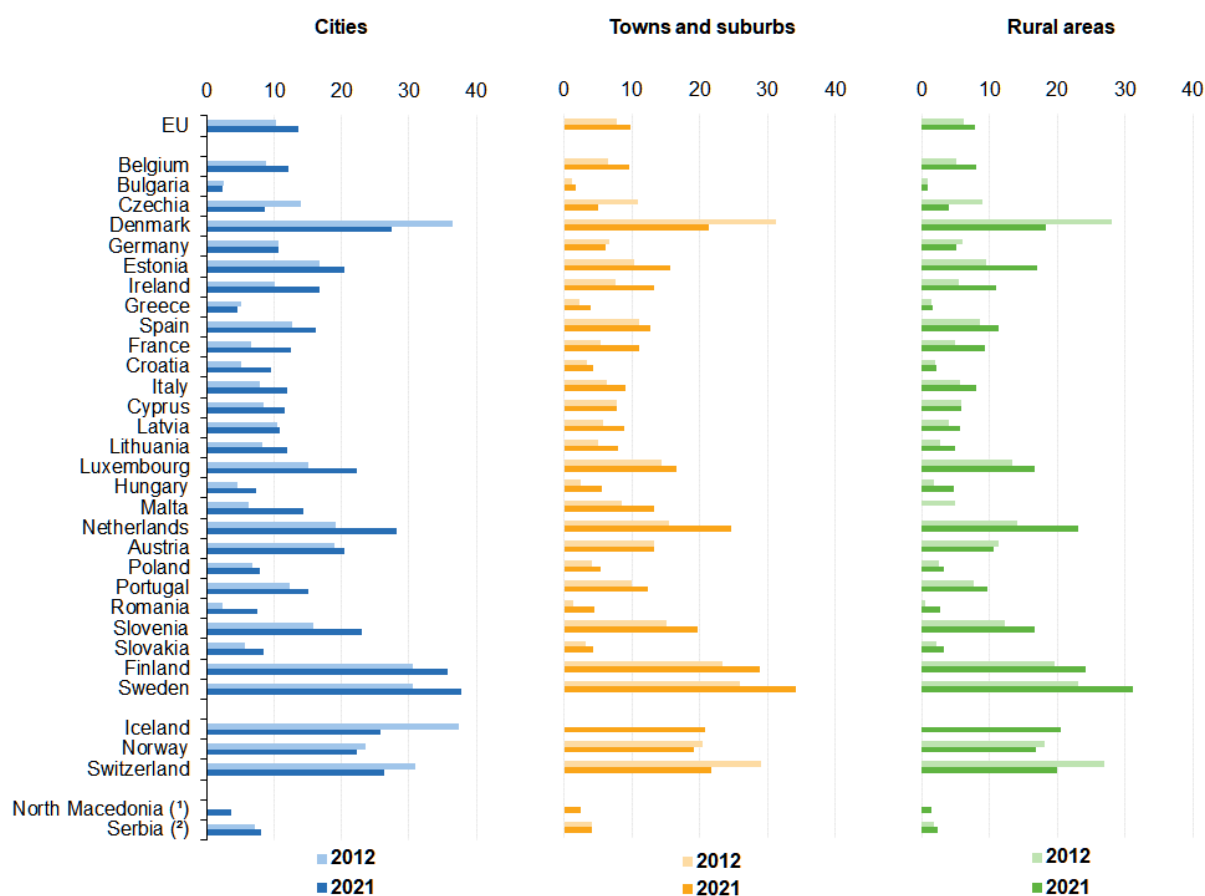
**Figure 10: Adult participation in education and training (25–64 years) by sex and degree of urbanisation, 2021 (%)** Source: Eurostat (trng\_lfs\_14)

Between 2012 and 2021, adult participation in education and training increased by 2.6 percentage points across the EU (note again that data for 2021 are not fully comparable with the previous years due to a break in series).

This pattern was repeated for all three categories when analysed by degree of urbanisation, with the largest increase recorded for people living in cities (up 3.4 points), followed by those living in towns and suburbs (up 2.1 points) and in rural areas (up 1.6 points).

Adult participation in education and training rose between 2012 and 2021 in the vast majority of EU Member States (24 out of 27); the highest increases were recorded in the Netherlands and Sweden, while Denmark, Czechia and Germany recorded falls in participation during the period under consideration. An analysis by degree of urbanisation reveals that the largest gains in adult participation were generally recorded for people living in cities. Particularly large increases were recorded for cities in Malta, Luxembourg, Slovenia and Ireland (as well as those already noted for the Netherlands and Sweden, where similar gains were also made for people living in towns and suburbs and in rural areas), while a similarly large increase was observed for Estonia in rural areas.

### Adult participation in education and training (25–64 years) by degree of urbanisation, 2012 and 2021 (%)



Note: participation in education or training during the four weeks prior to the survey interview. Due to a break in series, data for 2021 are not fully comparable with the previous years. Missing information is due to low reliability (unless otherwise noted).

(\*) 2012: not available. 2020 instead of 2021.

(\*) 2014 instead of 2012.

Source: Eurostat (online data code: trng\_ifs\_14)



**Figure 11: Adult participation in education and training (25–64 years) by degree of urbanisation, 2012 and 2021 (%)** Source: Eurostat (online data code: trng\_ifs\_14)

#### Source data for tables and graphs

- [Education and training: tables and figures](#)

## Context

Alongside the provision of health care, public expenditure on education is often considered as one of the most important investments that can be made in people. Education has the potential to drive forward socioeconomic development: this is particularly the case in a globalised world where a highly-skilled workforce can be an advantage in terms of productivity, innovation and competitiveness.

Education and training play a vital role in the economic and social strategies of the EU. In February 2021, a [Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond \(2021–2030\)](#) (2021/C 66/01) was adopted. The Resolution sets a number of [policy targets](#) for the [European Education Area](#) designed to promote collaboration between EU Member States and monitor progress. It builds on previous strategies and pursues five priority actions:

- improve quality, equity, inclusion and success for all in education and training;
- make [lifelong learning](#) and mobility a reality for all;
- enhance competences and motivation in the education profession;
- reinforce tertiary education; and
- support the green and digital transitions in and through education and training.

## See also

### Online publications

- [Education and training in the EU – facts and figures](#)
- [Labour force survey publications](#)
- [EU labour force survey statistics](#)
- [Eurostat regional yearbook](#)
- [Rural Europe](#)
- [Urban Europe](#)

### Methodological publications

- [Applying the Degree of Urbanisation – 2021 edition](#)
- [EU labour force survey](#)
- [Methodological manual on territorial typologies – 2018 edition](#)

### Background articles

- [Geographical information system of the Commission \(GISCO\)](#)

## Publications

### Statistical publications

- [Eurostat regional yearbook – 2022 edition](#)
- [Urban Europe – statistics on cities, towns and suburbs – 2016 edition](#)
- [Young people in Europe – a statistical summary – 2022 edition](#)

### Methodological publications

- [Applying the Degree of Urbanisation – A methodological manual to define cities, towns and rural areas for international comparisons – 2021 edition](#)
- [Methodological manual on territorial typologies – 2018 edition](#)

## Database

- [Degree of urbanisation \(degurb\)](#)
- [Education and training \(educ\)](#)
- [EU targets for the European Education Area](#)
- [Employment and unemployment \(Labour force survey\) \(emp\)](#)

## Dedicated section

- [Degree of urbanisation](#)
- [Education and training](#)
- [Employment and unemployment \(LFS\)](#)
- [Rural development](#)

## Methodology

- [Applying the degree of urbanisation – A methodological manual to define cities, towns and rural areas for international comparisons – 2021 edition](#)
- [Education and training – methodology](#)
- [EU labour force survey – methodology](#)
- [EU labour force survey – new methodology from 2021 onwards](#)
- [Methodological manual on territorial typologies – 2018 edition](#)

## Legislation

### Statistical legislation

- [Education and training – legislation](#)
- [Regulation \(EU\) 2017/2391](#) of the European Parliament and of the Council of 12 December 2017 amending Regulation (EC) No 1059/2003 as regards the territorial typologies (Tercet)
- [Consolidated and amended version of Regulation \(EC\) No 1059/2003](#) of the European Parliament and of the Council on the establishment of a common classification of territorial units for statistics (NUTS)

### Policy legislation

- [Commission Delegated Regulation \(EU\) No 522/2014](#) of 11 March 2014 supplementing Regulation (EU) No 1301/2013 of the European Parliament and of the Council with regard to the detailed rules concerning the principles for the selection and management of innovative actions in the area of sustainable urban development to be supported by the European Regional Development Fund
- [Regulation \(EU\) No 1305/2013](#) of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)
- [Regulation \(EU\) No 1310/2013](#) of the European Parliament and of the Council of 17 December 2013 laying down certain transitional provisions on support for rural development by the European Agricultural Fund for Rural Development (EAFRD)

## Visualisations

- [Regions and cities illustrated \(RCI\) – Degree of urbanisation](#)

## External links

- [Urban Agenda for the EU](#)

### European Commission – Directorate-General Agriculture and rural development

- [Rural development](#)

### European Commission – Directorate-General Regional and Urban Policy

- [Cities and urban development](#)
- [Cohesion in Europe towards 2050; eighth report on economic, social and territorial cohesion](#)
- [Territorial cohesion](#)
- [Urban–rural linkages](#)

### European Committee of the Regions

- [European Committee of the Regions](#)

### European networks

- [European Network for Rural Development](#)
- [European Urban Initiative](#)

### United Nations

- [Habitat III – The new Urban Agenda](#)
- [Sustainable development goals – Rural development](#)