

Indicator A3. How does educational attainment affect participation in the labour market?

Highlights

- Higher educational attainment leads to better labour-market outcomes. In 2021, on average, employment rates for tertiary-educated young adults (25-34 year-olds) are 8 percentage points higher than those who have attained upper secondary or post-secondary non-tertiary education and 26 percentage points higher than those who have attained below upper secondary education across OECD countries. Similarly, higher educational attainment is correlated with lower rates of unemployment and labour-market inactivity.
- Tertiary attainment among 25-34 year-olds has increased over the past two decades, but there is no sign of this leading to a decline in its labour-market value. In 2021, across OECD countries, the average unemployment rate of tertiary-educated younger adults was 2 percentage points below that of their peers with upper secondary or post-secondary non-tertiary attainment and 9 percentage points lower than for those with below upper secondary attainment. These differences are nearly identical to the differences in 2000.
- On average across OECD countries, employment rates are highest among tertiary-educated individuals who studied information and communication technologies (ICT), and lowest among those who studied the arts and humanities, social sciences, journalism and information. However, these differences need to be put into perspective: on average even those with arts and humanities, social sciences, journalism and information degrees have higher employment rates than their peers with upper secondary or post-secondary non-tertiary attainment.

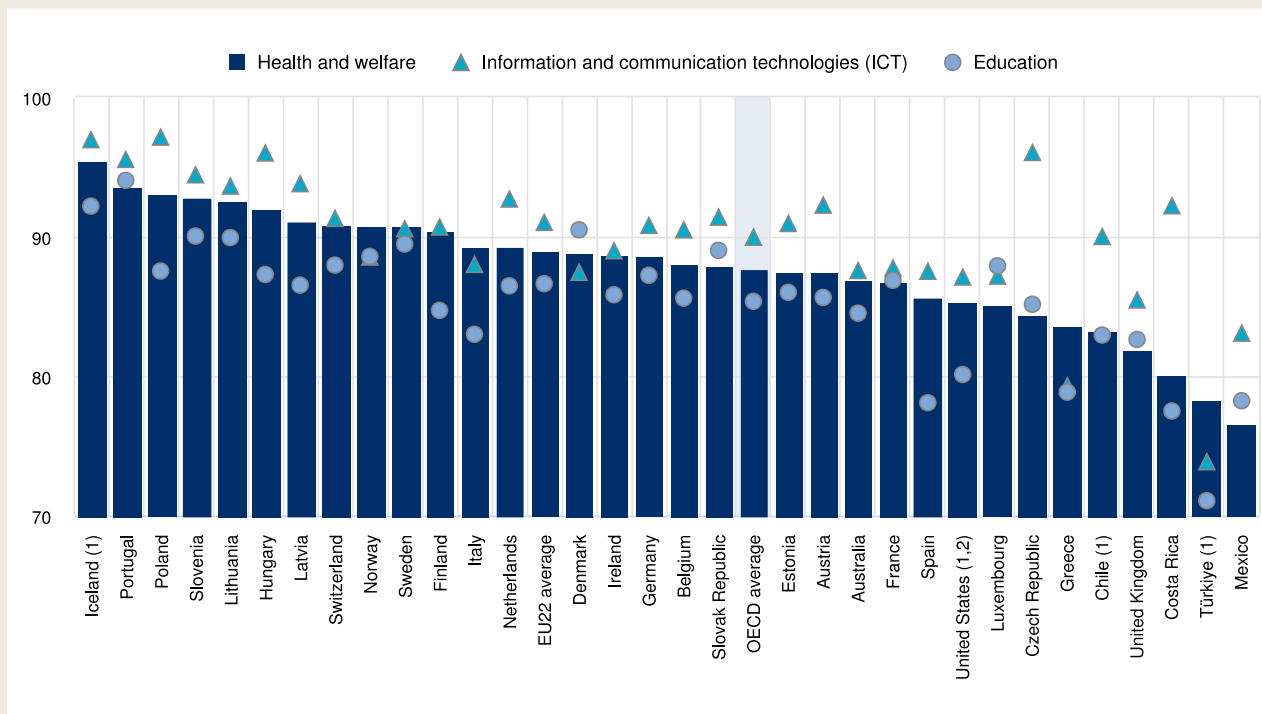
Context

Modern economies depend on a supply of highly skilled workers and these workers in turn reap labour-market benefits. These advantages, combined with expanded education opportunities, have increased the pool of skilled people across the OECD. Increasing demand for skills means labour markets can absorb the growing number of highly skilled workers, and continue to provide them with better employment prospects. In contrast, the labour-market prospects for adults with lower levels of qualifications are more challenging. Those with lower educational qualifications earn less (see Indicator A4) and are at greater risk of unemployment. In the coming years, their risk of unemployment will further increase, as many workers with lower qualifications work in jobs that could be automated in the near future (Arntz, Gregory and Zierahn, 2016^[1]). It is estimated that 14% of existing jobs could disappear as a result of automation in the next 15-20 years, and another 32% are likely to change radically as individual tasks are automated (OECD, 2019^[2]).

Education systems need to respond to the labour-market challenges of today and prepare students for the labour markets of the future. Labour-market outcomes by level of educational attainment are among the most important headline measures of the links between education and economic opportunities for individuals. They show the types of qualifications that are in demand by employers and can help governments to better understand global trends and anticipate how their economies may evolve in the coming years.

Figure A3.1. Employment rates of tertiary-educated adults, by field of study (2021)

Percentage of employed 25-64 year-olds among all 25-64 year-olds




1. Year of reference differs from 2021. Refer to the source table for more details.

2. Data refer to bachelor's degree field, even for those with additional tertiary degrees.

Countries are ranked in descending order of the employment rate of adults with a tertiary degree in the field of health and welfare.

Source: OECD (2022), Table A3.3. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

StatLink  <https://stat.link/mcsx06>

Other findings

- Tertiary attainment protects strongly against the effects of economic crises. During both the financial crisis of 2008 and the COVID-19 pandemic, unemployment increased much less among those with tertiary education than those with lower levels of attainment. In 2021, across OECD countries with comparable trend data, average unemployment rates among tertiary-educated 25-34 year-olds started to decline, whereas they stagnated for those with upper secondary or post-secondary non-tertiary attainment and increased for those with below upper secondary attainment.
- Higher educational attainment remains closely correlated with higher employment rates even within tertiary attainment levels. Adults with a doctoral or equivalent degree have the highest employment rates, while the employment rate of individuals with a master's or equivalent degree is higher than for those with a bachelor's or equivalent degree.
- There are differences in labour-market inactivity rates among tertiary-educated adults across OECD countries, ranging from 5% in Lithuania to over 20% in the Czech Republic and Italy. In some countries, a considerable fraction of tertiary-educated adults are not actively looking for work.

Analysis

Educational attainment and labour-market participation

Educational attainment and employment rates are strongly correlated. Upper secondary or post-secondary non-tertiary education is often seen as the minimum educational attainment for successful labour-market participation for most individuals (OECD, 2021^[3]). There is a large increase in employment rates among 25-64 year-olds with upper secondary or post-secondary non-tertiary attainment compared to those with below upper secondary attainment. On average, only 58% of individuals with below upper secondary attainment are employed in OECD countries, but 75% of individuals with upper secondary or post-secondary non-tertiary attainment are employed. The employment rate among those with tertiary attainment is even higher, at 85%, but the difference in employment rates between upper secondary or post-secondary non-tertiary and tertiary attainment is smaller than the difference between below upper secondary and upper secondary or post-secondary non-tertiary attainment (Table A3.1).

There continues to be a strong relationship between labour-market participation and educational attainment that holds whether it is measured by employment rates, unemployment rates or inactivity rates. This relationship exists in nearly all OECD and partner countries with available data. It is very rare to find a country where a subpopulation with lower educational attainment has higher labour-market participation rates than a subpopulation with higher educational attainment (Table A3.2 and Table A3.4). This positive relationship has been stable over the decades, despite the strong increase in attainment levels across the OECD (OECD, 2022^[4]).

While the link between educational attainment and employment rates holds for men and for women, it is particularly strong for women. Among 25-34 year-olds, in 2021, just 43% of women with below upper secondary attainment are employed, compared to 82% of those with tertiary attainment. These figures are 69% and 88% for men. The large gender difference among younger adults with below upper secondary attainment are unlikely to be solely due to employability. More likely, they are related to the persistence of traditional gender roles. Women who expect to stay home to take care of a family instead of pursuing a career have less incentive to obtain a formal education and are therefore more likely to have low educational attainment. This is reflected in inactivity rates for younger women with below upper secondary attainment that are on average more than twice as high as for men and resulting low employment rates across the OECD (Table A3.2 and (OECD, 2021^[5])).

Tertiary attainment and employment rates

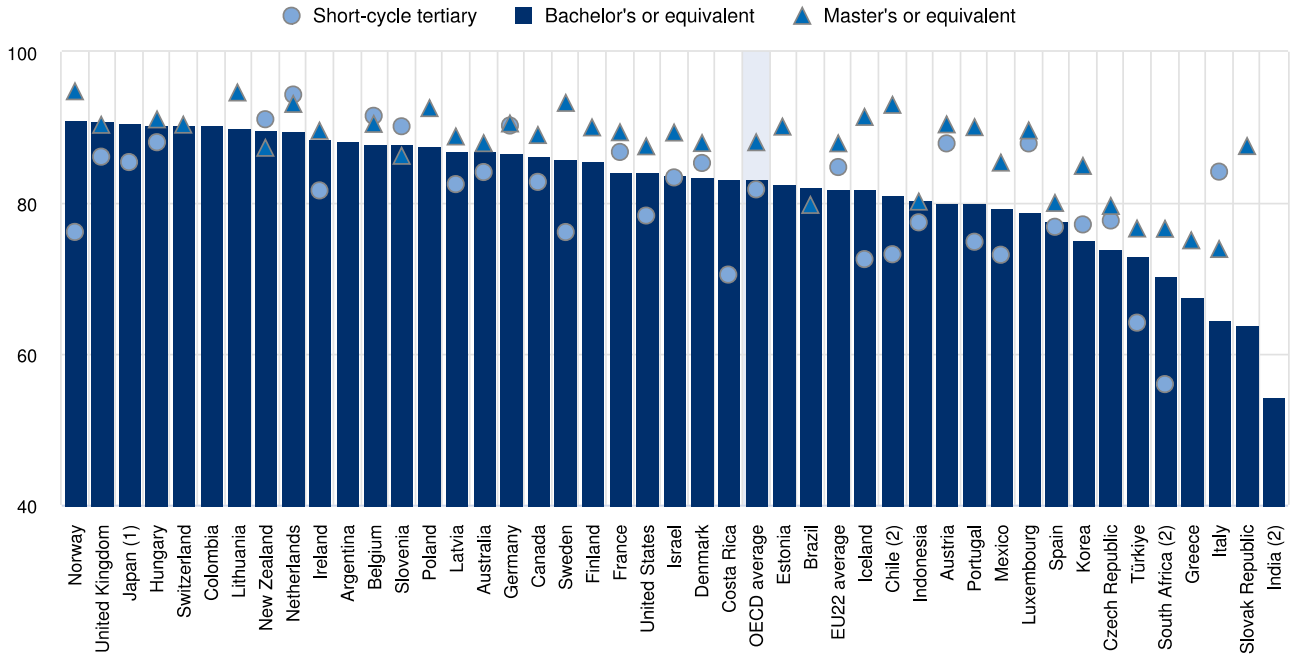
Educational attainment has increased strongly among younger adults in all OECD and partner countries with comparable data. On average across OECD countries, about 27% of 25-34 year-olds had completed a tertiary qualification in 2000 and this share increased to 48% in 2021 (see Indicator A1). The increase in attainment levels is a response to a changing labour market, in which skills are becoming ever more important and business are struggling to fill specialised positions. However, it is also putting pressure on workers who find that their qualifications, which were valuable not long ago, are no longer sufficient to compete against better qualified candidates (Lauder and Mayhew, 2020^[6]).

Educational attainment and employment rates are positively correlated across different levels of tertiary attainment. Individuals aged 25-64 with a doctoral or equivalent degree have the highest employment rates of all ISCED attainment levels in all OECD countries except in Luxembourg and New Zealand. Likewise, the employment rate of individuals with a master's or equivalent degree is higher than the employment rate of those with a bachelor's or equivalent degree as their highest level of attainment everywhere except New Zealand. On average, individuals with a master's or equivalent degree are 5 percentage points more likely to be employed than individuals with a bachelor's or equivalent degree. The difference in employment rates persists throughout adults' working life in most OECD countries. So, although master's graduates are more likely to have work experience than bachelor's graduates, their higher employment rates are not simply due to them finding employment after graduating more easily than those with a bachelor's or equivalent degree (Figure A3.2 and Table A3.1).

On average across the OECD, 25-34 year-old graduates from short-cycle tertiary programmes have almost the same employment rates as those with a bachelor's or equivalent degree. However, this average hides large variations across countries. In some countries, short-cycle tertiary graduates have higher employment rates than those with bachelor's or master's or equivalent degrees, while in others they have lower rates. As short-cycle tertiary programmes aim to provide professional skills, often combined with an implicit promise of an easier transition into the labour market, these data suggest that there are differences in the effectiveness of such programmes (Figure A3.2).

Figure A3.2. Employment rate of 25-34 year-olds, by level of tertiary attainment (2021)

Percentage of employed 25-34 year-olds among all 25-34 year-olds



1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of the adults are under this group).
 2. Year of reference differs from 2021. Refer to the source table for more details.
 Countries are ranked in descending order of the employment rate among 25-34 year-olds with a bachelor's or equivalent degree.
Source: OECD (2022), *Education at a Glance Database*, <http://stats.oecd.org/>. See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

StatLink <https://stat.link/im8fu5>

At the other end of the tertiary attainment spectrum, the differences in employment rates across countries are much smaller. People with a doctoral or equivalent degree have the highest employment rate of any educational attainment level in almost all OECD countries. On average across the OECD, 93% of all 25-64 year-olds with a doctoral or equivalent degree are employed, and there are only four countries where it is below 90% (Estonia, New Zealand, Spain and the United States). In Hungary, an impressive 99% of adults with a doctoral or equivalent degree are in employment (Table A3.1).

By field of study

Employment rates for adults with tertiary attainment are high across all fields of study. Overall, the science, technology, engineering and mathematics (STEM) fields have the strongest employment outcomes. Within these fields, employment rates are highest for people who studied ICT; on average 90% of adults with a tertiary ICT degree are in employment in OECD countries. Similarly, the average employment rate of graduates in engineering, manufacturing and construction is very high at 89%. Education, a field of special relevance for many countries, has an average employment rate that is somewhat lower, but still high at 85%. Arts and humanities, social sciences, journalism and information is the broad field of study with the lowest employment rates among tertiary-educated 25-64 year-olds, at an average of 83%. To put this into perspective, the employment rate of individuals with tertiary attainment is still about 10 percentage points higher than that of their peers with upper secondary or post-secondary non-tertiary attainment on average across the OECD. This shows that tertiary attainment provides labour-market benefits even in fields of study that mostly do not directly train students for a specified career (Figure A3.1 and Table A3.3).

While the differences in employment rates between fields of study are small, they are very consistent across OECD countries. For example, employment rates for adults with tertiary attainment in ICT are as high as or higher than for those with tertiary attainment in arts and humanities and social sciences, journalism and information in all OECD countries. Within the STEM fields, graduates in natural sciences, mathematics and statistics tend to have lower employment rates than other STEM fields in almost all countries. The gaps are especially large in Chile, the Czech Republic, Mexico and Portugal, where employment rates are on average approximately 10 percentage points lower than in other STEM fields (Table A3.3).

No internationally comparable data on employment rates by field of study exist for below tertiary attainment levels across OECD countries. However, evidence suggest that occupation has an important effect on employment rates of low-skilled workers (Autor and Dorn, 2013^[7]). Many countries have shortages of workers with below tertiary attainment levels in some sectors even if overall unemployment rates of those with these attainment levels is high. Thus, field of study is also likely to have a considerable influence on employment prospects also for workers with below tertiary attainment.

By subnational regions

On average, across OECD and partner countries with subnational data on labour-force status, there is more regional variation in employment rates among those with lower levels of educational attainment. For example, in Australia, employments rates for 25-64 year-olds adults with below upper secondary attainment range from 54% (in Canberra), to 63% (in Western Australia), compared with a range of 82% (in Tasmania) to 89% (in Northern Territory) for adults with tertiary attainment. Despite the concentration of economic activity in the capital city regions, in most countries, these regions do not generally have the highest employment rates. However, for tertiary-educated adults, the employment rate in the capital city region does tend to be slightly higher than the unweighted average of all regions in a country. In Greece, for example, the employment rate for adults with tertiary attainment in the capital city region of Attica is about 3 percentage points higher than the unweighted average of all Greece's regions (OECD, 2022^[8]).

Educational attainment and unemployment rates

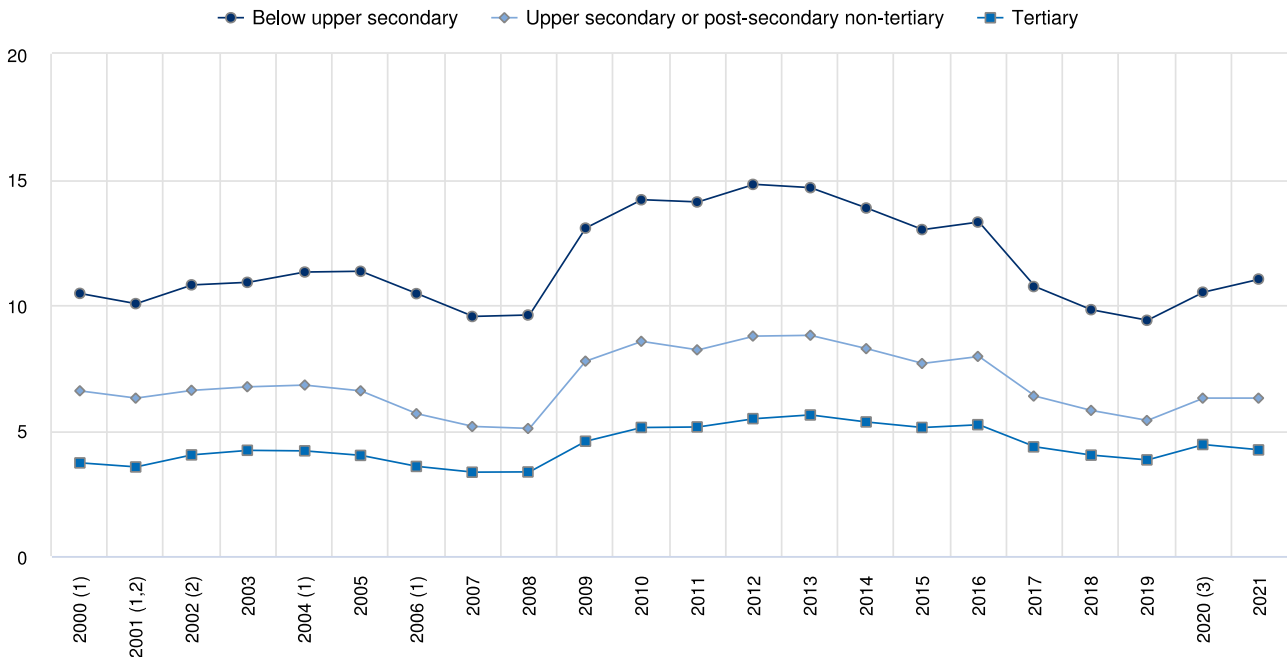
Between 2000 and 2021, tertiary attainment rates among 25-34 year-olds increased from 27% to 48% on average across OECD countries with available trend data (see Indicator A1). Despite this large increase, there are few signs that the labour-market benefits of a tertiary degree are diminishing. Among 25-34 year-olds, the average gap in unemployment rates between those with tertiary attainment and those with lower levels of attainment is almost exactly the same in 2021 as it was in 2000. In aggregate across the OECD, the labour market has absorbed a growing number of tertiary-educated workers without any noticeable effect on their unemployment rates (Figure A3.3).

Tertiary attainment also provides strong protection against the effects of economic crises. Unemployment increased strongly in the aftermath of the 2008 financial crisis for those with below upper secondary attainment, and to a lesser degree, also for those with upper secondary or post-secondary non-tertiary attainment. In contrast, the impact on tertiary-educated 25-34 year-olds was much smaller. A similar pattern can also be observed during the COVID-19 pandemic. While unemployment rates increased in 2020 for the three aggregate levels of educational attainment, the increase was much smaller for tertiary-educated younger adults than for those with lower attainment levels. In 2021, unemployment rates for tertiary-educated younger adults started to decline again, while they continued to grow for those with below upper secondary attainment and remained constant for those with upper secondary or post-secondary non-tertiary attainment (Figure A3.3).

While the data clearly suggest that increasing tertiary attainment has positive labour-market effects, two important caveats apply. First, aggregate trends across the OECD cannot rule out that, in some countries, the share of population with tertiary attainment is higher than optimal given labour-market conditions. Any conclusive analysis in this respect would not only have to consider the effects that increasing tertiary attainment has on new graduates, but also the consequences it has on the existing workforce. Second, the data do not imply that pursuing tertiary attainment is always the best choice at the individual level. For some people, upper secondary or post-secondary non-tertiary education leads to better career prospects and more fulfilling jobs than tertiary degrees. In contrast, there is little doubt that the decrease in the population with below upper secondary attainment has been a universally positive trend that should be further supported. The differences in socio-economic outcomes that are documented throughout Chapter A of this report are too large to make it plausible that any OECD country would be better off with a greater share of individuals with below upper secondary attainment.

Figure A3.3. Trends in unemployment rates, by educational attainment (2000 to 2021)

Percentage of unemployed 25-34 year-olds among 25-34 year-olds in the labour force, OECD average



Note: Because of a lack of data for many years, the following countries are excluded from the OECD average: Austria, Chile, Colombia, France, Iceland, Japan, Lithuania, Luxembourg, Norway and Slovenia. There are breaks in the time series following methodological change in the ISCED classification with minor impact on the aggregate levels of educational attainment.

- 1: Missing data for Israel.
- 2: Missing data for Finland.
- 3: Missing data for Türkiye.

Source: OECD (2022), *Education at a Glance Database*, <http://stats.oecd.org/>. See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

StatLink  <https://stat.link/ktzcyw>

Box A3.1. Cross-country differences in overqualification levels among tertiary-educated workers

While employment is crucial, it is also important that workers find jobs that correspond to their qualifications. To avoid being unemployed, individuals might accept jobs below their level of education. This wastes human capital and can reduce job satisfaction. This box presents the prevalence of overqualification across OECD countries.

The educational qualifications of workers and the educational requirements of employers meet in the labour market. Ensuring a good match between educational attainment and educational requirements of jobs is essential for countries to promote strong and inclusive growth (OECD, 2013^[9])

For tertiary-educated workers, being overqualified means having a tertiary qualification while working in a job needing upper secondary or lower levels of educational attainment (see *Definitions* and *Methodology* sections for more information). With the expansion of tertiary education, a large number of tertiary graduates in some countries hold jobs that do not seem to make the best use of their qualifications. This phenomenon has become a growing concern among policy makers.

Education at a Glance 2018 showed that on average across OECD countries and economies that participated in the Survey of Adult Skills (PIAAC), 15% of tertiary-educated workers aged 25 to 64 reported being overqualified for their job (which means having a qualification of ISCED 5A or 6 while working in a job needing ISCED 3 or below). The highest

shares are observed in Japan, where over 25% of workers reported being in this situation. In contrast, in Denmark, Finland, Slovenia, Sweden and the Republic of Türkiye, no more than one in ten tertiary-educated workers are overqualified (OECD, 2018^[10]).

These cross-country variations call for explanations on the positions of countries relative to the average overqualification level among tertiary-educated workers. There are two types of factors that may affect the relative overqualification levels among countries.

- **Individual-level factors:** country of birth is a major factor behind overqualification in most countries with a sizeable immigrant population. In Norway and Sweden, the share of overqualified workers is at least three times as high among foreign-born adults as among the native-born population. Age is another factor that plays a role in overqualification. Young people lacking work experience are more likely to accept jobs below their qualification level to enter the labour market. Gender, parental educational attainment, field of study, whether individuals work for the public sector and contract type may also influence the likelihood of being overqualified. Aggregated at the national level, difference in the distribution of workers with these different individual-level factors may explain the variation in the overqualification levels across countries.
- **Country-level factors:** First, the business cycle and the state of the labour market can affect the likelihood of being overqualified. It is well documented that adults entering the labour market during recessions are more likely to be overqualified. The same holds for those who enter a labour market which has a relative oversupply of tertiary-educated workers. Second, labour-market legislation appears to be of some importance. In countries with strict employment protection, employers may rely more on existing employees than outsiders to fill new vacancies and therefore reduce the overall opportunities for labour-market entrants. However, the effect of the strictness of employment protection on the overall incidence of overqualification is less conclusive, since the probability of overqualification may decrease since internal recruitment and promotions could reduce the number of overqualified employees over time. Third, the design and overall quality of the education system also differs across countries. Empirical research has found that graduates face tougher employment conditions in countries with relatively poor-quality education systems (Verhaest and Van Der Velden, 2013^[11]).

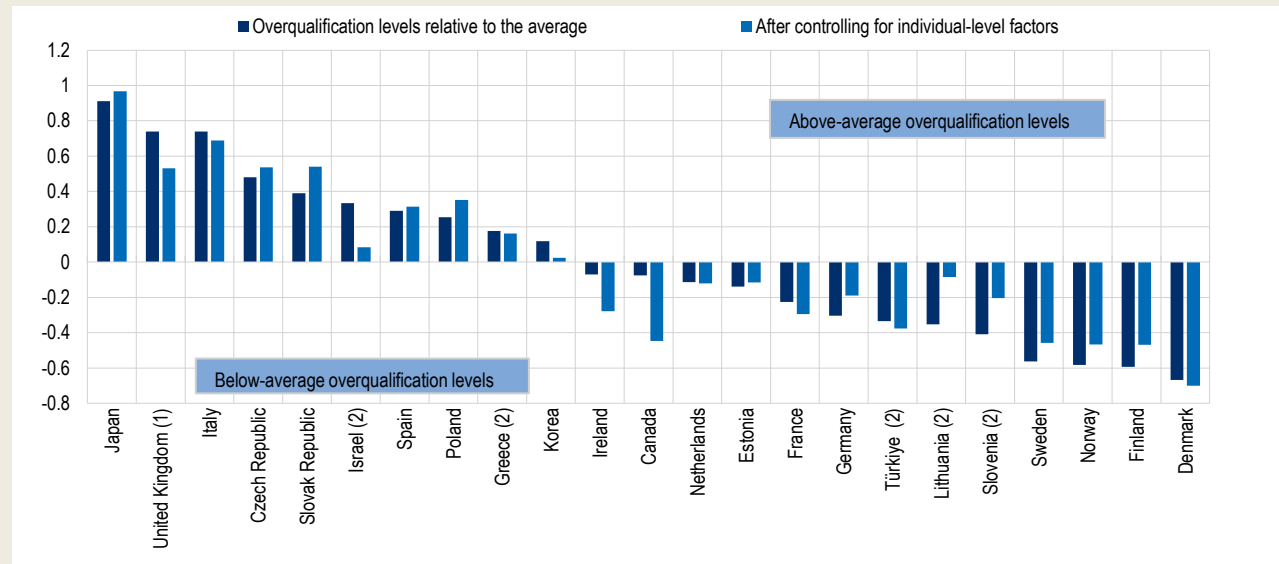
Figure A3.4 shows country overqualification levels relative to the average of the countries included in the figure, and how far individual-level factors contribute to explaining the above- or below-average levels of overqualification among tertiary-educated workers. Bars above zero signify above-average overqualification levels, while bars below zero mean below-average overqualification levels. These estimates are produced by multilevel logistic regression, and the regression table is available in Annex 3. The regression does not control for country-level factors as, in general, there is a lack of internationally agreed measures for these factors. To simplify the interpretation of the results, this analysis considers that variations not explained by the individual-level factors listed above are due to differences directly occurring at country level.

In Figure A3.4, the dark blue bars reflect the values cited above, before controlling for individual-level factors. Japan has the highest relative overqualification level and Denmark the lowest. After controlling for individual-level factors, bar lengths decreased the most in Canada, Ireland, Israel, Lithuania, Slovenia, the Slovak Republic and the United Kingdom (Figure A3.4). This implies that in these countries, the individual-level factors are contributing to the above- or below-average levels of overqualification. In contrast, in the Czech Republic, Denmark, Estonia, Greece, Italy, the Netherlands, Spain and Türkiye, the bar lengths barely change after controlling for individual-level factors. In these countries, the overqualification level is not strongly affected by the individual-level factors listed above, and the relative overqualification levels in these countries are likely to be influenced by country-level factors.

Looking more specifically at each individual-level factor, the risk of being overqualified among tertiary-educated workers decreases with age and parental educational attainment level, while the risk is greater among workers with a migrant background. Moreover, working in the private sector and having a temporary contract are both associated with a greater risk of overqualification. Field of study is also related to the risk of overqualification; in particular, workers who studied in the field of health and welfare are less likely to be overqualified.

Figure A3.4. Cross-country differences in overqualification levels among tertiary-educated workers (2012 or 2015)

Employed 25-64 year-olds



How to read this figure: Variables are unitless. The bars represent the positions of countries relative to the average overqualification level. If the length of a bar becomes shorter after controlling for individual-level factors, it implies that the individual-level factors contribute to explaining the above- or below-average levels of overqualification. See Annex 3 for the list of factors and for the regression table (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

Note: An overqualified tertiary-educated worker is defined as a job holder who has attained an education at ISCED 5A or 6 while holding a job that needs only ISCED 3 or less. Educational attainment refers to ISCED-97. See *Definitions, Methodology and Source* sections for more information.

1. Individual-level data refer to the subnational entities England (UK) and Northern Ireland (UK).

2. Reference year is 2015; for all other countries and subnational entities the reference year is 2012.

Countries are ranked in descending order of relative overqualification levels.

Source: OECD (2022). See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

StatLink  <https://stat.link/du0gm1>

Long-term unemployment

Long-term unemployment is a particularly damaging form of unemployment. It has severe negative consequences on the physical and mental well-being of the unemployed and their families. Moreover, the longer unemployment lasts, the harder it becomes to find a new job. Skills atrophy when they are not used and many employers are reluctant to hire the long-term unemployed even if they meet their requirements. These difficulties are aggravated by the fact that when the long-term unemployed do find a new job, they tend to be offered lower wages than those who have been unemployed for a shorter time (Abraham et al., 2016_[12]). Due to these consequences, public policy needs to make particular efforts to prevent long-term unemployment.

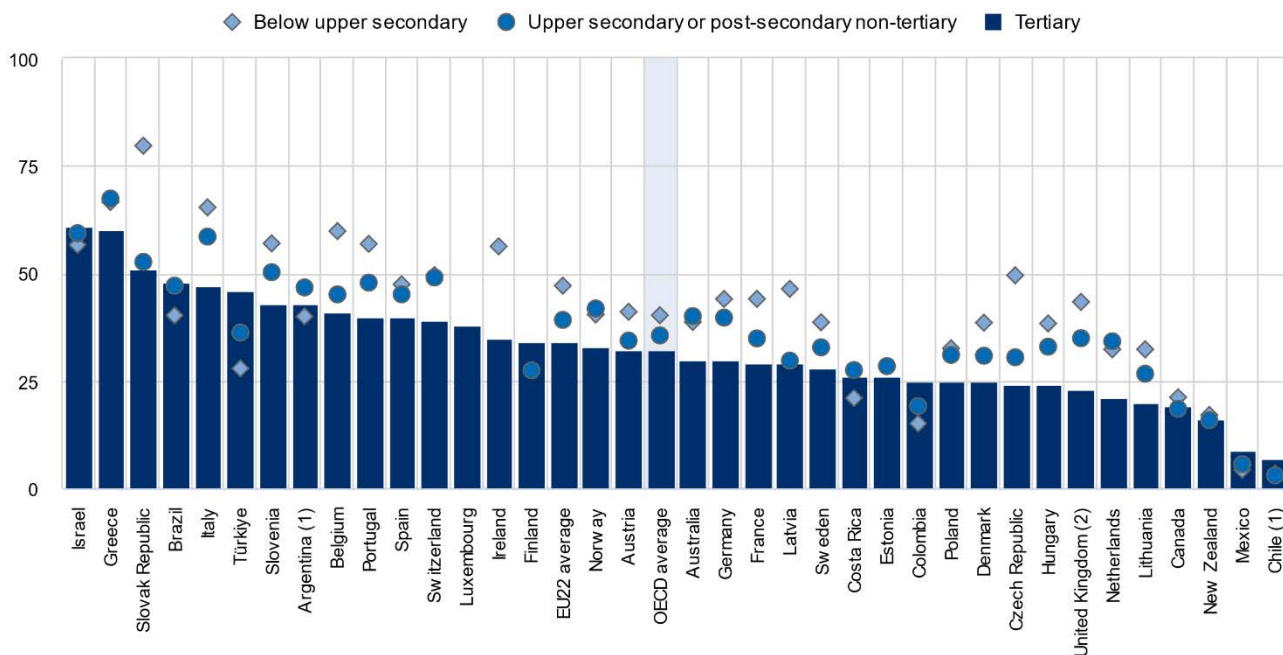
Higher educational attainment is also effective in reducing the risk of long-term unemployment. On average, 31% of unemployed tertiary-educated adults have been unemployed for over 12 months, compared to 35% of those with upper secondary or post-secondary non-tertiary attainment and 40% for those with below upper secondary attainment. Indeed, these figures understate the differences in the total number of long-term unemployed because they do not take into account the fact that individuals with greater educational attainment have much lower unemployment rates in the first place (Table A3.5).

This pattern of lower long-term unemployment rates among those with higher educational attainment holds in almost all OECD countries. The countries where the share of long-term unemployed is higher among tertiary-educated unemployed adults than those with lower attainment tend to have per capita GDP levels that are well below the OECD average. This might be due to

weaker unemployment protection schemes in these countries, forcing poorer unemployed adults, with lower attainment levels, to find a job more urgently than their wealthier peers with higher attainment levels. The only country with above-average per capita GDP where long-term unemployment is higher among tertiary-educated unemployed adults is the United States, another country with weaker unemployment protection schemes than many other OECD countries (Figure A3.5).

Figure A3.5. Long-term unemployment (12 months or more) among 25-64 year-olds, by educational attainment (2021)

As a percentage of all unemployed 25-64 year-olds in the labour force



1. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (12% of adults aged 25-64 are in this group).

2. Year of reference differs from 2021. Refer to the source table for more details.

Countries are ranked in descending order of the share of tertiary-educated 25-64 year-olds who have been unemployed for 12 months or more.

Source: OECD (2022), Table A3.5. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

StatLink  <https://stat.link/67xl01>

Educational attainment and labour-market inactivity

While unemployment receives most public attention, the economic inactivity rate – the share of people who are neither working nor actively looking for a job – is another important measure of labour-market participation. The inactive population includes people who are caring for a family or are unable to work for health reasons, but also people who were unemployed and have given up looking for a job. Thus, long-term unemployment might eventually turn into inactivity, meaning people disappear from the unemployment statistics while still suffering from its harmful consequences.

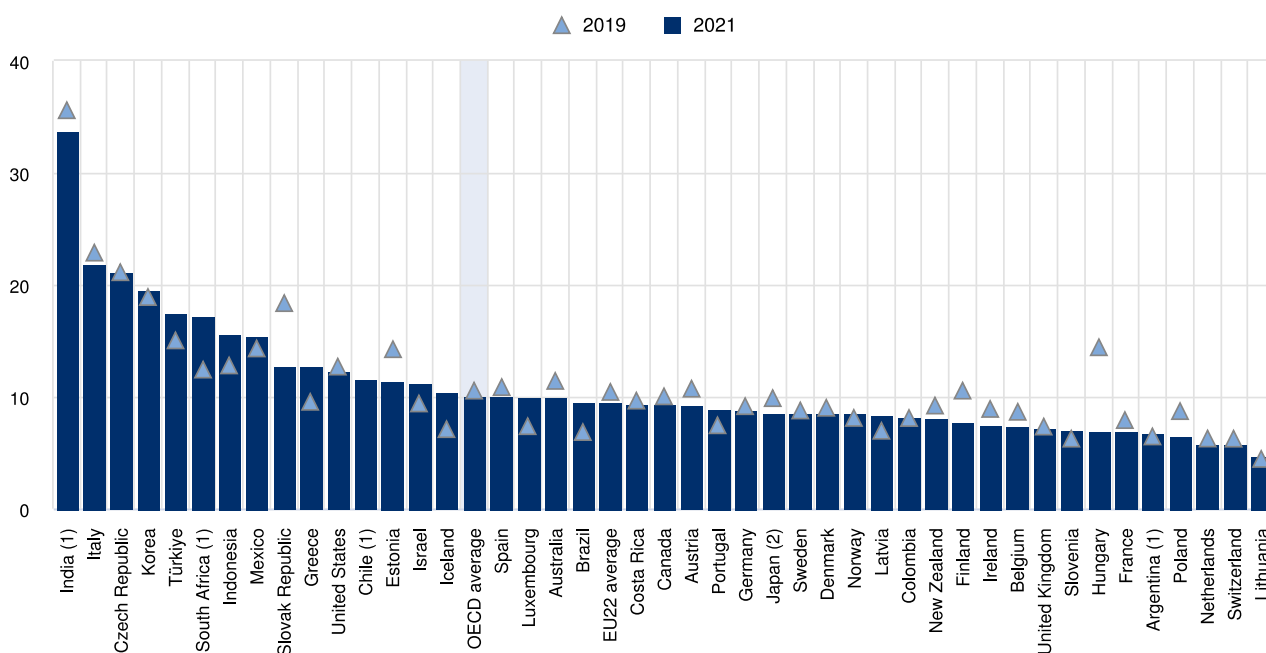
The societal costs of inactivity among individuals with tertiary attainment are especially high. Governments spend large sums to educate people to tertiary level (see Chapter C). While economic considerations are not the only reason for public spending on tertiary education, such spending is only sustainable if it creates a return in the form of higher tax revenues. Moreover, inactivity among tertiary-educated individuals removes their skills from the workforce, which also has an indirect impact on those with lower attainment levels as high-skilled employment tends to have positive spillover effects on low-skilled employment (Mazzolari and Ragusa, 2013_[13]).

There are large difference among countries in the inactivity rates of tertiary-educated 25-34 year-olds across OECD countries. On average, in 2021, 10% of younger adults with tertiary attainment are not in the labour force, but in Lithuania the share is half that, at 5%, while in the Czech Republic and Italy it is more than twice the OECD average. (Figure A3.6).

Among 25-34 year-olds with upper secondary or post-secondary non-tertiary attainment, in 2021, average inactivity rates are 17%, rising to 32% for those with below upper secondary attainment across OECD countries. Notably, these rates have remained largely constant during the COVID-19 pandemic, suggesting that the feared shift towards higher inactivity rates has not materialised in most countries. While there are some countries that experienced an increase in inactivity rates, more countries experienced a decrease in inactivity rates among tertiary-educated adults from 2019 to 2021. In some countries, such as Hungary and the Slovak Republic, this decrease in inactivity rates among tertiary-educated younger adults has been substantial (over 5 percentage points) (Figure A3.6 and Table A3.4).

Figure A3.6. Trends in inactivity rates of tertiary-educated 25-34 year-olds (2019 and 2021)

Percentage of inactive 25-34 year-olds among all 25-34 year-olds




1. Year of reference differs from 2021. Refer to the source table for more details.

2. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

Countries are ranked in descending order of the percentage of inactive tertiary-educated 25-34 year-olds in 2021.

Source: OECD (2022), Table A3.4. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

StatLink  <https://stat.link/pq287>

Definitions

Labour force (active population) is the total number of employed and unemployed persons, in accordance with the definition in the Labour Force Survey.

Age groups: Adults refer to 25-64 year-olds; **younger adults** refer to 25-34 year-olds.

Educational attainment refers to the highest level of education successfully completed by an individual.

Employed individuals are those who, during the survey reference week, were either working for pay or profit for at least one hour or had a job but were temporarily not at work. The **employment rate** refers to the number of persons in employment as a percentage of the population.

Fields of study are categorised according to the ISCED Fields of education and training (ISCED-F 2013). See the *Reader's Guide* for full listing of the ISCED fields used in this report.

Inactive individuals are those who, during the survey reference week, were outside the labour force and classified neither as employed nor as unemployed. Individuals enrolled in education are also considered as inactive if they are not looking for a job. The **inactivity rate** refers to inactive persons as a percentage of the population (i.e. the number of inactive people is divided by the number of the population of the same age group).

Levels of education: See the *Reader's Guide* at the beginning of this publication for a presentation of all ISCED 2011 levels. The previous classification, ISCED-97, is used for the analyses based on the Survey of Adult Skills (PIAAC) in the textbox. The levels of education are defined as follows: **below upper secondary** corresponds to levels 0, 1, 2 and 3C short programmes; **upper secondary or post-secondary non-tertiary** corresponds to levels 3 and 4; and **tertiary** corresponds to levels 5B, 5A and 6. ISCED 5A (tertiary-type A) consists of largely theory-based programmes designed to provide sufficient qualifications for entry to advanced research programmes and professions with high skill requirements, such as medicine, dentistry or architecture. The duration is at least three years full time, although usually four or more years. These programmes are not exclusively offered at universities, and not all programmes nationally recognised as university programmes fulfil the criteria to be classified as tertiary-type A. These programmes include second-degree programmes, such as the American master's degree. ISCED 5B consists of programmes that are typically shorter than those of tertiary-type A and focus on practical, technical or occupational skills for direct entry into the labour market, although some theoretical foundations may be covered. They have a minimum duration of two years full-time equivalent at the tertiary level. ISCED 6 consists of programmes that lead directly to the award of an advanced research qualification (e.g. PhD). The theoretical duration of these programmes is three years, full time, in most countries (for a cumulative total of at least seven years full-time equivalent at the tertiary level), although the actual enrolment time is typically longer. Programmes are devoted to advanced study and original research.

Qualification mismatch: For the analysis in the textbox, an **overqualified worker** is defined as a job holder who has attained an education at ISCED 5A or 6 while holding a job that needs only ISCED 3 or less. An **underqualified worker** is defined as a job holder who has attained ISCED 3 or below while holding a job that needs ISCED 5A or 6.

Unemployed individuals are those who, during the survey reference week, were without work, actively seeking employment and currently available to start work. The **unemployment rate** refers to unemployed persons as a percentage of the labour force (i.e. the number of unemployed people is divided by the sum of employed and unemployed people).

Methodology

For information on methodology, see Indicator A1.

Please see the *OECD Handbook for Internationally Comparative Education Statistics* (OECD, 2018^[14]) for more information and Annex 3 for country-specific notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

The distribution of unemployment by its duration in Table A3.5 does not take into account unemployed adults who reported unknown duration of unemployment. The share of adults who have been unemployed for at least 3 months but less than 12 months refer to the share of those who have been unemployed for less than 12 months in Argentina, Australia, Colombia, Finland, Portugal, Switzerland and Türkiye.

The qualification mismatch presented in Box A3.1 does not reflect misalignments between the field of study of the worker and what is needed for the job. The definitions of overqualification can vary across different studies on the topic. The question asked by the Survey of Adult Skills on job requirements is the following: "Still talking about your current job: If applying today, what would be the usual qualifications, if any, that someone would need to get this type of job?". The analysis focuses on the comparison between ISCED 3 or below with ISCED 5A or 6 and does not look at the situation for ISCED 5B. This decision is driven by the blurred boundary between ISCED 5B and ISCED 5A or 6 and it also takes into account the fact that the ISCED 4 level is not well defined in the labour market.

Source

For information on sources, see Indicator A1.

Data on subnational regions for selected indicators are available in the *OECD Regional Statistics (database)* (OECD, 2022^[8])

References

- Abraham, K. et al. (2016), "The consequences of long-term unemployment: Evidence from linked survey and administrative data", *NBER Working Papers*, No. 22665, National Bureau of Economic Research, Cambridge, MA, <https://doi.org/10.3386/w22665>. [12]
- Arntz, M., T. Gregory and U. Zierahn (2016), "The risk of automation for jobs in OECD countries: A comparative analysis", *OECD Social, Employment and Migration Working Papers*, No. 189, OECD Publishing, Paris, <https://doi.org/10.1787/5jlz9h56dvq7-en>. [1]
- Autor, D. and D. Dorn (2013), "The Growth of Low-Skill Service Jobs and the Polarization of the US Labor Market", *American Economic Review*, Vol. 103/5, pp. 1553-1597, <https://doi.org/10.1257/aer.103.5.1553>. [7]
- Lauder, H. and K. Mayhew (2020), "Higher education and the labour market: An introduction", *Oxford Review of Education*, Vol. 46/1, pp. 1-9, <https://doi.org/10.1080/03054985.2019.1699714>. [6]
- Mazzolari, F. and G. Ragusa (2013), "Spillovers from High-Skill Consumption to Low-Skill Labor Markets", *Review of Economics and Statistics*, Vol. 95/1, pp. 74-86, https://doi.org/10.1162/rest_a_00234. [13]
- OECD (2022), *Education at a Glance Database - Educational attainment and labour-force status*, http://stats.oecd.org/Index.aspx?datasetcode=EAG_NEAC (accessed on 20 July 2022). [4]
- OECD (2022), *OECD Regional Database - Education*, https://stats.oecd.org/Index.aspx?DataSetCode=REGION_EDUCAT (accessed on 20 July 2022). [8]
- OECD (2021), *Education at a Glance 2021: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/b35a14e5-en>. [3]
- OECD (2021), *Education at a Glance Database - Education and earnings*, OECD, http://stats.oecd.org/Index.aspx?datasetcode=EAG_EARNINGS. [5]
- OECD (2019), *OECD Employment Outlook 2019: The Future of Work*, OECD Publishing, Paris, <https://doi.org/10.1787/9ee00155-en>. [2]
- OECD (2018), *Education at a Glance 2018: OECD Indicators*, OECD Publishing, Paris, <https://doi.org/10.1787/eag-2018-en>. [10]
- OECD (2018), *OECD Handbook for Internationally Comparative Education Statistics 2018: Concepts, Standards, Definitions and Classifications*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264304444-en>. [14]
- OECD (2013), *OECD Skills Outlook 2013: First Results from the Survey of Adult Skills*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264204256-en>. [9]
- Verhaest, D. and R. Van Der Velden (2013), "Cross-country differences in graduate overeducation", *European Sociological Review*, Vol. 29/3, <https://doi.org/10.1093/esr/jcs044>. [11]

Indicator A3 tables

Tables Indicator A3. How does educational attainment affect participation in the labour market?

Table A3.1	Employment rates of 25-64 year-olds, by educational attainment (2021)
Table A3.2	Trends in employment rates of 25-34 year-olds, by educational attainment and gender (2011 and 2021)
Table A3.3	Employment rates of tertiary-educated 25-64 year-olds, by field of study (2021)
Table A3.4	Trends in unemployment and inactivity rates of 25-34 year-olds, by educational attainment (2019 to 2021)
Table A3.5	Unemployment rates of 25-64 year-olds, by duration of unemployment and educational attainment (2021)

StatLink  <https://stat.link/cyt6uv>

Cut-off date for the data: 17 June 2022. Any updates on data can be found on line at: <http://dx.doi.org/10.1787/eag-data-en>. More breakdowns can also be found at: <http://stats.oecd.org>, *Education at a Glance Database*.

Table A3.1. Employment rates of 25-64 year-olds, by educational attainment (2021)

Percentage of employed 25-64 year-olds among all 25-64 year-olds

	Below upper secondary	Upper secondary or post-secondary non-tertiary			Tertiary					All levels of education
		Upper secondary	Post-secondary non-tertiary	Total	Short-cycle tertiary	Bachelor's or equivalent	Master's or equivalent	Doctoral or equivalent	Total	
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
OECD Countries										
Australia	60	78	84	79	81	86	88	95	86	79
Austria	54	75	85	76	85	80	89	93	86	76
Belgium	45	72	85	73	86	85	89	95	87	74
Canada	56	69	79	72	79	83	87 ^d	x(7)	82	77
Chile ¹	52	63	a	63	73	83	91 ^d	x(7)	80	65
Colombia	65	76 ^a	x(2)	68	x(6)	87 ^d	x(6)	x(6)	77	69
Costa Rica	60	66	c	66	72	83	89	c	81	66
Czech Republic	56	83 ^d	x(2)	83	89	82	88	94	87	83
Denmark	62	82	91	82	87	86	90	93	88	81
Estonia	64	79	80	79	83	86	89	92	87	81
Finland	54	76	95	77	82	88	90	m	88	79
France	53	74	61	74	85	84	89	91	86	75
Germany	62	80	86	82	88	87	89	93	88	81
Greece	53	62	68	63	71	73	84	93	76	65
Hungary	59	81	91	82	91	89	92	99	91	82
Iceland	71	80	91	82	85	87	92	93	89	83
Ireland	52	70	75	72	81	86	88	92	86	77
Israel	48	70	a	70	84	86	90	92	87	76
Italy	51	70	74	70	70	75	85	92	82	66
Japan ²	x(2)	82 ^d	x(5)	m	82 ^d	89 ^d	x(6)	x(6)	86 ^d	84
Korea	61	70	a	70	76	77	86 ^d	x(7)	77	73
Latvia	62	73	75	73	82	86	86	97 ^e	86	77
Lithuania	58	74	74	74	a	88	92	96	90	80
Luxembourg	62	72	78	72	81	81	89	89	86	77
Mexico	64	69	a	69	72	78	86	92	78	68
Netherlands	66	83	79	83	90	87	91	96	89	82
New Zealand	72	82	86	83	90	89	88	89	89	83
Norway	61	81	83	81	83	90	93	95	89	82
Poland	49	74	74	74	76	89	91	97	91	78
Portugal	70	82	81	82	78	83	92	95	90	80
Slovak Republic	30	79	82	79	c	76	90	92	88	78
Slovenia	50	75	a	75	86	89	91	94	90	79
Spain	58	71	64	71	79	80	84	87	81	71
Sweden	62	85	82	84	82	89	93	94	89	83
Switzerland	67	82 ^d	x(2)	82	x(6, 7, 8)	88 ^d	89 ^d	93 ^d	89	83
Türkiye	50	59	a	59	63	75	82	91	72	57
United Kingdom ³	64	79	a	79	82	87	88	91	86	80
United States	52	67 ^a	x(2)	67	75	80	85	88	81	72
OECD average	58	75	80	75	81	84	89	93	85	76
EU22 average	56	76	79	76	82	84	89	93	87	77
Partners										
Argentina	66	73	a	73	x(6)	85 ^d	x(6)	93	86	74
Brazil	55	68	a	68	x(6)	80 ^d	83	90	80	65
China	m	m	m	m	m	m	m	m	m	m
India ¹	61	63	75	64	x(6)	61 ^d	x(6)	64	62	62
Indonesia	73	73 ^d	x(2)	73	75	82	82	89	81	74
Saudi Arabia	m	m	m	m	m	m	m	m	m	m
South Africa ¹	40	53	m	53	67	77	84 ^d	x(7)	73	49
G20 average	58	71	m	70	m	81	m	87	81	71

Note: In most countries, data refer to ISCED 2011. For Argentina and India, data refer to ISCED-97. See *Definitions* and *Methodology* sections for more information. Data and more breakdowns are available at: <http://stats.oecd.org/>, *Education at a Glance Database*.

1. Year of reference differs from 2021: 2020 for Chile, India and South Africa.

2. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of adults are in this group).

3. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (12% of adults aged 25-64 are in this group).

Source: OECD/ILO (2022). See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

Table A3.2. Trends in employment rates of 25-34 year-olds, by educational attainment and gender (2011 and 2021)

Percentage of employed 25-34 year-olds among all 25-34 year-olds

	Below upper secondary						Upper secondary or post-secondary non-tertiary						Tertiary					
	Men		Women		Total		Men		Women		Total		Men		Women		Total	
	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021	2011	2021
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
OECD Countries																		
Australia	78 ^b	70	49 ^b	47	65 ^b	60	92 ^b	89	69 ^b	71	82 ^b	82	92 ^b	91	80 ^b	84	85 ^b	87
Austria	77	65	52	47	63	57	87	87	79	78	83	83	89	89	85	84	87	87
Belgium	66 ^b	57	41 ^b	36	55 ^b	47	86 ^b	83	72 ^b	70	79 ^b	77	90 ^b	90	88 ^b	89	89 ^b	89
Canada	70	65	44	38	59	55	83	81	70	67	78	76	87	87	81	84	84	85
Chile ¹	81 ^b	68	43 ^b	44	62 ^b	56	81 ^b	71	56 ^b	51	68 ^b	60	91 ^b	83	81 ^b	77	86 ^b	79
Colombia	m	87	m	42	m	68	m	84	m	52	m	68	m	85	m	72	m	78
Costa Rica	83	81	39	39	62	62	90	83	63	50	76	66	86	85	82	74	84	79
Czech Republic	60 ^b	73	34 ^b	38	46 ^b	56	91 ^b	95	62 ^b	60	78 ^b	80	91 ^b	94	63 ^b	66	76 ^b	78
Denmark	70	67	45	45	60	58	83	85	75	71	80	79	87	87	84	84	85	86
Estonia	64	80	46	55	58	71	83	89	67	72	76	83	89	92	72	81	78	85
Finland	64	57 ^b	c	38 ^b	56	48 ^b	84	79 ^b	70	72 ^b	78	76 ^b	91	89 ^b	77	86 ^b	83	87 ^b
France	68	62	43	39	56	52	87	82	68	71	79	77	90	89	84	86	87	87
Germany	69 ^b	70	43 ^b	45	56 ^b	59	84 ^b	87	76 ^b	81	80 ^b	84	93 ^b	91	86 ^b	86	89 ^b	88
Greece	72 ^b	64	37 ^b	20	59 ^b	46	74 ^b	71	54 ^b	50	64 ^b	62	73 ^b	75	67 ^b	65	69 ^b	69
Hungary	56	70	25	45	41	59	82	90	59	79	72	85	91	93	72	89	80	91
Iceland	79	75	57	68	70	73	80	88	62	70	72	80	88	89	83	81	85	84
Ireland	46 ^b	56	36 ^b	29	41 ^b	45	68 ^b	79	61 ^b	64	65 ^b	72	83 ^b	90	81 ^b	87	82 ^b	88
Israel	58 ^b	58	27 ^b	41	46 ^b	51	72 ^b	69	62 ^b	60	68 ^b	65	83 ^b	86	81 ^b	83	82 ^b	85
Italy	73 ^b	64	38 ^b	31	58 ^b	50	78 ^b	74	59 ^b	52	69 ^b	64	71 ^b	71	66 ^b	70	68 ^b	70
Japan ²	m	m	m	m	m	m	x(13)	x(14)	x(15)	x(16)	x(17)	x(18)	92 ^{b,d}	94 ^d	72 ^{b,d}	84 ^d	81 ^{b,d}	89 ^d
Korea	69 ^b	75	44 ^b	56	58 ^b	65	73 ^b	68	51 ^b	55	63 ^b	63	85 ^b	80	65 ^b	73	75 ^b	76
Latvia	57	74	44	32	53	60	78	81	65	69	72	76	90	91	82	84	85	87
Lithuania	43 ^b	62	41 ^b	40 ^b	43 ^b	57	71 ^b	86	67 ^b	66	69 ^b	79	91 ^b	93	87 ^b	90	89 ^b	91
Luxembourg	c	83	c	c	c	74	c	88	c	81	c	85	c	89	c	84	89 ^b	86
Mexico	90	89	41	44	64	65	88	88	55	54	71	70	87	86	75	74	81	79
Netherlands	81 ^b	77	58 ^b	62	71 ^b	71	89 ^b	90	82 ^b	81	85 ^b	86	92 ^b	93	92 ^b	89	92 ^b	91
New Zealand	77	77	46	56	62	68	88	90	67	73	78	82	89	93	78	86	83	90
Norway	74	72	62	52	69	64	88	87	77	80	83	84	91	88	88	88	89	88
Poland	57 ^b	60	35 ^b	31	49 ^b	50	85 ^b	92	58 ^b	65	73 ^b	81	91 ^b	95	82 ^b	88	85 ^b	91
Portugal	79	74	67	63	74	70	81	81	79	77	80	79	80	80	83	86	82	84
Slovak Republic	bc	33	bc	18	28 ^b	26	82 ^b	89	57 ^b	73	71 ^b	83	88 ^b	90	69 ^b	79	77 ^b	83
Slovenia	bc	68	bc	41 ^b	c	58	83 ^b	89	74 ^b	72	79 ^b	84	91 ^b	90	87 ^b	87	89 ^b	88
Spain	63	66	51	49	58	59	71	71	63	67	67	69	79	80	75	77	77	78
Sweden	71 ^b	71	45 ^b	46	60 ^b	60	87 ^b	85	78 ^b	76	83 ^b	82	88 ^b	87	85 ^b	85	86 ^b	86
Switzerland	78 ^b	76 ^b	62 ^b	54 ^b	70 ^b	65 ^b	90 ^b	89 ^b	81 ^b	83 ^b	86 ^b	87 ^b	92 ^b	92 ^b	82 ^b	89 ^b	87 ^b	91 ^b
Türkiye	85 ^b	79	25 ^b	24	53 ^b	51	88 ^b	83	34 ^b	32	66 ^b	61	86 ^b	83	66 ^b	59	77 ^b	71
United Kingdom ³	70 ^b	72	41 ^b	52	56 ^b	64	87 ^b	89	69 ^b	77	78 ^b	83	89 ^b	93	83 ^b	88	86 ^b	90
United States	66	64	38	38	54	53	72	74	62	61	67	68	87	87	78	81	82	84
OECD average	70	69	44	43	57	58	82	83	66	67	75	76	88	88	79	82	83	84
EU22 average	65	66	43	40	54	56	82	84	68	70	75	78	87	88	79	83	83	85
Partners																		
Argentina	87	83	43	41	67	64	88	81	59	59	73	70	96	92	85	86	89	88
Brazil	87 ^b	75	53 ^b	37	71 ^b	58	91 ^b	82	40 ^b	55	64 ^b	68	92 ^b	87	85 ^b	78	88 ^b	82
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
India ¹	m	95	m	28	m	59	m	88	m	21	m	59	m	76	m	29	m	54
Indonesia	93	88	50	47	70	67	91	86	50	50	72	70	87	87	74	74	80	80
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
South Africa ¹	55	41	39	26	47	34	62	51	41	38	51	45	75	67	64	61	70	63
G20 average	m	73	m	39	m	57	m	80	m	56	m	69	m	85	m	75	m	80

Note: Totals might not add up to 100% for the averages because of missing data for some levels for some countries. The code "b" in columns for year 2011 represents that data refer to ISCED-97. Data in columns for year 2021 refer to ISCED 2011 for all countries except for Argentina and India. See *Definitions* and *Methodology* sections and Annex 3 for more information. Data and more breakdowns are available at <http://stats.oecd.org/>, *Education at a Glance Database*.

1. Year of reference differs from 2021: 2020 for Chile, India and South Africa.

2. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of the adults are under this group).

3. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (9% of adults aged 25-34 are in this group).

Source: OECD/ILO (2022). See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

Table A3.3. Employment rates of tertiary-educated 25-64 year-olds, by field of study (2021)

Percentage of employed 25-64 year-olds among all 25-64 year-olds

	Education	Arts and humanities, social sciences, journalism and information			Business, administration and law			Natural sciences, mathematics and statistics	Information and communication technologies (ICT)	Engineering, manufacturing and construction	Health and welfare			Total
		Arts	Humanities (except languages), social sciences, journalism and information	Total	Business and administration	Law	Total				Health (medical and dental)	Health (nursing and associate health fields)	Total	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
OECD														
Countries														
Australia	85	x(4)	86	83	x(7)	x(7)	85	83	88	88	x(13)	x(13)	87	86
Austria	86	83	83	84	86	87	86	87	92	87	90	86	87	86
Belgium	86	x(4)	85	84	x(7)	x(7)	87	89	90	90	x(13)	x(13)	88	87
Canada	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Chile ¹	83	84	89	86	83	85	83	78	90	89	92	83	83	84
Colombia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Costa Rica	78	x(4)	79	79	x(7)	x(7)	81	88	92	85	x(13)	x(13)	80	81
Czech Republic	85	86	84	84	83	91	64	83	96	92	88	84	84	87
Denmark	90	77	86	84	90	92	90	82	87	90	m	m	89	88
Estonia	86	81	88	85	88	89	88	91	91	87	x(13)	x(13)	87	87
Finland	85	85	85	85	86	95	85	89	91	90	96	90	90	88
France	87	x(4)	84	81	x(7)	x(7)	86	87	88	88	x(13)	x(13)	87	86
Germany	87	84	86	84	89	89	90	86	91	90	90	87	89	88
Greece	79	x(4)	81	74	x(7)	x(7)	75	75	79	81	x(13)	x(13)	84	76
Hungary	87	x(4)	93	91	x(7)	x(7)	90	89	96	93	x(13)	x(13)	92	91
Iceland ¹	92	x(4)	x(4)	92	x(7)	x(7)	95	92	97	93	x(13)	x(13)	95	93
Ireland	86	x(4)	86	77	x(7)	x(7)	89	87	89	95	x(13)	x(13)	89	86
Israel	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Italy	83	69	78	76	85	81	83	81	88	88	x(13)	x(13)	89	82
Japan	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Korea	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Latvia	87	88	85	84	86	78	84	91	94	87	92	95	91	86
Lithuania	90	88	92	90	89	x(7)	89	90	94	89	93	92	93	90
Luxembourg	88	x(4)	85	82	x(7)	x(7)	89	83	87	87	m	m	85	86
Mexico	78	77	74	75	78	80	78	73	83	81	77	77	77	78
Netherlands	86	89	87	87	91	88	91	86	93	89	93	90	89	89
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Norway	89	89	89	88	90	90	90	85	89	92	x(13)	x(13)	91	89
Poland	88	86	90	90	92	92	92	89	97	93	x(13)	x(13)	93	91
Portugal	94	x(4)	91	87	x(7)	x(7)	89	83	96	89	x(13)	x(13)	94	90
Slovak Republic	89	x(4)	89	86	x(7)	x(7)	90	87	91	89	x(13)	x(13)	88	88
Slovenia	90	84	90	89	87	91	88	90	94	91	x(13)	x(13)	93	90
Spain	78	x(4)	80	78	x(7)	x(7)	80	82	88	83	x(13)	x(13)	86	81
Sweden	89	80	88	85	90	89	89	85	91	92	88	94	91	89
Switzerland	88	82	85	84	89	85	88	91	91	93	92	91	91	89
Türkiye ¹	71	x(4)	x(4)	67	x(7)	x(7)	73	73	74	78	x(13)	x(13)	78	75
United Kingdom	83	x(4)	85	83	x(7)	x(7)	84	83	85	87	x(13)	x(13)	82	86
United States ^{1,2}	80	81	84	83	x(7)	x(7)	86	85	87	88	x(13)	x(13)	85	82
OECD average	85	m	86	83	m	m	86	85	90	89	m	m	88	86
EU22 average	87	m	86	84	m	m	86	86	91	89	m	m	89	87
Partners														
Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: Data on humanities (except languages), social sciences, journalism and information might refer to the broad field social sciences, journalism and information only. Data in column 14 might differ from data in Table A3.1 column 9 due to differences in country coverage and reference years. See *Definitions and Methodology* sections for more information. Data and more breakdowns are available at <http://stats.oecd.org/>, *Education at a Glance Database*.

1. Year of reference differs from 2021: 2017 for Chile and the United States; 2016 for Iceland and Türkiye.

2. Data refer to bachelor's degree field, even for those with additional tertiary degrees.

Source: OECD (2022). See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

Table A3.4. Trends in unemployment and inactivity rates of 25-34 years old, by educational attainment (2019 to 2021)

Inactivity rates are measured as a percentage of all 25-34 year-olds; unemployment rates as a percentage of 25-34 year-olds in the labour force

	Unemployment rate						Inactivity rate					
	Below upper secondary		Upper secondary or post-secondary non-tertiary		Tertiary		Below upper secondary		Upper secondary or post-secondary non-tertiary		Tertiary	
	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021	2019	2021
	(1)	(3)	(4)	(6)	(7)	(9)	(10)	(12)	(13)	(15)	(16)	(18)
OECD	Countries											
Australia	10	10	5	5	3	4	32	33	15	14	11	10
Austria	15	23	4	7	4	4	31	27	10	12	11	9
Belgium	17	23	6	9	4	4	38	38	14	15	9	7
Canada	12	14	7	9	5	6	36	36	16	17	10	9
Chile	m	m	m	m	m	m	m	m	m	m	m	m
Colombia	10	10	12	16	12	15	22	25	16	19	8	8
Costa Rica	14	20	12	19	9	12	22	23	16	19	10	9
Czech Republic	13	14	2	4	1	1	34	35	16	17	21	21
Denmark	10	10	6	4	7	6	37	35	16	17	9	9
Estonia	7	11	5	6	3	3	26	20	14	12	14	11
Finland	17	16 ^b	7	8 ^b	5	5 ^b	41	42 ^b	17	17 ^b	11	8 ^b
France	24	20	11	10	6	6	33	35	15	14	8	7
Germany	12	11	3	4	3	3	33	34	13	13	9	9
Greece	30	29	26	20	19	20	23	35	16	22	10	13
Hungary	11	13	3	4	2	2	34	33	16	11	14	7
Iceland	6	10	5	7	4	6	16	19	12	14	7	10
Ireland	13	15	6	9	4	4	44	47	19	21	9	8
Israel	4	8	5	7	4	5	40	45	26	30	9	11
Italy	21	21	14	14	12	10	33	36	25	26	23	22
Japan ¹	m	m	x(7)	x(9)	3 ^d	2 ^d	m	m	x(16)	x(18)	10 ^d	9 ^d
Korea	6	6	7	7	6	5	34	31	29	32	19	20
Latvia	14	15	7	10	4	5	24	30	14	15	7	8
Lithuania	19	19	8	9	3	4	33	30	14	13	4	5
Luxembourg	c	c	c	c	4	4	c	c	8	10	7	10
Mexico	3	4	4	5	6	6	31	32	25	26	14	15
Netherlands	7	6	3	4	2	3	31	24	12	11	6	6
New Zealand	7	7	4	4	2	2	26	27	15	14	9	8
Norway	8	11	3	4	3	3	31	29	13	13	8	9
Poland	13	12	4	4	3	3	46	43	18	15	9	7
Portugal	9	11	6	10	7	8	14	22	9	12	7	9
Slovak Republic	37	39	6	8	3	5	47	58	14	10	18	13
Slovenia	13	15	6	6	5	5	29	32	9	11	6	7
Spain	23	28	17	18	12	13	17	18	15	16	11	10
Sweden	17	25	5	6	4	6	22	19	13	13	9	9
Switzerland	10	14 ^b	5	6 ^b	4	4 ^b	23	24 ^b	9	8 ^b	6	6 ^b
Türkiye	16	14	15	13	15	14	38	40	28	30	15	18
United Kingdom ²	7	9	3	4	2	3	28	30	13	13	7	7
United States	10	11	6	10	2	4	37	40	21	24	13	12
OECD average	13	15	7	8	5	6	31	32	16	17	11	10
EU22 average	16	18	7	8	5	6	32	33	14	15	11	10
Partners												
Argentina	14	13	11	11	5	5	26	27	20	22	6	7
Brazil	15	18	13	15	8	9	26	29	16	19	7	10
China	m	m	m	m	m	m	m	m	m	m	m	m
India	3	m	8	m	17	m	43	m	39	m	36	m
Indonesia	3	3	4	5	5	6	28	30	23	26	13	16
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	43	m	33	m	21	m	31	m	24	m	12	m
G20 average	13	m	10	m	7	m	33	m	21	m	13	m

Note: See *Definitions and Methodology* sections for more information. Data and more breakdowns are available at <http://stats.oecd.org/>, *Education at a Glance Database*. Additional columns showing 2020 data on the unemployment and inactivity rates of 25-34 year-olds are available for consultation on line (see StatLink below).

1. Data for tertiary education include upper secondary or post-secondary non-tertiary programmes (less than 5% of the adults are in this group).

2. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (9% of adults aged 25-64 are in this group).

Source: OECD (2022). See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink  <https://stat.link/retq11>

Table A3.5. Unemployment rates for adults by educational attainment and distribution of unemployment by its duration (2021)

Percentage of unemployed 25-64 year-olds among 25-64 year-olds in the labour force

	Below upper secondary				Upper secondary or post-secondary non-tertiary				Tertiary			
	Unemployment rate	Distribution of unemployment by its duration			Unemployment rate	Distribution of unemployment by its duration			Unemployment rate	Distribution of unemployment by its duration		
		Less than 3 months	3 months to less than 12 months	12 months or more		Less than 3 months	3 months to less than 12 months	12 months or more		Less than 3 months	3 months to less than 12 months	12 months or more
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
OECD Countries												
Australia	7	x(3)	61 ^d	39	5	x(7)	60 ^d	40	3	x(11)	70 ^d	30
Austria	14	27	32	41	5	32	33	34	4	35	34	32
Belgium	13	17	23	60	6	25	30	45	3	28	31	41
Canada	11	46	33	21	8	46	36	18	5	46	35	19
Chile ¹	6	73	23	3	7	73	24	3	6	68	25	7
Colombia	8	x(3)	85 ^d	15	14	x(7)	81 ^d	19	12	x(11)	75 ^d	25
Costa Rica	14	58	21	21	15	46	27	27	8	40	33	26
Czech Republic	12	18	33	49	3	25	44	30	1	28	48	24
Denmark	7	31	31	38	4	32	37	31	4	35	41	25
Estonia	12	38	34	28	6	31	41	28	4	36	38	26
Finland	14 ^b	x(3)	65 ^{b,d}	35 ^b	7 ^a	x(7)	73 ^{b,d}	27 ^a	4 ^b	x(11)	66 ^{b,d}	34 ^b
France	12	26	30	44	7	33	32	35	5	35	36	29
Germany	7	26	30	44	3	27	33	40	2	34	37	30
Greece	17	9	25	67	15	9	24	67	11	14	26	60
Hungary	10	30	32	38	3	32	35	33	1	39	37	24
Iceland	m	m	m	m	m	m	m	m	m	m	m	m
Ireland	9	17	27	56	6	26	32	42	4	31	35	35
Israel	6	8	35	57	6	9	32	59	4	8	31	61
Italy	12	15	20	65	8	19	23	59	5	25	28	47
Japan	m	m	m	m	m	m	m	m	2	m	m	m
Korea	m	m	m	m	m	m	m	m	m	m	m	m
Latvia	14	20	33	46	8	31	40	30	5	28	43	29
Lithuania	15	31	37	32	9	37	36	27	4	39	42	20
Luxembourg	6	c	c	c	4	c	c	c	4	c	30	38
Mexico	3	78	17	4	4	68	26	6	4	63	28	9
Netherlands	4	30	37	32	3	34	31	34	3	45	34	21
New Zealand	4	39	83	17	3	41	84	16	2	50	84	16
Norway	7	27	32	40	3	24	34	42	2	31	36	33
Poland	7	22	45	32	3	25	44	31	2	30	45	25
Portugal	6	x(3)	43 ^d	57	6	x(7)	52 ^d	48	4	x(11)	60 ^d	40
Slovak Republic	38	4	17	80	6	13	34	53	3	11	38	51
Slovenia	8	11	32	57	5	20	30	50	3	22	35	43
Spain	20	25	28	47	14	25	30	45	9	28	32	40
Sweden	21	19	43	39	5	31	36	33	4	35	37	28
Switzerland	10	x(3)	50 ^d	50	5	x(7)	51 ^d	49	3	x(11)	61 ^d	39
Türkiye	10	x(3)	72 ^d	28	11	x(7)	64 ^d	36	10	x(11)	54 ^d	46
United Kingdom ²	6	23	33	43	3	31	34	35	3	39	39	23
United States	10	36	39	25	7	37	41	22	4	31	42	27
OECD average	11	29	38	40	6	32	40	35	4	34	42	31
EU22 average	13	22	33	47	6	27	37	39	4	30	39	34
Partners												
Argentina	9	x(3)	60 ^d	40	8	x(7)	54 ^d	46	3	x(11)	56 ^d	43
Brazil	12	27	33	40	12	21	32	47	7	16	36	48
China	m	m	m	m	m	m	m	m	m	m	m	m
India	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	2	38	37	25	3	24	38	37	3	21	34	45
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m
South Africa	m	m	m	m	m	m	m	m	m	m	m	m
G20 average	m	m	m	m	m	m	m	m	m	m	m	m


Note: See *Definitions* and *Methodology* sections for more information. Data and more breakdowns are available at <http://stats.oecd.org/>, *Education at a Glance Database*.

1. Year of reference differs from 2021: 2017 for Chile.

2. Data for upper secondary attainment include completion of a sufficient volume and standard of programmes that would be classified individually as completion of intermediate upper secondary programmes (12% of adults aged 25-64 are in this group).

Source: OECD (2022). See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-A.pdf).

Please refer to the Reader's Guide for information concerning symbols for missing data and abbreviations.

StatLink  <https://stat.link/s20tfc>



From:
Education at a Glance 2022
OECD Indicators

Access the complete publication at:
<https://doi.org/10.1787/3197152b-en>

Please cite this chapter as:

OECD (2022), “How does educational attainment affect participation in the labour market?”, in *Education at a Glance 2022: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/0c0b63ae-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.