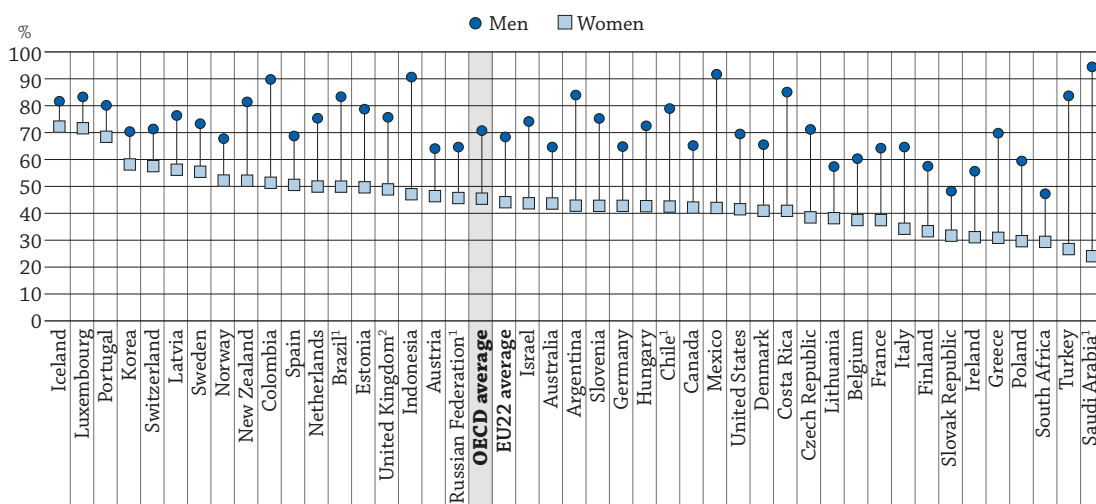


HOW DOES EDUCATIONAL ATTAINMENT AFFECT PARTICIPATION IN THE LABOUR MARKET?

- On average across OECD countries, 81% of 25-34 year-old adults who have at least an upper secondary education are employed, compared to 60% among those who have not completed upper secondary education.
- On average across OECD countries, the employment rate of younger women (age 25-34) without upper secondary education is 45%, compared to 71% for their male peers, but the disparities narrow as educational attainment increases.
- While labour-market outcomes for foreign-born adults without upper secondary education are mixed across OECD and partner countries, foreign-born adults with tertiary education have lower employment prospects than their native-born peers in most countries with data.

Figure A3.1. Employment rates of 25-34 year-olds with below upper secondary education, by gender (2017)



1. Year of reference differs from 2017. Refer to the source table for details.

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 (17% of adults aged 25-64 are in this group).

Countries are ranked in descending order of the employment rate of 25-34 year-old women with below upper secondary education.

Source: OECD/ILO (2018), Table A3.2. See Source section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

StatLink  <https://doi.org/10.1787/888933802057>

Context

The economies of OECD countries depend upon a supply of highly skilled workers. Expanded education opportunities have increased the pool of skilled people across countries, and those with high qualifications are more likely to be employed. On the other hand, while employment opportunities still exist for those with lower qualifications, their labour-market prospects are relatively challenging. People with the lowest educational qualifications have low earnings (see Indicator A4) and are often working in routine jobs that are at greater risk of being automated, therefore increasing their likelihood of being unemployed (Arntz, Gregory and Zierahn, 2016^[1]). These disparities in labour-market outcomes can exacerbate inequalities in society.

Education systems face challenges in responding to changing demands for skills in the labour market. Given the technological advances that have been transforming the needs of the global labour market, employment prospects are better among those with higher skills, particularly in information and communication technology (ICT), and those who are comfortable using ICT for problem solving. Such skills may be acquired outside of formal education and, in some cases, can help people find jobs despite lower educational attainment (Lane and Conlon, 2016^[2]).

Employment and unemployment rates over time provide a basis for assessing the long-term trends and variations in labour-market risks among men and women with different levels of education and at different ages. These results can help governments better understand how economies may evolve in the coming years. In turn, that understanding could inform education policies, with the aim of ensuring that the students of today are better prepared for the jobs of tomorrow.

With the recent increase in migration flows to OECD countries, the labour-market situation of foreign-born adults stimulates the public debate. According to the *International Migration Outlook 2017* (OECD, 2017^[3]), 13% of the total population in OECD countries are foreign-born. The important rise in humanitarian migration largely contributed to the growing preoccupation with reviewing migration policies. However, humanitarian migration makes up only a part of total population flows. A large share of migrants moves for work reasons, and there is evidence of positive social and economic returns to migration. Overall, foreign-born adults largely contribute to increasing the workforce, and they generally contribute more in taxes and social contributions than they receive in benefits (OECD, 2014^[4]).

■ Other findings

- On average across OECD countries, the unemployment rate is almost twice as high for those who have not completed upper secondary education as for those with higher qualifications: 15% of younger adults (age 25-34) without upper secondary education are unemployed, compared to around 7% for those with a higher level of education (i.e. upper secondary, post-secondary non-tertiary education or tertiary education).
- On average across OECD countries, about 35% of adults (age 25-64) who have not completed upper secondary education are inactive, compared to 20% of adults with upper secondary or post-secondary non-tertiary education and 12% of adults with a tertiary degree.
- Between 2007 and 2017, the gender gap in employment rates for younger adults (age 25-34) with low educational attainment has decreased by more than 5 percentage points in about one-third of OECD countries, while the gender gap increased by 5 or more percentage points in Estonia, Lithuania, New Zealand, Poland, the Slovak Republic and Slovenia.
- Across OECD and partner countries that participated in the Survey of Adult Skills (PIAAC), a large majority of workers report having a level of education that corresponds to the level needed for their job.

Analysis

Educational attainment and employment

Upper secondary education is the minimum educational attainment level for successful labour-market integration. Adults (age 25-64) without at least this level of education are penalised in the labour market. On average across OECD countries, the employment rate is 85% for tertiary-educated adults, 76% for adults with an upper secondary or post-secondary non-tertiary qualification, and less than 60% for adults who have not completed upper secondary education (Table A3.1).

The increase in employment rates for those with an upper secondary or post-secondary non-tertiary education compared to those with lower levels of education is 25 percentage points or more in Belgium, the Czech Republic, Poland and the Slovak Republic. Countries with the lowest increase (below 10 percentage points) are Argentina, Brazil, Colombia, Costa Rica, Greece, Indonesia, Korea, Mexico and Saudi Arabia (Table A3.1).

Adults who have not completed upper secondary education enjoy high employment rates (between 70% and 80%) in only a few countries: Colombia, Iceland, Indonesia and New Zealand. In all other countries, these adults are penalised in the labour market. Less than half are employed in Belgium, Poland, the Slovak Republic, Slovenia and South Africa (Figure A3.1).

On average across OECD countries, getting a tertiary education improves employment rates by roughly a further 10 percentage points, compared to adults with an upper secondary or post-secondary non-tertiary education. The difference is 15 percentage points or more in Latvia, Lithuania, Poland, Slovenia and South Africa. The employment advantage is 7 percentage points or less in Australia, the Czech Republic, Denmark, Estonia, Germany, Hungary, Iceland, Korea, New Zealand, Portugal, the Slovak Republic, Sweden, Switzerland and the United Kingdom. One explanation for this situation is that, in some of these countries, employment rates for adults with an upper secondary or post-secondary non-tertiary vocational qualification are almost as high as for tertiary graduates. For example, in Germany and Switzerland, a majority of vocational graduates participate in combined school- and work-based programmes, which smooth the transition from education to work (Table A3.1 and [OECD, 2018_[5]]).

In all OECD and partner countries, younger adults (age 25-34) are better educated than their older peers. In most OECD countries, the share of the population without upper secondary education among younger adults is less than 20% (see Indicator A1). This generational change has an impact in the labour-market outcomes for graduates: on average across OECD countries, 81% of younger adults who have gone beyond compulsory education are employed, compared to 60% who have not completed upper secondary education (Table A3.2 and [OECD, 2018_[5]]).

For younger adults in Argentina, Brazil, Chile, France, Indonesia, Ireland, Israel, Korea, Latvia, Lithuania, Mexico, Poland, South Africa, Turkey and the United States, a tertiary degree has an employment advantage of 10 percentage points or more compared to younger adults with only upper secondary or post-secondary non-tertiary education (Table A3.2).

Educational attainment and employment and gender

In all OECD and partner countries except Norway and Portugal, employment rates are lower for women than for men, regardless of the educational attainment level.

Employment rates are particularly low for women without upper secondary education. On average across OECD countries, the employment rate of younger women without upper secondary education is 45%, compared to 71% for their male peers. In most OECD and partner countries, less than half of young women without upper secondary education are employed, but the employment rate of women is lowest in Saudi Arabia and Turkey, where only one in four women with below upper secondary education are employed (Figure A3.1).

In contrast, in half of OECD countries, the employment rates of younger men (age 25-34) without upper secondary education exceed 70%. Almost full employment (more than 90%) of young men is reached in Colombia, Indonesia, Mexico and Saudi Arabia, but these high employment rates of younger men seem to be achieved at the expense of younger women, as women's employment rates in these countries are between 40 and 70 percentage points lower. In a few countries, such as Iceland, Luxembourg and Portugal, younger men without upper secondary education have relatively high employment rates (around 80%), with concurrent high employment rates for women (about 70%) (Figure A3.1).

Disparities by gender in employment rates narrow as educational attainment increases. On average across OECD countries, the gender difference in employment rates among 25-34 year-olds without upper secondary qualification is 25 percentage points (71% for men and 45% for women). This difference shrinks to 16 percentage points among individuals with upper secondary or post-secondary non-tertiary education (84% for men and 68% for women) and 9 percentage points among tertiary-educated men and women (89% for men and 80% for women) (Table A3.2).

Educational attainment and unemployment

In many OECD and partner countries, unemployment rates are especially high among younger adults (age 25-34). On average across OECD countries, the unemployment rate is almost twice as high for those who have not completed upper secondary education: 15% compared to 8% for those with upper secondary or post-secondary non-tertiary education. The unemployment rate of tertiary-educated younger adults is only 6% (Table A3.3).

The situation is especially severe for younger adults without an upper secondary education in the Slovak Republic and South Africa, where the unemployment rate for this group exceeds 30%. It is also very high in France, Greece and Spain, where about 25% of these younger adults are unemployed (Table A3.3).

Having attained upper secondary education or above reduces the risk of unemployment. The positive impact of further education on the unemployment rate is especially high in Australia, Austria, Germany, Hungary, the Slovak Republic, Sweden and Switzerland. In all these countries, the unemployment rate for younger adults with an upper secondary or post-secondary non-tertiary education is about one-third the unemployment rate for younger adults with below upper secondary education (Table A3.3).

While unemployment rates for 25-34 year-olds in many countries improve only slightly with education beyond upper secondary or post-secondary non-tertiary education, the positive effect of tertiary education on unemployment rates in this age group is especially high in Argentina, the Czech Republic, Estonia, France, Iceland, Ireland, Latvia, New Zealand, Poland, the Russian Federation and the United States. In these countries, unemployment rates for 25-34 year-olds with tertiary attainment are about half the rates of younger adults with an upper secondary or post-secondary non-tertiary education. In Lithuania and South Africa, the unemployment rate of tertiary-educated younger adults is only one-third of their lower educated peers (Table A3.3).

In Costa Rica, Iceland, Israel, Korea, Mexico, Portugal and Turkey, unemployment rates are similar across educational attainment levels. In a few countries, the relationship between unemployment rates and educational attainment levels is reversed. In Saudi Arabia, for example, 20% of tertiary-educated younger adults are unemployed, compared to only 2% of those who have not completed upper secondary education (Table A3.3).

Educational attainment and inactivity

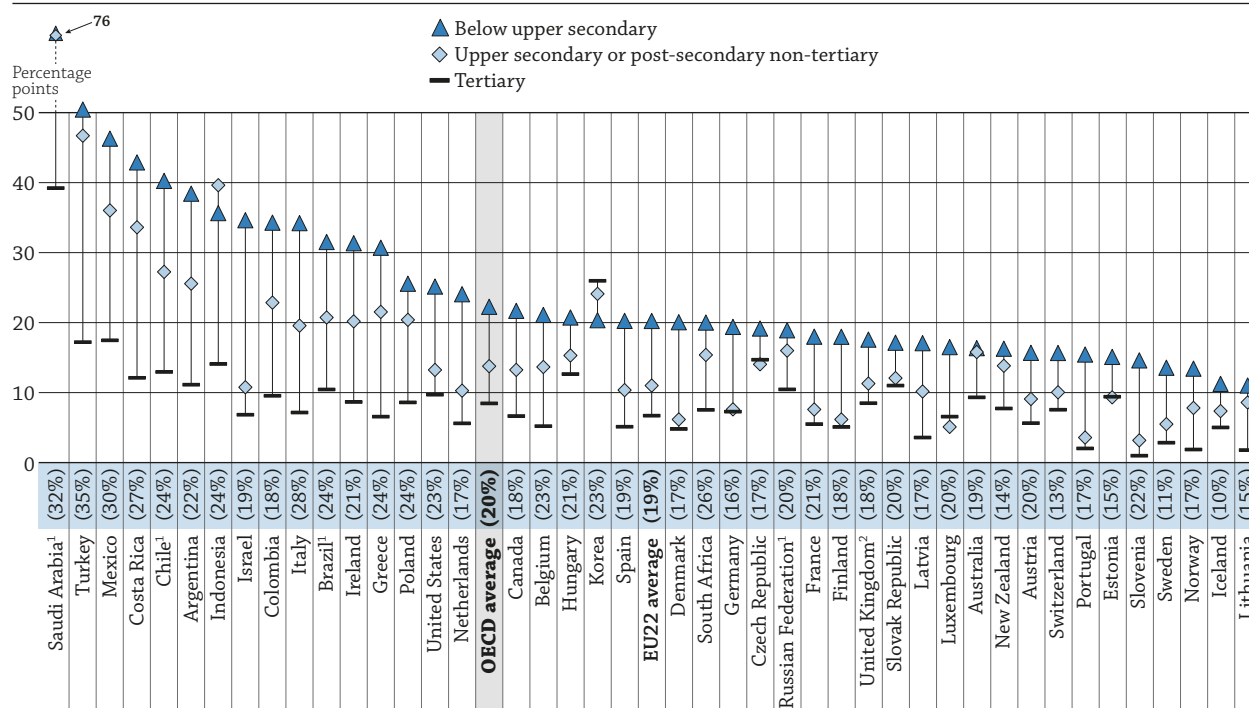
The percentage of inactive people (i.e. individuals not employed and not looking for a job) is higher among those with lower educational attainment levels. On average across OECD countries, around 35% of adults aged 25-64 who have not completed upper secondary education were inactive in 2017, compared to 20% of adults with upper secondary or post-secondary non-tertiary education and around 10% of adults with a tertiary degree (OECD, 2018^[5]).

Women have consistently higher inactivity rates than men across all educational attainment levels, but the rates are especially high among those who have not completed upper secondary education. The difference in inactivity rates for men and women with below upper secondary education is 22 percentage points, while the difference for those with upper secondary or post-secondary non-tertiary education is 14 percentage points, and the difference for those with tertiary education is 8 percentage points (Figure A3.2).

The gender gap in inactivity rates of adults without upper secondary education is highest in Saudi Arabia (76 percentage points) and Turkey (50 percentage points), and the gap is 40 percentage points or more in Chile, Costa Rica and Mexico. Even though the difference in inactivity rates of men and women decreases with higher educational attainment levels, in one-third of OECD countries, the gender gap in activity rates of adults with tertiary education is still more than 10 percentage points, and it is above 20 percentage points in Korea (26 percentage points) and Saudi Arabia (39 percentage points) (Figure A3.2).

In only a few countries, including Lithuania, Norway, Portugal and Slovenia, the gender gap in inactivity rates of tertiary-educated adults is almost closed (less than 3 percentage points) (Figure A3.2).

Figure A3.2. Gender differences in inactivity rates, by educational attainment (2017)
25-64 year-olds, percentage-point difference (inactivity rate for women minus inactivity rate for men)



Note: The percentage in parentheses shows the inactivity rate of 25-64 year-old adults.

1. Year of reference differs from 2017. Refer to Table A3.1 for details.

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 (17% of adults aged 25-64 are in this group).

Countries are ranked in descending order of the gender differences in inactivity rates of the population with below upper secondary education.

Source: OECD/ILO (2018), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

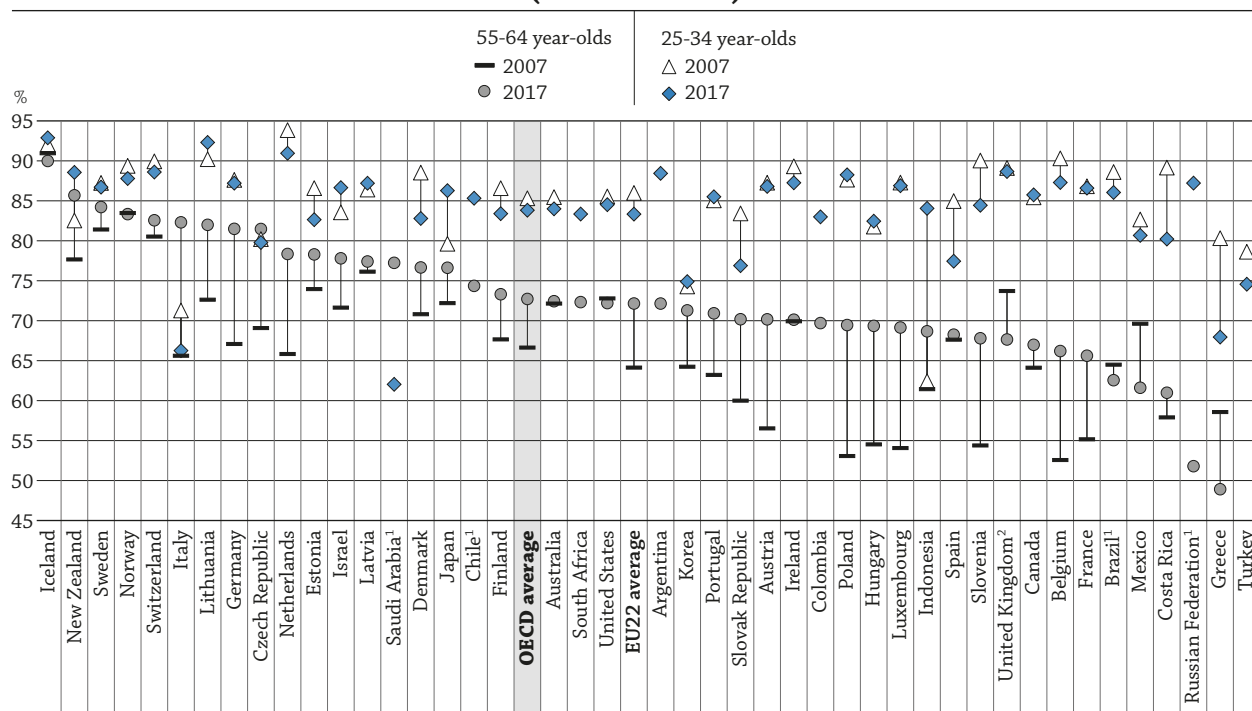
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Overall trends in employment rates by educational attainment

Since the Great Recession in the late 2000s and early 2010s, employment rates have returned to the level they were a decade earlier in most OECD and partner countries. On average across OECD countries, regardless of educational attainment, about 75% of adults (age 25-64) were employed in 2017, which is similar to 2007 levels. However, these trends hide diverging employment trends of younger adults (age 25-34) and older adults (age 55-64) (OECD, 2018^[5]).

On average across OECD countries, the employment rate of 25-34 year-olds with tertiary education was about 85% in 2007 and 2017. In a few countries, including Indonesia, Japan and New Zealand, the employment rate for these younger adults has increased over the last decade, but the opposite tendency can be observed in many countries. In Costa Rica, Denmark, Greece, Italy, the Slovak Republic, Slovenia and Spain, the employment rate of younger adults with tertiary education is 5 or more percentage points lower in 2017 than it was in 2007. Some of these countries are especially hit by the Great Recession, and their economies have not yet recovered fully (Figure A3.3).

In contrast, on average across OECD countries, the employment rates of 55-64 year-olds with tertiary education have increased by 6 percentage points, from 67% in 2007 to 73% in 2017 (Figure A3.3). The increase in employment rates of older adults can be partly explained by the fact that, on average across 24 OECD countries with available data, the age of labour-market exit (effective retirement age) has increased over the last 15 years for both men and women. In contrast, from the 1970s to the late 1990s, the average retirement age was decreasing. The age of labour-market exit in 2017 was 64.3 on average across the OECD, and it was 1.5 years lower for women than for men. However, beyond the OECD average statistics, there are vast differences across countries. The average effective age of labour-market exit ranges from 60.2 in France and the Slovak Republic to 72.1 in Korea. It is lower than 62 in Belgium, France, Luxembourg and the Slovak Republic and higher than 66 in Chile, Iceland, Israel, Japan, Korea, Mexico, New Zealand and Turkey (OECD, 2017^[6]).


Figure A3.3. Trends in employment rates of 25-34 and 55-64 year-olds with tertiary education (2007 and 2017)

1. Year of reference differs from 2017. Refer to Table A3.2 for details.

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 (17% of adults aged 25-64 are in this group).

Countries are ranked in descending order of the employment rate of tertiary-educated 55-64 year-olds in 2017.

Source: OECD/ILO (2018), Education at a Glance Database, <http://stats.oecd.org/>. See Source section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

StatLink  <https://doi.org/10.1787/888933802095>

In more than half of OECD countries, the employment rates of older adults with tertiary education have increased by at least 5 percentage points over the last decade. In many of these countries, employment rates increased by more than 10 percentage points, with the highest increases in Italy and Poland (Figure A3.3).

The increase in employment rates of older adults over time can be observed across educational attainment levels. On average across OECD countries, the employment rate of 55-64 year-olds without upper secondary education has increased by 6 percentage points, from 40% in 2007 to 46% in 2017. Over the same period, the employment rate increased by 8 percentage points (from 52% to 60%) for those with an upper secondary or post-secondary non-tertiary education and by 6 percentage points (from 67% to 73%) for tertiary graduates (OECD, 2018^[5]).

On average across OECD countries and different educational attainment levels, the gender gap in employment rates among younger adults has remained more or less stable over the last decade, but it has evolved differently across countries (Table A3.2).

In most OECD and partner countries, the gender gap in employment rates of adults without upper secondary education has fallen between 2007 and 2017. In most of these countries, this decline is due to a decreasing employment rate for men, rather than an increasing employment rate for women. The decline in the gender gap due to rising employment rates for younger women is highest in Korea (16 percentage points), where the employment rate of young women (age 25-34) without upper secondary education rose from 42% in 2007 to 58% in 2017, while the employment rate of young men remained stable (about 70% in 2007 and 2017) (Table A3.2).

In a few countries, the gender gap has increased for younger adults (age 25-34) with low educational attainment. In Lithuania, Poland and Slovenia, for example, the employment rates of younger women without secondary education have declined much faster than those of younger men, leading to an increase in the gender gap of 5 or more percentage points (Table A3.2).

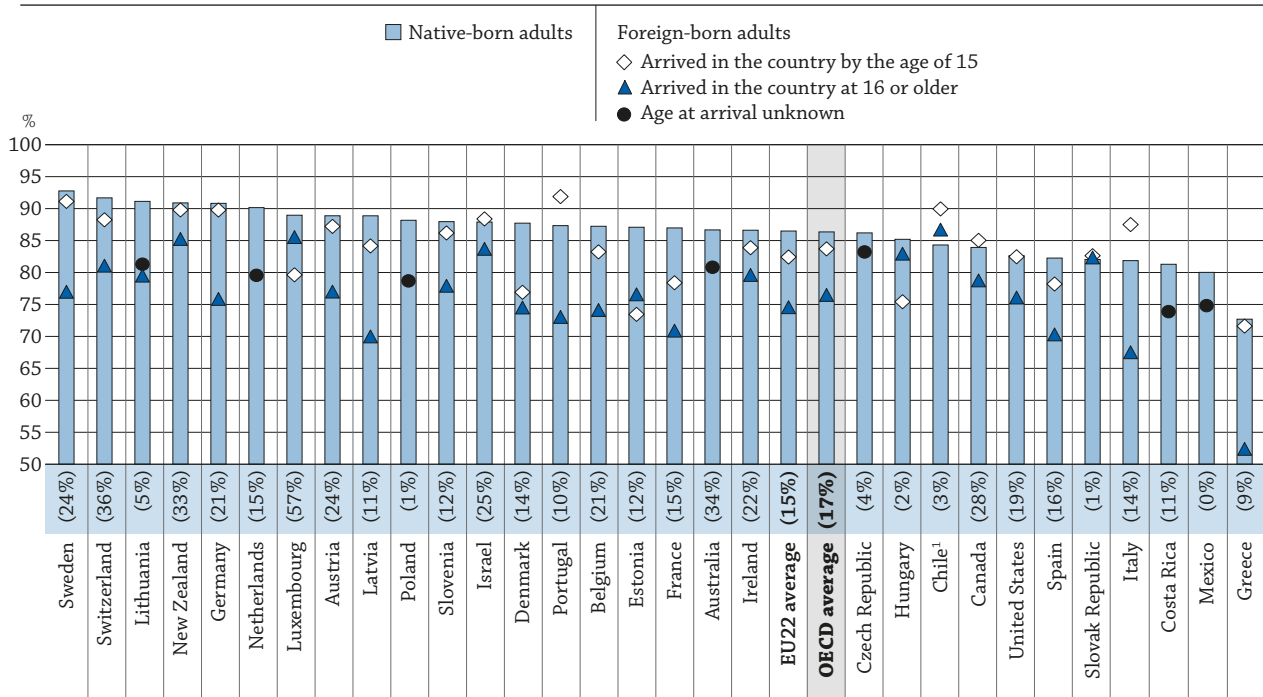
A3

Labour-market outcomes for foreign-born adults by educational attainment

The labour-market outcomes for foreign-born adults compared to native-born adults vary widely across OECD and partner countries. For both native-born and foreign-born adults, the likelihood of being employed increases with higher educational attainment, but it increases more steeply for native-born adults than for foreign-born adults (Table A3.4).

Among countries with available data, there are both higher and lower levels of employment rates for adults without upper secondary education for native-born versus foreign-born adults. For example, in Chile, Hungary, Israel, Italy, Luxembourg, Portugal and the United States, the employment rates of foreign-born adults without upper secondary education are more than 10 percentage points higher than those of their native-born peers. In contrast, in Denmark, the Netherlands and Sweden, the employment rates of foreign-born adults are more than 10 percentage points lower than those of their native-born peers. The difference between the employment rates of native-born and foreign-born adults may vary depending on the age at arrival in the country for foreign-born adults (Table A3.4).

Figure A3.4. Employment rates of native- and foreign-born 25-64 year-olds with tertiary education, by age at arrival in the country (2017)



Note: The percentage in parentheses represents the share of foreign-born adults among 25-64 year-olds.

1. Year of reference differs from 2017. Refer to the source table for details.

Countries are ranked in descending order of the employment rate of tertiary-educated native-born adults.

Source: OECD/ILO (2018), Table A3.4. See *Source* section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).
StatLink <https://doi.org/10.1787/888933802114>

While labour-market outcomes for foreign-born adults without upper secondary education are mixed across OECD and partner countries, foreign-born adults with tertiary education have lower employment prospects than their native-born peers in most countries with data. In Austria, Belgium, Denmark, Estonia, France, Germany, Greece, Italy, Latvia, the Netherlands, Spain and Sweden, the gap in the employment rate between tertiary-educated native-born and foreign-born adults is more than 10 percentage points, systematically in favour of tertiary-educated native-born adults (Table A3.4).

For foreign-born adults with a tertiary degree, the age at arrival in the country determines employment prospects. In most countries, the employment rates for foreign-born adults who arrived by age 16 are higher than for those who arrived in the country at a later age. For instance, in Greece, Italy and Portugal, early arrival yields an employment advantage of around 20 percentage points (Figure A3.4).

Since foreign-born adults who arrived in the country at an early age have spent some years in the education system of the host country and gained credentials recognised by the host country, their labour-market outcomes are better than of those who arrived at a later age with a foreign qualification. Foreign-born adults often face problems getting their education and experience recognised in their host country. The challenges they face in getting their credentials valued in the host country also explain why they are often overqualified for their positions (OECD, 2017^[3]).

In addition, foreign-born adults generally have fewer alternatives in terms of family support than native-born adults. They also generally have lower unemployment insurance and fewer possibilities of returning to school (OECD, 2017^[3]). As shown in the European Union Minorities and Discrimination Survey (FRA, 2017^[7]), foreign-born adults also often face discrimination when looking for work, particularly foreign-born adults from North Africa. Thus, foreign-born workers are likely to have a lower reservation wage (the lowest wage rate at which a worker would be willing to accept a particular type of job), and this implies that they are more likely to accept any job they can get. This may explain the fact that, in many countries, the employment rate for foreign-born adults with low educational attainment is higher than for their native-born peers.

Box A3.1. Qualification match or mismatch among workers

The objectives of formal education are very broad, but preparation for an active life in society through gainful employment is an important one, conditioning well-being to a large extent. The educational qualifications of workers and the educational requirements of jobs meet in the labour market. Qualification matching through this process is a measure of the close links between the education system and the labour market. The first two international reports of the Survey of Adult Skills (PIAAC) (see *Source* section at the end of this indicator) have presented highlights of qualification mismatch, suggesting that overqualification is particularly common among foreign-born workers and those employed in small establishments, in part-time jobs or on fixed-term contracts (OECD, 2013^[8]; OECD, 2016^[9]).

At the individual level, a qualification mismatch occurs when an individual works in a job that does not require the level of formal education the worker holds (i.e. being overqualified or underqualified) (see *Definitions* and *Methodology* sections at the end of this indicator). Being in one of these two types of mismatch is likely to have an impact on earnings (see Box A4.1 in Indicator A4). Aggregated at the national level, overqualification may be the result of an oversupply of qualified workers relative to the structure of jobs in the economy, while underqualification may be the result of workers succeeding in having their skills valued beyond their formal educational attainment.

Overqualification and underqualification are present to varying extents

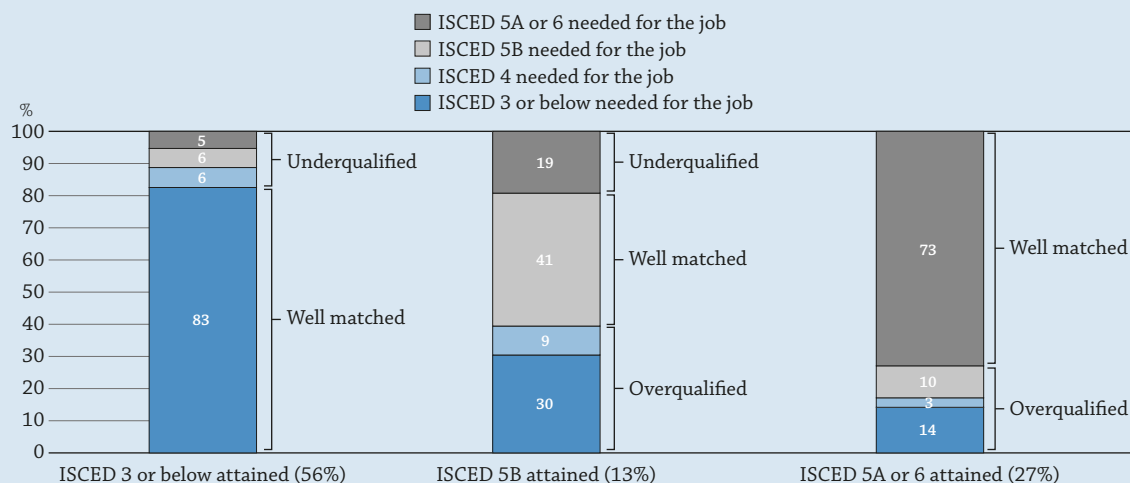
Across countries and economies that participated in the Survey of Adult Skills (PIAAC), a large majority of workers report having a level of education that corresponds to the level needed for their job (Figure A3.a). For example, on average, 85% of workers with a qualification of upper secondary education (ISCED 3) or below reported working in a job that requires this level of education. Among workers with a qualification of tertiary-type A or advanced research programmes (ISCED 5A or 6), 75% reported being in a similarly well-matched situation. For adults with a tertiary-type B degree (ISCED 5B), the match between the level of education attained and the level of education required on the job is not as high, but this is probably due to the fact that these levels of education are less common and, therefore, fewer employers are asking for such qualifications (Figure A3.a).

On average across OECD countries and economies that participated in the Survey of Adult Skills (PIAAC), 15% of workers 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 England (United Kingdom) and Japan, where over 25% of workers reported being in this situation (Figure A3.a and Table A3.a, available on line).

In contrast, on average only 5% of workers reported being underqualified for their job (which means having a qualification of ISCED 3 or below while working in a job needing ISCED 5A or 6). The shares are highest in Finland, Israel, Italy and the Netherlands, where at least 10% of workers reported being in this situation (Figure A3.a, and Table A3.a, available on line).

...

Figure A3.a. Qualification match or mismatch among workers (2012 or 2015)
Survey of Adult Skills (PIAAC), employed 25-64 year-olds, OECD average



Note: The percentage in parentheses represents the proportion of workers with this level of education. The values were redistributed to add up to 100%. Data from the Survey of Adult Skills (PIAAC) are based on ISCED-97. The labels “underqualified”, “well matched” and “overqualified” have been added to ease the reading, but in some cases the boundaries between ISCED levels can be blurred. See *Definitions, Methodology* and *Source* sections for more information.

Source: OECD (2018), Table A3.a, available on line. See *Source* section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

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Migration status and age

Among personal characteristics that may be associated with various situations of overqualification and underqualification, whether one is born in the country of present residence is a major factor in most countries with a sizeable immigrant population. In Norway and Sweden, the share of overqualified workers is at least three times as large among immigrants as among the native-born population. In addition to other issues such as language or culture, credential recognition is a serious problem for first-generation immigrants with higher levels of education seeking a job that matches their level of education (Table A3.b, available on line).

Age is often closely associated with experience in the labour market, and it also plays a role in both mismatched situations. On the one hand, young people may accept jobs below their qualification in order to enter the labour market. On the other hand, older workers may succeed in having their skills and further training valued beyond their formal educational attainment. Both situations would lead to different age patterns among overqualified and underqualified workers. Data from the Survey of Adult Skills (PIAAC) support this hypothesis, showing that the mean age among overqualified workers is 39, seven years younger than the mean age among underqualified workers (46) (Table A3.b, available on line).

Numeracy skills

Skills are far from homogeneous at any level of formal education, and skills are an important driver for individual employment and economic outcomes (OECD, 2015^[10]). On average among similarly-educated adults, numeracy skills tend to be lower among those who are overqualified than among those who are well matched (Figure A3.b). This implies that a formal qualification does not guarantee finding a job corresponding to one’s educational attainment. Formal qualifications should also be accompanied by good skills. Otherwise, there is a higher likelihood of ending up in a job where the education requirements are below the acquired qualification.

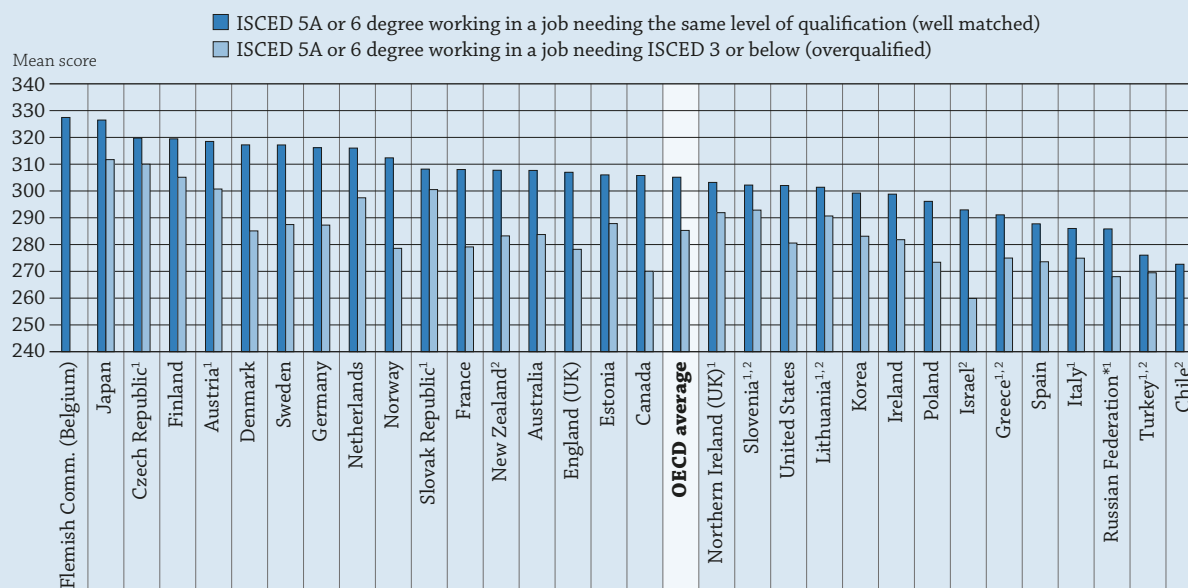
The same pattern holds for all countries and economies that participated in the Survey of Adult Skills (PIAAC), with only a few exceptions where data on the overqualified are missing or where the differences are not statistically significant. Among tertiary-educated adults holding an ISCED 5A or 6 degree, the largest differences in the mean numeracy score between well-matched and overqualified workers are observed in Canada, Denmark, Israel and Norway, where the gap is above 30 score points (which is equivalent to over four years of schooling).

...

In contrast, the difference between well-matched and overqualified workers is not statistically significant in ten countries or economies (Figure A3.b).

Figure A3.b. Mean numeracy score among adults with ISCED 5A or 6, by selected qualification match or mismatch among workers (2012 or 2015)

Survey of Adult Skills (PIAAC), employed 25-64 year-olds



Note: Some data points are not displayed because there are too few observations to provide a reliable estimate. Data from the Survey of Adult Skills (PIAAC) are based on ISCED-97. See *Definitions, Methodology and Source* sections for more information.


1. The difference between well-matched and overqualified workers is not statistically significant at 5%.

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

* See note on data for the Russian Federation in the *Source* section.

Countries are ranked in descending order of the mean score of adults reporting having an educational attainment equivalent to what is needed for their job (well matched).

Source: OECD (2018), Table A3.c, available on line. See *Source* section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

StatLink  <https://doi.org/10.1787/888933802152>

Box A3.1 Tables

WEB Table A3.a Qualification match or mismatch among workers and distribution of educational attainment among workers (2012 or 2015)

WEB Table A3.b Selected qualification mismatches among workers, by mean age and native-born/foreign-born status (2012 or 2015)

WEB Table A3.c Mean numeracy score among adults with ISCED 5A and 6, by selected qualification match or mismatch among workers (2012 or 2015)

Subnational variations in labour-market outcomes by educational attainment level

On average across the 19 OECD and partner countries with subnational data on labour-force status, employment rates tend to vary more across regions among those with lower levels of education than among those with higher levels of education. For example, in the United States (one large country with many subnational regions), among adults who have not completed upper secondary education, the employment rate ranges from 32% to 68% between states while, among adults with upper secondary education, the employment rate ranges from 60% to 79% between states (OECD/NCES, 2018^[11]).

A3

In general, the regional variation in employment rates is the lowest among adults with tertiary education. In most countries, the difference in the employment rate in the subnational region with the lowest and the highest rate is below 10 percentage points. The Russian Federation (another large country with many subnational regions) is the country with the largest disparities, with a low of 69% and a high of 93% (OECD/NCES, 2018_[11]).

In many countries, employment rates in the region including the capital city are above the country average, regardless of educational attainment level. In Spain, for example, the employment rate for adults who have not completed upper secondary education in the capital city region is 60%, 4 percentage points higher than the country average of 56%. This is also the case for most other educational attainment levels. In contrast, in Austria and Germany, employment rates in the capital region are below the country average, regardless of educational attainment level (OECD/NCES, 2018_[11]).

Definitions

Active population (labour force) 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; and **older adults** refer to 55-64 year-olds.

Educational attainment refers to the highest level of education attained by a person.

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 working-age population.

Inactive individuals are those who, during the survey reference week, were neither employed nor unemployed (i.e. individuals who 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 all working-age people).

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 Box A3.1. The levels of education are defined as follows: **below upper secondary** corresponds to levels 0, 1, 2 and 3C short programmes; **upper secondary** corresponds to levels 3A, 3B and 3C long programmes; post-secondary non-tertiary corresponds to levels 4A and 4B; and **tertiary** corresponds to levels 5B, 5A and 6. ISCED 5A 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. 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. Tertiary-type A 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 match/mismatch: For the analysis in Box A3.1, 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. A **well-matched worker** is an individual reporting working in a job that needs his/her level of education. The ISCED-97 categories used for analysis in Box A3.1 are: ISCED 0-3, ISCED 4, ISCED 5B and ISCED 5A-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).

The **working-age population** is the total population aged 25-64.

Methodology

For information on methodology, see Indicator A1.

The match or mismatch presented in Box A3.1 is dependent on the number of education levels selected. In this analysis, educational attainment is classified in four groups; breaking that down further into more groups would result in a higher mismatch. This caution is especially relevant for the category “ISCED 3 or below”, which encompasses four different attainment levels (ISCED 0 to 3) and represents over 50% of workers. It is also important to note that the mismatch presented in this analysis does not reflect misalignments between the field of study of the worker and what is needed for the job. The definitions of overqualification and underqualification can vary across the 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 4 and 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. For more information on the methodology used in Box A3.1, please see the *Methodology* section in Indicator A7.

Please see the *OECD Handbook for Internationally Comparative Education Statistics 2018* (OECD, 2018^[12]) for more information and Annex 3 for country-specific notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

Lithuania was not an OECD member at the time of preparation of this publication. Accordingly, Lithuania does not appear in the list of OECD members and is not included in the zone aggregates.

Source

For information on sources, see Indicator A1.

Data on subnational regions for selected indicators are released by the OECD, with the support from the US National Centre for Education Statistics (NCES), and 19 countries have submitted their data for this edition of Indicator A3: Australia, Austria, Belgium, Canada, Colombia, Finland, Germany, Greece, Ireland, Italy, Poland, the Russian Federation, Slovenia, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. Subnational estimates were provided by countries using national data sources or by Eurostat based on data for Level 2 of the Nomenclature of Territorial Units for Statistics (NUTS 2). For the United Kingdom, the subnational regions are based on NUTS 1.

Data used in Box A3.1 are based on the OECD Programme for the International Assessment of Adult Competencies (the Survey of Adult Skills [PIAAC]).

Note regarding data from Israel

The statistical data for Israel are supplied by and are under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Note regarding data from the Russian Federation in the Survey of Adult Skills (PIAAC)

The sample for the Russian Federation does not include the population of the Moscow municipal area. The data published, therefore, do not represent the entire resident population aged 16-65 in the Russian Federation but rather the population of the Russian Federation excluding the population residing in the Moscow municipal area. More detailed information regarding the data from the Russian Federation as well as that of other countries can be found in the *Technical Report of the Survey of Adult Skills*, Second Edition (OECD, 2016^[13]).

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Indicator A3 Tables


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Table A3.1 Employment rates of 25-64 year-olds, by educational attainment (2017)

Table A3.2 Trends in employment rates of 25-34 year-olds, by educational attainment and gender (2007 and 2017)

Table A3.3 Employment, unemployment and inactivity rates of 25-34 year-olds, by educational attainment (2017)

Table A3.4 Employment rates of native- and foreign-born 25-64 year-olds, by age at arrival in the country and educational attainment (2017)

Cut-off date for the data: 18 July 2018. 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 (2017)**

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										
Australia	59	77	83	78	82	85	84	89	84	77
Austria	54	76	81	77	86	80	89	92	86	76
Belgium	47	73	87	73	81	84	87	93	85	72
Canada	56	72	79	74	81	83	85 ^d	x(7)	82	77
Chile ¹	62	72	a	72	80	86	95 ^d	x(7)	84	71
Czech Republic	51	82 ^d	x(2)	82	88	81	87	92	86	81
Denmark	62	81	93	81	85	84	89	94	86	79
Estonia	65	79	78	79	81	84	88	94	86	80
Finland	53	73	c	74	82	84	87	97	85	76
France	53	73	66	73	84	84	88	90	85	73
Germany	60	80	86	82	90	88	88	93	89	81
Greece	50	58	63	59	63	71	83	85	72	61
Hungary	55	77	84	78	86	83	88	93	85	76
Iceland	77	88	95	90	89	92	95	98	93	88
Ireland	51	70	75	72	80	85	89	90	85	74
Israel	52	74	a	74	84	87	90	93	87	78
Italy	52	71	75	71	c	73	83	93	81	65
Japan ²	x(2)	79 ^d	x(5)	m	79 ^d	88 ^d	x(6)	x(6)	84 ^d	82
Korea	66	73	a	73	77	78 ^d	x(6)	x(6)	77	74
Latvia	61	73	73	73	86	86	90	98	88	76
Luxembourg	60	74	80	75	82	81	89	93	86	76
Mexico	65	71	a	71	70	80	87	89	80	69
Netherlands	61	80	84	80	87	88	91	95	89	79
New Zealand	73	80	87	83	88	89	88	93	89	83
Norway	61	79	85	80	82	90	93	95	89	80
Poland	42	69	73	70	67	85	89	98	88	73
Portugal	68	82	83	82	c	83	88	92	87	76
Slovak Republic	39	75	77	75	91	73	83	86	82	74
Slovenia	46	70	a	70	78	89	88	93	87	73
Spain	56	70	78	70	79	79	84	90	81	68
Sweden	67	87	83	86	85	90	92	93	89	84
Switzerland	67	82 ^d	x(2)	82	x(6, 7, 8)	88 ^d	88 ^d	92 ^d	88	83
Turkey	52	63	a	63	66	77	85	93	75	59
United Kingdom ³	63	83	a	81	82	86	86	88	85	80
United States	56	70 ^d	x(2)	70	78	82	85	90	82	74
OECD average	58	75	80	76	81	84	88	92	85	76
EU22 average	55	75	79	76	82	83	87	92	85	75
Partners										
Argentina	65	74	a	74	x(6)	85 ^d	x(6)	x(6)	85	73
Brazil ¹	65	74 ^d	x(2)	74	x(9)	x(9)	x(9)	x(9)	83	71
China	m	m	m	m	m	m	m	m	m	m
Colombia	72	75 ^d	x(2)	75	x(9)	x(9)	x(9)	x(9)	83	75
Costa Rica	64	69	c	69	71	83	89 ^d	x(7)	81	69
India	m	m	m	m	m	m	m	m	m	m
Indonesia	73	74	m	74	78	87	94	98	85	75
Lithuania	52	71	77	73	a	90	91	94	91	79
Russian Federation ⁴	51	68	75	72	77	88	85	89	81	75
Saudi Arabia ⁵	60	65	a	65	x(6)	75 ^d	x(6)	x(6)	75	65
South Africa	43	55	74	58	82	85	85 ^d	x(7)	85	56
G20 average	m	m	m	m	m	m	m	m	m	m

Note: In most countries data refer to ISCED 2011. For Indonesia and Saudi Arabia 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 2015.

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 (17% of adults aged 25–64 are in this group).

4. Year of reference 2016.

5. Year of reference 2014.

Source: OECD/ILO (2018). See *Source* section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

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

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Table A3.2. **Trends in employment rates of 25-34 year-olds, by educational attainment and gender (2007 and 2017)**
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	
	2007	2017	2007	2017	2007	2017	2007	2017	2007	2017	2007	2017	2007	2017	2007	2017	2007	2017
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
OECD																		
Australia	80 ^b	65	46 ^b	44	64 ^b	55	91 ^b	89	68 ^b	67	81 ^b	80	93 ^b	91	80 ^b	79	85 ^b	84
Austria	78	64	56	46	65	56	89	86	73	83	82	85	92	89	83	85	87	87
Belgium	69 ^b	60	44 ^b	37	58 ^b	50	88 ^b	83	72 ^b	70	81 ^b	78	91 ^b	89	89 ^b	86	90 ^b	87
Canada	70	65	50	42	62	57	86	83	74	70	81	78	89	89	83	84	85	86
Chile ¹	m	79	m	43	m	61	m	80	m	57	m	69	m	89	m	83	m	85
Czech Republic	66 ^b	71	35 ^b	38	50 ^b	54	93 ^b	94	63 ^b	66	79 ^b	82	93 ^b	93	70 ^b	71	80 ^b	80
Denmark	84 ^b	66	63 ^b	41	74 ^b	56	91 ^b	83	82 ^b	72	87 ^b	78	91 ^b	85	86 ^b	81	89 ^b	83
Estonia	77	79	53	50	69	69	95	92	69	68	83	82	94	94	82	75	87	83
Finland	74	58	53	m	66	48	85	79	70	67	78	74	94	90	81	79	87	83
France	75	64	45	37	61	52	89	82	72	66	81	74	90	90	84	84	87	87
Germany	68 ^b	65	42 ^b	43	55 ^b	55	82 ^b	86	72 ^b	79	77 ^b	83	93 ^b	90	83 ^b	84	88 ^b	87
Greece	89 ^b	70	43 ^b	31	71 ^b	54	86 ^b	68	62 ^b	48	73 ^b	59	84 ^b	75	77 ^b	63	80 ^b	68
Hungary	60	73	33	43	47	58	87	91	63	69	76	82	92	94	74	74	82	82
Iceland	90	82	74	72	83	78	93	89	76	80	86	85	95	96	89	90	92	93
Ireland	74 ^b	56	45 ^b	31	62 ^b	46	90 ^b	82	71 ^b	63	81 ^b	73	93 ^b	90	87 ^b	85	89 ^b	87
Israel	61 ^b	74	22 ^b	44	45 ^b	62	74 ^b	74	58 ^b	66	67 ^b	71	87 ^b	90	81 ^b	84	84 ^b	87
Italy	81 ^b	65	42 ^b	34	64 ^b	52	83 ^b	73	64 ^b	53	73 ^b	64	75 ^b	69	69 ^b	65	71 ^b	66
Japan ²	m	m	m	m	m	m	m	m	m	m	m	m	92	93 ^d	69	79 ^d	80	86 ^d
Korea	71 ^b	70	42 ^b	58	61 ^b	64	76 ^b	71	51 ^b	54	64 ^b	65	84 ^b	81	65 ^b	69	74 ^b	75
Latvia	79	76	52	56	70	70	91	86	70	69	81	79	92	94	83	83	86	87
Luxembourg	90 ^b	83	71 ^b	72	81 ^b	78	88 ^b	88	77 ^b	79	83 ^b	84	89 ^b	90	86 ^b	84	87 ^b	87
Mexico	93	92	40	42	64	66	91	89	58	54	73	71	90	88	77	74	83	81
Netherlands	88 ^b	75	59 ^b	50	75 ^b	65	94 ^b	88	83 ^b	77	88 ^b	83	96 ^b	93	92 ^b	90	94 ^b	91
New Zealand	80	81	56	52	69	68	92	91	69	68	82	80	92	93	76	85	83	89
Norway	77	68	61	52	70	61	90	85	81	74	86	80	91	87	88	88	89	88
Poland	61 ^b	59	38 ^b	30	51 ^b	48	84 ^b	89	63 ^b	60	74 ^b	77	92 ^b	95	85 ^b	84	88 ^b	88
Portugal	87	80	71	68	80	76	80	82	77	82	78	82	87	85	84	86	85	86
Slovak Republic	27 ^b	48	21 ^b	32	24 ^b	40	89 ^b	89	62 ^b	62	76 ^b	78	93 ^b	90	76 ^b	68	83 ^b	77
Slovenia	78 ^b	75	59 ^b	43	70 ^b	64	89 ^b	88	79 ^b	76	85 ^b	83	94 ^b	90	88 ^b	81	90 ^b	84
Spain	85	69	58	51	74	61	86	73	72	65	79	69	89	79	82	76	85	77
Sweden	75 ^b	73	51 ^b	55	64 ^b	66	89 ^b	87	79 ^b	81	84 ^b	84	89 ^b	88	86 ^b	86	87 ^b	87
Switzerland	84 ^b	71	59 ^b	58	70 ^b	65	91 ^b	89	78 ^b	82	84 ^b	85	94 ^b	91	84 ^b	86	90 ^b	89
Turkey	83 ^b	84	20 ^b	27	49 ^b	54	86 ^b	87	31 ^b	35	65 ^b	65	87 ^b	85	68 ^b	64	79 ^b	75
United Kingdom ³	78 ^b	76	44 ^b	49	60 ^b	63	90 ^b	91	73 ^b	75	82 ^b	83	93 ^b	93	85 ^b	84	89 ^b	89
United States	77	69	46	42	64	57	84	80	68	66	76	73	92	88	81	81	86	85
OECD average	76	71	48	45	63	60	88	84	69	68	79	77	91	89	81	80	85	84
EU22 average	75	68	49	44	63	58	88	85	71	70	80	78	91	88	82	80	86	83
Partners																		
Argentina	m	84	m	43	m	67	m	84	m	60	m	72	m	93	m	85	m	88
Brazil ¹	88	83	56	50	72	68	90	86	69	64	79	75	92	91	86	83	89	86
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Colombia	m	90	m	51	m	72	m	88	m	62	m	75	m	89	m	78	m	83
Costa Rica	94	85	45	41	71	66	95	88	59	55	77	71	94	84	85	77	89	80
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	92 ^b	91	46	47	67 ^b	68	80 ^b	90	39 ^b	49	60 ^b	71	72 ^b	91	54 ^b	79	62 ^b	84
Lithuania	66 ^b	57	53 ^b	38	61 ^b	51	87 ^b	86	75 ^b	69	81 ^b	79	92 ^b	94	89 ^b	91	90 ^b	92
Russian Federation ⁴	m	65	m	46	m	57	m	88	m	70	m	80	m	94	m	82	m	87
Saudi Arabia ⁵	m	94	m	24	m	65	m	91	m	12	m	59	m	92	m	35	m	62
South Africa	m	47	m	29	m	40	m	58	m	43	m	50	m	86	m	81	m	83
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: In most countries there is a break in the time series, represented by the code "b", as data for 2017 refer to ISCED 2011 while data for 2007 years refer to ISCED-97. For Indonesia and Saudi Arabia 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 2015 instead of 2017.

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 (17% of adults aged 25-64 are in this group).

4. Year of reference 2016 instead of 2017.

5. Year of reference 2014 instead of 2017.

Source: OECD/ILO (2018). See *Source* section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

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


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Table A3.3. Employment, unemployment and inactivity rates of 25-34 year-olds, by educational attainment (2017)
Employment and 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

	Employment rate			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	Below upper secondary	Upper secondary or post-secondary non-tertiary	Tertiary
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
OECD									
Australia	55	80	84	13.4	4.4	4.1	36	17	12
Austria	56	85	87	18.8	5.5	3.7	31	10	10
Belgium	50	78	87	22.7	9.0	4.7	36	15	8
Canada	57	78	86	14.0	7.5	5.0	34	16	10
Chile ¹	61	69	85	11.6	9.2	6.7	32	24	9
Czech Republic	54	82	80	13.9	3.2	1.6	37	15	19
Denmark	56	78	83	10.2	5.6	7.8	37	17	10
Estonia	69	82	83	12.3	6.0	3.0	22	13	15
Finland	48	74	83	15.8	9.8	5.6	43	18	12
France	52	74	87	26.3	12.7	5.8	30	15	8
Germany	55	83	87	15.2	3.8	2.8	36	14	10
Greece	54	59	68	30.0	28.1	25.4	23	17	9
Hungary	58	82	82	13.7	3.8	2.4	33	15	16
Iceland	78	85	93	3.4	3.8	1.9	19	11	5
Ireland	46	73	87	19.7	9.7	4.2	43	19	9
Israel	62	71	87	5.3	5.8	3.8	35	25	10
Italy	52	64	66	23.8	15.7	13.7	32	25	23
Japan ²	m	m	86 ^d	m	m	2.6 ^d	m	m	11 ^d
Korea	64	65	75	4.4	7.0	6.6	33	31	20
Latvia	70	79	87	14.7	9.7	4.6	18	12	9
Luxembourg	78	84	87	c	4.0	4.8	15	13	9
Mexico	66	71	81	3.2	4.4	5.7	32	26	14
Netherlands	65	83	91	8.6	4.7	2.7	29	13	7
New Zealand	68	80	89	8.5	5.0	2.5	26	15	9
Norway	61	80	88	10.5	4.7	2.9	32	16	10
Poland	48	77	88	16.0	6.1	3.2	42	18	9
Portugal	76	82	86	11.3	10.0	8.1	15	9	7
Slovak Republic	40	78	77	31.8	8.9	5.5	42	15	19
Slovenia	64	83	84	14.8	8.3	8.8	24	9	7
Spain	61	69	77	27.8	18.4	13.9	15	15	10
Sweden	66	84	87	16.7	5.3	4.8	21	11	9
Switzerland	65	85	89	14.6	4.7	4.5	24	10	7
Turkey	54	65	75	11.7	11.3	13.1	39	27	14
United Kingdom ³	63	83	89	9.5	3.8	2.7	31	13	9
United States	57	73	85	13.2	6.2	2.8	34	22	13
OECD average	60	77	84	14.8	7.8	5.8	30	17	11
EU22 average	58	78	83	17.8	8.7	6.4	30	15	11
Partners									
Argentina	67	72	88	11.1	8.1	4.3	25	22	8
Brazil ¹	68	75	86	10.6	10.9	6.5	23	16	8
China	m	m	m	m	m	m	m	m	m
Colombia	72	75	83	8.5	11.5	11.0	21	15	7
Costa Rica	66	71	80	10.0	11.2	8.8	27	20	12
India	m	m	m	m	m	m	m	m	m
Indonesia	68	71	84	3.1	5.2	5.3	30	25	11
Lithuania	51	79	92	18.6	8.1	2.8	37	14	5
Russian Federation ⁴	57	80	87	16.5	8.5	4.4	32	12	9
Saudi Arabia ⁵	65	59	62	2.1	8.4	19.6	33	35	23
South Africa	40	50	83	38.8	34.3	9.7	35	24	8
G20 average	m	m	m	m	m	m	m	m	m

Note: In most countries data refer to ISCED 2011. For Indonesia and Saudi Arabia 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 2015.

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 (17% of adults aged 25-64 are in this group).

4. Year of reference 2016.

5. Year of reference 2014.

Source: OECD/ILO (2018). See *Source* section for more information and Annex 3 for notes (<http://dx.doi.org/10.1787/eag-2018-36-en>).

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


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Table A3.4. **Employment rates of native- and foreign-born 25-64 year-olds, by age at arrival in the country and educational attainment (2017)**
 Percentage of employed 25-64 year-olds among all 25-64 year-olds

	Below upper secondary					Upper secondary or post-secondary non-tertiary					Tertiary				
	Native-born	Foreign-born			Total	Native-born	Foreign-born			Total	Native-born	Foreign-born			Total
		Arrived in the country by the age of 15	Arrived in the country at 16 or older	Total			Arrived in the country by the age of 15	Arrived in the country at 16 or older	Total			Arrived in the country by the age of 15	Arrived in the country at 16 or older	Total	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	
OECD															
Australia	61	x(4)	x(4)	54	59	80	x(9)	x(9)	73	78	87	x(14)	x(14)	81	84
Austria	56	57	51	52	54	77	84	71	73	77	89	87	77	78	86
Belgium	48	38	44	43	47	76	64	63	63	73	87	83	74	76	85
Canada	56	63	53	55	56	75	73	71	71	74	84	85	79	80	82
Chile ¹	62	54	83	81	62	71	78	83	81	72	84	90	87	85	84
Czech Republic	50	x(4)	x(4)	59	51	82	x(9)	x(9)	85	82	86	x(14)	x(14)	83	86
Denmark	64	56	53	53	62	83	64	69	69	81	88	77	75	76	86
Estonia	66	68	61	64	65	80	74	67	71	79	87	73	77	76	86
Finland	m	m	m	m	53	m	m	m	m	74	m	m	m	m	85
France	54	52	48	49	53	74	64	61	63	73	87	78	71	73	85
Germany	62	63	57	58	60	82	82	75	77	82	91	90	76	78	89
Greece	48	57	57	57	50	60	61	52	54	59	73	72	52	56	72
Hungary	55	57 ^c	79	75	55	78	89	80	81	78	85	75	83	82	85
Iceland	m	m	m	m	77	m	m	m	m	90	m	m	m	m	93
Ireland	51	49	48	48	51	72	63	71	70	72	87	84	80	80	85
Israel	47	65	73	71	52	72	79	79	79	74	88	88	84	85	87
Italy	50	56	61	61	52	71	69	67	68	71	82	88	68	71	81
Japan ²	m	m	m	m	m	m	m	m	m	m	m	m	m	m	84 ^d
Korea	m	m	m	m	66	m	m	m	m	73	m	m	m	m	77
Latvia	62	53	56	53	61	74	70	58	63	73	89	84	70	77	88
Luxembourg	52	66	65	65	60	76	71	74	74	75	89	80	86	85	86
Mexico	65	x(4)	x(4)	63	65	71	x(9)	x(9)	64	71	80	x(14)	x(14)	75	80
Netherlands	64	x(4)	x(4)	49	61	82	x(9)	x(9)	68	80	90	x(14)	x(14)	80	89
New Zealand	74	69	65	67	73	85	84	77	79	83	91	90	85	86	89
Norway	m	m	m	m	61	m	m	m	m	80	m	m	m	m	89
Poland	42	x(4)	x(4)	c	42	70	x(9)	x(9)	76	70	88	x(14)	x(14)	79	88
Portugal	68	76	71	73	68	82	86	74	80	82	87	92	73	83	87
Slovak Republic	39	c	c	c	39	75	74	69	71	75	82	83	82	82	82
Slovenia	48	58 ^e	53	54	46	73	71	70	70	70	88	86	78	81	87
Spain	55	57	58	58	56	71	68	68	68	70	82	78	70	71	81
Sweden	74	67	56	57	67	88	80	73	75	86	93	91	77	80	89
Switzerland	66	71	67	68	67	83	81	78	79	82	92	88	81	82	88
Turkey	m	m	m	m	52	m	m	m	m	63	m	m	m	m	75
United Kingdom ³	m	m	m	m	63	m	m	m	m	81	m	m	m	m	85
United States	46	68	66	66	56	69	77	73	74	70	83	82	76	78	82
OECD average	57	60	60	60	58	76	74	71	72	76	86	84	76	78	85
EU22 average	55	58	57	57	55	76	73	68	71	76	86	82	75	77	85
Partners															
Argentina	m	m	m	m	65	m	m	m	m	74	m	m	m	m	85
Brazil ¹	m	m	m	m	65	m	m	m	m	74	m	m	m	m	83
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Colombia	m	m	m	m	72	m	m	m	m	75	m	m	m	m	83
Costa Rica	63	x(4)	x(4)	69	64	69	x(9)	x(9)	67	69	81	x(14)	x(14)	74	81
India	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Indonesia	m	m	m	m	73	m	m	m	m	74	m	m	m	m	85
Lithuania	46	c	c	c	52	74	c	66	67	73	91	c	80	81	91
Russian Federation ⁴	m	m	m	m	51	m	m	m	m	72	m	m	m	m	81
Saudi Arabia ⁵	m	m	m	m	60	m	m	m	m	65	m	m	m	m	75
South Africa	m	m	m	m	43	m	m	m	m	58	m	m	m	m	85
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m

Note: In most countries data refer to ISCED 2011. For Indonesia and Saudi Arabia 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.

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