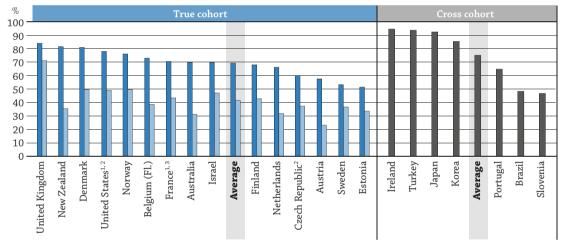
INDICATOR A9

HOW MANY STUDENTS COMPLETE TERTIARY EDUCATION?

- On average across countries with true-cohort data (data on individual students), 41% of students who enter a bachelor's or equivalent programme graduate within the theoretical duration of the programme, although sometimes from a different educational level. Within three years after the theoretical duration of the programme, the average completion rate increases to 69%. For countries with cross-cohort data (aggregate data on student cohorts), the average completion rate is of 75%.
- In nearly all countries, women have higher completion rates than men at the short-cycle tertiary, bachelor's and long first-degree levels.
- Of the students who enter a bachelor's or equivalent programme, an average of 1% transfer and graduate instead from a short-cycle tertiary programme within the theoretical duration of the original programme. Within three years after the theoretical duration, over 1% transfer and graduate from a long first degree.

Figure A9.1. Completion rate of full-time students who entered at bachelor's or equivalent level, by method and duration (2014)

- True-cohort completion by the theoretical duration plus 3 years (N+3)
- True-cohort completion by theoretical duration (N)
- Cross-cohort completion



Note: Please refer to the Methodology section for an explanation on the true-cohort and cross-cohort methodologies. For countries that submitted true-cohort data, the data presented in this figure correspond to students who entered at bachelor's or equivalent level and graduated from any educational level within the specified time frame.

- 1. Data provided using a longitudinal survey. For the United States, year of graduation is 2009 instead of 2014.
- 2. N+3 refers to N+2.
- 3. Excludes international students.

Countries are ranked in descending order of completion rate for cross-cohort and completion by N+3 for true cohort.

Source: OECD. Table A9.1. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933397478

Context

Tertiary completion rates can indicate the efficiency of tertiary education systems, as they show how many of the students who enter a tertiary programme ultimately graduate from it. However, low completion rates do not necessarily imply an inadequate tertiary system, as students may leave a programme for a variety of reasons. They may realise that they have chosen a subject or educational programme that is not a good fit for them, or they may find attractive employment opportunities before completing the programme. In some education systems, it may also be common for students to enrol without intending to graduate from a specific programme, but rather to pursue a few courses as part of lifelong learning or upskilling.

INDICATOR A9

In addition to higher education policies and practices, completion rates may also be influenced by social and economic factors. It is important, therefore, to understand how factors such as gender, immigrant status and parents' educational background can have an impact on individuals' likelihood of succeeding in tertiary education (Box A9.1). Indeed, addressing potential at-risk groups is a vital step to successfully widening tertiary attainment.

Given the growing flexibility in tertiary education systems, completion of a programme may be defined differently across countries. This indicator focuses on full-time students (see Box A9.2. for completion rate of part-time students) and only two specific time frames for completion: 1) the share of students who graduate within the theoretical duration of the programme in which they began; and 2) the share of students who graduate within three years after the theoretical duration. The difference between these two time frames can shed light on the extent to which students tend to graduate "on time" (within the amount of time expected given the theoretical duration of the programme). This indicator also examines the share of students who leave the education system without graduating, the share of students who continue in education after the theoretical time frame and the share of students who graduate from a different educational level than the one in which they began.

Other findings

- Of students who enter a bachelor's or equivalent programme, on average, by the end of the theoretical duration of the programme, 41% have graduated, 18% have left the education system, and 40% are still in education. Within the theoretical duration plus three years, the share of students who have graduated increases to 69%, the share of students who have left the education system increases to 23%, and the share of students still in education decreases to 8%.
- In bachelor's or equivalent programmes, the gender gap for completion within the theoretical duration favours women in all countries that submitted true-cohort data. With only one exception (Turkey), women's completion rates at this level are also higher than men's in nearly all countries with cross-cohort data.
- For countries with cross-cohort data, the average completion rate in short-cycle tertiary education (68%) is considerably lower than the averages for bachelor's or equivalent level (75%) and for long first degrees (72%).

Note

Completion and graduation rates are two different measures. Completion describes the percentage of students who enter a tertiary programme for the first time and who graduate from it a given number of years after they entered. The calculation is made taking into account the number of years usually allocated for completing the programme (the theoretical duration), and an additional three years.

This measure of tertiary completion should not be confused with the indicator on tertiary graduation rates. Graduation rates represent the estimated percentage of people from a certain age cohort that are expected to graduate at some point during their lifetime (see Indicator A3). It measures the number of graduates from tertiary education relative to the country's population. For each country, for a given year, the number of students who graduate is broken down into age groups (for example, the number of 22-year-old graduates divided by the total number of 22-year-olds in the country). The overall graduation rate is the sum of these age-specific graduation rates.

A third indicator in *Education at a Glance* uses the notion of educational attainment (see Indicator A1). Attainment measures the percentage of a population that has reached a certain level of education, in this case those who graduated from tertiary education. It represents the relationship between all graduates (of the given year and previous years) and the total population.

Analysis

Completion rates for true-cohort and cross-cohort data

Completion rate in this indicator is calculated using two different methods, depending on data availability. The first method, true cohort, follows individual students from entry into a tertiary programme until a specified number of years later. Completion is then calculated as the share of entrants who have graduated in that time frame. The second method, cross cohort, is used when individual data are not available. It calculates completion by dividing the number of graduates in a year by the number of new entrants to that programme a certain number of years before, when the number of years corresponds to the theoretical duration of the programme.

Because of the difference in methodologies, caution must be exercised when comparing true-cohort and cross-cohort completion rates. On the one hand, countries with true-cohort data are able to report exactly how many students from a given entry cohort have graduated within a specific time frame. That means that the true-cohort completion rate includes students who graduated before or exactly at the end of the time frame (even if they graduated from a different tertiary level than the one in which they began) and excludes students who took longer than the time frame to graduate.

On the other hand, the number of graduates used in the cross-cohort calculation is the total number of graduates of a tertiary level in a given calendar year. Thus, it includes every student who graduated that year, regardless of the time they took to successfully complete the programme. As an example, consider a programme with a theoretical duration of two years. Completion rates will then be calculated using the graduation cohort in 2014 and an entry cohort two academic years earlier, in 2012/2013. For countries with cross-cohort data, the graduation cohort in 2014 will include students who entered in 2012/2013 and graduated on time (within two years) as well as all others who entered before 2012/2013 and graduated in 2014. As a result, in countries where a significant share of students take longer to graduate, cross-cohort completion will be overestimated when compared to true-cohort completion, for which the time frame is limited.

The theoretical duration of tertiary programmes may vary across countries. Therefore, despite having the same reference year for graduates (2014 unless specified otherwise), the year used for entry cohorts differs across countries. Please see Annex 3 (www.oecd.org/education/education-at-a-glance-19991487.htm) for more information on each country's theoretical duration for tertiary programmes.

True-cohort completion rates

On average across countries that submitted true-cohort data, 47% of students who entered short-cycle tertiary education graduated within the theoretical duration of the programme in which they began. Three years after the theoretical duration, the average completion in short-cycle tertiary education increases to 65%, but is the lowest of the three first-time tertiary levels (short-cycle, bachelor's and long first degrees).

At the bachelor's or equivalent level, the average rate of completion is 41% within the theoretical duration of the programme and 69% three years later. There is a wide variation in completion rates among countries, ranging from 23% in Austria to 71% in the United Kingdom within the theoretical duration, and from 51% in Estonia to 84% in the United Kingdom three years after the theoretical duration. The completion rate for all countries increases between theoretical duration and three years after the theoretical duration, but for some countries the increase is substantial. Notably, the completion rate at this level increases by over 30 percentage points in Australia, Austria, Belgium (Flemish Community), Denmark and the Netherlands and by over 40 percentage points in New Zealand.

Only seven countries have data available on the completion rate for long first degrees, and three countries and economies - Australia, Belgium (Flemish Community) and New Zealand - do not offer such programmes. In nearly all countries, the completion rate for long first degrees is higher than at the bachelor's or equivalent level. The only exceptions are the Czech Republic, where completion within theoretical duration at the bachelor's level is 8 percentage points higher, and Norway, where completion within three years after the theoretical duration is also 8 percentage points higher at the bachelor's level. The average completion rate among countries with available data is 49% within the theoretical duration and 68% three years later.

A large difference in completion rates between the shorter and longer time frames is not necessarily a negative outcome. In Belgium (Flemish Community), for example, higher education programmes are very flexible and are not divided into years of study. Instead, students are required to take a certain number of credits to graduate, but the years of study, even if full-time, may not be consecutive. This type of flexible system tends to increase the number of students that do not graduate "on time", but could be beneficial to students in many other ways. Particularly in countries that provide relatively broad access to tertiary education, as is the case in Belgium (Flemish Community), flexibility may be important to give students more time to meet the standards set by their educational institution.

Cross-cohort completion rates

The completion rate in short-cycle tertiary education is 68% on average across countries that submitted cross-cohort data. This average increases to 75% at the bachelor's or equivalent level and to 72% for long first degrees. At all three levels, Slovenia has the lowest completion rate: 18% in short-cycle, 47% in bachelor's or equivalent and 60% in long first degrees. The highest completion rates are observed in Japan for short-cycle tertiary education (86%), in Ireland and Turkey for bachelor's or equivalent level (both at 94%) and in Turkey for long first degrees (84%).

Gender differences in completion rate

In nearly all countries with available data, women have higher completion rates than men in first-time tertiary levels (Table A9.1). In bachelor's or equivalent programmes, the gender gap for completion within the theoretical duration favours women in all countries that submitted true-cohort data. The difference reaches 20 percentage points or more in Estonia and Finland. A similar pattern holds true for completion rates within three years after the theoretical duration, with the sole exception of Israel, where men's completion rate is 2 percentage points higher than women's. Among countries that submitted cross-cohort data, Turkey is the only country where men's completion rate is higher than women's in bachelor's or equivalent programmes, a difference of 1 percentage point.

For countries with true-cohort data, the gender gap in completion of bachelor's or equivalent programmes tends to decrease with a longer time frame. Three years after the theoretical duration, the gender gap decreases in 8 out of the 15 countries with available data. Among those eight countries, the most notable example is Finland, where the gender gap in favour of women is the highest within the theoretical duration and decreases by 5 percentage points within the theoretical duration plus three years.

Pathways of students who enter tertiary education

For countries that submitted true-cohort data, it is possible to analyse what has happened to students after the theoretical duration of the programme in which they began, and three years later. Have they graduated? If not, are they still in education or have they left the education system? These questions are treated in Figure A9.2, which shows the distribution of students who entered a bachelor's or equivalent programme after the theoretical duration of the programme and three years later.

On average across countries with available data, about 41% of students who enter a bachelor's or equivalent programme graduate by the theoretical duration of the programme in which they began. Within this same time frame, 18% leave the education system and 40% are still in education. Within the theoretical duration plus three years, a considerable number of students who were still in education either graduate or leave the education system. The share of students who graduate increases to 69%, and the share of students who leave the education system increases to 23%, while the share of students still in education decreases to 8%.

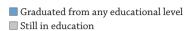
In some countries, it is relatively common for students to enter a tertiary level, transfer to another level before finishing and end up graduating at that new level. This is the case, for example, in France, where 8% of students who enter at the bachelor's or equivalent level graduate from the short-cycle tertiary level within the theoretical duration of the bachelor's programme they had originally entered. In Austria, 1% of students who enter a bachelor's or equivalent programme transfer and graduate from a short-cycle tertiary programme, and 4% transfer to a long first-degree programme and graduate from it within three years after the theoretical duration of the original bachelor's programme.

Some students who enter short-cycle tertiary programmes also transfer and graduate from a different tertiary level. Because short-cycle programmes tend to have a lower theoretical duration than bachelor's or equivalent programmes, it is difficult for students to transfer and still graduate within the original shorter time frame. Nevertheless, about 1% of entrants to a short-cycle tertiary programme, on average, transfer and graduate from a bachelor's or equivalent programme within the theoretical duration of the original short-cycle programme. The average increases considerably three years after the original programme's theoretical duration, reaching 4% of entrants. In Sweden and the United States, 8% of entrants to a short-cycle tertiary programme transfer and graduate from a bachelor's or equivalent programme in the longer time frame.

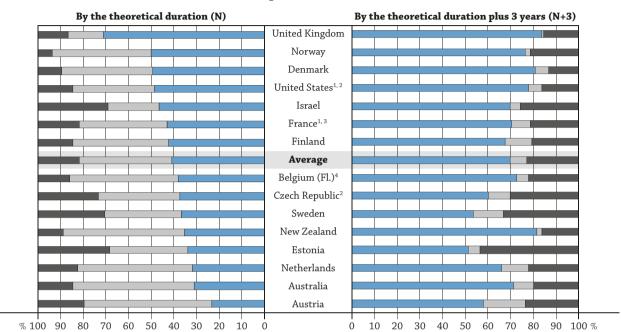
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Figure A9.2. Distribution of full-time students who entered the bachelor's or equivalent level, by duration (2014)

True cohort only



■ Had not graduated and were not in education



- 1. Data provided using a longitudinal survey. For the United States, year of graduation is 2009 instead of 2014.
- 2. N+3 refers to N+2.
- 3. Excludes international students.
- 4. Data for "Had not graduated and were not in education" refer to students who were not enrolled in either bachelor's or master's degrees. They could still be enrolled at other levels or in adult education.

Countries are ranked in descending order of completion rate at any educational level by N.

Source: OECD. Table A9.2. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

StatLink http://dx.doi.org/10.1787/888933397483

Box A9.1. Completion rate by socio-economic factors

Studies have shown that coming from a disadvantaged socio-economic background has a strong impact on completion, perhaps even more so than ethnicity and gender (Vossensteyn et al., 2015; Thomas and Quinn, 2006). Even among students with high qualifications, students from disadvantaged backgrounds tend to be more at risk of dropping out because of financial constraints, family problems or peer pressure (Quinn, 2013).

Figure A9.a shows the completion rate of students who entered bachelor's or equivalent programmes and graduated from the same level, broken down by two measures of socio-economic background: parents' educational attainment and immigrant status. In France, Norway and the United States, the completion rate of students increases as their parents' educational attainment increases. In France, the completion rate of students whose mother or father attained tertiary education is 11 percentage points higher than the completion rate of students whose parents did not attain upper secondary education. The difference is 10 percentage points in Norway and 27 percentage points in the United States. These results reflect the main findings in the literature, which show that first-generation students (when no one in the family has attended higher education) encounter more obstacles in tertiary education and are therefore more likely to drop out (Aina, 2013; Rose-Adams, 2012).

This is not the case in all countries with available data. In Denmark and Israel, the completion rate of students is actually highest among those whose parents have upper secondary or post-secondary non-tertiary education as their highest level of attainment. Nevertheless, in these countries, the completion rate remains lowest among students whose parents did not complete upper secondary education. In Finland, the completion rate is highest among students whose parents did not attain upper secondary education. In fact, their completion rate is 10 percentage points higher than that of students whose parents attained tertiary education. It is important to note, however, that 64% of the entry cohort in Finland had parents who had attained tertiary education versus only 5% whose parents did not complete upper secondary education. The result for this small share must therefore be interpreted with caution. One possible explanation for their comparatively high completion rate is that, given the extra difficulties in attending tertiary education if both parents did not complete upper secondary education, the few who do make it are especially highly motivated.

Being an immigrant also seems to affect a student's chance of succeeding in higher education. The completion rate for native-born students is higher than the completion rate for both first-generation and secondgeneration immigrant students in all countries with available data. The difference in completion rates between first-generation and second-generation students differs across countries, but is never greater (in absolute terms) than the difference between native-born and either first or second-generation immigrants. The lower completion rates among students with an immigrant background add to existing concerns regarding their educational outcomes, such as the fact that immigrant students underperform in the OECD Programme for International Student Assessment (PISA), even after adjusting for socio-economic differences (OECD, 2012). Please see Indicator A4 for more information on educational outcomes of immigrants.

These results highlight the fact that learning outcomes among students with an immigrant background or from families with low levels of education should be an area of focus among education policy makers, particularly in countries where these students show significantly lower completion rates than their peers who do not come from these social groups.

Figure A9.a. Completion rate in bachelor's or equivalent programmes, by parents' educational attainment and student's immigrant status (2014)

Full-time students who entered the bachelor's or equivalent level and graduated that same level within the programme's theoretical duration

		Completion rate by the highest level of parents' educational attainment								
	Below uppe	r secondary	Upper seco post-secondar	•	Tertiary		Unknown			
	Completion rate	% of entry cohort	Completion % of entry cohort Co		Completion rate	% of entry cohort	Completion % of entry cohort			
Denmark	43	5%	49	26%	46	46%	57	23%		
Finland	51	5%	44	27%	41	64%	47	4%		
France ¹	29	34%	37	17%	40	48%	32	0%		
Israel	57	15%	63	32%	60	47%	48	6%		
Norway	39	7%	47	40%	49	52%	a	a		
United States ¹	26	3%	35	31%	53	65%	32	1%		

		Completion rate by the student's immigrant status								
	First generati internation	on (excluding al students)	Second ge	eneration	Nativo	e-born	Unkı	nown		
	Completion rate	% of entry cohort	Completion rate	% of entry cohort	Completion rate	% of entry cohort	Completion rate	% of entry cohort		
Denmark	39	4%	35	3%	50	93%	50	0%		
Finland	36	1%	m	m	42	99%	0	0%		
Israel	55	12%	61	26%	61	57%	44	5%		
Norway	38	8%	36	2%	49	90%	a	a		
United States ¹	35	6%	43	7%	48	84%	41	3%		

Notes: The data in columns "% of entry cohort" refer to the share of students who belong to each of the categories. For example, in the first table, 46% of students in Denmark's entry cohort had at least one tertiary-educated parent. In the second table, 4% of students in Denmark's entry cohort were first generation immigrants.

Data in this box may not be comparable to the data in the rest of the indicator because they may be based on different datasets.

1. Data provided using a longitudinal survey. For the United States, year of graduation is 2009 instead of 2014.

Source: OECD. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Box A9.2. Completion rate of part-time students

Determining the completion rate of part-time students using an internationally comparable method is challenging because, as measured in this indicator, the completion rate relies on the theoretical duration of a programme. Given the wide variety and flexibility of part-time studies across programmes, it would be difficult to determine a theoretical duration for part-time students that would be consistent both within and across countries. Please see Annex 3 (www.oecd.org/education/education-at-a-glance-19991487.htm) for more information on the definition of part-time students across countries. As a result, data collected for the calculation of the completion rate of part-time students was based on the time frame deemed most relevant for each country. In other words, countries selected the shortest time period that takes into account completion by the large majority of part-time students.

For example, consider a short-cycle tertiary programme with a full-time theoretical duration of two years. Most part-time students will not have graduated within two years, but the number of years they will take to graduate will differ across countries. Thus, if most part-time students in a country complete the programme within seven years of study, the time frame for the calculation of completion rates will be seven years (please see the *Methodology* section at the end of this indicator for more information).

Completion rates of part-time students are of great relevance to policy makers, especially in countries such as New Zealand and Norway, where they represent over 35% of students enrolled in bachelor's or equivalent programmes (see Indicator C1 for the prevalence of part-time study in each country). Moreover, studies have shown that part-time students may be more at risk of dropping out than full-time students (Vossensteyn et al., 2015). Figure A9.b shows the completion rate of part-time students in bachelor's or equivalent programmes within the duration specified in parentheses after name of each country. This rate ranges from 59% in Norway to 20% in Israel. In Norway, the completion rate of full-time students is 50% within the theoretical duration of the programme and 76% three years later, while in Israel it is 47% within the theoretical duration and 70% three years later.

The reasons why students choose to study part time may have an impact on their likelihood of succeeding in higher education. Studies have found, for example, that students who choose to study part time for financial reasons need sufficient funding to prevent them from exceeding a certain threshold of working hours, above which they are significantly more likely to drop out (Hovdhaugen, 2014; Vossensteyn, 2013). Other reasons why students may choose to study on a part-time basis include illnesses, having a disability, having to care for a child or family member, or a fear of failing courses. Regardless of the reason, low completion rates for parttime students warrant further investigation, as they could indicate discrepancies between students' needs and what is being offered by the education system.

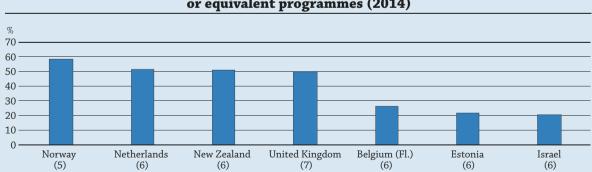


Figure A9.b. Completion rate of part-time students in bachelor's or equivalent programmes (2014)

Note: The number in parentheses corresponds to the duration chosen by each country as the most relevant for the measurement of parttime completion rates. Thus, the completion rate is the result of the number of part-time graduates divided by the number of part-time entrants N years before, where N is the number in parentheses by each country.

Countries are ranked in descending order of completion rate at bachelor's or equivalent level for part-time students.

Source: OECD. Education database. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

Definitions

The true-cohort method requires following an entry cohort through a specific time frame, which in the case of this survey corresponds to the theoretical duration N and the theoretical duration plus three years (N+3). Only countries with longitudinal surveys or registers are able to provide such information. Panel data can be available in the form of an individual student registry (a system including unique personal ID numbers for students) or a cohort of students used for conducting a longitudinal survey.

The cross-cohort method only requires the number of new entrants to a given ISCED level and the number of graduates N years later, where N corresponds to the theoretical duration of the programme. Under the assumption of constant student flows (constant increase or decrease in the number of students entering a given ISCED level throughout the years), the cross-cohort completion is closer to a total completion rate (i.e. the completion rate of all students, regardless of the time it took them to graduate). As such, in countries where a large share of students do not graduate "on time" given the theoretical duration of the programme, the cross-cohort completion may be more comparable to longer time frames of the true-cohort completion.

The theoretical duration of studies is the regulatory or common-practice time it takes a full-time student to complete a level of education. Please see Annex 3 (www.oecd.org/education/education-at-a-glance-19991487.htm) for information on each country's theoretical duration for tertiary programmes.

Parents' educational attainment:

- below upper secondary means that both parents have attained ISCED-97 level 0, 1, 2 or 3C short programmes
- upper secondary or post-secondary non-tertiary means that at least one parent (mother or father) has attained ISCED-97 level 3A, 3B, 3C long programmes or level 4
- tertiary means that at least one parent (mother or father) has attained ISCED-97 level 5A, 5B or 6.

First-generation immigrants refer to those born outside the country and whose parents were both also born in another country. In this indicator it excludes international students.

Second-generation immigrants refer to those born in the country but whose parents were both born in another country.

Methodology

Data on completion rates refer to the academic year 2013/2014 and were collected through a special survey undertaken in 2015. Countries could submit data using either true-cohort or cross-cohort methodology.

Completion rate for both methods is calculated as the number of graduates divided by the number of entrants N or N+3 years before (where N is the theoretical duration of the programme).

For countries that submitted data using the true-cohort method, it is possible to calculate two different completion rates (described below) which are computed for two different timeframes (theoretical duration N and N+3):

- completion rate of students who graduate at the same ISCED level which they entered: number of graduates in a given calendar year and ISCED level divided by the number of entrants to that same ISCED level N/N+3 calendar years before
- completion rate of students who graduate at any tertiary ISCED level: the sum of graduates from all tertiary ISCED levels in a given calendar year who entered a given ISCED level N/N+3 calendar years before.

For cross-cohort data, only one completion rate is calculated: the number of graduates in a given calendar year and ISCED level divided by the number of entrants to that same ISCED level N calendar years before.

If countries offer programmes of different theoretical durations within the same ISCED level, the completion rate of each programme is calculated separately and then weighted by the number of new entrants to each program. This calculation is done for the theoretical duration N for both cross-cohort and true-cohort methodologies, and for the timeframe N+3 for true-cohort data.

For countries that submit true-cohort data it is also possible to calculate the share of students still in education and the share of students who have neither graduated nor are still enrolled - all of which is calculated within the timeframes of N and N+3. Both shares are calculated by dividing the number of students in the given situation by the number of new entrants.

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Given the difficulty in determining the theoretical duration of part-time studies, the information on part-time completion is gathered based on the time frame deemed most relevant by each country for each ISCED level. This time frame is chosen by countries based on the shortest time frame after which most part-time students have graduated or the number of part-time students completing their studies drops significantly. The completion rate is then calculated as the number of part-time graduates divided by the number of part-time new entrants N years before, where N is the duration chosen by each country.

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.

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Indicator A9 Tables

StatLink http://dx.doi.org/10.1787/888933397448					
Table A9.1	Completion rate of full-time students by level of education, gender, method and duration (2014)				
Table A9.2	Distribution of full-time students who entered a given educational level, by theoretical duration (N) and theoretical duration plus three years (N+3) (2014)				

Cut-off date for the data: 20 July 2016. Any updates on data can be found on line at: http://dx.doi.org/10.1787/eag-data-en

Table A9.1. Completion rate of full-time students by level of education, gender, method and duration (2014)

	Entered short-cycle tertiary			ntered bacheloi uivalent progra		Entered master's or equivalent programme (long first degree)			
	Men	Women	Total	Men	Women	Total	Men	Women	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
		Ti	rue cohort – Co	ompleted any	educational le	vel by theoret	ical duration (N)	
Australia	m	m	m	28	33	31	a	a	a
Austria	66	73	70	21	25	23	36	38	37
Belgium (Fl.)	m	m	m	32	44	38	a	a	a
Czech Republic	m	m	m	27	45	37	22	32	29
Denmark	48	58	53	46	52	50	m	m	m
Estonia	m	m	m	22	42	34	19	52	36
Finland	a	a	a	30	53	43	m	m	m
France ^{1, 2}	63	63	63	37	47	43	56	52	54
Israel	m	m	m	46	47	47	m	m	m
Netherlands	m	m	m	24	38	32	m	m	m
Norway	45	53	49	47	52	50	58	59	59
New Zealand	51	52	51	28	41	36	a	a	a
Sweden	26	39	32	27	43	36	42	58	52
United Kingdom	53	42	46	68	74	71	78	82	79
United States ¹	15	15	15	43	53	49	m	m	m
Average	46	49	47	35	46	41	45	53	49
		True cohe	ort – Complete	d any educatio	onal level by tl	neoretical dur	ation plus 3 ve	pars (N+3)	
Australia	m	m	m	65	74	70	a a	a	a
Austria	81	86	84	53	62	58	58	63	61
Belgium (Fl.)	m	m	m	67	78	73	a	a	a
Czech Republic ³	m	m	m	49	68	60	58	68	65
Denmark	69	75	72	77	83	81	m	m	m
Estonia	m	m	m	39	59	51	41	67	54
Finland	a	a	a	58	76	68	m	m	m
France ^{1, 2}	79	77	78	66	73	70	m	m	m
Israel	m	m	m	71	69	70	m	m	m
Netherlands	m	m	m	58	73	66	m	m	m
Norway	55	62	59	72	79	76	64	71	68
New Zealand	60	64	62	77	84	81	a	a	a
Sweden	36	51	44	43	60	53	62	77	71
United Kingdom	72	79	76	81	86	84	87	90	88
United States ^{1, 3}	41	46	44	74	80	78	m	m	m
Average	62	68	65	63	74	69	62	73	68
		'							
					Cross cohort				
Brazil	53	51	51	43	52	48	a	a	a
Czech Republic	71	82	78	m	m	m	m	m	m
Ireland	77	92	84	91	98	94	a	a	a
Japan	84	87	86	90	95	92	m	m	m
Korea	71	88	80	81	90	85	m	m	m
Portugal	a	a	a	58	71	65	65	78	71
Slovenia	18	18	18	45	48	47	55	63	60
Spain	76	82	79	m	m	m	m	m	m
Turkey	65	69	67	94	93	94	81	88	84
Average	64	71	68	72	78	75	67	76	72

Note: Please refer to the Methodology section for an explanation on the true-cohort and cross-cohort methodologies.

 $\textbf{Source:} \ \mathsf{OECD.} \ \mathsf{See} \ \mathsf{Annex} \ \mathsf{3} \ \mathsf{for} \ \mathsf{notes} \ (\underline{\mathsf{www.oecd.org/education/education-at-a-glance-19991487.htm}).$

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

 $^{1.\} Data\ provided\ using\ a\ longitudinal\ survey.\ For\ the\ United\ States,\ year\ of\ graduation\ is\ 2009\ instead\ of\ 2014.$

^{2.} Excludes international students.

 $^{3.\} N+3$ corresponds to N+2. For the United States, only for bachelors' or equivalent programmes.

Table A9.2. Distribution of full-time students who entered a given educational level, by theoretical duration (N) and theoretical duration plus three years (N + 3) (2014)

True cohort only

	Entered bachelor's or equivalent programmes								
	Graduated fro				Graduated from master's or equivalent programmes (long first degree)	's it s		Had not graduated and were not in education	
	By theoretical duration (N)	By N+3	By theoretical duration (N)	By N+3	By N+3	By theoretical duration (N)	By N+3	By theoretical duration (N)	By N+3
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Australia Austria	31 23	70 53	0	0 1	a 4	54 57	9 19	15 20	20 24
Belgium (Fl.) ¹	38	73	m	m	m	48	5	14	22
Czech Republic ²	37	60	0	0	0	36	9	26	31
Denmark	49	79	1	2	m	40	6	10	13
Estonia	34	51	a	a	a	35	5	31	43
Finland	43	68	a	a	a	42	12	15	21
France ^{3, 4}	36	62	8	8	0	39	8	18	21
Israel	47	70	a	a	a	22	5	31	26
Netherlands ⁵	31	65	0	0	0	51	12	17	22
Norway	50	76	a	a	a	44	3	6	21
New Zealand	33	79	2	3	a	54	3	11	16
Sweden	36	51	1	1	2	34	13	29	34
United Kingdom	71 ^d	84 ^d	x(1)	x(2)	x(2)	16	0	13	16
United States ^{2, 3, 6}	46	74	3^{d}	3^{d}	a	36	6	15	17
Average	40	68	1	1	1	40	8	18	23

		Entered short-cycle tertiary									
		Graduat short-cycl			aduated from bachelor's equivalent programmes		Still in education		raduated in education		
		By theoretical duration (N)	By N+3	By theoretical duration (N)	By N+3	By theoretical duration (N)	By N+3	By theoretical duration (N)	By N+3		
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
•	Australia	m	m	m	m	m	m	m	m		
OE	Austria	70	83	0	0	14	2	16	14		
	Belgium (Fl.) ¹	m	m	m	m	m	m	m	m		
	Czech Republic	m	m	m	m	m	m	m	m		
	Denmark	53	69	0	3	28	5	19	23		
	Estonia	m	m	m	m	m	m	m	m		
	Finland	a	a	a	a	a	a	a	a		
	France ^{3, 4}	63	76	0	2	22	2	15	20		
	Israel	m	m	m	m	m	m	m	m		
	Netherlands	m	m	m	m	m	m	m	m		
	New Zealand	50	58	2	5	26	1	23	36		
	Norway	49	56	a	3	44	2	6	40		
	Sweden	30	36	3	8	27	10	41	46		
	United Kingdom	46 ^d	76 ^d	x(1)	x(2)	41	0	13	23		
	United States ^{3, 7}	15 ^d	36^{d}	0	8	54	12	30	44		
	Average	47	61	1	4	32	4	20	31		

^{1.} Data for "Had not graduated and were not in education" refer to students who were not enrolled in either bachelor's or master's degrees or equivalent programmes. They could still be enrolled at other levels or in adult education.

Source: OECD. See Annex 3 for notes (www.oecd.org/education/education-at-a-glance-19991487.htm).

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

^{2.} N+3 corresponds to N+2.

^{3.} Data provided using a longitudinal survey. For the United States, year of graduation is 2009 instead of 2014.

^{4.} Excludes international students.

^{5.} In the Netherlands, a few students enter a bachelor's programme and graduate from a long first degree within the theoretical duration of the original bachelor's programme. They represent less than 0.001% of total new entrants and are included with "Graduated from a long first degree" by N+3.

^{6.} In the United States, students who enter a bachelor's programme may also transfer and graduate from a post-secondary non-tertiary programme. These students are included in "Graduated from short-cycle tertiary" and they represent 0.5% of the entrants to a bachelor's programme by N and 0.7% by N+3.

^{7.} Graduated from short-cycle tertiary includes entrants to a short-cycle tertiary programme who graduated from a post-secondary non-tertiary programme. They represent 1.3% of entrants by N and 2.3% by N+3.



FINANCIAL AND HUMAN RESOURCES Invested In Education



Indicator B1 How much is spent per student? StatLink http://dx.doi.org/10.1787/888933397510

Indicator B2 What proportion of national wealth is spent on education? StatLink http://dx.doi.org/10.1787/888933397664

Indicator B3 How much public and private investment in education is there? StatLink http://dx.doi.org/10.1787/888933397754

Indicator B4 What is the total public spending on education? StatLink http://dx.doi.org/10.1787/888933397855

Indicator B5 How much do tertiary students pay and what public support do they receive? StatLink http://dx.doi.org/10.1787/888933397928

Indicator B6 On what resources and services is education funding spent? StatLink http://dx.doi.org/10.1787/888933398014

Indicator B7 Which factors influence the level of expenditure on education? StatLink http://dx.doi.org/10.1787/888933398071

Classification of educational expenditure

Educational expenditure in this chapter is classified through three dimensions:

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- The first dimension represented by the horizontal axis in the diagram below relates to the location where spending occurs. Spending on schools and universities, education ministries and other agencies directly involved in providing and supporting education is one component of this dimension. Spending on education outside these institutions is another.
- The second dimension represented by the vertical axis in the diagram below classifies the goods and services that are purchased. Not all expenditure on educational institutions can be classified as direct educational or instructional expenditure. Educational institutions in many OECD countries offer various ancillary services - such as meals, transport, housing, etc. - in addition to teaching services to support students and their families. At the tertiary level, spending on research and development can be significant. Not all spending on educational goods and services occurs within educational institutions. For example, families may purchase textbooks and materials themselves or seek private tutoring for their children.
- The third dimension represented by the colours in the diagram below distinguishes among the sources from which funding originates. These include the public sector and international agencies (indicated by light blue), and households and other private entities (indicated by medium-blue). Where private expenditure on education is subsidised by public funds, this is indicated by cells in the grev colour.

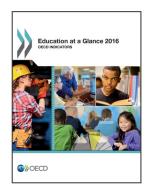
	Public sources of funds Private sources	of funds Private funds publicly subsidised
	Spending on educational institutions (e.g. schools, universities, educational administration and student welfare services)	Spending on education outside educational institutions (e.g. private purchases of educational goods and services, including private tutoring)
Spending on core educational	e.g. public spending on instructional services in educational institutions	e.g. subsidised private spending on books
services	e.g. subsidised private spending on instructional services in educational institutions	e.g. private spending on books and other school materials or private tutoring
	e.g. private spending on tuition fees	
Spending on research and	e.g. public spending on university research	
development	e.g. funds from private industry for research and development in educational institutions	
Spending on educational services other	e.g. public spending on ancillary services such as meals, transport to schools, or housing on the campus	e.g. subsidised private spending on student living costs or reduced prices for transport
than instruction	e.g. private spending on fees for ancillary services	e.g. private spending on student living costs or transport

Coverage diagrams

For Indicators B1, B2, B3 and B6

For Indicator B4

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