HOW MANY STUDENTS FINISH TERTIARY EDUCATION?

Tertiary education covers a wide range of programmes and serves overall as an indicator of countries' production of advanced skills. A traditional university degree is associated with completion of tertiary-type A courses; tertiary-type B generally refers to shorter and often vocationally oriented courses. This indicator first shows the current tertiary graduate output of education systems, *i.e.* the percentage of the population in the typical age cohort for tertiary education that successfully completes tertiary programmes, as well as the evolution of the sector since 1995. Finally, this indicator shows current tertiary completion rates in education systems, *i.e.* the percentage of students who follow and successfully complete tertiary programmes. Although "dropping out" is not necessarily an indicator of failure from the individual student's perspective, high dropout rates may indicate that the education system is not meeting students' needs.

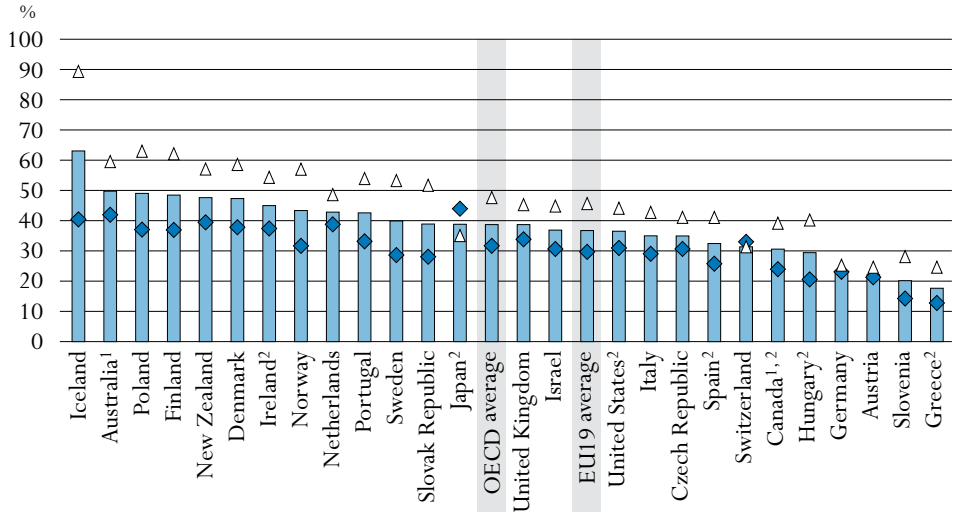
Key results

Chart A3.1. Tertiary-type A graduation rates by gender in 2007 (first-time graduation)

The chart shows the number of students completing tertiary-type A programmes for the first time in 2007 by gender, as a percentage of the relevant group.

Males + Females Males Females

Based on current patterns of graduation, on average 39% of an age cohort is estimated to have completed tertiary-type A education in 2007 among the 24 OECD countries with comparable data. Differences between countries are greater when gender is taken into consideration. Significantly more females obtain tertiary-type A qualifications than males, with graduation rates of 47% and 31%, respectively. The gender gap is more than 25 percentage points in Finland, Norway, Poland and Sweden and nearly 50 percentage points in Iceland.



1. Year of reference 2006.
2. The graduation rates for tertiary-type A programmes are calculated on a gross basis.

Countries are ranked in descending order of the graduation rates for tertiary-type A education, for both males and females.

Source: OECD. Table A3.1. See Annex 3 for notes (*www.oecd.org/edu/eag2009*).

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Other highlights of this indicator

- Tertiary-type A graduation rates range from 20% or less in Greece to 45% or more in Australia, Denmark, Finland, Iceland, Ireland, New Zealand and Poland. For countries with a higher number of international students, the graduation rate is artificially inflated; the adjusted graduation rates – when international students are excluded – for Australia and New Zealand are at 36% and 37% respectively.

- On average in OECD countries, the tertiary-type A graduation rate has risen by 18 percentage points over the last 12 years. In every country for which comparable data are available, tertiary-type A graduation rates increased between 1995 and 2007, often quite substantially.

- Based on current patterns of graduation, on average 9% of an age cohort is estimated to have completed tertiary-type B education in 2007 among the 22 OECD countries with comparable data and 1.5% programmes leading to advanced research qualifications.

- On average among the 18 OECD countries for which data are available in 2005, 30% of tertiary students fail to successfully complete a programme equivalent to this level of education. Completion rates differ widely among OECD countries. In Hungary and New Zealand, more than 40% of those who enter tertiary programmes leave without tertiary qualifications (in either tertiary-type A or tertiary-type B programmes) in contrast to their counterparts in Belgium (Flemish Community), Denmark, France, Germany and Japan and the partner country the Russian Federation, where the proportion is less than 25%.

- Beginning but not completing a tertiary-type A programme does not necessarily represent a failure if students benefit from the time spent in the programme and move successfully to the tertiary-type B education track. In France and to a lesser extent in Denmark and New Zealand, a significant proportion of students (15% in France and 3% in the two other countries) who do not complete the tertiary-type A programme are successfully re-oriented to a tertiary-type B programme.

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Policy context

Attainment of upper secondary education has become the norm in most countries today. In addition, most students are graduating from upper secondary programmes designed to provide access to tertiary education, leading to increased enrolments at this higher level (see Indicator A2). Countries with high graduation rates at the tertiary level are also those most likely to develop or maintain a highly skilled labour force.

Tertiary level dropout and completion rates can be useful indicators of the internal efficiency of tertiary education systems. However, students may leave a tertiary programme for many reasons: they may realise that they have chosen a subject or educational programme that is not a good fit for them; they may fail to meet the standards set by their educational institution, particularly in tertiary systems that provide relatively broad access; or they may find attractive employment before completing their programme. Dropping out is not necessarily an indication of an individual student's failure, but high drop out rates may well indicate that the education system is not meeting the needs of students. Students may find that the educational programmes offered do not meet their expectations or their labour market needs. It may also be that programmes take longer than the number of years for which students can justify being outside the labour market.

Evidence and explanations

Tertiary graduation rates show the rate at which each country's education system produces advanced skills. But tertiary programmes vary widely in structure and scope among countries. Tertiary graduation rates are influenced both by the degree of access to tertiary programmes and by the demand for higher skills in the labour market. They are also affected by the way in which the degree and qualification structures are organised within countries.

Graduation rates at the tertiary level

Tertiary-type A programmes are largely theory-based and are designed to provide qualifications for entry into advanced research programmes and professions with high skill requirements. The organisation of tertiary-type A programmes differs among countries. The institutional framework may be universities or other institutions. The duration of programmes leading to a first tertiary-type A qualification ranges from three years (*e.g.* the bachelor's degree in many colleges in Ireland and the United Kingdom in most fields of education, and the *licence* in France) to five years or more (*e.g.* the *Diplom* in Germany).

In many countries there is a clear distinction between first and second university degrees, (*i.e.* undergraduate and graduate programmes), but this is not always the case. In some systems, degrees that are internationally comparable to a master's degree are obtained through a single programme of long duration. To ensure international comparability, it is therefore necessary to compare degree programmes of similar cumulative duration, as well as completion rates for first degree programmes.

To allow for comparisons that are independent of differences in national degree structures, tertiary-type A degrees are subdivided according to the total theoretical duration of study – the standard (set out by law or regulations) number of years in which a student can complete the education programme. Specifically, the OECD classification divides degrees into three groups: medium (three to less than five years), long (five to six years) and very long (more than six years).

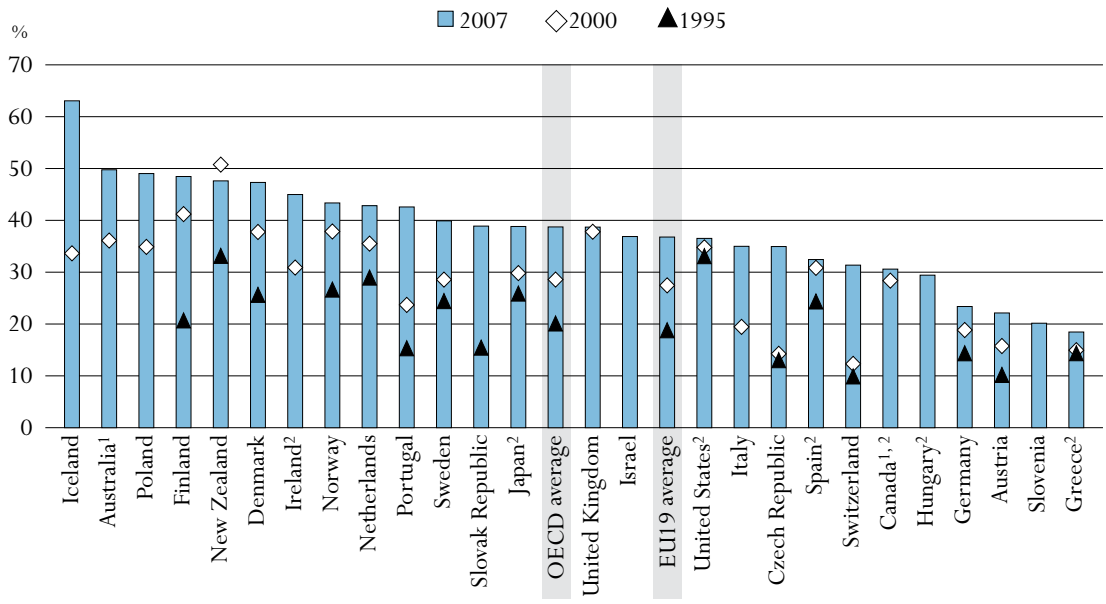
Degrees obtained from programmes of less than three years' duration are not considered equivalent to the completion of the tertiary-type A level of education and are therefore not included in this indicator. Second degree programmes are classified according to the cumulative duration of the first and second degree programmes. Individuals who already hold a first degree are deducted.

First-time tertiary-type A graduation rates

Based on current patterns of graduation, on average 39% of an age cohort among the 24 OECD countries with comparable data are estimated to have completed tertiary-type A education in 2007. This figure ranged from less than 20% in Greece to 45% or more in Australia, Denmark, Finland, Iceland, Ireland, New Zealand and Poland. Note however that the graduation rates for countries with a high proportion of international students (*e.g.* Australia and New Zealand) are artificially inflated as all international graduates are by definition first-time graduates, regardless of their previous education in other countries. Therefore, the adjusted graduation rates – when international students are excluded - for Australia and New Zealand are at 36% and 37% respectively (Table A3.1).

Disparities among countries are greater when gender is taken into consideration. On average in OECD countries, the number of females who obtain tertiary-type A qualifications is significantly higher than the number of males; females' graduation rate is 47% compared to 31% for males. The gender gap is equal or superior to 25 percentage points in Finland, Norway, Poland and Sweden and nearly 50 percentage points in Iceland. In Austria, Germany and Switzerland, the sexes are quite balanced. In Japan significantly more males graduate from tertiary-type A programmes (Chart A3.1).

Chart A3.2. Tertiary-type A graduation rates in 1995, 2000 and 2007 (first-time graduation)



1. Year of reference 2006 instead of 2007.
2. The graduation rates for tertiary-type A programmes are calculated on a gross basis.

Countries are ranked in descending order of the graduation rates for tertiary-type A education in 2007.

Source: OECD. Table A3.2. See Annex 3 for notes (*www.oecd.org/edu/eag2009*).

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On average in OECD countries, tertiary-type A graduation rates increased by 18 percentage points over the last 12 years. In every country for which comparable data are available, these rates increased between 1995 and 2007, often quite substantially.

From 1995 to 2007, tertiary graduation rates evolved quite differently in OECD and partner countries. In Denmark, Finland, New Zealand, Norway and Spain, increases were more marked from 1995 to 2000 than from 2000 to 2007. New Zealand has even experienced a decline in its graduation rate since 2000, mainly due to the fluctuation of international students entering and leaving the country. However, in the Czech Republic, Greece, Japan, Portugal, Sweden and Switzerland the increase occurred mainly in the last seven years (Chart A3.2).

The most significant increases between 2000 and 2007 were reported in the Czech Republic and Switzerland where the rate almost tripled over this period, and to a lesser extent in Iceland, Italy and Portugal. In Switzerland, the striking increase at the beginning of the 21st century reflected the 1997 creation of the *Fachhochschulen* (Universities of Applied Science) and the later extension of these programmes to more institutions and programmes. Austria and Germany, despite an increase of tertiary-type A graduation rate (courses have been shortened and numerus *clausus* restrictions have been eased for Germany), are still well behind the OECD average. First-time graduation rates in Greece have fluctuated since 1995 and in 2007 were the lowest of all OECD countries. The government has recently enacted a reform to improve the quality of tertiary education outcomes (*e.g.* limit the duration of academic study, improve the governance of universities). Due to the progressive expansion of the BaMa structure in the Czech Republic, the graduation rate has grown rapidly in recent years; in 2004, 13 000 new bachelors and 7 000 new "consequential" masters in 2006 were registered. In 2005, there were 19 000 new bachelors and 11 000 new "consequential" masters in 2007. In Italy, the large increase between 2002 and 2005 was largely due to structural change. The reform of the Italian tertiary system in 2002 allowed university students who had originally enrolled in programmes of longer duration to obtain a degree after three years of study. Between 2000 and 2007, the graduation rate in Spain, the United Kingdom and the United States didn't increase as much as in other countries.

Tertiary-type A: the shorter the programme, the higher the participation and graduation rates

The duration of tertiary studies tends to be longer in EU countries than in other OECD countries. Two-thirds of all OECD tertiary-type A students graduate from programmes with a duration of three to less than five years compared to less than 56 % in EU countries (Table A3.1).

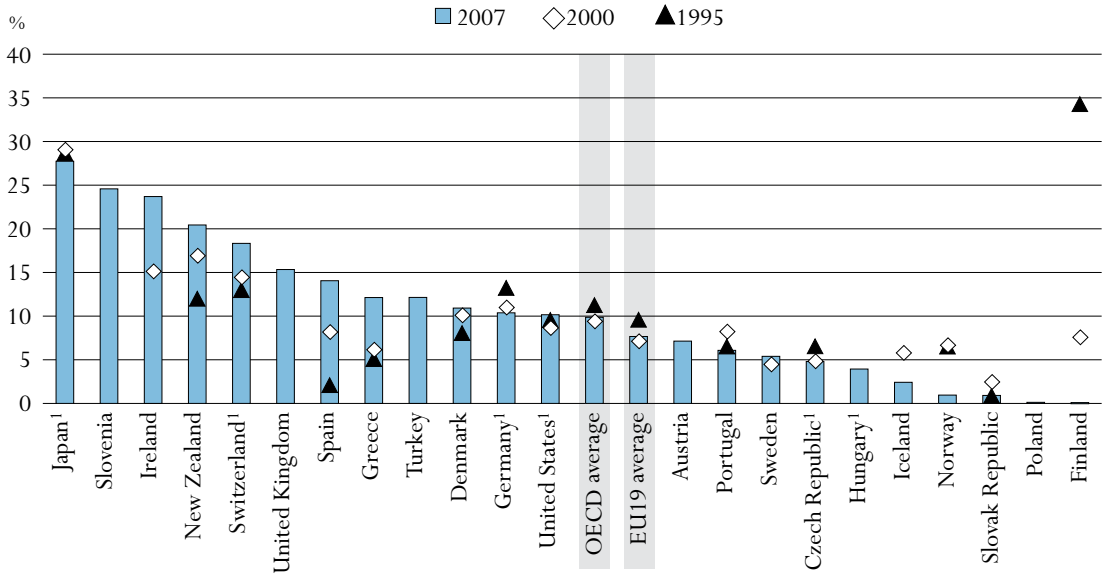
Overall, tertiary-type A graduation rates tend to be higher in countries in which programmes are mainly of shorter duration. Tertiary-type A graduation rates are around 40% or more in Australia, Sweden and the United Kingdom, where programmes of three to less than five years are the norm (95% or more of graduates follow programmes of three to less than five years). In contrast, in Austria and Germany, most students complete programmes of at least five years' duration and tertiary-type A graduation rates are below 25%. In the future, with the implementation of the Bologna process (see Box A3.1 in *Education at a Glance 2008*), there may be fewer programmes of long duration in European countries. Poland is a notable exception: despite typically long tertiary-type A programmes, its tertiary-type A graduation rate is over 40% (Table A3.1).

First-time tertiary-type B graduation rates

Tertiary-type B programmes are classified at the same competency level as tertiary-type A programmes but are more occupationally oriented and usually lead to direct labour market access. They are typically of shorter duration than tertiary-type A programmes – usually two to three years – and are generally not intended to lead to university-level degrees. Graduation rates for tertiary-type B programmes average some 9% of an age cohort for the 22 OECD countries with comparable data. In fact, graduation from tertiary-type B programmes is a significant feature of the tertiary system in only a few countries, most notably Ireland, Japan and New Zealand and the partner country Slovenia, where over 20% of the age cohort obtained tertiary-type B qualifications in 2007 (Table A3.1).

Trends in provision of and graduation from tertiary-type B programmes vary even though the OECD average has been stable over the past 12 years. For instance, in Spain, the sharp rise in tertiary-type B graduation rates between 1995 and 2007 is attributable to the development of new advanced level vocational training programmes. In contrast, in Finland these programmes are being phased out and the proportion of the age cohort graduating from them has thus fallen rapidly (Table A3.2).

Chart A3.3. Tertiary-type B graduation rates in 1995, 2000 and 2007 (first-time graduation)



1. The graduation rates for tertiary-type B programmes are calculated on a gross basis.
Countries are ranked in descending order of the graduation rates for tertiary-type B education in 2007.
Source: OECD. Table A3.2. See Annex 3 for notes (*www.oecd.org/edu/eag2009*).
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Advanced research qualification rates

For the 29 OECD countries with comparable data, 1.5% of the population obtained an advanced research qualification (such as a Ph.D.) in 2007. The proportion ranges from 0.1% in the partner country Chile to more than 2% in Finland, Germany, Portugal, Sweden, Switzerland and the United Kingdom (Table A3.1).

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Graduation rates: first and second degrees and advanced research qualifications

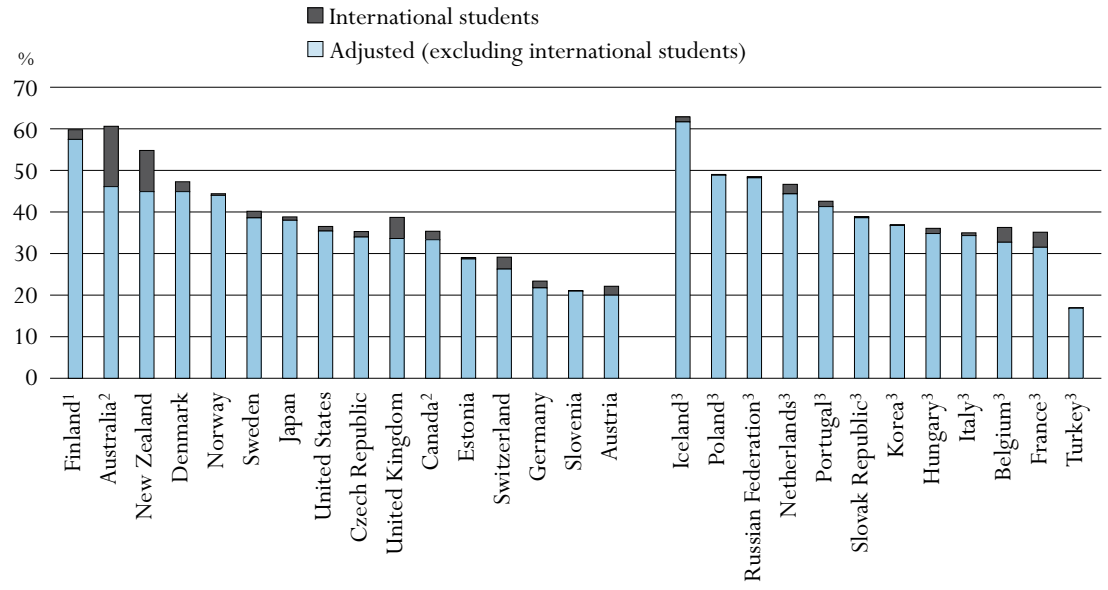
Graduation rates for first degrees are available for all countries; however, this is not the case for first-time graduation rates, as in some countries educational data reporting systems do not include sufficient information on first-time graduates.

In 2007, on average among OECD countries, more than one third of an age cohort are estimated to have completed their first degree at tertiary-type A level. The proportion exceeds 50% in Australia, Finland, Iceland and New Zealand. By contrast, the graduation rate is less than 20% in Mexico and Turkey and in the partner country Chile. The partner country Slovenia is the only country in which more people obtained their first degree from more occupationally oriented programmes (tertiary-type B) than from the largely theory-based programmes (tertiary-type A). In Korea and the partner country Chile, the rates of graduation from both types of programmes are similar (Table A3.3).

International students' contribution to graduate output

International students make a significant contribution to the tertiary graduate output in a number of countries and these students have a marked impact on estimated graduation rates. In order to compare graduation rates across countries it is important to examine the impact of international students on the graduate output.

Chart A3.4. Graduation rate at tertiary-type A level (first degree): impact of international students (2007)



1. First degrees programmes include second degrees.
2. Year of reference 2006.
3. The graduation rates at tertiary-type A first degree level are calculated for foreign students (defined on the basis of their country of citizenship). These data are not comparable with data on international graduates and are therefore presented separately.

Countries are ranked in descending order of the adjusted graduates in tertiary-type A first degree programmes.

Source: OECD. Table A3.3. See Annex 3 for notes (*www.oecd.org/edu/eag2009*).

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In Australia, New Zealand and to a lesser extent the United Kingdom, the impact of international students on the graduation rate at tertiary-type A first degrees level is represented by a drop of 15, 10 and 5 percentage points respectively. This pattern implies that the true domestic graduate output is significantly overestimated as a proportion of overall graduation rates. This is most significant for tertiary-type A second degree programmes in Australia and the United Kingdom, where graduation rates drop by 10 and 9 percentage points when international graduates are excluded. International graduates in advanced research programmes represent more than 40% of the graduate output in Switzerland and the United Kingdom. The contribution of international students to the graduate output is also significant at tertiary-type A first degree – although to a lesser extent (around 10% of the graduate output) – in Austria and Switzerland. Among countries for which data on student mobility are not available, the contribution of foreign students is 10% or more in Belgium and France (Chart A3.4).

Completion rate in tertiary education

Overall tertiary completion rates count as "completing" students who enter a tertiary-type A programme and who graduate with either a tertiary-type A or a type B qualification, or those who enter a tertiary-type B programme and who graduate with either a tertiary-type A or a tertiary-type B qualification. On average among the 18 OECD countries for which data are available in 2005, some 30% of tertiary students fail to successfully complete a programme equivalent to this level of education. Completion rates differ widely among OECD and partner countries. In Hungary and New Zealand, more than 40% of those who enter a tertiary programme leave without a tertiary qualification (either tertiary-type A or tertiary-type B) in contrast to their counterparts in Belgium (Flemish Community), Denmark, France, Germany and Japan and the partner country the Russian Federation, where the proportion is less than 25% (Chart A3.5).

The difference between the proportion of skilled jobs and the proportion of people with tertiary education (see Indicator A1) suggests that most countries may benefit from further increase in the output of tertiary graduates. Increasing the proportion of students who enter a tertiary programme and leave with a tertiary qualification can help to improve the internal efficiency of tertiary education systems, especially when a small proportion of upper secondary graduates enter tertiary education or when the graduation rate is relatively low compared to the OECD average. In terms of three variables (entry, graduation and completion rates), two countries may have similar graduation rates but significant differences on the two other variables, so that they should adopt different strategies to improve their internal efficiency. For example, Japan and Sweden had similar first-time graduation rates in 2007 (39% and 40%, respectively) but also significant differences in the level of entry and completion rates in tertiary-type A education. Whereas Japan counterbalances below-average entry rates into tertiary-type A programmes (41% in 2001 against 48% on average) with, at 91%, the highest completion rates among OECD and partner countries, Sweden had an entry rate well above the average in 2001 (69%) but a below-average completion rate (69%) (see Indicator A2).

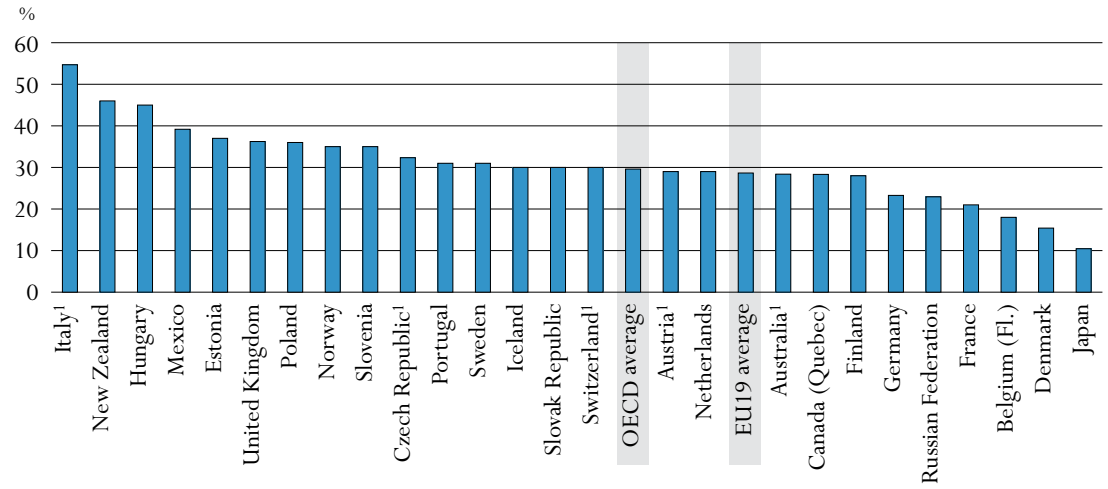
Completion rates in tertiary-type A and tertiary-type B education

On average among the 24 OECD countries for which data are available, some 31% of tertiary-type A students fail to successfully complete the programme they enter. However completion rates differ widely among OECD countries. In Hungary, Italy, New Zealand and the United States, less

than 60% of those who enter tertiary-type A programmes go on to successfully complete their programme, in contrast to their counterparts in Denmark, the United Kingdom and the partner country the Russian Federation where the completion rates are around 80%, and in Japan where it is 91%. Tertiary-type B completion rates are, at 64% on average, somewhat lower than those for tertiary-type A programmes, and again there is wide variation among countries. Tertiary-type B completion rates range from above 80% in Belgium (Flemish Community), Denmark and Japan to below 40% in New Zealand and the United States (Table A3.4).

OECD countries with low tuition fees in tertiary-type A education often debate whether they should increase those fees in order to improve completion rates. In fact, some OECD countries have already increased tuition fees (while exempting some students for academic merit), based on the idea that higher fees will increase students' incentives to finish their studies quickly. However, it is difficult to see a relationship between completion rates in tertiary-type A programmes and the level of tuition fees charged by tertiary-type A institutions. The countries in which tuition fees charged by tertiary-type A public educational institutions exceed USD 1 500 and with available completion rate data are Australia, Canada, Japan, the Netherlands, New Zealand, the United Kingdom and the United States (see Indicator B5). Completion rates are significantly lower than the OECD average (69%) in New Zealand and the United States but above 70% in the others. By way of contrast, Denmark does not charge tuition fees and provides a high level of public subsidies for students but has completion rates (81%) above the OECD average. This is not surprising because all indicators on tertiary education and especially on rates of return show that compared to upper secondary attainment, tertiary-type A educational attainment significantly benefits individuals in terms of earnings and employment. This can create a sufficiently big incentive, independently of the level of tuition fees, for students to finish their studies (see Indicator A10 in *Education at a Glance 2008*).

Chart A3.5. Proportion of students who enter a tertiary programme and leave without at least a first tertiary degree (2005)



1. Tertiary-type A programmes only.

Countries are ranked in descending order of the proportion of students who enter into a tertiary programme and leave without at least a first tertiary degree.

Source: OECD. Table A3.4. See Annex 3 for notes (*www.oecd.org/edu/eag2009*).

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Beginning a tertiary-type A programme but not graduating is not necessarily linked to failure if students can be successfully re-oriented towards tertiary-type B education. Thus, in France and to a lesser extent in Denmark and New Zealand, a significant proportion of students (15% in France and 3% in the other two) who have not completed tertiary-type A level are successfully re-oriented to tertiary-type B level. In other words, in France, out of 100 students who start a tertiary-type A programme, 64 will receive at least a first tertiary-type A qualification, 15 will be re-oriented to a tertiary-type B programme and only 21 will leave without a tertiary qualification. Re-orientation is more frequent in tertiary-type B education; in Iceland and New Zealand, 22% and 9%, respectively, of students who do not complete this level are re-oriented to a tertiary-type A programme. Among these countries, only New Zealand has a large proportion of students enrolled in tertiary-type B education (Table A3.4).

In addition, in some countries not all students follow courses offered in tertiary-type A education in order to obtain a degree. For instance, an individual might attend courses in a given programme on a part-time basis for professional development, with no intention of completing the associated degree. Some other tertiary students (generally mature students) may also follow courses that are not part of a programme leading to a degree to increase their lifelong learning perspectives.

Lastly, in some countries many students successfully complete some parts of a qualification but do not finish the whole programme. Non-completion of a degree does not mean that the acquired skills and competencies are lost and not valued by the labour market in these countries. In Sweden, students can leave a tertiary-type A programme before completing it, be employed for some time, and later decide to continue their studies. They do not lose the benefit of the modules that they successfully completed in the past. In some other countries, students may successfully complete all modules they undertake, yet never enrol in enough modules to complete the qualification. For example, in New Zealand, where part-time study is more common, it is estimated that around one in five students complete all modules they enrol in, yet never enrol in enough modules to complete the qualification. This tends to mask the performance of more traditional full-time students which in 2005 was 73% at tertiary-type A level (see Table A4.2 in *Education at a Glance 2008*).

Thus, the extent to which non-completion of tertiary education is a policy problem will vary between countries and completion rates should be interpreted with caution. It will be interesting to see if changes in the labour market over the next decades in OECD and partner countries will have an effect on the incentives for individuals to complete tertiary studies. If there is further expansion of tertiary education over the next decade (which is a feasible option in most countries), completion of tertiary programmes will be more highly valued on the labour market and the benefit of entering tertiary education without graduating with at least a first degree will be eroded (see Indicator A1).

Definitions and methodologies

Data refer to the academic year 2006/07 and are based on the UOE data collection on education statistics administered by the OECD in 2007 (for details see Annex 3 at *www.oecd.org/edu/eag2009*).

Tertiary graduates are those who obtain a tertiary qualification in the specified reference year. This indicator distinguishes among different categories of tertiary qualifications: *i)* tertiary-type B

qualifications (ISCED 5B); *ii)* tertiary-type A qualifications (ISCED 5A); and *iii)* advanced research degrees of doctorate standard (ISCED 6). For some countries, data are not available for these categories. In such cases, the OECD has assigned graduates to the most appropriate category (see Annex 3 at *www.oecd.org/edu/eag2009* for a list of programmes included for each country at the tertiary-type A and tertiary-type B levels). Tertiary-type A degrees are also subdivided by their corresponding total theoretical duration of studies, to allow for comparisons that are independent of differences in national degree structures.

In Table A3.1 to Table A3.3 (from 2005 onwards), graduation rates for tertiary programmes (tertiary-type A, tertiary-type B and advanced research programmes) are calculated as net graduation rates (*i.e.* as the sum of age-specific graduation rates). Net graduation rates represent the estimated percentage of the age cohort that will complete tertiary-type A/B education (based on current patterns of graduation). Gross graduation rates are presented for countries that are unable to provide such detailed data. In order to calculate gross graduation rates, countries identify the age at which graduation typically occurs (see Annex 1). The number of graduates, regardless of their age, is divided by the population at the typical graduation age. In many countries, defining a typical age of graduation is difficult, however, because graduates are dispersed over a wide range of ages.

In Table A3.2, data on trends in graduation rates at tertiary level for the years 1995, 2000, 2001, 2002, 2003 and 2004 are based on a special survey carried out in OECD countries and four of the six partner countries in January 2007.

Data on completion rates (Table A3.4) were collected through a special survey undertaken in 2007. The completion rate is calculated as the ratio of the number of students who graduate from an initial degree during the reference year to the number of new entrants in this degree *n* years before, with *n* being the number of years of full-time study required to complete the degree. The calculation of the completion rate is defined from a cohort analysis in one-half of the countries listed in Table A3.4 (true cohort method). The estimation for the other countries assumes constant student flows at the tertiary level, owing to the need for consistency between the graduate cohort in the reference year and the entrant cohort *n* years before (cross-section method). This assumption may be an oversimplification (see Annex 3 at *www.oecd.org/edu/eag2009*).

Drop outs are defined as students who leave the specified level without graduating from a first qualification at that level. The first qualification refers to any degree, regardless of the duration of study, obtained at the end of a programme that does not have a previous degree at the same level as a pre-requisite.

Further references

The following additional material relevant to this indicator is available on line at:

StatLink http://dx.doi.org/10.1787/664042306054

- ***Table A3.5. Percentage of tertiary graduates, by field of education (2007)***
- ***Table A3.6. Percentage of tertiary qualifications awarded to females at tertiary level, by field of education (2007)***
- ***Table A3.7. Science graduates among 25-34 year-olds in employment, by gender (2007)***
- ***Table A3.8. Trends in net graduation rates at advanced research qualification level (1995-2007)***

A3

Table A3.1.

Graduation rates in tertiary education (2007)

Sum of graduation rates for single year of age by programme destination and duration

		Tertiary-type B programmes (first-time graduation)				Tertiary-type A programmes (first-time graduation)							Advanced research programmes (Ph.D or equivalent)
						All programmes				Proportion of first-time graduation rates by duration of programmes (in %)			
										3 to less than 5 years	5 to 6 years	More than 6 years	
		M+F	Adjusted[1]	Males	Females	M+F	Adjusted[1]	Males	Females	M+F	M+F	M+F	M+F
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
OECD countries	Australia[2]	m	m	m	m	49.8	35.8	41.1	58.8	95	5	n	1.9
	Austria	7.1	m	6.7	7.6	22.1	20.0	20.4	23.9	35	65	n	1.8
	Belgium	m	m	m	m	m	m	m	m	m	m	m	1.3
	Canada[2]	m	m	m	m	30.6	m	23.1	38.5	m	m	m	1.0
	Czech Republic	4.8	4.7	2.8	6.9	34.9	33.7	29.8	40.4	48	43	10	1.4
	Denmark	10.9	10.4	11.5	10.4	47.3	44.1	36.9	57.9	57	42	n	1.3
	Finland	0.1	0.1	0.2	n	48.5	m	36.1	61.4	56	43	1	2.9
	France	m	m	m	m	m	m	m	m	m	m	m	1.4
	Germany	10.4	m	7.8	13.0	23.4	21.7	22.2	24.6	41	59	n	2.3
	Greece	12.1	m	10.7	13.6	17.7	m	11.9	23.9	m	m	m	1.4
	Hungary	3.9	m	2.3	5.7	29.4	m	19.7	39.5	69	31	n	0.7
	Iceland	2.4	2.4	2.2	2.6	63.1	61.6	39.5	88.7	83	17	n	0.2
	Ireland	23.7	m	24.2	23.1	45.0	m	36.5	53.6	54	46	n	1.4
	Italy[3]	m	m	m	m	35.0	34.3	28.2	42.0	71	29	n	1.3
	Japan	27.7	m	20.4	35.5	38.8	m	43.1	34.4	84	16	1	1.1
	Korea	m	m	m	m	m	m	m	m	m	m	m	1.1
	Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m
	Mexico	m	m	m	m	m	m	m	m	m	m	m	0.2
	Netherlands	n	m	n	n	42.8	m	37.9	47.9	m	m	m	1.6
	New Zealand	20.4	16.6	16.7	23.9	47.6	37.3	38.6	56.4	85	15	n	1.3
	Norway	1.0	m	0.8	1.1	43.4	m	30.8	56.3	82	12	5	1.5
	Poland	0.1	m	n	0.2	49.0	m	36.2	62.3	28	72	n	1.0
	Portugal	6.1	m	4.3	7.9	42.6	m	32.3	53.2	51	49	n	3.7
	Slovak Republic	0.9	m	0.5	1.4	38.9	m	27.2	51.0	29	71	n	1.6
	Spain	14.0	m	12.7	15.4	32.4	m	24.9	40.4	46	53	1	0.9
	Sweden	5.4	5.3	4.4	6.4	39.9	37.2	27.8	52.6	96	4	n	3.3
	Switzerland	18.3	m	23.2	13.4	31.4	m	32.1	30.7	63	24	13	3.3
	Turkey	12.1	m	13.1	11.2	m	m	m	m	85	14	1	0.3
	United Kingdom[4]	15.3	m	10.5	20.2	38.7	m	33.0	44.6	97	3	1	2.1
	United States	10.1	m	7.4	13.0	36.5	m	30.1	43.4	55	39	6	1.5
	OECD average	*9.4*		*8.3*	*10.6*	*38.7*		*30.8*	*46.9*	*64*	*34*	*2*	*1.5*
	EU19 average	*7.7*		*6.6*	*8.8*	*36.7*		*28.8*	*44.9*	*56*	*43*	*1*	*1.7*
Partner countries	Brazil	m	m	m	m	m	m	m	m	m	m	m	0.4
	Chile	m	m	m	m	m	m	m	m	m	m	m	0.1
	Estonia	m	m	m	m	m	m	m	m	m	m	m	0.8
	Israel	m	m	m	m	36.9	m	29.8	44.1	100	n	n	1.3
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	1.6
	Slovenia	24.6	m	19.2	30.3	20.2	m	13.4	27.4	67	33	n	1.4

Note: Please refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated, and those that are net importers may be overestimated. The adjusted graduation rates seek to compensate for that.

1. Adjusted graduation rates correspond to the graduation rate when international students are excluded. International students are defined on the basis of their country of citizenship for the Czech Republic, Iceland, Italy, Netherlands and the Russian Federation. International students include exchanges students in Sweden.
2. Year of reference 2006.
3. Advanced research programme graduates refer to 2006.
4. The graduation rates for tertiary-type B programmes include some graduates who have previously graduated at this level and therefore overestimate first-time graduation.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag2009).*

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

StatLink http://dx.doi.org/10.1787/664042306054

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Table A3.2.

Trends in tertiary graduation rates (1995-2007)

Sum of graduation rates for single year of age, by programme destination

		Tertiary-type A									Tertiary-type B								
		1995	2000	2001	2002	2003	2004	2005	2006	2007	1995	2000	2001	2002	2003	2004	2005	2006	2007
OECD countries	**Australia**	m	36	44	49	50	51	50	50	m	m	m	m	m	m	m	m	m	m
	Austria	10	15	17	18	19	20	20	21	22	m	m	m	m	m	7	8	7	7
	Belgium	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Canada	27	27	27	27	28	29	35	31	m	m	m	m	m	m	m	m	m	m
	Czech Republic	13	14	14	15	17	20	25	29	35	6	5	5	4	4	5	6	6	5
	Denmark	25	37	39	41	43	44	46	45	47	8	10	12	13	14	11	10	10	11
	Finland	20	41	45	49	48	47	48	48	48	34	7	4	2	1	n	a	a	a
	France	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Germany	14	18	18	18	18	19	20	21	23	13	11	11	10	10	10	11	11	10
	Greece	14	15	16	18	20	24	25	20	18	5	6	6	7	9	11	12	12	12
	Hungary	m	m	m	m	m	29	36	30	29	m	m	m	m	m	3	4	4	4
	Iceland	m	33	38	41	45	51	56	63	63	m	6	8	6	7	5	4	4	2
	Ireland	m	30	29	32	37	39	38	39	45	m	15	20	13	19	20	24	27	24
	Italy	m	19	21	25	m	36	41	39	35	m	n	1	1	m	n	n	n	m
	Japan	25	29	32	33	34	35	36	39	39	28	29	27	27	26	26	27	28	28
	Korea	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Mexico	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Netherlands	29	35	35	37	38	40	42	43	43	m	m	m	m	m	m	n	n	n
	New Zealand	33	50	51	46	49	50	51	52	48	12	17	17	18	20	21	21	24	20
	Norway	26	37	40	38	39	45	41	43	43	6	6	6	5	5	3	2	1	1
	Poland	m	34	40	43	44	45	45	47	49	m	m	m	n	n	n	n	n	n
	Portugal	15	23	28	30	33	32	32	33	43	6	8	8	7	7	8	9	9	6
	Slovak Republic	15	m	m	23	25	28	30	35	39	1	2	2	3	2	3	2	1	1
	Spain	24	30	31	32	32	33	33	33	32	2	8	11	13	16	17	17	15	14
	Sweden	24	28	29	32	35	37	38	41	40	m	4	4	4	4	4	5	5	5
	Switzerland	9	12	19	21	22	26	27	30	31	13	14	11	11	12	12	8	10	18
	Turkey	6	9	9	10	11	11	11	15	m	m	m	m	m	m	m	m	11	12
	United Kingdom[1]	m	37	37	37	38	39	39	39	39	m	m	12	12	14	16	17	15	15
	United States	33	34	33	32	32	33	34	36	37	9	8	8	8	9	9	10	10	10
	OECD average	***20***	***28***	***30***	***31***	***33***	***35***	***36***	***37***	***39***	***11***	***9***	***10***	***9***	***10***	***9***	***9***	***9***	***10***
	OECD average for countries with 1995 and 2007 data	***18***								***36***	***11***								***11***
	EU19 average	***18***	***27***	***29***	***30***	***32***	***33***	***35***	***35***	***37***	***9***	***7***	***8***	***7***	***8***	***8***	***8***	***8***	***8***
Partner countries	**Brazil**	m	10	10	13	15	m	m	m	m	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Estonia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Israel	m	m	m	29	31	32	35	36	37	m	m	m	m	m	m	m	m	m
	Russian Federation	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
	Slovenia	m	m	m	m	m	m	18	21	20	m	m	m	m	m	m	24	26	25

Note: Up to 2004, graduation rates at the tertiary-type A or B levels were calculated on a gross basis. From 2005 and for countries with available data, graduation rates are calculated as net graduation rates (*i.e.* as the sum of age-specific graduation rates).
Please refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.
1. The graduation rates for tertiary-type B programmes include some graduates who have previously graduated at this level and therefore overestimate first-time graduation.
Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag2009).*
Please refer to the Reader's Guide for information concerning the symbols replacing missing data.
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Table A3.3.

Graduation rate at different tertiary levels (2007)

Sum of graduation rates for single year of age (including or excluding international/foreign students) by programme destination

		Tertiary-type B programmes (first degree)		Tertiary-type A programmes (first degree)		Tertiary-type A programmes (second degree)		Advanced research programmes	
		Graduation rate (all students)	Adjusted graduation rate (excluding international/foreign students)	Graduation rate (all students)	Adjusted graduation rate (excluding international/foreign students)	Graduation rate (all students)	Adjusted graduation rate (excluding international/foreign students)	Graduation rate (all students)	Adjusted graduation rate (excluding international/foreign students)
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
OECD countries	**Australia**[1, 2]	16.7	m	60.6	46.1	17.9	7.7	1.9	1.5
	Austria[1]	7.1	7.0	22.1	20.0	1.7	1.5	1.8	1.4
	Belgium[3]	30.9	28.8	36.3	32.7	10.6	8.2	1.3	0.9
	Canada[1, 2]	m	m	35.4	33.3	8.5	7.4	1.0	0.9
	Czech Republic[1]	4.8	m	35.3	34.0	10.9	10.3	1.4	1.3
	Denmark[1]	12.0	11.5	47.3	44.9	17.2	15.4	1.3	1.2
	Finland[4]	0.1	0.1	59.8	57.5	0.8	x(4)	2.9	2.6
	France[3]	25.2	24.4	35.1	31.5	13.9	11.0	1.4	1.0
	Germany[4]	10.4	m	23.4	21.7	2.0	1.4	2.3	2.0
	Greece	12.8	m	20.3	m	5.0	m	1.4	m
	Hungary[3]	4.5	4.5	36.1	34.8	5.7	5.6	0.7	0.7
	Iceland[3]	2.6	2.6	62.9	61.7	14.0	13.5	0.2	0.2
	Ireland	23.7	m	45.0	m	17.8	m	1.4	m
	Italy[3, 5]	0.7	0.7	35.0	34.3	19.1	18.6	1.3	1.2
	Japan[1]	27.7	26.9	38.8	38.0	5.5	5.1	1.1	0.9
	Korea[3]	34.4	34.3	36.9	36.8	3.8	3.7	1.1	1.0
	Luxembourg	m	m	m	m	m	m	m	m
	Mexico	1.3	m	18.6	m	2.8	m	0.2	m
	Netherlands[3]	n	n	46.6	44.4	13.5	12.9	1.6	m
	New Zealand[1]	24.9	20.4	54.8	44.9	15.9	13.2	1.3	1.1
	Norway[1]	1.0	1.0	44.4	44.0	12.0	11.7	1.5	1.4
	Poland[3]	1.0	m	49.0	48.8	33.9	33.8	1.0	m
	Portugal[3]	6.1	6.0	42.6	41.3	2.9	2.8	3.7	3.4
	Slovak Republic[3]	0.9	m	38.9	38.6	11.7	11.6	1.6	1.6
	Spain	14.0	m	28.6	m	1.0	m	0.9	m
	Sweden[1]	5.5	5.4	40.2	38.6	3.7	3.1	3.3	3.1
	Switzerland[4]	25.0	m	29.1	26.3	9.4	7.6	3.3	1.9
	Turkey[3]	12.1	12.1	17.0	16.9	2.6	2.6	0.3	0.3
	United Kingdom[1]	15.3	14.2	38.7	33.6	22.3	13.8	2.1	1.2
	United States[1]	10.1	10.0	36.5	35.4	16.1	14.5	1.5	1.0
	OECD average	***11.8***		***38.5***		***10.4***		***1.5***	
	EU19 average	***11.3***		***37.9***		***8.7***		***1.6***	
Partner countries	**Brazil**	m	m	24.6	m	1.1	m	0.4	m
	Chile	15.3	m	15.7	m	2.9	m	0.1	m
	Estonia[1]	22.9	22.9	29.0	28.7	10.9	10.5	0.8	0.8
	Israel	0.0	m	36.9	m	13.9	m	1.3	m
	Russian Federation[3]	27.2	27.1	48.5	48.2	0.5	m	1.6	m
	Slovenia[1]	28.5	28.3	21.1	21.0	3.6	3.5	1.4	1.3

Note: Please refer to Annex 1 for information on the method used to calculate graduation rates (gross rates versus net rates) and the corresponding typical ages.

Mismatches between the coverage of the population data and the graduate data mean that the graduation rates for those countries that are net exporters of students may be underestimated and those that are net importers may be overestimated. The adjusted graduation rates seek to compensate for that.

1. International graduates are defined on the basis of their country of residence.
2. Year of reference 2006.
3. The graduation rates are calculated for foreign students (defined on the basis of their country of citizenship). These data are not comparable with data on international graduates and are therefore presented separately in the Chart A3.4.
4. International graduates are defined on the basis of their country of prior education.
5. Advanced research programme graduates refer to 2006.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag2009)*.

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

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Table A3.4.

Completion rates in tertiary education (2005)

Calculated separately for tertiary-type A and tertiary-type B programmes: Number of graduates from these programmes divided by the number of new entrants to these programmes in the typical year of entrance.

		Method	Year used for new entrants: 5A	Year used for new entrants: 5B	Tertiary education: Completion rates (at least first 5B or 5A programme) [1]	Tertiary education: Leaving without tertiary qualification	Tertiary-type A education: 5A completion rates (at least first 5A programme) [2]	Tertiary-type A education: Not completed 5A level but re-oriented with success at 5B level	Tertiary-type B education: 5B completion rates (at least first 5B programme) [3]	Tertiary-type B education: Not completed 5B level but re-oriented with success at 5A level
			(1)	(2)	(3)	(4)	(5)	(6)		
OECD countries	**Australia**	Cross-section	2003-05	m	m	m	72	m	m	m
	Austria	Cross-section	2000-03	m	m	m	71	m	m	m
	Belgium (Fl.)	Cross-section	1998-2001	2003-04	82	18	76	m	88	m
	Canada (Quebec)	True cohort	2000	2000	72	28	75	n	63	n
	Czech Republic	Cross-section	m	m	m	m	68	m	m	m
	Denmark[4]	True cohort	1995-96	1995-96	85	15	81	3	88	3
	Finland	True cohort	1995	1995	72	28	72	a	a	a
	France	True cohort	1996-2003	1996-2003	79	21	64	15	78	2
	Germany	Cross-section	2001-02	2003-04	77	23	77	n	77	n
	Greece	m	m	m	m	m	m	m	m	m
	Hungary	Cross-section	2001-04	2004-05	55	45	57	m	44	m
	Iceland	True cohort	1996-97	1996-97	70	30	66	1	55	22
	Ireland	m	m	m	m	m	m	m	m	m
	Italy	True cohort	1998-99	1998-99	m	m	45	m	m	m
	Japan	Cross-section	2000 and 2002	2004	90	10	91	m	87	m
	Korea	m	m	m	m	m	m	m	m	m
	Luxembourg	m	m	m	m	m	m	m	m	m
	Mexico	Cross-section	2002-03	2004-05	61	39	61	a	64	a
	Netherlands	True cohort	1997-98	1997-98	71	29	71	a	m	m
	New Zealand	True cohort	1998	1998	54	46	58	3	30	9
	Norway	True cohort	1994-95	1994-95	65	35	67	m	66	m
	Poland	Cross-section	2001-04	2003-04	64	36	63	m	71	m
	Portugal	Cross-section	2001-06	2004	69	31	73	m	59	m
	Slovak Republic	Cross-section	2000-03	2003-04	70	30	70	m	72	m
	Spain	m	m	m	m	m	m	m	m	m
	Sweden	True cohort	1995-96	1995-96	69	31	69	1	m	m
	Switzerland	True cohort	1996-2001	1996-2001	m	m	70	m	m	m
	Turkey	m	m	m	m	m	m	m	m	m
	United Kingdom	Cross-section	2003-04	2003-04	64	36	79	m	43	m
	United States[4]	True cohort	1999	2002	47	m	56	m	33	m
	OECD average				***69***	***30***	***69***	***~***	***64***	***~***
	EU19 average				***71***	***29***	***69***	***~***	***62***	***~***
Partner countries	**Brazil**	m	m	m	m	m	m	m	m	m
	Chile	m	m	m	m	m	m	m	m	m
	Estonia	Cross-section	2003	2003	63	37	67	m	59	m
	Israel	m	m	m	m	m	m	m	m	m
	Russian Federation	Cross-section	2001-02	2002-03	77	23	79	m	76	m
	Slovenia	Cross-section	2001-02	2001-02	65	35	64	m	67	m

Note: The cross section method refers to the number of graduates in the calendar year 2005 and is calculated according to the traditional OECD approach, taking into account different durations. True section method is defined from a cohort analysis and based on Panel data.

1. Completion rates in tertiary education represent the proportion of those who enter a tertiary-type A or a tertiary-type B programme, who go on to graduate from either at least a first tertiary-type A or a first tertiary-type B programme.
2. Completion rates in tertiary-type A education represent the proportion of those who enter a tertiary-type A programme, who go on to graduate from at least a first tertiary-type A programme.
3. Completion rates in tertiary-type B education represent the proportion of those who enter a tertiary-type B programme, who go on to graduate from at least a first tertiary-type B programme.
4. Only full-time students.

Source: OECD. See Annex 3 for notes *(www.oecd.org/edu/eag2009).*

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

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