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*Chapter*

**C**

# ACCESS TO EDUCATION, PARTICIPATION AND PROGRESSION



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*Chapter C looks at access to education, participation and progression, in terms of...*

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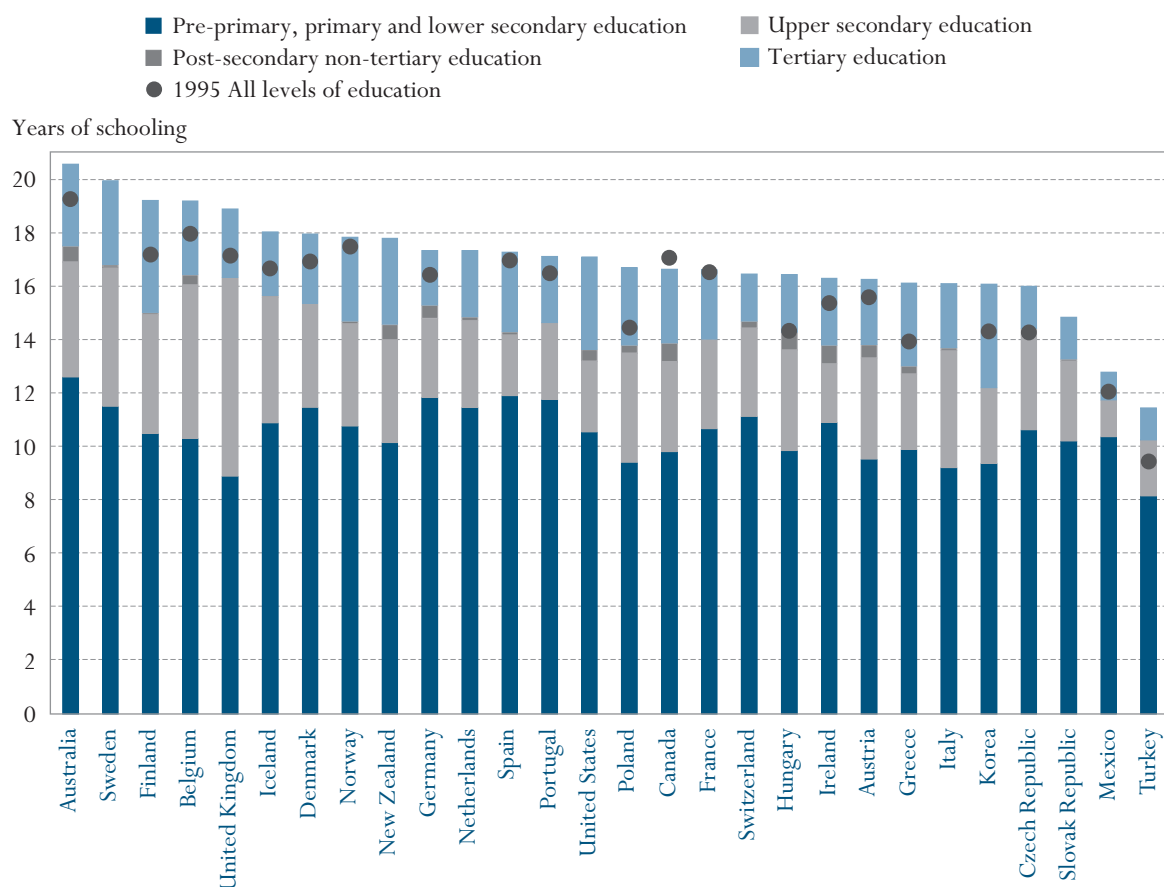
## INDICATOR C1: SCHOOL EXPECTANCY AND ENROLMENT RATES

- In 25 out of 28 OECD countries, individuals participate in formal education for between 16 and 20 years, on average. Most of the variation among countries on this measure derives from differences in enrolments in upper secondary education.
- School expectancy increased between 1995 and 2001 in 20 out of 21 OECD countries reporting comparable data.
- In half of the OECD countries, more than 70 per cent of children aged three to four are enrolled in either pre-primary or primary programmes. At the other end of the spectrum, a 17-year-old can expect to spend an average of 2.6 years in tertiary education.
- In the majority of OECD countries, females can expect to receive 0.5 more years, on average, of education than males.

Chart C1.1

### School expectancy (2001)

*Expected years of schooling under current conditions, excluding education for children under five years of age, by level of education*



Countries are ranked in descending order of the total school expectancy for all levels of education in 2001.

Source: OECD. Table C1.1. See Annex 3 for notes ([www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003)).

## Policy context

A well-educated population is critical for a country's economic and social development, present and future. Societies therefore, have an intrinsic interest in ensuring broad access to a wide variety of educational opportunities for children and adults. Early childhood programmes prepare children for primary education. They can provide help to combat linguistic and social disadvantages and provide opportunities to enhance and complement home educational experiences. Primary and secondary education lay the foundations for a wide range of competencies and prepare young people to become lifelong learners and productive members of society. Tertiary education provides a range of options for acquiring advanced knowledge and skills, either immediately after school or later.

This indicator presents several measures of participation in education to elucidate levels of access to education in different OECD countries. Enrolment trends at different levels of education are also presented as an indicator of the evolution of access to education.

## Evidence and explanations

### Overall participation in education

One way of looking at participation in education is to estimate the number of years during which a five-year-old child can expect to be in either full-time or part-time education during his/her lifetime, given current enrolment rates. *School expectancy* is estimated by taking the sum of enrolment rates for each single year of age, starting at age five (Chart C1.1). In OECD countries, a child in Mexico and Turkey can expect to be in education for 12 years or less, compared to 19 or more years in Australia, Belgium, Finland, Sweden and the United Kingdom.

Most of the variation in school expectancy among OECD countries comes from differences in enrolment rates in upper secondary education. Relative differences in participation are large at the tertiary level, but apply to a smaller proportion of the cohort and therefore have less of an effect on school expectancy.

Measures of the average length of schooling like *school expectancy* are affected by participation rates over the life cycle and therefore underestimate the actual number of years of schooling in systems where access to education is expanding. Nor does this measure distinguish between full-time and part-time participation. OECD countries with relatively large proportions of part-time enrolments will therefore tend to have relatively high values. In Australia, Belgium, Portugal, Sweden and the United Kingdom, part-time education accounts for three or more years of school expectancy (Table C1.1).

In OECD countries where school expectancy at a given level of education exceeds the number of grades at that level, repeating a level (or, in the case of Australia, the number of adults enrolling in those programmes) has a greater impact on school expectancy than the proportion of students leaving school before completing that level of education.

*This indicator examines enrolments at all levels of education.*

*In 25 out of 28 OECD countries, individuals participate in formal education for between 16 and 20 years, on average.*

*Most of the variation comes from differences in enrolment rates in upper secondary education.*

*Long school expectancy does not necessarily imply that all young people have access to higher levels of education...*

Enrolment rates are influenced by entry rates to a particular level of education and by the typical duration of studies. A high number of expected years in education, therefore, does not necessarily imply that all young people will participate in education for a long time. Belgium and Sweden, where five-year-olds can expect to be in school for more than 19 years, have nearly full enrolment (rates over 90 per cent) for 15 and 13 years of education, respectively. Conversely, Australia and Finland, which have equally high school expectancy, have nearly full enrolment (rates over 90 per cent) for only 12 years of education (Table C1.2).

*...but in most OECD countries, virtually all young people receive at least 12 years of formal education.*

In most OECD countries, virtually all young people have access to 12 years of formal education. At least 90 per cent of students are enrolled in an age band spanning 14 or more years in Belgium, France and Japan. Mexico and Turkey, by contrast, have enrolment rates exceeding 90 per cent for a period of seven years or less (Table C1.2).

*In the majority of OECD countries, females can expect to receive 0.5 more years, on average, of education than males.*

In the majority of OECD countries, females can expect to receive 0.5 more years, on average, of education than males. The variation in school expectancy is generally greater for females than for males. Some OECD countries show sizeable gender differences. In Korea, Switzerland and Turkey, males can expect to receive between 0.6 and 1.9 years more education than females. The opposite is true in Belgium, Finland, Iceland, New Zealand, Norway, Sweden and the United Kingdom, where the expected duration of enrolment for females exceeds that of males by more than one year (in Sweden by more than three years) (Table C1.1).

*School expectancy increased between 1995 and 2001 in 20 out of 21 OECD countries.*

### **Trends in participation in education**

School expectancy increased between 1995 and 2001 in 20 out of 21 OECD countries for which comparable trend data are available (Table C1.1). In Greece, Hungary, Poland and Turkey, the increase was 15 per cent or more over this relatively short period.

*In half of the OECD countries, over 70 per cent of children aged three to four are enrolled in either pre-primary or primary programmes.*

### **Participation in early childhood education**

In the majority of OECD countries, universal enrolment, which is defined here as enrolment rates exceeding 90 per cent, starts between the ages of five and six years. However, in Belgium, the Czech Republic, Denmark, France, Germany, Hungary, Iceland, Italy, Japan, New Zealand, Norway, Spain, Sweden and the United Kingdom, over 70 per cent of children aged three to four are already enrolled in either pre-primary or primary programmes (Table C1.2). Their enrolment rates range from under 22 per cent in Canada, Korea, Switzerland and Turkey, to over 90 per cent in Belgium, France, Iceland, Italy and Spain.

Given the impact of early childhood education and care on building a strong foundation for lifelong learning and on ensuring equitable access to learning opportunities later, pre-primary education is very important. However, institutionally based pre-primary programmes covered by this indicator are not the only form of quality early childhood education and care. Inferences about access to and quality of pre-primary education and care should therefore be made very carefully.

### Participation towards the end of compulsory education and beyond

Several factors, including a higher risk of unemployment and other forms of exclusion for young people with insufficient education, influence the decision to stay enrolled beyond the end of compulsory education. In many OECD countries, the transition from education to employment has become a longer and more complex process that provides the opportunity or the obligation for students to combine learning and work to develop marketable skills (see Indicator C4).

Compulsory education in OECD countries ends between the ages of 14 (Korea, Portugal and Turkey) and 18 (Belgium, Germany and the Netherlands), and in most countries at age 15 or 16 (Table C1.2). However, the statutory age at which compulsory education ends does not always correspond to the age at which enrolment is universal.

While participation rates in most OECD countries are high until the end of compulsory education, they drop below 90 per cent before the age at which students are no longer legally required to be enrolled in school in Mexico, the Netherlands, Turkey and the United States. In the Netherlands and the United States, this may be due in part to the fact that compulsory education ends at age 18 and 17 respectively, which is comparatively high. By contrast, in 20 OECD countries, virtually all children remain in school beyond the age at which compulsory education ends (Table C1.2).

In most OECD countries, enrolment rates gradually decline starting in the last years of upper secondary education. There are several noteworthy exceptions, however where enrolment rates remain relatively high until the age of 20 to 29. In Australia, Belgium, Poland and the Nordic countries, for example, enrolment rates for 20 to 29-year-olds still exceed 25 per cent (Table C1.2)

### The transition to post-secondary education

Graduates of upper secondary programmes who decide not to enter the labour market upon graduation and people who are already working and want to upgrade their skills can choose from a wide range of post-secondary programmes. In OECD countries, tertiary programmes vary in the extent to which they are theoretically based and designed to prepare students for advanced research programmes or professions with high skill requirements (tertiary-type A), or focus on occupationally specific skills so that students can directly enter the labour market (tertiary-type B). The institutional location of programmes used to give a relatively clear idea of their nature (*e.g.*, university versus non-university institutions of higher education), but these distinctions have become blurred and are therefore not applied in the OECD indicators.

Upper secondary graduates in many education systems can also enrol in relatively short programmes (less than two years) to prepare for trades or specific vocational fields. These programmes are offered as advanced or second upper secondary programmes in some OECD countries (*e.g.*, Austria, Germany, Hungary and Spain); in others they are offered in post-secondary education (*e.g.*,

*Compulsory education ends between the ages of 14 and 18 in OECD countries, and in most countries at age 15 or 16.*

*Participation in education tends to be high until the end of compulsory education, but in four OECD countries, more than 10 per cent of students never finish compulsory education.*

*In Australia, Belgium, Poland and the Nordic countries, one out of four 20 to 29-year-olds participates in education.*

*Post-secondary non-tertiary programmes are offered in 25 out of 29 OECD countries.*

Canada and the United States). From an internationally comparable point of view, these programmes straddle upper secondary and tertiary education and are therefore classified as a different level of education (post-secondary non-tertiary education). In 25 out of 29 OECD countries, these kinds of programmes are offered to upper secondary graduates (see Table C1.1).

### Participation in tertiary education

*On average in OECD countries, a 17-year-old can expect to receive 2.6 years of tertiary education.*

On average in OECD countries, a 17-year-old can expect to receive 2.6 years of tertiary education. Both tertiary entry rates and the typical duration of study affect the expectancy of tertiary education. In Australia, Finland, Greece, Korea, New Zealand, Norway, Spain, Sweden and the United States, the figure is three years or more. In the Czech Republic, Mexico, the Slovak Republic and Turkey, by contrast, the expectancy of tertiary education is 1.6 years or less (see Table C1.1 and Indicator C2).

*Policies to expand education have, in many OECD countries, increased pressure for greater access to tertiary education.*

Policies to expand education have increased pressure for greater access to tertiary education in many OECD countries. Thus far, this pressure has more than compensated for declines in cohort sizes which had led, until recently, to predictions of stable or declining demand from school leavers in several OECD countries. Whereas some OECD countries are now showing signs of a levelling demand for tertiary education, the overall trend remains upward.

### Definitions and methodologies

*Data refer to 2000–2001 and are based on the VOE data collection on education statistics, which is administered annually by the OECD, and the 2002 World Education Indicators Programme.*

Except where otherwise noted, figures are based on head counts, that is, they do not distinguish between full-time and part-time study. A standardised distinction between full-time and part-time participants is very difficult because in several OECD countries, the concept of part-time study is not recognised, although in practice, at least some students would be classified as part-time by other countries. For some OECD countries, part-time education is not completely covered by the reported data.

The average length of time a five-year-old can expect to be formally enrolled in school during his/her lifetime, or *school expectancy*, is calculated by adding the net enrolment percentages for each single year of age from five onwards. The average duration of schooling for the cohort will reflect any tendency to lengthen (or shorten) studies in subsequent years. When comparing data on school expectancy, however, it must be borne in mind that neither the length of the school year nor the quality of education is necessarily the same in each country.

Net enrolment rates expressed as percentages in Table C1.2 are calculated by dividing the number of students of a particular age group enrolled in all levels of education by the size of the population of that age group. Table C1.1 shows the index of change in school expectancy between 1995 and 2001. Enrolment data for 1994–1995 were obtained through a special survey in 2000 and follow the ISCED-97 classification.



Table C1.1  
**School expectancy (2001)**  
*Expected years of schooling under current conditions, excluding education for children under the age of five*

		2001								Index of change in school expectancy for all levels of education combined (1995=100)	
		Full-time and part-time						Full-time	Part-time		
		All levels of education combined			Primary and lower secondary education	Upper secondary education	Post-secondary non-tertiary education	Tertiary education	All levels of education combined		All levels of education combined
		M+F	Males	Females	M+F			M+F			M+F
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
OECD COUNTRIES	Australia*	20.6	20.3	20.9	11.9	4.3	0.6	3.1	15.5	5.0	107
	Austria*	16.3	16.2	16.3	8.2	3.8	0.5	2.4	16.3	n	104
	Belgium*	19.2	18.6	19.8	9.3	5.7	0.4	2.8	16.2	3.0	107
	Canada	16.6	16.4	16.9	8.8	3.4	0.7	2.8	15.7	1.0	98
	Czech Republic	16.0	15.9	16.1	9.1	3.6	0.2	1.6	15.8	0.2	112
	Denmark	18.0	17.5	18.5	9.6	3.9	n	2.6	18.0	n	106
	Finland*	19.2	18.5	20.0	9.1	4.5	0.1	4.2	19.2	n	112
	France	16.6	16.4	16.8	9.5	3.3	n	2.6	16.6	n	101
	Germany*	17.3	17.5	17.2	10.1	3.0	0.5	2.1	17.3	0.1	106
	Greece	16.1	15.9	16.4	9.0	2.8	0.3	3.1	15.9	0.2	116
	Hungary*	16.4	16.2	16.7	8.1	3.8	0.7	2.2	14.8	1.6	115
	Iceland	18.0	17.3	18.8	9.9	4.7	0.1	2.4	16.2	1.8	108
	Ireland*	16.3	15.8	16.8	10.8	2.2	0.7	2.5	15.3	1.0	106
	Italy*	16.1	15.7	16.4	8.2	4.4	0.1	2.4	16.0	0.1	m
	Japan	m	m	m	9.1	3.0	m	m	m	m	m
	Korea	16.1	17.0	15.1	8.9	2.8	m	3.9	16.1	n	112
	Luxembourg	m	m	m	9.1	3.6	0.1	m	m	m	m
	Mexico	12.8	12.7	12.8	9.5	1.4	m	1.1	12.6	n	105
	Netherlands	17.3	17.5	17.2	10.5	3.3	0.1	2.5	16.5	0.8	m
	New Zealand	17.8	17.0	18.6	10.1	3.8	0.6	3.2	15.5	2.3	m
	Norway	17.8	17.2	18.5	9.9	3.8	0.1	3.1	16.6	1.2	102
	Poland	16.7	16.2	17.2	8.0	4.1	0.3	2.9	14.6	2.1	116
	Portugal	17.1	16.7	17.6	10.8	2.9	m	2.5	13.8	3.3	104
	Slovak Republic	14.9	14.8	15.0	9.0	3.0	0.1	1.6	14.2	0.6	m
Spain	17.3	16.9	17.7	10.9	2.3	0.1	3.0	16.7	0.6	102	
Sweden	20.0	18.5	21.6	9.7	5.2	0.1	3.2	16.5	3.5	m	
Switzerland	16.5	16.8	16.1	9.5	3.3	0.3	1.8	16.0	0.4	m	
Turkey*	11.5	12.2	10.3	8.0	2.1	m	1.2	11.5	n	121	
United Kingdom	18.9	17.9	19.9	8.9	7.4	m	2.6	14.6	4.3	110	
United States	17.1	16.7	17.5	9.5	2.7	0.4	3.5	15.5	1.6	m	
	<b>Country mean</b>	<b>16.9</b>	<b>16.6</b>	<b>17.2</b>	<b>9.4</b>	<b>3.6</b>	<b>0.2</b>	<b>2.6</b>	<b>15.7</b>	<b>1.2</b>	<b>108</b>
NON-OECD COUNTRIES	Argentina <sup>1</sup>	17.0	16.3	17.6	10.8	2.2	m	3.0	14.7	2.2	m
	Brazil <sup>1</sup>	15.7	15.4	15.9	10.8	2.7	m	0.9	15.7	n	m
	Chile <sup>1</sup>	14.8	15.0	14.6	8.4	3.5	m	1.7	14.8	n	m
	China	11.7	m	m	8.9	1.2	m	0.6	11.2	0.5	m
	Egypt	11.3	11.6	10.9	8.0	2.0	0.1	1.1	11.2	0.1	m
	Indonesia	11.2	11.4	11.0	8.9	1.2	m	0.7	11.2	n	m
	Israel	15.6	15.4	15.7	8.6	3.1	0.1	2.7	15.1	0.4	m
	Jamaica	13.2	m	m	9.2	1.6	0.7	0.8	12.8	0.4	m
	Malaysia <sup>1</sup>	12.6	12.3	12.9	8.6	1.8	0.2	1.3	12.4	0.1	m
	Paraguay <sup>1</sup>	11.9	11.9	11.9	9.2	1.4	m	0.6	11.9	n	m
	Peru <sup>1</sup>	13.5	13.4	13.6	10.3	1.4	0.5	0.6	13.5	n	m
	Philippines <sup>1</sup>	11.9	11.8	12.0	9.3	0.7	0.2	1.4	11.9	n	m
	Russian Federation	14.6	m	m	7.0	1.2	0.7	3.2	14.6	m	m
	Thailand	13.2	13.2	13.2	9.6	2.4	n	2.0	13.2	m	m
	Tunisia	13.7	m	m	9.9	2.3	n	1.0	13.7	n	m
	Uruguay <sup>1</sup>	15.8	15.5	16.0	10.0	2.6	m	1.9	15.8	n	m
	Zimbabwe	12.2	12.6	11.8	9.6	1.3	n	0.2	12.2	n	m

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2. 1. Year of reference 2000.

\* See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Source: OECD.

Table C1.2

**Enrolment rates (2001)**

Full-time and part-time students in public and private institutions, by age

	Ending age of compulsory education	Number of years at which over 90% of the population are enrolled	Age range at which over 90% of the population are enrolled	Students aged:					
				4 and under as a percentage of the population of 3 to 4-year-olds	5-14 as a percentage of the population of 5 to 14-year-olds	15-19 as a percentage of the population of 15 to 19-year-olds	20-29 as a percentage of the population of 20 to 29-year-olds	30-39 as a percentage of the population of 30 to 39-year-olds	40 and over as a percentage of the population of over 40-year-olds
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>OECD COUNTRIES</b>									
Australia	15	12	5 - 16	38.1	100.1	81.1	28.3	14.4	6.6
Austria	15	12	5 - 16	62.1	98.7	76.9	18.6	4.1	0.4
Belgium*	18	15	3 - 17	119.4	100.2	91.0	26.5	7.3	2.9
Canada	16	12	6 - 17	20.8	97.2	75.0	21.2	4.3	1.1
Czech Republic	15	13	5 - 17	76.5	99.8	87.8	14.7	1.1	0.1
Denmark	16	11	4 - 15	84.6	97.2	82.9	31.5	5.7	0.9
Finland	16	12	6 - 17	38.7	93.5	85.3	39.2	10.4	2.1
France*	16	15	3 - 17	119.3	101.0	86.6	19.6	1.7	a
Germany	18	12	6 - 17	70.4	100.1	89.4	24.2	2.8	0.2
Greece	15	10	6 - 16	29.2	98.1	77.0	23.8	0.3	n
Hungary	16	12	5 - 16	80.7	99.4	79.0	20.0	3.8	0.4
Iceland*	16	13	4 - 16	122.7	98.9	79.2	30.1	6.8	1.9
Ireland*	15	12	5 - 16	26.1	100.6	80.9	16.6	3.0	x(8)
Italy*	15	13	3 - 15	98.9	99.4	72.2	17.1	2.0	x(8)
Japan	15	14	4 - 17	76.8	101.0	m	m	m	m
Korea	14	12	6 - 17	18.2	92.6	79.3	25.0	1.6	0.3
Luxembourg	15	11	4 - 15	68.8	92.2	78.1	6.0	0.3	n
Mexico	15	7	6 - 12	35.2	95.0	41.0	9.1	2.9	0.4
Netherlands	18	13	4 - 16	48.9	99.3	86.2	24.3	3.2	0.7
New Zealand	16	12	4 - 15	85.9	99.3	73.0	23.4	10.0	3.4
Norway	16	12	6 - 17	75.9	97.6	85.3	26.3	6.3	1.4
Poland	15	12	6 - 17	29.0	94.3	85.5	25.8	3.8	x(8)
Portugal	14	11	5 - 15	67.9	107.0	73.3	21.7	3.4	0.6
Slovak Republic	16	11	6 - 16	68.5	97.9	74.6	12.0	1.3	0.2
Spain*	16	12	4 - 16	107.5	103.6	80.1	23.5	2.5	0.4
Sweden*	16	13	6 - 18	73.1	98.1	86.4	33.0	14.6	3.6
Switzerland	15	11	6 - 16	21.5	98.7	83.3	19.7	3.5	0.2
Turkey*	14	6	7 - 12	n	83.5	30.0	5.4	0.3	n
United Kingdom*	16	12	4 - 15	81.0	98.7	74.7	23.3	13.0	5.7
United States	17	11	5 - 15	47.4	102.1	77.6	22.6	4.9	1.2
<b>Country mean</b>	<b>16</b>	<b>12</b>		<b>63.1</b>	<b>98.2</b>	<b>77.7</b>	<b>21.8</b>	<b>4.8</b>	<b>1.3</b>
<b>NON-OECD COUNTRIES</b>									
Argentina <sup>1</sup>	14	10	5 - 14	39.1	105.6	65.8	23.3	5.4	1.4
Brazil <sup>1</sup>	14	9	7 - 15	25.4	89.8	74.6	20.8	6.7	1.8
Chile <sup>1</sup>	14	9	6 - 14	23.1	93.6	67.8	m	m	m
China	14	5	7 - 12	n	81.7	m	m	m	m
Egypt	13	6	6 - 12	6.7	85.3	32.4	m	n	n
India <sup>1</sup>	14	m	m	m	m	m	m	m	m
Indonesia	15	7	6 - 13	n	86.4	44.8	3.4	n	n
Israel	15	11	5 - 16	104.6	96.9	63.3	15.1	3.6	0.8
Jamaica	12	11	4 - 14	70.9	97.8	40.6	m	m	m
Malaysia <sup>1</sup>	12	8	6 - 13	12.7	93.1	46.9	8.6	0.5	0.1
Paraguay <sup>1</sup>	14	5	7 - 11	6.7	87.6	50.4	4.1	0.2	0.1
Peru <sup>1</sup>	16	9	6 - 14	54.1	99.3	53.8	9.1	1.8	0.4
Philippines <sup>1</sup>	12	7	7 - 13	0.4	85.1	35.6	m	m	m
Russian Federation	15	9	7 - 15	m	83.3	70.8	15.4	m	m
Thailand	14	8	4 - 11	60.3	96.5	54.1	m	m	m
Tunisia	16	5	6 - 10	26.0	86.7	53.9	m	n	n
Uruguay <sup>1</sup>	15	9	6 - 14	25.3	98.5	65.9	20.4	4.1	0.6
Zimbabwe	12	7	7 - 13	n	88.4	38.3	n	n	n

Note: Ending age of compulsory education is the age at which compulsory schooling ends. For example, an ending age of 18 indicates that all students under 18 are legally obliged to participate in education.

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2.

<sup>1</sup> Year of reference 2000.

\* See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Source: OECD.

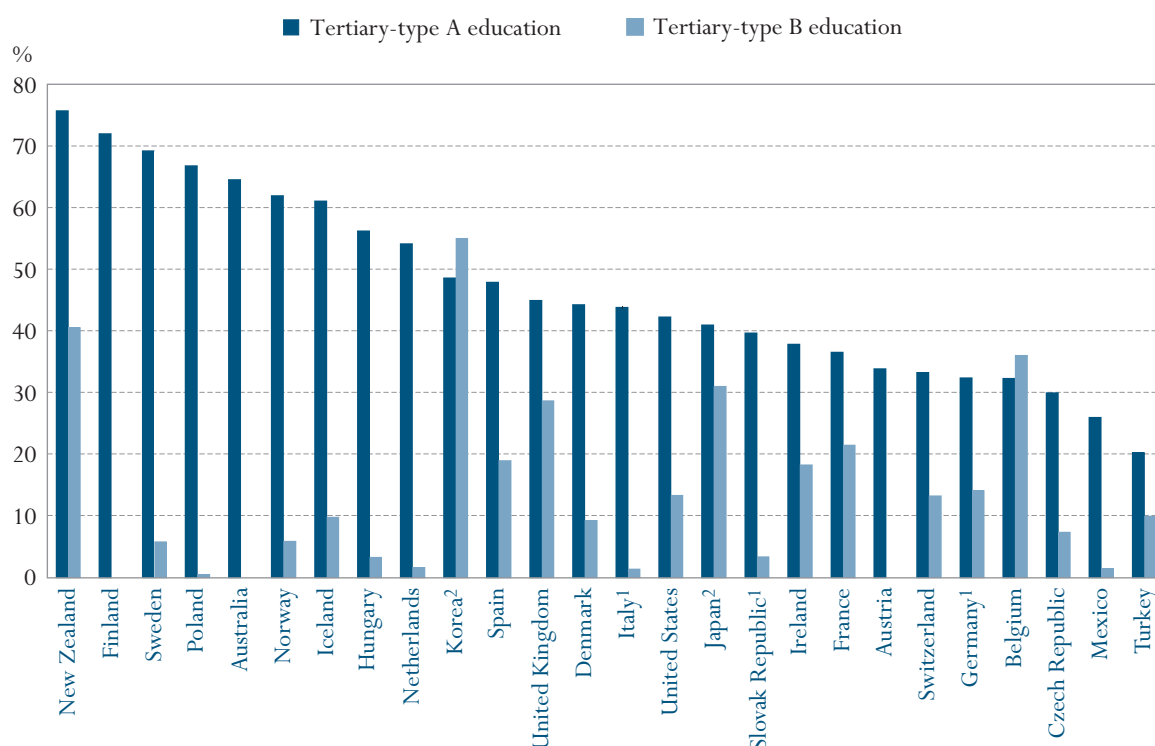
## INDICATOR C2: ENTRY TO AND EXPECTED YEARS IN TERTIARY EDUCATION AND PARTICIPATION IN SECONDARY EDUCATION

- Today, four out of ten school leavers are likely to attend tertiary programmes leading to the equivalent of a bachelor's or higher tertiary-type A degree. In some OECD countries, every second school leaver is likely to attend such a programme.
- On average in OECD countries, a 17-year-old can now expect to enrol in 2.6 years of tertiary-type A programmes, of which 2 years will be full-time.
- With the exception of France and Germany, participation in tertiary education grew in all OECD countries between 1995 and 2001.
- The majority of tertiary students are enrolled in public institutions, but in Belgium, Japan, Korea, the Netherlands and the United Kingdom, most students are enrolled in privately managed institutions.
- The majority of primary and secondary students are enrolled in public institutions. However, privately managed schools now enrol, on average, 10 per cent of primary students, 13 per cent of lower secondary students and 20 per cent of upper secondary students.

Chart C2.1

### Entry rates to tertiary education (2001)

Sum of net entry rates for single year of age in tertiary-type A and tertiary-type B education



Note: Net entry rates for type A and B programmes cannot be added because some students enter both types of programmes.

1. Entry rate for type B programmes calculated as gross entry rate.

2. Entry rate for type A and B programmes calculated as gross entry rate.

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

Source: OECD. Table C2.1. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

## Policy context

*This indicator shows the percentage of the youth cohort that will enter different types of tertiary education during their lives.*

High tertiary entry and participation rates help to ensure the development and maintenance of a highly educated population and labour force. Tertiary education is associated with better access to employment and higher earnings (see Indicator A12). Rates of entry to tertiary education are a partial indication of the degree to which a population is acquiring high-level skills and knowledge that the labour market in knowledge societies values.

*Entry and participation rates reflect both the accessibility of tertiary education and the perceived value of attending tertiary programmes.*

As students have become more aware of the economic and social benefits of tertiary education, entry rates into tertiary type A and tertiary-type B programmes have risen. Continued growth in participation, and a widening diversity of backgrounds and interests of the people aspiring to tertiary studies, will require a new kind of provision. Tertiary institutions will need to meet growing demand by expanding the number of places that they offer and by adapting their programmes, teaching and learning to the diverse needs of new generations of students.

*The indicator also shows patterns of participation at the secondary level of education.*

Graduation from upper secondary education is becoming the norm in most OECD countries, but the curricular content in upper secondary programmes can vary, depending on the type of education or occupation for which the programmes are designed. Most upper secondary programmes in OECD countries are designed primarily to prepare students for tertiary studies, and their orientation can be general, pre-vocational or vocational. In addition to preparing students for further education, most OECD countries also have upper secondary programmes which prepare students to enter the labour market directly. Some OECD countries, however, delay vocational training until after graduation from upper secondary education, although these post-secondary programmes often resemble upper secondary level programmes.

## Evidence and explanations

### Overall access to tertiary education

*47 per cent of today's young people in OECD countries will enter tertiary-type A programmes.*

In OECD countries, tertiary programmes vary in the extent to which they are theoretically based and designed to prepare students for advanced research programmes or professions with high skill requirements (tertiary-type A), or focus on occupationally specific skills so that students can directly enter the labour market (tertiary-type B). For a classification of national educational programmes into these categories, see Annex 3 at [www.oecd.org/edu/eq2003](http://www.oecd.org/edu/eq2003).

Today, almost every second young person in the OECD area will enter tertiary-type A programmes during his/her lifetime, assuming that current entry rates continue. In fact, in Australia, Finland, Iceland, New Zealand, Norway, Poland and Sweden, over 60 per cent of young people enter tertiary-type A programmes (Table C2.1).

In other OECD countries, the rates of first-time entry to tertiary-type A programmes are considerably lower: the estimated first-time entry rates for the Czech Republic, Mexico and Turkey are 30 per cent or below.

The proportion of people who enter tertiary-type B programmes is generally smaller than the proportion entering tertiary-type A programmes. In 24 OECD countries with available data, 15 per cent of young people, on average, will enter tertiary-type B programmes. The figures range from 1 per cent in Italy, Mexico and Poland to over 30 per cent in the Belgium, Japan and New Zealand, and 50 per cent in Korea (Table C2.1 and Chart C2.1).

*Fifteen per cent of today's young people will enter tertiary-type B programmes.*

In Belgium, wide access to tertiary-type B programmes counterbalances comparatively low rates of entry to tertiary-type A programmes. Other OECD countries, most notably Korea and the United Kingdom, have entry rates around the OECD average for tertiary-type A programmes, and comparatively high rates of entry to tertiary-type B programmes. New Zealand stands out as a country with entry rates at both levels that are the highest among OECD countries.

Net rates of entry to tertiary education should also be seen in the light of participation in post-secondary non-tertiary programmes, which are an important alternative to tertiary education in some OECD countries (Indicator C1).

People entering tertiary-type B programmes may also enter tertiary-type A programmes later in their lives. Tertiary-type A and B entry rates cannot be added together to obtain overall tertiary-level entry rates because entrants might be double counted.

### Participation in tertiary education

Enrolment rates provide another perspective on participation in tertiary education. They reflect both the total number of individuals entering tertiary education and the duration of their studies. The sum of net enrolment rates for each single year of age, referred to as the *expectancy of tertiary education*, gives an overall measure of the amount of tertiary education undertaken by an age cohort rather than by individual participants. In contrast to entry rates, expectancy of tertiary education, which is based on enrolments in tertiary-type A and tertiary-type B programmes, can be summed.

On average in OECD countries, a 17-year-old can expect to receive 2.6 years of tertiary education, of which two years will, on average, be full-time. In Australia, Finland, Greece, Korea, New Zealand, Norway, Sweden and the United States, 17-year-olds can expect to receive at least three years of full-time or part-time tertiary education during their lifetimes. In Finland and Korea, students can expect to receive about four years of full-time studies. By contrast, the expectancy of tertiary education is less than two years in the Czech Republic, Mexico, the Slovak Republic, Switzerland and Turkey (Table C2.2).

*In Australia, Finland, Greece, Korea, New Zealand, Norway, Sweden and the United States, young people can expect to receive at least three years of tertiary education during their lifetime.*

On average in OECD countries, expectancy of enrolment in tertiary-type A programmes (2.1 years) is far higher than that in tertiary-type B programmes (0.4 years). Because tertiary-type A programmes tend to be longer, they dominate the stock of enrolments and therefore the volume of resources required, all other things being equal (see Indicator B1, Table B1.3).

*The longer tertiary-type A programmes tend to increase the stock of enrolments, and therefore the volume of resources required.*

The majority of tertiary students are enrolled in public institutions, but in some OECD countries the majority are in privately managed institutions.

In the majority of OECD countries, public institutions provide and manage tertiary-type A programmes. However, in Belgium, the Netherlands and the United Kingdom, the majority of students are enrolled in privately managed institutions that draw predominantly on public funds. In Japan and Korea, over 70 per cent of students are enrolled in institutions that are privately managed and financed predominantly from private sources. In Mexico, Poland, Portugal and the United States (Table C2.3), around 30 per cent of students are enrolled in such institutions.

### Trends in participation

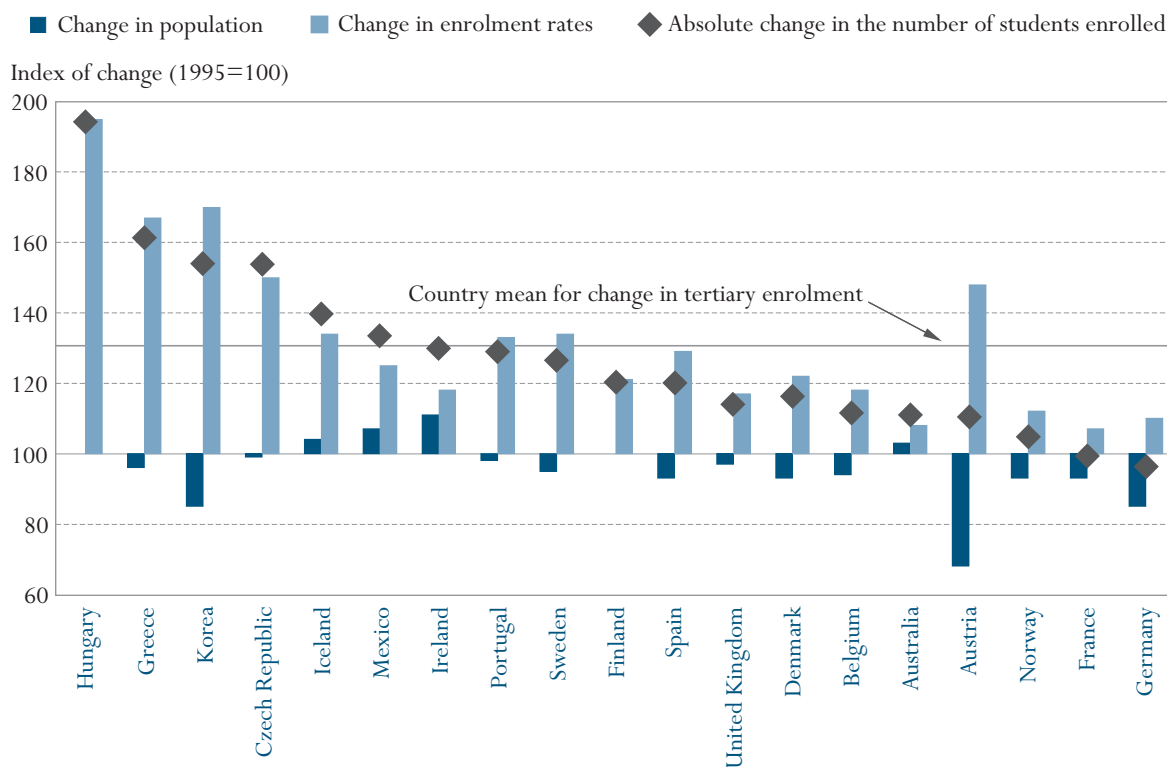
Participation in tertiary education grew in most OECD countries between 1995 and 2001.

With the exception of France and Germany, participation in tertiary education grew in all OECD countries between 1995 and 2001. In half of the OECD countries with available data, the number of students enrolled in tertiary education increased by over 25 per cent, and in the Czech Republic, Greece, Hungary, Korea and Poland, it grew by 54, 61, 94, 54 and 134 per cent, respectively (Table C2.2).

Chart C2.2

### Change in the number of tertiary students in relation to changing participation rates and demography (2001)

Index of change in the number of students at the tertiary level between 1995 and 2001, and the relative contribution of demographic changes and changing enrolment rates (1995 = 100)



Countries are ranked in descending order of the absolute change in number of tertiary students. Source: OECD. Table C2.2. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

At the tertiary level, changes in enrolment rates are less closely tied to changes in the size of the relevant age cohort than is true for primary and secondary education. Chart C2.2 breaks down the change in the number of students enrolled into two components: changes in cohort sizes and changes in enrolment rates. Growing demand, reflected in higher enrolment rates, is the main factor driving expansion in tertiary enrolments. Australia, Ireland and Mexico are the only OECD countries where population increases significantly contributed to higher tertiary enrolments, but in all cases, higher enrolment rates were even more significant. Conversely, the actual increase in tertiary students would have been significantly higher in many OECD countries (in particular Austria and Korea) had the population not decreased. In France and Germany, these decreases were actually more significant than increases in enrolment rates, meaning that overall, there was a slight drop in tertiary enrolment, despite a 7 and 10 per cent increase in enrolment rates, respectively.

### Age of entrants

Traditionally, students typically enter tertiary-type A programmes immediately after having completed upper secondary education, and this remains true in many OECD countries. In Belgium, France, Ireland and the Slovak Republic, for example, more than 80 per cent of all first-time entrants are under 22 years of age (Table C2.1).

In other OECD countries, the transition to the tertiary level is often delayed, in some cases by some time spent in the labour force. In these countries, first-time entrants to tertiary-type A programmes are typically older and show a much wider range of entry ages. In Denmark, Iceland, New Zealand, Sweden and Switzerland, for example, more than half the students enter this level for the first time after the age of 22 (Table C2.1). The proportion of older first-time entrants to tertiary-type A programmes may, among other factors, reflect the flexibility of these programmes and their suitability to students outside the typical or modal age cohort. It may also reflect a specific view of the value of work experience for higher education studies, which is characteristic of the Nordic countries and common in Australia and New Zealand, where a sizeable proportion of new entrants is much older than the typical age of entry. In Australia, New Zealand, Switzerland, the United States and the Nordic countries, more than 20 per cent of first-time entrants are 27 years of age or older.

### Participation in and graduation from upper secondary vocational education

In most OECD countries, students do not follow a uniform curriculum at the upper secondary level. Programmes at the upper secondary level are subdivided into three categories based on the degree to which they are oriented towards a specific class of occupations or trades and lead to a labour-market relevant qualification:

- **Type 1 (general)** education programmes are not designed explicitly to prepare participants for specific occupations or trades, or for entry into further vocational or technical education programmes.

*Growing demand, reflected in higher participation rates, is the main factor driving expansion in tertiary enrolments.*

*In Belgium, France, Ireland and the Slovak Republic, more than 80 per cent of all entrants to tertiary-type A programmes are under 22 years of age, whereas in Denmark, Iceland, New Zealand, Sweden and Switzerland, more than half the students enter this level for the first time after the age of 22.*

*Upper secondary programmes are classified based on whether they are...*

*...general,...*

*...pre-vocational...*

- **Type 2 (pre-vocational or pre-technical)** education programmes are mainly designed to introduce participants to the world of work and to prepare them for entry into further vocational or technical education programmes. Successful completion of such programmes does not lead to a labour-market relevant vocational or technical qualification. At least 25 per cent of the programme content should be vocational or technical.

*...or vocational.*

- **Type 3 (vocational)** education programmes prepare participants for direct entry into specific occupations without further training. Successful completion of such programmes leads to a labour-market relevant vocational qualification.

The degree to which a programme has a vocational or general orientation does not necessarily determine whether participants have access to tertiary education. In several OECD countries, vocationally oriented programmes are designed to prepare for further studies at the tertiary level, while in other countries, many general programmes do not provide direct access to further education.

*In more than half of the OECD countries, the majority of upper secondary students attend vocational or apprenticeship programmes.*

In all OECD countries, students can choose between vocational, pre-vocational and general programmes. In more than half of the OECD countries, the majority of upper secondary students attend vocational or apprenticeship programmes. In OECD countries with dual-system apprenticeship programmes (Austria, Germany, Luxembourg, the Netherlands and Switzerland), and in Australia, Belgium, the Czech Republic, Poland, the Slovak Republic and the United Kingdom, 60 per cent or more of upper secondary students are enrolled in vocational programmes. The exception is Iceland, where the majority of students are enrolled in general programmes even though dual-system apprenticeship programmes are offered (Table C2.5).

In most OECD countries, vocational education is school-based. In Austria, the Czech Republic, Iceland and the Slovak Republic, however, about half of the vocational programmes have combined school-based and work-based elements. In Denmark, Germany, Hungary and Switzerland, the majority of vocational programmes have both school-based and work-based elements.

### Upper secondary enrolment by type of institution

*The majority of upper secondary students are enrolled in public institutions...*

Although the majority of primary and secondary students are enrolled in publicly managed and financed schools, in OECD countries, 20 per cent of upper secondary students on average are now enrolled in privately managed schools (Table C2.4 and Chart C2.3).

*...but enrolments in privately managed upper secondary institutions account for the majority of students in Belgium, Korea, the Netherlands and the United Kingdom.*

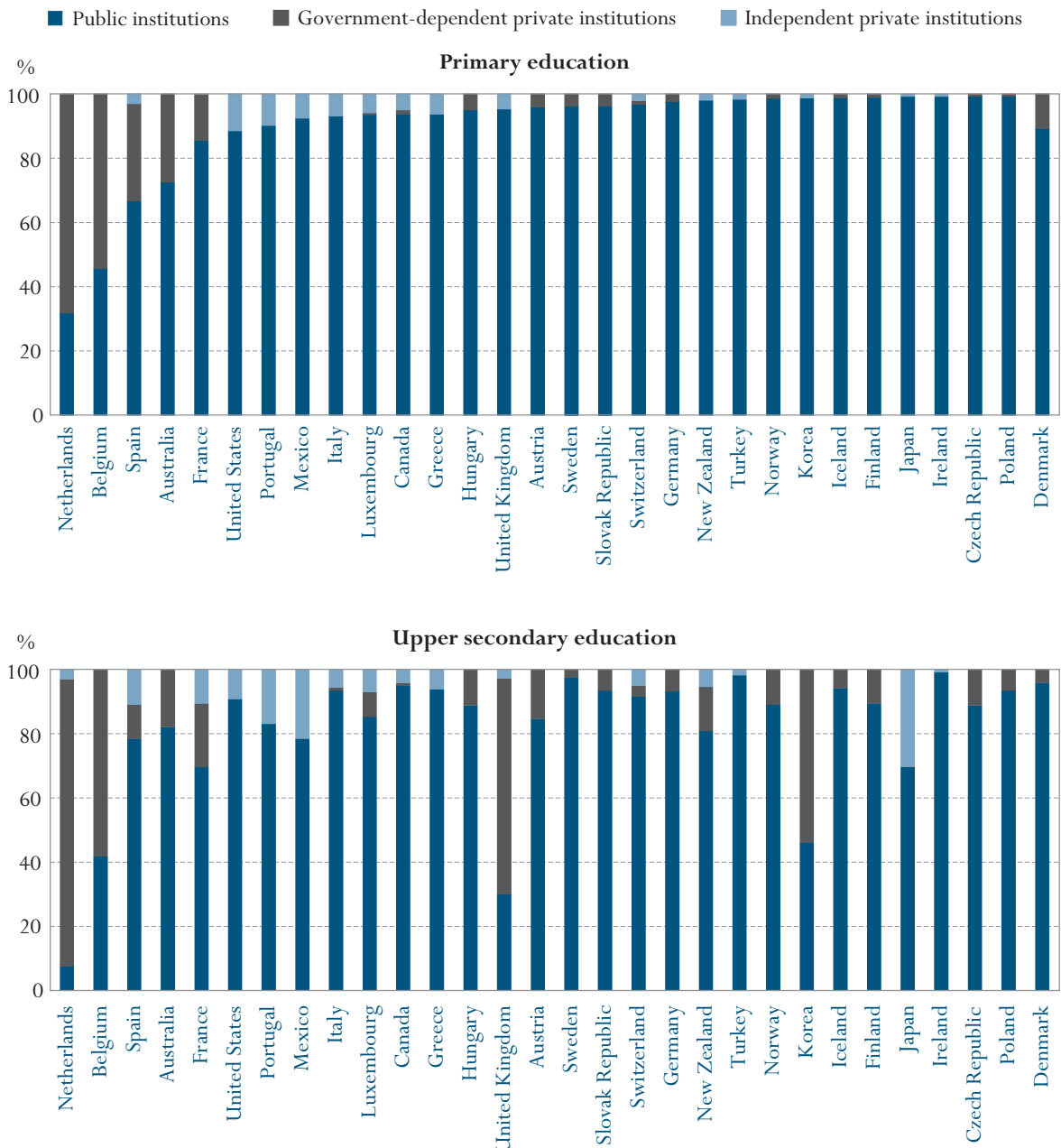
The majority of upper secondary students in Belgium, Korea, the Netherlands and the United Kingdom are enrolled in government-dependent private institutions (58, 54, 90 and 67 per cent respectively). Private educational institutions that are financed mainly by household payments are far less common at the upper secondary level and below, and are occasionally perceived as imposing barriers to the participation of students from low income families. However, in France, Mexico, Portugal and Spain, between 10 and 22 per cent of upper secondary students are enrolled in private institutions that are financed



predominantly by unsubsidised household payments, and in Japan this figure is 30 per cent (Table C2.4).

Chart C2.3

## Percentage of students enrolled in public and private institutions (2001)

C<sub>2</sub>

Countries are ranked in descending order of percentage of students enrolled in private institutions in primary education.  
Source: OECD Table C2.4. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

### Definitions and methodologies

*Data refer to the school year 2000–2001 and are based on the UOE data collection on education statistics, which is administered annually by the OECD (for details, see Annex 3).*

Table C2.1 shows, for all ages, the sum of net entry rates. The net entry rate of a specific age is obtained by dividing the number of first-time entrants of that age to each type of tertiary education by the total population in the corresponding age group (multiplied by 100). The sum of net entry rates is calculated by adding the rates for each single year of age. The result represents the proportion of people in a synthetic age-cohort who enter tertiary education, irrespective of changes in population sizes and of differences between OECD countries in the typical entry age. Table C2.1 shows also the 20<sup>th</sup>, 50<sup>th</sup> and 80<sup>th</sup> percentiles of the age distribution of first-time entrants, *i.e.*, the age below which 20 per cent, 50 per cent and 80 per cent of first-time entrants are to be found.

New (first-time) entrants are students who are enrolling at the relevant level of education for the first time. Foreign students enrolling for the first time in a post-graduate programme are considered first-time entrants.

Not all OECD countries can distinguish between students entering a tertiary programme for the first time and those transferring between different levels of tertiary education or repeating or re-entering a level after an absence. Thus, first-time entry rates for each level of tertiary education cannot be added up to total tertiary-level entrance rate because it would result in double-counting entrants.

Table C2.2 shows the expected number of years for which 17-year-olds will be enrolled in tertiary education, or the sum of net enrolment rates for people aged 17 and over (divided by 100). This measure is a function of the number of participants in tertiary education and the duration of tertiary studies. Since the denominator also includes those who have never participated in tertiary education, the indicator cannot be interpreted as the average number of years an individual student requires to complete tertiary education.

Pre-vocational and vocational programmes include both school-based programmes and combined school and work-based programmes that are recognised as part of the education system. Entirely work-based education and training that is not overseen by a formal education authority is not taken into account.

*Data for 1994–1995 are based on a special survey carried out in OECD member countries in 2000.*

Data on tertiary enrolment in 1994–1995 were obtained from a special survey carried out in 2000. OECD countries were asked to report according to the ISCED-97 classification.

Table C2.1  
**Entry rates to tertiary education and age distribution of new entrants (2001)**  
*Sum of net entry rates for each year of age, by gender and programme destination*

	Tertiary-type B			Tertiary-type A						
	Net entry rates			Net entry rates			Age at:			
	M+F	Males	Females	M+F	Males	Females	20 <sup>th</sup> percentile <sup>1</sup>	50 <sup>th</sup> percentile <sup>1</sup>	80 <sup>th</sup> percentile <sup>1</sup>	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
OECD COUNTRIES	Australia	m	m	m	65	58	72	18.5	20.3	28.5
	Austria	m	m	m	34	31	37	19.1	20.4	23.3
	Belgium	36	29	43	32	32	33	18.3	18.8	21.1
	Canada	m	m	m	m	m	m	m	m	m
	Czech Republic	7	5	10	30	26	35	18.9	19.9	22.4
	Denmark	9	12	7	44	33	56	21.1	22.8	27.0
	Finland	a	a	a	72	62	83	19.9	21.6	27.0
	France	22	22	21	37	30	43	18.3	18.9	20.3
	Germany <sup>2</sup>	14	10	19	32	32	33	20.1	21.4	24.1
	Greece	m	m	m	m	m	m	m	m	m
	Hungary	3	3	4	56	50	63	19.3	21.0	26.2
	Iceland	10	11	9	61	42	80	20.9	22.8	30.0
	Ireland	18	18	19	38	33	43	18.3	19.0	19.9
	Italy <sup>2</sup>	1	1	2	44	38	50	m	m	m
	Japan <sup>3</sup>	31	22	41	41	48	33	m	m	m
	Korea <sup>3</sup>	55	56	54	49	52	45	m	m	m
	Luxembourg	m	m	m	m	m	m	m	m	m
	Mexico	1	2	1	26	26	25	18.3	19.5	26.2
	Netherlands	2	1	2	54	51	58	18.4	19.8	23.1
	New Zealand	41	34	47	76	62	89	19.0	23.4	<40
	Norway	6	7	5	62	48	76	20.1	21.7	<40
	Poland	1	n	1	67	x(4)	x(4)	m	m	m
	Portugal	m	m	m	m	m	m	m	m	m
Slovak Republic <sup>2</sup>	3	2	5	40	40	39	18.6	19.5	21.3	
Spain	19	19	19	48	42	54	18.4	19.0	22.4	
Sweden	6	6	6	69	55	84	20.3	22.6	<40	
Switzerland	13	15	12	33	37	29	20.4	22.2	28.7	
Turkey	10	11	9	20	23	18	18.3	19.5	22.9	
United Kingdom	29	25	33	45	41	49	18.4	19.4	24.3	
United States	13	12	15	42	36	49	18.4	19.3	28.3	
<b>Country mean</b>	<b>15</b>	<b>13</b>	<b>16</b>	<b>47</b>	<b>41</b>	<b>51</b>				
NON-OECD COUNTRIES	Argentina <sup>4</sup>	35	21	48	59	53	64	m	m	m
	Brazil <sup>3</sup>	m	m	m	31	27	35	m	m	m
	Chile <sup>3,4</sup>	16	16	15	43	45	40	m	m	m
	Indonesia	5	5	5	12	14	11	m	m	m
	Israel	m	m	m	50	46	56	21.3	23.6	26.9
	Paraguay <sup>4</sup>	10	6	14	m	m	m	m	m	m
	Philippines <sup>4</sup>	x(4)	x(5)	x(6)	52	48	56	m	m	m
	Thailand <sup>3</sup>	20	17	24	47	x(4)	x(4)	m	m	m
	Tunisia <sup>3</sup>	m	m	m	28	x(4)	x(4)	m	m	m
	Uruguay <sup>3,4</sup>	13	9	16	30	23	37	m	m	m

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2.

1. 20/50/80 per cent of new entrants are below this age.

2. Entry rate for type B programmes calculated as gross entry rate.

3. Entry rate for type A and B programmes calculated as gross entry rate.

4. Year of reference 2000.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Table C2.2

**Expected years in tertiary education and changes in total tertiary enrolment (2001)**
*Expected years of tertiary education under current conditions, by gender and mode of study, and index of change in total enrolment in tertiary education (1995=100)*

	Tertiary-type B education			Tertiary-type A education			Total tertiary education (type A, B and advanced research programmes)			Change in enrolment (1995=100)		
	Full-time and part-time		Full-time	Full-time and part-time		Full-time	Full-time and part-time		Full-time	Total tertiary education	Attributable to:	
	M + F	Females	M + F	M + F	Females	M + F	M + F	Females	M + F		Change in population	Change in enrolment rates
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)		
<b>OECD COUNTRIES</b>												
Australia	0.7	0.7	0.2	2.3	2.6	1.4	3.1	3.4	1.7	111	103	108
Austria	0.2	0.3	0.2	2.0	2.1	2.0	2.4	2.5	2.4	110	68	148
Belgium	1.4	1.6	1.1	1.3	1.3	1.3	2.8	3.0	2.4	112	94	118
Canada	0.7	0.8	0.6	2.0	2.3	1.4	2.8	3.1	2.1	100	m	m
Czech Republic	0.2	0.2	0.2	1.3	1.3	1.2	1.6	1.6	1.5	154	99	150
Denmark	0.3	0.2	0.3	2.3	2.8	2.3	2.6	3.0	2.6	116	93	122
Finland	0.1	0.1	0.1	3.8	4.2	3.8	4.2	4.6	4.2	120	100	121
France	0.6	0.7	0.6	1.8	2.0	1.8	2.6	2.8	2.6	99	93	107
Germany*	0.3	0.4	0.3	1.7	1.7	1.7	2.1	2.1	2.0	96	85	110
Greece	1.0	1.0	1.0	2.0	2.2	2.0	3.1	3.3	3.1	161	96	167
Hungary*	n	0.1	n	2.1	2.4	1.1	2.2	2.4	1.2	194	100	195
Iceland	0.2	0.2	0.1	2.2	2.8	1.7	2.4	3.0	1.9	140	104	134
Ireland	x(7)	x(8)	x(9)	x(7)	x(8)	x(9)	2.6	2.9	1.9	130	111	118
Italy	n	0.1	n	2.3	2.7	2.3	2.4	2.7	2.4	106	m	m
Japan	m	m	m	m	m	m	m	m	m	m	m	m
Korea	1.6	1.2	1.6	2.3	1.7	2.3	3.9	2.9	3.9	154	85	170
Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m
Mexico	n	n	n	1.0	1.0	1.0	1.1	1.0	1.1	134	107	125
Netherlands	n	n	n	2.4	2.5	2.1	2.5	2.6	2.1	m	m	m
New Zealand	0.8	1.0	0.4	2.4	2.8	1.7	3.2	3.8	2.1	m	m	m
Norway	0.2	0.2	0.2	2.8	3.5	2.1	3.1	3.8	2.3	105	93	112
Poland	n	n	n	2.8	3.3	1.4	2.9	3.4	1.5	234	m	m
Portugal	0.1	0.1	a	2.3	2.7	a	2.5	2.9	a	129	98	133
Slovak Republic	0.1	0.1	n	1.4	1.5	1.0	1.6	1.7	1.1	m	m	m
Spain	0.3	0.3	0.3	2.5	2.8	2.3	3.0	3.2	2.7	120	93	129
Sweden	0.1	0.1	0.1	2.9	3.5	1.6	3.2	3.8	1.8	126	95	134
Switzerland	0.4	0.3	0.1	1.3	1.1	1.2	1.8	1.5	1.4	m	m	m
Turkey*	0.3	0.3	0.3	1.0	0.8	1.0	1.3	1.1	1.3	137	m	m
United Kingdom	0.8	0.9	0.2	1.7	1.9	1.4	2.6	2.9	1.7	114	97	117
United States	0.7	0.8	0.3	2.7	3.0	1.7	3.5	3.9	2.1	m	m	m
<b>Country mean</b>	<b>0.4</b>	<b>0.4</b>	<b>0.3</b>	<b>2.1</b>	<b>2.3</b>	<b>1.7</b>	<b>2.6</b>	<b>2.8</b>	<b>2.0</b>	<b>131</b>	<b>95</b>	<b>133</b>
<b>NON-OECD COUNTRIES</b>												
Argentina <sup>1</sup>	0.7	1.1	0.7	2.3	2.4	m	3.0	3.5	0.7	m	m	m
Brazil <sup>1</sup>	x(4)	x(5)	x(6)	0.9	1.0	0.9	0.9	1.0	0.9	m	m	m
Indonesia	0.2	0.2	0.2	0.5	0.4	0.5	0.7	0.6	0.7	m	m	m
Israel	m	m	m	2.1	2.4	1.6	2.9	3.3	2.5	m	m	m
Malaysia <sup>1</sup>	0.6	0.6	0.5	0.7	0.7	0.6	1.3	1.3	1.1	m	m	m
Paraguay <sup>1</sup>	0.2	0.3	0.2	x(7)	x(8)	x(9)	1.0	1.1	1.0	m	m	m
Peru <sup>1</sup>	0.6	0.7	0.6	m	m	m	0.6	0.7	0.6	m	m	m
Russian Federation <sup>2</sup>	1.0	1.1	1.0	2.1	2.4	2.1	3.2	3.6	3.2	m	m	m
Thailand	m	m	m	1.5	1.3	0.7	1.9	1.7	1.1	m	m	m
Uruguay <sup>1,2</sup>	0.5	0.7	0.5	1.4	1.7	1.4	1.9	2.4	1.9	m	m	m

1. Year of reference 2000.

2. Excludes advanced research programmes.

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2.

 \* See Annex 3 for notes ([www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003)).

Source: OECD.

Table C2.3

## Students enrolled in public and private institutions and full-time and part-time programmes in tertiary education (2001)

Distribution of students, by mode of study, type of institution and programme destination

	Type of institution						Mode of study			
	Tertiary-type B education			Tertiary-type A and advanced research programmes			Tertiary-type B education		Tertiary-type A and advanced research programmes	
	Government-dependent		Independent	Government-dependent		Independent	Full-time	Part-time	Full-time	Part-time
	Public	private		Public	private					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
<b>OECD COUNTRIES</b>										
Australia	98.4	1.6	a	99.9	a	0.1	34.3	65.7	61.0	39.0
Austria	64.2	35.8	x(2)	95.1	4.9	x(6)	68.9	31.1	100.0	a
Belgium	47.5	52.5	m	41.1	58.9	m	73.3	26.7	95.5	4.5
Canada	100.0	n	n	100.0	n	n	87.4	12.6	68.3	31.7
Czech Republic	65.8	34.2	a	98.9	1.1	a	100.0	n	92.6	7.4
Denmark	100.0	a	a	99.8	0.2	a	100.0	a	100.0	a
Finland	83.1	16.9	a	85.1	14.9	a	100.0	a	100.0	a
France	73.0	11.5	15.5	88.6	0.8	10.6	100.0	a	100.0	a
Germany	64.3	35.7	x(2)	100.0	a	a	83.8	16.2	100.0	a
Greece	100.0	a	a	100.0	a	a	100.0	a	100.0	a
Hungary	86.4	13.6	a	86.6	13.4	a	88.1	11.9	55.9	44.1
Iceland	38.2	61.8	n	93.8	6.2	n	71.5	28.5	79.4	20.6
Ireland	96.5	a	3.5	93.7	a	6.3	64.1	35.9	82.9	17.1
Italy	63.5	a	36.5	93.6	a	6.4	100.0	a	100.0	a
Japan	9.5	a	90.5	27.5	a	72.5	96.9	3.1	90.6	9.4
Korea	13.8	a	86.2	22.9	a	77.1	100.0	a	100.0	a
Luxembourg	100.0	a	a	100.0	a	a	100.0	a	100.0	a
Mexico	95.2	a	4.8	67.1	a	32.9	100.0	a	100.0	a
Netherlands	9.2	90.8	m	31.3	68.7	m	58.2	41.8	81.4	18.6
New Zealand	79.3	20.1	0.5	98.8	1.2	n	46.4	53.6	69.1	30.9
Norway	82.8	17.2	x(2)	88.7	11.3	x(6)	86.1	13.9	72.3	27.7
Poland	86.5	11.5	2.0	71.5	a	28.5	76.0	24.0	53.8	46.2
Portugal	52.9	a	47.1	71.1	a	28.9	m	m	m	m
Slovak Republic	94.0	6.0	a	99.4	0.4	0.2	61.2	38.8	70.4	29.6
Spain	75.9	17.1	6.9	88.2	n	11.8	99.7	0.3	90.8	9.2
Sweden	71.5	0.9	27.6	94.4	5.6	a	92.0	8.0	53.8	46.2
Switzerland	37.3	40.5	22.2	91.2	6.6	2.2	31.5	68.5	92.0	8.0
Turkey*	98.6	a	1.4	96.3	a	3.7	100.0	a	100.0	a
United Kingdom	a	100.0	n	a	100.0	n	29.7	70.3	76.3	23.7
United States	92.6	a	7.4	68.9	a	31.1	42.5	57.5	63.0	37.0
<b>Country mean</b>	<b>69.3</b>	<b>18.9</b>	<b>14.1</b>	<b>79.8</b>	<b>9.8</b>	<b>12.0</b>	<b>79.0</b>	<b>21.0</b>	<b>84.5</b>	<b>15.5</b>
<b>NON-OECD COUNTRIES</b>										
Argentina <sup>1</sup>	58.7	29.8	11.6	85.2	a	14.8	100.0	a	m	m
Brazil <sup>1</sup>	m	a	m	34.6	a	65.4	m	m	100.0	m
Chile <sup>1</sup>	6.7	6.1	87.2	32.1	23.0	44.9	100.0	a	100.0	a
China	m	m	m	m	m	m	56.8	43.2	85.3	14.7
Egypt	m	m	m	m	m	m	m	m	94.5	5.5
India	m	m	m	m	m	m	100.0	a	85.5	14.5
Indonesia	49.8	a	50.2	33.5	a	66.5	100.0	a	100.0	a
Israel	m	m	m	12.1	80.5	7.3	100.0	n	80.4	19.6
Jamaica	79.3	a	20.7	66.1	a	33.9	57.9	42.1	55.7	44.3
Malaysia <sup>1</sup>	58.1	a	41.9	70.9	a	29.1	85.3	14.7	95.5	4.5
Paraguay <sup>1</sup>	45.9	x(3)	54.1	44.6	a	55.4	100.0	a	m	m
Peru <sup>1</sup>	46.1	1.1	52.8	m	a	m	100.0	a	m	m
Philippines <sup>1</sup>	40.5	a	59.5	30.3	a	69.7	100.0	a	100.0	a
Russian Federation	97.8	a	2.2	90.3	a	9.7	m	m	m	m
Thailand	57.7	a	42.3	87.7	a	12.3	100.0	n	64.5	35.5
Tunisia	m	a	m	m	a	m	100.0	a	100.0	a
Uruguay <sup>1</sup>	88.3	a	11.7	88.6	a	11.4	100.0	a	100.0	a
Zimbabwe	91.9	8.1	a	92.0	8.0	a	m	m	m	m

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2. 1. Year of reference 2000.

\* See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Source: OECD.

Table C2.4  
**Students enrolled in public and private institutions and full-time and part-time programmes  
 in primary and secondary education (2001)**  
*Distribution of students, by mode of study and type of institution*

	Type of institution									Mode of study	
	Primary education			Lower secondary education			Upper secondary education			Primary and secondary education	
	Government-dependent			Government-dependent			Government-dependent				
	Public	private	Independent	Public	private	Independent	Public	private	Independent	Full-time	Part-time
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
OECD COUNTRIES											
Australia	72.4	27.6	a	70.2	29.8	a	81.9	18.1	a	75.9	24.1
Austria	95.8	4.2	x(2)	92.5	7.5	x(5)	84.4	15.6	x(8)	99.4	0.6
Belgium	45.6	54.4	m	43.1	56.9	m	41.6	58.4	m	81.3	18.7
Canada	93.5	1.4	5.1	92.2	1.1	6.7	94.9	0.7	4.5	99.5	0.5
Czech Republic	99.1	0.9	a	98.3	1.7	a	88.7	11.3	a	99.9	0.1
Denmark	89.2	10.8	a	87.4	12.6	a	95.6	4.4	a	100.0	a
Finland	98.8	1.2	a	95.8	4.2	a	89.3	10.7	a	100.0	a
France	85.4	14.3	0.2	79.0	20.7	0.2	69.6	19.6	10.8	100.0	a
Germany	97.6	2.4	x(2)	93.2	6.8	x(5)	93.0	7.0	x(8)	99.8	0.2
Greece	93.7	a	6.3	94.7	a	5.3	93.7	a	6.3	98.1	1.9
Hungary	94.9	5.1	a	94.5	5.5	a	88.6	11.4	a	96.6	3.4
Iceland	98.6	1.4	n	99.0	1.0	n	94.0	6.0	n	93.2	6.8
Ireland	99.1	n	0.9	100.0	n	n	98.9	n	1.1	99.9	0.1
Italy	93.0	a	7.0	96.6	a	3.4	93.3	0.9	5.8	99.3	0.7
Japan	99.1	a	0.9	94.3	a	5.7	69.6	a	30.4	98.9	1.1
Korea	98.6	a	1.4	78.1	21.9	a	45.8	54.2	a	100.0	a
Luxembourg	93.3	0.7	6.0	79.0	14.0	6.9	85.2	7.6	7.2	100.0	n
Mexico	92.3	a	7.7	86.2	a	13.8	78.2	a	21.8	100.0	a
Netherlands	31.6	68.4	a	23.8	75.8	0.4	7.3	89.5	3.2	97.2	2.8
New Zealand	98.0	a	2.0	95.8	a	4.2	80.7	13.7	5.6	94.7	5.3
Norway	98.4	1.6	x(2)	98.0	2.0	x(5)	88.8	11.2	x(8)	99.1	0.9
Poland	99.1	0.9	a	98.9	1.1	a	93.3	6.6	0.1	95.3	4.7
Portugal	90.0	a	10.0	89.8	a	10.2	82.9	a	17.1	92.5	7.5
Slovak Republic	96.1	3.9	a	95.2	4.8	a	93.3	6.7	a	99.1	0.9
Spain	66.6	30.2	3.2	66.5	30.3	3.2	78.3	10.5	11.2	96.2	3.8
Sweden	96.1	3.9	a	96.5	3.5	a	97.4	2.6	a	84.5	14.3
Switzerland	96.6	1.1	2.2	93.3	2.3	4.3	91.4	3.5	5.1	99.6	0.4
Turkey*	98.2	a	1.8	a	a	a	97.9	a	2.1	100.0	a
United Kingdom	95.2	a	4.8	93.5	0.3	6.1	30.0	67.0	3.0	76.8	23.2
United States	88.4	a	11.6	90.1	a	9.9	90.6	a	9.4	100.0	n
<b>Country mean</b>	<b>89.8</b>	<b>7.8</b>	<b>2.7</b>	<b>83.8</b>	<b>10.1</b>	<b>3.1</b>	<b>80.6</b>	<b>14.6</b>	<b>5.6</b>	<b>95.9</b>	<b>4.1</b>
NON-OECD COUNTRIES											
Argentina	80.1	16.4	3.5	77.4	19.3	3.3	71.0	23.3	5.7	100.0	a
Brazil	92.1	a	7.9	90.3	a	9.7	85.8	a	14.2	100.0	a
China	m	m	m	m	m	m	m	m	m	97.3	2.7
Chile	55.7	36.7	7.6	58.0	34.4	7.6	51.1	33.0	15.8	100.0	a
Egypt	91.1	1.0	7.9	m	m	m	93.3	0.2	6.6	100.0	a
Indonesia	84.1	a	15.9	63.0	a	37.0	47.3	a	52.7	100.0	a
India	83.5	8.5	8.0	65.9	19.4	14.7	44.8	36.5	18.7	99.9	0.1
Israel	100.0	a	a	100.0	a	a	100.0	a	a	99.0	1.0
Jamaica	95.1	a	4.9	98.1	a	1.9	96.8	a	3.2	m	m
Malaysia	97.1	a	2.9	94.3	a	5.7	94.0	a	6.0	m	m
Paraguay <sup>1</sup>	85.3	9.5	5.2	75.7	11.5	12.8	67.0	10.1	22.9	100.0	a
Peru	87.0	3.3	9.7	84.0	4.8	11.2	81.2	5.2	13.6	100.0	a
Philippines	92.7	a	7.3	78.2	a	21.8	74.0	a	26.0	100.0	a
Russian Federation	99.6	a	0.4	99.7	a	0.3	99.6	a	0.4	m	m
Thailand	86.8	13.2	x(2)	95.4	4.6	x(5)	90.7	9.3	a	85.9	14.1
Tunisia	99.2	a	0.8	97.2	a	2.8	85.6	a	14.4	100.0	a
Uruguay	86.0	a	14.0	87.2	a	12.8	89.5	a	10.5	100.0	a
Zimbabwe	12.7	87.3	a	26.8	73.2	a	30.8	69.2	a	100.0	a

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2.

1. Year of reference 2000.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Table C2.5  
**Upper secondary enrolment patterns (2001)**  
*Enrolment in public and private upper secondary institutions by type of programme*

		Distribution of enrolment by type of programme			
		General	Pre-vocational	Vocational	of which: combined school and work-based
		(1)	(2)	(3)	(4)
OECD COUNTRIES	Australia	36.1	a	63.9	x(3)
	Austria	21.4	6.8	71.8	36.2
	Belgium	30.8	a	69.2	2.5
	Canada	84.8	8.0	7.2	a
	Czech Republic	19.3	0.8	79.9	37.9
	Denmark	45.4	0.3	54.3	53.5
	Finland	43.3	a	56.7	10.3
	France	43.3	a	56.7	12.0
	Germany	36.7	a	63.3	51.2
	Greece	64.8	a	35.2	a
	Hungary	49.8	38.7	11.5	11.5
	Iceland	63.6	1.2	35.2	17.8
	Ireland	74.2	25.8	a	a
	Italy	35.7	38.4	25.9	a
	Japan	74.1	0.8	25.1	a
	Korea	65.9	a	34.1	a
	Luxembourg	36.2	a	63.8	13.5
	Mexico	87.8	a	12.2	x(3)
	Netherlands	29.9	a	70.1	a
	New Zealand	m	m	m	m
	Norway	42.4	a	57.6	a
	Poland	37.9	a	62.1	a
	Portugal	71.7	a	28.3	m
	Slovak Republic	22.4	a	77.6	42.5
	Spain	64.4	a	35.6	5.1
	Sweden*	48.3	a	51.7	n
	Switzerland	35.0	a	65.0	57.3
	Turkey	60.3	a	39.7	7.7
	United Kingdom	33.1	x(3)	66.9	x(3)
	United States	m	m	m	m
	<b>Country mean</b>	<b>48.5</b>	<b>4.5</b>	<b>47.2</b>	<b>15.0</b>
NON-OECD COUNTRIES	Argentina <sup>1</sup>	33.9	a	66.1	a
	Brazil <sup>1</sup>	89.1	a	10.9	m
	Chile <sup>1</sup>	58.6	a	41.4	a
	Egypt	34.6	a	65.4	a
	India <sup>1</sup>	99.5	a	0.5	a
	Israel	67.0	a	33.0	3.9
	Jamaica	99.4	a	0.6	m
	Malaysia <sup>1</sup>	84.6	a	15.4	a
	Paraguay <sup>1</sup>	80.4	a	19.6	a
	Peru <sup>1</sup>	81.7	a	18.3	a
	Philippines <sup>1</sup>	100.0	a	a	a
	Russian Federation	100.0	a	a	a
	Thailand	74.1	a	25.9	a
	Tunisia	88.2	6.4	5.4	a
	Uruguay <sup>1</sup>	81.6	a	18.4	a
	Zimbabwe <sup>2</sup>	100.0	a	a	a

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2.

1. Year of reference 2000.

\* See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

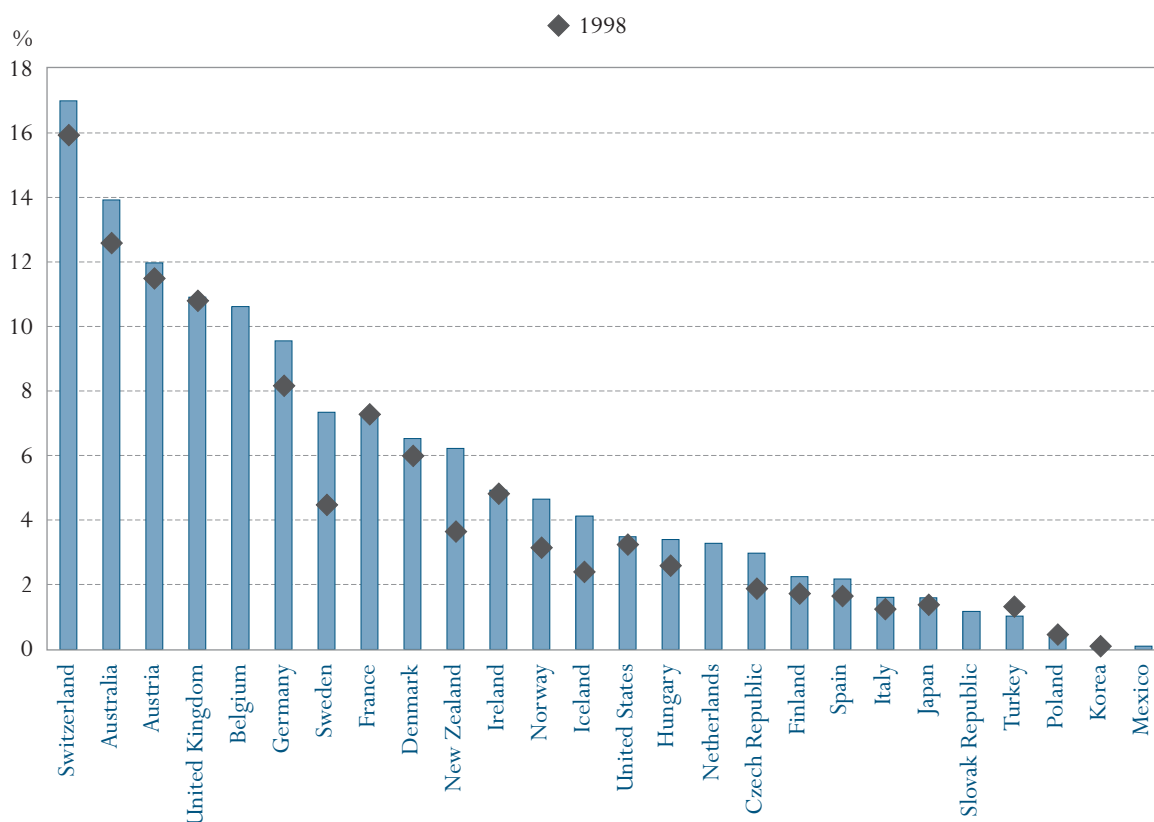
Source: OECD.

## INDICATOR C3: FOREIGN STUDENTS IN TERTIARY EDUCATION

- Five countries (Australia, France, Germany, the United Kingdom and the United States) receive 71 per cent of all foreign students studying in the OECD area.
- In absolute numbers, students from Greece, Japan, Korea and Turkey represent the largest sources of intakes from OECD countries. Students from China and Southeast Asia comprise the largest numbers of foreign students from non-OECD countries.
- In relative terms, the percentage of foreign students enrolled in OECD countries ranges from below one to almost 17 per cent in Switzerland. Proportional to their size, Australia, Austria, Belgium, Switzerland and the United Kingdom take in the most foreign students, when measured as a percentage of their tertiary enrolments.

Chart C3.1

Percentage of tertiary students enrolled who are not citizens of the country of study (2001)



Countries are ranked in descending order of the percentage of students enrolled who are not citizens of the country of study.

Source: OECD. Table C3.1. See Annex 3 for notes ([www.oecd.org/edu/eqq2003](http://www.oecd.org/edu/eqq2003)).



## Policy context

The international dimension of higher education is receiving growing attention from multiple perspectives.

On the one hand, the general trend towards freely circulating capital, goods and services coupled with changes in the openness of labour markets have increased the demand for new kinds of educational provision in OECD countries. Governments as well as individuals are looking increasingly to higher education to play a role in broadening the horizons of students and allowing them to develop a deeper understanding of the multiplicity of languages, cultures and business methods in the world. One way for students to expand their knowledge of other societies and languages and hence to leverage their labour market prospects is to study in tertiary educational institutions in countries other than their own. As a matter of fact, several OECD governments have set up schemes and policies to promote such mobility.

The international mobility of students involves economic costs and benefits, that depend to a large extent on sending countries' policies regarding financial aid to students going overseas for study, and host countries' policies on tuition fees and financial support for overseas' students. While the direct short-term monetary costs and benefits of this mobility are relatively easy to measure, the long-term social and economic outcomes are far more difficult to quantify.

From the perspective of institutions, foreign enrolments may constrain the instructional settings and processes insofar as the curriculum and teaching methods sometimes have to be adapted to a culturally and linguistically diverse student body. These constraints are greatly outweighed, however, by numerous benefits to host institutions. Indeed, foreign enrolments can help to reach the critical mass needed to diversify the range of educational programmes offered, and may compensate for variations in domestic enrolment rates. They can also increase tertiary institutions' financial resources.

Last but not least, international negotiations currently underway on trade liberalisation of services highlight the economic implications of the internationalisation of the provision of education services. The trend towards greater internationalisation of education is likely to have a growing impact on countries' balances of payments, and some OECD countries already show signs of specialisation in education exports. In this perspective, it is worth noting that in addition to student flows across borders, cross-border electronic delivery of highly flexible educational programmes and campuses abroad are also relevant to the internationalisation of higher education, although no comparable data exist yet.

The internationalisation of higher education, however, has many more economic outcomes in addition to those reflected in the trade balance. The internationalisation of education can also be seen as an opportunity for smaller and / or less developed educational systems to improve the cost efficiency of their education provision. Indeed, training opportunities abroad may constitute

*This indicator shows the mobility of students between countries ...*

*...in terms of sending and host country policies.*

*Internationalisation brings benefits and constraints to institutions,...*

*...has an impact on countries' balance of payments...*

*... and may improve the cost efficiency of education provision.*

a cost-efficient alternative to national provision, and allow countries to focus limited resources on educational programmes where economies of scale can be generated.

The numbers and trends in students studying in other countries can provide some idea of the extent of student mobility. In the future, it will also be important to develop ways to quantify and measure other components of the internationalisation of education.

### **Evidence and explanations**

#### **Distribution of foreign students by host countries**

*In 2001, 1.65 million students were enrolled outside their country of origin,*

*...a 16 per cent increase since 1998.*

*Five OECD countries attract seven out of ten foreign students.*

In 2001, 1.65 million students were enrolled outside their country of origin, of which 1.54 million (or 94 per cent) studied in the OECD area. This represented a 1.5 per cent increase in total student mobility since the previous year.

Although student flows into OECD countries increased by only 1.1 per cent between 2000 and 2001, comparison with 1998 figures shows that the absolute number of foreign students enrolled in the OECD area has increased by 16 per cent within four years. For data see Annex 3 at [www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003).

A relatively small number of countries enrolls the vast majority of foreign students studying in the OECD area and in other non-OECD countries reporting such data. The United States receives the most foreign students (in absolute terms) with 28 per cent of the total of all foreign students, followed by the United Kingdom and Germany (14 and 12 per cent respectively), France and Australia (nine and seven per cent, respectively) (Chart C3.2). These five host countries account for about 71 per cent of all students studying abroad.

Among these countries, it is noteworthy that over one year, France and Germany both increased their share of all foreign students by about half a percentage point. Australia displayed the highest increase in the share of foreign students among OECD countries, with a year-to-year increase of 0.8 percentage point amounting to some 15,000 additional foreign students in absolute terms (see Indicator C3 from *Education at a Glance 2002*).

*Not all non-national students came to the host country expressly with the intention to study.*

This indicator defines a foreign student as someone who is not a citizen of the country of study. In most countries, it has not been possible to distinguish between foreign students who are residents in the country but who have immigrated (or whose parents have immigrated), and students who came to the country expressly to pursue their education. This leads to an overestimation of the foreign student body in countries with comparatively stringent naturalisation policies.

For example, Germany is a high-ranking destination for foreign students but the actual number of non-resident students registered in German tertiary education institutions accounts for only two-thirds of all foreign students. This is because a significant number of “domestic foreigners”, that is mainly children of migrant workers, are considered foreign for the purposes of this indicator, despite having grown up in Germany and holding permanent residence in this country.

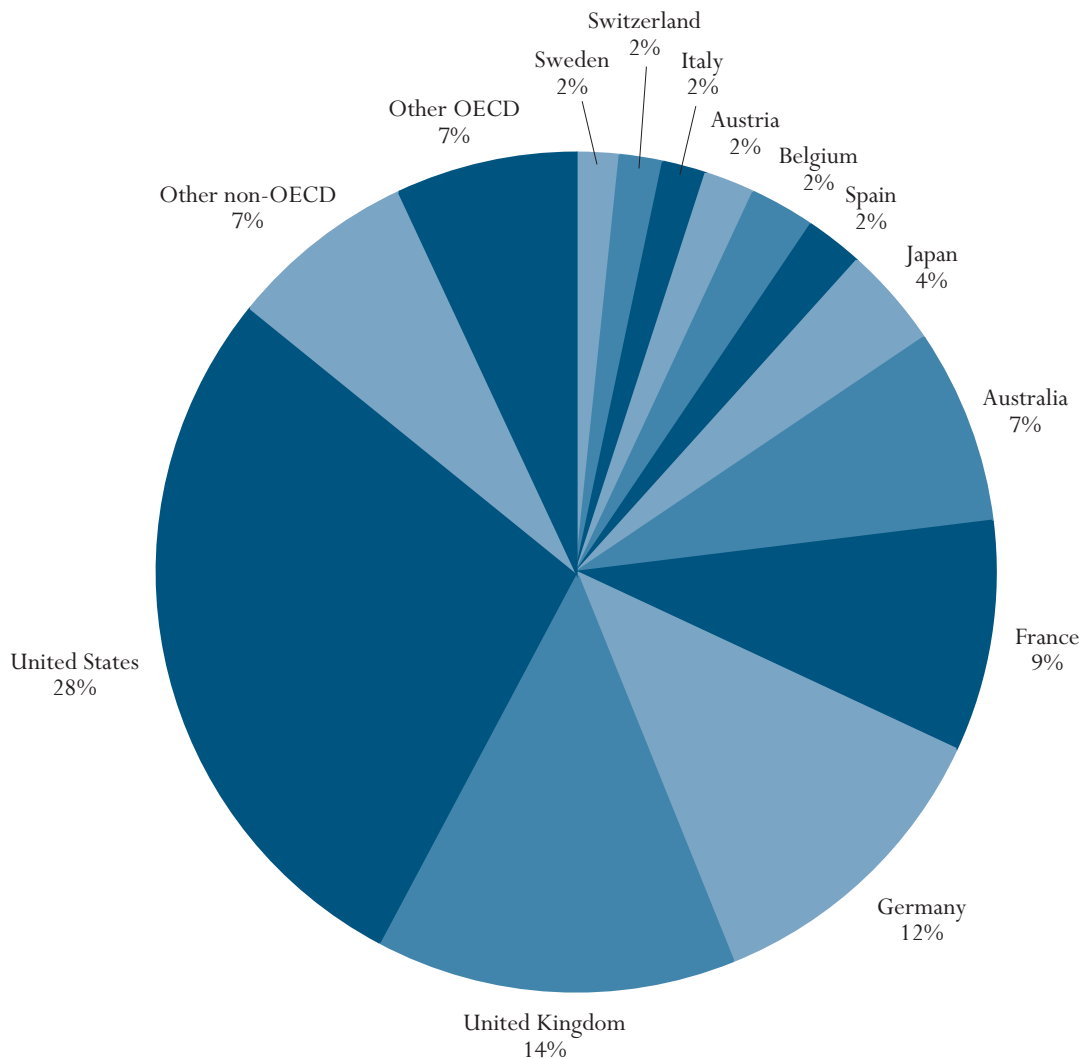
The language spoken is critical for selecting a foreign country in which to study. Countries whose language of instruction is widely spoken and read (e.g., English, French, German) dominate in hosting foreign students, be it in absolute or relative terms.

*Language of instruction is a critical factor in selecting a country in which to study.*

The dominance of English-speaking countries such as Australia, the United Kingdom and the United States (in absolute numbers) may be largely attributable to the fact that students intending to study abroad are most likely to have learned English in their home country. As a matter of fact, an increasing number of institutions in non-English-speaking countries now offer courses in English to attract foreign students, especially so in Nordic countries, which

Chart C3.2

## Distribution of foreign students by host country (2001)

C<sub>3</sub>

Source: OECD.

may explain the comparatively large increase in the index of the proportion of foreign students enrolled in Finland, Norway and Sweden between 1998 and 2001 (Table C3.1).

### Proportion of foreign students by countries of origin

The increase over time in the number of foreign students was fairly balanced among the different world regions, as shown by the fairly stable geographic composition of the foreign students' intake.

Asian students form the largest group of foreign students studying in reporting OECD and non-OECD countries, with 42 per cent of the total, followed by Europeans (33 per cent), in particular citizens of the European Union (21 per cent). Students from Africa account for 11 per cent of all foreign students. Altogether, 41 per cent of foreign students enrolled in reporting OECD and non-OECD countries are citizens of an OECD country. For data, see Annex 3 at [www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003).

The predominance of students from Asia and Europe among foreign intakes is also noticeable when focusing on OECD countries. Students from Korea and Japan comprise the largest groups of all foreign students, at 4.3 and 3.4 per cent respectively, followed by students from Germany (3.3 per cent), Greece (3.3 per cent), France (2.9 per cent), and Turkey (2.7 per cent). Together, these countries account for 20 per cent of all foreign students in reporting OECD and non-OECD countries. For data see Annex 3 at [www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003).

With respect to foreign students originating from non-OECD countries, students from China represent 8.0 per cent of all foreign students (not including an additional 1.4 per cent from Hong Kong), followed by students from India (3.8 per cent), Morocco (2.7 per cent), Malaysia (2.0 per cent) and Indonesia (2.0 per cent). Another 3.8 per cent of all foreign students originate from Southeast Asia – Indonesia, Singapore and Thailand. For data see Annex 3 at [www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003).

International trade, financial, economic and historical relations are important factors underlying student mobility. For example, the promotion of regional economic integration by organisations and treaties such as the European Union, NAFTA, ASEAN and APEC may provide incentives for students to develop their understanding of partner countries' cultures and languages, and to build bilateral or multilateral networks. Some national governments have made international student mobility an explicit part of their socio-economic development strategies. For example, several governments in the Asia-Pacific region, such as Australia, Japan and New Zealand, have initiated policies to attract foreign students to study in their higher education institutions, often on a revenue generating or at least self-financing basis.

### Foreign student intakes as a proportion of total enrolments

The foregoing analysis has focused on the distribution of absolute numbers of foreign students by countries of destination and origin. One way to take the size of the national tertiary education systems into account is to examine the intake

*The geographic composition of the foreign students' intake is fairly stable over time.*

*Students from Greece, Japan and Korea represent the largest intakes from OECD countries...*

*...while students from China and Southeast Asia make up the largest proportion of foreign students from non-OECD countries.*

of tertiary students in a particular country as well as the number of students studying abroad relative to its tertiary enrolments.

Australia, Austria and Switzerland receive the largest proportion of foreign students relative to total tertiary enrolment in their countries (between 12 and 17 per cent), followed by Belgium, Germany and the United Kingdom. By contrast, in Italy, Japan, Korea, Mexico, Poland, the Slovak Republic and Turkey, the proportion of foreign students in tertiary enrolment remains below 2 per cent (Chart C3.1).

In comparison with OECD countries, non-OECD countries participating in the World Education Indicators project receive marginal numbers of foreign students relative to their size, with the exception of Malaysia and Uruguay where foreign students reach 3.4 and 2.2 per cent of enrolments respectively (Table C3.1).

Compared to 1998, several OECD countries have experienced a significant increase in the proportion of foreign students enrolled in their education system. This upward trend is especially noticeable in Germany, Italy, Spain, and the Nordic, Eastern European and Asian-Pacific OECD countries, with indexes of change ranging between 115 and 173.

This trend is also visible in the case of three of the top receiving countries relative to their size, Australia, Germany and New Zealand, with indexes of change at 111, 117 and 170, respectively. This suggests that these countries might play an even greater role in the internationalisation of higher education in the future.

### Students studying abroad relative to total enrolments

It is also possible to estimate the extent to which students study abroad by comparing the number of students of a particular nationality studying abroad to national tertiary enrolments. The measure used here only covers students leaving their country to study in OECD and non-OECD countries that report data; it does not cover students who study abroad in countries other than those reporting their intakes in Table C3.1. The indicator is thus likely to underestimate the proportion of students studying abroad. Another potential source of underestimation may be that the indicator is calculated on a full-year basis whereas many students study abroad for less than a full academic year. For example, more than half of the students from the United States who study abroad leave for half a year or less, and only 14 per cent stay in the host country for a full academic year.

The ratio of students studying abroad to total enrolment in the country of origin varies widely, from below 1 per cent in Australia (0.6 per cent), Mexico (0.7 per cent) and the United States (0.2 per cent), to as much as 24 per cent in Iceland and 228 per cent in Luxembourg (see Table 3.1, column 6). The latter case is specific, however, because Luxembourg only offers post-secondary non-tertiary programmes or the first year at the tertiary level. Since students in

*The percentage of foreign students enrolled in OECD countries ranges from below one to 17 per cent.*

*Australia, Germany and New Zealand, which already play significant roles, might further increase their position on the international education market.*

*Greece, Iceland, Ireland, Luxembourg and Norway send a large proportion of their students abroad, while Australia, Mexico and the United States send relatively few.*

Luxembourg must continue their studies abroad, a large number of students are enrolled outside the country.

### Net balance of international student exchange

*Proportional to their size, Australia, Switzerland and the United Kingdom show the largest net intake of foreign students.*

Although the United States receives over 444,000 foreign students more than the total number of US students going abroad, other countries have much larger net intakes of students when the size of their tertiary systems is taken into account. In Australia, Switzerland and the United Kingdom, the net intake is between 4.4 and 6.9 per cent of their tertiary enrolment (see Table C3.1, column 7). Conversely, Iceland, Ireland, Norway and the Slovak Republic show the highest relative net outflow of students, at 20.5, 5.3, 5.1 and 6 per cent of total tertiary enrolments, respectively. The balances of student flows take only students to and from reporting OECD and non-OECD countries into account. The absolute balance of countries that accept a significant number of students from non-reporting countries or that send students to non-reporting countries may differ from these figures.

*Various push-pull factors help to explain student mobility patterns.*

Given the numerous benefits that foreign students may bring to their host countries, it is important to identify the factors likely to enhance student mobility.

Student mobility patterns can be attributed to a variety of push-pull factors, such as language barriers, the academic reputation of particular institutions or programmes, the flexibility of programmes with respect to counting time spent abroad towards degree requirements, the limitations of higher education provision in the home country, restrictive university admission policies at home, financial incentives and tuition costs.

These patterns also reflect geographical and historical links between countries, future job opportunities, cultural aspirations, and government policies to facilitate credit transfer between home and host institutions. The transparency and flexibility of courses and degree requirements also count.

### Trade effects and economic benefits of the internationalisation of higher education

*The net intake of foreign students indicates the magnitude of the benefits countries can potentially reap from the international exchange of tertiary students.*

A first direct benefit of the intake of foreign students is the tuition fee revenue that is generated and most importantly the domestic consumption by foreign students, which both appear in the balance of current accounts as exports of educational services. The magnitude of this gain is highest when host countries adopt a full-fee tuition policy for overseas students, while in countries where tuition fees charged to foreign students are below the cost of education provision, the net gain depends on the extent of foreign students' domestic consumption. Exports of educational services were estimated at US\$ 30 billion in 1998, or 3 per cent of total OECD trade in services. In a top receiving country such as Australia, exports of educational services were the third largest service sector export earner in 2000-2001, representing nearly 12 per cent of total service exports.

In addition to the direct benefits of internationalised higher education, a higher client-base of tertiary education may result in indirect gains, whereby net

receiving countries generate economies of scale in tertiary education, and can therefore diversify their range of programmes and / or reduce their unit costs. This can be particularly important for host countries with a relatively small population (e.g. Switzerland).

The presence of a potential foreign student client-base also compels higher education institutions to offer quality programmes that stand out among competitors, which may contribute to the development of a highly reactive, client-driven higher education.

Finally, the intake of foreign students can to some extent involve technology transfers (especially in advanced research programmes), foster intercultural contacts and help to build social networks for the future.

### Profile of foreign intake by host country

In some countries a comparatively large proportion of foreign students is enrolled in tertiary-type B programmes. This is the case in Belgium (44.3 per cent), New Zealand (24.3 per cent) and Korea (18.4 per cent) among OECD countries, and to a very large extent in Malaysia (79.4 per cent) among non-OECD countries. By contrast other countries see a large proportion of their foreign students choose highly theoretical advanced research programmes. This is most notably the case in Finland (19.6 per cent), Switzerland (18.1 per cent), Spain (17.1 per cent), the United States (16.6 per cent) and Sweden (15.1 per cent), suggesting that these countries offer attractive advanced programmes to prospective foreign graduate students. This latter group of countries is also likely to benefit from larger technology transfers and tuition revenue per foreign student (in the countries which charge foreign students full tuition costs) (Table C3.4).

*The profile of the intake of foreign students varies significantly among countries, suggesting different specialisations on the international education market.*

### Definitions and methodologies

Students are classified as foreign students if they are not citizens of the country in which the data are collected. While pragmatic and operational, this classification may create inconsistencies resulting from differing national policies regarding the naturalisation of immigrants and the inability of several countries to report foreign students net of permanent resident students. Countries that naturalise immigrants stringently and which cannot identify non-resident foreign students therefore over-estimate the size of their foreign student body, compared to more lenient countries. Bilateral comparisons of the data on *foreign* students should therefore be made with caution, since some countries differ in the definition and coverage of their foreign students (see Annex 3 at [www.oecd.org/edu/eq2003](http://www.oecd.org/edu/eq2003)).

*Data refer to the academic year 2000–2001 and are based on the VOE data collection on education statistics, which is administered annually by the OECD (see Annex 3).*

Foreign student data are collected by host countries and therefore relate to students that are coming in rather than to students going abroad. Host countries covered by this indicator are OECD countries with the exception of Canada, Greece, Luxembourg and Portugal as well as the following non-OECD countries: Argentina, Chile, India, Indonesia, Malaysia, the Philippines, the Russian Federation, Thailand, Tunisia and Uruguay. This indicator

does not include students studying in OECD countries that did not report foreign students nor in non-OECD countries other than those mentioned above. All statements on students studying abroad therefore underestimate the real number of students abroad.

The method of obtaining data on the number of foreign students is the same as that used for collecting data on total enrolments, *i.e.*, records of regularly enrolled students in an educational programme are used. Domestic and foreign students are usually counted on a specific day or period of the year. This procedure measures the proportion of foreign enrolments in an education system, but the actual number of individuals involved in foreign exchange may be much higher, since many students study abroad for less than a full academic year, or participate in exchange programmes that do not require enrolment (*e.g.*, inter-university exchange or advanced research short-term mobility).

Tables C3.1, C3.2 and C3.3 show foreign enrolment as a proportion of the total enrolment in the host country or country of origin. Total enrolment, used as a denominator, comprises all persons studying in the country (including all foreign students) but excludes all students from that country who study abroad.

The index of intensity of foreign students' intake shown in Table C3.1 compares the numbers of foreign students as a proportion of domestic enrolments with the average order of magnitude for OECD countries. This makes it possible to refine the scale of foreign students' intakes based on the size of the tertiary education system. An index higher (lower) than one reflects a higher (lower) intake as a proportion of enrolments compared with the OECD mean. Alternatively, this index can also be interpreted in terms of a comparison of the weight of a country in OECD foreign students' intakes with its weight in OECD enrolments. If so, an index higher (lower) than one reflects a higher (lower) foreign students' intake than the country's weight in OECD enrolments would suggest.

The proportions of students abroad given in Table C3.2 do not include the proportion of all students of a certain nationality studying abroad, but expresses the numbers of students of a given nationality as a proportion of the total domestic enrolment at the tertiary level, excluding students who are nationals of that country who are not studying in their home country.

Table C3.4 shows the distribution of foreign students enrolled in an education system according to the level and type of education in which they are enrolled.



Table C3.1

## Exchange of students in tertiary education (2001)

Foreign students enrolled as a percentage of all students (foreign plus domestic), and exchange of students as a percentage of total tertiary enrolment

**Reading the first column:** 13.9 per cent of all students in tertiary education in Australia are foreign students (from throughout the world).

**Reading the fourth column:** Australia enrolls 2.6 times more foreign tertiary students than the average OECD country, while Malaysia's proportion of foreign students is 0.6 times the OECD average.

**Reading the fifth column:** Foreign tertiary students from other countries that report foreign students, represent 6.9 per cent of all tertiary students in Australia.

**Reading the sixth column:** 0.6 per cent of all tertiary students in Australia study in other countries that report foreign students.

Column 7 represents the difference between column 5 and column 6.

	Foreign students from throughout the world as a percentage of all students (foreign and domestic students)			Index of intensity of foreign students' intake relative to OECD reference area <sup>1</sup>	Exchange of students with other reporting countries <sup>2</sup> (relative to total tertiary enrolment)			Foreign enrolment by gender	
	2001	1998	Index of change (1998=100)		Intake of students from other reporting countries	National students enrolled abroad in other reporting countries	Net intake of foreign students from other reporting countries	% males	% females
<b>OECD COUNTRIES</b>									
Australia	13.9	12.6	111	2.6	6.9 <sup>3</sup>	0.6 <sup>3</sup>	6.3 <sup>3</sup>	53.1	46.9
Austria	12.0	11.5	104	2.2	8.1	4.4	3.8	49.0	51.0
Belgium	10.6	m	m	2.0	5.7	2.8	2.9	50.9	49.1
Canada	m	2.8	m	m	m	m	m	m	m
Czech Republic	3.0	1.9	157	0.6	1.7	2.0	-0.3	55.1	44.9
Denmark	6.5	6.0	109	1.2	2.8	3.2	-0.4	45.3	54.7
Finland	2.2	1.7	130	0.4	0.8	3.5	-2.7	56.9	43.1
France	7.3	7.3	99	1.4	1.7	2.3	-0.6	m	m
Germany	9.6	8.2	117	1.8	4.7	2.6	2.0	52.2	47.8
Greece	m	m	m	m	m	11.4	m	m	m
Hungary	3.4	2.6	131	0.6	1.2	2.2	-1.0	56.2	43.8
Iceland	4.1	2.4	173	0.8	3.3	23.8	-20.5	35.2	64.8
Ireland	4.9	4.8	102	0.9	4.0	9.2	-5.3	47.7	52.3
Italy	1.6	1.2	130	0.3	0.2	2.3	-2.0	45.4	54.6
Japan	1.6	1.4	114	0.3	0.7	1.4	-0.7	54.6	45.4
Korea	0.1	0.1	128	n	n	2.3	-2.2	56.8	43.2
Luxembourg	m	30.5	m	m	m	228.5	m	m	m
Mexico	0.1	m	m	n	n	0.7	-0.7	m	m
Netherlands	3.3	m	m	0.6	2.0	2.3	-0.3	50.7	49.3
New Zealand	6.2	3.7	170	1.2	2.7	3.5	-0.8	49.6	50.4
Norway	4.7	3.2	147	0.9	2.3	7.4	-5.1	m	m
Poland	0.4	0.5	82	0.1	0.1	1.1	-1.0	m	m
Portugal	m	m	m	m	m	2.8	m	m	m
Slovak Republic	1.2	m	m	0.2	0.3	6.2	-6.0	61.3	38.7
Spain	2.2	1.7	131	0.4	1.4	1.4	n	45.0	55.0
Sweden	7.3	4.5	164	1.4	4.4	4.2	0.2	m	m
Switzerland	17.0	15.9	107	3.2	11.8	4.9	6.9	55.9	44.1
Turkey	1.0	1.3	78	0.2	n	2.8	-2.7	73.1	26.9
United Kingdom	10.9	10.8	101	2.0	5.6	1.2	4.4	52.2	47.8
United States	3.5	3.2	108	0.7	1.7	0.2	1.5	58.1	41.9
<b>Country mean</b>	<b>5.3</b>	<b>5.8</b>		<b>1.0</b>	<b>2.8</b>	<b>4.0<sup>4</sup></b>		<b>52.6</b>	<b>47.4</b>
<b>NON-OECD COUNTRIES</b>									
Argentina	0.7	m	m	0.1	0.1	1.4	-1.2	m	m
Chile	0.8	m	m	0.1	0.3	1.1	-0.7	m	m
India	0.1	m	m	n	n	0.7	-0.7	m	m
Indonesia	n	m	m	n	n	1.1	-1.1	m	m
Malaysia	3.4	m	m	0.6	1.3	6.0	-4.7	m	m
Philippines	0.1	m	m	n	n	0.2	-0.2	m	m
Russian Federation	0.9	m	m	0.2	m	m	m	m	m
Thailand	0.1	m	m	n	n	0.9	-0.9	m	m
Tunisia	1.2	m	m	0.2	m	m	m	m	m
Uruguay	2.2	m	m	0.4	m	m	m	m	m

1. The index compares the numbers of foreign students as a proportion of domestic enrolments with the average order of magnitude for OECD countries. This makes it possible to refine the scale of foreign students' intakes based on the size of the tertiary education system. An index higher (lower) than one reflects a higher (lower) intake as a proportion of enrolments compared with the OECD mean.

2. Data in columns 5 to 7 do not show the exchange of students throughout the world. Coverage is limited to the OECD and non-OECD countries shown in the table that report data in column 1. Therefore data are not comparable to those reported in Column 1.

3. Tertiary-type A and advanced research programmes only.

4. Country mean excludes Luxembourg.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Table C3.2

**Proportion of foreign students in tertiary education in the country of study (2001)**

Number of foreign students enrolled in tertiary education as a percentage of students in the country of destination, based on head counts

The table shows the share of students in each country that have citizenship of another country.

Example: Reading the second column: 0.03 per cent of Austrian tertiary students are Belgian citizens, 0.02 per cent of Austrian students are Canadian citizens, etc.

Reading the first row: 0.02 per cent of Danish tertiary students are Australian citizens, 0.05 per cent of Irish tertiary students are Australian citizens, etc.

		Countries of destination											
Countries of origin		Australia	Austria	Belgium	Czech Republic	Denmark	Finland	France	Germany	Iceland	Ireland	Italy	Japan
OECD COUNTRIES	Australia	a	0.01	n	n	0.02	0.01	0.01	0.01	0.01	0.05	n	0.01
	Austria	0.02	a	0.01	n	0.01	0.01	0.02	0.32	0.13	0.03	n	n
	Belgium	0.01	0.03	a	n	0.01	0.01	0.10	0.05	0.01	0.04	0.01	n
	Canada	0.15	0.02	0.02	0.01	0.02	0.03	0.05	0.02	0.05	0.11	n	0.01
	Czech Republic	0.01	0.15	0.01	n	a	0.01	0.02	0.08	0.04	0.01	0.01	n
	Denmark	0.02	0.02	0.01	n	n	0.02	0.01	0.03	0.48	0.02	n	n
	Finland	0.01	0.06	0.02	n	0.06	a	0.01	0.05	0.29	0.06	n	n
	France	0.04	0.16	2.95	n	0.06	0.04	a	0.31	0.27	0.33	0.03	0.01
	Germany	0.14	2.30	0.14	0.01	0.30	0.09	0.26	a	0.35	0.30	0.04	0.01
	Greece	0.01	0.12	0.17	0.16	0.01	0.01	0.13	0.38	n	0.03	0.49	n
	Hungary	0.01	0.45	0.03	n	0.01	0.03	0.03	0.14	n	n	0.01	n
	Iceland	n	0.01	n	n	0.39	0.01	n	0.01	n	a	n	n
	Ireland	0.04	0.02	0.02	n	0.02	0.01	0.03	0.03	n	n	a	n
	Italy	0.02	2.68	0.83	n	0.04	0.03	0.18	0.36	0.17	0.08	n	a
	Japan	0.28	0.11	0.05	n	0.02	0.03	0.07	0.10	0.06	0.02	n	n
	Korea	0.32	0.12	0.02	n	n	0.01	0.08	0.23	n	0.01	n	0.45
	Luxembourg	n	0.11	0.39	n	n	n	0.07	0.08	0.01	0.01	n	n
	Mexico	0.02	0.03	0.02	n	0.01	0.01	0.05	0.02	0.01	n	n	n
	Netherlands	0.04	0.04	0.73	n	0.05	0.02	0.02	0.09	0.07	0.03	n	n
	New Zealand	0.53	n	n	n	0.01	n	n	n	n	n	n	n
	Norway	0.28	0.03	0.01	0.02	0.77	0.02	0.02	0.04	0.35	0.09	n	n
	Poland	0.02	0.35	0.07	0.03	0.11	0.02	0.10	0.49	0.13	0.02	0.02	n
	Portugal	0.01	0.02	0.18	n	0.01	0.01	0.14	0.09	n	0.03	n	n
	Slovak Republic	0.01	0.41	0.01	1.42	n	0.01	0.01	0.05	0.02	n	n	n
	Spain	0.01	0.13	0.36	n	0.05	0.03	0.18	0.28	0.13	0.13	0.01	n
	Sweden	0.12	0.09	0.01	0.02	0.35	0.21	0.04	0.04	0.31	0.05	0.01	n
	Switzerland	0.02	0.10	0.03	n	0.02	0.01	0.05	0.09	0.06	0.01	0.04	n
	Turkey	0.02	0.49	0.12	n	0.10	0.01	0.10	1.28	0.01	n	0.01	n
	United Kingdom	0.52	0.08	0.06	0.09	0.20	0.05	0.13	0.12	0.16	1.16	0.01	0.01
	United States	0.46	0.14	0.05	0.02	0.12	0.07	0.12	0.17	0.26	1.10	0.01	0.03
	Argentina	0.01	0.01	0.01	n	n	n	0.03	0.02	n	n	0.01	n
Brazil	0.03	0.03	0.04	n	0.02	0.01	0.07	0.07	n	n	0.01	n	
Chile	0.02	0.01	0.03	n	0.01	n	0.02	0.02	n	n	n	n	
China	0.92	0.15	0.20	n	0.08	0.36	0.15	0.44	0.09	0.06	0.01	0.80	
Egypt	0.01	0.09	0.02	0.01	0.01	n	0.04	0.06	n	0.02	n	0.01	
India	0.71	0.04	0.04	0.01	0.01	0.02	0.01	0.07	0.02	0.04	0.01	0.01	
Indonesia	1.23	0.01	0.02	n	n	n	0.01	0.10	n	n	n	0.03	
Jamaica	n	n	n	n	n	n	0.00	n	n	n	n	n	
Jordan	0.01	0.03	n	0.01	n	n	0.01	0.05	0.02	0.01	0.01	n	
Malaysia	1.49	n	n	n	n	n	0.01	0.01	n	0.36	n	0.04	
Paraguay	n	n	n	n	n	n	0.00	n	n	n	n	n	
Peru	0.01	0.03	0.02	n	0.01	0.01	0.02	0.04	n	n	0.01	n	
Philippines	0.08	0.01	0.02	n	0.01	0.01	0.00	0.01	n	n	n	0.01	
Russian Federation	0.03	0.13	0.06	0.06	0.06	0.27	0.08	0.36	0.12	0.03	0.01	0.01	
Thailand	0.37	0.01	0.01	n	0.01	n	0.02	0.02	0.01	n	n	0.03	
Tunisia	n	0.02	0.08	n	n	n	0.00	0.06	n	n	0.01	n	
Uruguay	n	n	n	n	n	n	0.00	n	n	n	n	n	
Zimbabwe	0.04	n	n	n	n	n	0.00	n	n	n	n	n	
<b>Total: Africa</b>		<b>0.44</b>	<b>0.36</b>	<b>3.06</b>	<b>0.09</b>	<b>0.20</b>	<b>0.26</b>	<b>3.71</b>	<b>0.93</b>	<b>0.05</b>	<b>0.25</b>	<b>0.12</b>	<b>0.02</b>
<b>Total: Asia</b>		<b>8.96</b>	<b>1.47</b>	<b>0.73</b>	<b>0.28</b>	<b>0.53</b>	<b>0.60</b>	<b>0.98</b>	<b>3.25</b>	<b>0.28</b>	<b>0.84</b>	<b>0.19</b>	<b>1.46</b>
<b>Total: Europe</b>		<b>1.47</b>	<b>9.74</b>	<b>6.34</b>	<b>2.00</b>	<b>3.06</b>	<b>1.24</b>	<b>2.04</b>	<b>4.82</b>	<b>3.42</b>	<b>2.55</b>	<b>1.15</b>	<b>0.05</b>
<b>Total: North America</b>		<b>0.63</b>	<b>0.21</b>	<b>0.14</b>	<b>0.04</b>	<b>0.16</b>	<b>0.11</b>	<b>0.26</b>	<b>0.26</b>	<b>0.34</b>	<b>1.23</b>	<b>0.03</b>	<b>0.04</b>
<b>Total: Oceania</b>		<b>0.75</b>	<b>0.01</b>	<b>n</b>	<b>n</b>	<b>0.03</b>	<b>0.01</b>	<b>0.01</b>	<b>0.02</b>	<b>0.01</b>	<b>0.05</b>	<b>n</b>	<b>0.01</b>
<b>Total: South America</b>		<b>0.11</b>	<b>0.12</b>	<b>0.18</b>	<b>0.03</b>	<b>0.06</b>	<b>0.02</b>	<b>0.21</b>	<b>0.20</b>	<b>0.02</b>	<b>0.01</b>	<b>0.07</b>	<b>0.02</b>
<b>Not specified</b>		<b>0.39</b>	<b>0.06</b>	<b>0.17</b>	<b>0.54</b>	<b>2.49</b>	<b>0.02</b>	<b>0.05</b>	<b>0.08</b>	<b>0.01</b>	<b>n</b>	<b>0.05</b>	<b>n</b>
<b>Total: All countries</b>		<b>13.93</b>	<b>11.97</b>	<b>10.62</b>	<b>2.98</b>	<b>6.53</b>	<b>2.25</b>	<b>7.25</b>	<b>9.56</b>	<b>4.13</b>	<b>4.93</b>	<b>1.61</b>	<b>1.60</b>

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Table C3.2 (continued)

## Proportion of foreign students in tertiary education in the country of study (2001)

Number of foreign students enrolled in tertiary education as a percentage of students in the country of destination, based on head counts

The table shows the share of students in each country that have citizenship of another country.

Example: Reading the second column: 0.35 per cent of Dutch tertiary students are Belgian citizens, 0.01 per cent of Dutch students are Canadian citizens, etc.

Reading the first row: 0.01 per cent of Dutch tertiary students are Australian citizens, 0.05 per cent of Swedish tertiary students are Australian citizens, etc.

Countries of origin		Countries of destination											
		Korea	Netherlands	New Zealand	Norway	Poland	Slovak Republic	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
OECD COUNTRIES	Australia	n	0.01	a	0.01	n	n	n	0.05	0.03	n	0.06	0.02
	Austria	n	0.02	0.01	0.02	n	n	0.03	0.09	0.49	n	0.06	0.01
	Belgium	n	0.35	0.00	0.01	n	n	0.07	0.05	0.17	n	0.12	0.01
	Canada	n	0.01	0.06	0.03	0.01	0.01	n	0.08	0.11	n	0.15	0.16
	Czech Republic	n	0.01	n	0.02	0.01	0.20	0.01	0.03	0.08	n	0.02	0.01
	Denmark	n	0.01	0.02	0.40	n	n	0.02	0.23	0.05	n	0.08	0.01
	Finland	n	0.02	0.01	0.12	n	n	0.02	1.00	0.04	n	0.12	0.01
	France	n	0.07	0.04	0.06	n	n	0.27	0.27	1.88	n	0.60	0.05
	Germany	n	0.63	0.17	0.24	0.01	0.01	0.23	0.57	3.52	0.01	0.65	0.06
	Greece	n	0.02	n	0.01	n	0.18	0.02	0.07	0.16	0.08	1.39	0.02
	Hungary	n	0.01	n	0.01	n	0.02	0.01	0.06	0.10	n	0.02	0.01
	Iceland	n	n	n	0.14	n	n	n	0.09	0.01	n	0.01	n
	Ireland	n	0.01	n	0.01	n	n	0.02	0.03	0.03	n	0.59	0.01
	Italy	n	0.07	n	0.04	n	n	0.28	0.16	2.61	n	0.29	0.02
	Japan	0.02	0.01	0.28	0.01	n	n	0.01	0.04	0.12	n	0.30	0.30
	Korea	n	a	0.31	n	n	n	n	0.01	0.06	n	0.11	0.29
	Luxembourg	n	n	n	n	n	n	n	n	0.12	n	0.03	n
	Mexico	n	n	0.01	0.01	n	n	0.07	0.03	0.05	n	0.07	0.07
	Netherlands	n	n	a	0.07	n	n	0.05	0.15	0.16	n	0.12	0.01
	New Zealand	n	n	a	n	n	n	n	0.01	0.01	n	0.02	0.01
	Norway	n	0.02	0.08	n	a	n	0.01	0.34	0.08	n	0.19	0.01
	Poland	n	0.04	n	0.04	n	0.02	0.02	0.23	0.21	n	0.03	0.02
	Portugal	n	0.03	0.01	0.01	n	n	a	0.03	0.30	n	0.11	0.01
	Slovak Republic	n	n	n	0.01	n	n	0.00	a	0.06	n	0.01	0.00
	Spain	n	0.19	n	0.03	n	n	n	0.21	0.93	n	0.35	0.03
	Sweden	n	0.02	0.07	0.53	0.01	n	0.02	a	0.15	a	0.20	0.03
	Switzerland	n	0.02	0.01	0.02	n	n	0.01	0.06	n	n	a	0.01
	Turkey	n	0.20	n	0.02	n	n	n	0.04	0.34	a	0.09	a
	United Kingdom	n	0.13	0.08	0.20	n	n	0.13	0.22	0.18	0.01	a	0.05
United States	0.01	0.05	0.29	0.16	0.02	0.01	0.03	0.25	0.21	n	0.57	a	
NON-OECD COUNTRIES	Argentina	n	n	0.01	n	n	0.06	0.01	0.06	n	0.02	0.02	
	Brazil	n	0.01	0.02	0.02	n	n	0.05	0.02	0.11	n	0.05	
	Chile	n	0.01	0.01	0.03	n	n	0.04	0.07	0.04	n	0.01	
	China	0.05	0.08	1.88	0.11	n	n	0.01	0.17	0.26	0.01	0.50	
	Egypt	n	0.01	n	0.01	n	0.01	n	n	0.04	n	0.06	
	India	n	0.01	0.20	0.05	n	n	n	0.03	0.07	n	0.21	
	Indonesia	n	0.11	0.22	n	n	n	n	0.01	0.02	n	0.05	
	Jamaica	n	n	n	n	n	n	n	n	n	n	0.02	
	Jordan	n	n	n	n	n	0.01	n	n	0.01	0.01	0.04	
	Malaysia	n	n	0.60	n	n	n	n	0.01	n	n	0.44	
	Paraguay	n	n	n	n	n	n	n	n	n	n	n	
	Peru	n	0.01	n	0.01	n	n	0.05	0.02	0.10	n	0.01	
	Philippines	n	0.01	0.03	n	n	n	0.00	0.01	0.01	n	0.01	
	Russian Federation	n	0.05	0.02	0.18	0.02	0.02	0.01	0.15	0.23	0.06	0.07	
	Thailand	n	n	0.19	0.01	n	n	n	0.02	0.01	n	0.13	
	Tunisia	n	n	n	n	n	n	n	n	0.12	n	n	
	Uruguay	n	n	0.01	n	n	n	0.01	n	0.01	n	n	
	Zimbabwe	n	n	0.01	0.01	n	n	n	n	n	n	0.11	
	<b>Total: Africa</b>	<b>n</b>	<b>0.51</b>	<b>0.08</b>	<b>0.39</b>	<b>0.02</b>	<b>0.09</b>	<b>0.22</b>	<b>0.18</b>	<b>1.10</b>	<b>0.03</b>	<b>0.88</b>	<b>0.22</b>
	<b>Total: Asia</b>	<b>0.11</b>	<b>0.66</b>	<b>4.49</b>	<b>0.54</b>	<b>0.06</b>	<b>0.27</b>	<b>0.06</b>	<b>0.64</b>	<b>1.33</b>	<b>0.68</b>	<b>3.60</b>	<b>2.16</b>
<b>Total: Europe</b>	<b>n</b>	<b>1.83</b>	<b>0.56</b>	<b>2.67</b>	<b>0.26</b>	<b>0.79</b>	<b>1.39</b>	<b>4.51</b>	<b>12.90</b>	<b>0.33</b>	<b>5.29</b>	<b>0.51</b>	
<b>Total: North America</b>	<b>0.01</b>	<b>0.07</b>	<b>0.36</b>	<b>0.21</b>	<b>0.03</b>	<b>0.01</b>	<b>0.14</b>	<b>0.39</b>	<b>0.43</b>	<b>n</b>	<b>0.90</b>	<b>0.36</b>	
<b>Total: Oceania</b>	<b>n</b>	<b>0.01</b>	<b>0.68</b>	<b>0.01</b>	<b>n</b>	<b>n</b>	<b>0.00</b>	<b>0.06</b>	<b>0.04</b>	<b>n</b>	<b>0.09</b>	<b>0.03</b>	
<b>Total: South America</b>	<b>n</b>	<b>0.21</b>	<b>0.06</b>	<b>0.08</b>	<b>n</b>	<b>0.01</b>	<b>0.36</b>	<b>0.16</b>	<b>0.53</b>	<b>n</b>	<b>0.14</b>	<b>0.21</b>	
<b>Not specified</b>	<b>n</b>	<b>0.01</b>	<b>n</b>	<b>0.77</b>	<b>0.01</b>	<b>a</b>	<b>n</b>	<b>1.41</b>	<b>0.67</b>	<b>a</b>	<b>0.02</b>	<b>a</b>	
<b>Total: All countries</b>	<b>0.12</b>	<b>3.29</b>	<b>6.23</b>	<b>4.65</b>	<b>0.38</b>	<b>1.17</b>	<b>2.18</b>	<b>7.35</b>	<b>16.99</b>	<b>1.04</b>	<b>10.92</b>	<b>3.50</b>	

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Table C3.3

**Proportion of citizens in tertiary education studying abroad (2001)**

Number of students enrolled in tertiary education in other countries as a percentage of students enrolled in the country of origin, based on head counts

The table shows the share of students from each country that are studying in other countries.

Example: Reading the first column: 0.06 per cent of Japanese tertiary students study in Australia, 0.09 per cent of Korean students study in Australia, etc. Reading the first row: 0.02 per cent of Australian students study in France, 0.03 per cent of Australian students study in Germany, etc.

		Countries of destination												
		Australia	Austria	Belgium	Czech Republic	Denmark	Finland	France	Germany	Iceland	Ireland	Italy	Japan	Korea
OECD COUNTRIES	Australia	a	n	n	n	n	0.02	0.03	n	0.01	n	0.04	n	
	Austria	0.05	a	0.02	n	0.01	0.01	0.16	2.49	n	0.02	0.03	0.01	n
	Belgium	0.02	0.02	a	n	0.01	0.01	0.56	0.27	n	0.02	0.03	0.01	n
	Czech Republic	0.03	0.15	0.01	n	a	0.01	0.14	0.66	n	0.01	0.04	0.01	n
	Denmark	0.09	0.03	0.03	n	n	a	0.14	0.35	0.03	0.01	0.02	0.01	n
	Finland	0.04	0.06	0.03	n	0.04	a	0.11	0.36	0.01	0.03	0.02	0.01	n
	France	0.02	0.02	0.52	n	0.01	0.01	a	a	n	0.03	0.02	0.01	n
	Germany	0.06	0.29	0.02	n	0.03	0.01	0.25	a	n	0.02	0.04	0.01	n
	Greece	0.01	0.06	0.13	0.09	n	0.01	0.54	1.68	n	0.01	1.86	n	n
	Hungary	0.02	0.36	0.03	n	0.01	0.02	0.16	0.87	n	n	0.03	0.02	n
	Iceland	0.05	0.24	0.06	0.03	7.43	0.33	0.40	1.64	n	a	0.05	0.09	n
	Ireland	0.21	0.03	0.03	0.01	0.03	0.01	0.34	0.32	n	n	a	0.01	n
	Italy	0.01	0.39	0.17	n	n	n	0.21	0.42	n	0.01	n	a	n
	Japan	0.06	0.01	n	n	n	n	0.04	0.05	n	n	n	n	0.02
	Korea	0.09	0.01	n	n	n	n	0.05	0.16	n	n	n	0.57	n
	Luxembourg	0.32	12.0	55.39	n	n	n	54.20	64.55	0.04	0.87	0.95	0.24	n
	Mexico	0.01	n	n	n	n	n	0.05	0.02	n	n	n	0.01	n
	Netherlands	0.08	0.02	0.52	n	0.02	0.01	0.09	0.38	n	0.01	0.01	0.01	n
	New Zealand	2.60	n	n	n	0.01	n	0.02	0.03	n	n	n	0.04	n
	Norway	1.29	0.04	0.01	0.03	0.77	0.03	0.18	0.49	0.02	0.08	0.02	0.01	n
	Poland	0.01	0.05	0.01	n	0.01	n	0.11	0.57	n	n	0.02	n	n
	Portugal	0.02	0.01	0.17	n	n	n	0.73	0.46	n	0.01	0.01	0.01	n
	Slovak Republic	0.04	0.75	0.03	2.57	n	0.01	0.18	0.72	n	n	0.05	0.01	n
	Spain	0.01	0.02	0.07	n	n	n	0.20	0.32	n	0.01	0.01	n	n
	Sweden	0.30	0.07	0.01	0.01	0.19	0.16	0.24	0.25	0.01	0.02	0.03	0.02	n
	Switzerland	0.11	0.17	0.07	n	0.03	0.02	0.64	1.20	n	0.01	0.44	0.02	n
	Turkey	0.01	0.08	0.03	n	0.01	n	0.13	1.65	n	n	0.01	0.01	n
United Kingdom	0.22	0.01	0.01	0.01	0.02	0.01	0.13	0.12	n	0.09	0.01	0.02	n	
United States	0.03	n	n	n	n	n	0.02	0.03	n	0.01	n	0.01	n	
Argentina	0.02	0.01	0.01	n	n	n	0.11	0.09	n	n	0.06	0.02	n	
Brazil	0.01	n	0.01	n	n	n	0.05	0.05	n	n	0.01	0.01	n	
Chile	0.04	n	0.03	n	0.01	n	0.08	0.10	n	n	0.01	0.01	n	
Egypt	n	0.01	n	n	n	n	0.05	0.07	n	n	n	0.01	n	
Indonesia	0.36	n	n	n	n	n	0.01	0.07	n	n	n	0.04	n	
Jamaica	0.01	0.01	n	n	n	n	0.03	0.03	n	n	n	0.01	n	
Malaysia	2.35	n	n	n	n	n	0.02	0.04	n	0.11	n	0.32	n	
Paraguay	n	n	0.01	0.01	n	n	0.04	0.05	n	n	0.01	0.04	0.02	
Philippines	0.03	n	n	n	n	n	n	0.01	n	n	n	0.02	n	
Russian Federation	n	n	n	n	n	0.01	0.02	0.10	n	n	n	n	n	
Thailand	0.15	n	n	n	n	n	0.02	0.02	n	n	n	0.05	n	
Tunisia	n	0.03	0.13	n	n	n	0.03	0.61	n	n	0.05	0.02	n	
Uruguay	0.02	0.01	0.01	n	n	n	0.05	0.04	n	n	0.01	0.01	n	
Zimbabwe	1.02	0.01	0.02	0.02	0.02	0.01	0.02	0.20	n	0.02	n	0.02	n	

 Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Table C3.3 (continued)

## Proportion of citizens in tertiary education studying abroad (2001)

Number of students enrolled in tertiary education in other countries as a percentage of students enrolled in the country of origin, based on head counts

The table shows the share of students from each country that are studying in other countries.

Example: Reading the second column: 0.01 per cent of Japanese tertiary students study in New Zealand, 0.02 per cent of Korean students study in New Zealand, etc. Reading the first row: 0.02 per cent of Australian students study in Sweden, 0.01 per cent of Australian students study in Switzerland, etc.

Countries of origin	Countries of destination												Total	
	Netherlands	New Zealand	Norway	Poland	Portugal	Slovak Republic	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States		
<b>OECD COUNTRIES</b>														
Australia	n	a	n	n	m	n	n	0.02	0.01	n	0.14	0.26	0.55	
Austria	0.04	0.01	0.01	n	m	n	0.24	0.12	0.30	n	0.47	0.35	4.35	
Belgium	0.49	n	0.01	n	m	n	0.35	0.05	0.08	n	0.67	0.21	2.80	
Czech Republic	0.02	n	0.01	0.09	m	0.11	0.07	0.04	0.05	n	0.16	0.37	1.98	
Denmark	0.03	0.02	0.40	0.01	m	n	0.17	0.43	0.04	n	0.91	0.45	3.18	
Finland	0.03	n	0.08	n	m	n	0.12	1.28	0.03	n	0.91	0.28	3.45	
France	0.02	n	0.01	n	m	n	0.24	0.05	0.15	n	0.62	0.31	2.02	
Germany	0.15	0.01	0.02	0.01	m	n	0.20	0.10	0.28	n	0.64	0.42	2.59	
Greece	0.02	n	n	0.01	m	0.05	0.07	0.05	0.05	0.27	5.99	0.50	11.42	
Hungary	0.02	n	0.01	0.02	m	0.01	0.04	0.06	0.05	n	0.12	0.31	2.16	
Iceland	0.21	n	2.63	0.01	m	n	0.18	3.30	0.13	n	2.19	4.75	23.71	
Ireland	0.02	n	0.01	n	m	n	0.20	0.07	0.03	n	7.33	0.57	9.22	
Italy	0.02	n	n	n	m	n	0.28	0.03	0.24	n	0.34	0.17	2.28	
Japan	n	0.01	n	n	m	n	n	n	n	n	0.16	1.02	1.39	
Korea	a	0.02	n	n	m	n	n	n	n	n	0.07	1.27	2.25	
Luxembourg	0.71	n	n	n	m	n	0.99	0.16	8.05	n	27.52	2.50	228.48	
Mexico	n	n	n	n	m	n	0.06	n	n	n	0.07	0.45	0.69	
Netherlands	n	a	0.03	n	m	n	0.17	0.11	0.05	n	0.49	0.32	2.33	
New Zealand	0.01	a	n	n	m	n	n	0.01	0.01	n	0.25	0.47	3.47	
Norway	0.04	0.07	n	a	m	n	0.14	0.63	0.07	n	2.04	0.96	6.93	
Poland	0.01	n	n	n	m	n	0.02	0.05	0.02	n	0.04	0.12	1.07	
Portugal	0.04	n	0.01	n	m	a	0.38	0.03	0.13	n	0.59	0.2	2.80	
Slovak Republic	0.01	n	0.01	0.05	m	n	a	0.02	0.06	n	0.09	0.32	4.94	
Spain	0.05	n	n	n	m	n	n	0.04	0.08	n	0.40	0.20	1.43	
Sweden	0.03	0.04	0.28	0.03	m	n	0.12	a	a	n	1.13	1.11	4.05	
Switzerland	0.05	0.01	0.03	n	m	n	0.13	0.14	n	a	0.85	0.98	4.91	
Turkey	0.06	n	n	n	m	n	n	0.01	0.03	a	a	0.59	2.64	
United Kingdom	0.03	0.01	0.02	n	m	n	0.11	0.04	0.01	0.01	a	0.34	1.22	
United States	n	n	n	n	m	n	n	0.01	n	n	0.09	a	0.21	
Argentina	n	n	n	n	m	n	0.24	0.01	0.02	n	0.09	0.60	1.30	
Brazil	n	n	n	n	m	n	0.04	n	0.01	n	0.04	0.28	0.50	
Chile	0.01	0.01	0.01	n	m	n	0.17	0.06	0.02	n	0.07	0.30	0.92	
Egypt	n	n	n	n	m	n	n	n	n	n	0.07	0.11	0.36	
Indonesia	0.02	0.01	n	n	m	n	n	n	n	n	0.03	0.33	0.88	
Jamaica	n	0.01	0.01	n	m	n	n	n	n	n	0.90	8.62	9.64	
Malaysia	n	0.19	n	n	m	n	n	n	n	n	1.67	1.23	5.96	
Paraguay	n	n	n	n	m	n	0.05	n	n	n	0.02	0.39	0.65	
Philippines	n	n	n	n	m	n	n	n	n	n	0.01	0.11	0.20	
Russian Federation	n	n	n	n	m	n	n	0.01	0.01	0.01	0.02	0.08	0.30	
Thailand	n	0.02	n	n	m	n	n	n	n	n	0.13	0.46	0.87	
Tunisia	0.01	n	n	0.01	m	n	0.01	n	0.10	n	0.02	0.16	1.18	
Uruguay	n	0.01	n	n	m	n	0.16	0.01	0.02	n	0.04	0.35	0.75	
Zimbabwe	0.01	0.06	0.08	0.02	m	0.01	0.02	0.03	0.01	0.01	6.93	4.42	12.98	
<b>NON-OECD COUNTRIES</b>														

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Table C3.4  
**Foreign students by level and type of tertiary education (2001)**  
*Distribution of tertiary foreign students by level and type of education*

	Tertiary-type B	Tertiary-type A	Advanced research programmes	Tertiary-type A and advanced research programmes	Total tertiary
	(1)	(2)	(3)	(4)	(5)
<b>OECD COUNTRIES</b>					
Australia	8.4	86.2	5.4	91.6	100.0
Austria	2.3	86.5	11.2	97.7	100.0
Belgium	44.3	50.8	5.0	55.7	100.0
Czech Republic	3.4	81.7	14.9	96.6	100.0
Denmark	11.7	88.3	a	88.3	100.0
Finland	1.1	79.3	19.6	98.9	100.0
France	8.8	91.2	m	m	100.0
Germany	6.1	93.9	m	93.9	100.0
Iceland	2.6	96.0	1.4	97.4	100.0
Italy	9.2	90.3	0.5	90.8	100.0
Japan	5.8	x(4)	x(4)	94.2	100.0
Korea	18.4	68.4	13.2	81.6	100.0
Mexico	1.7	93.3	5.0	98.3	100.0
Netherlands	0.8	99.2	a	99.2	100.0
New Zealand	24.3	73.0	2.7	75.7	100.0
Norway	4.9	87.3	7.9	95.1	100.0
Poland	1.4	98.6	m	98.6	100.0
Slovak Republic	0.3	92.3	7.4	99.7	100.0
Spain	4.2	78.6	17.1	95.8	100.0
Sweden	2.3	82.6	15.1	97.7	100.0
Switzerland	14.2	67.7	18.1	85.8	100.0
Turkey	6.6	93.4	m	93.4	100.0
United Kingdom	14.6	73.8	11.6	85.4	100.0
United States	x(2)	83.4	16.6	m	100.0
<b>NON-OECD COUNTRIES</b>					
Chile	10.1	m	m	89.9	100.0
Malaysia	79.4	m	m	20.6	100.0
Philippines	n	m	m	100.0	100.0
Russian Federation	8.0	m	m	92.0	100.0

Note: x indicates that data are included in another column. The column reference is shown in brackets after "x". e.g., x(2) means that data are included in column 2.

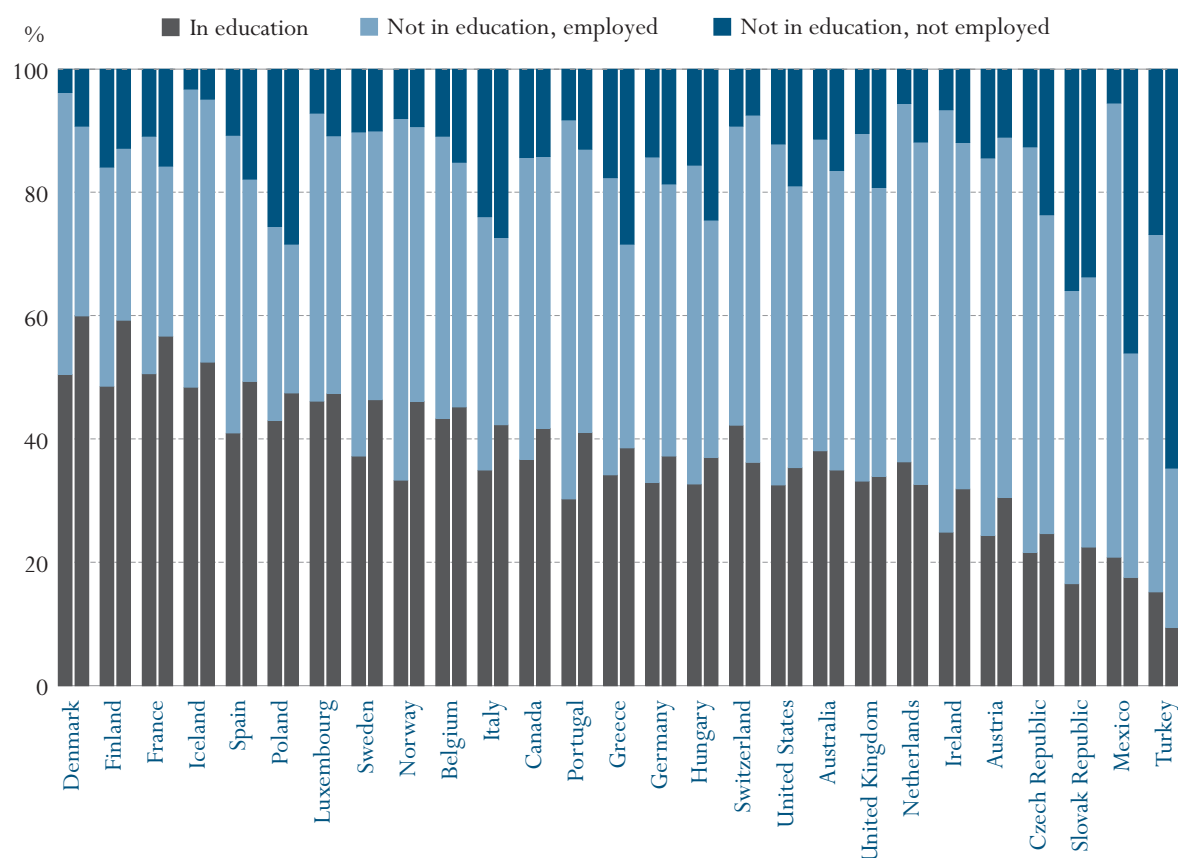
Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

## INDICATOR C4: EDUCATION AND WORK STATUS OF THE YOUTH POPULATION

- In 22 out of 27 OECD countries, more female than male 20 to 24-year-olds are in education. 20 to 24-year-old males are more likely to be employed.
- The percentage of 20 to 24-year-olds not in education ranges from 50 to 70 per cent, in most OECD countries.
- In some countries, education and work largely occur consecutively, while in other countries they are concurrent.
- Work-study programmes, relatively common in European countries, offer coherent vocational education routes to recognised occupational qualifications. In other countries, initial education and work are rarely associated.

Chart C4.1

Percentage of 20 to 24-year-olds in education and not in education (employed and not employed), by gender (2001)



Note: The first bar represents males, the second bar represents females.

Countries are ranked in descending order of the percentage of 20 to 24-year-old females in education.

Source: OECD. Tables C4.1a and C4.1b. See Annex 3 for notes ([www.oecd.org/edu/eqq2003](http://www.oecd.org/edu/eqq2003)).

## Policy context

*This indicator examines the education and employment status of young males and females.*

All OECD countries are experiencing rapid social and economic changes that are making the transition to working life more uncertain. In some OECD countries, education and work largely occur consecutively, while in other OECD countries they may be concurrent. The ways in which education and work are combined can significantly affect the transition process. Of particular interest, for example, is the extent to which working -beyond the usual “summer jobs” for students- while studying may facilitate entry into the labour force. On the other hand, many hours of work while studying may result in dropping out of education rather than contribute to a successful transition to the labour market.

## Evidence and explanations

### Combining work and education

*Work-study programmes and other ways of combining work and education are common in some OECD countries, but rare in others.*

Table C4.1 reveals the education and work status of young people in the age groups 15 to 19, 20 to 24 and 25 to 29. Working while studying can occur as part of work-study programmes or in the form of part-time jobs out of school hours. Work-study programmes are relatively common in European countries such as Austria, the Czech Republic, Germany and Switzerland, and offer coherent vocational education routes to recognised occupational qualifications. Many young people also combine paid work out of school hours with education. This form of initial contact with the labour market between the ages of 15 and 19 is a major feature of the transition from education to work in Australia, Canada, Denmark, Iceland, the Netherlands, Norway, the United States and, to a lesser extent, Finland, Sweden, Switzerland and the United Kingdom. Finally, in Belgium, France, Ireland and the Mediterranean and Eastern European countries, initial education and work are rarely associated.

*During the years spent in education, the employment status of males and females is broadly similar in most OECD countries.*

The employment status of males and females is broadly similar during the years spent in education, with the exception of Austria and Germany, where noticeably more males participate in work-study programmes. In Australia, Canada, Denmark, Finland, Iceland, the Netherlands, Norway and Sweden, noticeably more females than males in the 15 to 29-year-old age group combine work outside school hours with education (Tables C4.1a and C4.1b).

### Entry into the labour market after initial education

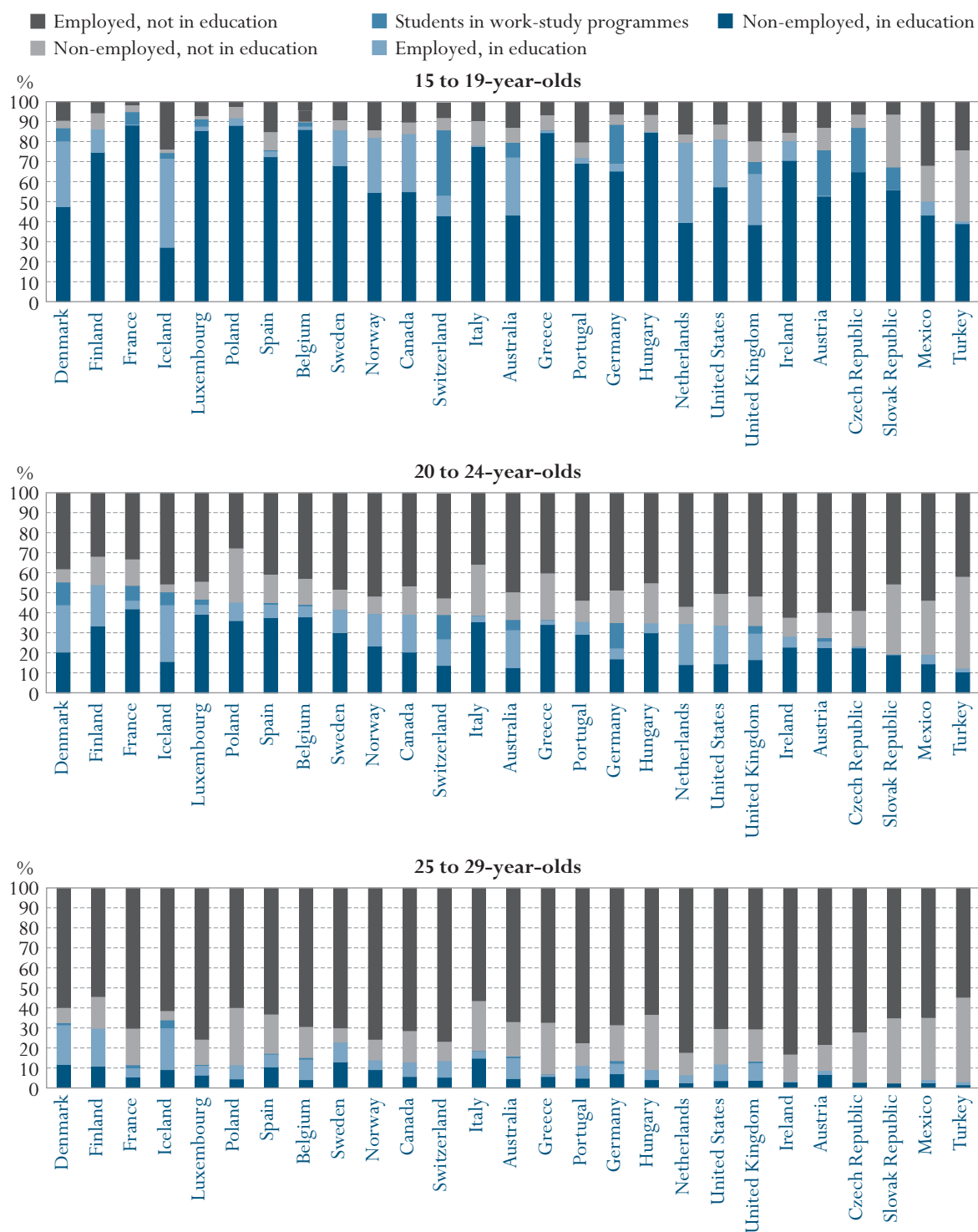
*The transition from education to work occurs at different points of time in different OECD countries, depending on various educational and labour market factors.*

As they grow older, young people participate decreasingly in education and increasingly in the labour force. The percentage of young people not in education in most OECD countries is between 10 and 30 per cent for 15 to 19-year-olds, rises to between 50 and 70 per cent for 20 to 24-year-olds and reaches 80 to 95 per cent for 25 to 29-year-olds (Chart C4.2). However, in many OECD countries young people begin their transition to work later, and in some cases over a longer period. This trend reflects not only the demand for education, but also the general state of the labour market, the length and orientation of educational programmes in relation to the labour market and the prevalence of part-time education.



Chart C4.2

Percentage of the youth population in education and not in education, by age group and work status (2001)



C4

Countries are ranked in descending order of the percentage of 20 to 24-year-olds in education.  
Source: OECD. Table C4.1. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

The age at which people enter the labour market after completing initial education has consequences for employment. Overall, older non-students are more likely to be employed than non-students in the age group 15 to 19 years, while a higher percentage of male than female non-students are working. In relative terms, more females than males are out of the labour force, particularly during the years associated with child-bearing and child-rearing, captured by the age group 25 to 29 years in this indicator (Tables C4.1a and C4.1b).

Employment-to-population ratios among young adults who are not in education provide information on the effectiveness of transition frameworks and thus help policy-makers to evaluate transition policies. In two-thirds of OECD countries, fewer than 65 (and in some even fewer than 50) per cent of 15 to 19-year-olds not in education are working, which may suggest that because these young people have left school early, they are not viewed by employers as having the skills necessary for productive employment. Employment-to-population ratios for 20 to 24-year-olds generally exceed 70 per cent, but ratios in some OECD countries such as Greece, Italy, Poland and Turkey are still around or below 65 per cent. For the 25 to 29 age group, most OECD countries have ratios of between 70 and 80 per cent, with the exception of Italy, Mexico, Poland, the Slovak Republic and Turkey. Employment-to-population ratios for young males tend to be higher than for young females after leaving education, probably because of family-related reasons and because the social acceptability of being unemployed is still higher for females than for males in many OECD countries (Tables C4.1a and C4.1b).

#### **Unemployment rate and ratio of unemployed non-students to the total youth population**

Young people represent the principal source of new skills in OECD countries. In most OECD countries, education policy seeks to encourage young people to complete at least upper secondary education. Since jobs on offer in the labour market require ever higher general skill levels and more flexible learning skills, persons with low attainment are often severely penalised. Differences in the ratio of unemployed non-students to the total youth population by level of educational attainment are an indicator of the degree to which further education improves the economic opportunities of any young person.

*Traditional unemployment measures overestimate unemployment in the transition period and are insensitive to different systems of combining education and work in the transition period.*

The youth unemployment rate by age group is the most common measure available for describing the labour market status of young people. However, unemployment rates do not take educational circumstances into account. Consequently, an unemployed young person counted in the numerator may, in some OECD countries, be enrolled in education. The denominator may include young people in vocational training, provided they are apprenticed, but not those in school-based vocational courses. Hence, if almost all young people in a particular age group are still in education, the unemployment rate will reflect only the few in the labour market and may therefore appear very high, particularly among the youngest cohort who have usually left the education system with very low qualifications.

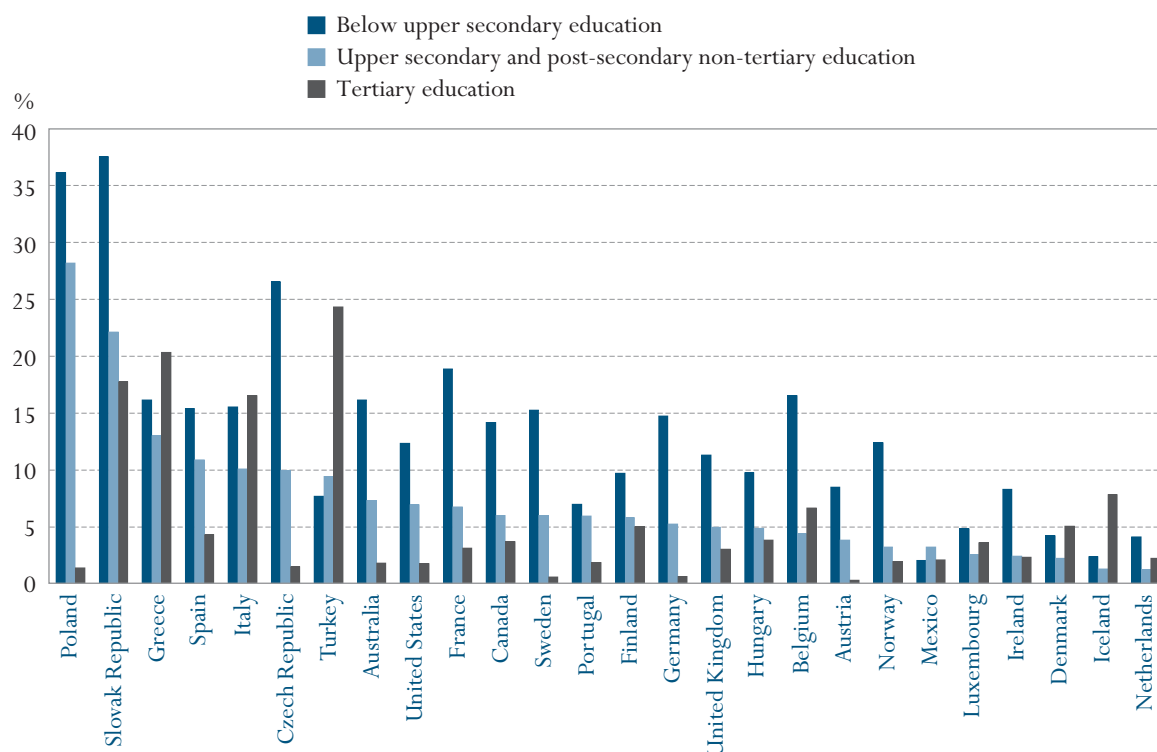
The ratio of unemployed non-students to the total age cohort is therefore a more appropriate way to reflect the likelihood of youth unemployment. This is because young people who are looking for a job while still in education are usually seeking part-time or temporary work while studying, unlike those entering the labour market after leaving school.

On average, completing upper secondary education reduces the unemployment-to-population ratio (*e.g.*, unemployment among non-students as a percentage of the entire age cohort) of 20 to 24-year-olds by about 6 percentage points, and that of 25 to 29-year-olds by about 4 percentage points (Table C4.2). In 19 out of 26 OECD countries, the unemployment-to-population ratio among 20 to 24-year-olds not in education is less than 8 per cent for those with upper secondary or post-secondary non-tertiary education. This proportion remains below 8 per cent for people without upper secondary education in only seven OECD countries. Since it has become the norm in most OECD countries to complete upper secondary education, many young persons who do not are much more likely to have employment difficulties during their working lives.

*The ratio of unemployed people who have not completed upper secondary education to the total youth population is 1.5 times higher on average than for upper secondary graduates.*

Chart C4.3

Ratio of unemployed non-students to the population of 20 to 24-year-olds, by level of educational attainment (2001)



Countries are ranked in descending order of the ratio of unemployed non-students to the population of 20 to 24-year-olds having attained upper secondary and post-secondary non-tertiary education.

Source: OECD. Table C4.2. See Annex 3 for notes ([www.oecd.org/edu/eq2003](http://www.oecd.org/edu/eq2003)).

*Upper secondary education, and even tertiary-level education, does not guarantee a job.*

*Data for this indicator were obtained from a special OECD data collection on the first quarter of the year.*

Nevertheless, in a number of OECD countries, for upper secondary graduates aged 20 to 24, the ratio of unemployed non-students to the total youth population is above 7 per cent (Chart C4.3). In a few OECD countries, even young people who have completed tertiary-level education are subject to considerable unemployment risk when they enter the labour market. The ratio of unemployed non-students to the total youth population among this age group is 16 per cent or more in Greece, Italy, the Slovak Republic and Turkey, and higher than 12 per cent for 25 to 29-year-olds in Greece and Italy (Table C4.2).

### Definitions and methodologies

Data for this indicator, which were obtained from a special OECD data collection, usually refer to the first quarter or the average of the first three months of the calendar year, and therefore exclude summer employment. The labour force status categories shown in this section are defined according to ILO guidelines, with one exception. For the purposes of these indicators, persons in work-study programmes (see below) have been classified separately as *in education* and *employed*, without reference to their ILO labour force status during the survey reference week, since they may not necessarily be in the work component of their programmes during the reference week, and may therefore not be employed then. “*Other employed*” includes individuals employed according to the ILO definition, but excludes those attending work-study programmes who are already counted as employed. Finally, “*not in the labour force*” includes individuals who are not working and who are not unemployed, *i.e.* individuals who are not looking for a job.

*Work-study programmes* combine work and education as parts of an integrated, formal education or training activity, such as the dual system in Germany; *apprentissage* or *formation en alternance* in France and Belgium; internship or co-operative education in Canada; and apprenticeship in Ireland. Vocational education and training take place in school settings and working environments. Students or trainees can be paid or not, usually depending on the type of job and the course or training.

The enrolment rates shown in Table C4.1 are estimated on the basis of self-reports collected during labour force surveys that often correspond only imprecisely with enrolment counts obtained from administrative sources shown elsewhere in this publication, for several reasons. First, age may not be measured in the same way. For example, in administrative data, both enrolment and age are measured on January 1st in OECD countries in the northern hemisphere, whereas in some labour force surveys, enrolment is measured in the reference week, while the age recorded is the age that will be attained at the end of the calendar year, even if the survey is conducted in the early part of the year. This means that recorded enrolment rates may occasionally reflect a population that is almost one year younger than the specified age range. At ages when movements out of education may be significant, this affects enrolment rates. Second, young people may be enrolled in several programmes and can sometimes be counted twice in administrative statistics but only once in a labour force survey.

Moreover, not all enrolments may be captured in administrative statistics, particularly in profit-making institutions. Third, the programme classification used in the self-reports in labour force surveys do not always correspond to the qualification standards used for administrative data collections.









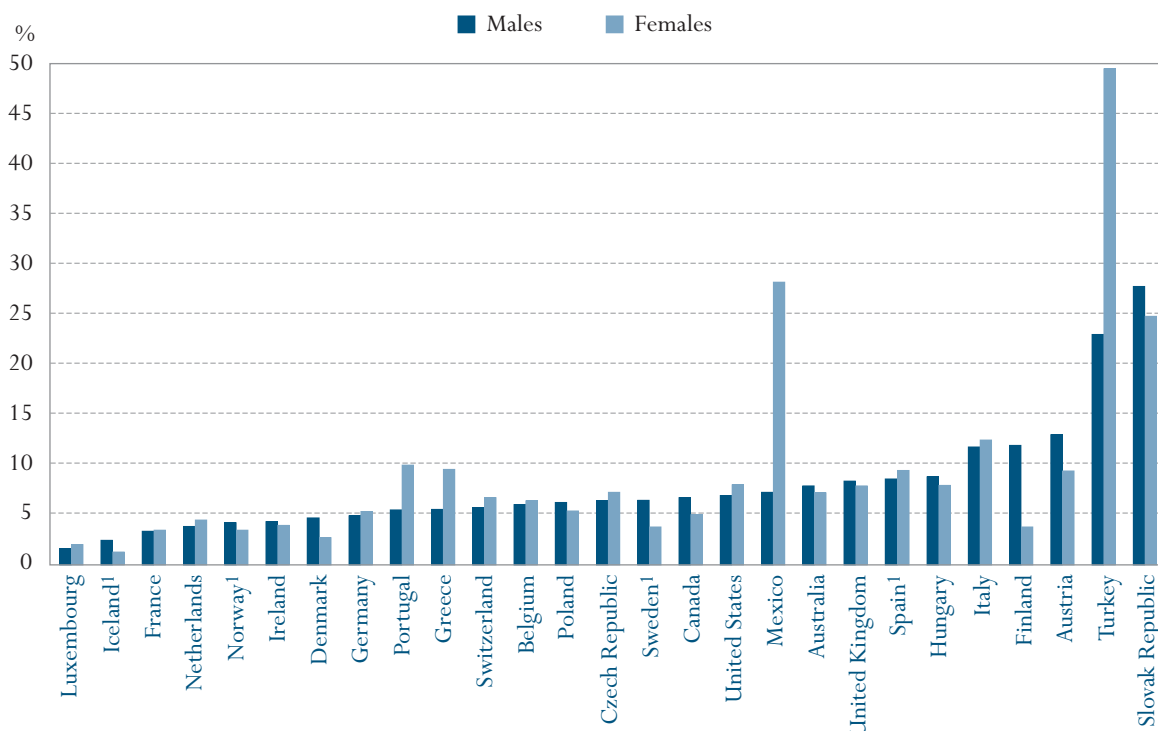


## INDICATOR C5: THE SITUATION OF THE YOUTH POPULATION WITH LOW LEVELS OF EDUCATION

- Most persons aged 15 to 19 are still in school. In many OECD countries, a high percentage of those who are not still in school are either unemployed or not in the labour force.
- In Austria, Italy, Mexico, the Slovak Republic and Turkey over 10 per cent of persons aged 15 to 19 are neither at school nor in the workforce.
- In Austria, Finland, the Slovak Republic and Sweden, more young males than females are neither at school nor in the workforce, and the reverse is true in Greece, Mexico, Portugal and Turkey.

Chart C5.1

Percentage of 15 to 19-year-olds who are not in education or work, by gender (2001)



1. 16 to 19-year-olds.

Countries are ranked in ascending order of 15 to 19-year-old males not in education or work.

Source: OECD. Tables C4.1a and C4.1b. See Annex 3 for notes ([www.oecd.org/edu/eqq2003](http://www.oecd.org/edu/eqq2003)).

## Policy context

Entering the labour market is often a difficult period of transition. While the length of time spent in education has increased, a significant proportion of young people still remain in a bad position as if they are neither in education nor working, *i.e.*, they are either unemployed or in non-employment. This situation gives particular cause for concern for younger age groups, many of whom have no unemployment status or welfare coverage (see *A Caring World*, OECD, 1999).

As the interrelationships between education, the economy and the well-being of nations become ever closer, providing for effective educational careers of young people and for successful transitions from initial education to working life become major policy concerns. Rising skill demands in OECD countries have made upper secondary diplomas a minimum for successfully entering the labour market and a basis for further participation in lifelong learning. Young people with lower qualifications run a higher risk of long-term unemployment or unstable or unfulfilling employment, which can have additional consequences such as social exclusion.

## Evidence and explanations

### Young people not in education or work

Over 80 per cent of persons between the ages of 15 and 19 are in education in most OECD countries. A small proportion of this age group is employed after having left school, although this figure is as high as 10 per cent for nine OECD countries and even more than 20 per cent in four others (Table C4.1).

There is, however, a group of young people who are no longer in education but not yet at work. Some are officially unemployed if they are actively seeking work, while those who are not doing so for some reason are considered to be in non-employment. Their reasons may be many and varied, such as discouragement because of the difficulty of finding work or voluntary withdrawal because of family circumstances. In 18 out of 27 OECD countries, the proportion of these young people is higher than the proportion of those with unemployment status.

To be out of education and out of employment is very uncommon in Denmark, France, Iceland, Ireland, Luxembourg, the Netherlands and Norway yet common in Austria, Italy, Mexico, the Slovak Republic and Turkey. In these countries, over 10 per cent of young people aged 15 to 19 are neither at school nor in work (Table C4.1). In other OECD countries, the proportion is lower but not insignificant, ranging from 4 to 10 per cent. The problem affects more young males than females in Austria, Finland, the Slovak Republic and Sweden, and the reverse is true in Greece, Mexico, Portugal and Turkey (Chart C5.1), differences between the sexes remain small in the other countries.

Young people with low qualifications may run an increased risk of long-term unemployment or of unstable, unfulfilling employment, which can have other negative consequences such as social exclusion. Early drop-out has become

*This indicator reflects on the situation of young people who are no longer in education but who are not yet in employment.*

*Most 15 to 19-year-olds are still at school. In many OECD countries, a high percentage of those who are not are either unemployed or not in the labour force.*

C<sub>5</sub>

*Between the ages of 20 and 24, the scale of the problem grows*

*and changes since most young people enter the labour market at that age.*

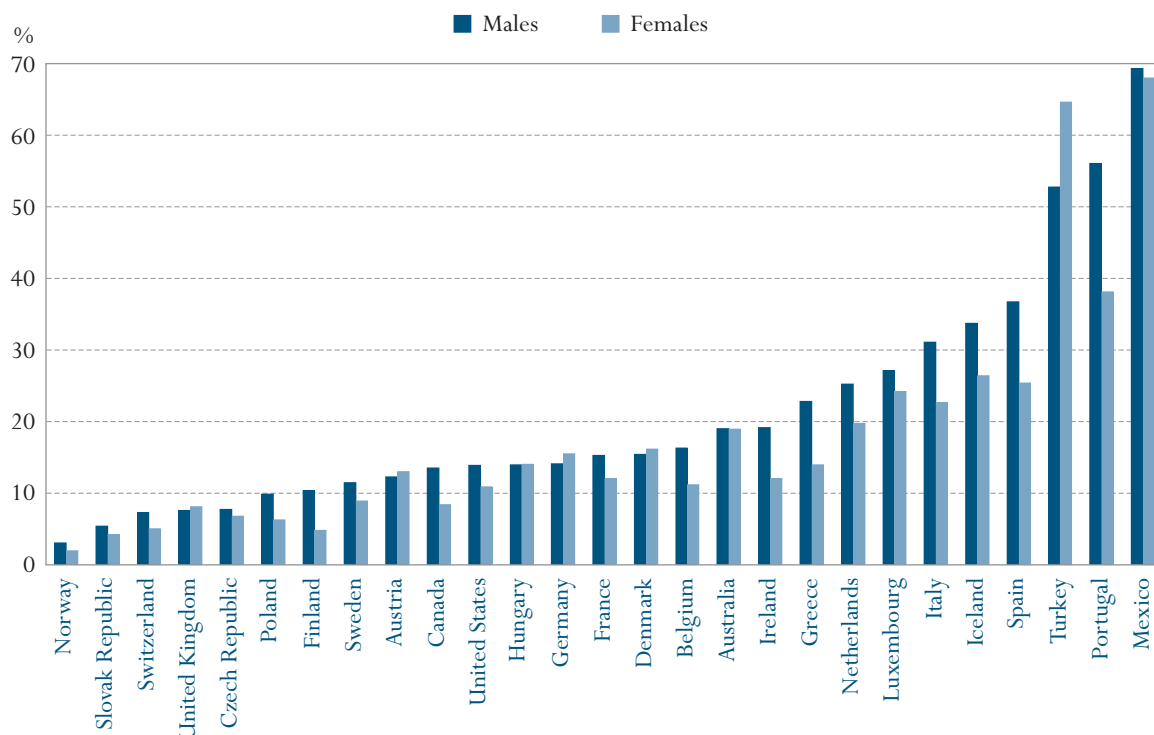
one of the most important educational policy problems. For students between 20 and 24 years, the scale of the problem grows compared to the age group 15 to 19 years and changes since most young people are entering the labour market at that age for the first time after having completed education. There is often a period of unemployment and adjustment before finding a secure and satisfying job (Chart C5.3).

In seven OECD countries including the Nordic and Eastern European countries as well as Switzerland and the United Kingdom, the proportion of young people without upper secondary education in the age group remains under 10 per cent. This is a limited group, but one that is certainly in a difficult position. In 12 out of 27 OECD countries, this potentially “at risk” group represents between 10 and 20 per cent of the age group. The challenge in terms of increasing upper secondary graduation rates is significant here. For the remaining eight OECD countries, more than 20 per cent of the age group falls under this category.

The consequences of having left school without an upper secondary qualification can be observed by comparing the work status of those with and those without an upper secondary qualification. In all OECD countries except one, higher educational attainment is associated with an increase in the employment

Chart C5.2

Percentage of 20 to 24-year-olds who are not in education and who have not attained upper secondary education, by gender (2001)



Countries are ranked in ascending order of the percentage of 20 to 24-year-old males who are not in education and who have not completed upper secondary education.

Source: OECD. Table C5.1. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

rate on average of 19 percentage points. The comparison also reveals some patterns related to the specific organisation of the labour market. The gap between those with upper secondary qualifications and those without is remarkably small in all Mediterranean countries, which suggests a good match between qualifications - even if these are low - and employment. The United Kingdom is an interesting case in that the prevalence of low qualifications is one of the lowest among OECD countries, but the unemployment differentials are particularly high, suggesting that the few persons who have not obtained an upper secondary qualification are particularly disadvantaged.

### Definitions and methodologies

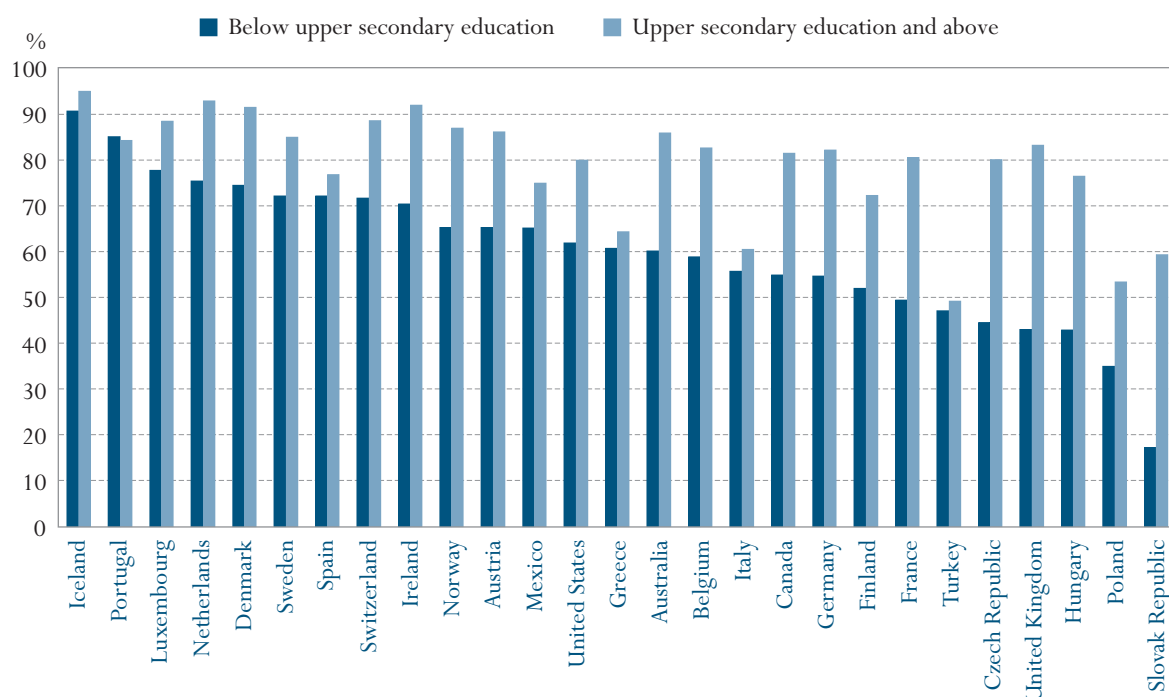
The indicator is based on labour force survey data on age-specific proportions of young people in each of the specified categories. The definitions of the labour force statuses of those not in education (and not enrolled in work-study programmes) are based on ILO guidelines. Data for this indicator were calculated from the special OECD data collection on transition from education to work (see Indicator A11).

*Data for this indicator were calculated from the special OECD data collection on transition from education to work.*

An “early school leaver” could broadly be defined as “a young person who has not attained upper secondary education and is not in education, or in a work-study programme leading to an upper secondary qualification or higher”. However,

Chart C5.3

Employment rates for 20 to 24-year-olds who are not in education, by level of educational attainment (2001)



Countries are ranked in descending order of the employment rate of 20 to 24-year-olds who are not in education and who have not completed upper secondary education.

Source: OECD Table C5.1. See Annex 3 for notes ([www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003)).

such a definition needs to include the specification of an age group within which very few people can still be attending school at the primary or secondary level. Young people aged 18 and 19, in a significant number of OECD countries, are still enrolled in upper secondary education. Very early leavers may eventually return to school. Moreover, labour market outcomes at early ages may not be representative of outcomes at later ages. The OECD therefore defines a young adult with low level of education as “a person aged 20-24 years who has not attained upper secondary education and who is not enrolled in education nor in a work-study programme”.



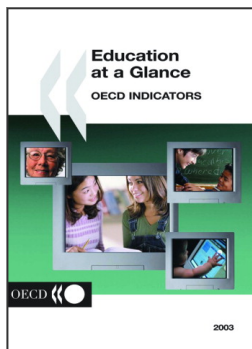
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