

*Chapter*

**B**

FINANCIAL AND HUMAN  
RESOURCES INVESTED  
IN EDUCATION





## Classification of educational expenditure

Educational expenditure in this indicator is classified through three dimensions:

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

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

■ Public sources of funds

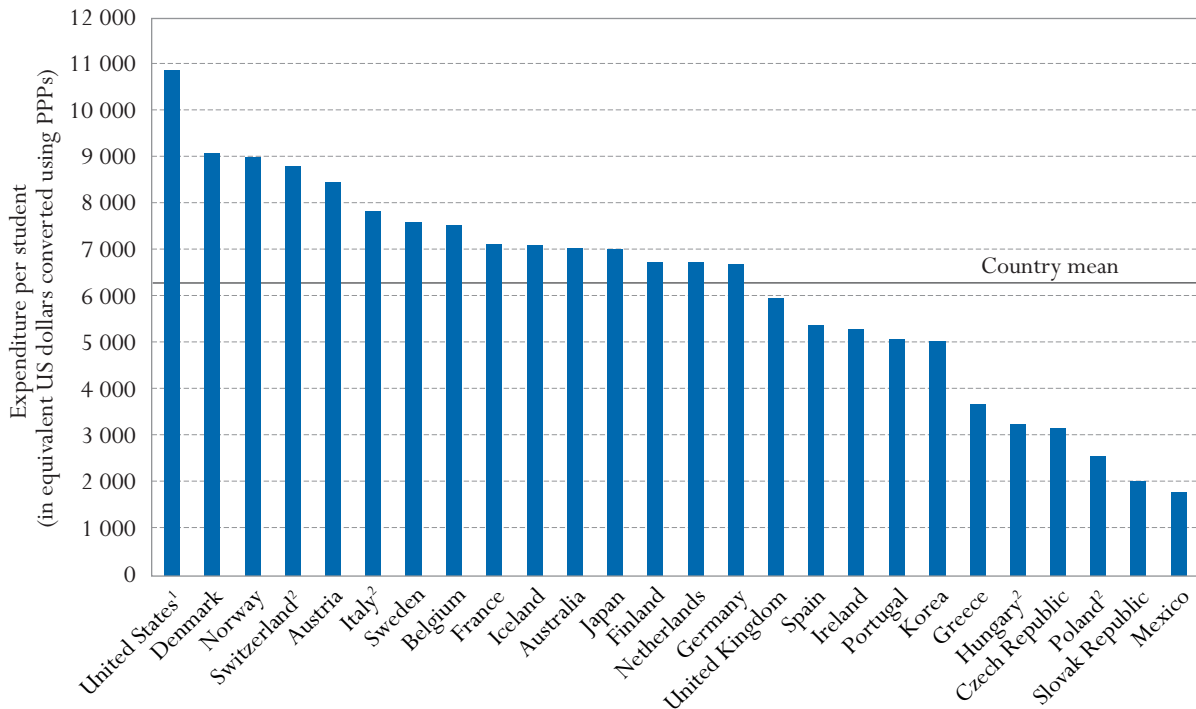
■ Private sources of funds

■ Private funds publicly subsidised

## INDICATOR B1: EDUCATIONAL EXPENDITURE PER STUDENT

- OECD countries spend US\$ 4 819 per primary student, US\$ 6 688 per secondary student and US\$ 12 319 per tertiary student, but these averages mask a broad range of expenditure across countries. On average, as represented by the simple mean across all OECD countries, countries spend 2.2 times as much per student at the tertiary level than at the primary level.
- Excluding R&D activities, expenditure in tertiary educational institutions represents on average US\$ 7 203 and ranges from US\$ 4 000 or below in Greece, Mexico, Poland and Turkey to more than US\$ 8 000 in Australia, Belgium, Denmark, Ireland, the Netherlands, Sweden, the United Kingdom and the United States.
- In some OECD countries, low annual expenditure per tertiary student still translates into high overall costs per tertiary student because students participate in tertiary studies over a long period of time.
- Lower expenditure cannot automatically be equated with a lower quality of educational services. Australia, Finland, Ireland, Korea and the United Kingdom, which have moderate expenditure on education per student at the primary and lower secondary levels, are among the OECD countries with the highest levels of performance by 15-year-old students in key subject areas.
- There are significant differences between the proportion of money invested in and the proportion of students enrolled in tertiary education. On average among the 24 OECD countries for which data are available, 24% of all expenditure on educational institutions is allocated to tertiary education whereas only 14% of students are enrolled at this level of education.
- Expenditure per primary, secondary and post-secondary non-tertiary student increased by 29% or more between 1995 and 2001 in Australia, Greece, Ireland, Poland, Portugal, Spain and Turkey. At the tertiary level, spending on education has not always kept pace with the rapid expansion of enrolments.
- In seven out of 22 OECD countries for which data are available expenditure on educational institutions per tertiary student expressed in US\$ decreased between 1995 and 2001, while GDP per capita increased over the same time period.

B<sub>1</sub>

**Chart B1.1. Annual expenditure on educational institutions per student (2001)***In equivalent US dollars converted using PPPs, for primary to tertiary education, based on full-time equivalents*

1. Public and independent private institutions only.

2. Public institutions only.

Countries are ranked in descending order of expenditure per student.

Source: OECD. Table B1.1. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

## Policy context

Effective schools require the right combination of trained and talented personnel, adequate facilities, state-of-the-art equipment and motivated students ready to learn. The demand for high-quality education, which can translate into higher costs per student, must be balanced against placing undue burden on taxpayers.

As a result, the question of whether the resources devoted to education yield adequate returns to the investments made figures prominently in the public debate. Although it is difficult to assess the optimal volume of resources required to prepare each student for life and work in modern societies, international comparisons of spending on education per student can provide a starting point for evaluating the effectiveness of different models of educational provision.

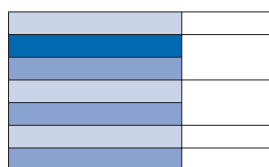
Policy makers must balance the importance of improving the quality of educational services with the desirability of expanding access to educational opportunities, notably at the tertiary level. The comparative review of how trends in educational expenditure per student have evolved shows that in many OECD countries the expansion of enrolments, particularly in tertiary education, has not always been paralleled by changes in educational investment.

*This indicator shows annual and cumulative expenditure on education per student in absolute terms...*

*...and relative to GDP per capita.*

*It also compares trends in the development of expenditure on education per student.*

B1



Coverage diagram  
(see page 197 for  
explanations)

Finally, decisions on the allocation of funds among the various levels of education are also important. For example, some OECD countries emphasise broad access to higher education while others invest in near-universal education for children as young as three or four years of age.

### Evidence and explanations

#### What this indicator covers and what it does not cover

The indicator shows direct public and private expenditure on educational institutions in relation to the number of full-time equivalent students enrolled in these institutions.

Public subsidies for students' living expenses have been excluded to ensure international comparability of the data. Expenditure data for students in private educational institutions are not available for certain OECD countries, and some other countries do not report complete data on independent private institutions. Where this is the case, only the expenditure on public and government-dependent private institutions has been taken into account. Note that variation in expenditure on education per student may reflect not only variation in the material resources provided to students (*e.g.*, variations in the ratio of students to teaching staff) but also variation in relative salary levels.

At the primary and secondary levels, educational expenditure is dominated by spending on instructional services; at the tertiary level other services, particularly those related to R&D activities or ancillary services, can account for a significant proportion of educational spending. Indicator B6 provides further information on how spending is distributed by different types of services provided.

#### Expenditure on education per student in equivalent US dollars

Annual per-student expenditure on educational institutions between primary and tertiary education provides an assessment of the investment made in each student. OECD countries as a whole spend US\$ 6 821 per student between primary and tertiary education. Spending on education at that level ranges from US\$ 3 300 per student or less in the Czech Republic, Hungary, Mexico, Poland and the Slovak Republic to more than US\$ 8 000 per student in Austria, Denmark, Norway, Switzerland and the United States. In eight out of 26 countries, spending on education falls between US\$ 5 900 and 7 100 per student (Chart B1.1).

However, even if overall spending per student is similar in some OECD countries, the ways in which resources are allocated across the different levels of education varies widely. OECD countries as a whole spend US\$ 4 819 per student at the primary level, US\$ 6 688 per student at the secondary level and US\$ 12 319 per student at the tertiary level. At the tertiary level, these averages are influenced by high expenditure in a few large OECD countries, most notably the United States. Spending on education per student in the "typical" OECD country, as represented by the simple mean across all OECD countries, amounts to US\$ 4 850 at the primary level, US\$ 6 510 at the secondary level and US\$ 10 052 at the tertiary level of education (Table B1.1).

*In eight out of 26 countries, spending on education between primary and tertiary education falls between US\$ 5 900 and 7 100 per student.*

*As a whole, OECD countries spend US\$ 4 819 per primary student, US\$ 6 688 per secondary student and US\$ 12 319 per tertiary student...*

These averages mask a broad range of expenditure on education per student across OECD countries. At the primary level, expenditure on educational institutions ranges from US\$ 1 252 per student in the Slovak Republic to US\$ 7 873 per student in Luxembourg. Differences among OECD countries are even greater at the secondary level, where spending on education per student varies by a factor of 6, from US\$ 1 874 in the Slovak Republic to US\$ 10 916 in Switzerland. Expenditure on education per tertiary student ranges from US\$ 3 579 in Poland to US\$ 22 234 in the United States (Table B1.1).

These comparisons are based on purchasing power parities, not market exchange rates, and therefore reflect the amount of a national currency that will buy the same basket of goods and services in a given country as that produced by the US dollar in the United States.

On average, expenditure on research and development (R&D) at the tertiary level represents 26% of all tertiary expenditure. In five out of 19 OECD countries for which tertiary expenditure are separated by type of services, R&D expenditure in tertiary institutions represents more than 35% of tertiary expenditure. On a per-student basis this can translate into significant amounts, as in Australia, Austria, Belgium, Denmark, Finland, Germany, Italy, the Netherlands and Sweden, where expenditure for R&D in tertiary institutions amounts to more than US\$ 3 000 per student (Chart B1.2 and Tables B1.1 and B6.2).

R&D spending in tertiary educational institutions depends on both total R&D expenditure in a country, and the national infrastructure for R&D activities. OECD countries in which most R&D is performed by tertiary educational institutions tend to report higher expenditure per tertiary student than countries in which a large part of R&D is performed in other public institutions or by industry. Excluding R&D activities, expenditure in tertiary educational institutions represents on average US\$ 7 203 and ranges from US\$ 4 000 or below in Greece, Mexico, Poland and Turkey to more than US\$ 8 000 in Australia, Belgium, Denmark, Ireland, the Netherlands, Sweden, the United Kingdom and the United States (Table B1.1 and Chart B1.2).

The labour intensiveness of the traditional model of classroom education accounts for the predominance of teachers' salaries in overall costs. Differences in the average class size and in the ratio of students to teaching staff (Indicator D2), in staffing patterns, in teachers' salaries (Indicator D3) and in teaching materials and facilities influence the differences in cost among levels of education, types of programme and types of school.

It would be misleading to equate lower unit expenditure generally with lower quality of educational services. Australia, Finland, Ireland, Korea and the United Kingdom, which have moderate expenditure on education per student at the primary and lower secondary levels, are among the OECD countries with the highest levels of performance by 15-year-old students in key subject areas (see the PISA study).

*...but these averages mask a broad range of expenditure across OECD countries.*

*R&D expenditure in tertiary institutions exceeds US\$ 3 000 per student in Australia, Austria, Belgium, Denmark, Finland, Germany, Italy, the Netherlands and Sweden.*

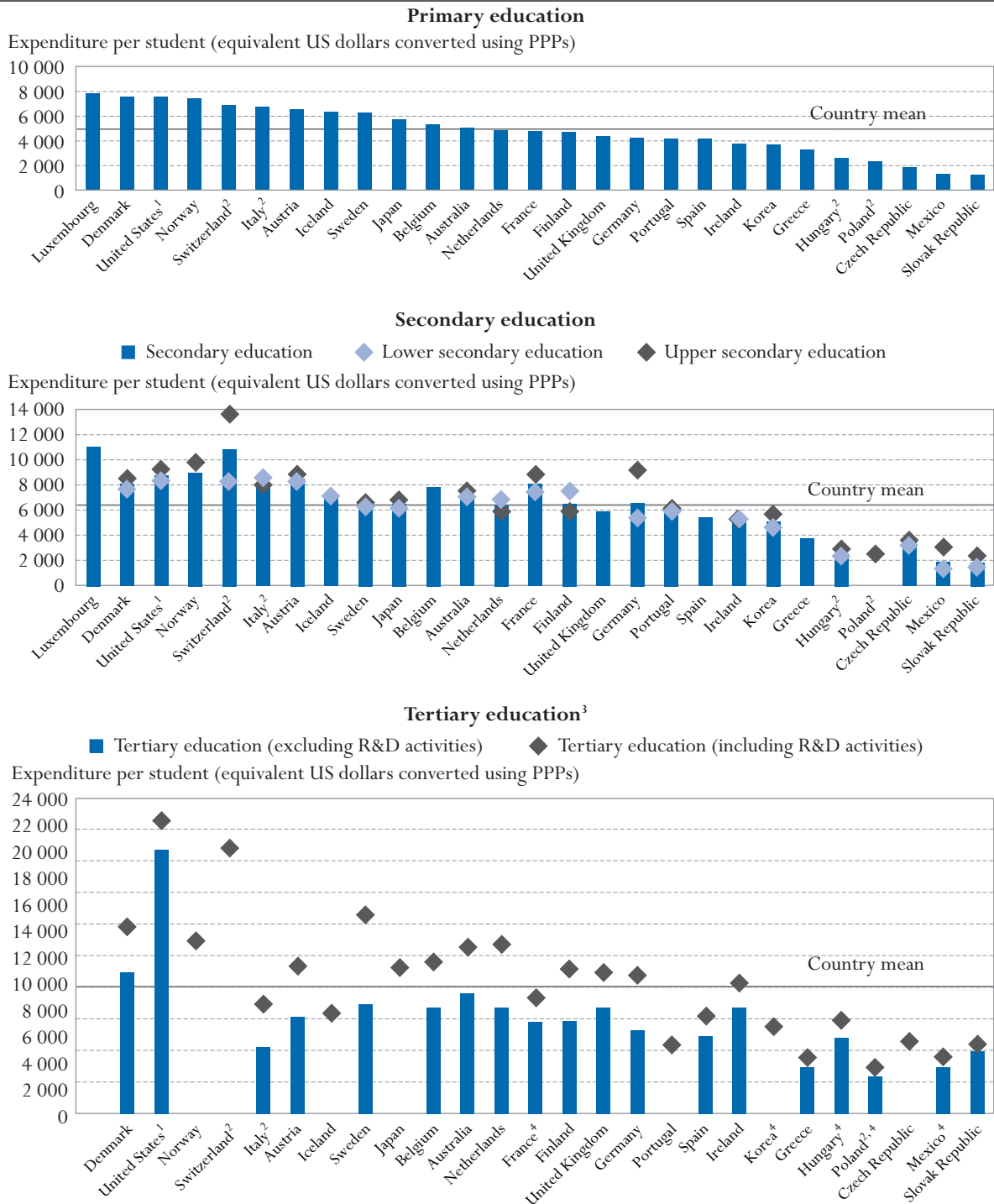
*Excluding R&D activities, expenditure in tertiary educational institutions represents an average of US\$ 7 203.*

*The labour intensiveness of education accounts for the predominance of teachers' salaries in overall costs.*

*Lower unit expenditure cannot simply be equated with lower student performance.*

**Chart B1.2. Annual expenditure on educational institutions per student, by level of education (2001)**

*In equivalent US dollars converted using PPPs, based on full-time equivalents*



1. Public and independent private institutions only.

2. Public institutions only.

3. The bar represents total expenditure at tertiary level and excludes research and development expenditure.

4. Research and development expenditure at tertiary level and thus total expenditure including R&D activities are underestimated.

Countries are ranked in descending order of expenditure per student in primary education.

Source: OECD, Tables B1.1 and B6.2. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



## Differences in educational expenditure per student between levels of education

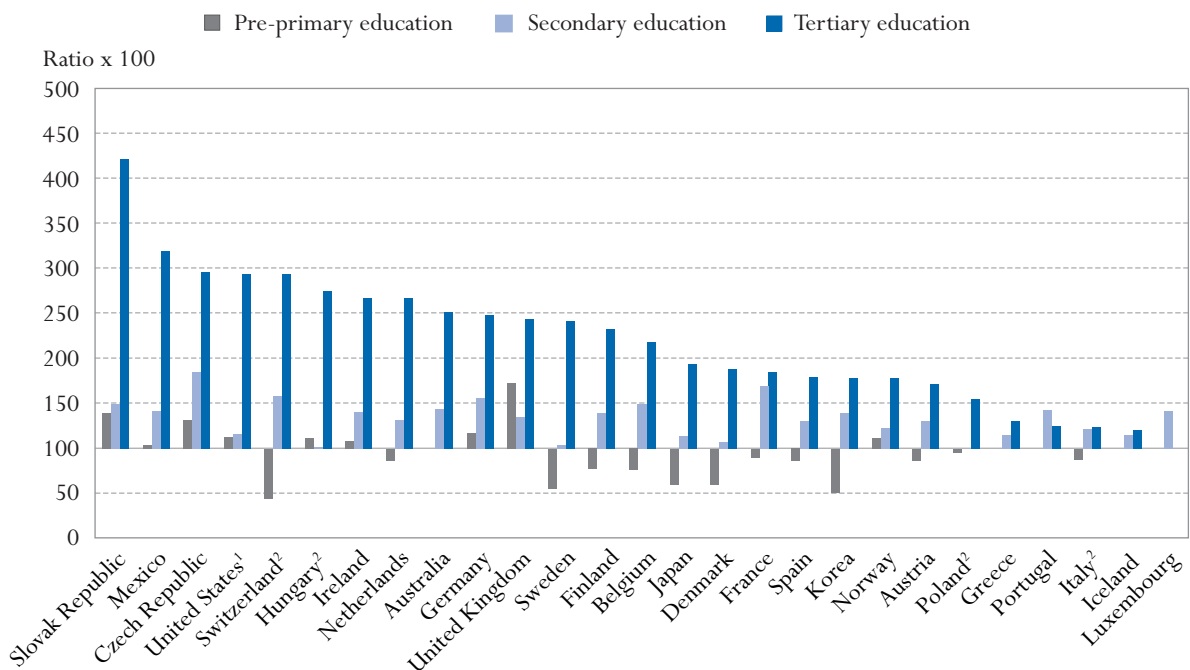
Expenditure on education per student exhibits a common pattern throughout OECD countries: in each OECD country, spending rises sharply from primary to tertiary education. This pattern can be understood by looking at the main determinants of expenditure, particularly the location and mode of educational provision. The vast majority of education still takes place in traditional school settings with (generally) similar organisation, curriculum, teaching style and management. These shared features are likely to lead to similar patterns of unit expenditure.

*Expenditure on education per student consistently rises with the level of education.*

Comparisons of the distribution of expenditure between levels of education indicate the relative emphasis placed on education at different levels in various OECD countries, as well as of the relative costs of providing education at those levels.

**Chart B1.3. Expenditure on educational institutions per student at various levels of education relative to primary education (2001)**

Primary education = 100



Note: A ratio of 300 for tertiary education means that expenditure on educational institutions per tertiary student is three times the expenditure on educational institutions per primary student.

A ratio of 50 for pre-primary education means that expenditure on educational institutions per pre-primary student is half the expenditure on educational institutions per primary student.

1. Public and independent private institutions only.

2. Public institutions only.

Countries are ranked in descending order of expenditure on educational institutions per student in tertiary education relative to primary education.

Source: OECD, Table B1.1. See Annex 3 for notes ([www.oecd.org/edu/eq2004](http://www.oecd.org/edu/eq2004)).

*On average, OECD countries spend 2.2 times as much on education per student at the tertiary level as at the primary level.*

Although expenditure on education per student rises with the level of education (from primary to tertiary) in almost all OECD countries, the relative sizes of the differentials vary markedly among countries (Chart B1.3). At the secondary level, expenditure on education per student is, on average, 1.3 times that at the primary level, although the difference ranges from 1 in Hungary and Sweden to 1.6 or more in the Czech Republic, France and Germany.

Although OECD countries spend, on average, 2.2 times as much on education per student at the tertiary level as at the primary level, spending patterns vary widely among countries. For example, whereas Greece, Iceland, Italy and Portugal only spend between 1.2 and 1.3 times as much on a tertiary student as on a primary student, Mexico and the Slovak Republic spend 3.2 and 4.2 times as much (Chart B1.3).

### **Educational expenditure per student over the average duration of tertiary studies**

*Annual expenditure on education per student does not always reflect the full cost of tertiary studies.*

Both the typical duration and the intensity of tertiary education vary among OECD countries. Therefore, the differences among countries in annual expenditure on educational services per student, as shown in Chart B1.2, do not necessarily reflect the variation in the total cost of educating the typical tertiary student.

*Students can choose from a range of institutions and enrolment options.*

Today, students can choose from a range of institutions and enrolment options to find the best fit for their degree objectives, abilities and personal interests. Many students enrol on a part-time basis while others work while studying, or attend more than one institution before graduating. These varying enrolment patterns can affect the interpretability of expenditure on education per student.

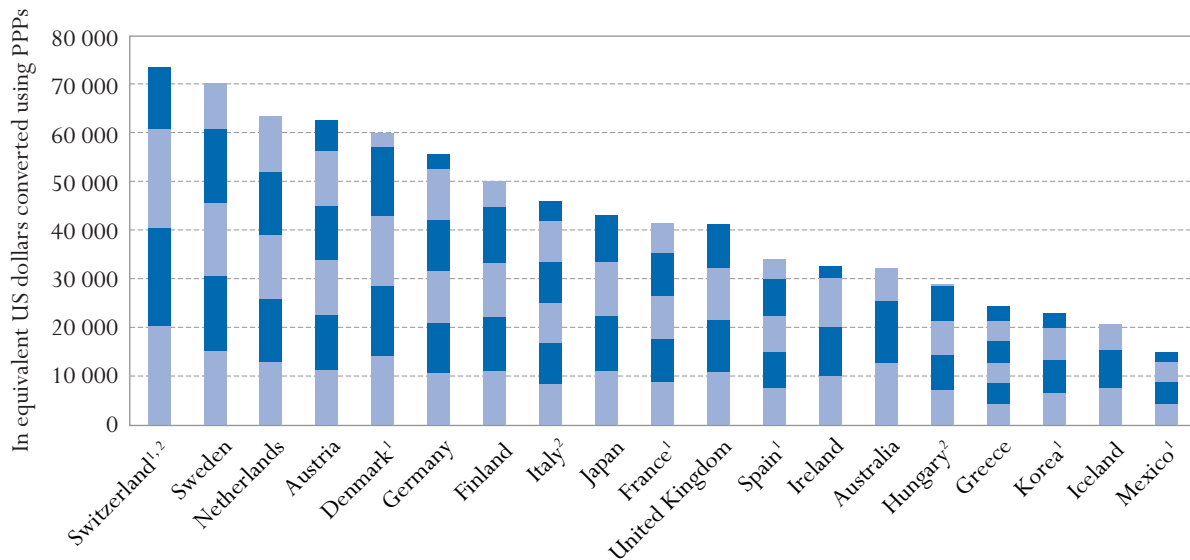
*Low annual expenditure may translate into high overall costs of tertiary education if the duration of tertiary studies is long.*

In particular, comparatively low annual expenditure on education per student can result in comparatively high overall costs of tertiary education if the typical duration of tertiary studies is long. Chart B1.4 shows the average expenditure that is incurred per student throughout the course of tertiary studies. The figures account for all students for whom expenditure is incurred, including those who do not finish their studies. Although the calculations are based on a number of simplified assumptions and therefore should be treated with some caution (see Annex 3 at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)), some striking shifts in the rank order of OECD countries between the annual and aggregate expenditure can be noted.

For example, annual spending per tertiary student in Japan is about the same as in Austria (US\$ 11 164 in Japan compared with US\$ 11 274 in Austria) (Table B1.1). But because of differences in the tertiary degree structure (Indicator A2), the average duration of tertiary studies is a little bit less than two years longer in Austria than in Japan (5.5 years in Austria, compared with 3.8 years in Japan). As a consequence, the cumulative expenditure for each tertiary student is almost US\$ 20 000 higher in Austria than in Japan (US\$ 62 459 compared with US\$ 42 970) (Chart B1.4 and Table B1.3).

**Chart B1.4. Cumulative expenditure on educational institutions per student over the average duration of tertiary studies (2001)**

Annual expenditure on educational institutions per student multiplied by average duration of studies, in equivalent US dollars converted using PPPs



Note: Each segment of the bar represents the annual expenditure on educational institutions per student. The number of segments represents the number of years a student remains on average in tertiary education.

1. The duration of tertiary studies is obtained from a special survey conducted in 1997 for the academic year 1995.

2. Public institutions only.

Countries are ranked in descending order of expenditure on educational institutions per student over the average duration of tertiary studies.

Source: OECD. Table B1.3. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

The total cost of tertiary-type A studies in Switzerland (US\$ 118 953) is more than twice as high as in the other reporting countries, except Austria and Germany (Table B1.3). These differences must, of course, be interpreted in light of differences in national degree structures as well as possible differences among OECD countries in the academic level of the qualifications of students leaving university. While similar trends are observed in tertiary-type B studies, the total cost of these studies tends to be much lower than those of tertiary type-A programmes, largely because of their shorter duration.

### Distribution of expenditure on educational institutions relative to number of students enrolled

The money invested in the education system of OECD countries can be compared according to the proportion of students enrolled at each level of education. A level of education that enrolls a high proportion of students should receive a high level of investment in order to ensure favourable teaching conditions. Table B1.4 shows the relationship between the share of expenditure on educational institutions and the number of students enrolled, by level of education. On average among the 23 OECD countries for which data are available, 41% of all expenditure on educational institutions is allocated to secondary education while 39% of students are enrolled at this level of education. The difference between the two figures exceeds

*On average 41% of all expenditure on educational institutions is allocated to secondary education while 39% of students are enrolled at this level of education...*

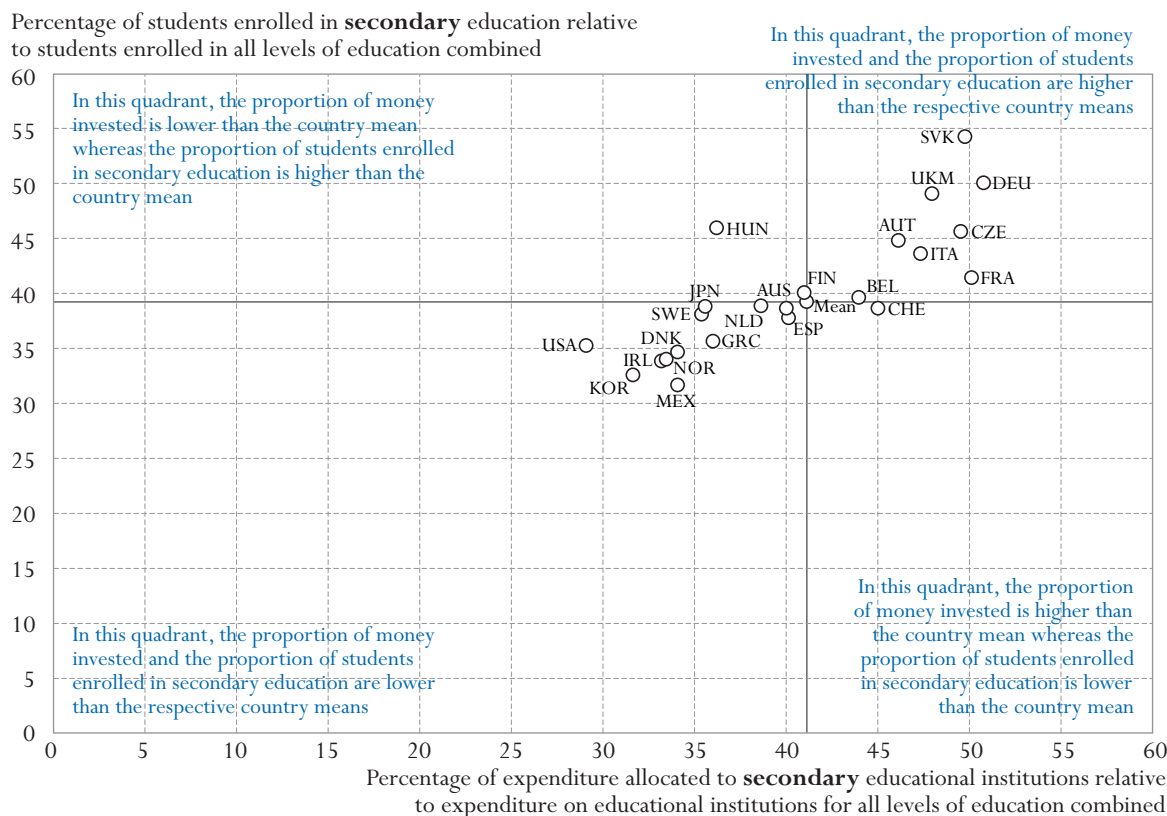
...whereas there are significant differences between the proportion of money invested and the proportion of students enrolled in primary or tertiary education.

4% in Belgium, France, Hungary, the Slovak republic, Switzerland and the United States. Among countries whose investment in secondary education compared to all levels of education is higher than the OECD average, Austria, the Czech Republic, France, Germany, Italy, the Slovak Republic and the United Kingdom have more than 45% of students enrolled in secondary education. At the other end of the scale, in Denmark, Ireland, Korea, Mexico, Norway and the United States, both the proportion of money invested and the proportion of students enrolled in secondary education are equal to or below 35% (Table B1.4 and Chart B1.5a).

Compared to secondary education, there are significant differences between the proportion of money invested and the proportion of students enrolled in primary and tertiary education. On average among the 24 OECD countries for which data are available, 26 and 24% of all expenditure on educational institutions are allocated to primary and respectively tertiary education, respectively, whereas 35% of students are enrolled in primary education and only 14% in tertiary education. The difference between the two proportions exceeds 12% in Australia, Ireland and Mexico in primary education and ranges in tertiary education from below 5% in France, Greece, Italy and Korea to more than 13%

Chart B1.5a. Expenditure allocated to secondary education and students enrolled at this level of education (2001)

In percentage of expenditure allocated and students enrolled for all levels of education combined



Note: On average, 41% of all expenditure on educational institutions is allocated to secondary education whereas 39% of students are enrolled at this level of education.

Please refer to the Reader's Guide for list of country codes and country names used in this chart.

Source: OECD. Table B1.4. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

in Ireland, the Netherlands, the Slovak republic, Sweden and the United States. In 10 out of 24 countries, the proportion of money invested and the proportion of students enrolled in tertiary education are lower than the OECD average, whereas in Finland, Greece, Ireland, Korea and the United States more than 29% of all education expenditure is invested in tertiary education (Table B1.4 and Chart B1.5b).

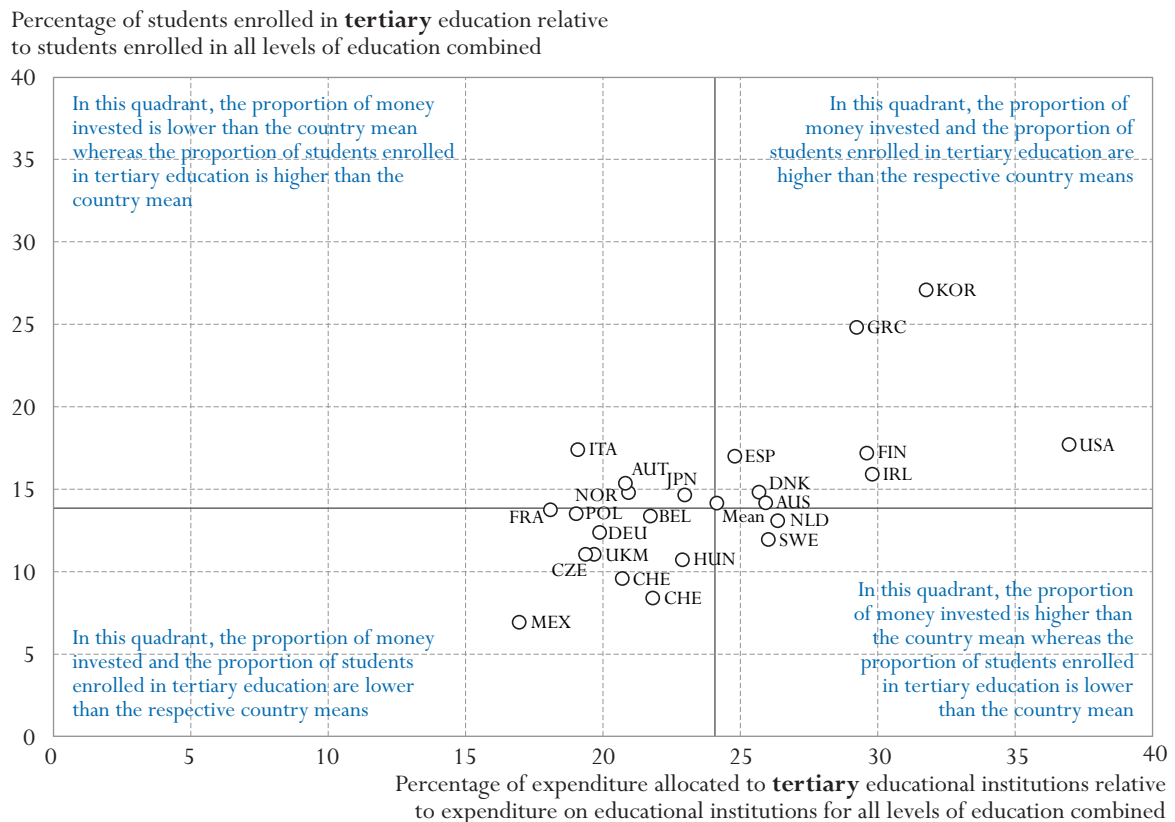
### Educational expenditure per student in relation to GDP per capita

Expenditure on education per student relative to GDP per capita is a spending measure that takes OECD countries' relative wealth into account. Since education is universal at lower levels, spending on education per student relative to GDP per capita at the lower levels of education can be interpreted as the resources spent on young people relative to a country's ability to pay. At higher levels of education, this measure is affected by a combination of national income, spending and enrolment rates. At the tertiary level, for example, OECD countries can be relatively high on this measure if a relatively large proportion of their wealth is spent on educating a relatively small number of students. For the

*OECD countries spend an average of 20% of GDP per capita on each primary student, 26% per secondary student and 42% per tertiary student.*

**Chart B1.5b. Expenditure allocated to tertiary education and students enrolled at this level of education (2001)**

*In percentage of expenditure allocated and students enrolled for all levels of education combined*



Note: On average, 24% of all expenditure on educational institutions is allocated to tertiary education whereas 14% of students are enrolled at this level of education.

Please refer to the Reader's Guide for list of country codes and country names used in this chart.

Source: OECD. Table B1.4. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

OECD as a whole, expenditure on education per student averages 20% of GDP per capita at the primary level, 26% at the secondary level and 42% at the tertiary level (Table B1.2).

*Beneath a certain level of GDP per capita, poorer OECD countries tend to spend less per student...*

The relationship between GDP per capita and expenditure per student is complex. Chart B1.6a shows the co-existence of two different relationships between two distinct groups of countries (see ovals in Chart B1.6a). Countries with a GDP per capita equivalent to US\$ 22 500 or less demonstrate a clear positive relationship between spending on education per student and GDP per capita. In this group, including the Czech Republic, Greece, Hungary, Korea, Mexico, Poland, Portugal, the Slovak Republic and Spain, poorer OECD countries tend to spend less per student than richer OECD countries.

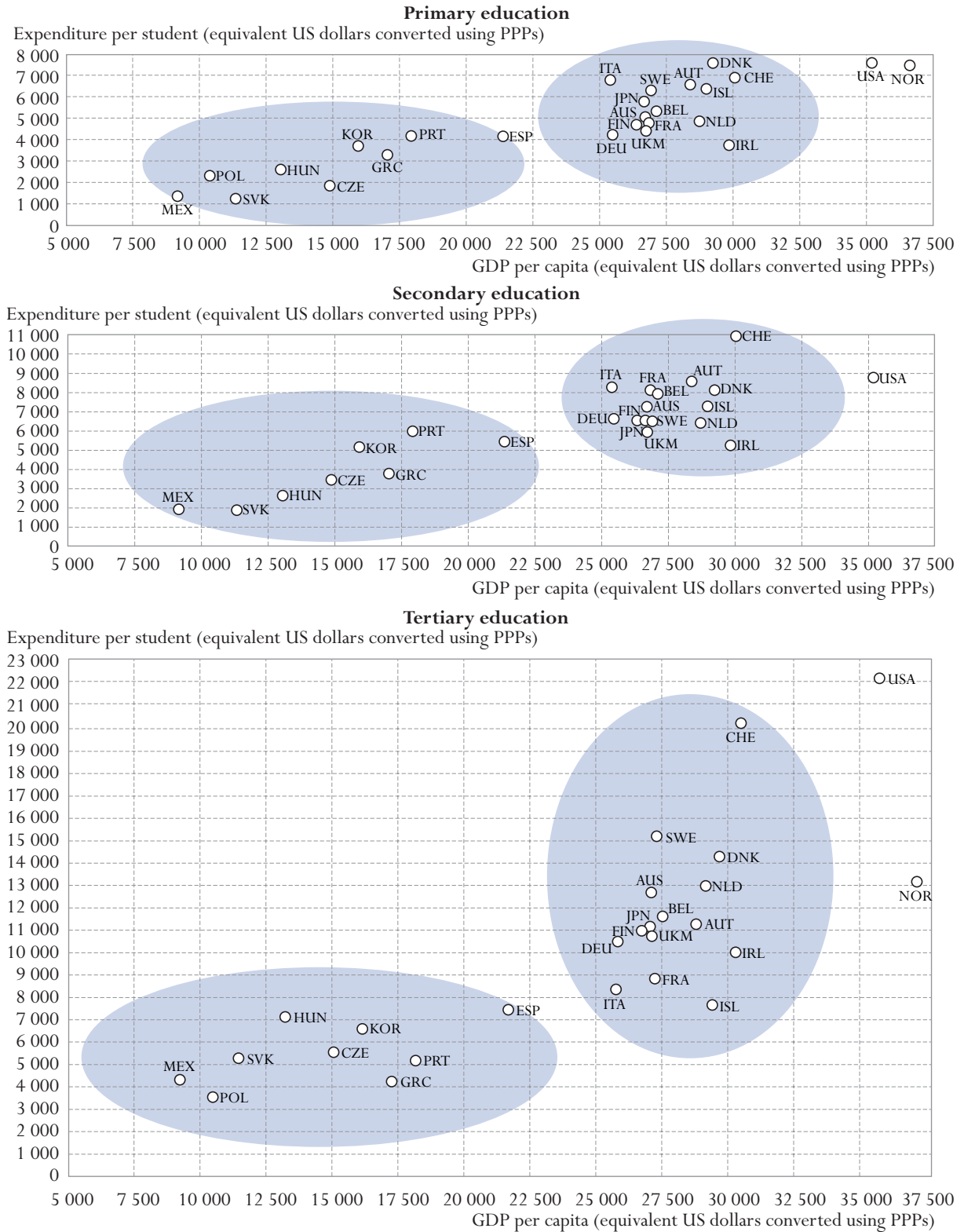
*...but the trend cannot be generalised.*

On the other hand, there is a considerable variation in spending on education per student among OECD countries with a GDP per capita greater than US\$ 22 500 (see ovals in Chart B1.6a). The higher GDP per capita, the greater the variation in expenditure devoted to students. Australia, France and the United Kingdom, for example, are countries with similar levels of GDP per capita which spend very different proportions of their GDP per capita on both the secondary and tertiary levels of education. Thus, the proportion of GDP per capita spent per secondary student in Australia and France (27 and 30% respectively) is above the OECD average while for the United Kingdom (at 22%) the proportion is below average. On the other hand, the United Kingdom spends 40% of GDP per capita per tertiary student, whereas Australia and France spent 48 and 33 % respectively, which are very different proportions (Table B1.2 and Chart B1.6b).

*Countries with very different levels of GDP per capita can nevertheless show similar distributions of investment by level of education.*

Expenditure on education per student relative to GDP per capita shows how spending on education in a country relates to the country's wealth as a whole. Countries with very different levels of GDP per capita can show similar distributions of investment by level of education. For example, Korea and Portugal – two countries with expenditure per student and GDP per capita below the OECD average – spend the same proportion of money per student per capita as Austria, France and Italy, and more than the United States, which has one of the highest GDP per capita. Similarly, Mexico and the Slovak Republic spend about 47% of GDP per capita on each tertiary-level student, which is approximately the same proportion as Australia, Denmark and the Netherlands (Chart B1.6b).

**Chart B1.6a. Annual expenditure on educational institutions per student relative to GDP per capita (2001)**  
*In equivalent US dollars converted using PPPs, by level of education*

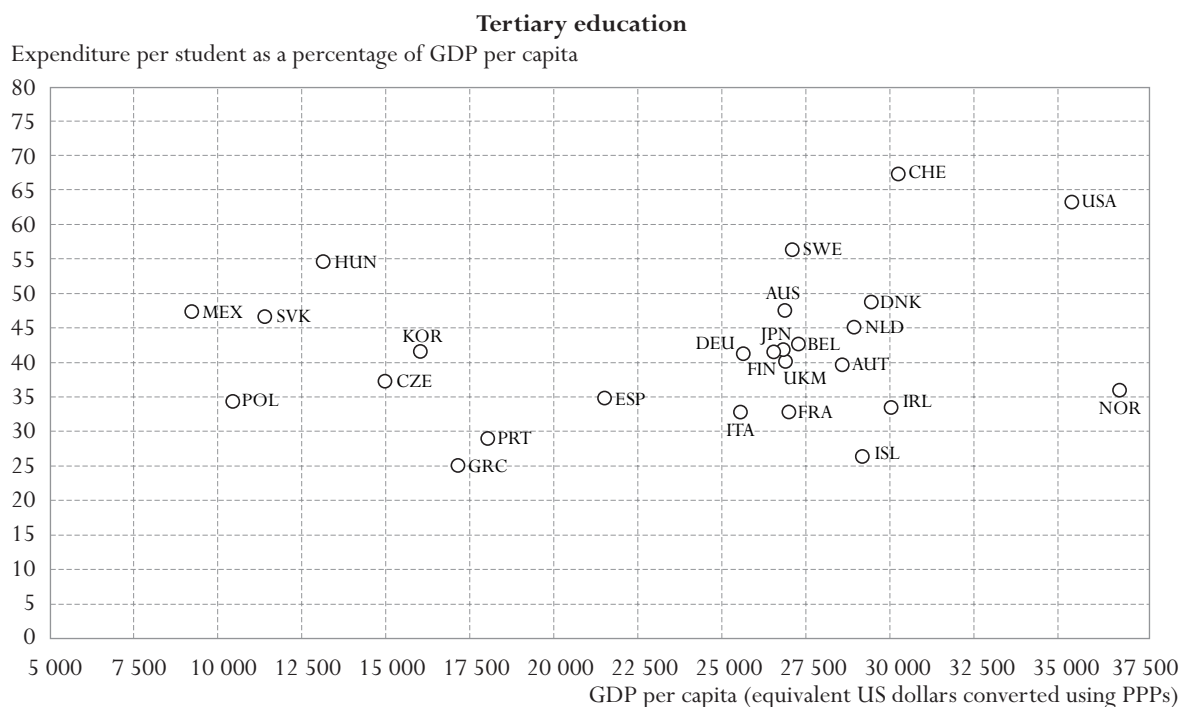
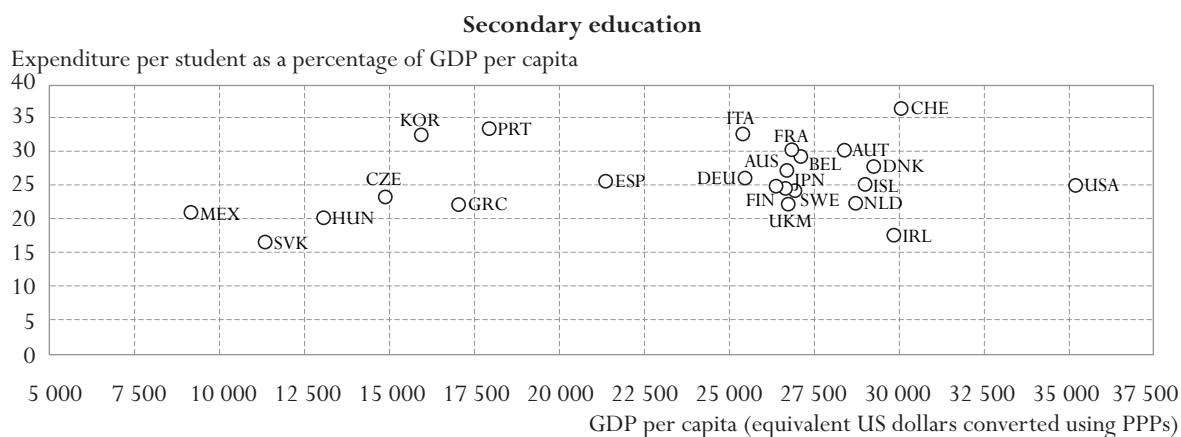
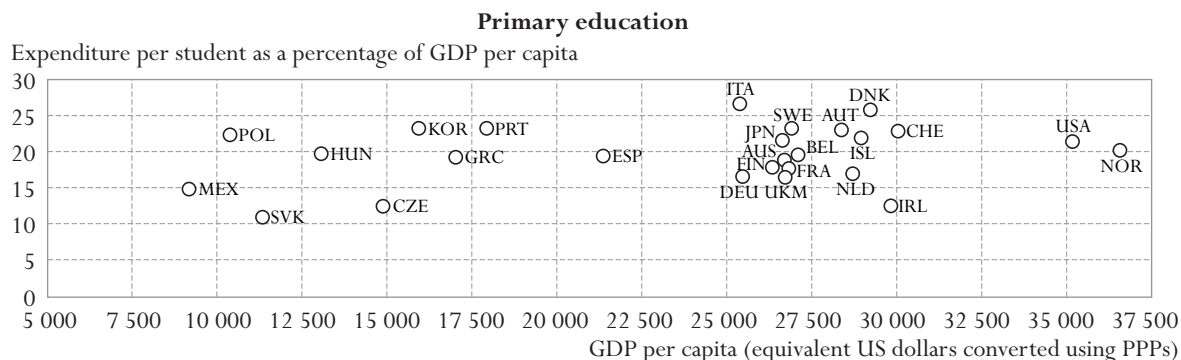


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Note: Please refer to the Reader's Guide for list of country codes and country names used in this chart.  
 Source: OECD, Tables B1.1 and B1.2 and Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

**Chart B1.6b. Annual expenditure on educational institutions per student as a percentage of GDP per capita relative to GDP per capita (2001)**

*By level of education*



Note: Please refer to the Reader's Guide for list of country codes and country names used in this chart.

Source: OECD, Tables B1.1 and B1.2 and Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).



### Change in expenditure on education per student between 1995 and 2001

The number of young people in a population influences both the enrolment rate and the amount of resources and organisational effort which a country must invest in its education system. Thus, the size of the youth population in a given country shapes the potential demand for initial education and training. The higher the number of young people, the greater the potential demand for educational services. Table B1.5 and Chart B1.7 show in absolute terms and at 2001 constant prices the effects of changes in enrolment and in expenditure between 1995 and 2001 on spending on education per student.

Expenditure per primary, secondary and post-secondary non-tertiary student increased between 1995 and 2001 by 29% or more in Australia, Greece, Ireland, Poland, Portugal, Spain and Turkey. In eleven out of the 23 OECD countries for which data are available, changes exceed 20% between 1995 and 2001. The Czech Republic and Norway saw a decline in expenditure on education per primary, secondary and post-secondary non-tertiary student by 4 and 6% respectively. The measured decline in expenditure per student for Norway is due to a substantial change in the price deflator at the level of total GDP, caused primarily by an increase in oil prices (Chart B1.7).

Although institutional arrangements are often slow in adapting to changing demographic conditions, changes in enrolments do not seem to have been the main factor driving changes in expenditure per primary, secondary and post-secondary non-tertiary student. Japan, Poland, Portugal and Spain are exceptions to this pattern, where a drop of more than 10% in enrolments combined with a slight rise in expenditure on education for Japan and Spain, and a sharp spending increase for Poland and Portugal have led to a significant increase in spending on education per student. In contrast, in France, Greece, Ireland and Italy, an increase of 10 to 36% in education budgets, coupled with a slight decrease in enrolments, has emphasized the increase in spending per primary, secondary and post-secondary non-tertiary student (Table B1.5 and Chart B1.7).

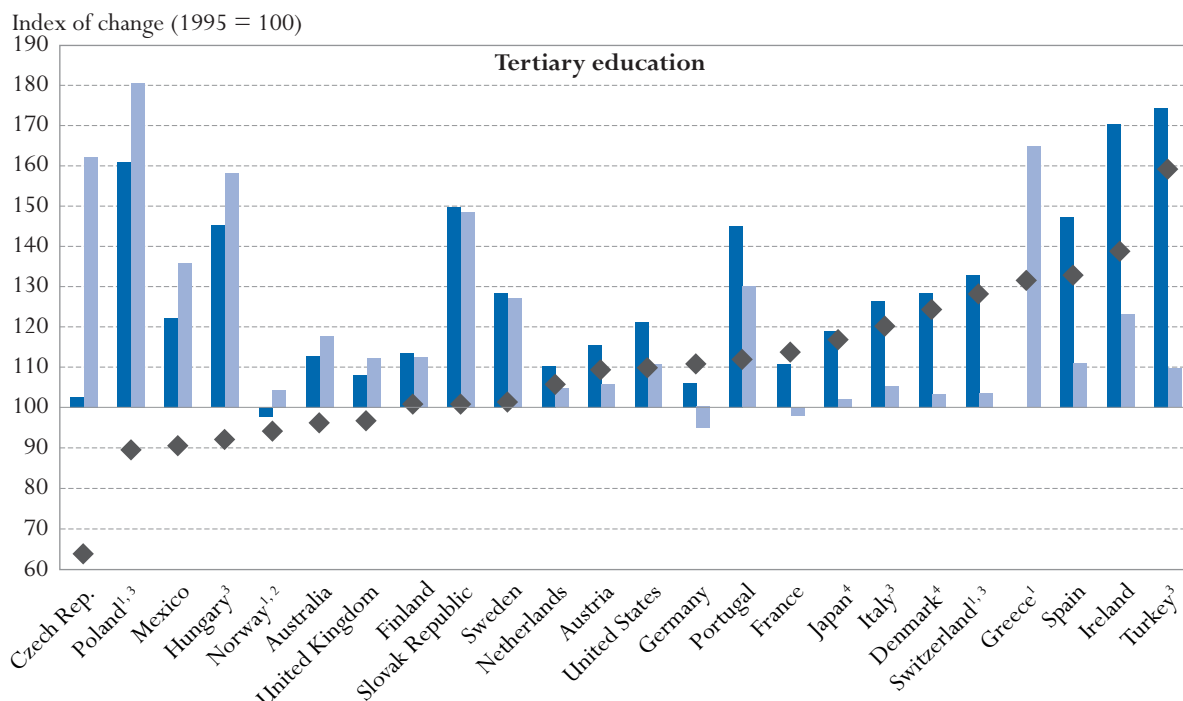
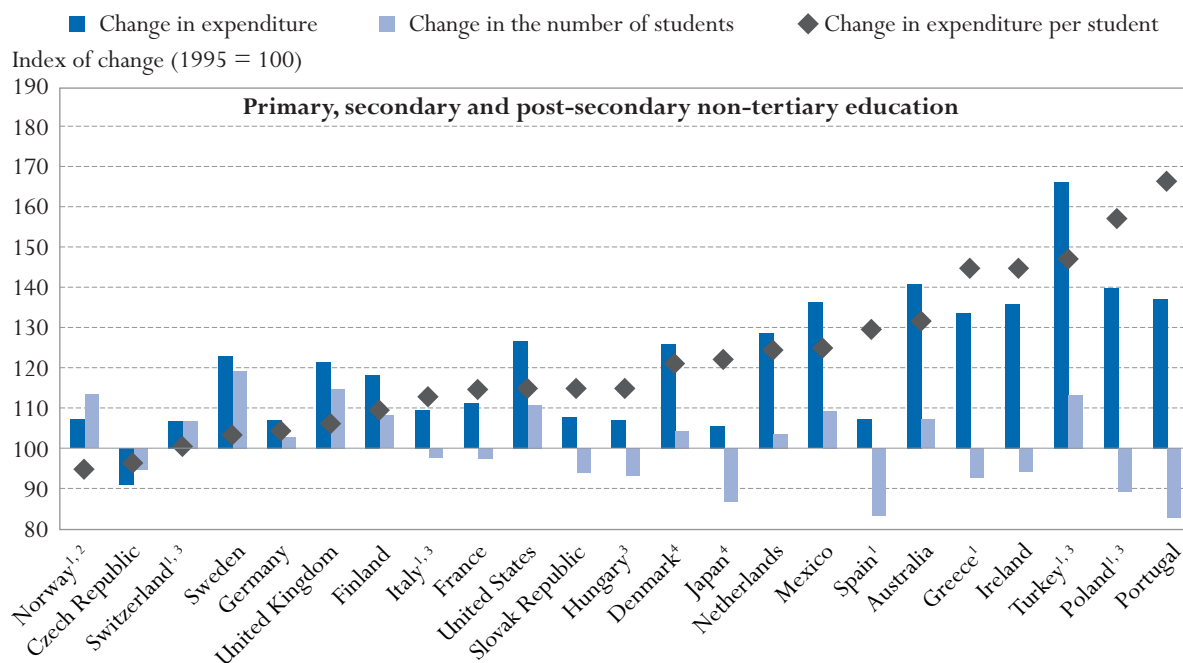
Other exceptions are Norway, Sweden, Turkey, the United Kingdom and the United States, the five OECD countries with the highest increase in the aggregated number of primary, secondary and post-secondary non-tertiary students between 1995 and 2001. These countries present different patterns. In Sweden, Turkey, the United Kingdom and the United States, increases in expenditure outpaced rising enrolments, leading to an increase in expenditure per student. In contrast, in Norway, an increase in student numbers due partly to the expansion of primary education from six to seven years implemented in the school year 1997-98, has not been counterbalanced by a similar increase in educational spending. However, the change between 1995 and 2001 in the price deflator at the level of total GDP for Norway (caused primarily by an increase in oil prices) led to the decline in educational spending and also in expenditure per primary, secondary and post-secondary non-tertiary student (Table B1.5 and Chart B1.7).

*Expenditure on education per primary, secondary and post-secondary non-tertiary student increased by 29% or more in Australia, Greece, Ireland, Poland, Portugal, Spain and Turkey.*

*At the primary and secondary levels, changes in enrolments were not the main factor driving expenditure...*

**Chart B1.7. Change in expenditure on educational institutions per student relative to different factors, by level of education (1995, 2001)**

Index of change between 1995 and 2001 (1995 = 100, 2001 constant prices)



1. Public expenditure only.

2. The decline in expenditure per student is due to a substantial change in the GDP deflator, caused primarily by an increase in oil prices.

3. Public institutions only.

4. Post-secondary non-tertiary included in both upper secondary and tertiary education.

Countries are ranked in ascending order of change in expenditure on educational institutions per student.

Source: OECD, Table B1.5. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

The pattern is different at the tertiary level of education. In seven out of 24 OECD countries for which data are available – Australia, the Czech Republic, Hungary, Mexico, Norway, Poland and the United Kingdom – expenditure on tertiary education per student declined between 1995 and 2001. In all of these countries except Norway (see previous paragraph), this was mainly the result of the rapid increase of more than 10% in the number of tertiary students during the same period (Chart B1.7). On the other hand, expenditure per tertiary student rose significantly in Greece, Ireland and Portugal despite a growth in enrolment of 65, 23 and 30%, respectively. France and Germany were the only OECD countries in which the number of tertiary students actually declined; in Germany, this decline occurred mainly in the earlier years of this period, and student numbers have lately begun to increase significantly (Table B1.5 and Chart B1.7).

*...while at the tertiary level, spending on education has not always kept pace with the rapid expansion of enrolments.*

### **Change in expenditure on education per student versus change in GDP per capita between 1995 and 2001**

Does growing national income necessarily translate into higher spending on education per student? Table B1.6 shows, for each OECD country, the change in expenditure on education per student in relation to the change in GDP per capita between 1995 and 2001, at 2001 constant prices and 2001 purchasing power parities.

In general, change in expenditure on education per student is linked to change in GDP per capita. However, in seven out of 22 OECD countries for which data are available expenditure on educational institutions per tertiary student (expressed in US\$) decreased between 1995 and 2001, while GDP per capita increased over the same period (Table B1.6). Expenditure per student increased in all other countries. In six of these – Denmark, Greece, Italy, Japan, Spain and Switzerland – expenditure on education per student increased at a greater rate than GDP per capita between 1995 and 2001. In all the other OECD countries, GDP per capita increased at a greater rate than expenditure per tertiary student (Table B1.6).

*In seven out of 22 OECD countries expenditure on educational institutions per tertiary student expressed in US\$ decreased, while GDP per capita increased, between 1995 and 2001.*

Among countries with comparable levels of expenditure on education per tertiary student and GDP per capita in 2001, it is possible to note some differences in patterns of investment in education between 1995 and 2001. For example, for the year 2001 Australia, Japan and the United Kingdom have approximately the same GDP per capita and expenditure on education per tertiary student; in comparing statistics from 1995, it appears that Japan increased spending on education per tertiary student at a greater rate than the growth of GDP per capita. By contrast, GDP per capita also increased significantly in Australia and the United Kingdom between 1995 and 2001, whereas expenditure on education per tertiary student slightly decreased over the same period (Table B1.6).

*Countries with comparable levels of expenditure and GDP per capita in 2001 display different patterns of investment in education between 1995 and 2001.*

### **Definitions and methodologies**

Expenditure on education per student at a particular level of education is calculated by dividing the total expenditure on educational institutions at that level by the corresponding full-time equivalent enrolment. Only those educational

*Data refer to the financial year 2001 and are based on the UOE data collection on education statistics administered by the OECD in 2003 (for details see Annex 3).*

*Data for the financial year 1995 are based on a special survey carried out in 2001 and updated in 2003.*

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institutions and programmes for which both enrolment and expenditure data are available are taken into account. Expenditure in national currency is converted into equivalent US dollars by dividing the national currency figure by the purchasing power parity (PPP) index. The PPP exchange rate gives the amount of a national currency that will buy the same basket of goods and services in a given OECD country as that bought by the US dollar in the United States. The PPP exchange rate is used because the market exchange rate is affected by many factors (interest rates, trade policies, expectations of economic growth, etc.) that have little to do with current relative domestic purchasing power in different OECD countries (Annex 2 gives further details).

Tables B1.5 and B1.6 show expenditure on educational institutions per student in financial year 1995. The data on expenditure for 1995 were obtained by a special survey conducted in 2001 and updated in 2003. OECD countries were asked to collect the 1995 data according to the definitions and the coverage of the UOE 2003 data collection. All expenditure data, as well as the GDP for 1995, are adjusted to 2001 prices using the GDP price deflator.

Expenditure on education per student relative to GDP per capita is calculated by expressing expenditure on education per student in units of national currency as a percentage of GDP per capita, also in national currency. In cases where the educational expenditure data and the GDP data pertain to different reference periods, the expenditure data are adjusted to the same reference period as the GDP data, using inflation rates for the OECD country in question (see Annex 2).

Expected expenditure over the average duration of tertiary studies (Table B1.3) is calculated by multiplying current annual expenditure by the typical duration of tertiary studies. The methodology used for the estimation of the typical duration of tertiary studies is described in Annex 3 at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004). For the estimation of the duration of tertiary education, data are based on a special survey carried out in OECD countries in 1997.

The ranking of OECD countries by annual expenditure on educational services per student is affected by differences in how countries define full-time, part-time and full-time equivalent enrolment. Some OECD countries count every participant at the tertiary level as a full-time student while others determine a student's intensity of participation by the credits which he or she obtains for successful completion of specific course units during a specified reference period. OECD countries that can accurately account for part-time enrolment will have higher expenditure per full-time equivalent student than OECD countries that cannot differentiate between different modes of student attendance.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2004 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004) for details on changes).

Table B1.1. Annual expenditure on educational institutions per student (2001)

In equivalent US dollars converted using PPPs, by level of education, based on full-time equivalents

	Pre-primary education (for children 3 years and older)	Primary education	Secondary education			Post-secondary non-tertiary education	Tertiary education (including R&D activities)			All tertiary education excluding R&D activities	Primary to tertiary education
			Lower secondary education	Upper secondary education	All secondary education		All tertiary education	Tertiary-type B education	Tertiary-type A and advanced research programmes		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>OECD COUNTRIES</b>											
Australia	m	5 052	7 042	7 587	7 239	6 057	12 688	7 692	13 654	9 200	7 046
Austria	5 713	6 571	8 316	8 852	8 562	8 240	11 274	9 884	11 382	7 388	8 462
Belgium	4 062	5 321	x(5)	x(5)	7 912	x(5)	11 589	x(7)	x(7)	8 084	7 548
Canada	m	m	m	m	m	m	m	m	m	m	m
Czech Republic	2 449	1871	3 245	3 663	3 448	1 607	5 555	2 789	5 907	m	3 169
Denmark	4 542	7572	7 653	8 531	8 113	x(4,7)	14 280	x(7)	x(7)	10 771	9 075
Finland	3 640	4 708	7 496	5 938	6 537	x(5)	10 981	4 304	11 143	7 061	6 751
France	4 323	4 777	7 491	8 884	8 107	6 529	8 837	9 378	8 689	6 965	7 124
Germany	4 956	4 237	5 366	9 223	6 620	9 460	10 504	5 633	11 306	6 370	6 696
Greece	x(2)	3 299	x(5)	x(5)	3768	1155	4 280	2 373	5 188	3 534	3 680
Hungary <sup>1</sup>	2 882	2 592	2 325	2 981	2 633	4135	7 122	3 026	7 266	5 822	3 254
Iceland	m	6 373	7 123	7 369	7 265	m	7 674	8 067	7 671	m	7 101
Ireland	4 026	3 743	5 214	5 285	5 245	4783	10 003	x(7)	x(7)	8 086	5 294
Italy <sup>1</sup>	5 972	6 783	8 558	8 051	8 258	m	8 347	13 456	8 270	5 064	7 839
Japan	3 478	5 771	6 166	6 880	6 534	x(4,7)	11 164	8 823	11 493	m	7 018
Korea	1 913	3 714	4 612	5 681	5 159	a	6 618	4 295	8 236	m	5 035
Luxembourg	x(2)	7 873	x(5)	x(5)	11 091	x(5)	m	m	m	m	m
Mexico	1 410	1 357	1 342	3 144	1 915	a	4 341	x(7)	x(7)	3538	1 793
Netherlands	4 228	4 862	6 779	5 911	6 403	5506	12 974	7 380	13 044	8 075	6 733
New Zealand	m	m	m	m	m	m	m	m	m	m	m
Norway	8 246	7 404	8 365	9 840	9 040	x(5)	13 189	x(7)	x(7)	m	9 004
Poland <sup>1</sup>	2 220	2 322	x(2)	2 592	m	2134	3 579	3 341	3 582	2 864	2 573
Portugal	m	4 181	5 882	6 076	5 976	a	5 199	x(7)	x(7)	m	5 092
Slovak Republic	1 740	1 252	1 483	2 452	1 874	x(4)	5 285	x(4)	5 285	4 788	2 031
Spain	3 608	4 168	x(5)	x(5)	5 442	x(5)	7 455	7 280	7 483	5 951	5 385
Sweden	3 504	6 295	6 285	6 628	6 482	3757	15 188	x(7)	x(7)	8 356	7 612
Switzerland <sup>1</sup>	3 080	6 889	8 219	13 701	10 916	5910	20 230	6 785	21 815	m	8 795
Turkey <sup>1</sup>	m	m	a	m	m	a	m	x(7)	x(7)	3 950	m
United Kingdom	7 595	4 415	x(5)	x(5)	5 933	x(5)	10 753	x(7)	x(7)	8 101	5 972
United States <sup>2</sup>	8 522	7 560	8 359	9 278	8 779	x(7)	22 234	x(7)	x(7)	20 098	10 871
<i>Country mean</i>	<i>4 187</i>	<i>4 850</i>	<i>5 787</i>	<i>6 752</i>	<i>6 510</i>	<i>3705</i>	<i>10 052</i>	~	~	<i>7 203</i>	<i>6 190</i>
<i>OECD total</i>	<i>4 490</i>	<i>4 819</i>	~	~	<i>6 688</i>	~	<i>12 319</i>	~	~	<i>10 724</i>	<i>6 821</i>
<b>PARTNER COUNTRIES</b>											
Argentina	1 745	1 655	2 189	2 487	2 306	a	3 775	5 028	3 047	m	2 182
Brazil <sup>1,3</sup>	1 044	832	862	870	864	a	m	m	10306	m	m
Chile <sup>4</sup>	1 766	2 110	2070	2 094	2 085	a	6 901	3 486	7 611	m	2 732
India	57	405	390	1045	650	m	2 522	x(7)	x(7)	m	m
Indonesia	73	108	279	396	322	a	1 414	x(7)	x(7)	m	m
Israel	3 428	4 650	x(5)	x(5)	5 617	4 051	11 494	7 521	12 751	m	6 033
Jamaica	248	646	904	954	922	1 773	8 028	2 957	16 324	m	m
Jordan <sup>1</sup>	342	811	834	853	840	m	m	m	m	m	m
Malaysia <sup>1</sup>	611	1 562	x(5)	x(5)	2 600	7 367	11303	10 996	11 402	m	2 679
Paraguay	x(2)	802	x(5)	x(5)	1373	m	4 030	2 164	5 003	m	m
Peru	359	431	528	547	534	m	4 230	m	m	m	m
Philippines <sup>1</sup>	75	492	456	506	465	m	1 648	x(7)	x(7)	m	m
Thailand	764	1 045	977	1 185	1 081	m	1 851	2 507	1 744	m	m
Tunisia <sup>1</sup>	m	2473	x(2)	x(2)	x(2)	a	4 433	x(7)	x(7)	m	m
Uruguay <sup>1</sup>	1 200	1 202	889	1 243	1 046	a	2 201	x(7)	x(7)	m	1 261
Zimbabwe <sup>4</sup>	m	878	x(5)	x(5)	1368	a	m	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. Public institutions only.

2. Public and independent private institutions only.

3. Year of reference 2000.

4. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

Table B1.2. Annual expenditure on educational institutions per student relative to GDP per capita (2001)

By level of education, based on full-time equivalents

	Pre-primary education (for children 3 years and older)	Primary education	Secondary education			Post- secondary non- tertiary education	Tertiary education (including R&D activities)			All tertiary education excluding R&D activities	Primary to tertiary education	
			Lower secondary education	Upper secondary education	All secondary education		All tertiary education	Tertiary- type B education	Tertiary- type A and advanced research programmes			
												(1)
<b>OECD COUNTRIES</b>												
Australia	m	19	26	28	27	23	48	29	51	34	26	
Austria	20	23	29	31	30	29	40	x(7)	x(7)	26	30	
Belgium	15	20	x(5)	x(5)	29	x(5)	43	x(7)	x(7)	30	28	
Canada	m	m	m	m	m	m	m	m	m	m	m	
Czech Republic	16	13	22	25	23	11	37	19	40	m	21	
Denmark	16	26	26	29	28	x(4,7)	49	x(7)	x(7)	37	31	
Finland	14	18	28	23	25	x(5)	42	16	42	27	26	
France	16	18	28	33	30	24	33	35	32	26	27	
Germany	19	17	21	36	26	37	41	22	44	25	26	
Greece	x(2)	19	x(5)	x(5)	22	7	25	14	30	21	22	
Hungary <sup>1</sup>	22	20	18	23	20	32	55	23	56	45	25	
Iceland	m	22	25	25	25	m	26	28	26	m	25	
Ireland	13	13	17	18	18	16	34	x(7)	x(7)	27	18	
Italy <sup>1</sup>	24	27	34	32	33	m	33	53	33	m	31	
Japan	13	22	23	26	25	x(4,7)	42	33	43	m	26	
Korea	12	23	29	36	32	a	42	27	52	m	32	
Luxembourg	x(2)	16	x(5)	x(5)	23	x(5)	m	m	m	m	m	
Mexico	15	15	15	34	21	a	47	x(7)	x(7)	39	20	
Netherlands	15	17	24	21	22	19	45	26	45	28	23	
New Zealand	m	m	m	m	m	m	m	m	m	m	m	
Norway	23	20	23	27	25	x(5)	36	x(7)	x(7)	m	25	
Poland <sup>1</sup>	21	22	x(2)	25	m	21	35	32	35	28	25	
Portugal	m	23	33	34	33	a	29	x(7)	x(7)	m	28	
Slovak Republic	15	11	13	22	17	x(4)	47	x(4)	47	42	18	
Spain	17	20	x(5)	x(5)	25	x(5)	35	34	35	28	25	
Sweden	13	23	23	25	24	14	56	x(7)	x(7)	31	28	
Switzerland <sup>1</sup>	10	23	27	46	36	20	67	23	73	m	29	
Turkey <sup>1</sup>	m	m	a	m	m	a	m	x(7)	x(7)	65	m	
United Kingdom	28	17	x(5)	x(5)	22	x(5)	40	x(7)	x(7)	30	22	
United States <sup>2</sup>	24	21	24	26	25	x(7)	63	x(7)	x(7)	57	31	
<b>Country mean</b>	<b>17</b>	<b>20</b>	<b>23</b>	<b>28</b>	<b>26</b>	<b>16</b>	<b>42</b>	<b>28</b>	<b>43</b>	<b>34</b>	<b>26</b>	
<b>PARTNER COUNTRIES</b>												
Argentina	15	14	19	21	20	a	32	43	26	m	19	
Brazil <sup>1,3</sup>	16	13	13	14	14	a	m	m	161	m	m	
Chile <sup>4</sup>	18	22	21	22	22	a	71	36	79	m	28	
India	2	14	14	37	23	m	89	x(7)	x(7)	m	m	
Indonesia	3	4	10	14	11	a	49	x(7)	x(7)	m	m	
Israel	16	22	x(5)	x(5)	26	19	54	35	60	m	28	
Jamaica	7	17	24	26	25	48	217	80	442	m	m	
Jordan <sup>1</sup>	9	21	22	23	22	m	m	m	m	m	m	
Malaysia <sup>1</sup>	7	18	x(5)	x(5)	30	85	131	127	132	m	31	
Paraguay	m	15	x(5)	x(5)	26	m	77	41	96	m	m	
Peru	8	9	11	12	12	m	81	m	m	m	m	
Philippines	2	13	12	13	12	m	43	x(7)	x(7)	m	m	
Thailand	13	17	16	20	18	m	31	42	29	m	m	
Tunisia <sup>1</sup>	m	38	x(2)	x(2)	x(2)	a	68	93	x(7)	m	m	
Uruguay	14	14	11	15	12	a	26	x(7)	x(7)	m	15	
Zimbabwe <sup>4</sup>	m	20	x(5)	x(5)	31	a	m	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. Public institutions only.

2. Public and independent private institutions only.

3. Year of reference 2000.

4. Year of reference 2002.

 Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

**Table B1.3. Cumulative expenditure on educational institutions per student over the average duration of tertiary studies (2001)**  
*In equivalent US dollars converted using PPPs, by type of programme*

	Method <sup>1</sup>	Average duration of tertiary studies (in years) <sup>2</sup>			Cumulative expenditure per student over the average duration of tertiary studies		
		All tertiary education	Tertiary-type B education	Tertiary-type A and advanced research programmes	All tertiary education	Tertiary-type B education	Tertiary-type A and advanced research programmes
		(1)	(2)	(3)	(4)	(5)	(6)
OECD COUNTRIES							
Australia	CM	2.5	1.6	2.6	32 101	12 076	34 954
Austria	AF	5.5	2.8	6.3	62 459	27 873	72 048
Canada	CM	m	m	m	m	m	m
Denmark	AF	4.2	2.1	4.4	59 834	x(4)	x(4)
Finland	CM	4.5	a	4.5	49 972	a	49 972
France	AF	4.7	2.8	5.3	41 372	25 957	46 103
Germany	CM	5.3	2.4	6.5	55 426	13 357	73 488
Greece	AF	5.7	3.5	8.1	24 255	8 270	42 007
Hungary <sup>3</sup>	CM	4.1	2.0	4.1	28 844	6 052	29 426
Iceland	CM	2.7	2.0	2.8	20 566	15 811	21 786
Ireland	CM	3.2	2.2	4.0	32 411	x(4)	x(4)
Italy <sup>3</sup>	CM	5.5	3.3	5.6	45 824	44 002	46 064
Japan	CM	3.8	2.1	4.6	42 970	18 148	52 555
Korea	CM	3.4	2.1	4.2	22 701	8 890	34 756
Mexico	AF	3.4	x(3)	3.4	14 858	x(4)	x(4)
Netherlands	CM	4.9	x(1)	x(1)	63 186	x(4)	x(4)
Norway	CM	m	m	m	m	m	m
Poland <sup>3</sup>	CM	m	m	3.7	m	m	13 184
Spain	AF	4.6	1.5	4.7	33 920	10 841	35 221
Sweden	CM	4.6	2.6	4.7	69 981	x(4)	x(4)
Switzerland <sup>3</sup>	CM	3.6	2.2	5.5	73 320	14 839	118 953
United Kingdom	CM	3.8	x(1)	x(1)	41 209	x(4)	x(4)
<i>Country mean</i>		<i>4.2</i>	<i>2.2</i>	<i>4.7</i>	<i>42 906</i>	<i>~</i>	<i>~</i>

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. Either the Chain Method (CM) or an Approximation Formula (AF) was used to estimate the duration of tertiary studies.

2. The duration of tertiary studies is obtained by a special survey conducted in 1997 for the academic year 1995. Data for Austria, Finland, Germany, Greece, Japan, the Netherlands and the United Kingdom have been updated and correspond to the academic year 2002.

3. Public institutions only.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

**Table B1.4. Distribution of expenditure on educational institutions compared to number of students enrolled at each level of education (2001)**

Percentage

The table shows the distribution of educational expenditure and of students across levels of education. The number of students is adjusted to the financial year.

Example: Reading the first and second columns: In the Czech Republic, 10% of all expenditure on educational institutions is allocated to pre-primary education whereas 13% of pupils/students are enrolled at this level of education.

	Pre-primary education (for children 3 years and older)		Primary education		Secondary education						Post-secondary non-tertiary education	
	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Lower secondary		Upper secondary		All secondary		Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs
					Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs		
	(1)		(2)		(3)		(4)		(5)		(6)	
OECD COUNTRIES												
Australia	m	m	32	45	25	25	15	14	40	39	2	2
Austria	9	14	20	25	24	24	22	21	46	45	1	1
Belgium	9	16	23	31	x(5)	x(5)	x(5)	x(5)	44	40	x(5)	x(5)
Canada	4	m	x(5)	m	x(5)	m	x(5)	m	55	m	x(8)	m
Czech Republic	10	13	17	28	24	24	26	22	50	46	1	1
Denmark	11	21	27	29	15	17	19	18	34	35	x(4,7)	x(4,7)
Finland	6	11	23	31	18	15	23	25	41	40	x(5)	x(5)
France	11	17	19	27	26	23	24	18	50	42	n	n
Germany	11	14	13	21	28	34	23	16	51	50	4	3
Greece <sup>1</sup>	x(2)	7	27	30	x(5)	17	x(5)	19	36	36	1	2
Hungary <sup>1</sup>	15	17	18	23	17	24	19	22	36	46	3	3
Iceland	m	m	m	m	m	m	m	m	m	m	m	m
Ireland	n	n	32	46	18	19	15	15	33	34	3	4
Italy <sup>1</sup>	9	12	24	27	20	18	27	26	47	44	1	n
Japan	4	8	27	34	16	19	19	20	36	39	x(4,7)	a
Korea	2	5	24	36	14	16	18	17	32	33	a	a
Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m
Mexico	9	12	38	50	16	22	18	10	34	32	a	a
Netherlands	7	11	28	37	23	22	15	17	39	39	n	n
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m
Norway	10	11	31	40	14	15	20	19	33	34	x(5)	1
Poland <sup>1</sup>	8	9	50	55	x(2)	x(2)	22	22	m	m	1	1
Portugal	6	m	30	m	21	m	21	m	42	m	a	a
Slovak Republic	11	13	15	24	23	32	26	22	50	54	x(4)	x(4)
Spain	10	14	25	31	x(5)	24	x(5)	14	40	38	x(5)	x(5)
Sweden	7	15	31	34	15	16	21	22	35	38	n	1
Switzerland <sup>1</sup>	4	11	29	40	17	20	28	19	45	39	1	1
Turkey <sup>1</sup>	m	2	m	74	a	a	m	17	m	17	a	a
United Kingdom	8	7	24	33	x(5)	17	x(5)	33	48	49	x(5)	x(5)
United States	7	8	27	39	15	19	14	16	29	35	x(7)	a
<b>Country mean</b>	<b>8</b>	<b>11</b>	<b>26</b>	<b>35</b>	<b>18</b>	<b>20</b>	<b>21</b>	<b>20</b>	<b>41</b>	<b>39</b>	<b>1</b>	<b>1</b>
PARTNER COUNTRIES												
Argentina	7	9	31	44	20	22	15	14	35	35	a	a
Brazil <sup>1,2</sup>	9	9	32	41	26	32	13	16	39	48	a	a
Chile <sup>3</sup>	7	10	33	41	11	14	18	23	29	37	a	a
India	1	9	39	53	14	20	26	14	40	34	a	a
Indonesia	1	3	25	59	21	19	18	11	39	31	a	a
Israel	10	17	30	39	x(5)	13	x(5)	17	27	30	n	1
Jamaica	5	18	28	43	18	20	10	11	28	30	9	5
Jordan <sup>1</sup>	n	n	51	52	34	34	15	14	49	48	n	n
Malaysia <sup>1</sup>	1	5	30	52	x(5)	x(5)	x(5)	x(5)	36	37	1	n
Paraguay	2	x(2)	46	67	x(5)	x(5)	x(5)	x(5)	32	27	m	m
Peru	8	13	37	50	18	20	9	9	27	29	m	3
Philippines <sup>1</sup>	n	1	61	69	17	21	4	5	21	25	m	m
Thailand	11	m	34	m	9	m	11	m	20	m	m	m
Tunisia <sup>1</sup>	m	m	78	49	x(2)	24	x(2)	16	x(2)	39	a	a
Uruguay <sup>1</sup>	11	11	39	41	14	20	16	16	30	36	a	a
Zimbabwe <sup>3</sup>	2	m	64	74	x(5)	13	x(5)	13	34	26	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. Public institutions only.

2. Year of reference 2000.

3. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



**Table B1.4. (continued) Distribution of expenditure on educational institutions compared to number of students enrolled at each level of education (2001)**  
Percentage

	Tertiary education (including R&D activities)						Not allocated by level		All levels of education	
	All tertiary education		Tertiary-type B education		Tertiary-type A and advanced research programmes					
	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs	Proportion of expenditure on educational institutions	Proportion of students enrolled, based on FTEs
	(7)	(8)	(9)	(10)	(11)					
<b>OECD COUNTRIES</b>										
Australia	26	15	3	2	24	12	n	n	100	100
Austria	21	15	1	1	19	14	3	n	100	100
Belgium	22	13	x(7)	x(7)	x(7)	x(7)	2	n	100	100
Canada	41	m	17	m	24	m	a	m	100	m
Czech Republic	19	11	1	1	18	10	3	a	100	100
Denmark	26	15	x(7)	x(7)	x(7)	x(7)	2	a	100	100
Finland	30	17	n	n	29	17	n	n	100	100
France	18	14	4	3	14	11	1	a	100	100
Germany	20	12	2	2	18	11	1	n	100	100
Greece <sup>1</sup>	29	25	5	8	24	17	7	a	100	100
Hungary <sup>1</sup>	23	11	n	n	23	10	5	a	100	100
Iceland	m	m	m	m	m	m	m	m	m	m
Ireland	30	16	x(7)	x(7)	x(7)	x(7)	1	n	100	100
Italy <sup>1</sup>	19	17	n	n	19	17	n	a	100	100
Japan	23	15	2	2	21	13	10	4	100	100
Korea	32	27	9	11	23	16	11	a	100	100
Luxembourg	m	m	m	m	m	m	m	m	m	m
Mexico	17	7	x(7)	n	x(7)	7	2	a	100	100
Netherlands	26	13	n	n	26	13	a	m	100	100
New Zealand	m	m	m	m	m	m	m	m	m	m
Norway	21	15	x(7)	1	x(7)	14	5	a	100	100
Poland <sup>1</sup>	19	14	n	n	19	13	1	a	100	100
Portugal	19	m	x(7)	m	x(7)	m	3	m	100	m
Slovak Republic	22	8	x(4)	x(4)	22	8	3	a	100	100
Spain	25	17	3	2	21	15	a	a	100	100
Sweden	26	12	x(7)	n	x(7)	12	a	a	100	100
Switzerland <sup>1</sup>	21	10	1	1	20	9	1	n	100	100
Turkey <sup>1</sup>	m	8	x(7)	2	x(7)	6	a	a	m	100
United Kingdom	20	11	x(7)	3	x(7)	9	a	a	100	100
United States	37	18	x(7)	x(7)	x(7)	x(7)	a	a	100	100
<b>Country mean</b>	<b>24</b>	<b>14</b>	<b>3</b>	<b>2</b>	<b>21</b>	<b>12</b>	<b>2</b>	<b>n</b>	<b>100</b>	<b>100</b>
<b>PARTNER COUNTRIES</b>										
Argentina	19	12	9	4	10	7	9	a	100	100
Brazil <sup>1,2</sup>	20	2	x(7)	x(7)	x(7)	x(7)	a	a	100	100
Chile <sup>3</sup>	31	12	3	2	28	10	a	a	100	100
India	19	4	x(7)	x(7)	x(7)	x(7)	a	a	100	100
Indonesia	35	6	x(7)	x(7)	x(7)	x(7)	a	a	100	100
Israel	23	13	4	3	20	10	10	a	100	100
Jamaica	30	4	7	2	23	1	a	a	100	100
Jordan <sup>1</sup>	m	m	m	m	a	m	a	a	100	100
Malaysia <sup>1</sup>	29	7	5	1	23	5	3	n	100	100
Paraguay	20	6	4	2	16	4	a	a	100	100
Peru	28	4	6	4	22	5	a	a	100	100
Philippines <sup>1</sup>	14	5	a	a	14	4	2	a	100	100
Thailand	19	m	4	m	16	m	16	m	100	m
Tunisia <sup>1</sup>	22	8	x(7)	6	x(7)	n	a	4	100	100
Uruguay <sup>1</sup>	20	11	x(7)	3	x(7)	9	a	a	100	100
Zimbabwe <sup>3</sup>	m	m	m	m	m	m	a	a	100	100

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. Public institutions only.

2. Year of reference 2000.

3. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

**Table B1.5. Change in expenditure on educational institutions per student relative to different factors, by level of education (1995, 2001)**
*Index of change between 1995 and 2001 (1995 = 100, 2001 constant prices)*

	Primary, secondary and post-secondary non-tertiary education			Tertiary education			
	Change in expenditure	Change in the number of students	Change in expenditure per student	Change in expenditure	Change in the number of students	Change in expenditure per student	
OECD COUNTRIES							
Australia	141	107	131	Australia	113	118	96
Austria	103	m	m	Austria	115	106	109
Belgium	m	m	m	Belgium	m	m	m
Canada	101	m	m	Canada <sup>6</sup>	122	m	m
Czech Republic	91	95	96	Czech Republic	103	162	63
Denmark <sup>1</sup>	126	104	121	Denmark <sup>1</sup>	128	103	124
Finland	118	108	109	Finland	113	113	101
France	111	97	114	France	111	98	113
Germany	107	104	103	Germany	106	95	111
Greece <sup>2,4</sup>	134	93	144	Greece <sup>2</sup>	216	165	131
Hungary <sup>3</sup>	107	93	115	Hungary <sup>3</sup>	145	158	92
Iceland	m	m	m	Iceland	m	m	m
Ireland	136	94	145	Ireland	170	123	139
Italy <sup>2,3</sup>	110	98	112	Italy <sup>3</sup>	126	105	120
Japan <sup>1</sup>	105	87	122	Japan <sup>1</sup>	119	102	117
Korea	m	92	m	Korea	m	m	m
Luxembourg	m	m	m	Luxembourg	m	m	m
Mexico	136	109	125	Mexico	122	136	90
Netherlands	129	103	124	Netherlands	110	105	105
New Zealand <sup>2</sup>	141	m	m	New Zealand <sup>2</sup>	101	m	m
Norway <sup>2,4,5</sup>	107	113	94	Norway <sup>2</sup>	98	104	94
Poland <sup>2,3</sup>	140	89	157	Poland <sup>2,3</sup>	161	181	89
Portugal	137	83	166	Portugal	145	130	111
Slovak Republic	108	94	115	Slovak Republic	149	148	101
Spain <sup>2</sup>	107	83	129	Spain	147	111	133
Sweden	123	119	103	Sweden	128	127	101
Switzerland <sup>2,3</sup>	107	107	100	Switzerland <sup>2,3</sup>	133	104	128
Turkey <sup>2,3</sup>	166	113	147	Turkey <sup>3</sup>	174	110	159
United Kingdom	121	115	106	United Kingdom	108	112	96
United States	127	111	114	United States	121	111	109

1. Post-secondary non-tertiary included in both upper secondary and tertiary education.

2. Public expenditure only.

3. Public institutions only.

4. Pre-primary included in primary, secondary and post-secondary non-tertiary education.

5. The decline in expenditure per student is due to a substantial change in the GDP deflator caused primarily by an increase in oil prices.

6. Tertiary education includes only tertiary-type A and advanced research programmes.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

**Table B1.6. Change in expenditure on educational institutions per student and national income, by level of education (1995, 2001)***In equivalent US dollars converted using PPPs (2001 constant prices and 2001 constant PPPs)*

OECD COUNTRIES	1995			2001		
	Expenditure per student		GDP per capita	Expenditure per student		GDP per capita
	Primary, secondary and post-secondary non-tertiary education	Tertiary education		Primary, secondary and post-secondary non-tertiary education	Tertiary education	
Australia	4 846	13 897	23 135	6 063	12 688	26 685
Austria	m	10 341	24 889	7 852	11 274	28 372
Belgium	m	m	23 868	6 781	11 589	27 096
Canada	m	m	24 826	m	m	29 290
Czech Republic	2 927	8 785	13 426	2 819	5 555	14 861
Denmark	6 515	11 499	25 830	7 865	14 280	29 223
Finland	5 238	10 900	20 992	5 733	10 981	26 344
France	5 938	7 801	23 580	6 783	8 837	26 818
Germany	5 820	9 698	23 279	6 055	10 504	25 456
Greece	2 409	3 264	14 199	3 475	4 280	17 020
Hungary <sup>1</sup>	2 335	7 767	10 171	2 677	7 122	13 043
Iceland	m	m	23 564	7 010	7 674	29 036
Ireland	3 042	7 223	18 802	4 397	10 003	29 821
Italy <sup>1</sup>	6 577	5 621	22 889	7 714	8 347	25 377
Japan	5 134	9 691	25 092	6 179	11 164	26 636
Korea	m	m	12 780	4 406	6 618	15 916
Luxembourg	m	m	37 220	11 091	m	49 229
Mexico	1 263	4 821	7 737	1 575	4 341	9 148
Netherlands	4 548	12 311	24 503	5 654	12 974	28 711
New Zealand	m	m	19 053	m	m	21 230
Norway <sup>2</sup>	8 425	14 087	31 146	8 109	13 189	36 587
Poland <sup>1</sup>	1 528	4 023	7 682	2 396	3 579	10 360
Portugal	3 052	4 664	14 939	5 065	5 199	17 912
Slovak Republic	1 467	5 250	8 987	1 681	5 285	11 323
Spain	3 775	5 624	17 637	4 870	7 455	21 347
Sweden	6 180	m	22 846	6 372	15 188	26 902
Switzerland <sup>1</sup>	8 844	15 802	27 537	8 844	20 230	30 036
Turkey <sup>1</sup>	m	m	5 994	m	m	6 046
United Kingdom	4 941	10 981	23 006	5 324	10 753	26 715
United States	7 034	20 207	30 753	8 144	22 234	35 179

1. Public institutions only.

2. The decline in expenditure per student between 1995 and 2001 is due to a substantial change in the GDP deflator caused primarily by an increase in oil prices.

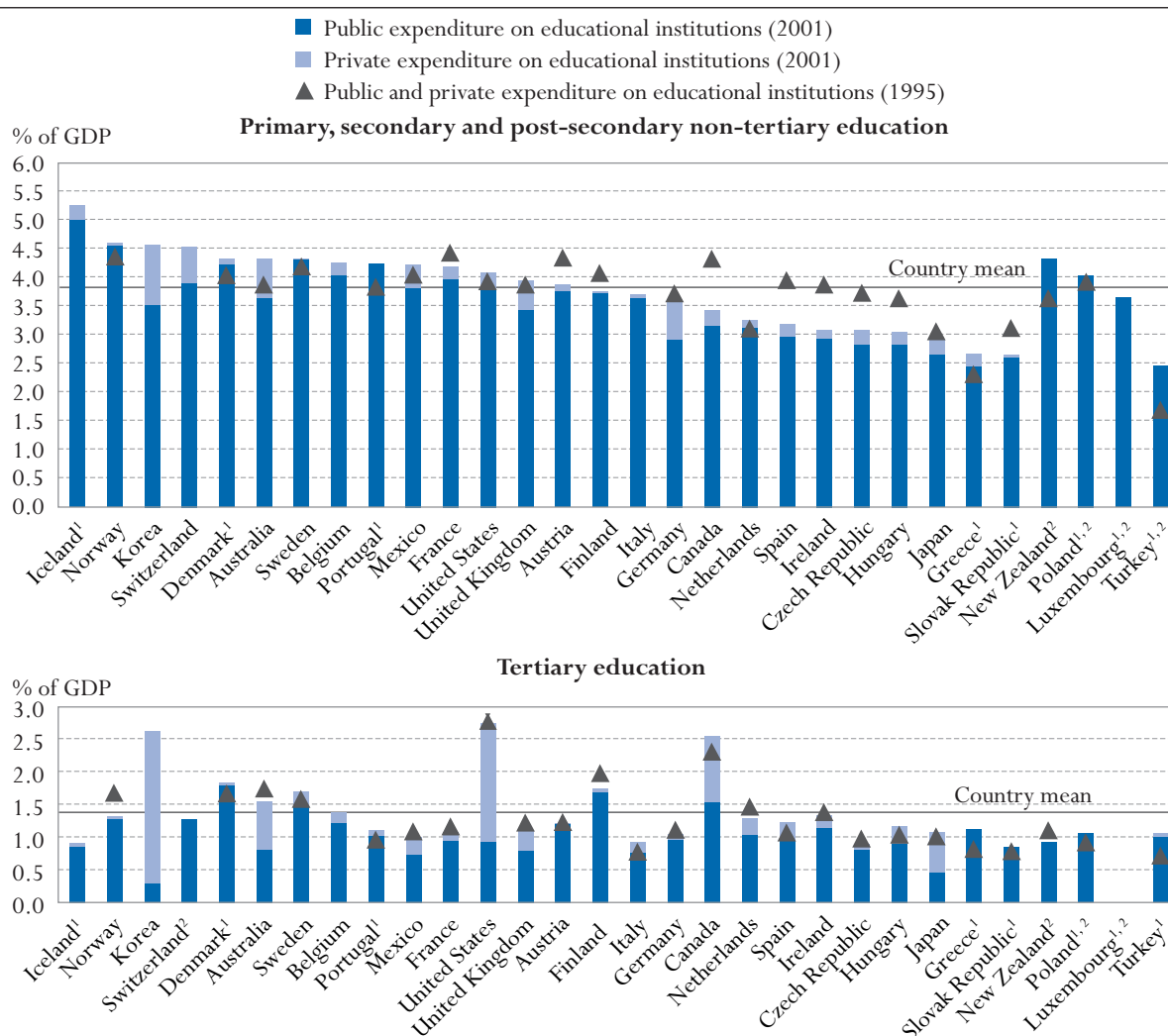
Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

## INDICATOR B2: EXPENDITURE ON EDUCATIONAL INSTITUTIONS RELATIVE TO GROSS DOMESTIC PRODUCT

- OECD countries spend 6.2% of their collective GDP on their educational institutions.
- In 17 out of 18 OECD countries for which data are available, public and private spending on educational institutions increased by more than 5% between 1995 and 2001; in contrast to trends in the early 1990s, increases in spending on educational institutions tended to fall behind the growth in national income.
- Two-thirds of expenditure on educational institutions, or 3.8% of combined OECD GDP, are devoted to primary, secondary and post-secondary non-tertiary education. Canada, Korea and the United States spend more than 2% of their GDP on tertiary education.

**Chart B2.1. Expenditure on educational institutions as a percentage of GDP (1995, 2001)**

*From public and private sources, by level of education, source of funds and year*



1. Public subsidies included in private expenditure.

2. Private expenditure on educational institutions is missing.

Countries are ranked in descending order of expenditure from both public and private sources on educational institutions in 2001 in primary, secondary and post-secondary non-tertiary education. Countries presenting public expenditure only are ranked separately.

Source: OECD, Table B2.1b. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

## Policy context

Expenditure on education is an investment that can help to foster economic growth, enhance productivity, contribute to personal and social development, and reduce social inequality. Relative to gross domestic product, expenditure on education shows the priority given to education in a country in terms of allocating its overall resources. The proportion of total financial resources devoted to education is one of the key choices made in each OECD country; this is an aggregate choice made by government, enterprise and individual students and their families. If the social and private returns on the investment in education are sufficiently large, there is an incentive for enrolment to expand and total investment to increase.

In appraising how much is spent on education, governments must assess demands for increased spending in areas such as teachers' salaries and educational facilities. This indicator can provide a point of reference as it shows how the volume of educational spending, relative to the size of national wealth and in absolute terms, has evolved over time in various OECD countries.

## Evidence and explanations

### What this indicator covers and what it does not cover

This indicator covers expenditure on schools, universities and other public and private institutions involved in delivering or supporting educational services. Expenditure on institutions is not limited to expenditure on instructional services but also includes public and private expenditure on ancillary services for students and families, where these services are provided through educational institutions. At the tertiary level, spending on research and development can also be significant and is included in this indicator, to the extent that the research is performed by educational institutions.

Not all spending on educational goods and services occurs within educational institutions. For example, families may purchase textbooks and materials commercially or seek private tutoring for their children outside educational institutions. At the tertiary level, student living costs and forgone earnings can also account for a significant proportion of the costs of education. All such expenditure outside educational institutions is excluded from this indicator, even if it is publicly subsidised. Public subsidies for educational expenditure outside institutions are discussed in Indicators B4 and B5.

### Overall investment relative to GDP

All OECD countries invest a substantial proportion of national resources in education. Taking into account both public and private sources of funds, OECD countries as a whole spend 6.2% of their collective GDP on their educational institutions at the pre-primary, primary, secondary and tertiary levels. Under current conditions of tight constraints on public budgets, such a large spending item is subject to close scrutiny by governments looking for ways to reduce or limit the growth of expenditure.

*This indicator provides a measure of the relative proportion of a nation's wealth that is invested in educational institutions.*

*It also includes a comparative review of changes in educational investment over time.*


*Coverage diagram (see page 197 for explanations)*

*As a whole, OECD countries spend 6.2% of their combined GDP on their educational institutions.*

The highest spending on educational institutions can be observed in Denmark, Korea and the United States, with more than 7% of GDP accounted for by public and private spending on educational institutions, followed by Belgium, Canada, Iceland, Norway and Sweden with more than 6%. Nine out of 28 OECD countries for which data are available, however, spend less than 5% of GDP on educational institutions, and in Greece, Luxembourg, the Slovak Republic and Turkey this figure is only between 3.5 and 4.1% (Table B2.1a).

*The national resources devoted to education depend on a number of inter-related factors of supply and demand.*

Many factors influence the relative position of OECD countries on this indicator. For example, OECD countries with high spending levels may be enrolling larger numbers of students, while countries with low spending levels may either be limiting access to higher levels of education or delivering educational services in a particularly efficient manner. The distribution of enrolments among sectors and fields of study may also differ, as may the duration of studies and the scale and organisation of related educational research. Finally, large differences in GDP among OECD countries imply that similar percentages of GDP spent on education can translate into very different absolute amounts per student (see Indicator B1).

#### **Changes in overall educational spending between 1995 and 2001**

*In 17 out of 18 OECD countries, public and private spending on educational institutions increased by more than 5% between 1995 and 2001...*

In 17 out of the 18 OECD countries for which comparable trend data are available, public and private investment in education increased by 5% or more between 1995 and 2001 in real terms. Australia, Denmark, Mexico, the Netherlands, Portugal, Sweden and the United States increased expenditure on education by between 20 and 40%, and Ireland increased spending by more than 40%. The trend is similar when public investment is considered separately: direct public expenditure on institutions and public subsidies to households designated for educational institutions rose by 5% or more in 24 out of 26 OECD countries for which data are available between 1995 and 2001. Greece, New Zealand, Poland and Turkey, for which no data on private spending are available, showed considerable growth in public spending on educational institutions (Table B2.2).

*...but increases in spending on education tended to fall behind the growth in national income over the same period.*

In 6 out of the 9 OECD countries that provide 1990, 1995 and 2001 data, spending on educational institutions grew faster than GDP during the first half of the 1990s, leading to an increase in average spending on educational institutions from 5.5% in 1990 to 5.6% of GDP in 1995 (Table B2.1a). The trend began to reverse in the second half of the 1990s. Spending on educational institutions increased between 1995 and 2001 in real terms but tended to lag behind growth in GDP between 1995 and 2001. Thirteen OECD countries out of 22 for which data are available showed a decrease in the proportion of GDP devoted to educational institutions over this period. Most notable are Canada, the Czech Republic, Ireland and Norway where the proportion of GDP spent on education decreased by more than 0.7 percentage points (Table B2.1a).

While the strong growth of GDP in Ireland hides significant increases in spending on educational institutions when spending on education is considered as a proportion of GDP, education in the Czech Republic did not benefit signifi-

cantly from growth in GDP. Both countries were already among the OECD countries spending a lower proportion of GDP on education in 1995 and have now fallen further behind (Table B2.1a).

### Expenditure on educational institutions by level of education

High overall spending on education does not necessarily translate into a high level of spending at all levels of education. Differences in spending on educational institutions are most striking at the pre-primary level of education. Here, spending ranges from less than 0.2% of GDP in Australia, Ireland and Korea, to 0.7% or more in Denmark, France and Hungary (Table B2.1c). Differences at the pre-primary level can be explained mainly by participation rates among younger children (see Indicator C1).

Investing in early childhood education is of key importance in order to build a strong foundation for lifelong learning and to ensure equitable access to learning opportunities later in school. However, high-quality early childhood education and care are not only provided by the educational institutions covered by this indicator. Inferences on access to and quality of early childhood education and care should therefore be made with caution.

Because of the largely universal enrolment at the primary and lower secondary levels of education in OECD countries, and the high participation rates in upper secondary education (see Indicators C1 and C2), these levels account for the bulk of expenditure on educational institutions, 3.8% of the combined OECD GDP (Chart B2.1). At the same time, significantly higher spending on education per student at the upper secondary and tertiary levels of education causes the overall investment in these levels to be higher than enrolment numbers alone would suggest. One-quarter of combined OECD expenditure on educational institutions is accounted for by tertiary education.

Canada, Korea and the United States spend 2.5, 2.7 and 2.7%, respectively, of their GDP on tertiary institutions (Chart B2.1). This accounts for more than one-third of all of their expenditure on educational institutions. Australia, Denmark, Finland and Sweden also show high spending levels, with 1.5% or more of GDP devoted to tertiary institutions. On the other hand, France, Iceland, Mexico, Portugal and Switzerland spend slightly below the average proportion of GDP on tertiary institutions but are among the OECD countries with the highest proportion of GDP spent on primary, secondary and post-secondary non-tertiary education. In Switzerland, a moderate proportion of GDP spent on tertiary institutions translates into one of the highest levels of spending per tertiary student, because of a comparatively low tertiary enrolment rate and a high level of GDP (Tables B2.1b and B1.3).

Countries vary in the levels of education at which spending has increased. Denmark, Finland, France, Germany, Portugal, Sweden, Turkey and the United States – OECD countries with a comparably high increase in absolute spending on educational institutions between 1995 and 2001 – invested additional resources in similar proportions in primary, secondary and post-secondary

*Countries differ markedly in their investment in pre-primary educational institutions.*

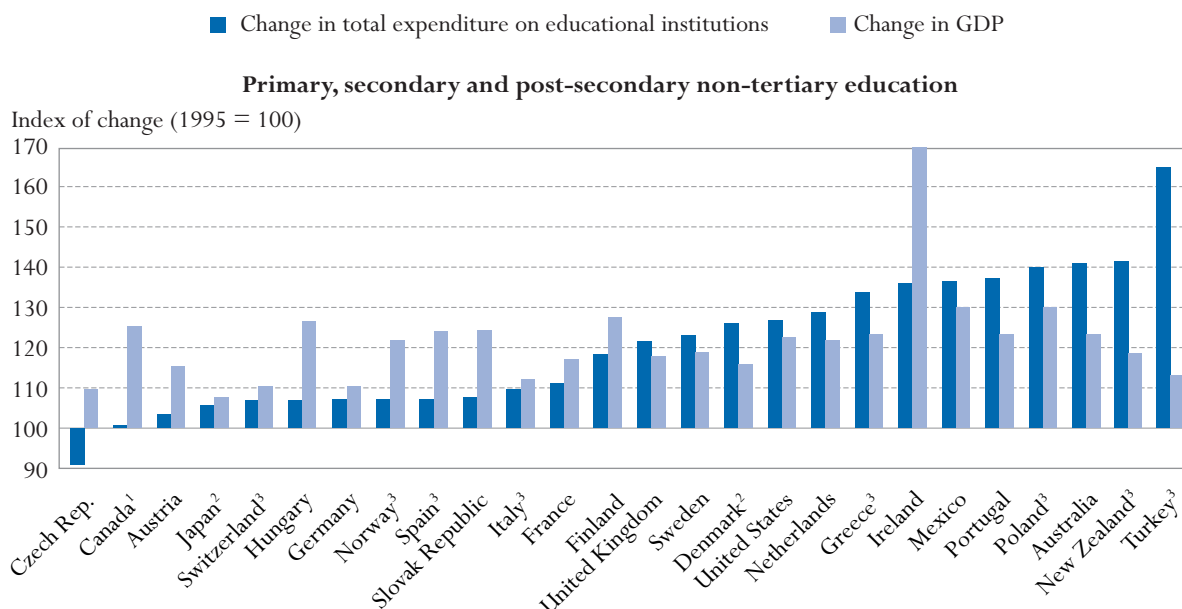
*Two-thirds of expenditure on educational institutions are devoted to primary, secondary and post-secondary non-tertiary education.*

*Canada, Korea and the United States spend more than 2% of their GDP on tertiary education.*

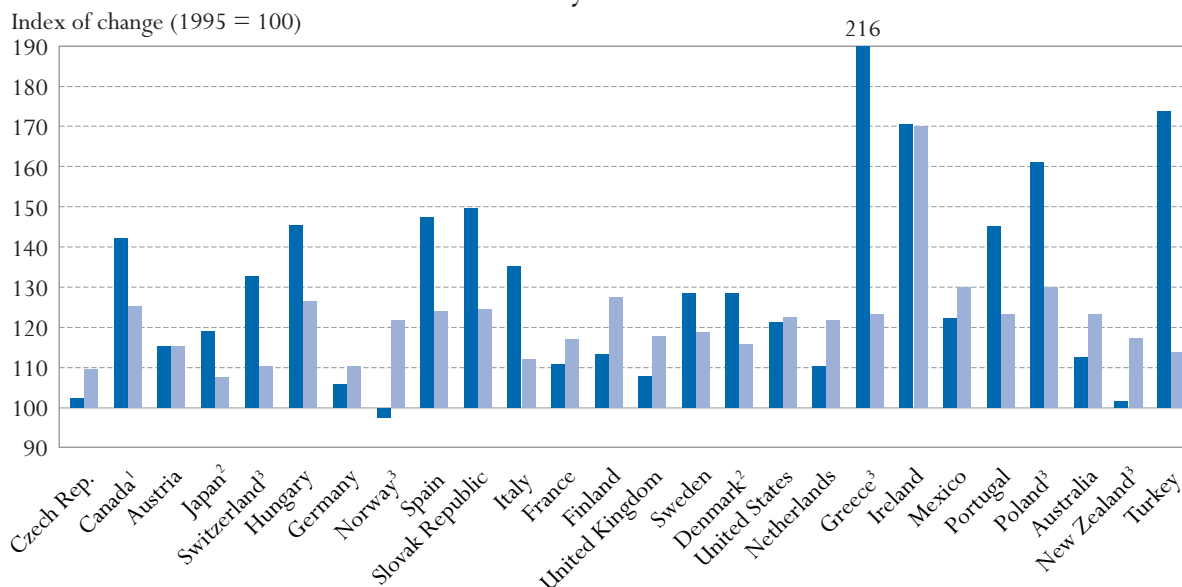
*While some OECD countries have increased spending at all levels of education, others have focused spending increases on specific levels.*

**Chart B2.2. Change in expenditure on educational institutions from public and private sources and in GDP (1995, 2001)**

Index of change between 1995 and 2001 (1995 = 100, 2001 constant prices)



**Tertiary education**



1. Tertiary education includes only tertiary-type A and advanced research programmes.

2. Post-secondary non-tertiary included in both upper secondary and tertiary education.

3. Public expenditure only.

Countries are ranked in ascending order of change in total expenditure on educational institutions in primary, secondary and post-secondary non-tertiary education between 1995 and 2001.

Source: OECD, Table B2.2 and Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



non-tertiary and tertiary education combined (Chart B2.2 and Table B2.2). Australia, Mexico, the Netherlands, New Zealand and the United Kingdom invested most of the increases between 1995 and 2001 into primary, secondary and post-secondary non-tertiary education. Conversely, in Canada, Greece, Hungary, Ireland, Poland, the Slovak Republic, Spain and Switzerland, spending on tertiary education increased by more than 20% between 1995 and 2001, while spending on lower levels increased much more slowly (Chart B2.2).

### Important factors influencing national expenditure on education

The national resources devoted to education depend on a number of inter-related factors of supply and demand, such as the demographic structure of the population, enrolment rates, income per capita, national levels of teachers' salaries and the organisation and delivery of instruction.

The size of the school-age population in a particular country (see Indicator A1 in the 2001 edition of *Education at a Glance*) shapes the potential demand for initial education and training. The larger the number of young people, the greater the potential demand for educational services. Among OECD countries of comparable national income, a country with a relatively large youth population will have to spend a higher percentage of its GDP on education so that each young person in that country has the opportunity to receive the same quantity of education as young people in other OECD countries. Conversely, if the youth population is relatively small, the same country will be required to spend less of its wealth on education in order to achieve similar results.

Although OECD countries generally have little control over the size of their youth populations, the proportion of students participating at various levels of education is indeed a central policy issue. Variations in enrolment rates among OECD countries reflect differences in the demand for education, from pre-primary to tertiary education, as well as the supply of programmes at all levels. Indicator C1 shows that the number of years that a 5-year-old child can expect to spend in education ranges from 13 to 21 among OECD countries. The variation in expected years in tertiary education is even wider, from one year in Mexico to more than four years in Finland (Indicator C2).

### Definitions and methodologies

Expenditure on educational institutions, as covered by this indicator, includes expenditure on instructional educational institutions as well as expenditure on non-instructional educational institutions. *Instructional educational institutions* are educational institutions which directly provide instructional programmes (i.e., teaching) to individuals in an organised group setting or through distance education. Business enterprises or other institutions providing short-term courses of training or instruction to individuals on a "one-to-one" basis are not included. *Non-instructional educational institutions* provide administrative, advisory or professional services to other educational institutions, although they do not enrol students themselves. Examples include national, state, and provincial ministries or departments of education; other bodies that administer education at various levels of government or analogous bodies in the private sector; and organisa-

*The larger the number of young people, the greater the potential demand for educational services.*

*The higher the enrolment rate, the more financial resources will be required.*

*Data refer to the financial year 2001 and are based on the UOE data collection on education statistics administered by the OECD in 2003 (for details see Annex 3).*

tions that provide such education-related services as vocational or psychological counselling, placement, testing, financial aid to students, curriculum development, educational research, building operations and maintenance services, transportation of students, and student meals and housing.

This broad definition of institutions ensures that expenditure on services, which are provided in some OECD countries by schools and universities and in others by agencies other than schools, is covered on a comparable basis.

The distinction by source of funds is based on the initial source of funds and does not reflect subsequent public-to-private or private-to-public transfers. For this reason, subsidies to households and other entities, such as subsidies for tuition fees and other payments to educational institutions, are included in public expenditure in this indicator. Payments from households and other private entities to educational institutions include tuition and other fees, net of offsetting public subsidies. A detailed discussion of public subsidies can be found in Indicator B5.

*Data for the financial year 1995 are based on a special survey carried out in 2001 and updated in 2003.*

*Data for 1995 are expressed in 2001 price levels.*

Tables B2.1a, B2.1b and B2.2 show expenditure on educational institutions for the financial year 1995. The data on expenditure for 1995 were obtained by a special survey in 2001 and updated in 2003; expenditure for 1995 was adjusted to methods and definitions used in the 2003 UOE data collection.

Chart B2.2 and Table B2.2 present an index of change in expenditure on institutions and GDP between 1995 and 2001. All expenditure, as well as 1995 GDP, is adjusted to 2001 prices using the GDP deflator.

For comparisons over time, the country mean accounts only for those OECD countries for which data are available for all reported reference years.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2004 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004) for details on changes).

Table B2.1a. Expenditure on educational institutions as a percentage of GDP for all levels of education (1990, 1995, 2001)

From public and private sources, by source of funds and year

	2001			1995			1990		
	Public <sup>1</sup>	Private <sup>2</sup>	Total	Public <sup>1</sup>	Private <sup>2</sup>	Total	Public <sup>1</sup>	Private <sup>2</sup>	Total
<b>OECD COUNTRIES</b>									
Australia	4.5	1.4	6.0	4.5	1.2	5.7	4.2	0.8	5.0
Austria	5.6	0.2	5.8	5.9	0.3	6.2	m	m	m
Belgium	6.0	0.4	6.4	m	m	m	m	m	m
Canada	4.9	1.3	6.1	6.2	0.8	7.0	m	m	m
Czech Republic	4.2	0.4	4.6	4.7	0.7	5.4	m	m	m
Denmark <sup>3</sup>	6.8	0.3	7.1	6.1	0.2	6.3	m	m	m
Finland	5.7	0.1	5.8	6.2	x	6.3	m	m	m
France	5.6	0.4	6.0	5.9	0.4	6.3	5.1	0.5	5.7
Germany	4.3	1.0	5.3	4.5	1.0	5.5	m	m	m
Greece <sup>3</sup>	3.8	0.2	4.1	3.1	n	3.2	m	m	m
Hungary	4.6	0.6	5.2	4.9	0.6	5.5	m	m	m
Iceland <sup>3</sup>	6.1	0.6	6.7	m	m	m	m	m	m
Ireland	4.1	0.3	4.5	4.7	0.5	5.3	m	m	m
Italy	4.9	0.4	5.3	4.7	m	m	m	m	m
Japan	3.5	1.2	4.6	3.5	1.1	4.6	m	m	m
Korea	4.8	3.4	8.2	m	m	m	m	m	m
Luxembourg <sup>3</sup>	3.6	n	3.6	m	m	m	m	m	m
Mexico	5.1	0.8	5.9	4.6	1.0	5.6	m	m	m
Netherlands	4.5	0.4	4.9	4.5	0.4	4.9	m	m	m
New Zealand	5.5	m	m	4.8	m	m	m	m	m
Norway	6.1	0.2	6.4	6.8	0.4	7.1	8.1	m	m
Poland <sup>3</sup>	5.6	m	m	5.7	m	m	m	m	m
Portugal <sup>3</sup>	5.8	0.1	5.9	5.3	n	5.3	m	m	m
Slovak Republic <sup>3,4</sup>	4.0	0.1	4.1	4.6	0.1	4.7	4.8	0.3	5.1
Spain	4.3	0.6	4.9	4.5	0.9	5.4	4.4	0.7	5.1
Sweden	6.3	0.2	6.5	6.1	0.1	6.2	5.1	n	5.1
Switzerland	5.4	m	m	5.4	m	m	m	m	m
Turkey <sup>3</sup>	3.5	n	3.5	2.3	n	2.3	2.8	m	2.8
United Kingdom	4.7	0.8	5.5	4.8	0.7	5.5	4.2	0.1	4.3
United States	5.1	2.3	7.3	5.0	2.2	7.2	4.9	2.2	7.1
<i>Country mean</i>	<i>5.0</i>	<i>0.7</i>	<i>5.6</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>
<i>OECD total</i>	<i>4.8</i>	<i>1.4</i>	<i>6.2</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>
<i>Country mean for countries with 1990, 1995 and 2001 data (9 countries)</i>	<i>4.9</i>	<i>0.7</i>	<i>5.6</i>	<i>4.9</i>	<i>0.7</i>	<i>5.6</i>	<i>4.9</i>	<i>0.7</i>	<i>5.5</i>
<b>PARTNER COUNTRIES</b>									
Argentina <sup>3</sup>	4.8	1.4	6.2	m	m	m	m	m	m
Brazil <sup>3,5</sup>	4.1	m	m	m	m	m	m	m	m
Chile <sup>6</sup>	4.3	3.2	7.5	m	m	m	m	m	m
India <sup>5</sup>	4.0	0.2	4.2	m	m	m	m	m	m
Indonesia <sup>3,4</sup>	1.3	0.7	2.0	m	m	m	m	m	m
Israel	7.1	1.5	8.6	8.5	1.9	10.3	m	m	m
Jamaica	6.2	5.1	11.3	m	m	m	m	m	m
Jordan	4.3	m	m	m	m	m	m	m	m
Malaysia <sup>3</sup>	7.2	m	m	m	m	m	m	m	m
Paraguay	4.5	2.1	6.6	m	m	m	m	m	m
Peru <sup>3</sup>	2.9	1.3	4.2	m	m	m	m	m	m
Philippines	3.2	2.2	5.4	m	m	m	m	m	m
Russian Federation	3.0	m	m	m	m	m	m	m	m
Thailand <sup>3</sup>	4.5	0.2	4.8	m	m	m	m	m	m
Tunisia <sup>3</sup>	6.8	m	m	m	m	m	m	m	m
Uruguay <sup>3,4</sup>	3.2	0.2	3.4	m	m	m	m	m	m
Zimbabwe <sup>3,6</sup>	5.6	m	m	m	m	m	m	m	m

1. Including public subsidies to households attributable for educational institutions. Including direct expenditure on educational institutions from international sources.

2. Net of public subsidies attributable for educational institutions.

3. Public subsidies to households not included in public expenditure, but in private expenditure.

4. Direct expenditure on educational institutions from international sources exceeds 1.5% of all public expenditure.

5. Year of reference 2000.

6. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).B<sub>2</sub>

**Table B2.1b. Expenditure on educational institutions as a percentage of GDP, by level of education (1995, 2001)**
*From public and private sources, by source of funds and year*

	Primary, secondary and post-secondary non-tertiary education				Tertiary education			
	2001			1995	2001			1995
	Public <sup>1</sup>	Private <sup>2</sup>	Total	Total	Public <sup>1</sup>	Private <sup>2</sup>	Total	Total
<b>OECD COUNTRIES</b>								
Australia	3.6	0.7	4.3	3.9	0.8	0.7	1.5	1.7
Austria	3.8	0.1	3.9	4.3	1.2	n	1.2	1.2
Belgium <sup>3</sup>	4.0	0.2	4.2	m	1.2	0.2	1.4	m
Canada <sup>4</sup>	3.1	0.3	3.4	4.3	1.5	1.0	2.5	2.3
Czech Republic <sup>3</sup>	2.8	0.2	3.1	3.7	0.8	0.1	0.9	1.0
Denmark <sup>5,6</sup>	4.2	0.1	4.3	4.0	1.8	n	1.8	1.6
Finland	3.7	n	3.7	4.0	1.7	n	1.7	1.9
France	4.0	0.2	4.2	4.4	1.0	0.1	1.1	1.1
Germany	2.9	0.7	3.6	3.7	1.0	0.1	1.0	1.1
Greece <sup>5</sup>	2.4	0.2	2.7	2.3	1.1	n	1.1	0.8
Hungary	2.8	0.2	3.1	3.6	0.9	0.3	1.2	1.0
Iceland <sup>5</sup>	5.0	0.2	5.2	m	0.9	n	0.9	m
Ireland <sup>3</sup>	2.9	0.1	3.1	3.9	1.1	0.2	1.3	1.3
Italy	3.6	0.1	3.7	m	0.8	0.2	0.9	0.8
Japan <sup>6</sup>	2.7	0.2	2.9	3.0	0.5	0.6	1.1	1.0
Korea	3.5	1.0	4.6	m	0.4	2.3	2.7	m
Luxembourg <sup>5</sup>	3.6	n	3.6	m	m	a	m	m
Mexico	3.8	0.4	4.2	4.0	0.7	0.3	1.0	1.1
Netherlands	3.1	0.1	3.3	3.1	1.0	0.3	1.3	1.4
New Zealand	4.3	m	m	3.6	0.9	m	m	1.1
Norway	4.6	n	4.6	4.3	1.3	n	1.3	1.7
Poland <sup>5</sup>	4.0	m	m	3.9	1.1	m	m	0.9
Portugal <sup>5</sup>	4.2	n	4.2	3.8	1.0	0.1	1.1	0.9
Slovak Republic <sup>3,5</sup>	2.6	n	2.7	3.1	0.8	0.1	0.9	0.8
Spain	3.0	0.2	3.2	3.9	1.0	0.3	1.2	1.0
Sweden <sup>3</sup>	4.3	n	4.3	4.2	1.5	0.2	1.7	1.6
Switzerland	3.9	0.6	4.5	m	1.3	m	m	m
Turkey <sup>5</sup>	2.5	m	m	1.7	1.0	n	1.1	0.7
United Kingdom	3.4	0.5	3.9	3.9	0.8	0.3	1.1	1.2
United States <sup>4</sup>	3.8	0.3	4.1	3.9	0.9	1.8	2.7	2.7
<i>Country mean</i>	<i>3.5</i>	<i>0.3</i>	<i>3.8</i>	<i>~</i>	<i>1.0</i>	<i>0.3</i>	<i>1.4</i>	<i>~</i>
<i>OECD total</i>	<i>3.5</i>	<i>0.3</i>	<i>3.8</i>	<i>~</i>	<i>0.9</i>	<i>0.9</i>	<i>1.8</i>	<i>~</i>
<i>Country mean for countries with 1995 and 2001 data</i>	<i>~</i>	<i>~</i>	<i>3.6</i>	<i>3.7</i>	<i>~</i>	<i>~</i>	<i>1.3</i>	<i>1.3</i>
<b>PARTNER COUNTRIES</b>								
Argentina <sup>5</sup>	3.6	0.5	4.0	m	0.8	0.4	1.2	m
Brazil <sup>5,7</sup>	2.9	m	m	m	0.8	m	m	m
Chile <sup>8</sup>	3.4	1.4	4.8	m	0.5	1.7	2.2	m
India <sup>6</sup>	3.2	0.2	3.4	m	0.8	n	0.8	m
Indonesia <sup>3,5</sup>	1.0	0.3	1.3	m	0.3	0.4	0.7	m
Israel	4.7	0.2	4.9	5.0	1.2	0.7	2.0	2.3
Jamaica	4.8	3.3	8.1	m	1.1	1.3	2.4	m
Jordan <sup>3</sup>	4.3	m	m	m	n	m	m	m
Malaysia <sup>5</sup>	4.9	m	m	m	2.1	m	m	m
Paraguay	3.7	1.5	5.2	m	0.8	0.5	1.3	m
Philippines	2.7	1.3	4.0	m	0.4	0.9	1.3	m
Russian Federation	1.7	m	m	m	0.5	m	m	m
Thailand <sup>5</sup>	2.5	m	m	m	0.8	0.2	0.9	m
Tunisia <sup>5</sup>	5.3	a	5.3	m	1.5	a	1.5	m
Uruguay <sup>3,5</sup>	2.2	0.2	2.4	m	0.7	n	0.7	m
Zimbabwe <sup>6,8</sup>	5.6	m	m	m	m	m	m	m

1. Including public subsidies to households attributable for educational institutions. Including direct expenditure on educational institutions from international sources.

2. Net of public subsidies attributable for educational institutions.

3. Direct expenditure on tertiary-level educational institutions from international sources exceeds 1.5% of all public expenditure. International sources at primary and secondary levels exceed 1.5% in Uruguay.

4. Post-secondary non-tertiary included in tertiary education.

5. Public subsidies to households not included in public expenditure, but in private expenditure.

6. Post-secondary non-tertiary included in both upper secondary and tertiary education.

7. Year of reference 2000.

8. Year of reference 2002.

 Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

Table B2.1c. Expenditure on educational institutions as a percentage of GDP, by level of education (2001)

From public and private sources<sup>1</sup>

	Pre-primary education (for children 3 years and older)	Primary, secondary and post-secondary non-tertiary education			Tertiary education			All levels of education combined (including undistributed and advanced research programmes)	
		All primary, secondary and post-secondary non-tertiary education	Primary and lower secondary education	Upper secondary education	Post-secondary non-tertiary education	All tertiary education	Tertiary-type B education		Tertiary-type A education
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<b>OECD COUNTRIES</b>									
Australia	0.1	4.3	3.3	0.9	0.1	1.5	0.2	1.4	6.0
Austria	0.5	3.9	2.6	1.3	0.1	1.2	0.1	1.1	5.8
Belgium <sup>2</sup>	0.6	4.2	1.5	2.8	x(4)	1.4	x(6)	x(6)	6.4
Canada	0.2	3.4	x(2)	x(2)	x(7)	2.5	1.1	1.5	6.1
Czech Republic	0.5	3.1	1.9	1.2	n	0.9	0.1	0.8	4.6
Denmark	0.8	4.3	3.0	1.3	x(4,6)	1.8	x(6)	x(6)	7.1
Finland	0.4	3.7	2.4	1.3	x(4)	1.7	n	1.7	5.8
France	0.7	4.2	2.7	1.5	n	1.1	0.2	0.8	6.0
Germany	0.6	3.6	2.2	1.2	0.2	1.0	0.1	1.0	5.3
Greece <sup>2</sup>	x(2)	2.7	1.1	1.5	n	1.1	0.2	0.9	4.1
Hungary	0.7	3.1	1.8	1.0	0.2	1.2	n	1.1	5.2
Iceland <sup>2</sup>	m	5.2	3.5	1.5	m	0.9	n	0.9	6.7
Ireland	n	3.1	2.3	0.7	0.1	1.3	x(6)	x(6)	4.5
Italy	0.5	3.7	2.2	1.4	n	0.9	n	0.9	5.3
Japan	0.2	2.9	2.0	0.9	x(4,6)	1.1	0.1	1.0	4.6
Korea	0.1	4.6	3.1	1.4	a	2.7	0.7	2.0	8.2
Luxembourg	x(2)	3.6	3.6	x(2)	x(2)	m	m	m	3.6
Mexico	0.5	4.2	3.2	1.0	a	1.0	x(6)	x(6)	5.9
Netherlands	0.4	3.3	2.5	0.8	n	1.3	n	1.3	4.9
New Zealand <sup>3</sup>	0.2	4.3	3.0	1.2	0.1	0.9	0.2	0.7	5.5
Norway	x(2)	4.6	3.4	1.2	x(4)	1.3	x(6)	x(6)	6.4
Poland <sup>3</sup>	0.4	4.0	2.8	1.2	n	1.1	n	1.0	5.6
Portugal	0.3	4.2	3.0	1.2	n	1.1	m	m	5.9
Slovak Republic	0.5	2.7	1.6	1.1	x(4)	0.9	x(4)	0.9	4.1
Spain <sup>2</sup>	0.5	3.2	3.2	x(3)	x(3)	1.2	0.2	1.1	4.9
Sweden	0.5	4.3	2.9	1.3	n	1.7	x(6)	x(6)	6.5
Switzerland	0.2	4.5	2.7	1.8	n	1.2	n	1.2	5.3
Turkey	m	2.5	1.8	0.7	a	1.1	x(6)	x(6)	3.5
United Kingdom <sup>2</sup>	0.5	3.9	1.3	2.6	x(4)	1.1	x(6)	x(6)	5.5
United States	0.5	4.1	3.1	1.0	x(6)	2.7	x(6)	x(6)	7.3
<i>Country mean</i>	<i>0.4</i>	<i>3.8</i>	<i>2.5</i>	<i>1.3</i>	<i>0.1</i>	<i>1.3</i>	<i>0.2</i>	<i>1.1</i>	<i>5.5</i>
<i>OECD total</i>	<i>0.5</i>	<i>3.8</i>	<i>2.6</i>	<i>1.2</i>	<i>0.1</i>	<i>1.8</i>	<i>x(6)</i>	<i>x(6)</i>	<i>6.1</i>
<b>PARTNER COUNTRIES</b>									
Argentina	0.4	4.0	3.1	0.9	a	1.2	0.6	0.6	6.2
Brazil <sup>3,4</sup>	0.4	2.9	2.4	m	a	m	m	m	m
Chile <sup>5</sup>	0.5	4.8	3.4	1.4	a	2.2	0.2	2.0	7.5
India	n	3.4	2.3	1.1	n	0.8	x(6)	x(6)	4.2
Indonesia	n	1.3	0.9	0.4	a	0.7	x(6)	x(6)	2.0
Israel	0.8	4.9	2.6	2.3	n	2.0	x(6)	x(6)	8.6
Jamaica	0.7	8.1	6.0	1.3	0.8	2.4	0.6	1.8	11.3
Jordan <sup>2</sup>	n	4.3	3.7	0.6	m	m	m	m	m
Malaysia <sup>2</sup>	0.1	4.9	2.2	2.6	0.1	2.1	0.4	1.7	7.2
Paraguay <sup>2</sup>	0.1	5.2	3.1	2.1	m	1.3	0.2	1.1	m
Peru	0.4	2.7	2.3	0.4	m	1.1	0.2	0.9	4.2
Philippines	n	4.0	3.8	0.1	0.1	1.3	x(6)	x(6)	5.4
Russian Federation	0.5	1.7	m	m	0.2	0.5	0.1	0.4	3.0
Thailand	0.5	2.6	2.0	0.5	m	0.9	0.2	0.8	m
Tunisia <sup>3</sup>	m	5.3	x(2)	x(2)	a	m	1.5	m	m
Uruguay	0.4	2.4	1.8	0.5	a	0.7	x(6)	x(6)	3.4
Zimbabwe <sup>5</sup>	n	5.6	x(2)	x(2)	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. Including international sources.

2. Column 3 only refers to primary education and column 4 refers to all secondary education.

3. Including only direct public expenditure on educational institutions.

4. Year of reference 2000.

5. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

B<sub>2</sub>

**Table B2.2. Change in expenditure on educational institutions (1995, 2001)**
*Index of change between 1995 and 2001 in expenditure on educational institutions from public and private sources, by level of education (1995 = 100, 2001 constant prices)*

	All levels of education			Primary, secondary and post-secondary non-tertiary education			Tertiary education		
	Public expenditure on educational institutions	Private expenditure on educational institutions	Total expenditure on educational institutions from both public and private sources	Public expenditure on educational institutions	Private expenditure on educational institutions	Total expenditure on educational institutions from both public and private sources	Public expenditure on educational institutions	Private expenditure on educational institutions	Total expenditure on educational institutions from both public and private sources
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Australia	127	153	132	139	152	141	89	156	113
Austria	108	90	107	103	99	103	114	160	115
Belgium	m	m	m	m	m	m	m	m	m
Canada <sup>1</sup>	107	129	111	99	128	101	107	151	122
Czech Republic	97	62	93	92	79	91	127	m	103
Denmark <sup>2</sup>	130	147	131	126	114	126	126	468	128
Finland	117	m	118	118	m	118	112	m	113
France	112	103	111	112	104	111	112	102	111
Germany	106	106	106	108	104	107	104	129	106
Greece <sup>3</sup>	154	m	m	134	m	m	216	m	m
Hungary	119	119	119	109	88	107	140	165	145
Ireland	148	111	145	134	180	136	208	86	170
Italy	113	m	m	110	m	m	126	175	135
Japan <sup>2</sup>	109	111	109	105	107	105	122	117	119
Mexico	140	121	137	142	107	136	111	160	122
Netherlands	123	114	122	130	102	129	107	124	110
New Zealand	135	m	m	141	m	m	101	m	m
Norway <sup>3,4</sup>	105	m	m	107	m	m	98	m	m
Poland	132	m	m	140	m	m	161	m	m
Portugal	135	314	136	137	178	137	139	320	145
Slovak Republic	107	112	109	107	187	108	131	167	149
Spain	117	m	m	107	m	m	149	141	147
Sweden	121	230	124	124	89	123	x(9)	x(9)	128
Switzerland	112	m	m	107	m	m	133	m	m
Turkey	167	m	m	166	m	m	170	237	174
United Kingdom	115	143	119	120	136	121	96	156	108
United States	125	125	125	126	134	127	121	121	121

1. Tertiary education includes only tertiary-type A and advanced research programmes.

2. Post-secondary non-tertiary included in both upper secondary and tertiary education.

3. Pre-primary included in primary, secondary and post-secondary non-tertiary education.

4. The decline in expenditure is due to a substantial change in the GDP deflator caused primarily by an increase in oil prices.

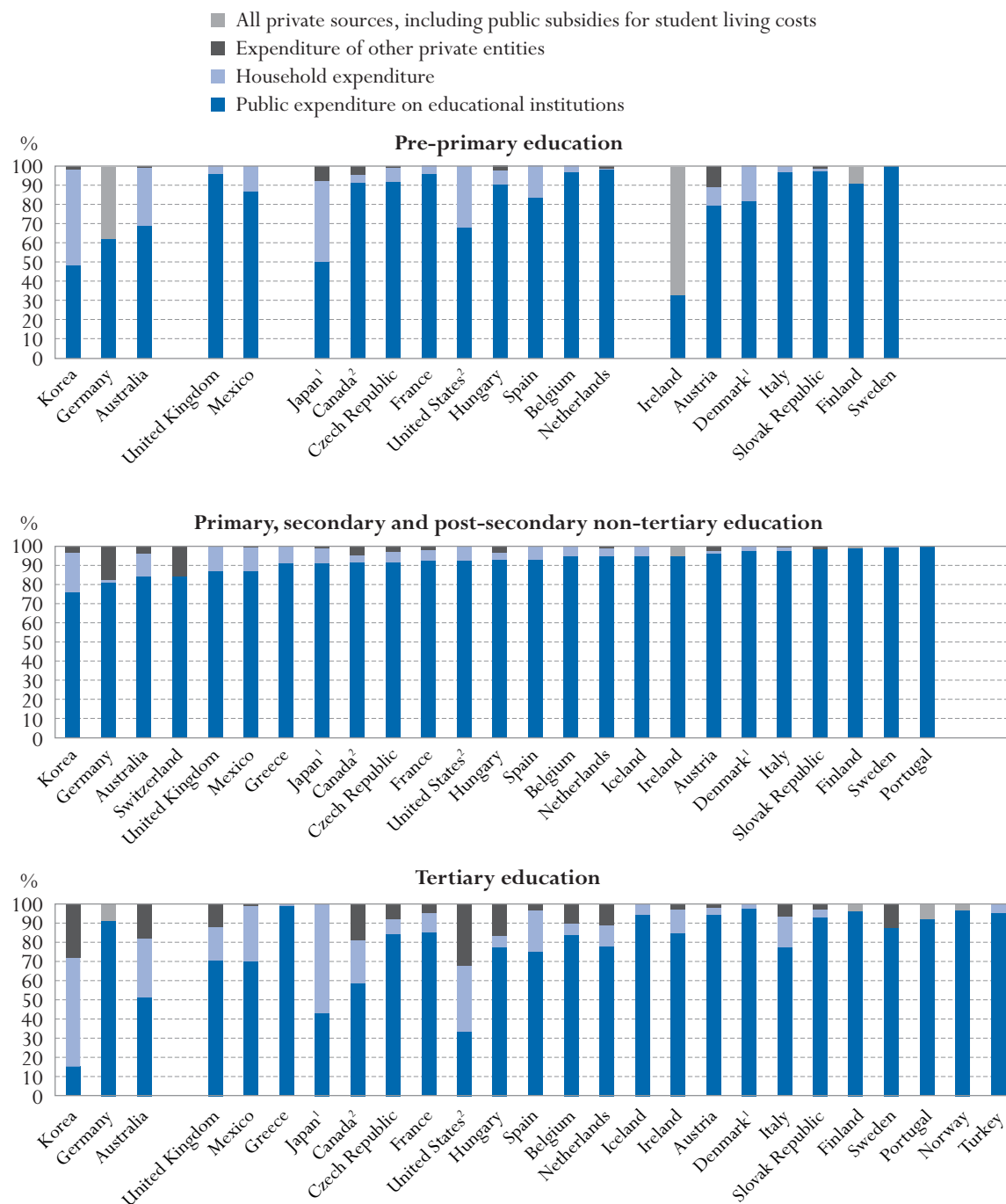
Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

## **INDICATOR B3: RELATIVE PROPORTIONS OF PUBLIC AND PRIVATE INVESTMENT IN EDUCATIONAL INSTITUTIONS**

- Education institutions are still mainly funded from public sources: 88% of all funds for educational institutions come directly from public sources. Private funding is, however, significant in Korea (where it represents 43% of total spending), the United States (approaching one-third of total spending), Australia and Japan (almost one-quarter of total spending).
- In a number of OECD countries, governments pay most of the costs of primary, secondary and post-secondary non-tertiary education but leave the management of educational institutions to the private sector, to provide a wider range of learning opportunities without creating barriers to the participation of students from low-income families.
- Tertiary institutions tend to obtain a much higher proportion of their funds from private sources than primary, secondary and post-secondary non-tertiary institutions. The private share ranges from less than 4% in Denmark, Finland, Greece and Norway, to over three-quarters in Korea but includes private payments that are subsidised from public sources.
- In one-third of the countries – Australia, Belgium, Canada, Hungary, Korea, the Netherlands, Sweden, the United Kingdom and the United States – the proportion of expenditure on tertiary institutions covered by private entities other than households represents 10% or more.
- Across all levels of education, the trend in the public/private share of education expenditure is mixed, with some countries shifting towards public spending while others move towards private expenditure. In most cases, shifts towards private expenditure did not lead to a decrease in the real level of public sector spending.

**B<sub>3</sub>**

**Chart B3.1. Distribution of public and private expenditure on educational institutions (2001)**  
By level of education



1. Post-secondary non-tertiary included in both upper secondary and tertiary education.

2. Post-secondary non-tertiary included in tertiary education.

Countries are ranked in ascending order of the proportion of direct public expenditure on educational institutions in primary, secondary and post-secondary non-tertiary education.

Source: OECD, Tables B3.2a and B3.2b. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



## Policy context

Cost-sharing between participants in the education system and society as a whole is an issue that is under discussion in many OECD countries. This question is especially relevant at the beginning and ending stages of initial education, pre-primary and tertiary education, where full or nearly full public funding is less common. As well as illustrating the policy for cost-sharing in each country, the indicator can shed light on the influence that public funding, as a policy lever, can and does have on the output of the education system as a whole.

As new client groups participate increasingly in a wider range of educational programmes and choose from more opportunities from increasing numbers of providers, governments are forging new partnerships to mobilise the necessary resources to pay for education. New policies are designed to allow different actors and stakeholders to participate more fully and to share costs and benefits more equitably.

As a result, public funding is now seen increasingly as providing only a part (although a very important part) of investment in education. The role of private sources has become more important in the funding of education. Some stakeholders are concerned that this balance should not become so tilted as to lead potential learners away from learning, instead of towards it. Thus, changes in a country's public/private funding share can provide important context for changing patterns and levels of participation within its educational system.

## Evidence and explanations

### What this indicator covers and what it does not cover

Governments can spend public funds directly on educational institutions or use them to provide subsidies to private entities for the purpose of education. When reporting on the public and private proportions of educational expenditure, it is therefore important to distinguish between the initial sources of funds and the final direct purchasers of educational goods and services.

Initial public spending includes both direct public expenditure on educational institutions and transfers to the private sector. To gauge the level of public expenditure, it is necessary to add together the components showing direct public expenditure on educational institutions and public subsidies for education. Initial private spending includes tuition fees and other student or household payments to educational institutions, less the portion of such payments offset by public subsidies.

The final public and private proportions are the percentages of educational funds spent directly by public and private purchasers of educational services. Final public spending includes direct public purchases of educational resources and payments to educational institutions and other private entities. Final private spending includes tuition fees and other private payments to educational institutions (whether offset or not by public subsidies).

Not all spending on instructional goods and services occurs within educational institutions. For example, families may purchase textbooks and materials com-

*This indicator shows the relative proportions of public and private spending on educational institutions...*

*...and how these proportions have changed since 1995.*


*Coverage diagram (see page 197 for explanations)*

mercially or seek private tutoring for their children outside educational institutions. At the tertiary level, student living costs and forgone earnings can also account for a significant proportion of the costs of education. All such expenditure outside educational institutions, even if it is publicly subsidised, is excluded from this indicator. Public subsidies for educational expenditure outside institutions are discussed in Indicators B4 and B5.

### **Public and private proportions of expenditure on educational institutions**

*Educational institutions are still mainly funded by public sources...*

Schools, universities and other educational institutions are still mainly publicly funded, although there is a substantial and growing degree of private funding. On average across OECD countries, 88% of all funds for educational institutions come directly from public sources. In addition, 0.7% is channelled to institutions via public subsidies to households (Table B3.1).

*...but OECD countries vary significantly in the extent to which they draw on private funds for education.*

Among the OECD countries reporting data, the proportion of private payments to educational institutions (including private payments that are subsidies) varies widely. In Denmark, Finland, Norway, Portugal, the Slovak Republic and Sweden, it is 5% or less, compared with almost one-quarter in Australia and Japan, approaching one third in the United States and just more than 40% in Korea (Table B3.1).

In most OECD countries, private expenditure is comprised mainly of household expenditure on tuition and other fees at tertiary institutions, while in Germany and Switzerland nearly all private expenditure is accounted for by contributions from the business sector to the dual system of apprenticeship at the upper secondary and post-secondary non-tertiary levels. In general the reporting of private expenditure on education is problematic and it is likely that some of the reported data are incomplete.

*In pre-primary education, the private share of total payments to educational institutions represents on average 19%; it is around 50% in Japan and Korea and 67% in Ireland.*

Investment in early childhood education is of key importance in order to build a strong foundation for lifelong learning and to ensure equitable access to learning opportunities later in school. In pre-primary education, the private share of total payments to educational institutions is very uneven. It ranges from 5% or less in Belgium, France, Italy, the Netherlands, the Slovak Republic and the United Kingdom, to well over 30% in Australia and Germany, to around 50% in Japan and Korea and to 67% in Ireland (Table B3.2a).

*Public funding dominates at the primary, secondary and post-secondary non-tertiary levels.*

Public funding very much dominates the primary, secondary and post-secondary non-tertiary levels of education in OECD countries: on average the rate of public funding among OECD countries is 92%. There are, nevertheless, levels of private funding which exceed 15% in Australia, Germany, Korea and Switzerland (Table B3.2a and Chart B3.1).

*In some OECD countries, significant public funds are given to institutions in the private sector...*

Although the vast majority of public funds are directed at public institutions, in a number of OECD countries significant public funds are transferred to private institutions or given directly to households to spend in the institution of their choice. In the former case, the final spending and delivery of education can be regarded as subcontracted by governments to non-governmental institutions, whereas in the latter instance, students and their families are left to decide which type of institution best meets their requirements.

On average across OECD countries at the primary, secondary and post-secondary non-tertiary levels, 10% of public funding designated for educational institutions is spent in institutions that are privately managed (Table B3.3). In the Netherlands, where the central government is the major final source of funds, 70% of public money for primary, secondary and post-secondary non-tertiary educational institutions is transferred from the government to private institutions, and in Belgium it is over 50%.

In Australia, France, Spain and the United Kingdom, the share of public funds transferred to private institutions at the primary, secondary and post-secondary non-tertiary levels of education ranges from 13 to 20%.

Public funding transfers to private households (and other private entities) are generally not a significant feature at the primary, secondary and post-secondary non-tertiary levels. On average across OECD countries, the proportion of public funds transferred is some 4%; it exceeds 10% in only Denmark, Hungary and Sweden (Table B3.3).

Nevertheless, such funding strategies not only generate required resources from a wider range of public and private sources, but also provide a plethora of learning opportunities that can improve the efficiency of schooling.

Other than in Denmark, Germany, Greece and Iceland, the private proportion of educational expenditure is far higher at the tertiary level than at the primary, secondary and post-secondary non-tertiary levels. Primary, secondary and post-secondary non-tertiary education are usually perceived as a public good with mainly public returns; at the tertiary level the high private returns in the form of better employment and income opportunities (see Indicator A11) suggest that a greater contribution by individuals to the costs of tertiary education may be justified, provided, of course, that governments can ensure that funding is accessible to students irrespective of their economic background (see also Indicator B5).

The proportion of expenditure on tertiary institutions covered by individuals, businesses and other private sources, including private payments that are subsidies, ranges from less than 4% in Denmark, Finland, Greece and Norway, to around one-half in Australia and Japan, two-thirds in the United States and over three-quarters in Korea (Chart B3.1 and Table B3.2b). In Korea, more than 80% of students are enrolled in private universities, where more than 95% of budgets are derived from tuition fees.

The contribution of private entities other than households to the financing of educational institutions is higher for tertiary education than for other levels of education. In one-third of the countries – Australia, Belgium, Canada, Hungary, Korea, the Netherlands, Sweden, the United Kingdom and the United States – the proportion of expenditure on tertiary institutions covered by private entities other than households represents around 10% or more. In Germany and Switzerland, a significant proportion of expenditure for primary, secondary and post-secondary non-tertiary education is covered by private entities other than

*...providing a wider range of learning opportunities without creating barriers to the participation of students from low-income families.*

*Tertiary institutions tend to acquire a much higher proportion of their funds from private sources...*

*...but the private share, including private payments that are subsidies, ranges widely from less than 4% in Denmark, Finland, Greece and Norway to 84% in Korea.*

*Contribution of private entities other than households to tertiary education institutions represents 10% or more in one-third of OECD countries.*

*Public funding transfers to households/students are more prevalent at the tertiary level than at other levels.*

households; in Austria and Japan, such bodies are responsible principally for pre-primary education (Chart B3.1).

It is more typical for households/students to receive some transfers of public funding at the tertiary level than at other levels. On average, some 18% of public funds at the tertiary level are transferred to households/students. This proportion is highest in New Zealand (48%), the United States (37%), Denmark (35%), Australia (33%), Norway (31%) and Sweden (30%) (Table B3.3).

The amounts paid by students and their families to cover tuition fees and other education-related expenditure differ among OECD countries according to taxation and spending policies, and the willingness of governments to support students. This willingness is influenced by students' enrolment status (full-time or part-time), age and residency (whether they are living at home). To some extent, however, the guidelines used in establishing eligibility for these subsidies are breaking down. Mature students, whose numbers are increasing, are more likely to have established their own households and to prefer part-time or distance learning to full-time, on-campus study.

### **Change in public and private investment in education**

*Between 1995 and 2001, some countries saw an increase in the proportion of private funding of education, while others saw a decrease.*

A comparison between 1995 and 2001 proportions of educational expenditure by private sources shows that as many countries recorded increases as recorded decreases in the private funding share (Chart B3.2 and Table B3.1). In Australia, Canada and the United Kingdom, the private funding share increased from 21.1, 18.8 and 12.7% in 1995 to respectively 24.4, 21.8 and 15.3% in 2001, respectively. On the other hand, the Czech Republic, Ireland, Mexico and Spain recorded a decrease of between 2 and 4 percentage points in the private share of funding.

*Eight countries recorded slight shifts from public to private funding...*

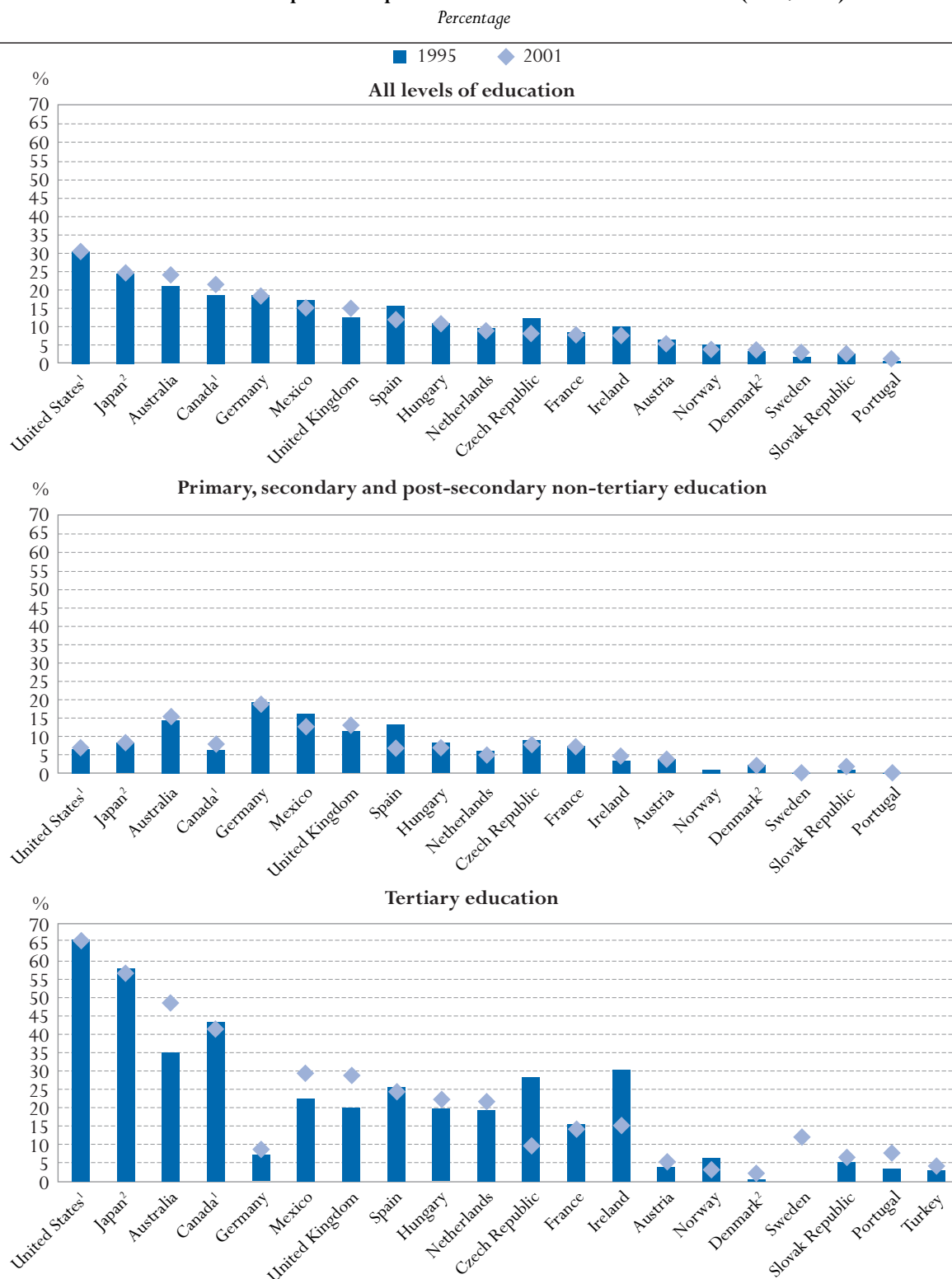
Eight countries for whom comparable data are available recorded shifts from public to private funding of primary, secondary and post-secondary non-tertiary education. In half of these countries – Australia, Canada, Ireland and the United Kingdom – the increase in the private share was more than 1 percentage point.

*...while shifts in the other direction were most evident in the Czech Republic, Hungary, Mexico, the Netherlands and Spain.*

Funding shifts in the opposite direction, towards public funding, were equally evident. This was most notable in the Czech Republic, Hungary, Mexico, the Netherlands and Spain where the public funding share of expenditure increased by between 1 and 7 percentage points (Chart B3.2 and Table B3.2a).

*The tertiary level experienced striking changes, which are at least partially in response to dramatic growth in participation.*

In many OECD countries, the growth in tertiary participation (Indicator C2) represents a response to heavy demand, both individual and social. But, just as many tertiary structures and programmes were designed for a different era, so too were its funding mechanisms. As demand for tertiary education has increased in many OECD countries, so has the share of the financial burden borne by private entities in countries such as Australia, Austria, Hungary, Mexico, Portugal and the United Kingdom (Chart B3.2).

**Chart B3.2. Share of private expenditure on educational institutions (1995, 2001)**


1. Post-secondary non-tertiary included in tertiary education.

2. Post-secondary non-tertiary included in both upper secondary and tertiary education.

Countries are ranked in descending order of the share of private expenditure on educational institutions in 2001 for all levels of education.

Source: OECD. Tables B3.1, B3.2a and B3.2b. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

*In most OECD countries, shifts towards private expenditure have not led to decreases in the real level of public-sector spending on tertiary education.*

It is important to note that rises in private educational expenditure have not generally been accompanied by cuts (in real terms) in public expenditure on education at the tertiary level or at the primary, secondary and post-secondary non-tertiary levels. On the contrary, public investment in education has increased in most of the OECD countries for which 1995 to 2001 data are available, regardless of changes in private spending (Table B2.2). In fact, many OECD countries with the highest growth in private spending have also shown the highest increase in public funding of education. This indicates that increasing private spending on tertiary education tends to complement, rather than replace, public investment. The main exception to this is Australia, where the shift towards private expenditure at tertiary level has been accompanied by a fall in the level of public expenditure in real terms.

### **Definitions and methodologies**

The public and private proportions of expenditure on educational institutions are the percentages of total spending originating in, or generated by, the public and private sectors. Private spending includes all direct expenditure on educational institutions, whether partially covered by public subsidies or not. Public subsidies attributable to households, included in private spending, are shown separately.

Parts of the budgets of educational institutions are related to ancillary services offered to students, including student welfare services, such as student meals, housing and transportation. Some of the costs for these services are covered by fees collected from students, which are included.

Other private entities include private businesses and non-profit organisations, including religious organisations, charitable organisations, and business and labour associations. It also includes expenditure by private companies on the work-based element of school and work-based training of apprentices and students.

The change in private and public spending on educational institutions is shown as an index and compares the proportion of private spending in 1995 with that in 2001. The data on expenditure for 1995 were obtained by a special survey in 2001 in which expenditure for 1995 was adjusted to methods and definitions used in the current UOE data collection.

The glossary at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004) gives a definition of public, government-dependent private and independent private institutions.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2004 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004) for details on changes).

B<sub>3</sub>

*Data refer to the financial year 2001 and are based on the UOE data collection on education statistics administered by the OECD in 2003 (for details see Annex 3).*

*Data for the financial year 1995 are based on a special survey carried out in 2001 and updated in 2003.*

**Table B3.1. Relative proportions of public and private expenditure on educational institutions for all levels of education (1995, 2001)***Distribution of public and private sources of funds for educational institutions after transfers from public sources, by year*

	2001					1995				
	Public sources	Private sources				Public sources	Private sources			
		Household expenditure	Expenditure of other private entities	All private sources <sup>1</sup>	Private, of which subsidised		Household expenditure	Expenditure of other private entities	All private sources <sup>1</sup>	Private, of which subsidised
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
<b>OECD COUNTRIES</b>										
Australia	75.6	17.3	7.1	24.4	0.2	78.9	13.7	7.4	21.1	0.5
Austria	94.4	2.9	2.6	5.6	1.7	93.4	3.4	3.2	6.6	1.5
Belgium	93.0	4.9	2.1	7.0	0.9	m	m	m	m	m
Canada <sup>2</sup>	78.2	11.6	10.2	21.8	m	81.2	7.7	11.1	18.8	m
Czech Republic	90.6	6.1	3.4	9.4	m	87.5	x(9)	x(9)	12.5	6.2
Denmark <sup>3</sup>	96.1	3.9	n	3.9	m	96.5	3.5	n	3.5	n
Finland	97.8	x(4)	x(4)	2.2	n	m	m	m	m	m
France	92.0	6.2	1.8	8.0	1.7	91.4	6.9	1.6	8.6	1.9
Germany	81.4	x(4)	11.8	18.6	n	81.4	x(9)	11.8	18.6	n
Greece	94.2	5.8	m	5.8	m	m	m	m	m	m
Hungary	89.0	4.7	6.3	11.0	n	89.0	5.0	6.0	11.0	n
Iceland	91.7	8.3	m	8.3	n	m	x(9)	x(9)	m	m
Ireland	92.2	7.1	0.7	7.8	n	89.8	9.7	0.5	10.2	m
Italy	90.7	8.0	1.3	9.3	1.0	m	m	m	m	m
Japan <sup>3</sup>	75.0	22.5	2.5	25.0	m	75.4	22.7	2.0	24.6	m
Korea	57.1	32.1	10.9	42.9	1.4	m	m	m	m	m
Luxembourg	m	m	m	m	m	m	m	m	m	m
Mexico	84.6	15.2	0.2	15.4	2.6	82.6	17.4	n	17.4	m
Netherlands	90.9	5.7	3.4	9.1	1.2	90.2	6.4	3.4	9.8	1.8
New Zealand	m	m	m	m	m	m	m	m	m	m
Norway	95.9	4.1	m	4.1	n	94.8	x(9)	x(9)	5.2	n
Poland	m	m	m	m	a	m	m	m	m	a
Portugal	98.5	1.5	m	1.5	m	99.4	0.6	m	0.6	m
Slovak Republic	97.1	1.4	1.4	2.9	m	97.2	x(9)	x(9)	2.8	m
Spain	87.8	11.4	0.8	12.2	0.7	84.2	x(9)	x(9)	15.8	0.4
Sweden	96.8	0.1	3.1	3.2	m	98.3	0.1	1.6	1.7	m
Switzerland	m	m	m	m	m	m	m	m	m	m
Turkey	m	m	m	m	m	m	m	m	m	m
United Kingdom	84.7	13.0	2.3	15.3	0.4	87.3	x(9)	x(9)	12.7	3.5
United States <sup>2</sup>	69.2	18.8	11.9	30.8	m	69.3	x(9)	x(9)	30.7	m
<i>Country mean</i>	<i>87.8</i>	<i>9.2</i>	<i>4.2</i>	<i>12.2</i>	<i>0.7</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>
<b>PARTNER COUNTRIES</b>										
Argentina	77.3	22.0	0.7	22.7	m	m	m	m	m	m
Chile <sup>4</sup>	56.3	42.6	1.1	43.7	0.8	m	m	m	m	m
India <sup>2</sup>	94.9	3.1	2.0	5.1	m	m	m	m	m	m
Indonesia	64.2	32.6	3.3	35.8	m	m	m	m	m	m
Israel	80.0	14.9	5.1	20.0	2.5	80.5	13.0	6.4	19.5	1.3
Jamaica	53.9	43.9	2.1	46.1	1.3	m	m	m	m	m
Malaysia	99.9	0.1	n	0.1	n	m	m	m	m	m
Paraguay	68.1	31.9	n	31.9	m	m	m	m	m	m
Peru	69.0	31.0	n	31.0	m	m	m	m	m	m
Philippines	59.1	40.9	n	40.9	a	m	m	m	m	m
Thailand	95.6	4.4	n	4.4	m	m	m	m	m	m
Tunisia	100.0	n	n	n	m	m	m	m	m	m
Uruguay	93.4	6.5	0.1	6.6	m	m	m	m	m	m
Zimbabwe <sup>4</sup>	100.0	n	n	n	n	m	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. Including subsidies attributable to payments to educational institutions received from public sources.

2. Post-secondary non-tertiary included in tertiary education.

3. Post-secondary non-tertiary included in both upper secondary and tertiary education.

4. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



**Table B3.2a. Relative proportions of public and private expenditure on educational institutions, by level of education (1995, 2001)**
*Distribution of public and private sources of funds for educational institutions after transfers from public sources, by year*

		Pre-primary education (for children 3 years and older)					Primary, secondary and post-secondary non-tertiary education										
		2001					2001					1995					
		Private sources					Private sources					Private sources					
		Public sources	Household expenditure	Expenditure of other private entities	All private sources <sup>1</sup>	Private, of which subsidised	Public sources	Household expenditure	Expenditure of other private entities	All private sources <sup>1</sup>	Private, of which subsidised	Public sources	Household expenditure	Expenditure of other private entities	All private sources <sup>1</sup>	Private, of which subsidised	
																	(1)
OECD COUNTRIES	Australia	68.9	30.3	0.7	31.1	n	84.4	12.1	3.5	15.6	n	85.5	10.5	4.0	14.5	0.7	
	Austria	79.3	9.8	10.9	20.7	0.5	96.3	1.7	2.0	3.7	1.1	96.2	1.9	1.9	3.8	0.6	
	Belgium	96.6	3.4	m	m	a	95.0	5.0	m	m	0.1	m	m	m	m	m	m
	Canada <sup>2</sup>	91.4	4.1	4.6	8.6	m	91.9	3.6	4.4	8.1	m	93.7	3.0	3.4	6.3	m	
	Czech Republic	91.8	7.6	0.6	8.2	m	92.1	5.4	2.5	7.9	m	90.9	x(14)	x(14)	9.1	6.8	
	Denmark <sup>3</sup>	81.7	18.3	n	18.3	m	98.0	2.0	m	2.0	m	97.8	2.2	m	2.2	n	
	Finland	91.0	x(4)	x(4)	9.0	n	99.1	x(9)	x(9)	0.9	n	m	m	m	m	m	
	France	95.9	4.1	n	4.1	n	93.0	5.5	1.5	7.0	1.8	92.5	6.2	1.3	7.5	2.1	
	Germany	62.3	x(4)	x(4)	37.7	n	81.1	x(9)	17.2	18.9	n	80.6	x(14)	x(14)	19.4	n	
	Greece	x(6)	x(7)	x(8)	x(9)	m	91.4	8.6	m	8.6	m	m	m	m	m	m	m
	Hungary	90.6	7.0	2.4	9.4	n	93.1	3.8	3.1	6.9	n	91.7	4.4	3.9	8.3	n	
	Iceland	m	m	m	m	n	95.3	4.7	m	4.7	m	m	m	m	m	m	m
	Ireland	33.2	x(4)	x(4)	66.8	m	95.3	x(9)	x(9)	4.7	m	96.5	x(14)	x(14)	3.5	m	
	Italy	97.0	3.0	n	3.0	n	98.0	1.7	0.3	2.0	0.3	m	m	m	m	m	
	Japan <sup>3</sup>	50.4	42.1	7.6	49.6	m	91.5	7.6	0.9	8.5	m	91.7	7.7	0.5	8.3	m	
	Korea	48.7	49.4	1.9	51.3	0.4	76.2	20.9	3.0	23.8	1.0	m	m	m	m	m	
	Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Mexico	86.7	13.1	0.1	13.3	0.8	87.2	12.6	0.2	12.8	3.0	83.8	16.2	a	16.2	m	
	Netherlands	98.2	0.7	1.1	1.8	a	95.1	4.1	0.8	4.9	0.9	93.9	5.1	1.0	6.1	1.4	
	New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Norway	m	m	m	m	m	m	m	m	m	m	99.0	x(14)	x(14)	1.0	m	
	Poland <sup>4</sup>	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	
	Portugal	m	m	m	m	m	99.9	0.1	a	0.1	m	100.0	n	a	n	m	
	Slovak Republic	97.4	1.4	1.2	2.6	a	98.5	0.3	1.2	1.5	m	99.1	x(14)	x(14)	0.9	m	
	Spain	83.4	16.6	m	16.6	n	93.3	6.7	m	6.7	m	86.6	12.5	0.9	13.4	m	
	Sweden	100.0	a	a	a	m	99.9	0.1	a	0.1	m	99.9	0.2	a	0.2	m	
Switzerland	m	m	m	m	m	84.8	n	15.2	15.2	1.2	89.1	n	10.9	10.9	1.1		
Turkey	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
United Kingdom	95.7	4.3	n	4.3	a	87.2	12.8	n	12.8	n	88.5	11.5	n	11.5	n		
United States <sup>2</sup>	68.1	31.9	n	31.9	m	93.0	7.0	n	7.0	m	93.4	x(14)	x(14)	6.6	m		
<i>Country mean</i>	<i>81.3</i>	<i>13.7</i>	<i>1.9</i>	<i>18.7</i>	<i>0.1</i>	<i>92.4</i>	<i>5.7</i>	<i>2.3</i>	<i>7.6</i>	<i>0.7</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>		
PARTNER COUNTRIES	Argentina	100.0	n	n	n	n	88.6	11.4	a	11.4	m	m	m	m	m		
	Chile <sup>5</sup>	73.1	26.9	0.1	26.9	n	71.6	27.8	0.5	28.4	a	m	m	m	m		
	India <sup>2</sup>	92.1	4.7	3.2	7.9	m	93.7	3.8	2.5	6.3	m	m	m	m	m		
	Indonesia	5.3	94.7	n	94.7	m	76.3	22.3	1.4	23.7	m	m	m	m	m		
	Israel	75.1	24.1	0.8	24.9	n	94.1	4.4	1.4	5.9	1.4	93.1	3.5	3.4	6.9	0.8	
	Jamaica	46.9	53.1	n	53.1	n	57.7	41.3	1.0	42.3	1.2	m	m	m	m		
	Malaysia	90.2	9.8	n	9.8	m	m	m	m	m	m	m	m	m	m		
	Paraguay	n	100.0	n	100.0	n	71.7	m	m	m	m	m	m	m	m		
	Peru	70.6	29.4	n	29.4	m	73.4	26.6	n	26.6	m	m	m	m	m		
	Philippines	m	m	m	m	m	66.8	33.2	n	33.2	a	m	m	m	m		
	Thailand	97.8	2.2	n	2.2	m	m	1.4	a	1.4	m	m	m	m	m		
	Tunisia	m	m	m	m	m	100.0	a	a	a	a	m	m	m	m		
	Uruguay	81.3	18.7	n	18.7	a	93.5	6.5	a	6.5	a	m	m	m	m		
	Zimbabwe <sup>5</sup>	m	m	m	m	m	100.0	n	n	n	n	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. To calculate private funds net of subsidies, subtract public subsidies (columns 5,10,15) from private funds (columns 4,9,14).

To calculate total public funds, including public subsidies, add public subsidies (columns 5,10,15) to direct public funds (columns 1,6,11).

1. Including subsidies attributable to payments to educational institutions received from public sources.

2. Post-secondary non-tertiary included in tertiary education.

3. Post-secondary non-tertiary included in both upper secondary and tertiary education.

4. Public institutions only.

5. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



**Table B3.2b. Relative proportions of public and private expenditure on educational institutions, for tertiary education (1995, 2001)***Distribution of public and private sources of funds for educational institutions after transfers from public sources, by year*

	2001					1995				
	Public sources	Private sources			Private, of which subsidised	Public sources	Private sources			Private, of which subsidised
		Household expenditure	Expenditure of other private entities	All private sources <sup>1</sup>			Household expenditure	Expenditure of other private entities	All private sources <sup>1</sup>	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
<b>OECD COUNTRIES</b>										
Australia	51.3	31.0	17.7	48.7	0.9	64.8	20.0	15.2	35.2	n
Austria	94.6	4.1	1.3	5.4	4.6	96.1	1.9	2.0	3.9	4.6
Belgium	84.1	6.0	9.9	15.9	4.1	m	m	m	m	m
Canada <sup>2</sup>	58.6	22.9	18.5	41.4	m	56.6	16.7	26.7	43.4	m
Czech Republic	85.3	7.7	7.0	14.7	m	71.5	3.3	25.2	28.5	8.7
Denmark <sup>3</sup>	97.8	2.2	n	2.2	m	99.4	0.6	n	0.6	n
Finland	96.5	x(4)	x(4)	3.5	n	m	m	m	m	m
France	85.6	10.3	4.1	14.4	2.3	84.3	11.8	3.9	15.7	2.6
Germany	91.3	x(4)	x(4)	8.7	n	92.8	x(9)	x(9)	7.2	n
Greece	99.6	0.4	m	0.4	m	m	m	m	m	m
Hungary	77.6	6.1	16.3	22.4	n	80.3	4.8	14.9	19.7	n
Iceland	95.0	5.0	m	5.0	n	m	m	m	m	m
Ireland	84.7	12.8	2.4	15.3	m	69.7	28.3	2.0	30.3	m
Italy	77.8	16.0	6.3	22.2	3.9	82.9	12.7	4.4	17.1	0.1
Japan <sup>3</sup>	43.1	56.9	n	56.9	m	42.0	58.0	n	58.0	m
Korea	15.9	58.1	26.0	84.1	n	m	m	m	m	m
Luxembourg	m	m	m	m	m	m	m	m	m	m
Mexico	70.4	28.9	0.7	29.6	2.1	77.4	22.6	m	22.6	m
Netherlands	78.2	11.1	10.7	21.8	2.0	80.6	10.1	9.3	19.4	2.5
New Zealand	m	m	m	m	m	m	m	m	m	m
Norway	96.9	x(4)	x(4)	3.1	a	93.7	x(9)	x(9)	6.3	n
Poland <sup>4</sup>	m	m	m	m	m	m	m	m	m	m
Portugal	92.3	x(4)	x(4)	7.7	m	96.5	3.5	m	3.5	m
Slovak Republic	93.3	4.3	2.5	6.7	m	94.6	x(9)	x(9)	5.4	m
Spain	75.5	21.5	3.0	24.5	3.0	74.4	19.4	6.2	25.6	2.0
Sweden	87.7	m	12.3	12.3	a	m	m	m	m	a
Switzerland	m	m	m	m	m	m	m	m	m	m
Turkey	95.8	4.2	m	4.2	n	97.0	3.0	m	3.0	0.7
United Kingdom	71.0	17.3	11.7	29.0	1.8	80.0	x(9)	x(9)	20.0	n
United States <sup>2</sup>	34.0	33.9	32.1	66.0	m	34.0	x(9)	x(9)	66.0	m
<i>Country mean</i>	<i>78.2</i>	<i>17.1</i>	<i>9.7</i>	<i>21.8</i>	<i>1.4</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>	<i>~</i>
<b>PARTNER COUNTRIES</b>										
Argentina	68.5	27.7	3.8	31.5	m	m	m	m	m	m
Chile <sup>5</sup>	19.6	77.8	2.6	80.4	2.6	m	m	m	m	m
India <sup>2</sup>	99.8	0.2	n	0.2	m	m	m	m	m	m
Indonesia	43.8	49.4	6.8	56.2	m	m	m	m	m	m
Israel	56.8	28.0	15.2	43.2	5.9	59.2	24.3	16.5	40.8	3.0
Jamaica	43.5	50.0	6.4	56.5	2.1	m	m	m	m	m
Paraguay	59.1	40.9	n	40.9	m	m	m	m	m	m
Peru	58.0	42.0	n	42.0	m	m	m	m	m	m
Philippines	33.1	66.9	n	66.9	a	m	m	m	m	m
Thailand	82.5	17.5	n	17.5	m	m	m	m	m	m
Tunisia	100.0	a	a	a	m	a	m	m	m	m
Uruguay	99.5	n	0.5	0.5	m	m	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. To calculate private funds net of subsidies, subtract public subsidies (columns 5,10) from private funds (columns 4, 9).

To calculate total public funds, including public subsidies, add public subsidies (columns 5,10) to direct public funds (columns 1, 6).

1. Including subsidies attributable to payments to educational institutions received from public sources.

2. Post-secondary non-tertiary included in tertiary education.

3. Post-secondary non-tertiary included in both upper secondary and tertiary education.

4. Public institutions only.

5. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

**Table B3.3. Distribution of total public expenditure on education (2001)**

*Public expenditure on education transferred to educational institutions and public transfers to the private sector, as a percentage of total public expenditure on education, by level of education*

	Primary, secondary and post-secondary non-tertiary education			Tertiary education			All levels of education combined		
	Direct public expenditure on public institutions	Direct public expenditure on private institutions	Indirect public transfers and payments to the private sector	Direct public expenditure on public institutions	Direct public expenditure on private institutions	Indirect public transfers and payments to the private sector	Direct public expenditure on public institutions	Direct public expenditure on private institutions	Indirect public transfers and payments to the private sector
<b>OECD COUNTRIES</b>									
Australia	77.7	18.5	3.8	67.1	n	32.9	m	m	m
Austria	97.7	0.4	2.0	82.8	0.3	16.9	93.6	0.8	5.7
Belgium	44.8	54.9	0.3	35.6	47.1	17.3	44.6	51.4	4.0
Canada <sup>1</sup>	98.2	1.8	x	77.8	0.4	21.8	90.9	1.3	7.9
Czech Republic	90.7	3.5	5.9	91.0	1.1	7.9	91.7	2.7	5.6
Denmark <sup>2</sup>	81.2	7.2	11.6	65.3	n	34.7	75.9	4.3	19.8
Finland	90.9	5.5	3.6	73.6	7.4	19.0	85.3	6.2	8.5
France	83.1	13.5	3.4	88.3	3.3	8.4	85.1	11.0	3.9
Germany	85.9	10.0	4.2	82.2	2.3	15.5	82.2	11.2	6.6
Greece	99.7	a	0.3	93.6	a	6.4	97.9	a	2.1
Hungary	82.4	7.5	10.1	77.0	3.5	19.5	83.6	5.8	10.5
Iceland	97.3	1.5	1.2	67.9	8.4	23.7	92.4	2.6	5.0
Ireland	96.7	n	3.3	88.1	n	11.9	94.2	n	5.8
Italy	96.5	2.2	1.3	85.9	1.7	12.4	94.4	2.3	3.3
Japan <sup>2</sup>	96.3	3.5	0.2	72.2	13.4	14.5	91.4	6.1	2.4
Korea	m	m	m	70.2	23.1	6.7	m	m	m
Luxembourg	91.3	3.3	5.3	m	m	m	91.3	3.3	5.3
Mexico	96.6	n	3.4	94.1	n	5.9	96.5	n	3.5
Netherlands	23.4	69.7	6.9	n	76.4	23.6	18.0	71.2	10.8
New Zealand	88.4	4.0	7.6	50.3	2.1	47.7	77.5	4.5	18.0
Norway	88.2	7.2	4.6	66.2	3.0	30.8	81.7	5.7	12.6
Poland	m	m	m	m	m	m	m	m	m
Portugal	92.1	6.6	1.3	93.8	n	6.2	91.8	6.1	2.1
Slovak Republic	94.4	3.5	2.0	m	a	m	m	m	m
Spain	84.8	14.2	1.0	89.2	2.5	8.3	86.2	11.1	2.7
Sweden	86.0	3.9	10.1	65.2	4.6	30.1	80.4	4.5	15.1
Switzerland	89.9	7.4	2.7	91.9	5.6	2.5	90.1	6.8	3.1
Turkey	99.1	m	0.9	85.6	0.3	14.0	94.8	0.1	5.1
United Kingdom	79.8	20.0	0.2	a	94.7	5.3	68.0	31.0	1.0
United States <sup>1</sup>	99.8	0.2	m	61.3	1.3	37.4	89.2	1.0	9.8
<b>Country mean</b>	<b>86.5</b>	<b>10.4</b>	<b>3.8</b>	<b>69.8</b>	<b>11.6</b>	<b>18.2</b>	<b>83.0</b>	<b>10.0</b>	<b>7.1</b>
<b>PARTNER COUNTRIES</b>									
Argentina	86.3	13.0	0.7	97.1	2.5	0.3	88.2	11.2	0.6
Brazil <sup>3</sup>	97.2	a	2.8	83.4	a	16.6	94.2	a	5.8
Chile <sup>4</sup>	63.6	36.0	0.4	37.2	33.3	29.5	60.1	35.5	4.5
India <sup>1</sup>	72.5	27.4	0.1	76.8	22.9	0.2	73.5	26.4	0.1
Indonesia	90.0	6.6	3.4	100.0	n	m	92.4	5.0	2.6
Israel	74.1	24.3	1.5	7.6	81.4	10.9	63.9	32.8	3.3
Jamaica	97.7	0.2	2.1	87.6	n	12.4	92.3	3.7	4.0
Jordan	100.0	a	a	m	m	m	m	m	m
Malaysia	99.5	a	0.5	76.6	a	23.4	91.7	a	8.3
Paraguay	m	6.3	0.3	98.7	a	1.3	94.3	5.2	0.5
Philippines	99.2	a	0.8	97.4	a	2.6	99.0	a	1.0
Thailand	91.0	4.2	4.9	69.8	m	30.2	87.8	2.2	10.0
Tunisia	100.0	a	m	100.0	a	m	100.0	a	m
Uruguay	99.9	a	0.1	100.0	a	n	100.0	a	n

1. Post-secondary non-tertiary included in tertiary education.

2. Post-secondary non-tertiary included in both upper secondary and tertiary education.

3. Year of reference 2000.

4. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

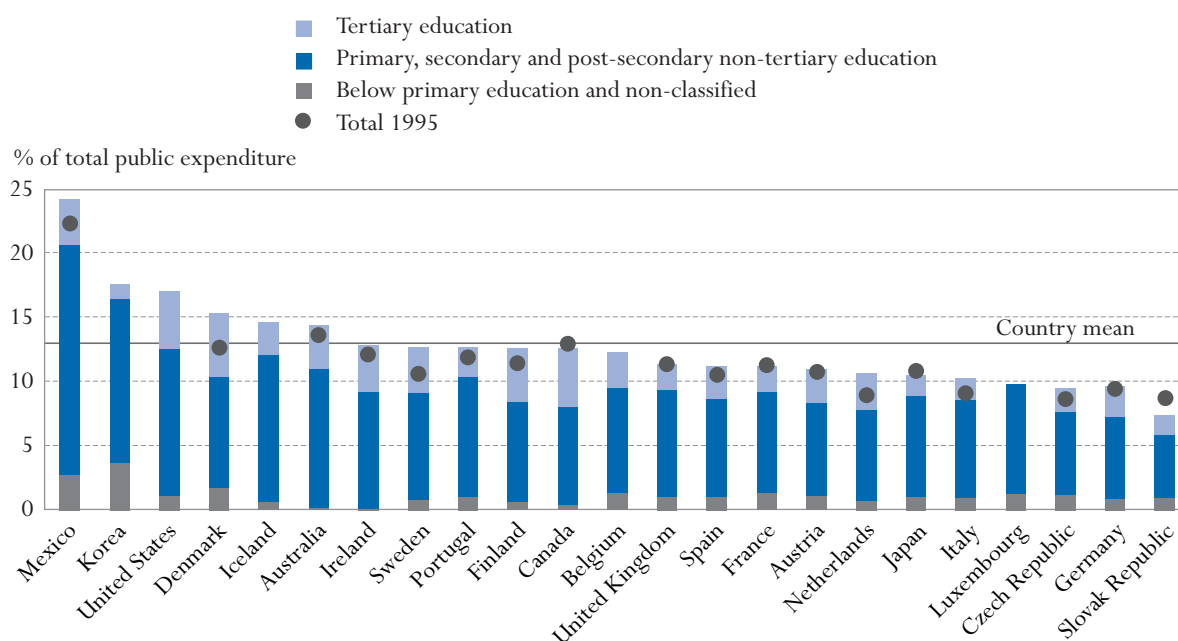
## INDICATOR B4: TOTAL PUBLIC EXPENDITURE ON EDUCATION

- On average, OECD countries devote 12.7% of total public expenditure to educational institutions. However, the values for individual countries range from below 10% in the Czech Republic, Germany, Luxembourg and the Slovak Republic, to 24% in Mexico.
- Public funding of education is a social priority, even in OECD countries with little public involvement in other areas.
- Public expenditure on education tended to grow faster than total public spending, but not as fast as GDP. Public expenditure on education as a percentage of total public expenditure grew fastest between 1995 and 2001 in Denmark, Mexico and Sweden.

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**Chart B4.1. Total public expenditure on education as a percentage of total public expenditure (1995, 2001)**

*Direct public expenditure on educational institutions plus public subsidies to households (which include subsidies for living costs, and other private entities) as a percentage of total public expenditure, by level of education and year*



Countries are ranked in descending order of total public expenditure on education at all levels of education as a percentage of total public expenditure in 2001.

Source: OECD. Table B4.1. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

*This indicator focuses on public expenditure on education.*

**B<sub>4</sub>**

*It also evaluates how public expenditure has changed over time in absolute terms and relative to total governmental spending.*


*Coverage diagram (see page 197 for explanations)*

**Policy context**

Governments become involved in providing services to the population for different reasons. If the public benefit from a particular service is greater than the private benefit, then markets alone may fail to provide these services adequately. Education is one area where all governments intervene to fund or direct the provision of services. As there is no guarantee that markets will provide equal access to educational opportunities, government funding of educational services ensures that education is not beyond the reach of some members of society. Public expenditure on education as a percentage of total public expenditure indicates the value of education relative to that of other public investments such as health care, social security, defence and security. It thus provides context for the other indicators on expenditure (particularly Indicator B3 on the public/private shares of expenditure on education) as well as quantification of an important policy lever in its own right.

Since the second half of the 1990s, most OECD countries made serious efforts to consolidate public budgets. Education had to compete with a wide range of other areas covered in government budgets for public financial support. To address this situation, this indicator evaluates the change in educational expenditure in absolute terms, and relative to changes in the size of public budgets.

**Evidence and explanations**

**What this indicator covers and what it does not cover**

This indicator shows total public expenditure on education. This expenditure includes direct public expenditure on educational institutions as well as public subsidies to households (*e.g.*, scholarships and loans to students for tuition fees and student living costs) and to other private entities for education (*e.g.*, subsidies to companies or labour organisations that operate apprenticeship programmes). Unlike the preceding indicators, this indicator also includes public subsidies that are not attributable to household payments for educational institutions, such as subsidies for student living costs.

OECD countries differ in the ways in which they use public money for education. Public funds may flow directly to schools or be channelled to institutions via government programmes or via households; they may also be restricted to the purchase of educational services or be used to support student living costs.

Total public expenditure on all services, excluding education, includes expenditure on debt servicing (*e.g.* interest payments) that are not included in public expenditure on education. The reason for this exclusion is that some countries cannot separate interest payment outlays for education from those for other services. This means that public expenditure on education as a percentage of total public expenditure can be underestimated in countries where interest payments represent a high proportion of total public expenditure on all services.

It is important to examine public investment in education in conjunction with private investment, as shown in Indicator B3.

## Overall level of public resources invested in education

On average, in 2001 OECD countries devoted 12.7% of total public expenditure to education. However, the values for individual countries range from below 10% in the Czech Republic, Germany, Luxembourg and the Slovak Republic, to 24% in Mexico (Chart B4.1). As in the case of spending on education in relation to GDP per capita, these values must be interpreted in the context of student demography and enrolment rates.

The public-sector proportion of funding of the different levels of education varies widely among OECD countries. In 2001, OECD countries spent between 6.4 (Germany) and 18% (Mexico) of total public expenditure on primary, secondary and post-secondary non-tertiary education, and between 1.2 (Korea) and 4.9% (Denmark) on tertiary education. On average in OECD countries, public funding of primary, secondary and post-secondary non-tertiary education is three times that of tertiary education, mainly due to enrolment rates. This ratio varies by country from less than double in Canada, Denmark and Finland to as high as nearly 11 times in Korea. The latter figure is indicative of the relatively high proportion of private funds that go into tertiary education in Korea (Table B4.1).

When public expenditure on education is examined as a proportion of total public spending, the relative sizes of public budgets (as measured by public spending in relation to GDP) must be taken into account.

Across OECD countries, when the size of public budgets relative to GDP is compared with the proportion of public spending committed to education, it is evident that even in countries with relatively low rates of public spending, education is awarded a very high level of priority. For instance, the share of public spending that goes to education in Korea, Mexico and the United States is among the highest of OECD countries (Chart B4.1); yet total public spending accounts for a relatively low proportion of GDP in these countries (Chart B4.2).

Although the overall pattern is not clear, there is some evidence to suggest that countries with high rates of public spending spend proportionately less on education; only four of the top ten countries for public spending on public services overall – Denmark, Finland, Portugal and Sweden – are in the top 10 public spenders on education (Charts B4.1 and B4.2).

The process of budget consolidation puts pressure on education along with every other service. Nevertheless, with the exception of Canada, Japan and the Slovak Republic, spending on education grew at least as fast as spending in other public areas between 1995 and 2001; the proportion of public budgets spent on education grew, on average, from 11.8% in 1995 to 12.7% in 2001. The figures suggest that the greatest increase in the share of public expenditure on education between 1995 and 2001 took place in Denmark (increasing from 12.7% to 15.4%), Mexico (22.4% to 24.3%) and Sweden (10.6% to 12.8%).

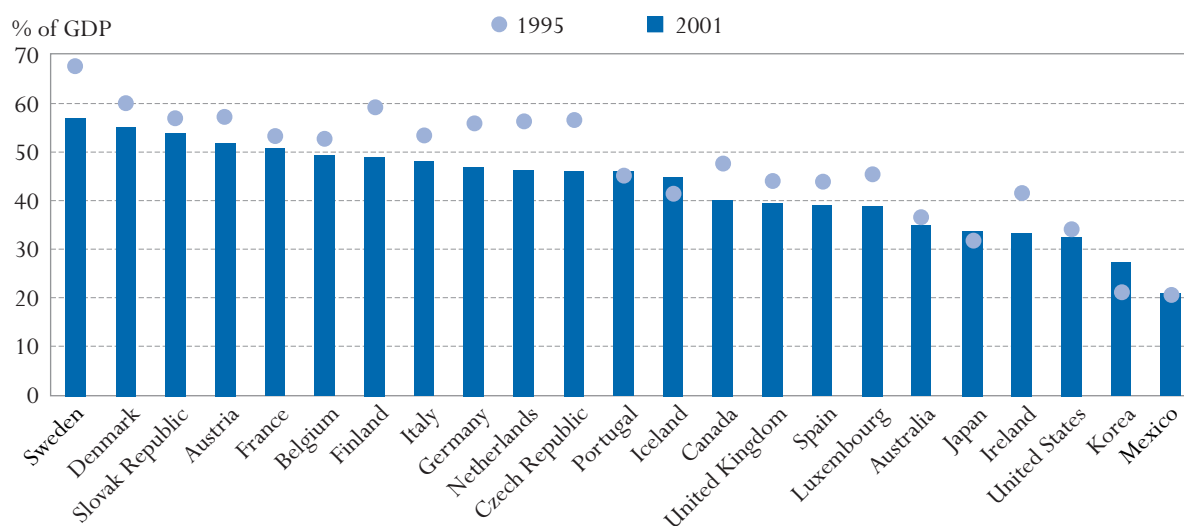
*On average, in 2001 OECD countries devoted 12.7% of total public expenditure to education.*

*On average OECD countries spend three times as much on primary, secondary and post-secondary non-tertiary education as they do on tertiary education.*

*Public funding of education is a social priority, even in OECD countries with little public involvement in other areas.*

*Typically, public expenditure on education grew faster than total public spending, but not as fast as national income from 1995 to 2001.*

**Chart B4.2. Total public expenditure as a percentage of GDP (1995, 2001)**



Note: This chart represents public expenditure on all services and not simply public expenditure on education. Countries are ranked in descending order of total public expenditure as a percentage of GDP in 2001. Source: OECD, Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eq2004](http://www.oecd.org/edu/eq2004)).

B4

*Data refer to the financial year 2001 and are based on the UOE data collection on education statistics administered by the OECD in 2003 (for details see Annex 3).*

### Definitions and methodologies

Educational expenditure is expressed as a percentage of a country's total public sector expenditure and as a percentage of GDP. Public educational expenditure includes expenditure on educational institutions and subsidies for students' living costs and for other private expenditure outside institutions. Public expenditure on education includes expenditure by all public entities, including ministries other than the ministry of education, local and regional governments and other public agencies.

Total public expenditure, also referred to as total public spending, corresponds to the non-repayable current and capital expenditure of all levels of government: central, regional and local. Current expenditure includes final consumption expenditure, property income paid, subsidies and other current transfers (e.g., social security, social assistance, pensions and other welfare benefits). Figures for total public expenditure have been taken from the OECD National Accounts Database (see Annex 2) and use the System of National Accounts 1993. In previous editions of *Education at a Glance*, total public expenditure was based on the System of National Accounts 1968. The change in the system of national accounts may explain differences in this indicator in comparison with previous editions of this publication.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2004 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at [www.oecd.org/edu/eq2004](http://www.oecd.org/edu/eq2004) for details on changes).

**Table B4.1. Total public expenditure on education (1995, 2001)**

Direct public expenditure on educational institutions plus public subsidies to households (which include subsidies for living costs, and other private entities), as a percentage of GDP and as a percentage of total public expenditure, by level of education and year

	Public expenditure <sup>1</sup> on education as a percentage of total public expenditure				Public expenditure <sup>1</sup> on education as a percentage of GDP			
	2001		1995		2001		1995	
	Primary, secondary and non-tertiary education	Tertiary education	All levels of education combined	All levels of education combined	Primary, secondary and post-secondary non-tertiary education	Tertiary education	All levels of education combined	All levels of education combined
<b>OECD COUNTRIES</b>								
Australia	10.8	3.4	14.4	13.6	3.8	1.2	5.0	5.2
Austria	7.3	2.6	11.1	10.7	3.8	1.4	5.8	6.2
Belgium	8.2	2.8	12.4	m	4.0	1.4	6.1	m
Canada <sup>2</sup>	7.6	4.6	12.7	13.1	3.1	1.9	5.2	6.5
Czech Republic	6.5	1.8	9.6	8.7	3.0	0.9	4.4	4.9
Denmark <sup>3</sup>	8.7	4.9	15.4	12.7	4.8	2.7	8.5	7.7
Finland	7.8	4.2	12.7	11.5	3.9	2.1	6.2	6.8
France	7.9	2.0	11.2	11.3	4.0	1.0	5.7	6.0
Germany	6.4	2.4	9.7	9.7	3.0	1.1	4.6	4.6
Greece	m	m	m	6.6	2.4	1.2	3.9	3.1
Hungary	m	m	m	12.9	3.2	1.1	5.1	5.4
Iceland	11.5	2.5	14.7	m	5.1	1.1	6.5	m
Ireland	9.1	3.7	13.0	12.2	3.0	1.2	4.3	5.1
Italy	7.6	1.7	10.3	9.1	3.7	0.8	5.0	4.9
Japan <sup>3</sup>	7.9	1.6	10.5	11.0	2.7	0.5	3.6	3.5
Korea	12.8	1.7	17.7	m	3.5	0.5	4.9	m
Luxembourg	8.5	m	9.8	m	3.3	m	3.8	m
Mexico	18.0	3.5	24.3	22.4	3.8	0.7	5.1	4.6
Netherlands	7.1	2.8	10.7	9.0	3.3	1.3	5.0	5.1
New Zealand	m	m	m	14.4	4.7	1.8	6.7	5.7
Norway	m	m	m	15.3	4.8	1.8	7.0	7.4
Poland	m	m	m	11.9	4.1	1.1	5.6	5.7
Portugal	9.3	2.3	12.7	11.9	4.3	1.1	5.9	5.4
Slovak Republic	4.9	1.5	7.5	8.8	2.7	0.8	4.0	5.0
Spain	7.6	2.6	11.3	10.6	3.0	1.0	4.4	4.7
Sweden	8.4	3.6	12.8	10.6	4.8	2.0	7.3	7.2
Switzerland	m	m	m	14.2	3.9	1.3	5.5	5.5
Turkey	m	m	m	m	2.5	1.2	3.7	2.4
United Kingdom	8.4	2.0	11.4	11.4	3.4	0.8	4.7	5.2
United States <sup>2</sup>	11.5	4.5	17.1	m	3.8	1.5	5.6	m
<b>Country mean</b>	<b>8.9</b>	<b>2.8</b>	<b>12.7</b>	<b>11.8</b>	<b>3.6</b>	<b>1.3</b>	<b>5.3</b>	<b>5.3</b>
<b>PARTNER COUNTRIES</b>								
Argentina	10.1	2.3	13.5	m	3.6	0.8	4.8	m
Brazil <sup>4</sup>	8.3	2.7	12.0	m	3.0	1.0	4.4	m
Chile <sup>5</sup>	14.5	2.6	18.7	m	3.4	0.6	4.4	m
India <sup>2</sup>	9.9	2.6	12.7	m	3.1	0.8	4.0	m
Indonesia	7.5	2.3	9.8	m	1.0	0.3	1.3	m
Israel	9.1	2.4	13.7	13.3	4.7	1.3	7.1	8.5
Jamaica	9.2	2.3	12.3	m	4.8	1.2	6.3	m
Jordan	m	m	m	m	4.3	m	m	m
Malaysia	12.4	6.8	20.0	m	4.9	2.7	7.9	m
Paraguay	8.0	1.7	9.7	m	3.7	0.8	4.5	m
Peru	16.1	5.3	23.5	m	2.0	0.7	2.9	m
Philippines	11.8	1.8	14.0	m	2.7	0.4	3.2	m
Russian Federation	6.7	2.0	11.5	m	1.8	0.5	3.0	m
Thailand	14.9	6.1	28.3	m	2.7	1.1	5.0	m
Tunisia	14.2	4.0	18.2	m	5.3	1.5	6.8	m
Uruguay	8.9	2.7	12.8	m	2.2	0.7	3.1	m
Zimbabwe <sup>2, 5</sup>	m	m	m	m	5.6	a	5.6	m

1. Public expenditure presented in this table includes public subsidies to households for living costs, which are not spent on educational institutions. Thus the figures presented here exceed those on public spending on institutions found in Table B2.1b.

2. Post-secondary non-tertiary included in tertiary education and excluded from primary, secondary and post-secondary non-tertiary education.

3. Post-secondary non-tertiary included in both upper secondary and tertiary education.

4. Year of reference 2000.

5. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

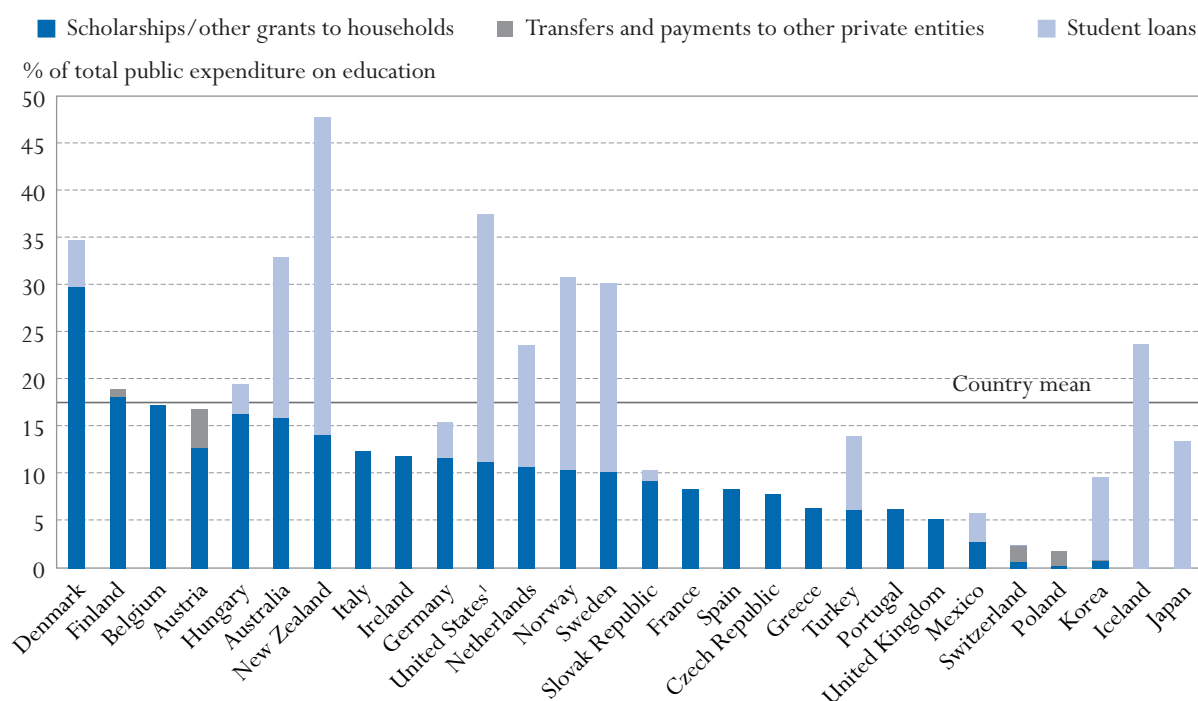
## INDICATOR B5: SUPPORT FOR STUDENTS AND HOUSEHOLDS THROUGH PUBLIC SUBSIDIES

- Public subsidies for students and households are evident mainly at the tertiary level.
- An average of 17% of public spending on tertiary education is devoted to supporting students, households and other private entities. In Australia, Denmark, New Zealand, Norway, Sweden and the United States, public subsidies account for about 30% or more of public tertiary education budgets.
- Subsidies are generally more evident in systems where students are expected to pay for at least part of the cost of their education.
- Subsidised student loan systems tend to operate in countries with high levels of participation at the tertiary level.
- In most OECD countries, the beneficiaries of public subsidies have considerable discretion regarding the spending of subsidies. In all reporting OECD countries, subsidies are spent mainly outside educational institutions, and in one out of three of these countries, exclusively outside.

B<sub>5</sub>

**Chart B5.1. Public subsidies for education in tertiary education (2001)**

Public subsidies for education to households and other private entities as a percentage of total public expenditure on education, by type of subsidy



1. Including post-secondary non-tertiary education.

Countries are ranked in descending order of scholarships/other grants to households and transfers and payments to other private entities in tertiary education.

Source: OECD, Table B5.2. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



## Policy context

Subsidies to students and their families are policy levers through which governments can encourage participation in education, particularly among students from low-income families, by covering part of the cost of education and related expenses. They can thereby seek to address issues of access and equality of opportunity. Their success must therefore be judged, at least in part, through examination of indicators of participation, retention and completion. Furthermore, public subsidies play an important role in indirectly financing educational institutions.

Channelling funding for institutions through students may also help to increase competition between institutions and result in greater efficiency in the financing of education. Since aid for student living costs can serve as a substitute for work as a financial resource, public subsidies may enhance educational attainment by enabling students to study full-time and to work fewer hours or not at all.

Public subsidies come in many forms: as means-based subsidies, as family allowances for all students, as tax allowances for students or their parents, or as other household transfers. Unconditional subsidies (such as tax reductions or family allowances) may provide less of an incentive for low-income students to participate in education than means-tested subsidies. However, they may still help reduce disparities between households with and without children in education.

A key question is whether financial subsidies for households should be provided in the form of grants or loans. Are loans an effective means to help increase the efficiency of financial resources invested in education and shift some of the cost of education to the beneficiaries of educational investment? Or are student loans less appropriate than grants in encouraging low-income students to pursue their education? This indicator cannot answer this question but presents the policies for subsidies in different OECD countries.

## Evidence and explanations

### What this indicator covers and what it does not cover

This indicator shows the proportion of public spending on education transferred to students, families and other private entities. Some of these funds are spent indirectly on educational institutions, for example, when subsidies are used to cover tuition fees. Other subsidies for education do not relate to educational institutions, such as subsidies for student living costs.

The indicator distinguishes between scholarships and grants, which are non-repayable subsidies, and loans, which must be repaid. The indicator does not, however, distinguish among different types of grants or loans, such as scholarships, family allowances and subsidies in kind.

Governments can also support students and their families by providing tax reductions and tax credits. These subsidies are not covered by this indicator.

The indicator reports the full volume of student loans in order to provide information on the level of support which current students receive. The indica-

*This indicator examines direct and indirect public spending on educational institutions as well as public subsidies to households for student living costs.*


*Coverage diagram  
(see page 197 for  
explanations)*

tor does not take repayments into account, even though these can reduce the real costs of loans substantially. The reason is that the gross amount of loans, including scholarships and grants, is the relevant variable for the measuring of financial aid to current participants in education. Although interest payments and repayments of the principal by borrowers would be taken into account in order to assess the net cost of student loans to public and private lenders, such payments are not usually made by current students but rather by former students. In most countries, moreover, loan repayments do not flow to the education authorities, and thus the money is not available to them to cover other educational expenditure.

Given that no internationally comparable method is currently available to calculate the net costs of student loan programmes, loans must be treated according to the likely use of the data. The OECD indicators therefore take the full amount of scholarships and loans (gross) into account when discussing financial aid to current students.

It is also common for governments to guarantee the repayment of loans to students made by private lenders. In some OECD countries, this indirect form of subsidy is as significant as, or more significant than, direct financial aid to students. However, for reasons of comparability, the indicator only takes into account the amounts relating to public transfers for private loans that are made to private entities (not the total value of loans generated).

Some OECD countries also have difficulties quantifying the amount of loans attributable to students. Therefore, data on student loans should be treated with some caution.

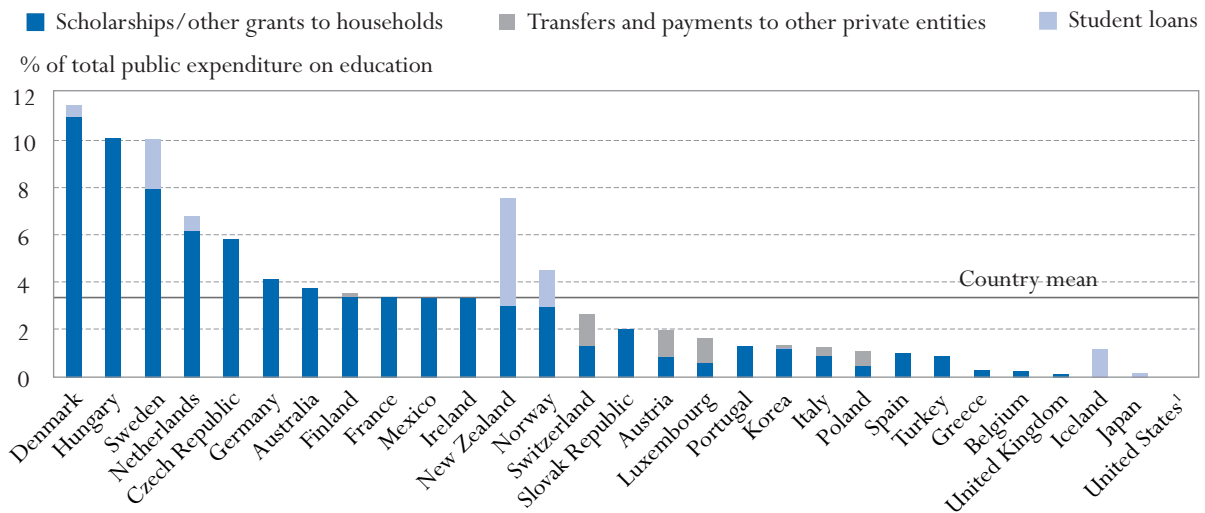
### **Public subsidies to households and other private entities**

*OECD countries spend an average of around 0.4% of their GDP on public subsidies to households and other private entities for education.*

OECD countries spend an average of 0.4% of their GDP on public subsidies to households and other private entities for all levels of education combined. The subsidies are largest in relation to GDP in Denmark (1.50% of GDP), followed by New Zealand (1.20%) and Sweden (1.10%). Furthermore, on average across OECD countries, 7.1% of public budgets for education are spent on transfers to the private sector (Tables B4.1, B5.1 and B5.2). Most of these amounts are devoted to the tertiary level of education, except in the Czech Republic, France, Hungary, Korea, Mexico, Poland and Switzerland, where more than 50% of transfers to the private sector are devoted to primary, secondary and post-secondary non-tertiary education (Tables B5.1 and B5.2).

*At the primary, secondary and post-secondary non-tertiary levels, public subsidies account for a comparatively small proportion of public spending on education.*

Most OECD countries offer public subsidies to households from upper secondary education onwards. There are usually few subsidies available before the upper secondary level, since in most OECD countries education up to that level is compulsory, free of charge, predominantly provided by the public sector and largely provided at the point of residence of students and their families. In seven out of 29 OECD countries for which data are available, subsidies to households and private entities therefore account for 1% or less of total public spending on primary, secondary and post-secondary non-tertiary education. However,

**Chart B5.2. Public subsidies for education in primary, secondary and post-secondary non-tertiary education (2001)***Public subsidies for education to households and other private entities as a percentage of total public expenditure on education, by type of subsidy*

1. Excluding post-secondary non-tertiary education.

Countries are ranked in descending order of scholarships/other grants to households and transfers and payments to other private entities for primary, secondary and post-secondary non-tertiary education.

Source: OECD, Table B5.1. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

in Hungary, New Zealand and Sweden, public subsidies account for between 7 and 11% of public expenditure on primary, secondary and post-secondary non-tertiary education; they reach 11.6% in Denmark (Chart B5.2). In most of the OECD countries with high proportions of subsidies at the primary, secondary and post-secondary non-tertiary levels of education, these subsidies are directed at adults re-entering secondary education.

The proportion of educational budgets spent on subsidies to households and private entities is much higher at the tertiary level. OECD countries spend, on average, 17% of their public budgets for tertiary education on subsidies to households and other private entities (Chart B5.1). In Australia, Denmark, New Zealand, Norway, Sweden and the United States, public subsidies account for 30% or more of public spending on tertiary education. Only Poland and Switzerland spend less than 5% of their total public spending on tertiary education on subsidies (Table B5.2).

A key question in many OECD countries is whether financial subsidies for households should primarily be provided in the form of grants or loans. Governments choose to subsidise students' living costs or educational costs through different mixtures of grants and loans. Advocates of student loans argue that money spent on loans goes further: if the amount spent on grants were used to guarantee or subsidise loans instead, more aid would be available to students in total, and overall access would be increased. Loans also shift some of the cost of education to those who benefit most from educational investment. Opponents of loans argue that student loans are less effective than grants in encouraging

*Australia, Denmark, New Zealand, Norway, Sweden and the United States spend 30% or more of their public education budget at the tertiary level on subsidies to the private sector.*

*OECD countries use different mixtures of grants and loans to subsidise students' educational costs.*

low-income students to pursue their education. They also argue that loans may be less efficient than anticipated because of the various subsidies provided to borrowers or lenders, and due to costs of administration and servicing. Cultural differences among and within countries may also affect students' willingness to take out a student loan.

Chart B5.1 presents the proportion of public educational expenditure spent on loans, grants and scholarships and other subsidies to households at the tertiary level. Grants and scholarships include family allowances and other specific subsidies, but exclude tax reductions. Thirteen out of 29 reporting OECD countries rely exclusively on grants or scholarships and transfers and payments to other private entities. The remaining OECD countries provide both grants or scholarships and loans to students. In general, the highest subsidies to students are provided by those OECD countries offering student loans; in most cases these countries spend an above-average proportion of their budgets on grants and scholarships alone (Chart B5.1 and Table B5.2).

*The largest subsidies in the form of student loans tend to be in countries with the highest participation rates in tertiary education.*

*Repayments of loans reduce the real cost of loan programmes to the public budget; at the same time, they increase the burden on households for education.*

The motivation for governments to introduce a student loan system can often be to better manage the cost of an expanding tertiary sector. It is notable, for instance, that the four countries reporting the largest subsidies in the form of student loans – Iceland, New Zealand, Norway and Sweden – also have some of the highest rates of entry into tertiary education of OECD countries (see Indicator C2). There are exceptions. Finland has the fourth highest tertiary (Type A) entry rates but does not operate a publicly-funded student loan system.

Repayments of public loans can be a substantial source of income for governments and can decrease the costs of loan programmes significantly. The current reporting of household expenditure on education as part of private expenditure (Indicator B4) does not take into account the repayment by previous recipients of public loans. These repayments can be a substantial burden to individuals and have an impact on the decision to participate in tertiary education. However, many OECD countries make the repayment of loans dependent on graduates' later level of income.

Given that repayments to loan programmes are made by former students who took out loans several years earlier, it is difficult to estimate the real costs of loan programmes. Loans are therefore reported on a gross basis only. International comparisons of total repayments in the same reference period cannot be made, since they are heavily influenced by changes in schemes for the distribution of loans and by changes in the numbers of students receiving loans.

#### **How subsidies are used: student living costs and tuition fees**

*In most OECD countries, the beneficiaries of public subsidies have considerable discretion about how they spend them.*

In most OECD countries, the bulk of public payments to households for education are not earmarked; that is, their use is determined by the beneficiaries, namely students and their families. In a few OECD countries, however, public subsidies are earmarked for payments to educational institutions. Australia, New Zealand and the United Kingdom, for example, earmark public subsidies

for tuition fees. In Australia, loans and tuition fees are closely regulated through the Higher Education Contribution Scheme (HECS). Under HECS, students can elect to pay their contributions for their university education in advance, semester by semester, and receive a 25% discount, or, they can repay their accumulated contribution through the tax system when their annual income exceeds a minimum threshold. For the purpose of the OECD education indicators, HECS is counted as a loan scheme, although students may not see the delayed payments as a loan. In OECD countries where tuition fees are substantial, a proportion of the public subsidy to households is effectively earmarked for payments to educational institutions, even without an official policy.

Scholarships and other grants attributable to students are largely spent outside educational institutions. They support educational expenses other than tuition fees. In Denmark, Finland and Hungary, scholarships and other grants not attributable for tuition fees to educational institutions account for more than 15% of the total public spending on tertiary education. Korea, Poland and Switzerland are the only OECD countries where scholarships and other grants attributable for expenditure outside institutions amount to less than 1% of total public spending on education (Table B5.2).

In OECD countries where students are required to pay tuition fees, public subsidies are of particular importance in order to provide students with access to educational opportunities, regardless of their financial situation. Indicator B3 shows what proportion of funding of educational institutions originates from private sources.

In OECD countries with low levels of private involvement in the funding of educational institutions, the level of public subsidies tends to be lower (Tables B5.2 and B3.2a and b). An exception is Korea, where despite the fact that around 90% of all expenditure on tertiary institutions originates from private sources, the level of subsidies to support tuition payments to institutions is, at 1%, comparatively low (Tables B5.2 and B3.2a and b).

### Definitions and methodologies

Public subsidies to households include the following categories: *i*) grants/scholarships; *ii*) public student loans; *iii*) family or child allowances contingent on student status; *iv*) public subsidies in cash or kind specifically for housing, transportation, medical expenses, books and supplies, social, recreational and other purposes; and *v*) interest-related subsidies for private loans.

Expenditure on student loans is reported on a gross basis, that is, without subtracting or netting out repayments or interest payments from the borrowers (students or households). This is because the gross amount of loans including scholarships and grants is the relevant variable for measuring financial aid to current participants in education.

Public costs related to private loans guaranteed by governments are included as subsidies to other private entities. Unlike public loans, only the net cost of these loans is included.

*In all reporting OECD countries subsidies are spent mainly outside educational institutions, and in one out of three OECD countries exclusively outside.*

*Subsidies are particularly important in systems where students are expected to pay at least part of the cost of their education.*

*Data refer to the financial year 2001 and are based on the VOE data collection on education statistics administered by the OECD in 2003 (for details see Annex 3).*

The value of tax reductions or credits to households and students is not included.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2004 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004) for details on changes).

**Table B5.1. Public subsidies for households and other private entities as a percentage of total public expenditure on education and GDP for primary, secondary and post-secondary non-tertiary education (2001)***Direct public expenditure on educational institutions and subsidies for households and other private entities*

	Direct expenditure for institutions	Subsidies for education to private entities					Subsidies for education to private entities as a percentage of GDP
		Financial aid to students			Transfers and payments to other private entities	Total	
		Scholarships/ other grants to households	Student loans	Total			
<b>OECD COUNTRIES</b>							
Australia	96.2	3.8	n	3.8	n	3.8	0.14
Austria	98.0	0.9	a	0.9	1.1	2.0	0.08
Belgium	99.7	0.3	n	0.3	n	0.3	0.01
Canada <sup>1</sup>	m	m	m	m	m	m	m
Czech Republic	94.1	5.9	a	5.9	n	5.9	0.18
Denmark	88.4	11.1	0.5	11.6	n	11.6	0.55
Finland	96.4	3.4	n	3.4	0.2	3.6	0.14
France	96.6	3.4	a	3.4	a	3.4	0.14
Germany	95.8	4.2	n	4.2	n	4.2	0.13
Greece	99.7	0.3	m	0.3	a	0.3	0.01
Hungary	89.9	10.1	a	10.1	n	10.1	0.32
Iceland	98.8	m	1.2	1.2	m	1.2	0.06
Ireland	96.7	3.3	n	3.3	n	3.3	0.10
Italy	98.7	0.9	a	0.9	0.3	1.3	0.05
Japan	99.8	m	0.2	0.2	n	0.2	0.01
Korea	98.7	1.2	0.1	1.3	0.1	1.3	0.05
Luxembourg	98.3	0.6	a	0.6	1.0	1.7	0.06
Mexico	96.6	3.4	a	3.4	a	3.4	0.13
Netherlands	93.1	6.2	0.6	6.9	n	6.9	0.23
New Zealand	92.4	3.0	4.6	7.6	n	7.6	0.36
Norway	95.4	3.0	1.6	4.6	n	4.6	0.22
Poland	98.9	0.5	a	0.5	0.6	1.1	0.05
Portugal	98.7	1.3	m	1.3	m	1.3	0.06
Slovak Republic	98.0	2.0	a	2.0	m	2.0	0.06
Spain	99.0	1.0	n	1.0	n	1.0	0.03
Sweden	89.9	8.0	2.1	10.1	m	10.1	0.48
Switzerland	97.3	1.4	n	1.4	1.3	2.7	0.11
Turkey	99.1	0.9	a	0.9	m	0.9	0.02
United Kingdom	99.8	0.2	a	0.2	n	0.2	0.01
United States <sup>1</sup>	100.0	n	n	n	n	n	n
<i>Country mean</i>	<i>96.7</i>	<i>3.0</i>	<i>0.4</i>	<i>3.1</i>	<i>0.2</i>	<i>3.3</i>	<i>0.13</i>
<b>PARTNER COUNTRIES</b>							
Argentina	99.3	0.4	a	0.4	0.3	0.7	n
Brazil <sup>2</sup>	97.2	0.4	m	0.4	2.4	2.8	0.1
Chile <sup>3</sup>	99.6	0.4	a	0.4	a	0.4	n
India <sup>1</sup>	99.9	0.1	a	0.1	a	0.1	n
Indonesia	96.6	3.4	m	3.4	m	3.4	n
Israel	98.5	1.5	n	1.5	n	1.5	0.1
Jamaica	97.9	2.1	a	2.1	a	2.1	0.1
Jordan	100.0	a	a	a	a	a	a
Malaysia	99.5	0.5	a	0.5	a	0.5	n
Paraguay	99.7	0.2	a	0.2	0.1	0.3	n
Peru <sup>1</sup>	100.0	a	n	a	n	a	m
Philippines	99.2	a	a	a	0.8	0.8	n
Thailand	95.1	0.7	4.2	4.9	m	4.9	n
Uruguay	99.9	0.1	a	0.1	a	0.1	n
Zimbabwe <sup>3</sup>	99.9	0.1	a	0.1	a	0.1	n

1. Excluding post-secondary non-tertiary education.

2. Year of reference 2000.

3. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

**Table B5.2. Public subsidies for households and other private entities as a percentage of total public expenditure on education and GDP for tertiary education (2001)**
*Direct public expenditure on educational institutions and subsidies for households and other private entities*

	Direct expenditure for institutions	Subsidies for education to private entities						Subsidies for education to private entities as a percentage of GDP	
		Financial aid to students				Scholarships/ other grants to households attributable for educational institutions	Transfers and payments to other private entities		Total
		Scholarships/ other grants to households	Student loans	Total					
<b>OECD COUNTRIES</b>									
Australia	67.1	15.9	17.0	32.9	1.2	n	32.9	0.39	
Austria	83.1	12.7	a	12.7	m	4.2	16.9	0.23	
Belgium	82.7	17.3	n	17.3	4.0	n	17.3	0.24	
Canada <sup>1</sup>	m	m	m	m	m	m	m	m	
Czech Republic	92.1	7.9	a	7.9	m	n	7.9	0.07	
Denmark	65.3	29.8	4.8	34.7	m	n	34.7	0.95	
Finland	81.0	18.2	n	18.2	n	0.8	19.0	0.39	
France	91.6	8.4	a	8.4	2.5	a	8.4	0.09	
Germany	84.5	11.7	3.8	15.5	a	n	15.5	0.17	
Greece	93.6	6.4	m	6.4	m	a	6.4	0.08	
Hungary	80.5	16.4	3.1	19.5	n	n	19.5	0.22	
Iceland	76.3	n	23.7	23.7	n	n	23.7	0.26	
Ireland	88.1	11.9	n	11.9	m	n	11.9	0.15	
Italy	87.6	12.4	n	12.4	4.4	n	12.4	0.10	
Japan	85.5	1.0	13.5	14.5	m	n	14.5	0.08	
Korea	90.4	0.8	8.7	9.5	0.8	0.1	9.6	0.03	
Luxembourg	m	m	m	m	m	m	m	m	
Mexico	94.1	2.9	3.0	5.9	2.8	n	5.9	0.04	
Netherlands	76.4	10.8	12.8	23.6	2.0	n	23.6	0.31	
New Zealand	52.3	14.2	33.5	47.7	n	n	47.7	0.84	
Norway	69.2	10.4	20.4	30.8	a	n	30.8	0.57	
Poland	98.2	0.4	a	0.4	a	1.5	1.8	0.02	
Portugal	93.8	6.2	m	6.2	m	m	6.2	0.07	
Slovak Republic	89.5	9.3	1.1	10.5	m	m	10.5	0.09	
Spain	91.7	8.3	n	8.3	3.6	n	8.3	0.08	
Sweden	69.9	10.3	19.9	30.1	a	a	30.1	0.62	
Switzerland	97.5	0.7	n	0.8	m	1.7	2.5	0.03	
Turkey	86.0	6.2	7.8	14.0	n	m	14.0	0.16	
United Kingdom	94.7	5.3	m	5.3	2.4	n	5.3	0.04	
United States <sup>1</sup>	62.6	11.3	26.1	37.4	m	a	37.4	0.55	
<b>Country mean</b>	<b>82.9</b>	<b>9.7</b>	<b>7.8</b>	<b>16.8</b>	<b>1.3</b>	<b>0.4</b>	<b>17.1</b>	<b>0.25</b>	
<b>PARTNER COUNTRIES</b>									
Argentina	99.7	0.3	n	0.3	m	n	0.3	n	
Brazil <sup>2</sup>	83.4	6.6	9.3	15.8	m	0.7	16.6	0.16	
Chile <sup>3</sup>	70.5	12.7	16.7	29.5	9.5	a	29.5	0.18	
India	99.8	0.2	n	0.2	n	n	0.2	n	
Israel	89.1	9.2	1.7	10.9	9.2	n	10.9	0.14	
Jamaica	87.6	4.7	7.7	12.4	4.2	a	12.4	0.15	
Malaysia	76.6	2.4	20.9	23.4	m	a	23.4	0.63	
Paraguay	98.7	1.3	a	1.3	a	a	1.3	0.01	
Peru	100.0	a	n	n	n	n	n	n	
Philippines	97.4	2.5	0.1	2.6	a	a	2.6	0.01	
Sri Lanka	94.1	x	x	5.9	m	m	5.9	0.02	
Thailand	69.8	x	x	30.2	m	m	30.2	0.33	
Uruguay	100.0	n	a	n	n	a	n	n	

1. Including post-secondary non-tertiary education.

2. Year of reference 2000.

3. Year of reference 2002.

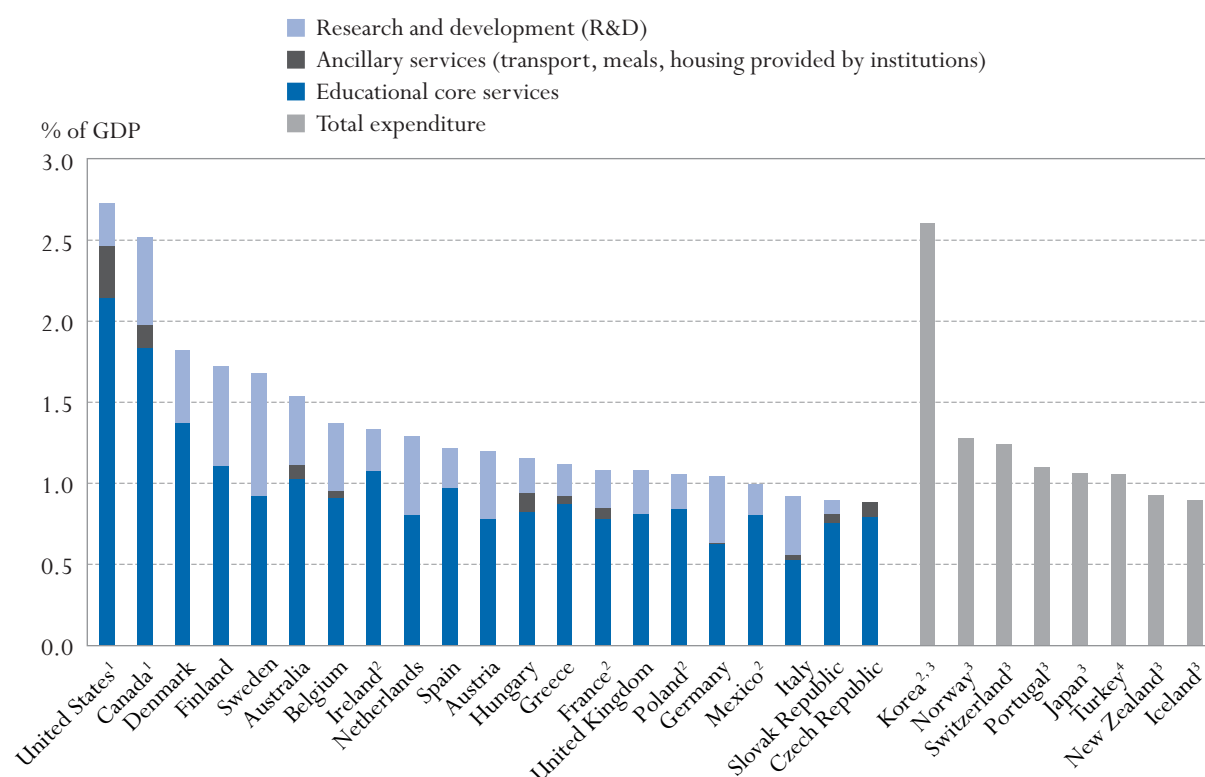
 Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



## INDICATOR B6: EXPENDITURE ON INSTITUTIONS BY SERVICE CATEGORY AND BY RESOURCE CATEGORY

- On average, one-quarter of expenditure on tertiary education is attributable to R&D at tertiary educational institutions. Significant differences among OECD countries in the emphasis on R&D in tertiary institutions explain part of the large differences in expenditure per tertiary student.
- In primary, secondary and post-secondary non-tertiary education combined, current expenditure accounts for an average of 92% of total spending across OECD countries. In all but four OECD countries, 70% or more of primary, secondary and post-secondary non-tertiary current expenditure is spent on staff salaries.

**Chart B6.1. Expenditure on instruction, R&D and ancillary services in tertiary educational institutions as a percentage of GDP (2001)**



1. Including post-secondary non-tertiary education.

2. Research and development (R&D) expenditure at tertiary level and thus total expenditure is underestimated.

3. The bar represents total expenditure at tertiary level and includes research and development (R&D) expenditure.

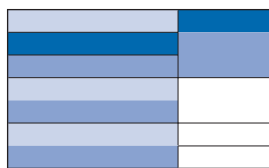
4. The bar represents total expenditure at tertiary level. Data on research and development (R&D) expenditure are missing.

Countries are ranked in descending order of expenditure on instruction, research and development (R&D) and ancillary services in tertiary institutions.

Source: OECD. Table B6.1. See Annex 3 for notes ([www.oecd.org/edu/eqg2004](http://www.oecd.org/edu/eqg2004)).

*This indicator compares OECD countries with respect to the division of spending between current and capital expenditure, and the distribution of current expenditure by resource category.*

*It also compares how OECD countries' spending is distributed by different functions of educational institutions.*



*Coverage diagram (see page 197 for explanations)*

### Policy context

How spending is apportioned between different categories of expenditure can affect the quality of services (*e.g.* teachers' salaries), the condition of educational facilities (*e.g.* school maintenance) and the ability of the education system to adjust to changing demographic and enrolment trends (*e.g.* the construction of new schools).

Comparisons of how different OECD countries apportion educational expenditure among the various resource categories can provide some insight into variation in the organisation and operation of educational institutions. Decisions on the allocation of resources made at the system level, both budgetary and structural, eventually feed through to the classroom and affect the nature of instruction and the conditions under which it is provided.

Educational institutions offer a range of educational services in addition to instruction. At the primary, secondary and post-secondary non-tertiary levels of education, institutions may offer meals, free transport to and from school or boarding facilities. At the tertiary level, institutions may offer housing and often perform a wide range of research activities as an integral part of tertiary education.

### Evidence and explanations

#### What this indicator covers and what it does not cover

This indicator breaks down educational expenditure by current and capital expenditure and the three main functions typically fulfilled by educational institutions. This includes costs directly attributable to instruction, such as teachers' salaries or school materials, and costs indirectly related to the provision of instruction, such as expenditure on administration, instructional support services, development of teachers, student counselling, or the construction and/or provision of school facilities. It also includes spending on ancillary services, such as student welfare services provided by educational institutions. Finally, it includes spending attributable to research and development (R&D) performed at tertiary educational institutions, either in the form of separately funded R&D activities or in the form of those proportions of salaries and current expenditure in general education budgets that are attributable to the research activities of staff.

The indicator does not include public and private R&D spending outside educational institutions, such as R&D spending in industry. A comparative review of R&D spending in sectors other than education is provided in the OECD Science and Technology Indicators. Expenditure on student welfare services at educational institutions only includes public subsidies for those services. Expenditure by students and their families on services that are provided by institutions on a self-funding basis is not included.

### Expenditure on instruction, R&D and ancillary services

Below the tertiary level educational expenditure is dominated by spending on educational core services. At the tertiary level other services, particularly those related to R&D activities, can account for a significant proportion of educational spending. Differences among OECD countries in expenditure on R&D activities can therefore explain a significant part of the differences among OECD countries in overall educational expenditure per tertiary student (Chart B6.1). High levels of R&D spending in tertiary educational institutions in Australia, Austria, Belgium, Canada, Denmark, Finland, Germany, the Netherlands and Sweden (between 0.4 and 0.8% of GDP), for example, imply that spending on education per student in these OECD countries would be considerably lower if the R&D component were excluded (Table B6.1).

Student welfare services and, sometimes, services for the general public are integral functions of schools and universities in many OECD countries. Countries finance these ancillary services with different combinations of public expenditure, public subsidies and fees paid by students and their families.

On average, OECD countries spend 0.2% of their GDP on subsidies for ancillary services provided by primary, secondary and post-secondary non-tertiary institutions. This represents 5% of total spending on these institutions. At the high end, the Czech Republic, Finland, France, Hungary and Sweden spend about 10% or more of total spending on educational institutions on ancillary services. In real terms, this expenditure represents more than US\$ 250 (PPP) per student in the Czech Republic, Hungary, Italy and the United Kingdom, and even more than US\$ 500 (PPP) per student in Finland, France and Sweden (Tables B6.1 and B6.2).

In more than two-thirds of OECD countries, the amount spent on ancillary services is higher than the amount spent on subsidies to households at the primary, secondary and post-secondary non-tertiary levels. Exceptions to this pattern are Germany, Ireland, the Netherlands and Sweden, where expenditure on subsidies to households is higher (Tables B5.1 and B6.1).

On average, expenditure on subsidies for ancillary services at the tertiary level amounts to just 0.1% of GDP. Nevertheless, on a per-student basis this can translate into significant amounts, as in Australia, the Czech Republic, France, Hungary and the United States, where subsidies for ancillary services amount to more than US\$ 500 (PPP). At the tertiary level, ancillary services are more often provided on a self-financed basis (Tables B6.1 and B6.2).

### Current and capital expenditure, and the distribution of current expenditure by resource category

Educational expenditure can first be divided into current and capital expenditure. Capital expenditure comprises spending on assets that last longer than one year and includes spending on the construction, renovation and major repair of buildings. Current expenditure comprises spending on school resources used each year for the operation of schools.

*Significant differences among OECD countries in the emphasis on R&D in tertiary institutions explain part of the variation in expenditure per tertiary student.*

*Student welfare services are integral functions of schools and universities.*

*Expenditure on ancillary services at primary, secondary, and post-secondary non-tertiary levels represents 5% of total spending on educational institutions.*

Current expenditure can be further sub-divided into three broad functional categories: compensation of teachers, compensation of other staff, and other current expenditure (on, for example, teaching materials and supplies, maintenance of school buildings, preparation of student meals and renting of school facilities). The amount allocated to each of these functional categories will depend in part on current and projected changes in enrolment, on the salaries of educational personnel and on costs of maintenance and construction of educational facilities.

Education takes place mostly in school and university settings. The labour-intensive technology of education explains the large proportion of current spending within total educational expenditure. In primary, secondary, and post-secondary non-tertiary education combined, current expenditure accounts for nearly 92% of total spending on average across all OECD countries.

There is some noticeable variation among OECD countries with respect to the relative proportions of current and capital expenditure: at the primary, secondary and post-secondary non-tertiary levels combined, the proportion of current expenditure ranges from less than 87% in Iceland, Korea and Luxembourg to 96% or more in Austria, Belgium, Canada, Mexico and Portugal (Chart B6.2).

*In all except four OECD countries, 70% or more of current expenditure at the primary, secondary and post-secondary non-tertiary levels is spent on staff salaries.*

The salaries of teachers and other staff employed in education account for the largest proportion of current expenditure in OECD countries. On average across OECD countries, expenditure on the compensation of educational personnel accounts for 81% of current expenditure at the primary, secondary and post-secondary non-tertiary levels of education combined. Although 70% or less of expenditure in the Czech Republic, Finland, Korea and Sweden is devoted to the compensation of educational personnel, the proportion is 90% or more in Greece, Luxembourg, Mexico, Portugal and Turkey (Chart B6.2).

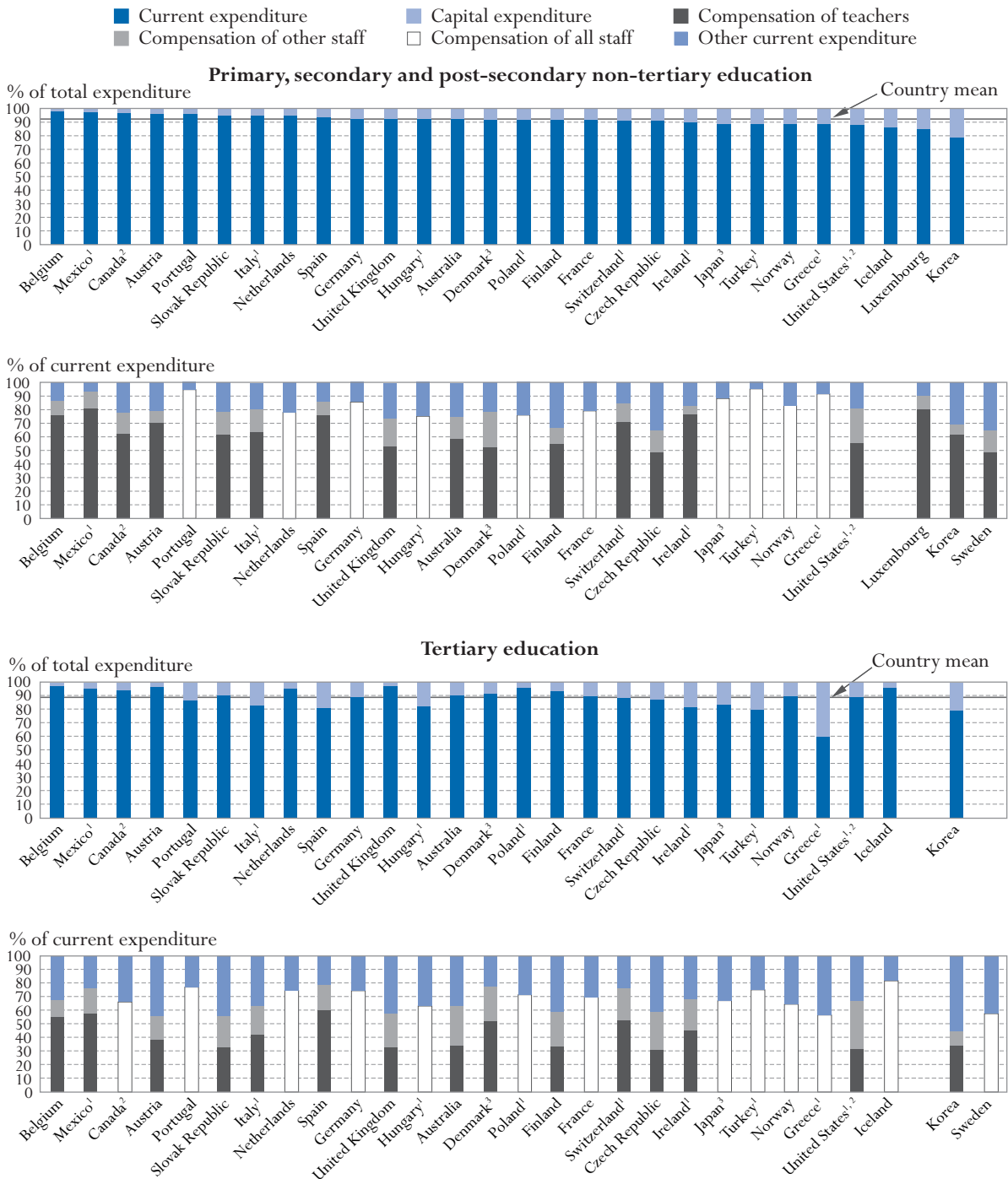
*OECD countries with smaller education budgets invest relatively more in personnel and less in other services.*

OECD countries with relatively small education budgets (Mexico, Portugal and Turkey, for example) tend to devote a larger proportion of current educational expenditure to the compensation of personnel and a smaller proportion to services that are sub-contracted or bought in, such as support services (*e.g.*, maintenance of school buildings), ancillary services (*e.g.*, preparation of meals for students) and renting of school buildings and other facilities.

*OECD countries vary in the proportions of current expenditure that they allocate to the compensation of teachers and other staff.*

In Denmark and the United States, around one quarter of current expenditure in primary, secondary and post-secondary non-tertiary education combined goes towards compensation of non-teaching staff, while in Austria, Ireland, Korea, Luxembourg and Spain this figure is 10% or less. These differences are likely to reflect the degree to which educational personnel specialise in non-teaching activities in a particular country (for example, principals who do not teach, guidance counsellors, bus drivers, school nurses, janitors and maintenance workers) (Table B6.3).

**Chart B6.2. Distribution of total and current expenditure on educational institutions (2001)**  
By resource category and level of education



B6

1. Public institutions only.  
 2. Post-secondary non-tertiary included in tertiary education.  
 3. Post-secondary non-tertiary included in both upper secondary and tertiary education.  
 Countries are ranked in descending order of current expenditure on primary, secondary and post-secondary non-tertiary education.  
 Source: OECD. Table B6.3. See Annex 3 for notes ([www.oecd.org/edu/eqq2004](http://www.oecd.org/edu/eqq2004)).

*At the tertiary level, the proportion of capital expenditure is generally larger because of differentiated and advanced teaching facilities.*

At the tertiary level, the proportion of total expenditure spent on capital outlays is larger than at the primary, secondary and post-secondary non-tertiary levels, generally because of more differentiated and advanced teaching facilities. In 14 out of 27 OECD countries for which data are available, the proportion spent on capital expenditure at the tertiary level is 10% or more, and in Greece, Korea and Turkey it is above 20% (Chart B6.2).

Differences are likely to reflect how tertiary education is organised in each OECD country, as well as the degree to which expansion in enrolments requires the construction of new buildings.

OECD countries, on average, spend 33% of current expenditure at the tertiary level on purposes other than the compensation of educational personnel. This is explained by the higher cost of facilities and equipment in higher education (Chart B6.2).

### **Definitions and methodologies**

The distinction between current and capital expenditure is the standard definition used in national income accounting. Current expenditure refers to goods and services consumed within the current year, and requiring recurrent production in order to sustain the provision of educational services. Capital expenditure refers to assets which last longer than one year, including spending on construction, renovation or major repair of buildings and new or replacement equipment. The capital expenditure reported here represents the value of educational capital acquired or created during the year in question – that is, the amount of capital formation – regardless of whether the capital expenditure was financed from current revenue or by borrowing. Neither current nor capital expenditure includes debt servicing.

Calculations cover expenditure by public institutions or, where available, that of public and private institutions combined.

Current expenditure other than on the compensation of personnel includes expenditure on services which are sub-contracted or bought in, such as support services (*e.g.*, maintenance of school buildings), ancillary services (*e.g.*, preparation of meals for students) and renting of school buildings and other facilities. These services are obtained from outside providers (unlike the services provided by the education authorities or educational institutions themselves using their own personnel).

Expenditure on R&D includes all expenditure on research performed at universities and other tertiary education institutions, regardless of whether the research is financed from general institutional funds or through separate grants or contracts from public or private sponsors. The classification of expenditure is based on data collected from the institutions carrying out R&D rather than on the sources of funds.

“Ancillary services” are services provided by educational institutions that are peripheral to the main educational mission. The two main components of ancillary services are student welfare services and services for the general public.

*Data refer to the financial year 2001 and are based on the VOE data collection on education statistics administered by the OECD in 2003 (for details see Annex 3).*

At primary, secondary, and post-secondary non-tertiary levels, student welfare services include meals, school health services, and transportation to and from school. At the tertiary level, it includes halls of residence (dormitories), dining halls, and health care. Services for the general public include museums, radio and television broadcasting, sports and recreational and cultural programmes. Expenditure on ancillary services, including fees from students or households, is excluded.

Educational core services are estimated as the residual of all expenditure, *i.e.*, total expenditure on educational institutions net of expenditure on R&D and ancillary services.

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2004 edition due to changes in definitions and coverage that were made as a result of the OECD expenditure comparability study (see Annex 3 at [www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004) for details on changes).

**Table B6.1. Expenditure on institutions by service category as a percentage of GDP (2001)**
*Expenditure on instruction, R&D and ancillary services in educational institutions  
and private expenditure on educational goods purchased outside educational institutions*

	Primary, secondary and post-secondary non-tertiary education				Tertiary education				
	Expenditure on educational institutions			Private payments on instructional services/goods outside educational institutions	Expenditure on educational institutions				Private payments on instructional services/goods outside educational institutions
	Educational core services	Ancillary services (transport, meals, housing provided by institutions)	Total		Educational core services	Ancillary services (transport, meals, housing provided by institutions)	Research and development at tertiary institutions	Total	
Australia	4.15	0.17	4.32	0.14	1.03	0.09	0.42	1.54	0.17
Austria	x(3)	x(3)	3.86	m	0.79	x(5)	0.41	1.20	m
Belgium	4.10	0.15	4.25	0.13	0.92	0.04	0.42	1.38	0.10
Canada <sup>1</sup>	3.21	0.18	3.40	m	1.84	0.14	0.54	2.52	0.41
Czech Republic	2.71	0.36	3.07	m	0.80	0.09	x(6)	0.89	m
Denmark <sup>2</sup>	x(3)	x(3)	4.32	0.55	1.37	x(5)	0.45	1.82	0.95
Finland	3.35	0.40	3.75	m	1.11	n	0.62	1.73	m
France <sup>3</sup>	3.61	0.56	4.17	0.14	0.78	0.07	0.23	1.08	0.08
Germany	3.50	0.08	3.58	0.18	0.63	n	0.41	1.04	0.08
Greece <sup>4</sup>	2.62	0.05	2.67	n	0.87	0.05	0.20	1.12	m
Hungary <sup>4</sup>	2.71	0.34	3.05	m	0.82	0.12	0.21	1.16	m
Iceland	x(3)	x(3)	5.23	m	x(8)	x(8)	x(8)	0.90	m
Ireland <sup>3</sup>	3.02	0.07	3.09	m	1.08	x(5)	0.26	1.34	m
Italy	3.56	0.15	3.71	0.07	0.53	0.03	0.36	0.92	0.21
Japan <sup>2</sup>	x(3)	x(3)	2.91	0.76	x(8)	x(8)	x(8)	1.06	m
Korea	x(3)	x(3)	4.55	m	x(8)	x(8)	x(8)	2.75	m
Luxembourg	x(3)	x(3)	3.64	0.01	m	m	m	m	m
Mexico <sup>3</sup>	x(3)	x(3)	4.22	0.23	0.81	x(5)	0.18	1.00	0.09
Netherlands	3.22	0.04	3.25	0.16	0.80	n	0.49	1.29	0.06
New Zealand	x(3)	x(3)	4.32	m	x(8)	x(8)	x(8)	0.93	m
Norway	x(3)	x(3)	4.58	m	x(8)	x(8)	x(8)	1.28	m
Poland <sup>3,4</sup>	3.78	0.25	4.03	m	0.85	n	0.21	1.06	m
Portugal	x(3)	x(3)	4.23	0.06	x(8)	x(8)	x(8)	1.10	0.07
Slovak Republic	2.41	0.25	2.66	0.21	0.76	0.05	0.08	0.90	0.10
Spain	3.14	0.04	3.18	m	0.97	x(5)	0.25	1.22	m
Sweden	3.88	0.43	4.31	0.49	0.92	a	0.75	1.68	0.62
Switzerland	x(3)	x(3)	4.52	m	x(8)	x(8)	x(8)	1.24	m
Turkey <sup>3,4</sup>	2.35	0.10	2.45	m	1.05	m	m	1.05	m
United Kingdom	3.68	0.26	3.94	m	0.81	m	0.27	1.08	0.24
United States <sup>1</sup>	4.07	n	4.07	a	2.15	0.32	0.26	2.73	a
<i>Country mean</i>	<i>3.32</i>	<i>0.20</i>	<i>3.78</i>	<i>0.22</i>	<i>0.99</i>	<i>0.07</i>	<i>0.35</i>	<i>1.34</i>	<i>0.23</i>

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. Post-secondary non-tertiary included in tertiary education and excluded from primary, secondary and post-secondary non-tertiary education.

2. Post-secondary non-tertiary included in both upper secondary and tertiary education.

3. Research and development expenditure and thus total expenditure is underestimated.

4. Ancillary services in public institutions only. Other ancillary services included in instructional services.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).



**Table B6.2. Annual expenditure per student on instruction, ancillary services and R&D (2001)**  
*Expenditure on educational institutions in US dollars converted using PPPs from public and private sources, by type of service and level of education*

	Primary, secondary and post-secondary non-tertiary education			Tertiary education			
	Direct expenditure on educational institutions			Direct expenditure on educational institutions			
	Educational core services	Ancillary services (transport, meals, housing provided by institutions)	Total	Educational core services	Ancillary services (transport, meals, housing provided by institutions)	Research and development	Total
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Australia	5 826	237	6 063	8 491	709	3 488	12 688
Austria	x(3)	x(3)	7 852	7 388	x(4)	3 886	11 274
Belgium	6 536	244	6 781	7 713	371	3 505	11 589
Canada <sup>1</sup>	m	m	m	m	m	m	m
Czech Republic	2 486	333	2 819	4 978	576	x(5)	5 555
Denmark <sup>2</sup>	x(3)	x(3)	7 865	10 771	x(4)	3 510	14 280
Finland	5 118	615	5 733	7 051	10	3 921	10 981
France	5 870	913	6 783	6 405	560	1 872	8 837
Germany	5 918	137	6 055	6 342	28	4 134	10 504
Greece	3 411	65	3 475	3 330	204	747	4 280
Hungary <sup>3</sup>	2 381	297	2 677	5 077	745	1 300	7 122
Iceland	x(3)	x(3)	7 010	x(7)	x(7)	x(7)	7 674
Ireland	4 302	95	4 397	8 086	x(4)	1 918	10 003
Italy <sup>3</sup>	7 402	312	7 714	4 792	272	3 283	8 347
Japan <sup>2</sup>	x(3)	x(3)	6 179	x(7)	x(7)	x(7)	11 164
Korea	x(3)	x(3)	4 406	x(7)	x(7)	x(7)	6 618
Luxembourg	x(3)	x(3)	11 091	m	m	m	m
Mexico	x(3)	x(3)	1 575	3 538	x(4)	803	4 341
Netherlands	5 588	66	5 654	8 075	n	4 900	12 974
New Zealand	x(3)	x(3)	m	x(7)	x(7)	x(7)	m
Norway <sup>3</sup>	x(3)	x(3)	8 109	x(7)	x(7)	x(7)	13 189
Poland <sup>3</sup>	2 247	148	2 396	2 864	n	715	3 579
Portugal	x(3)	x(3)	5 065	x(7)	x(7)	x(7)	5 199
Slovak Republic	1 526	158	1 681	4 493	295	497	5 285
Spain	4 809	61	4 870	5 951	x(4)	1 504	7 455
Sweden	5 736	636	6 372	8 356	a	6 833	15 188
Switzerland <sup>3</sup>	x(3)	x(3)	8 844	x(7)	x(7)	x(7)	20 230
Turkey <sup>3</sup>	m	m	m	3 950	m	m	m
United Kingdom	4 977	347	5 324	8 101	m	2 652	10 753
United States <sup>1,4</sup>	8 144	n	8 144	17 515	2 583	2 136	22 234
<i>Country mean</i>	<i>4 840</i>	<i>274</i>	<i>5 738</i>	<i>6 822</i>	<i>454</i>	<i>2 716</i>	<i>10 052</i>

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. Post-secondary non-tertiary included in tertiary education.
2. Post-secondary non-tertiary included in both upper secondary and tertiary education.
3. Public institutions only.
4. Public and independent private institutions only.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

**Table B6.3. Expenditure on educational institutions by resource category and level of education (2001)**
*Distribution of total and current expenditure on educational institutions from public and private sources*

	Primary, secondary and post-secondary non-tertiary education						Tertiary education					
	Percentage of total expenditure		Percentage of current expenditure				Percentage of total expenditure		Percentage of current expenditure			
	Current	Capital	Compensation of teachers	Compensation of other staff	Compensation of all staff	Other current	Current	Capital	Compensation of teachers	Compensation of other staff	Compensation of all staff	Other current
<b>OECD COUNTRIES</b>												
Australia	92.2	7.8	58.4	16.9	75.2	24.8	90.3	9.7	34.3	29.6	63.9	36.1
Austria	96.4	3.7	71.0	8.1	79.1	20.9	96.6	3.5	38.6	17.6	56.2	43.8
Belgium	98.2	1.8	76.6	10.4	87.0	13.0	97.7	2.3	55.6	12.7	68.3	31.7
Canada <sup>1</sup>	96.8	3.2	62.4	15.6	77.9	22.1	94.5	5.5	x(11)	x(11)	66.5	33.5
Czech Republic	91.2	8.8	48.7	16.1	64.8	35.2	87.5	12.5	31.2	27.7	58.9	41.1
Denmark <sup>2</sup>	92.0	8.0	52.6	25.9	78.5	21.6	92.0	8.0	52.3	25.5	77.7	22.3
Finland	91.7	8.3	55.0	11.9	67.0	33.0	93.6	6.4	33.7	25.4	59.1	40.9
France	91.7	8.3	x(5)	x(5)	78.9	21.1	89.7	10.3	x(11)	x(11)	70.1	29.9
Germany	92.4	7.6	x(5)	x(5)	85.2	14.8	89.5	10.5	x(11)	x(11)	74.8	25.2
Greece <sup>3</sup>	88.6	11.4	x(5)	x(5)	91.3	8.7	60.1	39.9	x(11)	x(11)	56.9	43.1
Hungary <sup>3</sup>	92.2	7.8	x(5)	x(5)	74.9	25.1	82.2	17.8	x(11)	x(11)	63.4	36.6
Iceland	86.1	13.9	x(5)	x(5)	m	m	96.2	3.8	x(11)	x(11)	81.9	18.1
Ireland <sup>3</sup>	89.7	10.3	76.5	6.1	82.7	17.3	81.6	18.4	45.6	23.2	68.7	31.3
Italy <sup>3</sup>	94.7	5.3	63.8	17.0	80.8	19.2	83.0	17.0	42.3	21.1	63.4	36.6
Japan <sup>2</sup>	88.9	11.1	x(5)	x(5)	87.7	12.3	83.7	16.3	x(11)	x(11)	67.5	32.5
Korea	78.7	21.3	61.7	7.8	69.5	30.5	79.5	20.5	34.2	11.1	45.2	54.8
Luxembourg	85.2	14.8	80.8	9.7	90.5	9.5	m	m	m	m	m	m
Mexico <sup>3</sup>	97.2	2.8	81.3	12.3	93.6	6.4	95.7	4.3	57.7	19.1	76.8	23.2
Netherlands	94.6	5.4	x(5)	x(5)	77.8	22.2	95.4	4.6	x(11)	x(11)	75.2	24.8
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m
Norway	88.7	11.3	x(5)	x(5)	82.8	17.2	90.1	9.9	x(11)	x(11)	64.9	35.1
Poland <sup>3</sup>	91.9	8.1	x(5)	x(5)	75.8	24.2	96.2	3.8	x(11)	x(11)	71.8	28.2
Portugal	96.2	3.8	x(5)	x(5)	94.3	5.7	87.0	13.0	x(11)	x(11)	77.4	22.6
Slovak Republic	94.9	5.1	62.0	16.8	78.8	21.2	90.3	9.7	33.0	23.3	56.3	43.8
Spain	93.5	6.5	76.0	9.9	85.9	14.1	80.9	19.1	59.9	19.4	79.3	20.7
Sweden	m	m	48.7	16.1	65.1	34.9	m	m	x(11)	x(11)	57.9	42.1
Switzerland <sup>3</sup>	91.2	8.8	71.5	13.1	84.6	15.4	88.5	11.5	52.8	24.1	76.9	23.1
Turkey <sup>3</sup>	88.8	11.2	x(5)	x(5)	94.8	5.2	79.8	20.2	x(11)	x(11)	75.3	24.7
United Kingdom	92.2	7.8	53.0	20.9	73.9	26.1	97.7	2.3	32.8	25.3	58.1	41.9
United States <sup>1,3</sup>	88.1	11.9	55.7	25.3	81.0	19.0	89.4	10.6	31.6	35.9	67.4	32.6
<b>Country mean</b>	<b>91.6</b>	<b>8.4</b>	<b>64.2</b>	<b>14.4</b>	<b>80.7</b>	<b>19.3</b>	<b>88.5</b>	<b>11.5</b>	<b>42.4</b>	<b>22.7</b>	<b>67.1</b>	<b>32.9</b>
<b>PARTNER COUNTRIES</b>												
Argentina <sup>3</sup>	98.4	1.6	59.4	28.9	88.3	11.7	99.2	0.8	54.5	35.3	89.8	10.2
Brazil <sup>3,4</sup>	93.3	6.7	x(5)	x(5)	79.2	20.8	96.9	3.1	x(11)	x(11)	82.2	17.8
Chile <sup>3,5</sup>	83.5	16.5	x(5)	x(5)	61.0	39.0	90.2	9.8	x(11)	x(11)	66.4	33.6
India <sup>1,3</sup>	95.3	4.7	86.7	5.4	92.2	7.8	98.8	1.2	99.7	x:X1	99.7	0.3
Indonesia <sup>3</sup>	93.9	6.1	78.0	7.8	85.8	14.2	82.0	18.0	87.2	11.8	99.0	1.0
Israel	92.3	7.7	x(5)	x(5)	78.1	21.9	90.5	9.5	x(11)	x(11)	75.1	24.9
Jamaica <sup>3</sup>	94.3	5.7	70.1	12.9	83.0	17.0	84.7	15.3	47.4	24.3	71.6	28.4
Jordan <sup>3</sup>	87.9	12.1	86.0	9.8	95.8	4.2	a	a	a	a	a	a
Malaysia <sup>3</sup>	63.2	36.8	64.8	11.6	76.4	23.6	48.6	51.4	31.5	13.5	45.0	55.0
Paraguay <sup>3</sup>	m	m	m	m	m	m	87.0	13.0	65.3	16.5	81.8	18.2
Peru <sup>3</sup>	m	5.3	m	m	m	m	85.5	14.5	51.4	8.1	59.5	40.5
Philippines <sup>3</sup>	91.6	8.4	85.6	a	85.6	14.4	95.4	4.6	75.2	a	75.2	24.8
Tunisia <sup>3</sup>	89.6	10.5	x(1)	x(1)	x(1)	x(1)	75.2	24.8	m	m	m	m
Uruguay <sup>3</sup>	96.6	3.4	35.3	12.0	47.4	52.6	92.0	8.0	59.3	24.2	83.5	16.5
Zimbabwe <sup>3,5</sup>	99.1	0.9	100.0	n	100.0	a	a	a	a	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. Post-secondary non-tertiary included in tertiary education.

2. Post-secondary non-tertiary included in both upper secondary and tertiary education.

3. Public institutions only.

4. Year of reference 2000.

5. Year of reference 2002.

Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2004](http://www.oecd.org/edu/eag2004)).

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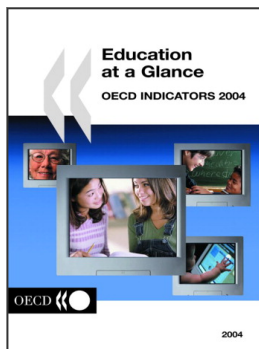
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