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*Chapter*

**B**

FINANCIAL AND HUMAN  
RESOURCES INVESTED  
IN EDUCATION



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## Classification of educational expenditure

Educational expenditure in this indicator are 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 not only offer teaching services but also various ancillary services to support students and their families, such as meals, transport, housing, etc. In addition, 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 between the sources from which the funds originate. 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 dark blue colour. The diagram is reported at the beginning of each indicator to signal its coverage.

	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 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 funds     
 ■ Private funds publicly subsidised

## INDICATOR B1: EDUCATIONAL EXPENDITURE PER STUDENT

- In the OECD area, annual public and private expenditure on educational institutions per student between primary and tertiary education are equal in average to US\$ 6 361 but ranges from around US\$ 3 000 per student or less in Czech Republic, Hungary, Mexico, Poland, the Slovak Republic, and Turkey to more than US\$ 8 000 per student in Austria, Denmark, Norway, Switzerland and United States.
- OECD countries spend US\$ 4 470 per primary student, US\$ 5 501 per secondary student and US\$ 11 109 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.
- Lower expenditure cannot automatically be equated with a lower quality of educational services. Australia, Finland, Ireland, Korea and the United Kingdom, for example, which have moderate expenditure on education per student at 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.
- In some OECD countries, low annual expenditure per tertiary student still translates into high overall costs per tertiary student because the duration of tertiary studies is long.
- Expenditure per primary, secondary and post-secondary non-tertiary student increased between 1995 and 2000 by over 25 per cent in Australia, Greece, Ireland, Portugal and Spain whereas at the tertiary level, spending on education has not always kept pace with the rapid expansion of enrolments.
- In eight out of 22 OECD countries expenditure on educational institutions per tertiary student decreased between 1995 and 2000 whereas GDP per capita increased.

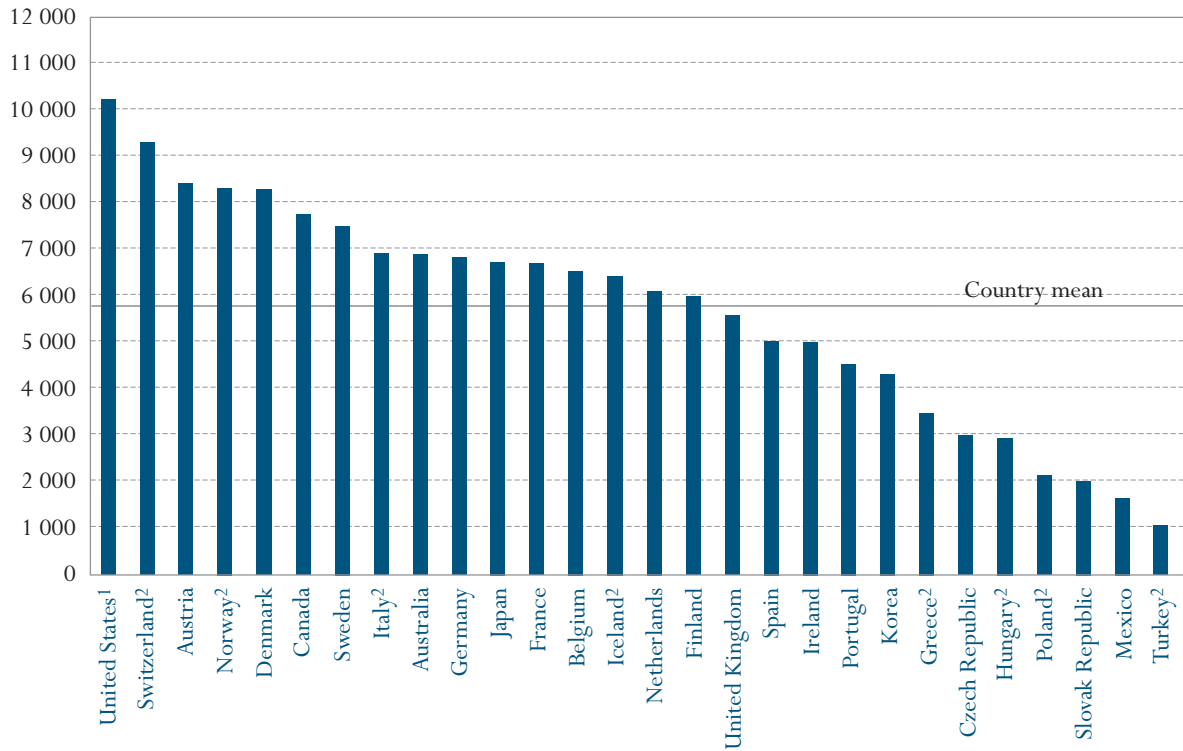
**B<sub>1</sub>**

Chart B1.1

## Expenditure on educational institutions per student (2000)

Annual expenditure on educational institutions per student in equivalent US dollars converted using PPPs, for primary to tertiary education, based on full-time equivalents

Expenditure per student (equivalent US dollars converted using PPPs)



B1

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/eag2003](http://www.oecd.org/edu/eag2003)).

B<sub>1</sub>

*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.*

### 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, needs to be balanced against placing undue burdens 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 the optimal volume of resources required to prepare each student for life and work in modern societies is difficult to assess, 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 also 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 in this indicator of how trends in expenditure on education per student have evolved shows how the expansion of enrolments in many OECD countries, particularly in tertiary education, has not always been paralleled by changes in educational investment.

Finally, decisions on the allocation of funds to 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.

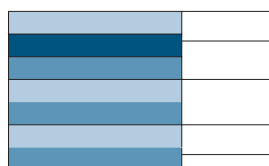
### Evidence and explanations

#### 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.

While educational expenditure is dominated below the tertiary level by spending on instructional services, at the tertiary level, other services, particularly those related to R&D activities, 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.



*Coverage diagram (see page 181 for explanations)*



## Expenditure on education per student in equivalent US dollars

Annual expenditure on educational institutions per student between primary and tertiary education provides an assessment of the investment that is made in each student. OECD countries as a whole spend US\$ 6 361 per student between primary and tertiary education. Spending on education at this level ranges from around US\$ 3 000 per student or less in Czech Republic, Hungary, Mexico, Poland, the Slovak Republic, and Turkey to more than US\$ 8 000 per student in Austria, Denmark, Norway, Switzerland and the United States. In nine out of 28 countries, spending on education varies between US\$ 6 000 and 7 000 per student.

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\$ 4 470 per student at the primary level, US\$ 5 501 per student at the secondary level and US\$ 11 109 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\$ 4 381 at the primary level, US\$ 5 957 at the secondary level and US\$ 9 571 at the tertiary level of education (Table B1.1)

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\$ 1 291 per student in Mexico to US\$ 7 074 per student in Denmark. Differences between OECD countries are even greater at the secondary level, where spending on education per student varies by a factor of 6, from US\$ 1 615 in Mexico to US\$ 9 780 in Switzerland. Expenditure on education per tertiary student ranges from US\$ 3 222 in Poland to US\$ 20 358 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 bought by the US dollar in the United States.

On average, expenditure on Research and Development (R&D) in tertiary institutions represents 27 per cent of all tertiary expenditure. In six out of 21 OECD countries for which tertiary expenditure are separated by type of services, R&D expenditure in tertiary institutions represents more than 35 per cent of tertiary expenditure. On a per student-basis this can translate into significant amounts, as in Australia, Austria, Belgium, Canada, Denmark, Germany, the Netherlands, Sweden and the United Kingdom, where expenditure for R&D in tertiary institutions amounts to over US\$ 3 000 per student (Chart B1.2 and Table B6.2).

R&D spending in tertiary educational institutions not only depends on total R&D expenditure in a country, but also on the national infrastructure for R&D activities. OECD countries in which most R&D is performed by tertiary

*Among nine out of 28 countries, spending on education between primary and tertiary education lies between US\$ 6 000 and 7 000 per student.*

*As a whole, OECD countries spend US\$ 4 470 per primary student, US\$ 5 501 per secondary student and US\$ 11 109 per tertiary student...*

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

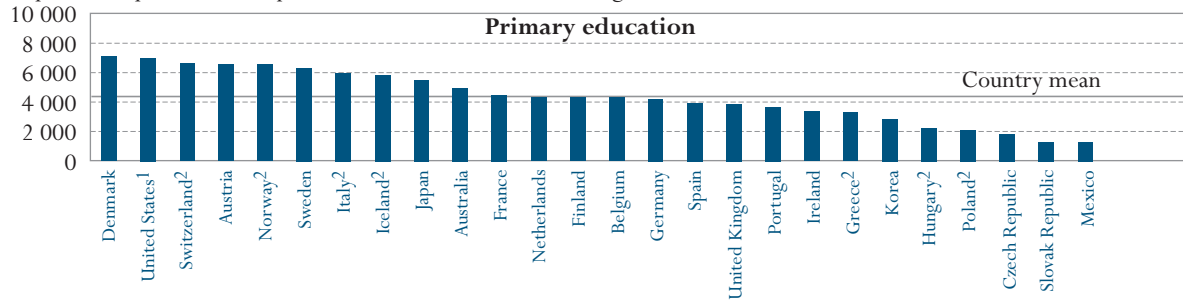
*R&D expenditure in tertiary institutions amounts to over US\$ 3 000 per student in Australia, Belgium, Germany, the Netherlands, Sweden and the United Kingdom.*

Chart B1.2

Expenditure on educational institutions per student by level of education (2000)  
 Annual expenditure on educational institutions per student in equivalent US dollars converted using PPPs,  
 by level of education, based on full-time equivalents

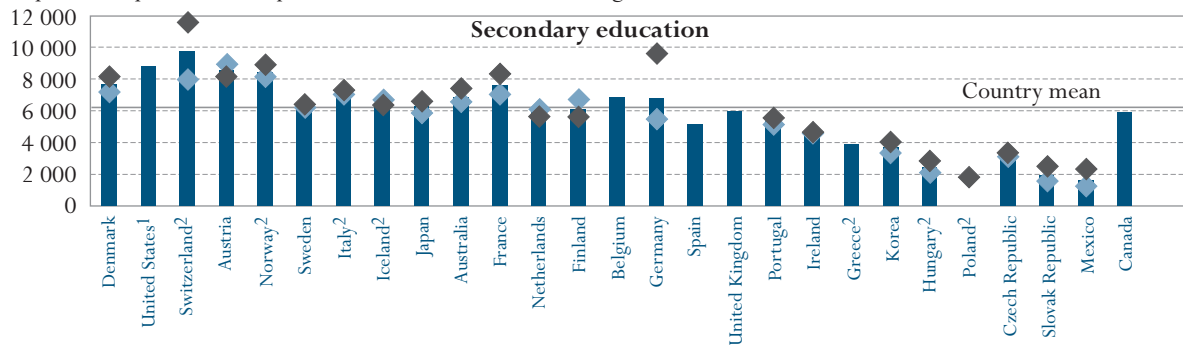
■ Total expenditure per student      ■ Research and development in tertiary institutions  
 ■ Ancillary services (transport, meals, housing provided by institutions)      ■ Educational core services

Expenditure per student (equivalent US dollars converted using PPPs)

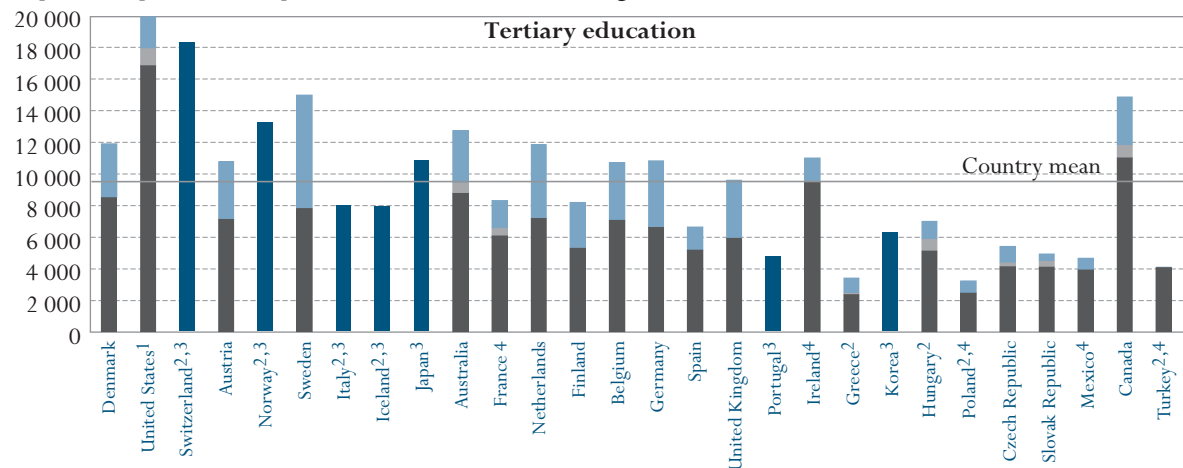


◆ Lower secondary education      ◆ Upper secondary education

Expenditure per student (equivalent US dollars converted using PPPs)



Expenditure per student (equivalent US dollars converted using PPPs)



1. Public and independent private institutions only.

2. Public institutions only.

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

4. Research and development expenditure at tertiary level and thus total expenditure are underestimated.

Countries are ranked in descending order of expenditure per student in primary education. Data for primary education are missing for Canada and Turkey.

Source: OECD. Tables B1.1 and B6.2. See Annex 3 for notes ([www.oecd.org/edu/eqq2003](http://www.oecd.org/edu/eqq2003)).

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.

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 D5) and in teaching materials and facilities influence the differences in cost between 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, for example, which have moderate expenditure on education per student at 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 Indicators A5 and A6)

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

Expenditure on education per student exhibits a common pattern throughout the OECD: in each OECD country it 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 – despite some differences – similar organisation, curriculum, teaching style and management. These shared features are likely to lead to similar patterns of unit expenditure.

Comparisons of the distribution of expenditure between levels of education are an indication of 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.

However, even though expenditure on education per student rises with the level of education in almost all OECD countries from primary to tertiary, the relative sizes of the differentials vary markedly between countries (Chart B1.3). At the secondary level, expenditure on education per student is, on average, 1.4 times that at the primary level, although the difference ranges from one time the expenditure per primary student in Sweden to more than 1.6 times 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 between countries. For example, whereas Italy and Portugal only spend around 1.3 times as much on a tertiary student as on a primary student, Mexico and the Slovak Republic spend respectively 3.6 and 3.8 times as much (Chart B1.3)

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

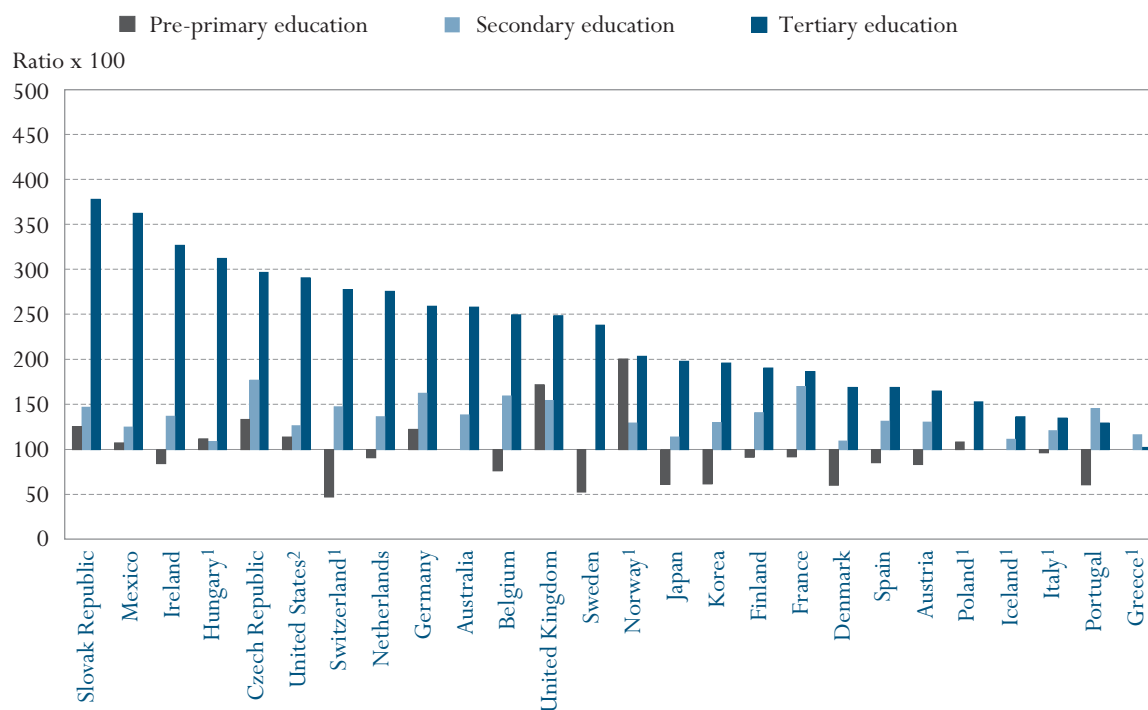
*Lower unit expenditure cannot simply be equated with lower student performance.*

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

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

Chart B1.3

Differences in expenditure on educational institutions per student relative to primary education (2000)  
 Ratio of expenditure on educational institutions per student at various levels of education to expenditure on educational institutions per student in primary education, multiplied by 100



Notes: A ratio of 500 for tertiary education means that expenditure on educational institutions per tertiary student in a particular country is 5 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 in a particular country is half the expenditure on educational institutions per primary student.

1. Public institutions only.

2. Public and independent private institutions only.

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

Source: OECD. Table B1.1. See Annex 3 for notes ([www.oecd.org/edu/eq2003](http://www.oecd.org/edu/eq2003)).

### 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.*

Since both the typical duration and the intensity of tertiary education vary between OECD countries, the differences between countries in annual expenditure on education per student on educational services 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 in order to find the best fit between 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.

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/eag2003](http://www.oecd.org/edu/eag2003)), some striking shifts in the rank order of OECD countries between the annual and aggregate expenditure can be noted.

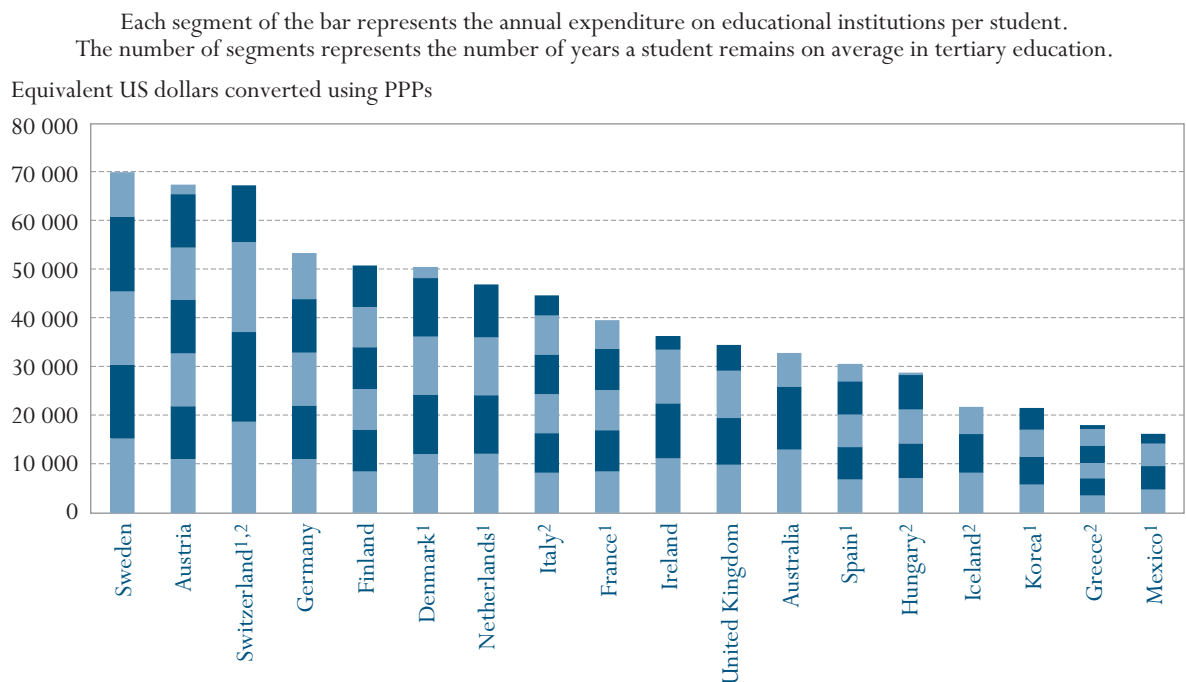
*Low annual expenditure may translate into high overall costs of tertiary education if the duration of tertiary studies is long.*

For example, annual spending per tertiary student in Ireland is about the same as in Austria (US\$ 11 083 in Ireland compared with US\$ 10 851 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 times longer in Austria than in Ireland (6.2 years in Austria, compared with 3.2 years in Ireland). As a consequence, the cumulative expenditure for each tertiary student is almost two times higher in Austria than in the Ireland (US\$ 66 948 compared with US\$ 35 909) (Chart B1.4 and Table B1.3).

Chart B1.4

### Cumulative expenditure on educational institutions per student over the average duration of tertiary studies (2000)

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



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

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

2. Public institutions only.

Source: OECD. Table B1.3. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

*OECD countries spend an average of 19 per cent of GDP per capita on each primary student, 25 per cent per secondary student and 42 per cent per tertiary student.*

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

*...but the trend can not be generalised.*

The total cost of tertiary-type A studies in Switzerland (US\$106 282) is more than twice as high as in the other reporting countries, except Germany (Table B1.3). These differences must, of course, be interpreted in the light of differences in national degree structures as well as possible differences between 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.

### **Educational expenditure per student in relation to national GDP**

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.

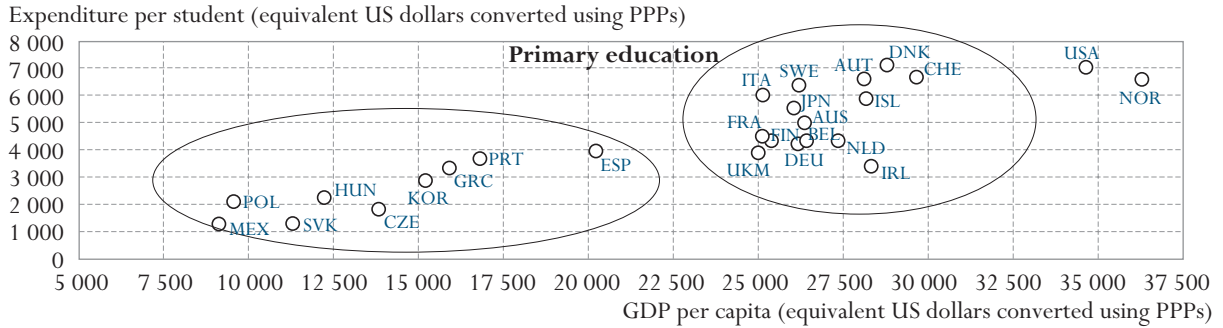
At the tertiary level, for example, OECD countries can be relatively high on this measure if a relatively large proportion of their wealth is spent on educating a relatively small number of students. For the OECD as a whole, expenditure on education per student averages 19 per cent of GDP per capita at the primary level, 25 per cent at the secondary level and 42 per cent at the tertiary level (Table B1.2).

The relationship between GDP per capita and expenditure per student is complex. Chart B1.3 shows the co-existence of two different relationships between two distinct groups of countries (see ovals in Chart B1.5). Countries with a GDP per capita equivalent to 25 000 US dollars 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, Spain and Turkey, poorer OECD countries tend to spend less per student than richer OECD countries. This trend can also be observed when looking at spending as a percentage of GDP per capita (Table B1.2).

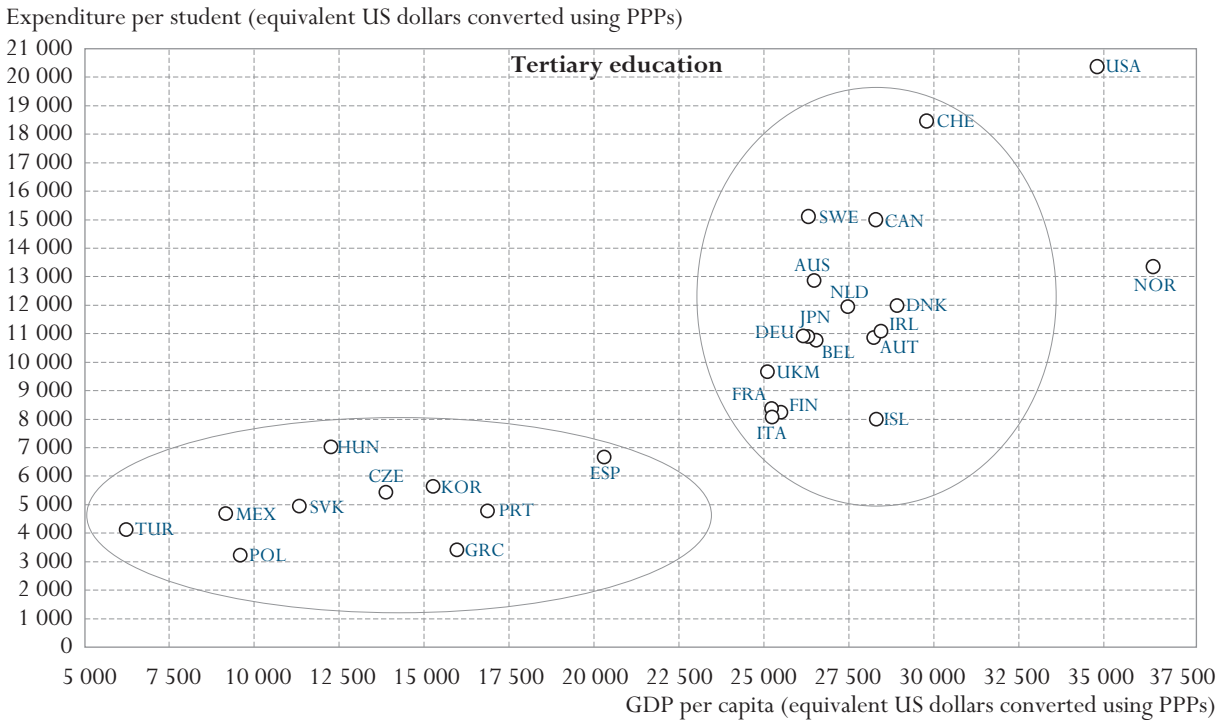
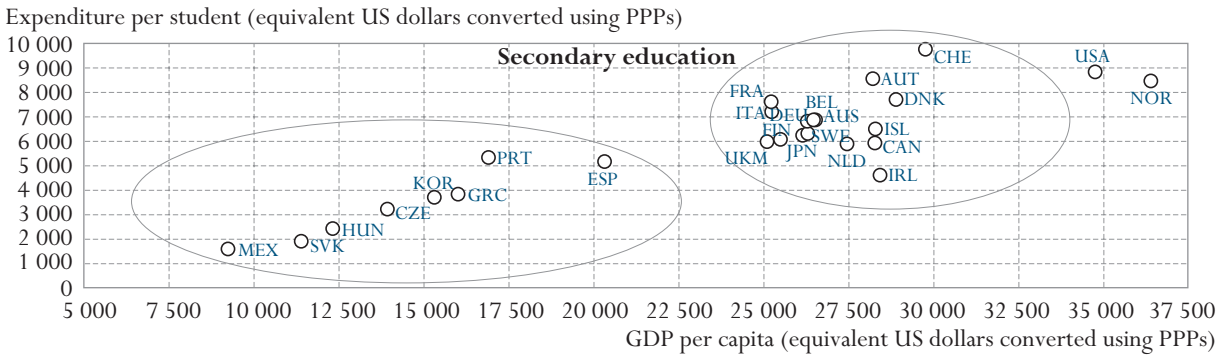
However, on the other hand, there is a considerable variation in spending on education per student among OECD countries with a GDP per capita greater than 25 000 US dollars (see ovals in Chart B1.5). The higher GDP per capita, the greater the variation in expenditure devoted to students. Thus, Austria, Canada and Ireland for example, are countries with similar levels of GDP per capita which spend very different proportions of their GDP per capita per student in secondary education. The proportion of national income spent per secondary student in Canada and Ireland - 21 and respectively 16 per cent of GDP per capita - is below the OECD average. By contrast, Austria spends 31 per cent of GDP per capita per secondary student, which is one of the highest proportions (Table B1.2).

Chart B1.5

**Expenditure on educational institutions per student relative to GDP per capita (2000)**  
 Annual expenditure on educational institutions per student relative to GDP per capita,  
 in equivalent US dollars converted using PPPs, by level of education



B1



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, B1.2 and Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).



### Changes in expenditure on education per student between 1995 and 2000

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. Chart B1.6 shows in absolute terms and at 2000 constant prices the effects of changes in enrolment and in expenditure between 1995 and 2000 on spending on education per student.

*Expenditure on education per primary, secondary and post-secondary non-tertiary student increased by over 25 per cent in Australia, Greece, Ireland, Portugal and Spain.*

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

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

Expenditure per primary, secondary and post-secondary non-tertiary student increased between 1995 and 2000 by over 25 per cent in Australia, Greece, Ireland, Portugal and Spain. On the other hand, the Czech Republic and Norway saw a decline in expenditure on education per primary, secondary and post-secondary non-tertiary student by over 5 per cent. In eight out of the 20 OECD countries, changes remained within plus or minus 6 per cent compared with 1995 (Chart B1.6)

Although institutional arrangements often adapt to changing demographic conditions only with a considerable time lag, 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 and Spain are exceptions to this pattern, where a drop of more than 9 per cent in enrolments combined with a slight rise in expenditure on education has led to a significant increase in spending on education per student. In contrast, in France, Greece, Ireland and Portugal, an increase of more than 10 per cent 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.

Other exceptions are Norway, Sweden and the United Kingdom, the three OECD countries with the highest increase in the number of primary, secondary and post-secondary non-tertiary students between 1995 and 2000. These however present different patterns. In Sweden, increases in expenditure out-paced the rising enrolment leading to a slight increase in expenditure per student, whereas in the United Kingdom the increase in enrolments was broadly matched by the increase in expenditure. 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 1997-1998 has not been counterbalanced by a similar increase in educational spending. This has led to a decrease in expenditure per primary, secondary and post-secondary non-tertiary student between 1995 and 2000.

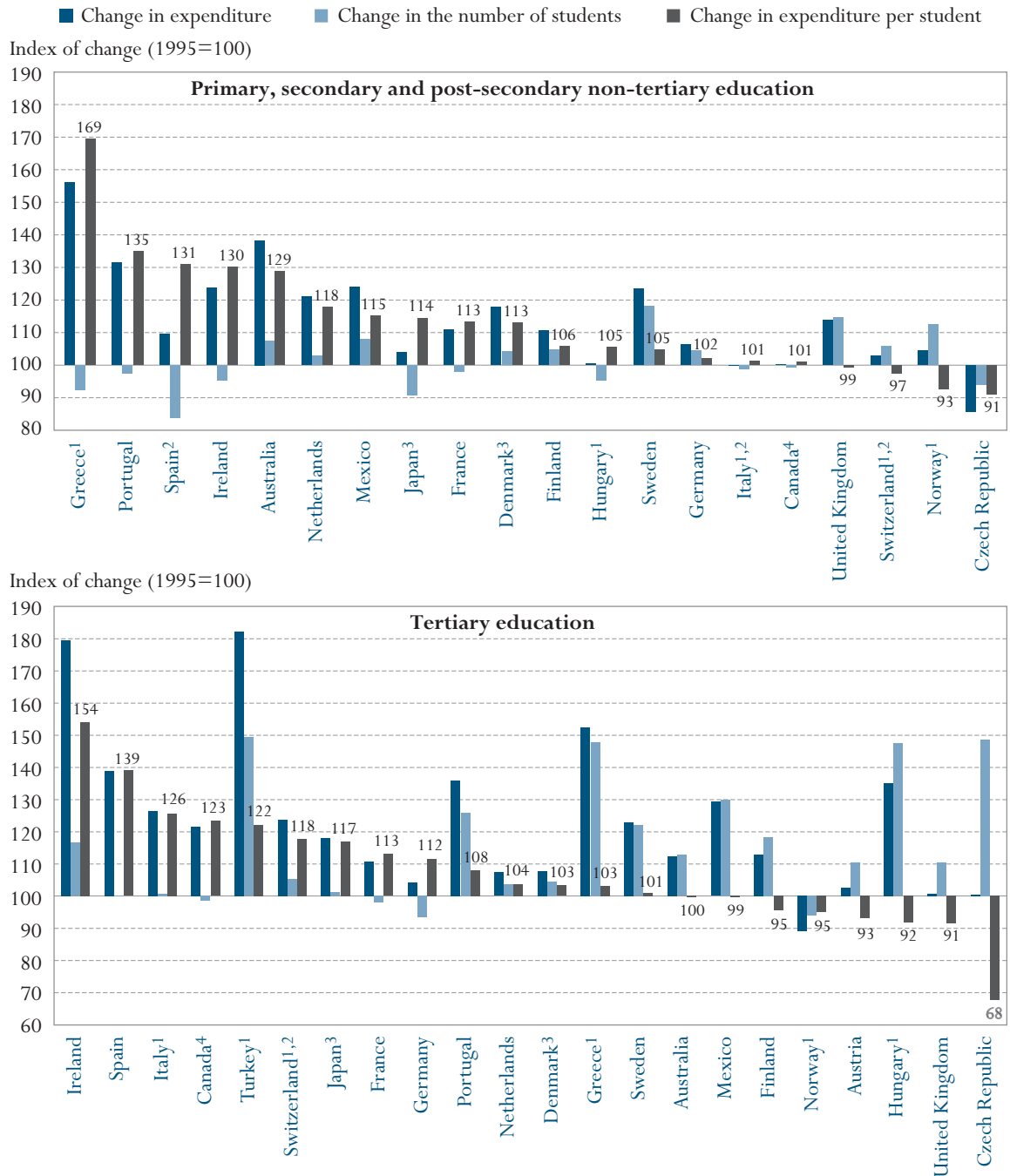
The pattern is different at the tertiary level of education. In six out of 22 OECD countries – Austria, the Czech Republic, Finland, Hungary, Norway and the United Kingdom – tertiary expenditure on education per student declined between 1995 and 2000 by 4.5 per cent or more. In all of these countries except Norway, this was mainly the result of the rapid increase in the number of tertiary students of more than 10 per cent during the same period



Chart B1.6

### Change in expenditure on educational institutions per student in comparison to underlying factors, by level of education (1995, 2000)

Indices of change in expenditure on educational institutions, enrolment and expenditure on educational institutions per student between 1995 and 2000 (1995=100, 2000 constant prices)



1. Public institutions only.

2. Public expenditure only.

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

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

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

Source: OECD. Table B2.2. See Annex 3 for notes ([www.oecd.org/edu/eq2003](http://www.oecd.org/edu/eq2003)).

(Chart B1.6). On the other hand, expenditure per tertiary student rose significantly in Greece, Ireland and Portugal despite a growth in enrolment of 48, 17 and 26 per cent, respectively. Germany and Norway were the only OECD countries in which the number of tertiary students actually declined by more than 4 per cent, although in Germany, this decline occurred mainly in the earlier years of this period whereas student numbers have lately begun to increase significantly. All other OECD countries except Turkey with increases in expenditure per tertiary student of more than 10 per cent saw little or no change in enrolments.

### **Changes in expenditure on education per student versus changes in GDP per capita between 1995 and 2000**

Does growing national income necessarily translate into higher spending on education per student? The arrows in Chart B1.7 show, for each OECD country, the changes in expenditure on tertiary education per student in relation to the changes in GDP per capita. The origin of the arrow represents GDP per capita (horizontal axis) and the expenditure on education per student (vertical axis) in 1995 (at 2000 prices and 2000 purchasing power parities), and the point of each arrow shows the corresponding values for 2000.

*In eight out of 22 OECD countries expenditure on educational institutions per tertiary student decreased between 1995 and 2000 whereas GDP per capita increased.*

In general, changes in expenditure on education per student are linked to changes in GDP per capita. However, in eight out of 22 OECD countries expenditure on educational institutions per tertiary student decreased between 1995 and 2000 whereas GDP per capita increased over the same period (see arrows in blue on Chart B1.7). Expenditure per student increased in all other countries. In nine of these – Canada, France, Germany, Ireland, Italy, Japan, Spain, Switzerland and Turkey – expenditure on education per student increased at a greater rate than GDP per capita between 1995 and 2000. In all the other OECD countries, GDP per capita increased at a greater rate than expenditure per tertiary student.

*Countries with comparable levels of expenditure and GDP per capita in 2000 display different patterns of investment in education between 1995 and 2000.*

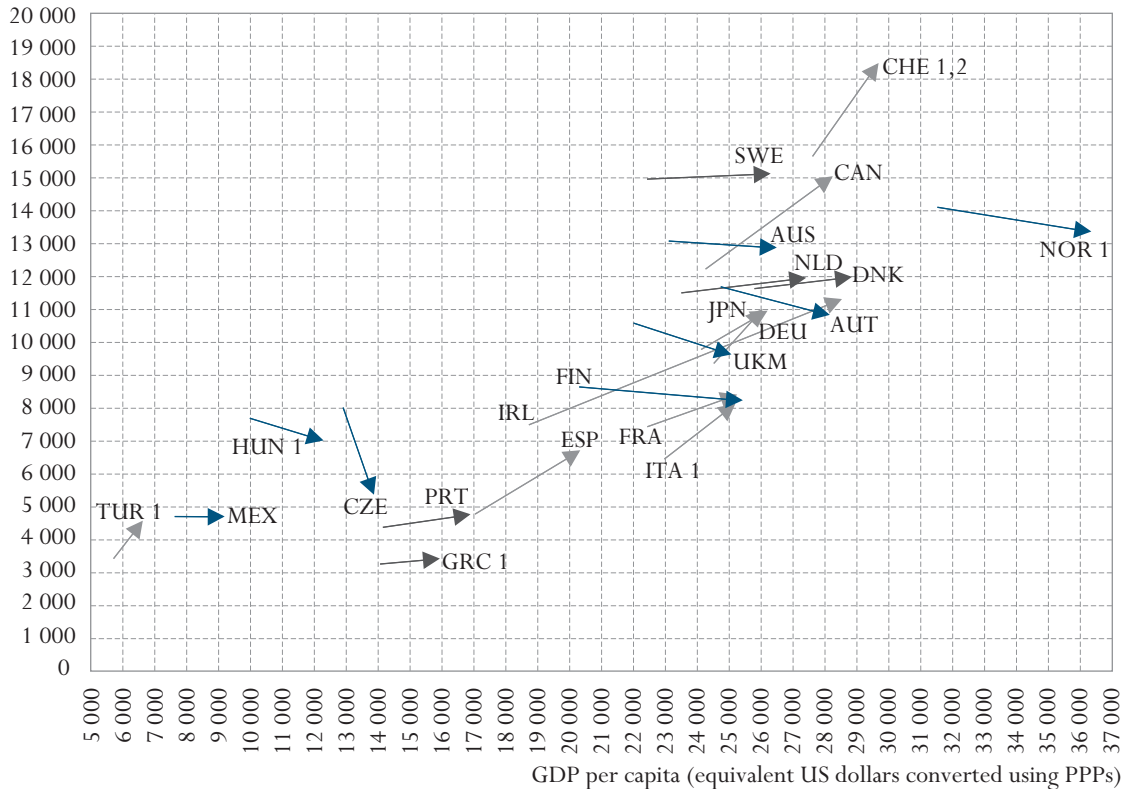
Among countries with comparable levels of expenditure on education per tertiary student and GDP per capita in 2000, it is possible to note some differences in the patterns of investment on education between 1995 and 2000. For example, while for the year 2000, Finland, France and Italy have approximately the same GDP per capita and expenditure on education per tertiary student, compared to 1995, it appears that Italy and to a lesser extent France increased spending on education per student at a greater rate than GDP per capita growth. By contrast, GDP per capita also increased significantly in Finland between 1995 and 2000 whereas expenditure on education per tertiary student slightly decreased over the same period.

Chart B1.7.

Changes in expenditure on educational institutions per student in tertiary education and national income  
Changes between 1995 and 2000 in expenditure on educational institutions per tertiary student compared  
with GDP per capita (2000 constant US dollars and 2000 constant PPPs)

- ▶ Index of change between 1995 and 2000 in GDP per capita is higher than in expenditure on educational institutions per student over the same period
- ▶ Expenditure on educational institutions per student decreased between 1995 and 2000 whereas GDP per capita increased over the same period
- ▶ Index of change between 1995 and 2000 in expenditure on educational institutions per student is higher than change in GDP per capita over the same period

Expenditure per student (equivalent US dollars converted using PPPs)



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

The beginning of the arrow indicates spending per student and GDP per capita in 1995. The end of the arrow indicates the corresponding values for 2000.

1. Public institutions only.

2. Public expenditure only.

Source: OECD, Table B1.1 and Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003)).

### Definitions and methodologies

Expenditure on education per student on 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 institutions and programmes are taken into account for which both enrolment and expenditure data are available. 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

Data refer to the financial year 2000 and are based on the VOE data collection on educational statistics administered by the OECD in 2002 (for details see Annex 3).

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.)

*Data for the financial year 1995 are based on a special survey carried out among OECD countries in 2000 and updated in 2002.*

Charts B1.6 and B1.7 show expenditure on education per student in the financial year 1995. The data on expenditure for 1995 were obtained by a special survey conducted in 2000 and updated in 2002. OECD countries were asked to collect the 1995 data according to the definitions and the coverage of the UOE 2002 data collection. All expenditure data, as well as the GDP for 1995, are adjusted to 2000 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/eag2003](http://www.oecd.org/edu/eag2003). For the estimation of the duration of tertiary education, data are based on a special survey carried out in OECD countries in 1997 and 2000.

The ranking of OECD countries by annual expenditure on education per student on educational services 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 2003 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/eag2003](http://www.oecd.org/edu/eag2003) for details on changes).

Table B1.1

## Expenditure on educational institutions per student (2000)

Annual expenditure on educational institutions per student 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	Lower secondary education	Upper secondary education	All secondary education	Post- secondary non-tertiary education	Tertiary education			Expendi- ture from primary to tertiary 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)
<b>OECD COUNTRIES</b>										
Australia	m	4 967	6 579	7 424	6 894	6694	12 854	7 260	14 044	6 904
Austria	5 471	6 560	8 934	8 165	8 578	10947	10 851	x(7)	x(7)	8 430
Belgium	3 282	4 310	x(5)	x(5)	6 889	x(5)	10 771	x(7)	x(7)	6 544
Canada	6 120	x(5)	x(5)	x(5)	5 947	x(8)	14 983	12 801	16 690	7 764
Czech Republic	2 435	1 827	3 134	3 360	3 239	1624	5 431	1 970	5 946	3 004
Denmark	4 255	7 074	7 222	8 164	7 726	x(4,7)	11 981	x(7)	x(7)	8 302
Finland	3 944	4 317	6 737	5 641	6 094	x(5)	8 244	4 208	8 426	6 003
France	4 119	4 486	7 076	8 334	7 636	6207	8 373	8 898	8 230	6 708
Germany	5 138	4 198	5 470	9 625	6 826	10148	10 898	5 728	11 754	6 849
Greece <sup>1</sup>	x(2)	3 318	x(5)	x(5)	3 859	1400	3 402	2 889	3 643	3 494
Hungary <sup>1</sup>	2 511	2 245	2 109	2 829	2 446	3223	7 024	3 474	7 098	2 956
Iceland <sup>1</sup>	m	5 854	6 705	6378	6 518	m	7 994	m	7 548	6 446
Ireland	2 863	3 385	4 625	4 655	4 638	4234	11 083	x(7)	x(7)	5 016
Italy <sup>1</sup>	5 771	5 973	7 089	7 308	7 218	m	8 065	4 114	8 136	6 928
Japan	3 376	5 507	5 904	6 615	6 266	x(4,7)	10 914	8 507	11 302	6 744
Korea	1 949	3 155	3 655	4 440	4 069	a	6 118	4 106	7 502	4 294
Luxembourg	m	m	m	m	m	m	m	m	m	m
Mexico	1 385	1 291	1 289	2 317	1 615	a	4 688	x(7)	x(7)	1 666
Netherlands	3 920	4 325	6 100	5 671	5 912	5006	11 934	6 890	12 004	6 125
New Zealand	m	m	m	m	m	m	m	m	m	m
Norway <sup>1</sup>	13 170	6 550	8 185	8 925	8 476	x(5)	13 353	x(7)	x(7)	8 333
Poland <sup>1</sup>	2 278	2 105	x(2)	1 790	m	x(4)	3 222	1 135	3 252	2 149
Portugal	2 237	3 672	5 151	5 563	5 349	a	4 766	x(7)	x(7)	4 552
Slovak Republic	1 644	1 308	1 558	2 488	1 927	x(4)	4 949	x(4)	4 949	2 028
Spain	3 370	3 941	x(5)	x(5)	5 185	x(5)	6 666	6 306	6 712	5 037
Sweden	3 343	6 336	6 238	6 411	6 339	4452	15 097	x(7)	x(7)	7 524
Switzerland <sup>1</sup>	3 114	6 631	8 012	11 622	9 780	7199	18 450	10 516	19 491	9 311
Turkey <sup>1</sup>	m	m	m	m	m	a	4 121	x(7)	x(7)	1 073
United Kingdom	6 677	3 877	x(5)	x(5)	5 991	x(5)	9 657	x(7)	x(7)	5 592
United States <sup>2</sup>	7 980	6 995	x(5)	x(5)	8 855	x(7)	20 358	x(7)	x(7)	10 240
<b>Country mean</b>	<b>4 137</b>	<b>4 381</b>	<b>5 575</b>	<b>6 063</b>	<b>5 957</b>	<b>4075</b>	<b>9 571</b>	~	~	<b>5 736</b>
<b>OECD total</b>	<b>4 477</b>	<b>4 470</b>	~	~	<b>5 501</b>	~	<b>11 109</b>	~	~	<b>6 361</b>
<b>NON-OECD COUNTRIES</b>										
Argentina	1 653	1 598	2 256	2 579	2 382	a	m	5 382	m	m
Brazil <sup>1,3</sup>	1 243	928	909	851	890	m	11 946	m	11 946	1 142
Chile	1 563	1 940	1 914	2 081	2 016	a	7 483	3 987	8 240	2 629
India <sup>3</sup>	56	268	429	707	540	m	1 831	4 917	1 668	446
Indonesia	85	137	370	494	416	a	1 799	x(7)	x(7)	331
Israel	3 369	4 351	x(5)	x(5)	5 518	4240	11 550	8 115	15 544	5 837
Jamaica <sup>1</sup>	m	m	1 244	1 483	1 327	3171	6 894	2 686	14 588	1 426
Malaysia <sup>1</sup>	491	1 235	x(5)	x(5)	2 238	8256	11 237	6 266	12 759	2 219
Paraguay	x(2)	722	x(5)	x(5)	1 256	m	4 012	2 109	4 969	1 031
Philippines <sup>1</sup>	93	573	581	613	587	m	1 589	x(7)	x(7)	645
Russian Federation <sup>1</sup>	1 297	x(5)	x(5)	x(5)	954	1439	892	763	960	968
Thailand	848	1 111	1 038	858	935	m	2 137	3 398	1 886	1 173
Tunisia <sup>1</sup>	m	2 280	x(2)	x(2)	x(2)	x(2)	m	m	m	1 220
Uruguay <sup>1</sup>	1 039	1 011	1 093	1 379	1 219	a	2 057	x(7)	x(7)	1 228
Zimbabwe	7	780	x(5)	x(5)	1 904	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 1999.

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

Table B1.2

**Expenditure on educational institutions per student relative to GDP per capita (2000)**
*Expenditure on educational institutions per student relative to GDP per capita by level of education, based on full-time equivalents*

	Pre-primary education (for children 3 years and older)	Primary education	Lower secondary education	Upper secondary education	All secondary education	Post- secondary non-tertiary education	Tertiary education			Expenditure from primary to tertiary 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)
<b>OECD COUNTRIES</b>										
Australia	m	19	26	29	27	26	50	28	55	27
Austria	19	23	32	29	31	39	39	x(7)	x(7)	30
Belgium	12	16	x(5)	x(5)	26	x(5)	41	x(7)	x(7)	25
Canada	22	x(5)	x(5)	x(5)	21	x(8)	53	46	59	28
Czech Republic	18	13	23	24	23	12	39	14	43	22
Denmark	15	25	25	28	27	x(4,7)	42	x(7)	x(7)	29
Finland	16	17	27	22	24	x(5)	33	17	33	24
France	16	18	28	33	30	25	33	35	33	27
Germany	20	16	21	37	26	39	42	22	45	26
Greece <sup>1</sup>	x(2)	21	x(5)	x(5)	24	9	21	18	23	22
Hungary <sup>1</sup>	21	18	17	23	20	26	58	28	58	24
Iceland <sup>1</sup>	m	21	24	23	23	m	28	m	27	23
Ireland	10	12	16	16	16	15	39	x(7)	x(7)	18
Italy <sup>1</sup>	23	24	28	29	29	m	32	16	32	28
Japan	13	21	23	25	24	x(4,7)	42	33	43	26
Korea	13	21	24	29	27	a	40	27	49	28
Luxembourg	m	m	m	m	m	m	m	m	m	m
Mexico	15	14	14	25	18	a	51	x(7)	x(7)	18
Netherlands	14	16	22	21	22	18	44	25	44	22
New Zealand	m	m	m	m	m	m	m	m	m	m
Norway <sup>1</sup>	36	18	23	25	23	x(4)	37	x(7)	x(7)	23
Poland <sup>1</sup>	24	22	x(2)	19	m	x(4)	34	12	34	23
Portugal	13	22	31	33	32	a	28	x(7)	x(7)	27
Slovak Republic	15	12	14	22	17	x(4)	44	x(4)	44	18
Spain	17	20	x(5)	x(5)	26	x(5)	33	31	33	25
Sweden	13	24	24	25	24	17	58	x(7)	x(7)	29
Switzerland <sup>1</sup>	11	22	27	39	33	24	62	36	66	31
Turkey <sup>1</sup>	m	m	m	m	m	a	66	x(7)	x(7)	17
United Kingdom	27	16	x(5)	x(5)	24	x(5)	39	x(7)	x(7)	21
United States <sup>2</sup>	23	20	x(5)	x(5)	26	x(7)	59	x(7)	x(7)	30
<b>Country mean</b>	<b>17</b>	<b>19</b>	<b>23</b>	<b>26</b>	<b>25</b>	<b>17</b>	<b>42</b>	<b>26</b>	<b>42</b>	<b>25</b>
<b>NON-OECD COUNTRIES</b>										
Argentina	13	13	18	21	19	a	m	43	m	m
Brazil <sup>1,3</sup>	16	12	11	11	11	m	150	m	150	14
Chile	17	21	20	22	21	a	79	42	88	28
India <sup>3</sup>	2	10	15	25	19	x(7)	65	176	60	16
Indonesia	15	5	16	18	17	a	87	x(7)	x(7)	11
Israel	15	21	x(5)	x(5)	24	20	54	39	58	26
Jamaica <sup>1</sup>	m	m	34	40	36	86	187	73	397	39
Malaysia <sup>1</sup>	5	14	x(5)	x(5)	25	92	125	70	142	25
Paraguay	x(2)	16	x(5)	x(5)	28	m	91	48	112	23
Philippines <sup>1</sup>	2	15	15	16	15	m	41	x(7)	x(7)	17
Russian Federation <sup>1</sup>	15	x(5)	x(5)	x(5)	11	17	11	9	11	11
Thailand	14	19	17	14	16	m	36	57	32	20
Tunisia <sup>1</sup>	m	36	x(2)	x(2)	x(2)	x(2)	m	m	m	19
Uruguay <sup>1</sup>	12	11	12	15	13	a	23	x(7)	x(7)	14
Zimbabwe	n	30	x(5)	x(5)	73	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 1999.

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

Table B1.3

**Cumulative expenditure on educational institutions per student over the average duration of tertiary studies (2000)**

*Average duration of tertiary studies and expenditure on educational institutions over the average duration of studies in equivalent US dollars converted using PPPs, by type of programme*

	Method <sup>1</sup>	Average duration of tertiary studies (in years)			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	32 521	11 398	35 953
Austria	AF	6.2	2.5	7.3	66 948	x(4)	x(4)
Canada	CM	m	m	m	m	m	m
Denmark <sup>2</sup>	AF	4.2	2.1	4.4	50 199	x(4)	x(4)
Finland	CM	6.0	a	6.0	50 469	a	50 469
France <sup>2</sup>	AF	4.7	2.8	5.3	39 200	24 629	43 666
Germany	CM	4.9	2.4	6.0	52 962	13 976	70 639
Greece <sup>3</sup>	AF	5.2	3.0	7.3	17 723	8 753	26 633
Hungary <sup>3</sup>	CM	4.1	2.0	4.1	28 448	6 949	28 748
Iceland <sup>1</sup>	CM	2.7	2.0	2.8	21 424	m	21 435
Ireland	CM	3.2	2.2	4.0	35 909	x(4)	x(4)
Italy <sup>3</sup>	CM	5.5	3.3	5.6	44 278	13 453	45 319
Korea <sup>2</sup>	CM	3.4	2.1	4.2	20 985	8 500	31 660
Mexico <sup>2</sup>	AF	3.4	x(3)	3.4	16 044	x(4)	x(4)
Netherlands <sup>2</sup>	CM	3.9	x(1)	x(1)	46 543	x(4)	x(4)
Norway	CM	m	m	m	m	m	m
Poland <sup>1</sup>	CM	m	m	3.7	m	m	11 966
Spain <sup>2</sup>	AF	4.6	1.5	4.7	30 330	9 390	31 593
Sweden	CM	4.6	2.6	4.7	69 561	x(4)	x(4)
Switzerland <sup>2,3</sup>	CM	3.6	2.2	5.5	66 867	22 997	10 6282
United Kingdom	CM	3.5	x(1)	x(1)	34 202	x(4)	x(4)
<i>Country mean</i>		<i>4.3</i>	<i>2.1</i>	<i>4.8</i>	<i>40 371</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.

3. Public institutions only.

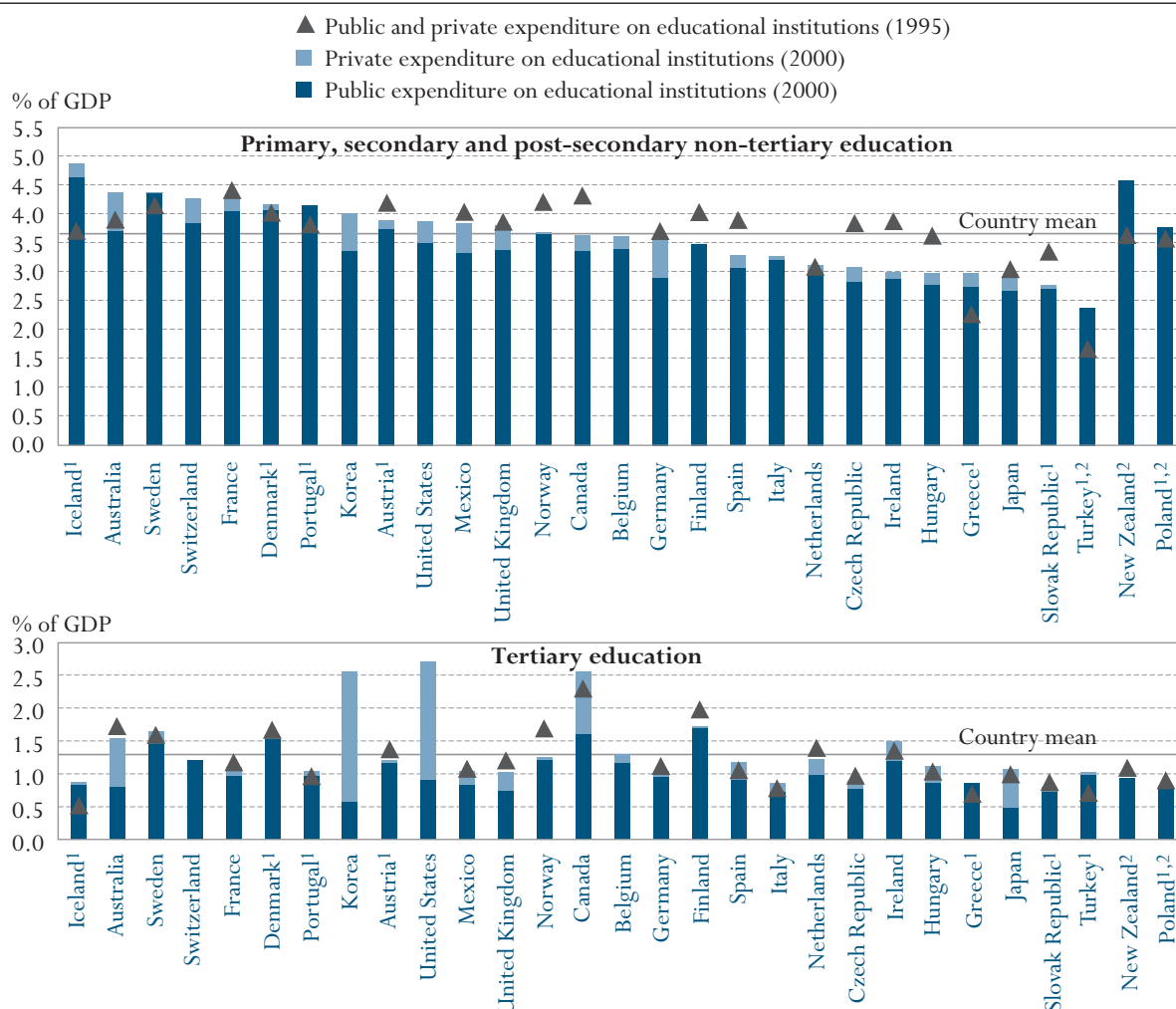
Source: OECD. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

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

- OECD countries spend 5.9 per cent of their collective GDP on their educational institutions.
- In 14 out of 19 OECD countries, public and private spending on educational institutions increased between 1995 and 2000 by more than 5 per cent but, in contrast to 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 3.6 per cent of combined OECD GDP, is devoted to primary, secondary and post-secondary non-tertiary education, although Canada, Korea and the United States spend more than 2 per cent of their GDP on tertiary education.

Chart B2.1

Expenditure on educational institutions as a percentage of GDP (1995, 2000)  
Direct and indirect expenditure on educational institutions 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 are missing.

Countries are ranked in descending order of total expenditure on educational institutions from both public and private sources 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/eqq2003](http://www.oecd.org/edu/eqq2003)).



## 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. The proportion of total financial resources devoted to education is one of the key choices made in each OECD country; and is an aggregate choice made by governments, enterprises, and individual students and their families. If the social and private returns on that investment 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 have to assess demands for increased spending in areas such as teachers' salaries and educational facilities. This indicator can provide a point of reference for this 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.

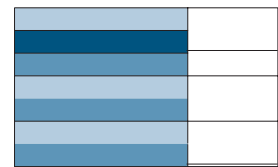
### Overall investment relative to GDP

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 5.9 per cent of their collective GDP on their educational institutions at 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.

The highest spending on educational institutions can be observed in Korea and the United States, with around 7.0 per cent of GDP accounted for by public and private spending on educational institutions, followed by Canada, Denmark,

*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 181 for explanations)*

*As a whole, OECD countries spend 5.9 per cent of their combined GDP on their educational institutions.*

Iceland and Sweden with more than 6.2 per cent. Nine out of 29 OECD countries, however, spend less than 5 per cent of GDP on educational institutions, and in Greece, the Slovak Republic and Turkey this figure is only between 3.4 and 4.2 per cent (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 between 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 between 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 2000**

*In 14 out of 19 OECD countries, public and private spending on educational institutions increased between 1995 and 2000 by more than 5 per cent...*

In 14 out of the 19 OECD countries for which comparable trend data are available, public and private investment in education increased by 5 per cent or more between 1995 and 2000 in real terms. Increases in expenditure on educational institutions amounted to between 20 and 38 per cent in Australia, Denmark, Ireland, Mexico, Portugal and Sweden and to over 40 per cent in Greece. The trend is similar when public investment is considered separately: direct public expenditure on institutions and public subsidies to households designated for institutions rose by 5 per cent or more in 20 out of 25 OECD countries between 1995 and 2000. New Zealand and Turkey, for which no data on private spending are available, show 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.*

Spending on educational institutions increased between 1995 and 2000 in real terms but tended to lag behind growth in GDP. Around two-thirds of OECD countries showed a decrease in the proportion of GDP devoted to educational institutions. Most notable are the Czech Republic, Finland, Ireland, Norway and the Slovak Republic 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 and the Slovak Republic did not benefit significantly 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**

*Countries differ markedly in their*

High overall spending on education does not necessarily translate into a high level of spending at all levels of education. Differences in spending on edu-

educational institutions are most striking at the pre-primary level of education. Here, spending ranges from less than 0.2 per cent of GDP in Australia, Ireland, Korea, Japan and New Zealand, to 0.7 per cent or more in Denmark, France, Hungary and Norway (Table B2.1c). Differences at the pre-primary level can be explained mainly by participation rates among younger children (see Indicator C1).

*investment in pre-primary educational institutions.*

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, namely 3.6 per cent 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.

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

Canada, Korea and the United States spend 2.6 and 2.7 per cent, 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. Denmark, Finland and Sweden also show high spending levels, with 1.6 per cent or more of GDP devoted to tertiary institutions. On the other hand, France, 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, nevertheless, 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).

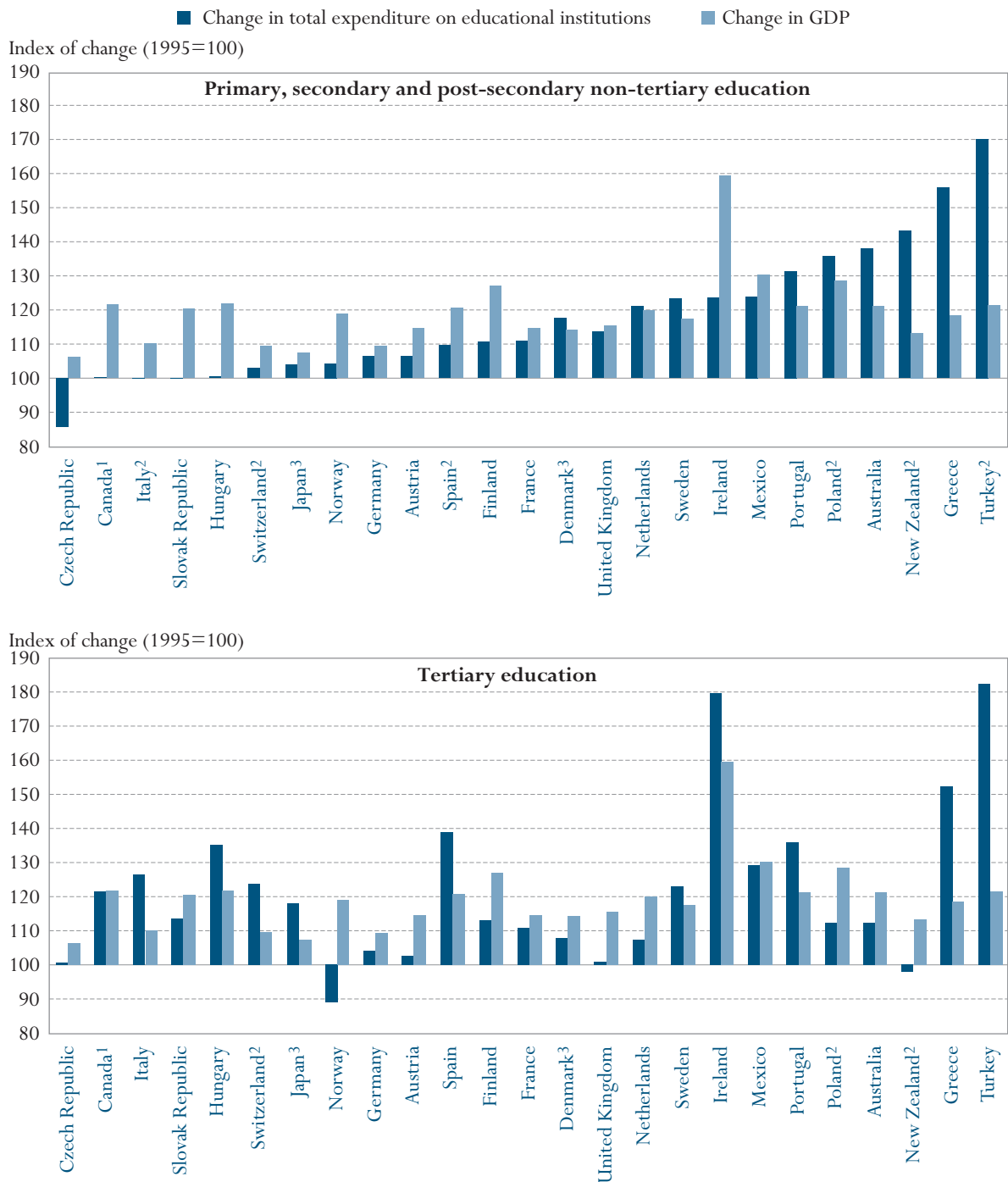
*Canada, Korea and the United States spend more than 2 per cent of their GDP on tertiary education.*

Countries vary in the levels of education at which spending has increased. Austria, Finland, France, Germany, Greece, Mexico, Portugal, Sweden and Turkey, OECD countries with a comparably high increase in absolute spending on educational institutions between 1995 and 2000, invested the additional resources in similar proportions in primary, secondary and post-secondary non-tertiary and tertiary education (Chart B2.2). Australia, Denmark, the Netherlands, New Zealand, Poland and the United Kingdom invested most of the increases made between 1995 and 2000 into primary, secondary and post-secondary non-tertiary education. Conversely, in Canada, Hungary, Ireland, Italy, Japan, the Slovak Republic, Spain, and Switzerland spending on tertiary

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

Chart B2.2

Changes in total expenditure on educational institutions and in national income (1995, 2000)  
 Index of change between 1995 and 2000 in total expenditure on educational institutions  
 from public and private sources and in national income (1995=100, 2000 constant prices)



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

2. Public expenditure only.

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

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 2000.

Source: OECD. Table B2.2 and Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eqg2003](http://www.oecd.org/edu/eqg2003)).

education increased by more than 10 per cent between 1995 and 2000 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 between 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 five-year-old child can expect to spend in education ranges among OECD countries from ten to 21. The variation in expected years in tertiary education is even wider, from one year in Mexico to over four years in Finland.

### **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 organisations 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.

*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 2000 and are based on the UOE data collection on educational statistics administered by the OECD in 2002 (for details see Annex 3).*

*Data for the financial year 1995 are based on a special survey carried out among OECD countries.*

*Data for 1995 are expressed in 2000 price levels.*

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, are 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.

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 2000 and updated in 2002 in which expenditure for 1995 was adjusted to methods and definitions used in the 2002 UOE data collection.

Chart B2.2 and Table B2.2 present an index of change in expenditure on institutions and GDP between 1995 and 2000. All expenditure, as well as 1995 GDP, is adjusted to 2000 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 2002 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/eag2003](http://www.oecd.org/edu/eag2003) for details on changes).

Table B2.1a

**Expenditure on educational institutions as a percentage of GDP (1995, 2000)***Expenditure on educational institutions from public and private sources for all levels of education, by source of funds and year*

	2000			1995		
	Public <sup>1</sup>	Private <sup>2</sup>	Total	Public <sup>1</sup>	Private <sup>2</sup>	Total
<b>OECD COUNTRIES</b>						
Australia	4.6	1.4	6.0	4.6	1.0	5.6
Austria <sup>3</sup>	5.4	0.3	5.7	5.9	0.3	6.3
Belgium	5.1	0.4	5.5	m	m	m
Canada	5.2	1.2	6.4	6.2	0.8	7.0
Czech Republic	4.2	0.5	4.6	4.9	0.5	5.4
Denmark <sup>3</sup>	6.4	0.3	6.7	6.1	0.2	6.3
Finland	5.5	0.1	5.6	6.3	x	6.3
France	5.7	0.4	6.1	5.9	0.4	6.3
Germany	4.3	1.0	5.3	4.5	1.0	5.5
Greece <sup>3</sup>	3.7	0.2	4.0	2.9	n	3.0
Hungary	4.4	0.6	5.0	4.9	0.6	5.5
Iceland <sup>3</sup>	5.7	0.6	6.3	4.5	0.6	5.1
Ireland	4.1	0.4	4.6	4.7	0.5	5.3
Italy	4.5	0.4	4.9	4.8	m	m
Japan	3.5	1.2	4.6	3.5	1.1	4.7
Korea	4.3	2.8	7.1	m	m	m
Luxembourg	m	m	m	m	m	m
Mexico	4.7	0.8	5.5	4.6	1.0	5.6
Netherlands	4.3	0.4	4.7	4.6	m	4.8
New Zealand	5.8	m	5.8	4.8	m	4.8
Norway	5.8	0.1	5.9	7.0	0.2	7.1
Poland <sup>3</sup>	5.2	m	5.2	5.5	m	5.5
Portugal <sup>3</sup>	5.6	0.1	5.7	5.3	n	5.3
Slovak Republic <sup>3</sup>	4.0	0.2	4.2	4.6	0.4	5.1
Spain	4.3	0.6	4.9	4.6	1.0	5.5
Sweden	6.3	0.2	6.5	6.3	0.1	6.4
Switzerland	5.3	0.4	5.7	5.4	m	m
Turkey <sup>3</sup>	3.4	n	3.4	2.3	n	2.3
United Kingdom	4.5	0.7	5.3	4.6	0.9	5.5
United States	4.8	2.2	7.0	m	m	m
<i>Country mean</i>	<i>4.8</i>	<i>0.6</i>	<i>5.5</i>			
<i>OECD total</i>	<i>4.6</i>	<i>1.3</i>	<i>5.9</i>			
<i>Country mean for countries with 1990, 1995 AND 2000 data (24 countries)</i>	<i>5.0</i>	<i>0.5</i>	<i>5.6</i>	<i>5.1</i>	<i>0.5</i>	<i>5.7</i>
<b>NON-OECD COUNTRIES</b>						
Argentina <sup>3</sup>	4.5	1.4	5.9	m	m	m
Brazil <sup>3,4</sup>	4.2	m	m	m	m	m
Chile	4.2	3.3	7.4	m	m	m
India <sup>4</sup>	4.1	0.2	4.2	m	m	m
Indonesia <sup>3,5</sup>	1.5	0.8	2.3	m	m	m
Israel	6.6	1.6	8.2	6.9	1.5	8.5
Jamaica	6.4	3.3	9.7	m	m	m
Malaysia <sup>3</sup>	5.9	n	5.9	m	m	m
Paraguay	5.0	2.2	7.2	m	m	m
Philippines <sup>4</sup>	3.9	2.5	6.4	m	m	m
Russian Federation <sup>3</sup>	3.0	m	m	m	m	m
Thailand <sup>3</sup>	4.9	0.2	5.1	m	m	m
Tunisia <sup>3</sup>	7.7	m	m	m	m	m
Uruguay <sup>3,5</sup>	2.8	0.1	3.0	m	m	m
Zimbabwe <sup>3</sup>	7.6	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. Year of reference 1999.

5. Direct expenditure on educational institutions from international sources exceeds 1.5 per cent of all public expenditure.

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



Table B2.1b  
**Expenditure on educational institutions as a percentage of GDP (1995, 2000)**  
*Expenditure on educational institutions from public and private sources, by level of education, source of funds and year*

	Primary, secondary and post-secondary non-tertiary education				Tertiary education			
	2000			1995	2000			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	3.7	0.7	4.4	3.9	0.8	0.7	1.6	1.7
Austria <sup>3</sup>	3.7	0.2	3.9	4.2	1.2	n	1.2	1.3
Belgium <sup>4</sup>	3.4	0.2	3.6	m	1.2	0.1	1.3	m
Canada <sup>5</sup>	3.3	0.3	3.6	4.3	1.6	1.0	2.6	2.3
Czech Republic <sup>4</sup>	2.8	0.3	3.1	3.8	0.8	0.1	0.9	1.0
Denmark <sup>3,6</sup>	4.1	0.1	4.2	4.0	1.5	n	1.6	1.6
Finland	3.5	n	3.5	4.0	1.7	n	1.7	1.9
France	4.0	0.2	4.3	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>3</sup>	2.7	0.2	3.0	2.3	0.9	n	0.9	0.7
Hungary	2.8	0.2	3.0	3.6	0.9	0.3	1.1	1.0
Iceland <sup>3</sup>	4.6	0.2	4.9	3.7	0.8	n	0.9	0.5
Ireland <sup>4</sup>	2.9	0.1	3.0	3.9	1.2	0.3	1.5	1.3
Italy	3.2	0.1	3.3	m	0.7	0.1	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	3.3	0.7	4.0	m	0.6	1.9	2.6	m
Luxembourg	m	m	m	m	m	m	m	m
Mexico	3.3	0.5	3.8	4.0	0.8	0.2	1.1	1.1
Netherlands	3.0	0.1	3.1	3.1	1.0	0.2	1.2	1.4
New Zealand	4.6	m	4.6	3.6	0.9	m	0.9	1.1
Norway	3.6	n	3.7	4.2	1.2	n	1.3	1.7
Poland <sup>3</sup>	3.7	m	3.7	3.6	0.8	m	0.8	0.9
Portugal <sup>3</sup>	4.1	n	4.1	3.8	1.0	0.1	1.1	0.9
Slovak Republic <sup>3,4</sup>	2.7	0.1	2.8	3.3	0.7	0.1	0.8	0.8
Spain	3.1	0.2	3.3	3.9	0.9	0.3	1.2	1.0
Sweden <sup>4</sup>	4.4	n	4.4	4.1	1.5	0.2	1.7	1.6
Switzerland	3.8	0.4	4.3	m	1.2	m	1.2	m
Turkey <sup>3</sup>	2.4	m	2.4	1.7	1.0	n	1.0	0.7
United Kingdom	3.4	0.4	3.8	3.9	0.7	0.3	1.0	1.2
United States <sup>5</sup>	3.5	0.4	3.9	m	0.9	1.8	2.7	m
<b>Country mean</b>	<b>3.4</b>	<b>0.3</b>	<b>3.6</b>		<b>1.0</b>	<b>0.3</b>	<b>1.3</b>	
<b>OECD total</b>	<b>3.3</b>	<b>0.4</b>	<b>3.6</b>		<b>0.9</b>	<b>0.9</b>	<b>1.7</b>	
<b>Country mean for countries with 1995 data only</b>			<b>3.6</b>	<b>3.7</b>			<b>1.2</b>	<b>1.2</b>
<b>NON-OECD COUNTRIES</b>								
Argentina <sup>3</sup>	3.2	0.4	3.7	m	0.8	0.4	1.2	m
Brazil <sup>3,7</sup>	3.0	m	m	m	0.8	m	m	m
Chile	3.2	1.4	4.6	m	0.6	1.7	2.3	m
India <sup>6,7</sup>	2.8	0.2	3.0	m	0.7	n	0.7	m
Indonesia <sup>3,4</sup>	1.1	0.3	1.5	m	0.4	0.4	0.8	m
Israel	4.5	0.2	4.7	5.0	1.1	0.8	1.9	1.9
Jamaica	4.8	2.6	7.4	m	1.3	0.5	1.8	m
Malaysia <sup>3</sup>	4.0	n	m	m	1.7	m	m	m
Paraguay	4.1	1.6	5.7	m	0.9	0.5	1.4	m
Philippines	3.3	1.5	4.8	m	0.5	1.0	1.5	m
Russian Federation	1.7	m	m	m	0.5	m	m	m
Thailand <sup>3</sup>	2.8	0.1	2.9	m	0.7	0.2	0.9	m
Tunisia <sup>3</sup>	5.2	m	m	m	m	m	m	m
Uruguay <sup>3,4</sup>	2.0	0.1	2.1	m	0.6	n	0.6	m
Zimbabwe <sup>6</sup>	7.6	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. Public subsidies to households not included in public expenditure, but in private expenditure.

4. Direct expenditure on tertiary-level educational institutions from international sources exceeds 1.5 per cent of all public expenditure.

International sources at primary and secondary level exceed 1.5 per cent in Uruguay.

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

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

7. Year of reference 1999.

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



Table B2.1c

**Expenditure on educational institutions as a percentage of GDP (2000)***Expenditure on educational institutions from public and private sources<sup>1</sup>, by level of education*

	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 pro- grammes)
		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	4.4	3.3	0.9	0.1	1.6	0.2	1.4	6.0
Austria	0.5	3.9	2.6	1.2	0.1	1.2	0.2	1.0	5.7
Belgium <sup>2</sup>	0.5	3.6	1.2	2.4	x(4)	1.3	x(6)	x(6)	5.5
Canada	0.2	3.6	x(2)	x(2)	x(7)	2.6	1.1	1.4	6.4
Czech Republic	0.5	3.1	2.0	1.1	n	0.9	n	0.9	4.6
Denmark	0.8	4.2	2.8	1.4	x(4,6)	1.6	x(6)	x(6)	6.7
Finland	0.4	3.5	2.3	1.2	x(4)	1.7	n	1.7	5.6
France	0.7	4.3	2.8	1.5	n	1.1	0.3	0.9	6.1
Germany	0.6	3.6	2.1	1.2	0.2	1.0	0.1	1.0	5.3
Greece <sup>2</sup>	x(2)	3.0	1.1	1.7	0.1	0.9	0.2	0.6	4.0
Hungary	0.7	3.0	1.8	1.1	0.1	1.1	n	1.1	5.0
Iceland <sup>2</sup>	m	4.9	m	m	m	0.9	0.1	0.8	6.3
Ireland	n	3.0	2.2	0.6	0.1	1.5	x(6)	x(6)	4.6
Italy	0.5	3.3	2.0	1.3	n	0.9	n	0.9	4.9
Japan	0.2	2.9	2.0	0.9	x(4,6)	1.1	0.1	1.0	4.6
Korea	0.1	4.0	2.7	1.3	a	2.6	0.7	1.9	7.1
Luxembourg	m	m	m	m	m	m	m	m	m
Mexico	0.5	3.8	3.1	0.8	a	1.1	x(6)	x(6)	5.5
Netherlands	0.3	3.1	2.3	0.8	n	1.2	n	1.2	4.7
New Zealand <sup>3</sup>	0.2	4.6	3.2	1.3	0.1	0.9	0.2	0.8	5.8
Norway	0.7	3.7	2.5	1.2	x(4)	1.3	n	1.3	5.9
Poland <sup>4</sup>	0.5	3.7	2.5	1.3	m	0.8	n	0.8	5.2
Portugal	0.3	4.1	2.9	1.2	a	1.1	x(6)	x(6)	5.7
Slovak Republic	0.4	2.8	1.7	1.1	x(4)	0.8	x(4)	0.8	4.2
Spain <sup>2</sup>	0.5	3.3	1.2	2.0	x(4)	1.2	0.1	1.1	4.9
Sweden	0.5	4.4	3.0	1.3	n	1.7	x(6)	x(6)	6.5
Switzerland	0.2	4.3	2.7	1.5	0.1	1.2	0.1	1.1	5.7
Turkey	m	2.4	1.7	0.7	a	1.0	x(8)	1.0	3.4
United Kingdom <sup>2</sup>	0.4	3.8	1.2	2.5	x(4)	1.0	x(6)	x(6)	5.3
United States	0.4	3.9	x(2)	x(2)	x(6)	2.7	x(6)	x(6)	7.0
<i>Country mean</i>	<i>0.4</i>	<i>3.6</i>	<i>2.2</i>	<i>1.3</i>	<i>0.1</i>	<i>1.3</i>	<i>0.2</i>	<i>1.0</i>	<i>5.4</i>
<i>OECD total</i>	<i>0.4</i>	<i>3.6</i>	<i>2.1</i>	<i>1.3</i>	<i>0.1</i>	<i>1.7</i>	<i>x(6)</i>	<i>x(6)</i>	<i>5.9</i>
<b>NON-OECD COUNTRIES</b>									
Argentina	0.4	3.7	2.9	0.8	a	1.2	0.5	0.7	5.9
Brazil <sup>3,4</sup>	0.4	3.0	2.5	0.5	m	0.8	m	0.8	4.2
Chile	0.5	4.6	3.3	1.3	a	2.3	0.2	2.1	7.4
India <sup>4</sup>	n	3.0	2.1	0.9	n	0.7	0.1	0.6	4.2
Indonesia	n	1.5	1.1	0.4	a	0.8	x(6)	x(6)	2.3
Israel	0.8	4.7	2.4	2.2	n	1.9	x(6)	x(6)	8.2
Jamaica	0.5	7.4	5.4	1.4	0.6	1.8	0.5	1.2	9.7
Malaysia <sup>2</sup>	0.1	4.0	1.7	2.1	0.2	1.7	0.3	1.4	5.9
Paraguay <sup>2</sup>	0.1	5.7	3.3	2.4	m	1.4	0.2	1.1	7.2
Philippines	n	4.8	4.6	0.2	0.1	1.5	x(6)	x(6)	6.4
Russian Federation	0.5	1.7	m	m	0.2	0.5	0.1	0.3	3.0
Thailand	0.6	2.9	2.3	0.6	m	0.9	0.2	0.6	5.1
Tunisia <sup>3</sup>	2.4	5.2	5.2	m	m	m	m	m	7.7
Uruguay	0.3	2.1	1.6	0.5	a	0.6	x(6)	x(6)	3.0
Zimbabwe	n	7.6	7.6	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.

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 1999.

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

Table B2.2

**Change in expenditure on educational institutions (1995, 2000)**
*Index of change between 1995 and 2000 in expenditure on educational institutions from public and private sources, by level of education (1995=100, 2000 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)
OECD COUNTRIES									
Australia	125	154	131	137	146	138	89	155	112
Austria	106	92	105	106	114	106	103	96	103
Belgium	m	m	m	m	m	m	m	m	m
Canada <sup>1</sup>	107	116	109	99	120	100	126	114	121
Czech Republic	96	61	91	89	59	86	119	49	100
Denmark <sup>2</sup>	120	139	120	118	113	118	106	432	108
Finland	111	x(1)	113	110	x(4)	111	110	x(7)	113
France	111	103	111	111	104	111	112	101	111
Germany	104	106	105	106	107	106	102	119	104
Greece	155	x(1)	160	147	x(4)	156	160	x(7)	152
Hungary	110	118	111	101	88	100	129	160	135
Ireland	139	129	138	123	141	124	206	125	180
Italy	101	m	m	100	m	m	118	165	126
Japan <sup>2</sup>	108	109	108	104	104	104	126	112	118
Mexico	134	109	129	127	106	124	133	118	129
Netherlands	117	115	117	122	107	121	104	120	107
New Zealand	136	m	m	143	m	m	98	m	m
Norway	99	60	98	105	76	104	91	53	89
Poland	122	m	m	136	m	m	112	m	m
Portugal	129	289	130	131	208	131	130	292	136
Slovak Republic	105	43	100	105	34	100	120	67	114
Spain	115	m	m	110	m	m	139	139	139
Sweden	120	216	122	123	83	123	114	225	123
Switzerland	107	m	m	103	m	m	124	m	m
Turkey	175	m	m	174	m	m	180	275	182
United Kingdom	112	102	111	114	112	114	107	90	101
NON-OECD COUNTRY									
Israel	116	120	117	116	98	115	121	136	127

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

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

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

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

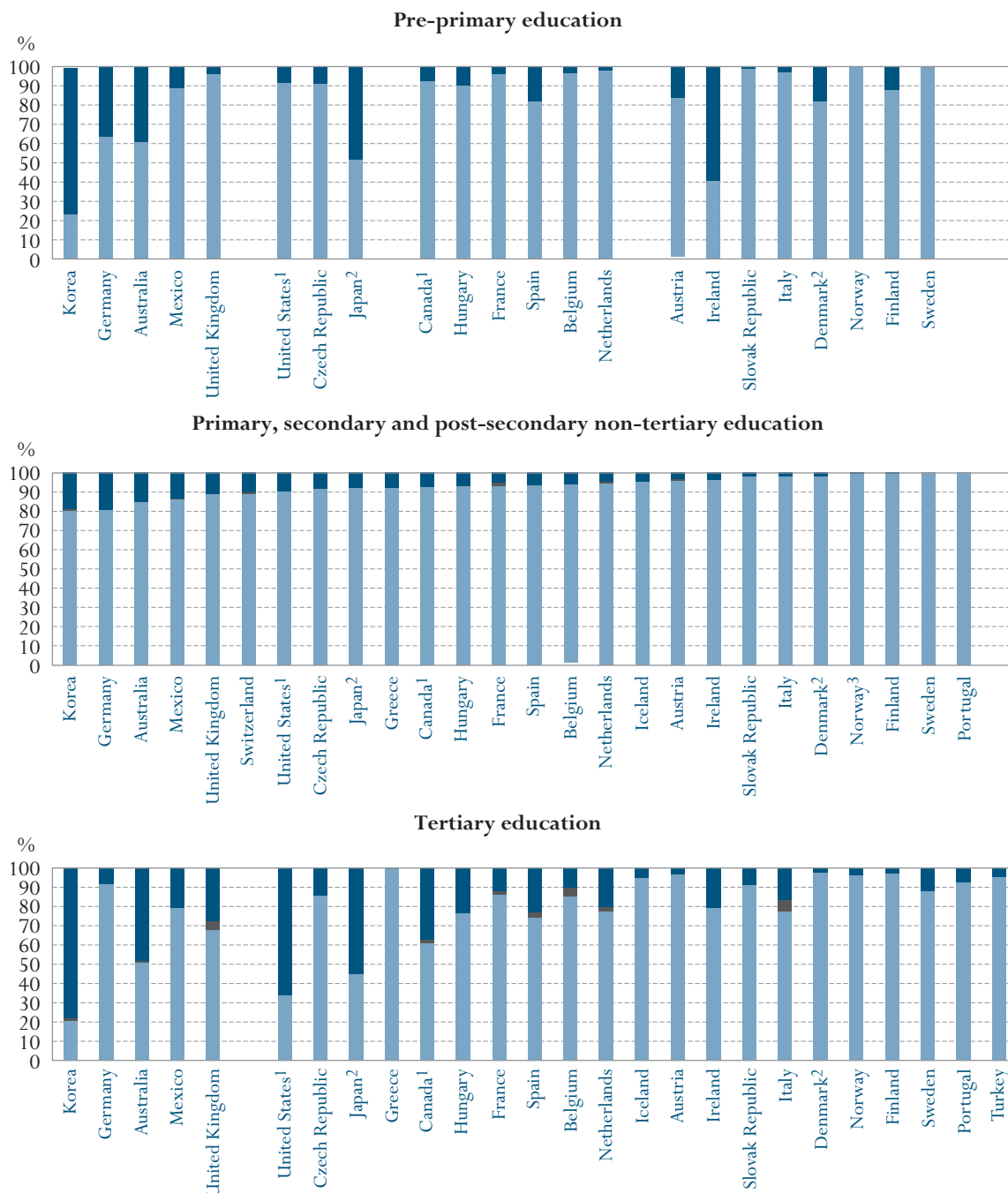
- Education institutions are still mainly funded from public sources: just over 88 per cent of all funds for educational institutions comes directly from public sources. Private funding is however significant in Korea (where it represents 40 per cent of the total), the United States (approaching one third of the total), Australia and Japan (almost one quarter of the total).
- 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 mobilise 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 3 per cent in Denmark, Finland and Greece to 77 per cent in Korea but includes private payments that are subsidised from public sources.
- Across the education levels the trend in the public/private share of education expenditure is a mixed one with shifts towards public spending as much in evidence as shifts towards private expenditure. In most cases where there have been shifts towards private expenditure this 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, by level of education (2000)

- Private expenditure on educational institutions, excluding public subsidies to households and other private entities
- Total public subsidies to households and other private entities, excluding public subsidies for student living costs
- Public expenditure on educational institutions



1. Post-secondary non-tertiary included in tertiary education.
2. Post-secondary non-tertiary included in both upper secondary and tertiary education.
3. Total public subsidies to households may be included in private payments.

Countries are ranked in ascending order of the proportion of direct public expenditure in primary, secondary and post-secondary non-tertiary education. Source: OECD. Table B3.2. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

## 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, it can shed light on the influence that public funding, as a policy lever, can and does have on the output of the system as a whole.

As new client groups participate increasingly in a wider range of educational programmes and have more opportunities made available by increasing numbers of providers, governments are forging new partnerships to mobilise the necessary resources to pay for education. New policies are designed to allow the 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 to 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.

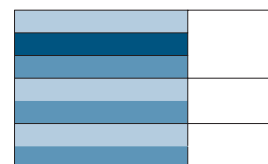
Initial public spending includes both direct public expenditure on educational institutions and transfers to the private sector. To gauge the level of public expenditure, the components showing direct public expenditure on educational institutions and public subsidies for education therefore need to be added together. 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 181 for explanations)*

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

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

*In pre-primary education, the private share of total payments to educational institutions represents on average 17 per cent.*

*Public funding dominates at the primary/secondary levels.*

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

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 they are publicly subsidised, are 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**

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, just over 88 per cent of all funds for educational institutions comes directly from public sources. In addition, 0.6 per cent is channelled to institutions via public subsidies to households (Table B3.1).

Among the OECD countries reporting data, the proportion of private payments to educational institutions, including private payments that are subsidies varies widely. In Finland, Norway, Portugal, Sweden and Turkey it is 3 per cent or less, compared with almost one quarter in Australia and Japan, approaching one third in the United States and just over 40 per cent 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 expenditures on education is problematic and it is likely that some of the reported data are incomplete.

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 variable. It ranges from 5 per cent or less in Belgium, France, Italy, the Netherlands, the Slovak Republic, and the United Kingdom, to well over a third in Australia and Germany, around 50 per cent in Japan, 60 per cent in Ireland and 75 per cent in Korea (Table B3.2).

Public funding very much dominates primary, secondary and post-secondary non-tertiary levels of education in OECD countries: on average the rate of public funding amongst OECD countries is 93 per cent. There are, nevertheless, significant levels of private funding in some countries, most notably Australia (15 per cent), Germany (20 per cent), Korea (19 per cent), and Mexico (14 per cent) (Chart B3.1).

Although the vast majority of public funds are directed at public institutions, in a number of OECD countries, significant public funds are in fact 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 level, 12 per cent of the public funds 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, 71 per cent 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 per cent.

In Australia, France, Spain and the United Kingdom, the share of public funds transferred to private institutions ranges at the primary/secondary and post-secondary level of education ranges from 12 to 22 per cent.

Public funding transfers to private households (and other private entities) are generally not a significant feature at the primary/secondary level – on average across OECD countries, the proportion of public funds transferred is some 4 per cent and exceeds 10 per cent in only Denmark, Hungary and Sweden (Table B3.3).

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

Other than in Austria, Germany and Greece, the private proportion of educational expenditure is far higher at the tertiary level than at the primary, secondary and post-secondary non-tertiary levels. While 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 Indicators A3 and A13) 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 3 per cent in Denmark, Finland and Greece, to around one half in Australia and Japan, two-thirds in the United States and over three-quarters in Korea (Chart B3.1). In Korea, over 80 per cent of students are enrolled in private universities, where more than 95 per cent of budgets are derived from tuition fees.

It is more usual, however, for households/students to receive some transfers of public funding at the tertiary level than at other levels. So for instance on average, some 17 per cent of public funds at the tertiary level are transferred to households/students. This proportion is highest in New Zealand (46 per cent), Denmark (39 per cent), Australia (32 per cent), Sweden (30 per cent), Norway (29 per cent) and the Netherlands (27 per cent).

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

*Tertiary institutions tend to mobilise 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 3 per cent in Denmark, Finland and Greece, to 77 per cent in Korea.*

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



*For education as a whole, the trend in the private share of education funding is a mixed one amongst countries.*

*Six countries recorded slight shifts from public to private funding of primary, secondary and post-secondary non-tertiary education.*

*At tertiary level there are also some striking changes which at least in part are a response to dramatic growth in participation.*

*In most OECD countries, shifts towards private expenditure have not led to decreases in real terms of public expenditure.*

The amounts paid by students and their families to cover tuition fees and other education-related expenditure differ between OECD countries according to taxation and spending policies, and the willingness of governments to support students. This willingness, in turn, 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.

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

A comparison between 1995 and 2000 of the proportion of educational expenditure which was met through private funds, shows that as many countries recorded increases as recorded decreases in the private funding share (Chart B3.2 and Table B3.1). In Australia, the private funding share increased from 20.6 per cent in 1995 to 24.3 per cent in 2000. On the other hand, in the Czech Republic, the Slovak Republic and Spain a decrease of around 5 percentage points in the private share of funding was recorded.

Six countries for whom comparable data are available recorded shifts from public to private funding of primary, secondary and post-secondary non-tertiary education. In only one of these countries, Canada, was the increase in the private share more than 1 percentage point (private share increasing from 6 per cent to 8 per cent).

Shifts of funding in the opposite direction, towards public funding, were equally evident, most notably in the Czech Republic, the Slovak Republic and Spain and where the public funding share of expenditure increased by between 4 and 6 percentage points (Chart B3.2 and Table B3.2).

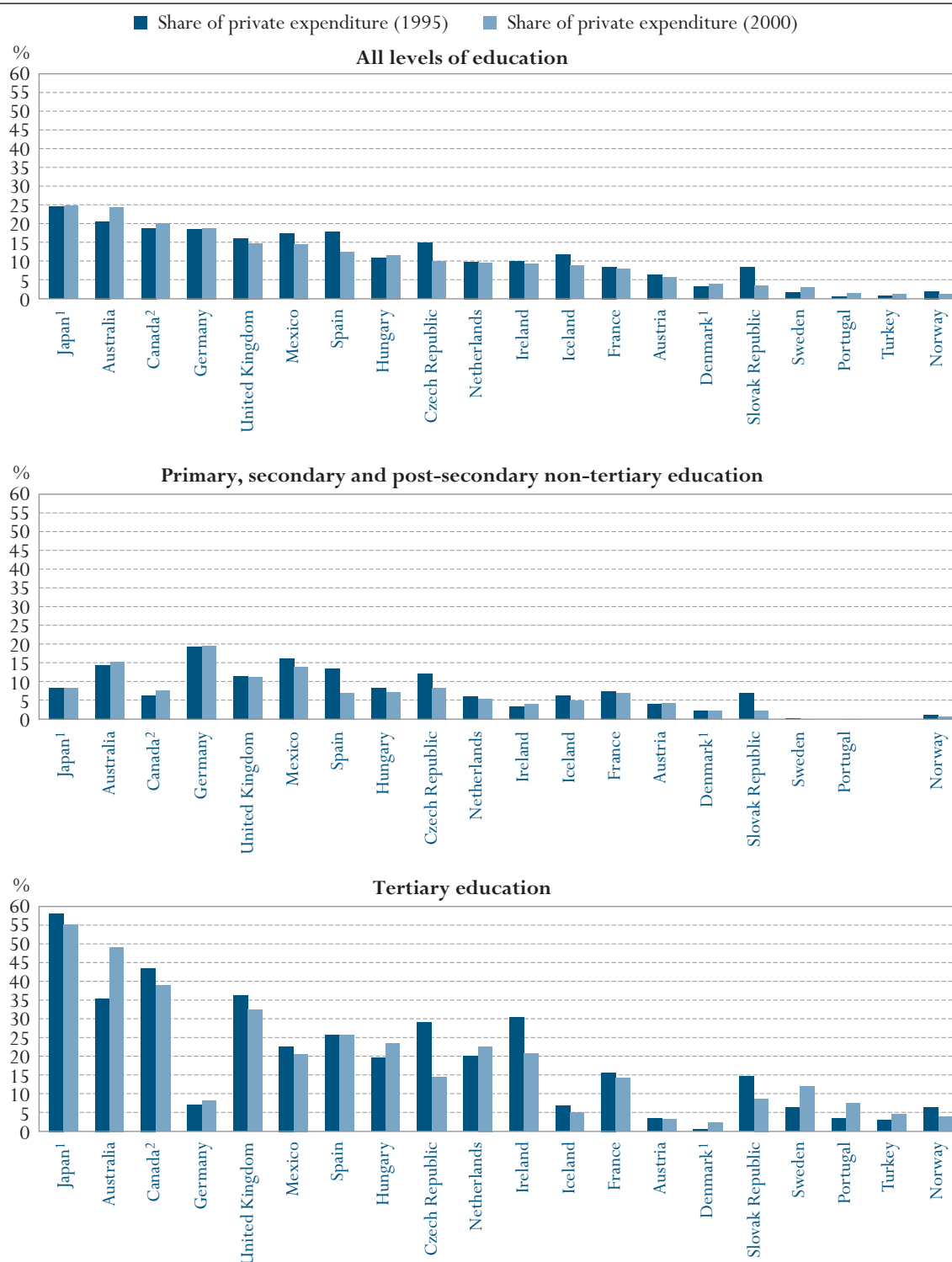
In many OECD countries, the growth in tertiary participation (Indicator C2) represents a response to heavy demand, both individual and social. But, just as many tertiary structures and programmes were designed for a different era, so too were its funding mechanisms. As demand for tertiary education has increased in many OECD countries, so has the share of the financial burden borne by families for a number of countries such as Australia, Hungary, Sweden and Turkey.

It is important to note that rises in private educational expenditure have not generally been accompanied by falls in real terms of public expenditure on education at the tertiary level or indeed at the primary, secondary and post-secondary non-tertiary level. On the contrary, public investment in education has increased in most of the OECD countries for which 1995 to 2000 data are available, regardless of changes in private spending (Table B2.2). In fact, some of the 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. A notable exception to this is in Australia where



Chart B3.2

## Share of private expenditure on educational institutions (1995, 2000)



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 descending order of the share of private expenditure in 2000 for all levels of education.

Source: OECD. Tables B3.1 and B3.2. See Annex 3 for notes ([www.oecd.org/edu/eq2003](http://www.oecd.org/edu/eq2003)).

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**

*Data refer to the financial year 2000 and are based on the UOE data collection on educational statistics administered by the OECD in 2002 (for details see Annex 3).*

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, which are usually 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.

*Data for the financial year 1995 are based on a special survey carried out among OECD countries in 2000.*

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 2000. The data on expenditure for 1995 were obtained by a special survey in 2000 in which expenditure for 1995 was adjusted to methods and definitions used in the current UOE data collection.

The glossary at the end of this volume 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 2002 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/eag2003](http://www.oecd.org/edu/eag2003) for details on changes).

Table B3.1

**Relative proportions of public and private expenditure on educational institutions for all levels of education (1995, 2000)***Distribution of public and private sources of funds for educational institutions after transfers from public sources, by year*

	2000			1995		
	Public sources	Private sources <sup>1</sup>	Private - of which: subsidised	Public sources	Private sources <sup>1</sup>	Private - of which: subsidised
<b>OECD COUNTRIES</b>						
Australia	75.7	24.3	0.3	79.4	20.6	3.0
Austria	94.2	5.8	2.3	93.4	6.6	1.5
Belgium	92.1	7.9	1.1	m	m	m
Canada	79.9	20.1	0.7	81.2	18.8	7.2
Czech Republic	89.9	10.1	n	85.0	15.0	6.2
Denmark	96.0	4.0	m	96.5	3.5	n
Finland	98.0	2.0	n	m	m	m
France	92.1	7.9	1.7	91.4	8.6	1.9
Germany	81.1	18.9	a	81.4	18.6	a
Greece	93.8	6.2	m	m	m	m
Hungary	88.3	11.7	n	89.0	11.0	n
Iceland	91.1	8.9	m	88.0	12.0	m
Ireland	90.5	9.5	n	89.8	10.2	m
Italy	90.9	9.1	1.3	m	m	m
Japan	75.2	24.8	m	75.4	24.6	m
Korea	59.2	40.8	1.0	m	m	m
Luxembourg	m	m	m	m	m	m
Mexico	85.3	14.7	0.5	82.6	17.4	m
Netherlands	90.3	9.7	m	90.1	9.9	m
New Zealand	m	m	m	m	m	m
Norway	98.7	1.3	n	97.9	2.1	n
Poland	m	m	a	m	m	m
Portugal	98.6	1.4	m	99.4	0.6	m
Slovak Republic	96.4	3.6	m	91.6	8.4	m
Spain	87.4	12.6	0.6	82.1	17.9	0.4
Sweden	97.0	3.0	a	98.3	1.7	m
Switzerland	91.8	8.2	1.0	m	m	m
Turkey	98.6	1.4	n	99.1	0.9	0.2
United Kingdom	85.2	14.8	0.9	83.9	16.1	3.5
United States	68.2	31.8	m	m	m	m
<b>Country mean</b>	<b>88.4</b>	<b>11.6</b>	<b>0.6</b>			
<b>NON-OECD COUNTRIES</b>						
Argentina	76.3	23.7	m	m	m	m
Chile	53.8	46.2	2.2	m	m	m
India <sup>2</sup>	95.5	4.5	m	m	m	m
Indonesia	64.5	35.5	m	m	m	m
Israel	80.0	20.0	1.0	80.5	19.5	1.3
Jamaica	65.0	35.0	1.1	m	m	m
Paraguay	69.0	31.0	m	m	m	m
Thailand	95.2	4.8	m	m	m	m
Uruguay	95.0	5.0	m	m	m	m

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

2. Year of reference 1999.

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

Table B3.2

**Relative proportions of public and private expenditure on educational institutions (1995, 2000)**  
*Distribution of public and private sources of funds for educational institutions after transfers from public sources, by level of education and year*

	Pre-primary education (for children 3 years and older)			Primary, secondary and post-secondary non-tertiary education						Tertiary education					
	2000			2000			1995			2000			1995		
	Public sources	Private sources <sup>1</sup>	Private- of which: subsi- dised	Public sources	Private sources <sup>1</sup>	Private- of which: subsi- dised	Public sources	Private sources <sup>1</sup>	Private- of which: subsi- dised	Public sources	Private sources <sup>1</sup>	Private- of which: subsi- dised	Public sources	Private sources <sup>1</sup>	Private- of which: subsi- dised
<b>OECD COUNTRIES</b>															
Australia	60.7	39.3	n	84.8	15.2	n	85.6	14.4	0.7	51.0	49.0	0.9	64.6	35.4	8.3
Austria	83.4	16.6	0.5	95.8	4.2	0.9	96.0	4.0	0.6	96.7	3.3	7.7	96.5	3.5	4.6
Belgium	96.0	4.0	a	93.9	6.1	0.1	m	m	m	85.2	14.8	4.5	m	m	m
Canada <sup>2</sup>	92.0	8.0	m	92.4	7.6	m	93.7	6.3	m	61.0	39.0	1.7	56.6	43.4	22.3
Czech Republic	90.8	9.2	n	91.7	8.3	n	87.9	12.1	6.6	85.5	14.5	n	71.0	29.0	8.6
Denmark <sup>3</sup>	81.8	18.2	m	97.8	2.2	m	97.8	2.2	n	97.6	2.4	n	99.4	0.6	n
Finland	87.7	12.3	n	99.5	0.5	n	m	m	m	97.2	2.8	n	m	m	m
France	95.9	4.1	n	93.0	7.0	1.9	92.5	7.5	2.1	85.7	14.3	2.3	84.3	15.7	2.6
Germany	63.1	36.9	a	80.5	19.5	a	80.6	19.4	a	91.8	8.2	a	92.8	7.2	a
Greece	m	m	m	91.7	8.3	m	m	m	m	99.7	0.3	m	m	m	m
Hungary	89.8	10.2	n	92.7	7.3	n	91.7	8.3	n	76.7	23.3	n	80.3	19.7	n
Iceland	m	m	m	95.1	4.9	m	93.7	6.3	m	94.9	5.1	m	93.0	7.0	m
Ireland	40.2	59.8	m	96.0	4.0	m	96.5	3.5	m	79.2	20.8	m	69.7	30.3	m
Italy	97.0	3.0	m	97.8	2.2	0.3	m	m	m	77.5	22.5	6.1	m	m	m
Japan <sup>3</sup>	51.3	48.7	a	91.7	8.3	m	91.7	8.3	m	44.9	55.1	m	42.0	58.0	m
Korea	25.9	74.1	0.5	80.8	19.2	0.9	m	m	m	23.3	76.7	1.1	m	m	m
Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Mexico	88.3	11.7	0.2	86.1	13.9	0.5	83.8	16.2	m	79.4	20.6	0.6	77.4	22.6	m
Netherlands	97.4	2.6	a	94.6	5.4	1.0	93.9	6.1	m	77.4	22.6	2.4	79.9	20.1	m
New Zealand	m	m	m	m	m	n	m	m	m	m	m	n	m	m	m
Norway	100.0	n	n	99.2	0.8	x	98.9	1.1	n	96.2	3.8	a	93.6	6.4	n
Poland	m	m	a	m	m	a	m	m	m	m	m	a	m	m	m
Portugal	m	m	m	99.9	0.1	m	100.0	n	m	92.5	7.5	m	96.5	3.5	m
Slovak Republic	98.5	1.5	a	97.6	2.4	m	93.1	6.9	m	91.2	8.8	m	85.3	14.7	m
Spain	81.5	18.5	n	93.0	7.0	n	86.6	13.4	n	74.4	25.6	2.5	74.4	25.6	2.0
Sweden	100.0	a	m	99.9	0.1	m	99.9	0.2	m	88.1	11.9	m	93.6	6.4	a
Switzerland	m	m	m	89.0	11.0	1.0	m	m	m	m	m	m	m	m	m
Turkey	m	m	m	m	m	a	100.0	a	a	95.4	4.6	n	97.0	3.0	0.7
United Kingdom	95.9	4.1	a	88.7	11.3	n	88.5	11.5	n	67.7	32.3	4.6	63.9	36.1	16.0
United States <sup>2</sup>	91.2	8.8	m	90.0	10.0	m	m	m	m	33.9	66.1	m	m	m	m
<b>Country mean</b>	<b>82.7</b>	<b>17.3</b>	<b>0.1</b>	<b>92.8</b>	<b>7.2</b>	<b>0.4</b>				<b>78.6</b>	<b>21.4</b>	<b>1.9</b>			
<b>NON-OECD COUNTRIES</b>															
Argentina	m	m	m	87.9	12.1	m	m	m	m	66.2	33.8	0.1	m	m	m
Chile	70.2	29.8	n	70.0	30.0	a	m	m	m	18.3	81.7	7.0	m	m	m
India <sup>2,4</sup>	93.6	6.4	m	93.6	6.4	m	m	m	m	99.8	0.2	m	m	m	m
Indonesia	5.3	94.7	m	76.5	23.5	m	m	m	m	43.8	56.2	m	m	m	m
Israel	74.7	25.3	n	94.1	5.9	1.3	93.1	6.9	0.8	56.5	43.5	n	59.2	40.8	3.0
Jamaica	61.6	38.4	n	63.6	36.4	0.9	m	m	m	71.5	28.5	2.3	m	m	m
Malaysia	88.9	11.1	a	100.0	n	m	m	m	m	m	m	m	m	m	m
Paraguay	m	m	m	71.9	28.1	m	m	m	m	62.6	37.4	m	m	m	m
Philippines	m	m	a	67.9	32.1	a	m	m	m	34.4	65.6	m	m	m	m
Thailand	98.0	2.0	m	97.8	2.2	x	m	m	m	80.4	19.6	m	m	m	m
Uruguay	89.2	10.8	m	94.5	5.5	x	m	m	m	99.7	0.3	m	m	m	m

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

To calculate private funds net of subsidies, subtract public subsidies (columns 3,6,9) from private funds (columns 2,5,8).

To calculate total public funds, including public subsidies, add public subsidies (columns 3,6,9) to direct public funds (columns 1,4,7).

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 1999.

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

Table B3.3

**Distribution of total public expenditure on education (2000)**

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	79.1	17.1	3.8	68.3	n	31.7	75.8	13.0	10.2
Austria	98.0	0.2	1.7	80.7	0.6	18.7	93.0	0.8	6.2
Belgium	45.2	54.5	0.3	35.6	48.1	16.3	44.0	51.8	4.2
Canada <sup>1</sup>	98.3	1.7	m	78.1	0.5	21.4	91.1	1.2	7.7
Czech Republic	91.3	3.1	5.6	90.2	1.2	8.6	92.0	2.5	5.6
Denmark <sup>2</sup>	77.2	6.8	16.0	61.1	n	38.9	72.8	4.2	23.1
Finland	91.5	4.7	3.8	74.8	7.5	17.7	85.8	5.9	8.3
France	83.1	13.4	3.5	88.6	3.3	8.1	85.2	10.9	3.9
Germany	86.4	9.4	4.1	83.6	2.4	14.0	83.0	10.9	6.1
Greece	99.8	a	0.2	94.2	a	5.8	98.5	a	1.5
Hungary	82.2	7.0	10.7	79.0	3.8	17.3	84.0	5.6	10.4
Iceland	97.7	1.1	1.2	77.1	1.0	21.9	94.1	1.1	4.8
Ireland	96.4	n	3.6	87.6	n	12.4	93.7	n	6.3
Italy	97.6	1.4	1.0	79.9	1.6	18.5	93.9	1.8	4.3
Japan <sup>2</sup>	96.3	3.5	0.2	76.3	12.6	11.1	91.9	6.2	1.9
Korea	86.9	11.6	1.5	45.2	45.4	9.4	81.1	16.0	2.9
Luxembourg	m	m	m	m	m	m	m	m	m
Mexico	96.8	n	3.2	95.0	n	5.0	96.8	0.0	3.2
Netherlands	21.7	70.5	7.8	38.0	34.9	27.0	26.8	60.7	12.4
New Zealand	88.6	3.6	7.8	51.8	2.0	46.3	78.6	4.2	17.2
Norway	89.9	4.5	5.6	68.2	3.2	28.6	81.7	5.9	12.4
Poland	m	m	m	m	m	m	m	m	m
Portugal	91.4	7.1	1.5	93.3	n	6.7	91.3	6.5	2.3
Slovak Republic	96.6	3.4	n	96.2	a	3.8	96.9	2.3	0.8
Spain	85.6	13.4	1.0	88.9	2.6	8.5	86.6	10.8	2.6
Sweden	85.9	3.0	11.1	65.7	4.8	29.5	80.6	3.9	15.4
Switzerland	89.8	7.7	2.5	92.0	6.7	1.3	90.0	7.2	2.8
Turkey	99.0	m	1.0	91.6	0.5	7.9	96.7	0.2	3.1
United Kingdom	78.1	21.8	0.1	a	87.1	12.9	66.4	31.3	2.4
United States <sup>1</sup>	99.7	0.3	m	73.2	9.0	17.7	92.8	3.2	4.0
<b>Country mean</b>	<b>85.1</b>	<b>11.9</b>	<b>3.7</b>	<b>72.5</b>	<b>10.7</b>	<b>16.8</b>	<b>82.3</b>	<b>11.1</b>	<b>6.6</b>
<b>NON-OECD COUNTRIES</b>									
Argentina	86.3	13.1	0.6	97.2	2.4	0.4	88.6	10.9	0.5
Brazil <sup>3</sup>	97.8	2.2	n	91.8	0.9	7.3	96.6	1.9	1.5
Chile	66.0	33.6	0.4	38.3	31.3	30.3	62.1	33.2	4.7
India <sup>1,3</sup>	66.6	33.3	0.1	77.3	22.6	0.2	72.7	27.2	0.1
Indonesia	90.2	6.4	3.4	m	m	m	92.4	5.0	2.6
Israel	74.5	24.2	1.3	6.3	82.1	11.6	63.5	33.2	3.3
Jamaica	98.4	0.1	1.5	90.4	n	9.6	94.1	2.8	3.1
Paraguay	92.8	6.9	0.3	98.7	x	1.3	93.9	5.7	0.4
Philippines	99.2	a	0.8	97.4	a	2.6	99.0	m	1.0
Thailand	93.5	2.4	4.2	62.7	1.0	36.2	87.9	2.1	10.0
Tunisia	m	m	m	m	m	m	m	m	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 1999.

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

## INDICATOR B4: TOTAL PUBLIC EXPENDITURE ON EDUCATION

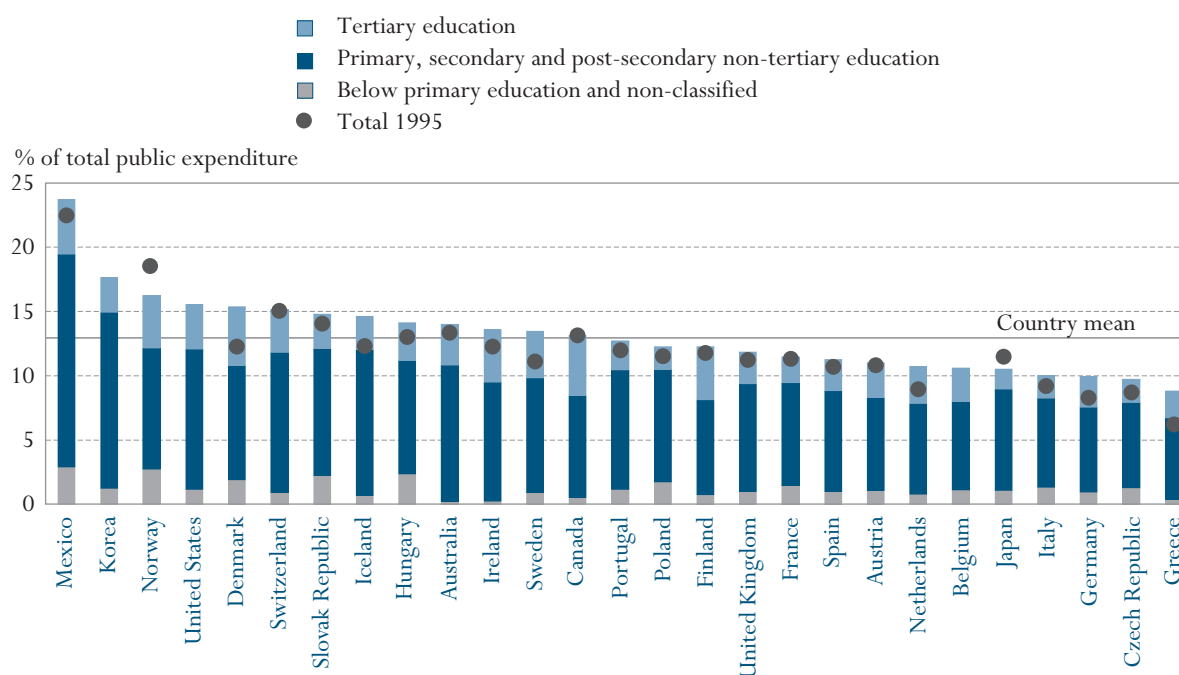
- On average, OECD countries devote 13.0 per cent of total public expenditure to educational institutions.
- Public funding of education is a social priority, even in OECD countries with little public involvement in other areas.
- Public expenditure on education tended to grow faster than total public spending, but not as fast as GDP. Education's share of public expenditure grew fastest in Denmark, Greece and Sweden. In the Czech Republic, Germany, Italy, the Netherlands, the Slovak Republic, and Sweden, public expenditure on education increased between 1995 and 2000 despite public budgets falling in real terms.
- In virtually every OECD country, public funding of primary, secondary and post-secondary non-tertiary education is more decentralised than public funding for tertiary education

B4

Chart B4.1

### Public expenditure on education as a percentage of total public expenditure (2000)

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



Countries are ranked in descending order of total expenditure from both public and private sources on educational institutions as a percentage of total public expenditure in 2000.

Source: OECD. Table B4.1. See Annex 3 for notes ([www.oecd.org/edu/eq2003](http://www.oecd.org/edu/eq2003)).

## Policy context

Governments become involved in providing services to the public 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 to the other indicators on expenditure, particularly B3 on the public/private shares of expenditure on education, as well as providing 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 for public financial support against a wide range of other areas covered in government budgets. To portray this, this indicator also evaluates the change in educational expenditure in absolute terms and relative to changes in the size of public budgets.

The level of government that has responsibility for, and control over, the funding of education is often thought to have a strategic advantage in influencing decisions regarding educational governance. An important question in educational policy is, therefore, the extent to which the division of responsibility for educational funding between national, regional and local authorities translates into responsibility for educational decision-making. Important decisions regarding educational funding are made both at the level of government where the funds originate and at the level of government by which they are finally spent or distributed. In illustrating each country's policy for centralisation or decentralisation of funding, this indicator provides, along with other indicators, some context for the educational performance of the system as a whole.

## 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 levels of government or indeed via households; they may also be restricted to the purchase of educational services or be used to support student living costs.

*This indicator focuses on public expenditure on education.*

*It also evaluates how public expenditure has changed over time in absolute terms and relative to total government spending. Finally, the source of public funds by level of government are examined.*


*Coverage diagram (see page 181 for explanations)*

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, OECD countries devote 13.0 per cent of total public expenditure to education.*

On average, OECD countries devote 13.0 per cent of total public expenditure to education. However, the values for individual countries range from below ten per cent in the Czech Republic, Germany and Greece, to almost 24 per cent in Mexico. (Chart B4.1). As in the case of spending on education in relation to GDP per capita, these values need to be interpreted in the light of student demography and enrolment rates.

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

The public-sector proportion of the funding of the different levels of education varies widely between OECD countries. In 2000, OECD countries spent between 6.3 (Greece) and 16.5 per cent (Mexico) of total public expenditure on primary, secondary and post-secondary non-tertiary education, and between 1.6 (Japan) and 4.7 per cent (Canada) on tertiary education. On average in OECD countries, reflecting in the main higher student numbers, public funding of primary, secondary and post-secondary non-tertiary education is three times that of tertiary education. This ratio varies by country from less than double in Canada, Denmark and Finland to as high as five times in Korea. The latter is indicative of the relatively high proportion of private funds which 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) need to be taken into account.

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

Across OECD countries, when the size of public budgets relative to GDP is compared with the proportion of public spending that is committed to education, it is evident that even in countries with relatively low rates of public spending, the priority that education is awarded within that spending is very high. For instance, the share of public spending that goes to education in Korea, Mexico and the United States is amongst the highest of OECD countries (Chart B4.1) and 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 cut, there is some evidence to suggest that countries with high rates of public spending spend proportionately less of it on education: only one of the top ten countries for public spending on public services overall, is in the top ten of public spenders on education.

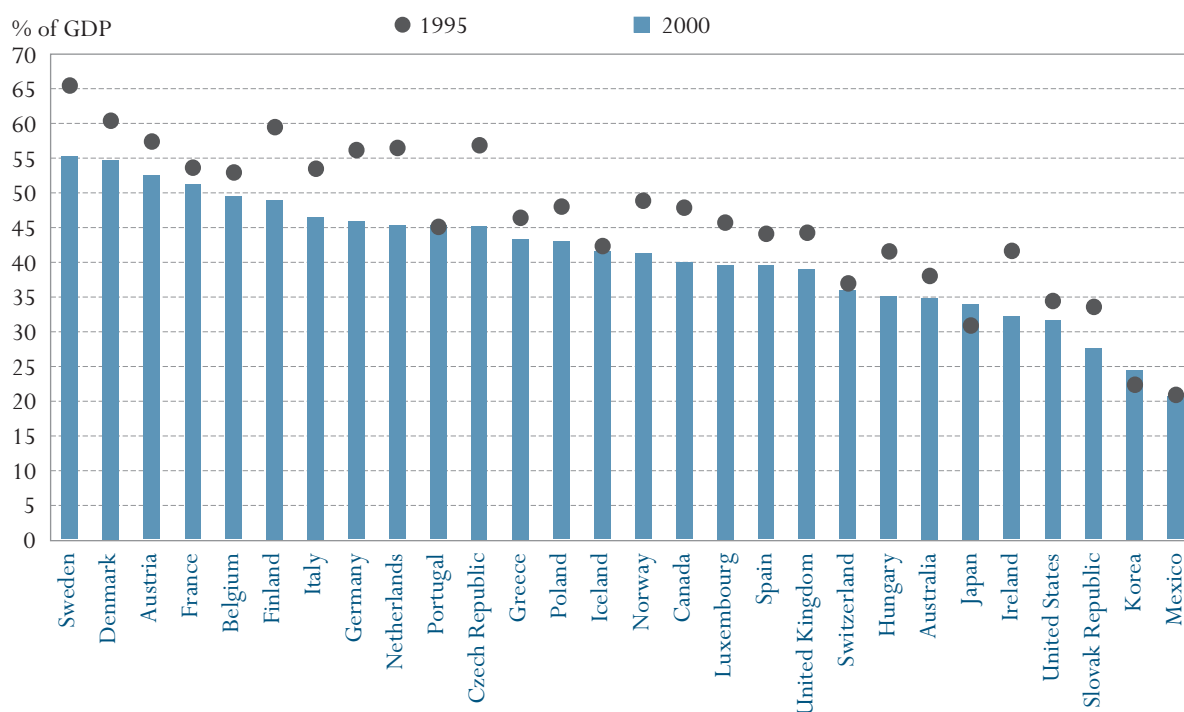
*Typically, public expenditure on education grew faster than total public spending, but not as fast as national income.*

The process of budget consolidation puts pressure on education as on every other service. Nevertheless, with the exception of Japan and Norway, spending on education grew at least as fast as spending in other public areas; the proportion of public budgets spent on education growing, on average, from 12.1 per cent in 1995 to 13.0 per cent in 2000. The figures suggest that the greatest increases in the share of public expenditure on education took place in Denmark (increasing from 12.2 per cent to 15.3 per cent), Greece (6.2 per cent to 8.8 per cent) and Sweden (11.0 per cent to 13.4 per cent).



Chart B4.2

## Total public expenditure as a percentage of GDP (1995, 2000)



B4

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 2000. Source: OECD. Annex 2. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

Across OECD countries, funding of primary, secondary and post-secondary non-tertiary education is more decentralised than public funding for tertiary education (Tables B4.2a and B4.2b). On average at the primary, secondary and post-secondary non-tertiary level 49 per cent of the initial funding comes from central rather than regional or local government compared with 77 per cent for tertiary education. Moreover, there are greater levels of transfers of funds from central to regional and local levels of government at the below tertiary level than there are at the tertiary levels, adding to the contrast in decentralisation between the levels of education.

Only two countries - New Zealand and the Slovak Republic - have entirely centralised funding systems below the tertiary level, whilst at the tertiary level, five countries - Hungary, Netherlands, New Zealand, Norway and the Slovak Republic operate such systems. Only Belgium has no central initial or final funding at the primary, secondary and post-secondary non-tertiary level.

*In virtually every OECD country, public funding of primary, secondary and post-secondary non-tertiary education is more decentralised than public funding for tertiary education.*

*Data refer to the financial year 2000 and are based on the UOE data collection on educational statistics administered by the OECD in 2002 (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.

The initial educational expenditure of each level of government – also referred to as the expenditure originating at that level – is the total educational expenditure of all public authorities at the level in question (direct expenditure plus transfers to other levels of government and to the private sector), less the transfers received from other levels of government. The proportion of initial expenditure made by a particular level of government is calculated as a percentage of the total, consolidated expenditure of all three levels. Only expenditure specifically designated for education is taken into account in determining the proportion of initial expenditure borne by a particular level. General-purpose transfers between levels of government, which provide much of the revenue of regional and local governments in some countries, have been excluded from the calculations.

The final expenditure of each level of government includes funds spent directly on educational institutions and transfers to households or other private entities (after transfers from other levels of government have occurred).

Note that data appearing in earlier editions of this publication may not always be comparable to data shown in the 2003 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/eag2003](http://www.oecd.org/edu/eag2003) for details on changes).

Table B4.1

**Total public expenditure on education (1995, 2000)**

Public expenditure on educational institutions plus public subsidies to households (which includes 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 on education as a percentage of total public expenditure				Public expenditure <sup>1</sup> on education as a percentage of GDP			
	2000			1995	2000			1995
	Primary, secondary and post-secondary 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	10.6	3.2	13.9	13.3	3.9	1.2	5.1	5.2
Austria	7.2	2.7	11.0	10.8	3.8	1.4	5.8	6.2
Belgium	6.9	2.6	10.6	m	3.4	1.3	5.2	m
Canada <sup>2</sup>	7.9	4.7	13.1	13.1	3.3	2.0	5.5	6.5
Czech Republic	6.6	1.8	9.7	8.7	3.0	0.8	4.4	4.9
Denmark <sup>3</sup>	8.8	4.6	15.3	12.2	4.8	2.5	8.4	7.4
Finland	7.4	4.2	12.2	11.7	3.6	2.0	6.0	7.0
France	8.0	2.0	11.4	11.3	4.1	1.0	5.8	6.0
Germany	6.6	2.4	9.9	8.2	3.0	1.1	4.5	4.6
Greece	6.3	2.1	8.8	6.2	2.7	0.9	3.8	2.9
Hungary	8.8	3.0	14.1	12.9	3.1	1.0	4.9	5.4
Iceland	11.3	2.6	14.6	12.2	4.7	1.1	6.0	4.9
Ireland	9.3	4.1	13.5	12.2	3.0	1.3	4.4	5.1
Italy	6.9	1.8	10.0	9.2	3.2	0.8	4.6	4.9
Japan <sup>3</sup>	7.9	1.6	10.5	11.4	2.7	0.5	3.6	3.6
Korea	13.6	2.7	17.6	m	3.3	0.7	4.3	m
Luxembourg	m	m	m	m	m	m	m	m
Mexico	16.5	4.3	23.6	22.4	3.4	0.9	4.9	4.6
Netherlands	7.0	2.9	10.7	8.9	3.2	1.3	4.8	5.0
New Zealand	m	m	m	14.4	4.9	1.7	7.0	5.7
Norway	9.4	4.1	16.2	18.4	3.9	1.7	6.7	9.0
Poland	8.8	1.8	12.2	11.5	3.8	0.8	5.2	5.5
Portugal	9.2	2.3	12.7	11.9	4.2	1.0	5.7	5.4
Slovak Republic	9.8	2.7	14.7	14.0	2.7	0.7	4.1	4.7
Spain	7.8	2.4	11.2	10.6	3.1	1.0	4.4	4.7
Sweden	8.9	3.6	13.4	11.0	4.9	2.0	7.4	7.2
Switzerland	10.9	3.4	15.1	15.0	3.9	1.2	5.4	5.5
Turkey	m	m	m	m	2.4	1.1	3.5	2.4
United Kingdom	8.3	2.5	11.8	11.2	3.4	1.0	4.8	5.1
United States <sup>2</sup>	10.9	3.5	15.5	m	3.5	1.1	5.0	m
<b>Country mean</b>	<b>8.9</b>	<b>2.9</b>	<b>13.0</b>	<b>12.1</b>	<b>3.5</b>	<b>1.2</b>	<b>5.2</b>	<b>5.4</b>
<b>NON-OECD COUNTRIES</b>								
Argentina	9.8	2.4	13.6	m	3.3	0.8	4.5	m
Brazil <sup>4</sup>	7.3	2.2	10.4	m	3.0	0.9	4.3	m
Chile	13.5	2.5	17.5	m	3.2	0.6	4.2	m
India <sup>2,4</sup>	8.6	2.2	12.7	m	2.8	0.7	4.1	m
Indonesia	7.4	2.2	9.6	m	1.1	0.3	1.5	m
Israel	9.0	2.5	13.7	13.3	4.5	1.2	6.8	6.9
Jamaica	8.1	2.4	11.1	m	4.8	1.4	6.5	m
Malaysia	17.2	8.5	26.7	m	4.0	2.0	6.2	m
Paraguay	9.3	1.9	11.2	m	4.1	0.9	5.0	m
Philippines	11.7	1.9	13.9	m	3.3	0.5	3.9	m
Russian Federation	6.0	1.7	10.6	m	1.7	0.5	3.0	m
Thailand	16.8	6.3	31.0	m	2.9	1.1	5.4	m
Tunisia	13.3	m	19.4	m	5.2	m	7.7	m
Uruguay	8.3	2.4	11.8	m	1.9	0.6	2.8	m
Zimbabwe <sup>2</sup>	m	m	m	m	7.6	m	7.6	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 is 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 1999.

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

B4

Table B4.2a  
**Initial sources of public educational funds and final purchasers of educational resources (2000)**  
*by level of government for primary, secondary and post-secondary non-tertiary education*

	Initial funds (before transfers between levels of government)				Final funds (after transfers between levels of government)				
	Central	Regional	Local	Total	Central	Regional	Local	Total	
OECD COUNTRIES	Australia	27	73	n	100	19	81	n	100
	Austria	70	8	22	100	34	43	23	100
	Belgium	a	94	6	100	a	94	6	100
	Canada <sup>1</sup>	4	70	26	100	3	10	87	100
	Czech Republic	80	a	20	100	80	a	20	100
	Denmark <sup>2</sup>	32	10	58	100	36	11	53	100
	Finland	41	a	59	100	9	a	91	100
	France	74	12	14	100	73	13	14	100
	Germany	8	75	18	100	7	71	22	100
	Greece	93	7	a	100	82	15	3	100
	Hungary	71	x	29	100	20	x	80	100
	Iceland	m	m	m	m	m	m	m	m
	Ireland	100	a	n	100	82	a	18	100
	Italy	81	5	14	100	81	4	15	100
	Japan <sup>2</sup>	25	57	18	100	1	81	18	100
	Korea	m	m	m	m	m	m	m	m
	Luxembourg	m	m	m	m	m	m	m	m
	Mexico	82	17	n	100	22	78	n	100
	Netherlands	94	n	6	100	74	n	26	100
	New Zealand	100	n	n	100	100	a	n	100
	Norway	34	a	66	100	11	a	89	100
	Poland	5	1	94	100	1	1	97	100
	Portugal	94	6	m	100	94	6	m	100
	Slovak Republic	100	a	a	100	100	a	a	100
	Spain	17	78	5	100	17	78	5	100
	Sweden	m	m	m	m	m	m	m	m
	Switzerland	3	52	45	100	n	58	42	100
	Turkey	m	m	m	m	m	m	m	m
	United Kingdom	26	a	74	100	24	a	76	100
	United States <sup>1</sup>	8	51	41	100	1	1	99	100
<b>Country mean</b>	<b>49</b>	<b>30</b>	<b>26</b>	<b>100</b>	<b>37</b>	<b>30</b>	<b>35</b>	<b>100</b>	
NON-OECD COUNTRIES	Argentina	9	91	m	100	1	99	m	100
	Brazil <sup>3</sup>	5	58	37	100	4	58	38	100
	Chile	95	a	5	100	48	a	52	100
	India <sup>1,3</sup>	10	84	6	100	10	71	19	100
	Indonesia	m	m	m	m	100	n	x	100
	Israel	90	a	10	100	67	a	33	100
	Jamaica	100	a	a	100	100	a	a	100
	Paraguay	100	n	n	100	98	2	x	100
	Philippines	86	a	14	100	86	a	14	100
	Russian Federation	7	18	75	100	7	18	75	100
	Thailand	94	a	6	100	90	a	10	100
	Tunisia	100	a	a	100	100	a	a	100
	Uruguay	100	a	a	100	100	a	a	100
	Zimbabwe <sup>1</sup>	100	a	a	100	100	a	a	100

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 1999.

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

Table B4.2b  
**Initial sources of public educational funds and final purchasers of educational resources (2000)**  
*by level of government for tertiary education*

	Initial funds (before transfers between levels of government)				Final funds (after transfers between levels of government)			
	Central	Regional	Local	Total	Central	Regional	Local	Total
<b>OECD COUNTRIES</b>								
Australia	91	9	n	100	91	9	n	100
Austria	99	1	n	100	99	1	n	100
Belgium	17	82	1	100	17	82	1	100
Canada <sup>1</sup>	34	66	n	100	23	73	n	100
Czech Republic	97	a	3	100	97	a	3	100
Denmark <sup>2</sup>	88	2	10	100	88	2	10	100
Finland	86	a	14	100	79	a	21	100
France	91	5	4	100	91	5	4	100
Germany	17	80	3	100	11	86	3	100
Greece	99	1	a	100	99	1	a	100
Hungary	100	x	n	100	100	x	n	100
Iceland	m	m	m	m	m	m	m	m
Ireland	100	a	n	100	90	a	10	100
Italy	92	7	n	100	91	8	n	100
Japan <sup>2</sup>	84	16	n	100	84	16	n	100
Korea	m	m	m	m	m	m	m	m
Luxembourg	m	m	m	m	m	m	m	m
Mexico	83	17	n	100	82	18	n	100
Netherlands	100	n	n	100	100	n	n	100
New Zealand	100	n	n	100	100	a	n	100
Norway	100	a	n	100	100	a	a	100
Poland	99	1	n	100	99	1	n	100
Portugal	m	m	m	m	m	m	m	m
Slovak Republic	100	a	a	100	100	a	a	100
Spain	16	83	1	100	16	83	1	100
Sweden	96	4	a	100	95	5	a	100
Switzerland	46	54	1	100	31	69	n	100
Turkey	m	m	m	m	m	m	m	m
United Kingdom	100	a	n	100	87	a	13	100
United States <sup>1</sup>	39	55	6	100	39	55	6	100
<b>Country mean</b>	<b>77</b>	<b>23</b>	<b>2</b>	<b>100</b>	<b>74</b>	<b>24</b>	<b>3</b>	<b>100</b>
<b>NON-OECD COUNTRIES</b>								
Argentina	31	69	n	100	1	99	n	100
Brazil <sup>3</sup>	64	34	2	100	64	34	2	100
Chile	100	a	a	100	100	a	a	100
India <sup>1, 3</sup>	38	62	x	100	38	62	a	100
Israel	98	a	2	100	98	a	2	100
Jamaica	100	a	a	100	100	a	a	100
Malaysia	100	m	n	100	100	m	a	100
Paraguay	100	n	n	100	100	n	n	100
Philippines	100	a	a	100	100	a	a	100
Russian Federation	81	17	2	100	81	17	2	100
Thailand	100	a	a	100	100	a	a	100
Uruguay	100	a	a	100	100	a	a	100

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 1999.

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

B4

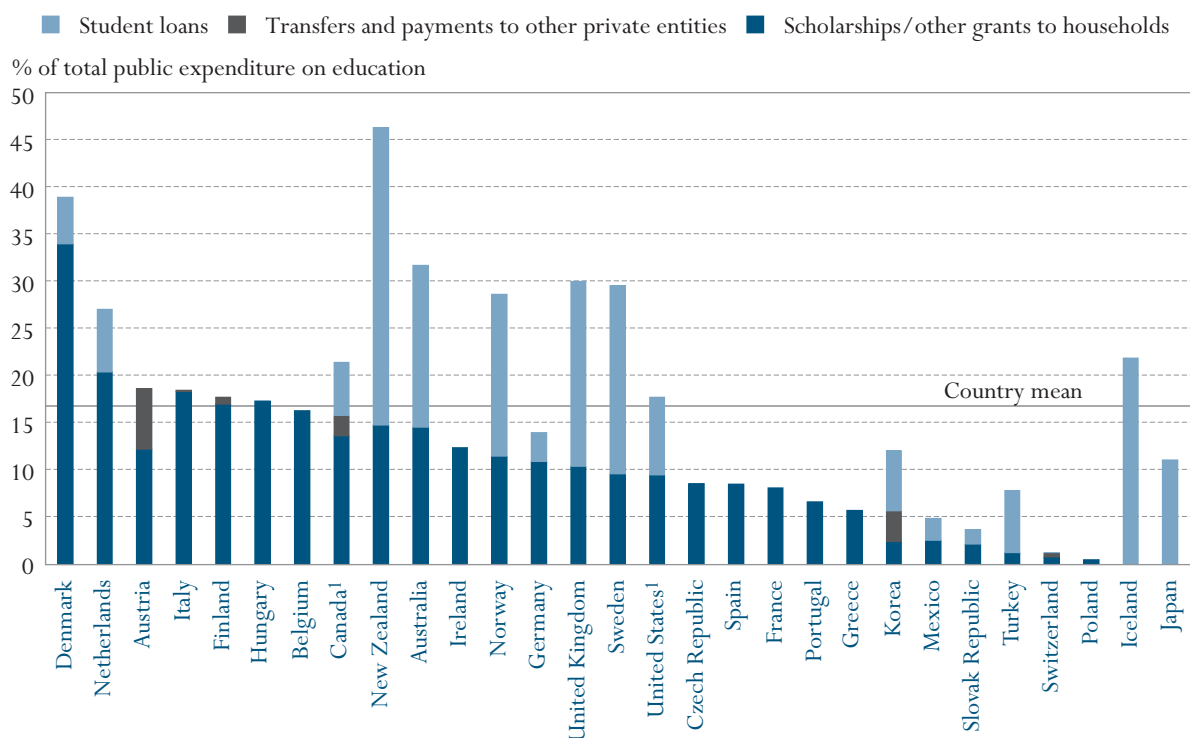
## INDICATOR B5: SUPPORT FOR STUDENTS AND HOUSEHOLDS THROUGH PUBLIC SUBSIDIES

- Public subsidies for students and households are mainly a feature at the tertiary level.
- An average of 17 per cent of public spending on tertiary education is devoted to supporting students, households and other private entities. In Australia, Denmark, New Zealand, Sweden and the United Kingdom, public subsidies account for about 30 per cent 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 almost half of these countries, exclusively outside.

B5

Chart B5.1

Public subsidies for education in tertiary education (2000)  
 Public subsidies for education to the private sector 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/eq2003](http://www.oecd.org/edu/eq2003)).

## 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 thereby can 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 to 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 portray the policies for subsidies that the different OECD countries pursue.

## Evidence and explanations

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

This indicator shows the proportion of public spending on education that is 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, on the one hand, and loans on the other. The indicator does not, however, distinguish between different types of grants or loans, such as scholarships versus family allowances and subsidies in kind.

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

*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 181 for  
explanations)*

The indicator reports the full volume of student loans in order to provide information on the level of support which current students receive. Given that repayments to loan programmes are made by former students who took out loans several years previously, it is difficult to estimate the real costs of loan programmes, net of repayments and 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. Moreover, in most countries, loan repayments do not flow to the education authorities, and thus the money is not available to them to cover other educational expenditure.

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 per cent of their GDP on public subsidies to households and other private entities.*

OECD countries spend an average of 0.4 per cent 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 (1.75 per cent of GDP), followed by New Zealand (1.18 per cent) and Sweden (1.14 per cent). Furthermore, on average across OECD countries, 7.0 per cent of public budgets for education is spent on transfers to the private sector (Tables B5.1 and B5.2). Most of these amounts are devoted to the tertiary level of education, except in the Czech Republic, France, Hungary, Mexico, and Switzerland, where more than 50 per cent of transfers to the private sector are devoted to primary, secondary and post-secondary non-tertiary education.

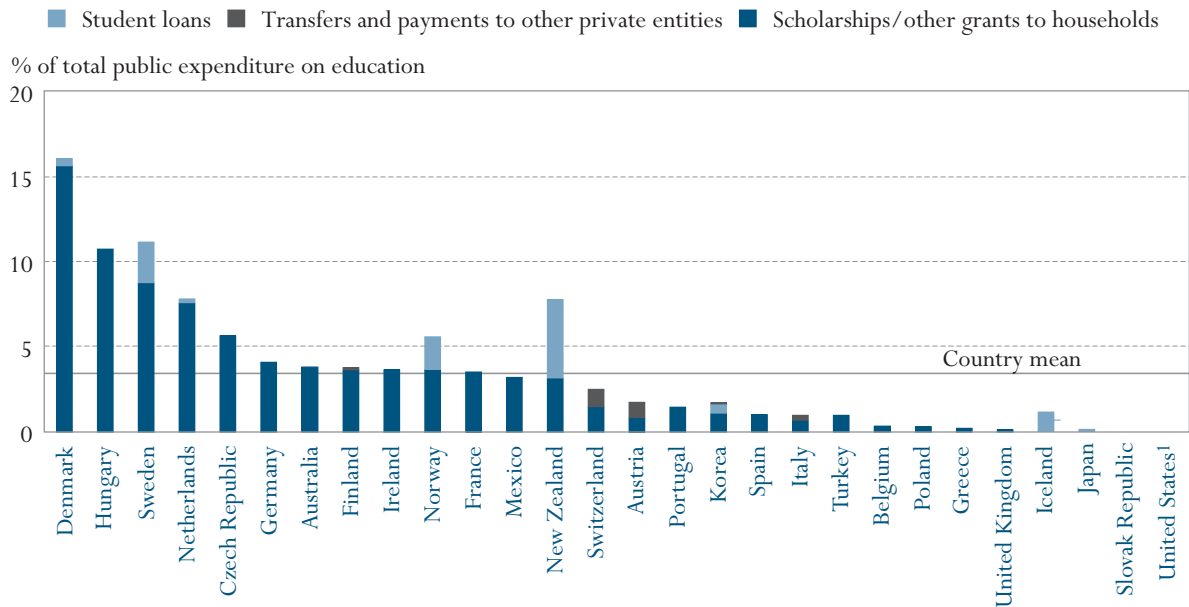
*At the primary, secondary and post-secondary non-tertiary levels, public subsidies account for a comparatively small proportion of public spending on education.*

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 nine out of 28 OECD countries, subsidies to households and private entities therefore account for 1 per cent or less of total public spending on primary, secondary and post-secondary non-tertiary education. However, in Hungary, the Netherlands, New Zealand, and Sweden, public subsidies account for between 8 and 11 per cent of public expenditure on primary, secondary and post-secondary non-tertiary education; and in Denmark for 16 per cent (Chart B5.2). In most of the OECD countries with high proportions of subsi-



Chart B5.2

Public subsidies for education in primary, secondary and post-secondary non-tertiary education (2000)  
Public subsidies for education to the private sector as a percentage of  
total public expenditure on education, by type of subsidy



B5

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/eag2003](http://www.oecd.org/edu/eag2003)).

dies 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 per cent of their public budgets for tertiary education on subsidies to households and other private entities (Chart B5.1). In Australia, Denmark, New Zealand, Sweden and the United Kingdom, public subsidies account for 30 per cent or more of public spending on tertiary education. Only Poland, the Slovak Republic and Switzerland spend less than 5 per cent 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, that is, 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.

*Australia, Denmark, New Zealand, Sweden and the United Kingdom spend 30 per cent 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.*

Opponents of loans argue that student loans will be less effective than grants in encouraging 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 of the costs of administration and servicing. Cultural differences between 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. 13 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 which offer student loans and in most cases these countries are spending 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.*

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 three countries reporting the largest subsidies in the form of student loans – Iceland, New Zealand and Sweden – also have some of the highest rates of entry into tertiary education of OECD countries (see Indicator C2). There are exceptions to this, however. Finland has the second highest tertiary (type A) entry rates of OECD countries but does not operate a publicly funded student loan system.

*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.*

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 expenditures (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 the later level of income of graduates.

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

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

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 the 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 related 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 per cent 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, Hungary and the Netherlands, scholarships and other grants not attributable for tuition fees to educational institutions account for more than 15 per cent of the total public spending on tertiary education. Poland and Switzerland are the only OECD countries where scholarships and other grants attributable for expenditure outside institutions amount to less than 1 per cent of total public spending on education (Table B5.2).

In OECD countries where students are required to pay tuition fees, access to public subsidies is of particular importance in order to provide students with access to educational opportunities, regardless of their financial situation. Indicator B4 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 also (Tables B5.2 and B3.2). An exception is Korea, where despite the fact that around 80 per cent of all expenditure on tertiary institutions originates from private sources, the level of subsidies to support tuition payments to institutions is, at 2 per cent, comparatively low (Tables B5.2 and B3.2).

### 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.

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 2002 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/eag2003](http://www.oecd.org/edu/eag2003) for details on changes).

*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 2000 and are based on the UOE data collection on educational statistics administered by the OECD in 2002 (for details see Annex 3).*

Table B5.1  
**Public subsidies to the private sector as a percentage of total public expenditure on education and GDP for primary, secondary and post-secondary non-tertiary education (2000)**

*Direct public expenditure on educational institutions and subsidies for households and other private entities as a percentage of total public expenditure on education and GDP*

	Direct expenditure for institutions	Subsidies for education to private entities					Subsidies for education to private entities as 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	0.15
Austria	98.3	0.8	a	0.8	0.9	1.7	0.07
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	94.4	5.6	a	5.6	n	5.6	0.17
Denmark	84.0	15.6	0.4	16.0	n	16.0	0.78
Finland	96.2	3.6	n	3.6	0.2	3.8	0.14
France	96.5	3.5	a	3.5	a	3.5	0.15
Germany	95.9	4.1	n	4.1	n	4.1	0.12
Greece	99.8	0.2	m	0.2	a	0.2	0.01
Hungary	89.3	10.7	a	10.7	n	10.7	0.33
Iceland	98.8	m	1.2	1.2	m	1.2	0.05
Ireland	96.4	3.6	n	3.6	n	3.6	0.11
Italy	99.0	0.7	a	0.7	0.3	1.0	0.03
Japan	99.8	m	0.2	0.2	n	0.2	n
Korea	98.5	1.0	0.5	1.5	0.1	1.5	0.05
Luxembourg	m	m	m	m	m	m	m
Mexico	96.8	3.2	a	3.2	a	3.2	0.11
Netherlands	92.2	7.6	0.2	7.8	n	7.8	0.25
New Zealand	92.2	3.1	4.6	7.8	n	7.8	0.38
Norway	94.4	3.6	2.0	5.6	n	5.6	0.22
Poland	99.7	0.3	x	0.3	m	0.3	0.01
Portugal	98.5	1.5	a	1.5	a	1.5	0.06
Slovak Republic	100.0	n	a	n	a	n	n
Spain	99.0	1.0	a	1.0	n	1.0	0.03
Sweden	88.9	8.7	2.4	11.1	m	11.1	0.55
Switzerland	97.5	1.5	n	1.5	1.1	2.5	0.10
Turkey	99.0	1.0	a	1.0	m	1.0	0.02
United Kingdom	99.9	0.1	a	0.1	n	0.1	n
United States <sup>1</sup>	100.0	n	n	n	n	n	n
<b>Country mean</b>	<b>96.6</b>	<b>3.2</b>	<b>0.4</b>	<b>3.4</b>	<b>0.1</b>	<b>3.4</b>	<b>0.13</b>
<b>NON-OECD COUNTRIES</b>							
Argentina	99.4	0.6	a	0.6	0.1	0.6	n
Brazil <sup>2</sup>	100.0	n	a	n	a	n	n
Chile	99.6	0.4	a	0.4	a	0.4	n
India <sup>1,2</sup>	99.9	0.1	x	0.1	x	0.1	n
Indonesia	96.6	3.4	m	3.4	m	3.4	n
Israel	98.7	1.3	n	1.3	n	1.3	0.1
Jamaica	98.5	1.5	n	1.5	n	1.5	0.1
Malaysia	99.7	0.3	a	0.3	m	0.3	n
Paraguay	99.7	0.2	a	0.2	0.1	0.3	n
Philippines	99.2	a	a	a	0.8	0.8	n
Thailand	95.8	0.7	3.5	4.2	m	4.2	0.1
Uruguay	99.9	0.1	a	0.1	a	0.1	n

1. Excluding post-secondary non-tertiary education.

2. Year of reference 1999.

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

Table B5.2  
Public subsidies to the private sector as a percentage  
of total public expenditure on education and GDP for tertiary education (2000)

Direct public expenditure on educational institutions and subsidies for households and other private entities as a percentage of total public expenditure on education and GDP

	Direct expenditure for institutions	Subsidies for education to private entities						Subsidies for education to private entities as 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	68.3	14.5	17.2	31.7	1.2	n	31.7	0.37	
Austria	81.3	12.2	a	12.2	x	6.4	18.7	0.27	
Belgium	83.7	16.3	n	16.3	4.4	n	16.3	0.21	
Canada <sup>1</sup>	78.6	13.6	5.7	19.2	m	2.2	21.4	0.42	
Czech Republic	91.4	8.6	a	8.6	n	n	8.6	0.07	
Denmark	61.1	33.9	4.9	38.9	n	n	38.9	0.98	
Finland	82.3	16.9	n	16.9	n	0.8	17.7	0.36	
France	91.9	8.1	a	8.1	2.5	a	8.1	0.08	
Germany	86.0	10.9	3.1	14.0	a	n	14.0	0.15	
Greece	94.2	5.8	m	5.8	m	a	5.8	0.05	
Hungary	82.7	17.3	a	17.3	n	n	17.3	0.18	
Iceland	78.1	m	21.9	21.9	m	m	21.9	0.24	
Ireland	87.6	12.4	n	12.4	m	n	12.4	0.16	
Italy	81.5	18.3	n	18.3	6.3	0.2	18.5	0.15	
Japan	88.9	m	11.1	11.1	m	n	11.1	0.06	
Korea	90.6	1.9	5.0	6.9	6.9	2.5	9.4	0.06	
Luxembourg	m	m	m	m	m	m	m	m	
Mexico	95.0	2.5	2.4	5.0	0.8	n	5.0	0.04	
Netherlands	73.0	20.3	6.7	27.0	2.3	n	27.0	0.35	
New Zealand	53.7	14.7	31.5	46.3	n	n	46.3	0.80	
Norway	71.4	11.5	17.1	28.6	a	n	28.6	0.48	
Poland	99.5	0.5	n	0.5	a	m	0.5	0.00	
Portugal	93.3	6.7	n	6.7	m	n	6.7	0.07	
Slovak Republic	96.2	2.1	1.6	3.8	m	a	3.8	0.03	
Spain	91.5	8.5	n	8.5	3.1	n	8.5	0.08	
Sweden	70.5	9.6	19.9	29.5	a	a	29.5	0.59	
Switzerland	98.7	0.8	n	0.8	m	0.5	1.3	0.02	
Turkey	92.1	1.3	6.6	7.9	n	m	7.9	0.08	
United Kingdom	70.0	10.4	19.6	30.0	4.7	n	30.0	0.30	
United States <sup>1</sup>	82.3	9.5	8.3	17.7	x	a	17.7	0.20	
<b>Country mean</b>	<b>83.2</b>	<b>11.0</b>	<b>6.4</b>	<b>16.4</b>	<b>1.7</b>	<b>0.5</b>	<b>16.8</b>	<b>0.24</b>	
<b>NON-OECD COUNTRIES</b>									
Argentina	99.6	0.3	m	0.3	m	0.1	0.4	n	
Brazil <sup>2</sup>	92.7	5.1	2.2	7.3	m	n	7.3	0.07	
Chile	69.7	13.6	16.7	30.3	26.5	a	30.3	0.19	
India <sup>2</sup>	99.8	0.2	x	0.2	x	x	0.2	n	
Israel	88.4	9.9	1.6	11.6	n	n	11.6	0.14	
Jamaica	90.4	2.8	6.7	9.6	2.8	n	9.6	0.13	
Malaysia	83.6	2.5	13.9	16.4	m	m	16.4	0.33	
Paraguay	98.7	1.3	a	1.3	x	a	1.3	0.01	
Philippines	97.4	2.5	0.1	2.6	x	a	2.6	0.01	
Thailand	63.8	0.1	36.1	36.2	x	m	36.2	0.40	
Uruguay	100.0	n	a	n	n	a	n	n	

1. Including post-secondary non-tertiary education.

2. Year of reference 1999.

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

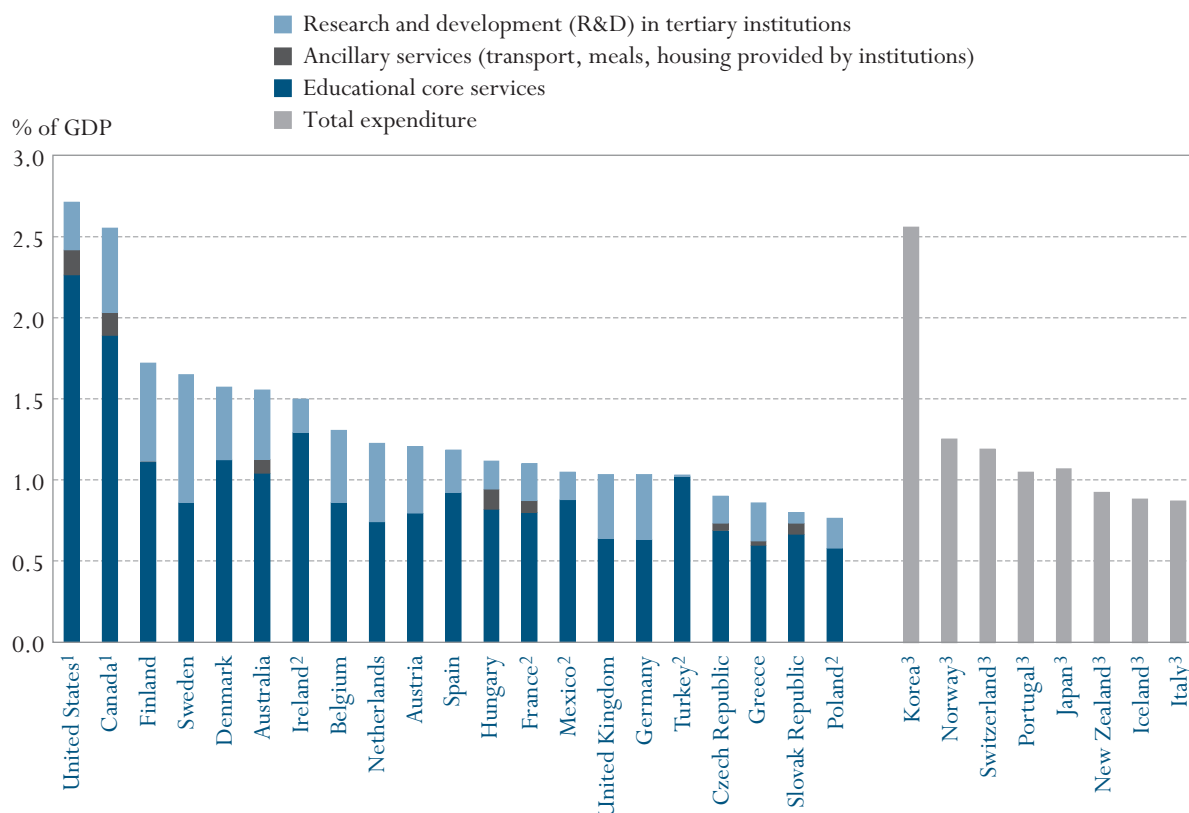
## INDICATOR B6: EXPENDITURE ON INSTITUTIONS BY SERVICE CATEGORY AND BY RESOURCE CATEGORY

- On average, one quarter of expenditure on tertiary education is attributable to R&D at tertiary educational institutions. Significant differences between 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, on average across all OECD countries, for 92 per cent of total spending. In all but three OECD countries, 70 per cent or more of primary, secondary and post-secondary non-tertiary current expenditure is spent on staff salaries.

B<sub>6</sub>

Chart B6.1

Expenditure on instruction, research and development (R&D) and ancillary services in tertiary educational institutions as a percentage of GDP (2000)



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

1. Including post-secondary non-tertiary education.

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

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

Source: OECD. Table B6.1. See Annex 3 for notes ([www.oecd.org/edu/eag2003](http://www.oecd.org/edu/eag2003)).

## Policy context

How spending is apportioned between different categories of expenditure can affect the quality of services (e.g., through 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 (as in the construction of new schools).

Comparisons of how different OECD countries apportion educational expenditure between 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 besides 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 which educational institutions typically fulfil. This includes, first, 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 on the construction and/or provision of school facilities. Second, it includes spending on ancillary services, such as student welfare services provided by educational institutions. Third, 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.

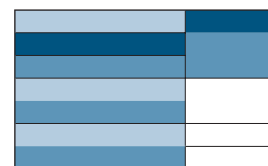
The indicator does not include public and private R&D spending outside educational institutions, such as R&D spending in industry. A comparative review of R&D spending in sectors other than education is provided in the OECD Science and Technology Indicators. Expenditure on student welfare services at 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 are 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 educa-

*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 181 for  
explanations)*

*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 6 per cent of total spending on educational institutions.*

tional spending. Differences between OECD countries in expenditure on R&D activities can therefore explain a significant part of the differences between 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, Sweden and the United Kingdom (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 per cent of their GDP on subsidies for ancillary services provided by primary, secondary and post-secondary non-tertiary institutions. This represents 6 per cent of total spending on these institutions. At the high end, the Czech Republic, Finland, France, Hungary and the Slovak Republic spend about 10 per cent or more of total spending on educational institutions on ancillary services, which translates into more than US\$ 500 (PPP) per student in Finland, France and Sweden and more than US\$ 250 (PPP) per student in Canada, the Czech Republic, the Flemish Community of Belgium, Hungary, Italy, the United Kingdom and the United States (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 per cent of GDP. Nevertheless, on a per student basis this can translate into significant amounts, as in Australia, Canada, the Flemish community of Belgium, France, Hungary and United States, where subsidies for ancillary services amount to over US\$ 500 (PPP). At the tertiary level, ancillary services are more often provided on a self-financed basis (Tables B6.1 and B6.2).

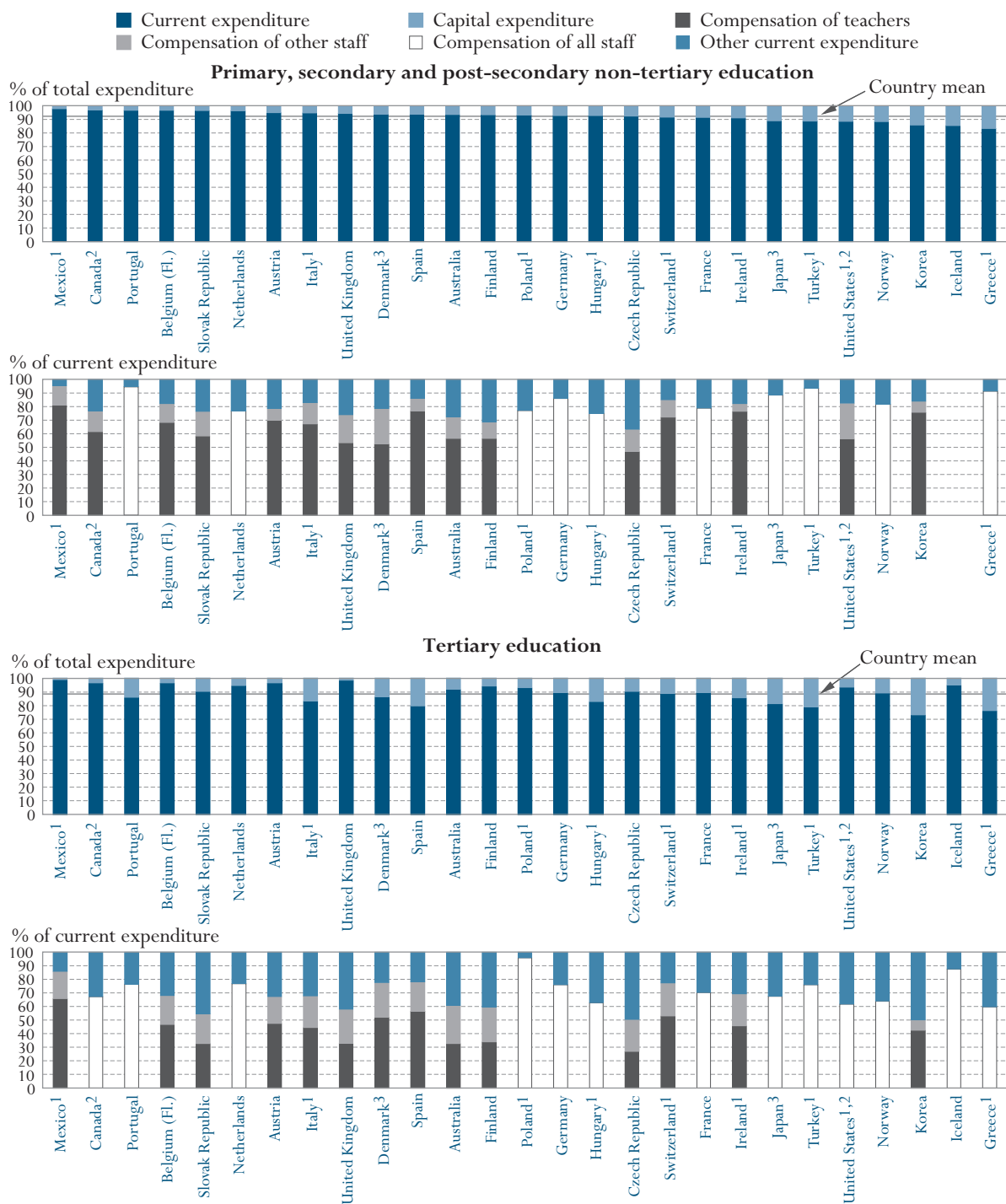
### **Current and capital expenditure, and the distribution of current expenditure by resource category**

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.

Current expenditure can be further sub-divided into three broad functional categories: compensation of teachers, compensation of other staff, and other



Chart B6.2

Distribution of total and current expenditure on educational institutions,  
by resource category and level of education (2000)

1. Public institutions.

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/eqa2003](http://www.oecd.org/edu/eqa2003)).

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, on average across all OECD countries, for 92 per cent of total spending.

There is some noticeable variation between 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 86 per cent in Greece, Iceland and Korea to 96 per cent or more in Canada, the Flemish Community of Belgium, Mexico, the Netherlands, Portugal and the Slovak Republic (Chart B6.2).

*In all except three OECD countries, 70 per cent 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 80 per cent of current expenditure at the primary, secondary and post-secondary non-tertiary levels of education combined. Although 70 per cent or less of expenditure in the Czech Republic, Finland and Sweden is devoted to the compensation of educational personnel, the proportion is 90 per cent or more in Greece, 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 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.

*OECD countries vary in the proportions of current expenditure which 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 and Spain this figure is 10 per cent 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).

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 16 out of 27 OECD countries, the proportion spent on capital expenditure at the tertiary level is 10 per cent or more, and in Greece, Korea, Spain and Turkey it is above 20 per cent (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 31 per cent 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 one used in national income accounting. Current expenditure refers to goods and services consumed within the current year, and must be made recurrently in order to sustain the production 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 on 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

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

*Data refer to the financial year 2000 and are based on the UOE data collection on educational statistics administered by the OECD in 2002 (for details see Annex 3).*

public. 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 are 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 2003 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/eag2003](http://www.oecd.org/edu/eag2003) for details on changes).

Table B6.1

**Expenditure on institutions by service category as a percentage of GDP (2000)**

Expenditure on instruction, research and development (R&D) and ancillary services in educational institutions  
as a percentage of GDP and private expenditure on educational goods purchased outside educational institutions as a percentage of GDP

OECD COUNTRIES	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	
		(1)		(2)		(3)			(4)
Australia	4.21	0.16	4.37	0.14	1.04	0.09	0.43	1.56	0.15
Austria	x(3)	x(3)	3.88	m	0.80	x(5)	0.41	1.21	m
Belgium	x(3)	x(3)	3.62	m	0.86	x(5)	0.45	1.31	m
Belgium (Fl.)	3.24	0.22	3.46	0.18	0.76	0.05	0.44	1.26	0.14
Canada <sup>1</sup>	3.44	0.19	3.62	m	1.89	0.14	0.52	2.55	0.41
Czech Republic	2.62	0.46	3.08	m	0.69	0.04	0.17	0.90	m
Denmark <sup>2</sup>	x(3)	x(3)	4.16	0.78	1.12	x(5)	0.45	1.58	0.98
Finland	3.10	0.39	3.48	m	1.11	n	0.61	1.72	m
France <sup>3</sup>	3.68	0.58	4.25	0.14	0.80	0.07	0.23	1.10	0.08
Germany	3.51	0.08	3.59	0.19	0.63	n	0.40	1.03	0.07
Greece <sup>4</sup>	2.87	0.04	2.91	0.75	0.60	0.03	0.24	0.86	0.07
Hungary <sup>4</sup>	2.49	0.34	2.83	m	0.82	0.12	0.18	1.12	m
Iceland	x(3)	x(3)	4.87	m	x(8)	x(8)	x(8)	0.89	m
Ireland <sup>3</sup>	2.93	0.06	2.99	m	1.29	x(5)	0.21	1.50	m
Italy	3.14	0.12	3.26	0.05	0.84	0.04	x(6)	0.87	0.24
Japan <sup>2</sup>	x(3)	x(3)	2.91	0.80	x(8)	x(8)	x(8)	1.07	m
Korea	x(3)	x(3)	4.04	m	x(8)	x(8)	x(8)	2.57	m
Luxembourg	m	m	m	m	m	m	m	m	m
Mexico <sup>3</sup>	x(3)	x(3)	3.83	0.21	0.88	x(5)	0.17	1.05	0.18
Netherlands	3.07	0.03	3.11	0.17	0.74	n	0.48	1.23	0.06
New Zealand	x(3)	x(3)	4.56	m	x(8)	x(8)	x(8)	0.93	m
Norway	x(3)	x(3)	3.67	m	x(8)	x(8)	x(8)	1.25	n
Poland <sup>3,4</sup>	3.52	0.23	3.75	m	0.58	n	0.19	0.77	m
Portugal	x(3)	x(3)	4.13	0.06	x(8)	x(8)	x(8)	1.05	0.07
Slovak Republic	2.53	0.25	2.77	0.24	0.66	0.07	0.07	0.80	0.10
Spain	3.17	0.11	3.28	m	0.92	x(5)	0.26	1.19	m
Sweden	3.93	0.43	4.36	0.55	0.86	a	0.79	1.65	0.59
Switzerland	x(3)	x(3)	4.26	m	x(8)	x(8)	x(8)	1.19	m
Turkey <sup>3,4</sup>	2.26	0.11	2.37	m	1.02	m	0.01	1.03	m
United Kingdom	3.54	0.25	3.79	m	0.64	n	0.40	1.04	0.09
United States <sup>1</sup>	3.74	0.14	3.87	0.02	2.26	0.16	0.29	2.71	0.11
<i>Country mean</i>	<i>3.21</i>	<i>0.22</i>	<i>3.62</i>	<i>0.31</i>	<i>0.96</i>	<i>0.05</i>	<i>0.33</i>	<i>1.29</i>	<i>0.21</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 is 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 are 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/eag2003](http://www.oecd.org/edu/eag2003)).

Table B6.2

**Expenditure per student on instruction, ancillary services and research and development (R&D) (2000)**  
*Expenditure per student 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)		
Australia	5 671	210	5 881	8 835	672	3 347	12 854
Austria	x(3)	x(3)	7 883	7 148	x(4)	3 702	10 851
Belgium	x(3)	x(3)	5 732	7 098	x(4)	3 673	10 771
Belgium (Fl.)	5 421	369	5 790	7 118	511	4 153	11 782
Canada <sup>1</sup>	5 640	307	5 947	11 093	826	3 065	14 983
Czech Republic	2 258	398	2 656	4 151	259	1 022	5 431
Denmark <sup>2</sup>	x(3)	x(3)	7 436	8 553	x(4)	3 428	11 981
Finland	4 705	587	5 292	5 323	19	2 902	8 244
France	5 517	863	6 380	6 094	537	1 742	8 373
Germany	6 048	138	6 185	6 643	30	4 225	10 898
Greece <sup>3</sup>	3 475	49	3 524	2 359	109	933	3 402
Hungary <sup>3</sup>	2 120	290	2 410	5 140	779	1 106	7 024
Iceland <sup>3</sup>	x(3)	x(3)	6 373	x(7)	x(7)	x(7)	7 994
Ireland	3 851	83	3 934	9 552	x(5)	1 531	11 083
Italy <sup>3</sup>	6 489	250	6 739	7 717	348	x(4)	8 065
Japan <sup>2</sup>	x(3)	x(3)	5 913	x(7)	x(7)	x(7)	10 914
Korea	x(3)	x(3)	3 608	x(7)	x(7)	x(7)	6 118
Luxembourg	m	m	m	m	m	m	m
Mexico	x(3)	x(3)	1 415	3 918	x(5)	770	4 688
Netherlands	5 084	54	5 138	7 230	n	4 704	11 934
New Zealand	x(3)	x(3)	m	x(7)	x(7)	x(7)	m
Norway <sup>3</sup>	x(3)	x(3)	7 399	x(7)	x(7)	x(7)	13 353
Poland <sup>3</sup>	1 869	119	1 988	2 443	n	779	3 222
Portugal	x(3)	x(3)	4 500	x(7)	x(7)	x(7)	4 766
Slovak Republic	1 579	153	1 732	4 105	432	412	4 949
Spain	4 474	162	4 636	5 182	x(4)	1 483	6 666
Sweden	5 701	620	6 321	7 869	a	7 228	15 097
Switzerland <sup>3</sup>	x(3)	x(3)	7 210	x(7)	x(7)	x(7)	18 450
Turkey <sup>3</sup>	m	m	822	4 071	m	50	4 121
United Kingdom	4 472	412	4 884	5 950	n	3 707	9 657
United States <sup>1,4</sup>	7 600	277	7 877	16 982	1 168	2 208	20 358
<b>Country mean</b>	<b>4 554</b>	<b>297</b>	<b>5 010</b>	<b>6 701</b>	<b>356</b>	<b>2 499</b>	<b>9 571</b>

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/eag2003](http://www.oecd.org/edu/eag2003)).

Table B6.3

## Expenditure on educational institutions, by resource category (2000)

Distribution of total and current expenditure on educational institutions from public and private sources, by resource category and level of education

	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	
													(1)
OECD COUNTRIES	Australia	93.5	6.5	56.1	16.0	72.2	27.8	91.3	8.7	32.6	28.1	60.8	39.2
	Austria	94.7	5.3	69.7	8.5	78.2	21.8	96.2	3.8	47.3	19.7	67.1	32.9
	Belgium	m	m	m	m	m	m	m	m	m	m	m	m
	Belgium (Fl.)	96.5	3.5	68.1	13.7	81.8	18.2	95.9	4.1	46.5	21.3	67.8	32.2
	Canada <sup>1</sup>	96.8	3.2	61.3	15.1	76.4	23.6	96.1	3.9	x(11)	x(11)	67.1	32.9
	Czech Republic	92.2	7.8	46.5	16.4	62.9	37.2	89.7	10.4	26.8	23.5	50.3	49.7
	Denmark <sup>2</sup>	93.6	6.4	52.3	26.1	78.4	21.6	85.9	14.1	52.0	25.4	77.4	22.6
	Finland	93.2	6.8	56.3	12.1	68.4	31.6	93.9	6.1	33.9	25.5	59.4	40.6
	France	91.3	8.7	x(5)	x(5)	78.8	21.2	89.1	10.9	x(11)	x(11)	70.1	29.9
	Germany	92.7	7.3	x(5)	x(5)	85.7	14.3	89.2	10.8	x(11)	x(11)	75.9	24.1
	Greece <sup>3</sup>	83.2	16.8	x(5)	x(5)	91.0	9.0	75.6	24.4	x(11)	x(11)	59.6	40.4
	Hungary <sup>3</sup>	92.6	7.4	x(5)	x(5)	74.9	25.1	82.4	17.6	x(11)	x(11)	62.6	37.4
	Iceland	85.2	14.8	x(5)	x(5)	m	m	94.4	5.6	x(11)	x(11)	87.4	12.6
	Ireland <sup>1</sup>	91.0	9.0	76.3	5.5	81.9	18.1	85.3	14.7	45.7	23.4	69.1	30.9
	Italy <sup>3</sup>	94.6	5.4	66.9	15.6	82.5	17.5	82.8	17.2	44.5	23.2	67.7	32.3
	Japan <sup>2</sup>	88.8	11.2	x(5)	x(5)	88.1	11.9	80.9	19.1	x(11)	x(11)	67.5	32.5
	Korea	84.2	15.8	75.0	8.5	83.5	16.5	72.2	27.8	37.3	12.8	50.0	50.0
	Luxembourg	m	m	m	m	m	m	m	m	m	m	m	m
	Mexico <sup>3</sup>	97.6	2.4	80.6	14.4	95.0	5.0	98.4	1.6	65.6	20.1	85.7	14.3
	Netherlands	96.1	3.9	x(5)	x(5)	76.7	23.3	94.1	5.9	x(11)	x(11)	76.7	23.3
New Zealand	m	m	m	m	m	m	m	m	m	m	m	m	
Norway	88.2	11.8	x(5)	x(5)	81.7	18.3	88.5	11.5	x(11)	x(11)	63.8	36.2	
Poland <sup>1</sup>	92.9	7.1	x(5)	x(5)	77.0	23.0	92.5	7.5	x(11)	x(11)	95.8	4.2	
Portugal	96.5	3.5	x(5)	x(5)	94.3	5.7	85.7	14.3	x(11)	x(11)	76.2	23.8	
Slovak Republic	96.3	3.7	58.1	17.9	76.1	23.9	89.8	10.2	32.6	21.8	54.4	45.6	
Spain	93.6	6.4	76.4	9.5	85.9	14.1	79.4	20.6	56.4	21.5	77.9	22.1	
Sweden	m	m	46.3	15.0	61.6	38.4	m	m	x(11)	x(11)	57.8	42.2	
Switzerland <sup>1</sup>	91.4	8.6	71.9	12.8	84.7	15.3	88.4	11.6	52.8	24.4	77.2	22.8	
Turkey <sup>1</sup>	88.5	11.5	x(5)	x(5)	93.4	6.6	78.5	21.5	x(11)	x(11)	75.8	24.2	
United Kingdom	94.3	5.7	53.1	20.5	73.6	26.4	98.2	1.8	33.0	24.8	57.8	42.2	
United States <sup>1,3</sup>	88.4	11.6	55.9	26.3	82.1	17.9	92.8	7.2	x(11)	x(11)	61.7	38.3	
<b>Country mean</b>	<b>92.2</b>	<b>7.8</b>	<b>63.0</b>	<b>14.9</b>	<b>80.3</b>	<b>19.7</b>	<b>88.3</b>	<b>11.7</b>	<b>43.7</b>	<b>22.7</b>	<b>68.8</b>	<b>31.2</b>	
NON-OECD COUNTRIES	Argentina <sup>1</sup>	96.9	3.1	61.1	29.5	90.7	9.3	98.6	1.4	54.8	35.5	90.4	9.6
	Brazil <sup>3,4</sup>	94.7	5.3	x(5)	x(5)	77.3	22.7	97.0	3.0	x(11)	x(11)	82.5	17.5
	Chile <sup>3</sup>	84.7	15.3	x(1)	x(1)	x(1)	x(1)	92.0	8.0	x(7)	x(7)	x(7)	x(7)
	India <sup>1,3,4</sup>	97.5	2.5	78.6	9.6	88.2	11.8	98.4	1.6	99.8	x(9)	99.8	0.2
	Indonesia <sup>1</sup>	93.9	6.1	78.0	7.7	85.8	14.2	82.0	18.0	87.2	11.8	99.0	1.0
	Israel	91.6	8.4	x(5)	x(5)	77.5	22.5	90.5	9.5	x(11)	x(11)	76.5	23.5
	Jamaica <sup>1</sup>	95.4	4.6	48.4	8.8	57.2	42.8	93.5	6.5	56.9	21.9	78.8	21.2
	Malaysia <sup>1</sup>	69.5	30.5	69.8	12.4	82.2	17.8	54.0	46.0	31.6	13.5	45.1	54.9
	Paraguay <sup>1</sup>	93.0	7.0	65.6	12.9	78.5	21.5	92.3	7.7	59.8	15.2	75.0	25.0
	Philippines <sup>1</sup>	91.6	8.4	85.6	m	85.6	14.4	95.4	4.6	75.2	m	75.2	24.8
	Tunisia <sup>1</sup>	88.8	11.2	x(1)	x(1)	x(1)	x(1)	m	m	m	m	m	m
	Uruguay <sup>1</sup>	95.3	4.7	66.7	18.9	85.6	14.4	94.9	5.1	63.8	22.7	86.5	13.5
	Zimbabwe	98.2	1.8	60.2	m	60.2	39.8	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.

1. Post-secondary non-tertiary education 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 1999.

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

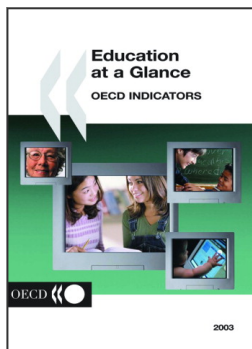
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