

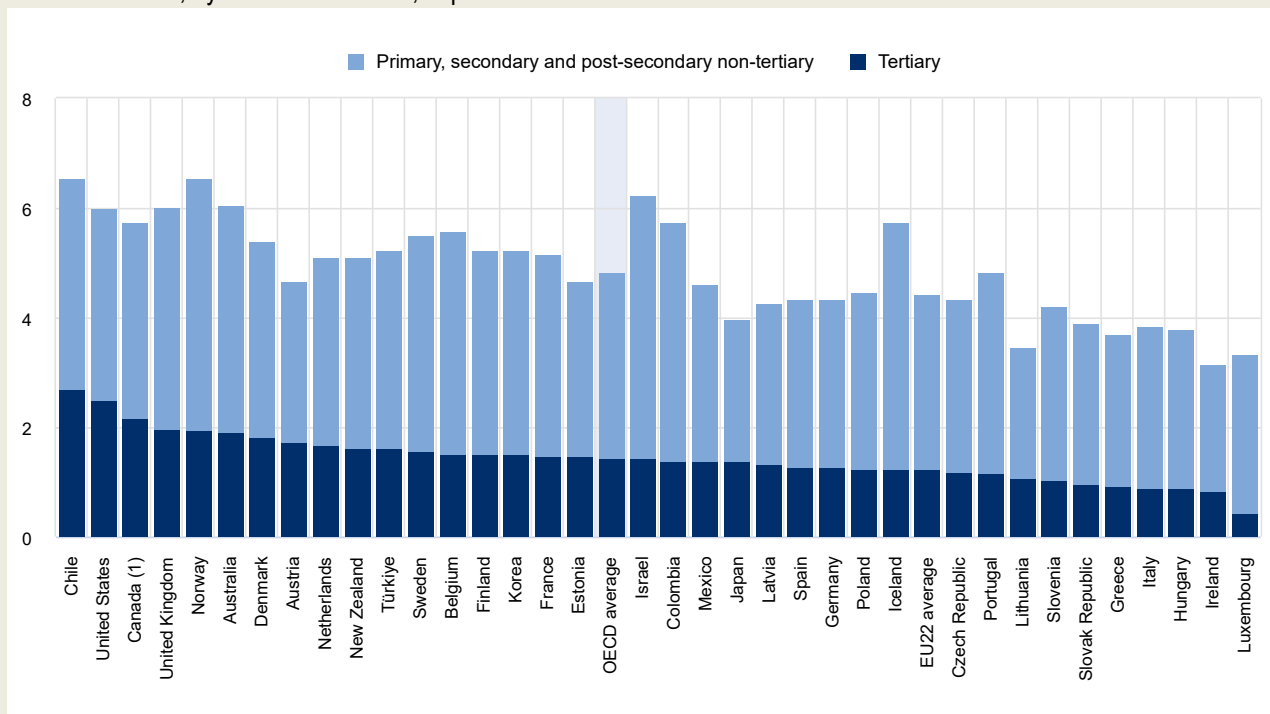
Indicator C2. What proportion of national output is spent on educational institutions?

Highlights

- Expenditure on tertiary education accounts for 1.5% of gross domestic product (GDP) on average across OECD countries or 30% of all education funding allocated to educational institutions.
- Education funding does not respond strongly to short-term fluctuations in GDP, but is influenced by long-term trends in GDP growth. Declines in GDP in 2008-09 only affected education budgets to a limited extent and only in some countries. The same might be expected for 2020, when most countries experienced a drop in GDP.
- Wealthier countries can afford to invest more resources on education than less wealthy ones. A USD 1 000 increase in GDP per capita is on average associated with a USD 200 increase in expenditure per student.

Figure C2.1. Total expenditure on educational institutions as a share of GDP (2019)


From all sources, by level of education, in per cent



1. Primary, secondary and post-secondary non-tertiary education includes pre-primary programmes.

Countries are ranked in descending order of total expenditure on tertiary educational institutions as a percentage of GDP.

Source: OECD/UIS/Eurostat (2022), Table C2.1. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

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Context

Countries invest in education to help foster economic growth, enhance productivity, contribute to personal and social development, and reduce social inequality, among other reasons. The level of expenditure on educational institutions is affected by the size of a country's school-age population, enrolment rates, the levels of teachers' salaries, and the organisation of education systems. At primary and lower secondary levels (which correspond broadly to the population aged 6 to 14), enrolment rates are close to 100% in most OECD countries. Changes in the number of students are therefore closely related to demographic changes. This is less the case in upper secondary and tertiary education, when part of the relevant population will have left the education system (see Indicator B1).

In order to account for these issues, this indicator measures the proportion of a nation's output that is invested in educational institutions. This measure demonstrates the priority given to educational institutions relative to a country's overall resources. National output is based on GDP, while expenditure on educational institutions includes spending by governments, enterprises, and individual students and their families. This indicator covers expenditure on schools, universities (including on research and development), and other public and private institutions involved in delivering or supporting educational services.

Public budgets are heavily scrutinised by governments and during economic downturns even core sectors like education can be subject to budget cuts. This indicator provides a point of reference, by showing how the volume of spending on educational institutions, relative to national GDP, has evolved over time in OECD countries. In deciding how much to allocate to educational institutions, governments must balance demands for increased spending in areas such as teachers' salaries and educational facilities with other areas of investment.

Other findings

- On average across OECD countries, expenditure on primary education amounts to 30% of the funding for educational institutions, while secondary education accounts for 39%. However, the share of expenditure on educational institutions is strongly influenced by the demographic composition in each country, as well as the duration of each level of education.
- In OECD countries, average expenditure per student on educational institutions from primary to tertiary levels is equivalent to 26% of GDP per capita. The relationship between GDP per capita and expenditure per student on educational institutions is clearly positive and reflects the fact that countries with low levels of expenditure per student may still be investing relatively large amounts relative to GDP per capita.

Analysis

Overall investment relative to GDP

All OECD countries devote a substantial share of national output to educational institutions. In 2019, OECD countries spent on average of 4.9% of their GDP on educational institutions from primary to tertiary levels (Table C2.1).

Expenditure on primary to tertiary educational institutions as a share of GDP varies from 6% or more in Australia, Chile, Israel, Norway, the United Kingdom and the United States to 3.5% or less in Ireland, Lithuania and Luxembourg (Figure C2.1 and Table C2.1). Many factors influence the relative expenditure of countries on this measure, including the number of students enrolled, the duration of studies and the effective allocation of funds. At the tertiary level, spending may be influenced by the criteria for accessing higher levels of education, the number of students enrolled across sectors and fields of study, and the scale of investment in research activities.

Expenditure on educational institutions by level of education

Funding for tertiary education accounts for 1.5% of GDP on average or 30% of all expenditure on educational institutions (Figure C2.1 and Figure C2.2). At this level, the various pathways and programmes available to students, the duration of programmes, the organisation of teaching, and research and development (R&D) activity all influence the level of expenditure. In 2019, among OECD countries, Austria, Canada, Chile, Japan, and the United States had the highest percentage of tertiary education spending (35% or more), with Canada, Chile, and the United States allocating the largest share of education funding to tertiary educational institutions. Some of these countries also have some of the highest levels of expenditure from private sources after public-to-private transfers have been accounted for (Table C2.3).

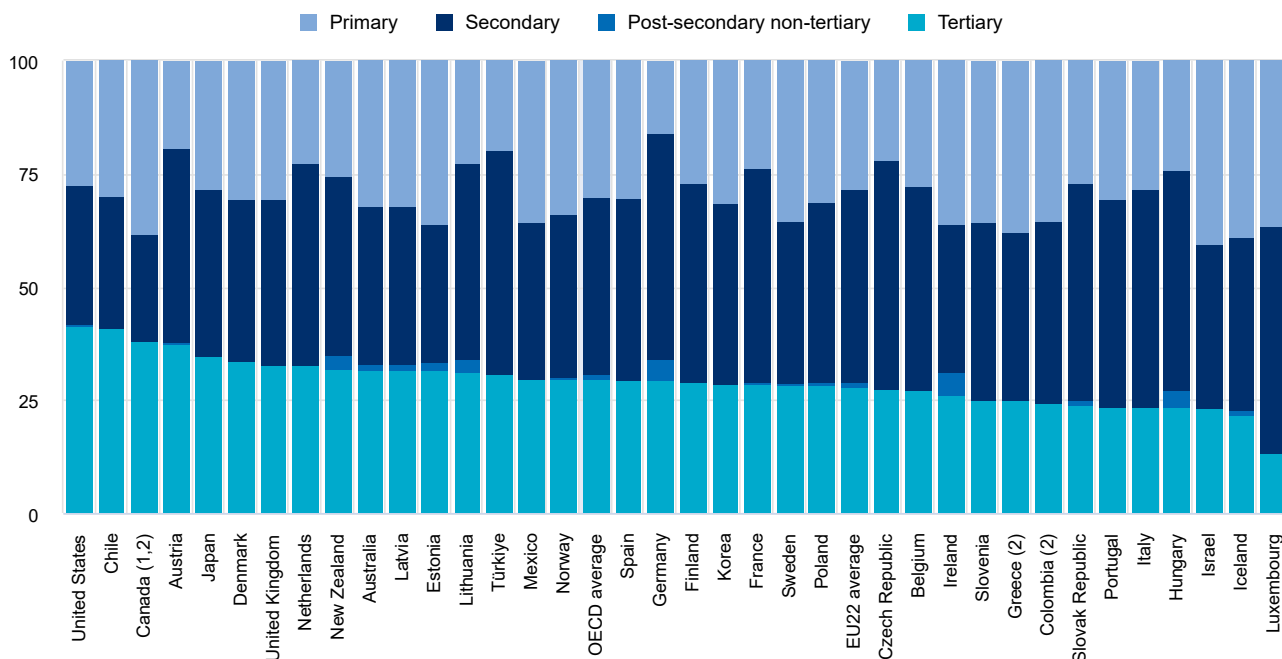
R&D spending in tertiary educational institutions can represent a substantial share of the total spending at this level and depends on the organisation of publicly funded research as well as the infrastructure and facilities available. Expenditure levels tend to be higher in Denmark, Sweden and other OECD countries where most publicly funded R&D is performed by tertiary educational institutions compared to those countries where R&D is mostly performed in other institutions. If R&D activities are excluded, expenditure on tertiary educational institutions as a share of GDP falls by 0.5 percentage points on average across OECD countries, although the difference is at least 0.7 percentage points in Denmark, Finland, Norway and Sweden (Table C2.1).

In all OECD countries with available data, the share of national resources devoted to educational institutions in non-tertiary education (primary, secondary and post-secondary non-tertiary levels) is much larger than the share devoted to tertiary education (Table C2.1). This is partly because tertiary education has lower enrolment rates (see Indicator B1) and require fewer years of studies. On average across OECD countries, 3.4% of GDP or 70% of total expenditure on educational institutions is directed to non-tertiary levels. The share of resources devoted to non-tertiary educational institutions ranges from 58% in the United States to 86% in Luxembourg (Figure C2.2).

On average across OECD countries, expenditure on primary education amounts to 30% of the funding for educational institutions, while secondary education accounts for 39%. The share of funding devoted to primary educational institutions ranges from less than 20% in Austria and Germany (due to the short duration of primary education) to 40% in Israel. At secondary level, it ranges from less than 25% in Canada to 50% in the Czech Republic, Germany and Luxembourg. These figures vary widely between countries and depend on the demographic structure of the population (see Indicator C1 for the analysis of expenditure per student by level of education) as well as on the relative size of primary, secondary and tertiary education (Figure C2.2). One factor that influences demographic structure is the fertility rate, with research showing that countries with relatively low fertility rates are more likely to spend a smaller share of their wealth on primary and lower secondary education (OECD, 2020^[1]).

Figure C2.2. Total expenditure on educational institutions by level of education (2019)

Primary to tertiary education, after transfers, in per cent




1. Primary education includes pre-primary programmes.

2. Post-secondary non-tertiary figures are treated as negligible.

Countries are ranked in descending order of their share of total expenditure on tertiary educational institutions.

Source: OECD/UIS/Eurostat (2022), Table C2.1. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

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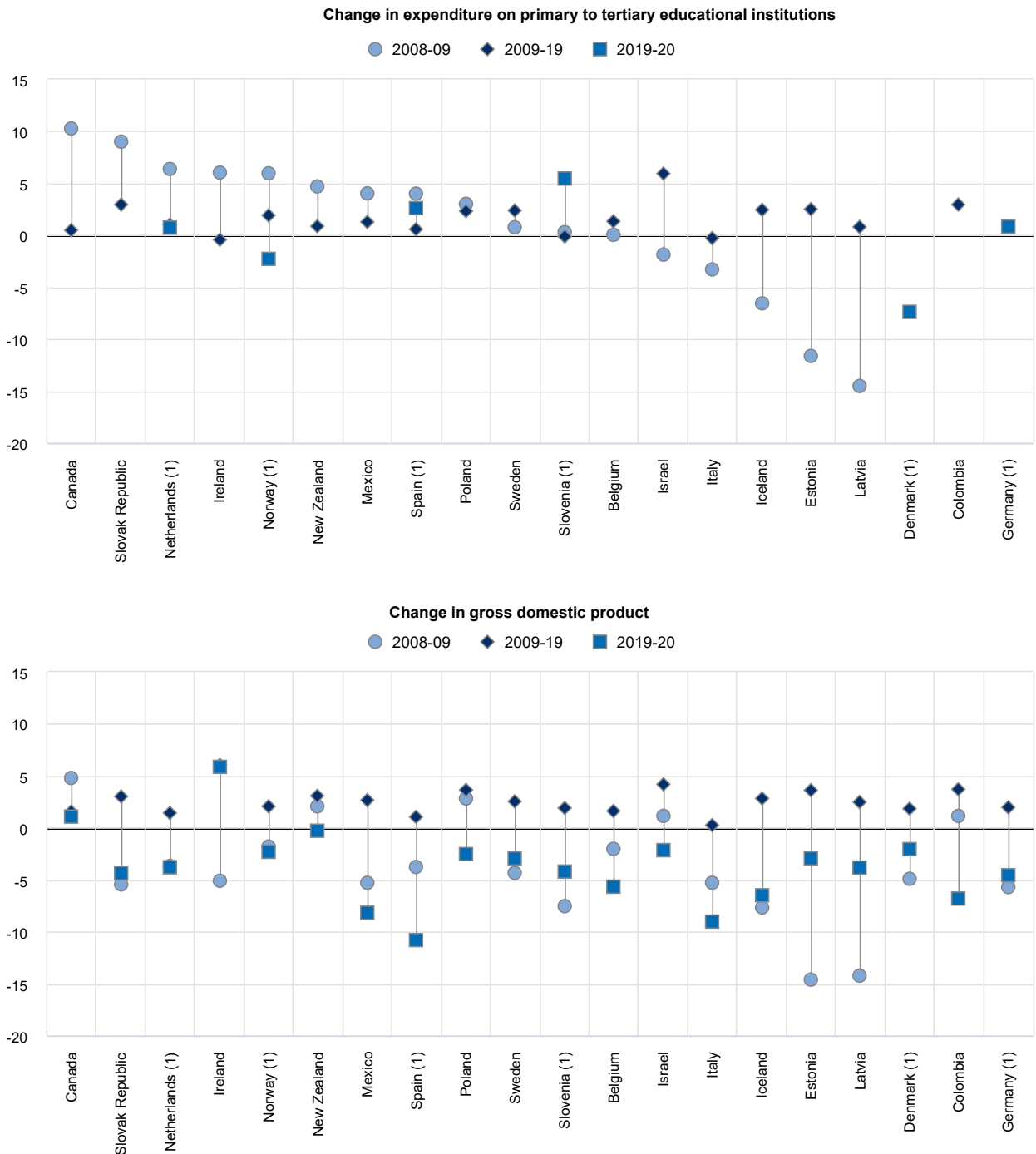
Changes in educational expenditure in the last decade

In 2019, the OECD average expenditure on primary to tertiary educational institutions as a share of GDP was only 0.2 percentage points lower than in 2008 and at the same level as that of 2015 (4.9%) (OECD, 2022^[2]), although the variation over time differs across education levels and countries. This slight decline reflects the variation of this share at the primary, secondary and post-secondary non-tertiary levels, while it remained rather stable at the tertiary level. Between 2008 and 2009, education expenditure on primary to post-secondary non-tertiary educational institutions as a share of GDP increased by 0.3 percentage points, while it declined by 0.5 percentage points between 2009 and 2015 and remained constant in the period 2015-19. This is also due to the general trend that saw GDP values declining in the period 2008-09 and recovering in the years after, while education expenditure remained relatively stable. Over the whole period between 2008 and 2019, Chile, the Czech Republic and Israel experienced the largest increase, of 0.8 percentage points or more. While the increase in Chile's education expenditure as a share of GDP was mostly observed at the tertiary level, those in the Czech Republic and Israel occurred mostly at the non-tertiary levels. On the other hand, Ireland and New Zealand experienced the largest declines in the period considered, of more than 1 percentage point (OECD, 2022^[2]).

On average, total expenditure from all sources on primary to tertiary educational institutions increased by 18% between 2008 and 2019, slightly below the increase in GDP (21%). Almost all countries with data available experienced an increase in the total expenditure on primary to tertiary institutions during this period, reaching 60% or more in Chile and Israel. Only Italy, Latvia and Slovenia experienced slight decreases in total expenditure on primary to tertiary institutions between 2008 and 2019 (Table C2.2). In a number of countries, GDP grew much faster than education expenditure, resulting in education expenditure falling as a share of GDP; this was particularly evident in New Zealand and Poland where the growth rate of GDP was at least 18 percentage points higher than the growth rate of total expenditure on primary to tertiary educational institutions.

Figure C2.3. Average annual change in total expenditure on primary to tertiary educational institutions and in GDP (2008 to 2020)

Compound annual growth rate, constant prices, in per cent



Please note that this chart compares the average annual growth rate over periods of different lengths. Overall, a positive growth rate has a higher impact over a longer time period. 1. Provisional data on the 2019-20 change in expenditure on educational institutions.

Countries are ranked in descending order of the percentage change in total expenditure on educational institutions over the period 2008 to 2009.

Source: OECD/UIS/Eurostat (2022), Table C2.4, available on line. See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

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In most countries, the increase in education expenditure was rather similar across educational levels, but Chile, Estonia, Mexico and Norway experienced a much larger increase at tertiary level, at least 30 percentage points more, while Israel and Portugal witnessed a much larger increase in funding for primary to post-secondary non-tertiary institutions (Table C2.2).

Expenditure on primary to tertiary educational institutions and GDP growth rates seem to be correlated only to a limited extent in the short run. Education budgets did not grow steadily between 2008 and 2019 in most countries, but alternated between periods of increased and decreased funding. For example, in Estonia, education expenditure fell by more than 10% in the period 2008-09 but grew after that, while falls in Iceland and Latvia took place over the period 2008-2011. In comparison, GDP growth rates seem to be steadier over time with the exceptions of the 2008-09 financial crisis and the 2019-20 health crisis (Table C2.2 and Figure C2.3).

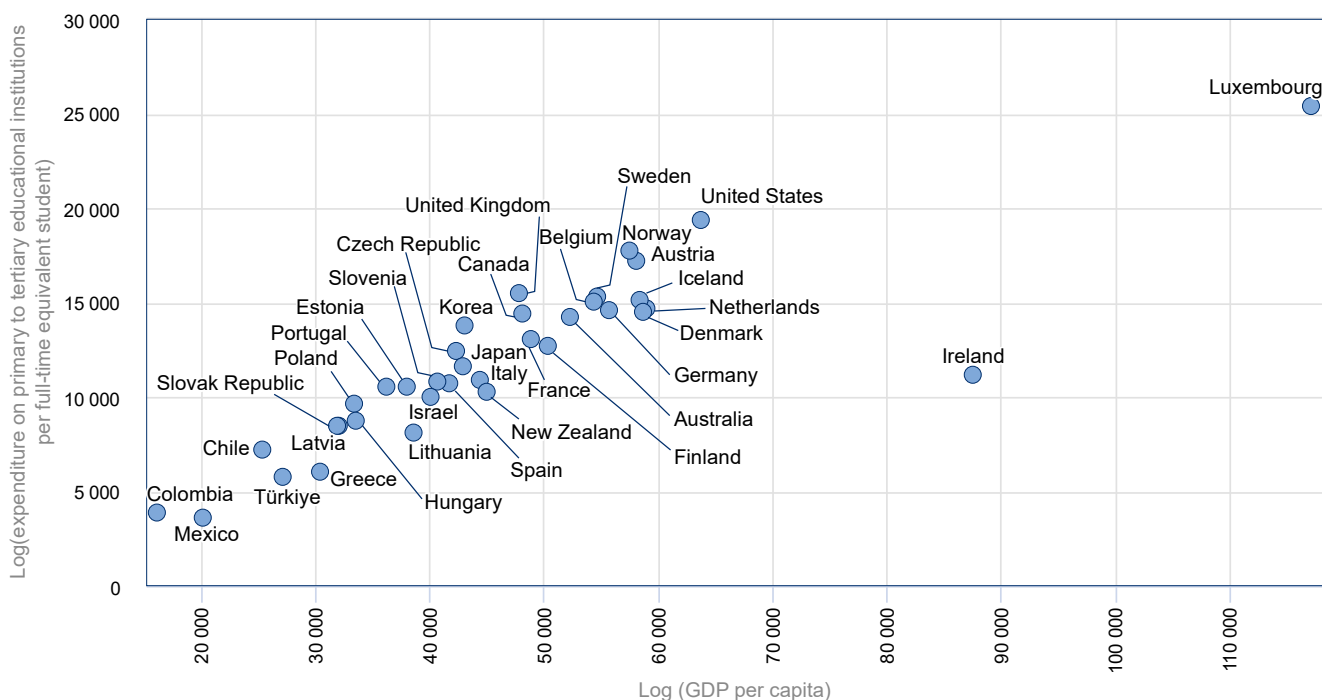
Education funding does not respond strongly to short-term fluctuations in GDP, but is more influenced by long-term trends in GDP growth. In 2009, GDP figures fell in the large majority of OECD countries, reaching troughs of 14-15% in Estonia and Latvia compared to the previous year and, similarly, most countries' GDP dropped in 2020 in the aftermath of the COVID-19 health crisis, by -9% in Italy and -11% in Spain. However, the 2009 falls in GDP only affected education budgets to a limited extent and only in some countries can the same might be expected for 2020, although education expenditure data are mostly provisional and only available for a limited number of countries (Figure C2.3).

Expenditure per student on educational institutions relative to GDP per capita

Expenditure on educational institutions per student relative to GDP per capita is a measure of spending that takes income levels into account. Since access to education in most OECD countries is universal (and usually compulsory) at lower levels of schooling, the amount spent per student as a share of GDP per capita can indicate whether the resources spent per student are proportionate to a country's ability to pay.

Figure C2.4. Total expenditure on primary to tertiary educational institutions per student relative to GDP per capita (2019)

In equivalent USD converted using PPPs, log scales



Source: OECD/UIS/Eurostat (2022), Table C1.1 and Annex 2 (Chapter C). See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

In OECD countries, total expenditure per student on educational institutions from primary to tertiary levels averages 26% of annual GDP per capita. Countries with low levels of expenditure per student may still be investing relatively large amounts as a share of GDP per capita. For example, Portugal's expenditure per student for most educational levels and its GDP per capita are both below the OECD average, but it spends a more than proportionate share of its GDP per capita on education (above the OECD average) (Figure C2.4 and Indicator C1).

The relationship between GDP per capita and expenditure per student on educational institutions is clearly positive but difficult to interpret. In other words, wealthier countries can afford to invest more resources on education than less wealthy countries. According to this correlation, an increase in GDP per capita of USD 1 000 generates, on average, an increase in expenditure per student of USD 200. Although the relationship is generally positive at these levels, there are variations even between countries with similar levels of GDP per capita. Estonia and Lithuania, for example, both have a GDP per capita of around USD 38 000, but they allocate different shares of their output to education. Per student, Estonia spends 28% of its GDP per capita on educational institutions (above the OECD average of 26%), while Lithuania spends 21% (Figure C2.4 and Indicator C1).

Expenditure on educational institutions by source of funds

Public spending remains the main source of educational funding in OECD countries. On average, public expenditure on educational institutions from primary to tertiary educational levels (after transfers to the private sector) accounts for 4.1% of GDP. However, large differences are observed across countries with available data. In Ireland, Japan and Lithuania, public expenditure represents 3% or less of GDP, while Norway and South Africa devote over 6% of GDP to direct public expenditure on educational institutions (Table C2.3).

Public transfers to households (such as scholarships and loans to students for tuition and other fees) and subsidies to other private entities for education (such as to firms or labour organisations operating apprenticeship programmes) comprise about 0.2% of GDP on average across OECD countries from primary to tertiary level. They account for 0.3% of GDP or more in Australia, Chile, Korea and New Zealand and reach almost 0.6% in the United Kingdom, mainly driven by public transfers at tertiary level (Table C2.3).

With public budgets tightening, many educational systems are turning increasingly to the private sector for additional investment, particularly at tertiary level. After transfers, private expenditure on primary to tertiary educational institutions accounts for 0.8% of GDP on average. Countries nevertheless differ considerably in the contribution of private expenditure on educational institutions, ranging from 0.1% of GDP or less in Finland, Luxembourg and Norway to 2% or more in Australia, Chile and the United Kingdom (Table C2.3).

At non-tertiary levels of education, private investment is low and accounts for 0.3% of GDP on average across OECD countries after public-to-private transfers. However, it amounts to at least 0.7% of GDP in Australia, Chile, Colombia, and Türkiye, the countries with the largest relative shares of private funding of non-tertiary education. At the tertiary level, private investment plays a more prominent role, accounting for an average of 0.5% of GDP after transfers. In some countries, private sources contribute a larger share of GDP even before public transfers to households are taken into account. Countries such as Australia, Chile, Korea, Mexico and the United Kingdom devote 0.6% of GDP or more in private spending before transfers. After public transfers are taken into account, private investment in tertiary education represents 1.4% of GDP or more in Chile, the United Kingdom and the United States, the highest among OECD countries (Table C2.3).

Definitions

Expenditure on educational institutions refers to public, private and international expenditure on entities that provide instructional services to individuals or education-related services to individuals and other educational institutions (schools, universities, and other public and private institutions).

Initial public spending includes both direct public expenditure on educational institutions and transfers to the private sector and excludes transfers from the international sector. **Initial private spending** includes tuition fees and other student or household payments to educational institutions, minus the portion of such payments offset by public subsidies. **Initial international spending** includes both direct international expenditure for educational institutions (for example a research grant from a foreign corporation to a public university) and international transfers to governments.

Final public spending includes direct public purchases of educational resources and payments to educational institutions. **Final private spending** includes all direct expenditure on educational institutions (tuition fees and other private payments to educational institutions), whether partially covered by public subsidies or not. Private spending also includes expenditure by private companies on the work-based element of school- and work-based training of apprentices and students. **Final international spending** includes direct international payments to educational institutions such as research grants or other funds from international sources paid directly to educational institutions.

Public transfers to households and other private entities for educational institutions include scholarships and other financial aid to students, plus certain subsidies to other private entities. Therefore, they are composed of government transfers and certain other payments to households, insofar as these translate into payments to educational institutions for educational services (for example fellowships, financial aid or student loans for tuition). They also include government transfers and some other payments (mainly subsidies) to other private entities, including subsidies to firms or labour organisations that operate apprenticeship programmes and interest subsidies to private financial institutions that provide student loans, etc.

Direct public expenditure on educational institutions can take the form of either purchases by the government agency itself of educational resources to be used by educational institutions or payments by the government agency to educational institutions that have responsibility for purchasing educational resources.

Direct private (from households and other private entities) expenditure on educational institutions includes tuition fees and other private payments to educational institutions, whether partially covered by public subsidies or not.

Methodology

Expenditure on educational institutions as a percentage of GDP at a particular level of education is calculated by dividing total expenditure on educational institutions at that level by GDP. Expenditure and GDP values in national currency are converted into equivalent USD by dividing the national currency figure by the purchasing power parity (PPP) index for GDP. The PPP conversion factor 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 (see Annex 2 for further details).

Expenditure per student on educational institutions relative to GDP per capita is calculated by dividing expenditure per student on educational institutions (see indicator C1) by GDP per capita. 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).

All entities that provide funds for education are classified as either governmental (public) sources, non-governmental (private) sources or international sources, such as international agencies and other foreign sources. The figures presented here group together public and international expenditure for display purposes. As the share of international expenditure is relatively small compared to other sources, its integration into public sources does not affect the analysis of the share of public spending.

Not all spending on instructional goods and services occurs within educational institutions. For example, families may purchase commercial textbooks and materials or seek private tutoring for their children outside educational institutions. At the tertiary level, students' living expenses and foregone earnings can also account for a significant proportion of the costs of education. All expenditure outside educational institutions, even if publicly subsidised, is excluded from this indicator. Public subsidies for educational expenditure outside institutions are discussed in Indicators C4 and C5.

A portion of educational institutions' budgets is related to ancillary services offered to students, including student welfare services (student meals, housing and transport). Part of the cost of these services is covered by fees collected from students and is included in the indicator.

Expenditure on educational institutions is calculated on a cash-accounting basis and, as such, represents a snapshot of expenditure in the reference year. Many countries operate a loan payment/repayment system at the tertiary level. While public loan payments are taken into account, loan repayments from private individuals are not, and so the private contribution to education costs may be under-represented.

For more information please see the *OECD Handbook for Internationally Comparative Education Statistics 2018* (OECD, 2018_[3]) and Annex 3 for country-specific notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

Source

Data refer to the financial year 2019 (unless otherwise specified) and are based on the UNESCO, OECD and Eurostat (UOE) data collection on education statistics administered by the OECD in 2021 (for details see Annex 3 at https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf). Data from Argentina, China, India, Indonesia, Saudi Arabia and South Africa are from the UNESCO Institute of Statistics (UIS).

The data on expenditure for 2008 to 2020 were updated based on a survey in 2021-22, and expenditure figures for 2008 to 2020 were adjusted to the methods and definitions used in the current UOE data collection.

References

- OECD (2022), *Educational Finance Indicators*, <https://stats.oecd.org/> (accessed on 20 July 2022). [2]
- OECD (2020), *OECD Labour Force Statistics 2020*, OECD Publishing, Paris, <https://doi.org/10.1787/5842cc7f-en>. [1]
- OECD (2018), *OECD Handbook for Internationally Comparative Education Statistics 2018*, OECD Publishing, Paris, <https://doi.org/10.1787/9789264304444-en>. [3]

Indicator C2 tables

Tables Indicator C2. What proportion of national wealth is spent on educational institutions?

Table C2.1	Total expenditure on educational institutions as a percentage of GDP (2019)
Table C2.2	Index of change in total expenditure on educational institutions as a percentage of GDP (2008, 2009, 2011 and 2019)
Table C2.3	Total expenditure on educational institutions as a percentage of GDP, by source of funds (2019)
WEB Table C2.4	Index of change in public expenditure on educational institutions as a percentage of GDP (2008, 2009, 2011 and 2019)

StatLink  <https://stat.link/1d5fnn>

Cut-off date for the data: 17 June 2022. Any updates on data can be found on line at: <http://dx.doi.org/10.1787/eag-data-en>. More breakdowns can also be found at: <http://stats.oecd.org>, *Education at a Glance Database*.

Table C2.1. Total expenditure on educational institutions as a percentage of GDP (2019)

Direct expenditure within educational institutions, by level of education

	Primary	Secondary					Post-secondary non-tertiary	Primary, secondary and post-secondary non-tertiary	Tertiary				Primary to tertiary	Primary to tertiary (excluding R&D)			
		Lower secondary	Upper secondary			All secondary			Short-cycle tertiary	Long-cycle tertiary	All tertiary	All tertiary (excluding R&D)					
			General programmes	Vocational programmes	All programmes												
															(1)	(2)	(3)
OECD	Countries																
	Australia	1.9	1.4	0.6	0.2	0.8	2.1	0.1	4.1	0.2	1.7	1.9	1.3	6.1	5.5		
	Austria	0.9	1.1	0.3	0.6	0.9	2.0	0.0	2.9	0.2	1.5	1.7	1.3	4.7	4.2		
	Belgium	1.5	0.9	0.7 ^d	0.9 ^d	1.6 ^d	2.5 ^d	x(3, 4, 5, 6)	4.1	0.0	1.5	1.5	1.0	5.6	5.1		
	Canada ^{1,2}	2.2 ^d	x(1)	x(5)	x(5)	1.4	1.4	m	3.5 ^d	0.6	1.6	2.2	m	5.7 ^d	m		
	Chile	1.9	0.7	0.9	0.3	1.2	1.9	a	3.9	0.4	2.3	2.7	2.6	6.5	6.4		
	Colombia ²	2.0	1.7	x(5)	x(5)	0.7	2.3	m	4.3	x(11)	x(11)	1.4	m	5.7	m		
	Costa Rica	m	m	m	m	m	m	a	m	m	m	m	m	m	m		
	Czech Republic	1.0	1.2	0.2	0.8	1.0	2.2	0.0	3.1	0.0	1.2	1.2	0.8	4.3	3.9		
	Denmark	1.6	1.1	0.5	0.3	0.9	1.9	a	3.6	0.2	1.6	1.8	0.8	5.4	4.4		
	Estonia	1.7	0.8	0.3	0.4	0.6	1.4	0.1	3.2	a	1.5	1.5	0.9	4.7	4.1		
	Finland	1.4	1.1	0.3	0.8 ^d	1.2 ^d	2.3 ^d	x(4, 5, 6)	3.7	a	1.5	1.5	0.8	5.2	4.5		
	France	1.2	1.2	0.8	0.5	1.2	2.4	0.0	3.7	0.3	1.2	1.5	1.0	5.2	4.7		
	Germany	0.7	1.2	0.4	0.5	0.9	2.2	0.2	3.1	0.0	1.3	1.3	0.7	4.3	3.8		
	Greece ²	1.4	0.7	0.4	0.2	0.7	1.4	m	2.8	a	0.9	0.9	0.6	3.7	3.4		
	Hungary	0.9	0.9	0.5	0.4	1.0	1.9	0.1	2.9	0.0	0.9	0.9	0.7	3.8	3.6		
	Iceland	2.2	1.0	0.8	0.4	1.1	2.2	0.1	4.5	0.0	1.2	1.3	m	5.7	5.7		
	Ireland	1.1	0.5	x(5)	x(5)	0.5	1.0	0.2	2.3	x(11)	x(11)	0.8	0.6	3.2	2.9		
	Israel	2.5	x(3, 4, 5)	1.4 ^d	0.9 ^d	2.3 ^d	2.3	0.0	4.8	0.2	1.2	1.4	1.0	6.2	5.8		
	Italy	1.1	0.7	x(5)	x(5)	1.1 ^d	1.8 ^d	x(5, 6)	2.9	0.0	0.9	0.9	0.6	3.8	3.5		
	Japan ³	1.1	0.7	x(5)	x(5)	0.8 ^d	1.5 ^d	x(5, 6, 9, 10, 11)	2.6	0.2 ^d	1.2 ^d	1.4 ^d	m	4.0	m		
	Korea	1.7	0.9	x(5)	x(5)	1.2	2.1	a	3.7	0.2	1.3	1.5	1.2	5.3	4.9		
	Latvia	1.4	0.7	0.5	0.4	0.8	1.5	0.1	2.9	0.1	1.2	1.3	1.0	4.3	3.9		
	Lithuania	0.8	1.1	0.3	0.1	0.4	1.5	0.1	2.4	a	1.1	1.1	0.8	3.5	3.2		
	Luxembourg	1.2	0.8	0.3	0.5	0.9	1.7	0.0	2.9	0.0	0.5	0.5	0.3	3.3	3.1		
	Mexico	1.6	0.8	0.5	0.3	0.8	1.6	a	3.2	x(11)	x(11)	1.4	1.2	4.6	4.4		
	Netherlands	1.2	1.1	0.3	0.8	1.2	2.3	a	3.4	0.0	1.7	1.7	1.1	5.1	4.5		
	New Zealand	1.3	1.0	0.8	0.2	1.0	2.0	0.2	3.5	0.1	1.5	1.6	1.3	5.1	4.8		
	Norway	2.2	1.0	0.6	0.7	1.4	2.3	0.0	4.6	0.1	1.9	1.9	1.2	6.6	5.8		
	Poland	1.4	0.9	0.3	0.5	0.9	1.8	0.0	3.2	0.0	1.3	1.3	0.9	4.5	4.1		
	Portugal	1.5	1.1	x(5)	x(5)	1.1 ^d	2.2 ^d	x(5, 6)	3.7	0.0	1.1	1.1	0.9	4.8	4.5		
	Slovak Republic	1.1	1.1	0.3	0.6	0.8	1.9	0.0	3.0	0.0	0.9	0.9	0.7	3.9	3.7		
	Slovenia	1.5	0.8	0.3	0.5	0.8	1.7	a	3.1	0.0	1.0	1.1	0.8	4.2	4.0		
	Spain	1.3	0.8	0.6	0.4 ^d	0.9 ^d	1.7 ^d	x(4, 5, 6)	3.1	0.2	1.1	1.3	1.0	4.3	4.0		
	Sweden	1.9	0.9	0.6	0.5	1.1	2.0	0.0	3.9	0.0	1.5	1.6	0.7	5.5	4.7		
	Switzerland ⁴	m	m	x(5)	x(5)	1.2 ^d	m	x(5)	m	m	m	m	m	m	m		
	Türkiye	1.0	1.1	0.8	0.7	1.5	2.6	a	3.6	x(11)	x(11)	1.6	1.3	5.2	4.9		
	United Kingdom	1.8	1.0	0.9	0.3	1.2	2.2	a	4.1	0.1	1.8	2.0	1.6	6.0	5.6		
	United States	1.6	0.9	1.0	a	1.0	1.9	0.0	3.5	x(11)	x(11)	2.5	2.2	6.0	5.7		
	OECD average	1.5	1.0	0.6	0.5	1.0	1.9	m	3.4	0.1	1.3	1.5	1.0	4.9	4.5		
	EU22 average	1.3	0.9	0.4	0.5	0.9	1.9	m	3.2	0.1	1.2	1.2	0.8	4.4	4.0		
Partners	Argentina	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	China	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	India	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	South Africa	m	m	m	m	m	m	m	m	m	m	m	m	m	m		
	G20 average	m	m	m	m	m	m	m	m	m	m	m	m	m	m		

Note: Data on early childhood education and care and all ISCED levels combined are available on line (see StatLink below). See *Definitions and Methodology* sections for more information. Data and more breakdowns available at: <http://stats.oecd.org>, *Education at a Glance Database*.

1. Primary education includes pre-primary programmes.
2. Post-secondary non-tertiary figures are treated as negligible.
3. Data do not cover day care centres and integrated centres for early childhood education.
4. Year of reference 2018.

Source: OECD/UIS/Eurostat (2022). See *Source* section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

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

StatLink  <https://stat.link/abpk3s>

Table C2.2. Change in total expenditure on educational institutions and change in GDP (2008, 2009, 2011 and 2019)

Final source of funds, index of change (2015=100, constant prices), by level of education

	Change in total expenditure on educational institutions												Change in gross domestic product				
	Primary, secondary and post-secondary non-tertiary				Tertiary				Primary to tertiary				2008	2009	2011	2019	
	2008	2009	2011	2019	2008	2009	2011	2019	2008	2009	2011	2019					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)					(13)
OECD Countries																	
Australia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Austria	m	m	m	101.7	m	m	m	108.8	m	m	m	104.2	96.8	93.2	97.7	108.5	
Belgium	96.7	94.9	97.7	104.1	81.7	87.0	90.6	111.3	92.8	92.9	95.9	106.0	93.0	91.1	95.3	107.0	
Canada ¹	89.2 ^d	96.6 ^d	94.9 ^d	107.2 ^d	99.3	112.3	108.7	108.7	93.0 ^d	102.6 ^d	100.1 ^d	107.8 ^d	86.5	90.6	88.4	105.6	
Chile	91.1	95.0	92.6	131.6	73.3	77.5	103.4	143.7	84.2	88.2	96.8	136.3	79.3	78.0	87.7	107.7	
Colombia	m	82.0	82.4	117.1	m	79.2	85.4	88.9	m	81.1	83.3	108.7	75.3	76.1	85.1	109.6	
Costa Rica	m	m	m	m	m	m	m	m	m	m	m	m	79.5	78.8	86.7	113.2	
Czech Republic	89.9	93.5	96.0	137.2	88.8	93.3	109.8	120.0	89.6	93.4	100.2	132.0	94.1	89.8	93.6	114.7	
Denmark	m	m	m	m	m	m	m	m	m	m	m	m	96.8	92.1	95.0	110.6	
Estonia	125.2	115.9	102.4	129.5	70.4	53.5	86.3	99.7	104.7	92.5	96.4	118.3	97.0	82.8	91.0	118.3	
Finland	95.1	95.0	100.0	102.0	98.9	101.8	110.6	96.3	96.2	97.1	103.2	100.3	105.0	96.5	102.2	108.6	
France	97.3	99.7	99.0	105.7	91.3	93.9	96.5	108.5	95.6	98.0	98.3	106.5	96.0	93.2	97.1	107.3	
Germany	96.2	m	101.5	108.6	82.8	m	94.1	111.4	92.3	m	99.3	109.4	93.6	88.3	95.6	107.2	
Greece	m	m	m	102.6	m	m	m	98.2	m	m	m	101.5	135.5	129.6	110.1	104.1	
Hungary	m	m	m	121.1	m	m	m	121.2	m	m	m	121.1	95.7	89.4	92.0	117.4	
Iceland	104.6	97.4	92.3	121.5	91.9	87.0	77.3	120.7	101.8	95.1	89.0	121.3	97.5	90.1	89.1	119.0	
Ireland	m	m	m	115.1	m	m	m	104.1	m	m	m	112.0	74.4	70.6	72.6	127.2	
Israel	67.6	66.0	81.3	125.7	81.6	81.0	98.5	118.0	71.0	69.7	85.5	123.8	77.3	78.1	87.2	117.7	
Italy	109.1	105.1	97.3	102.4	107.7	105.7	108.6	102.5	108.8	105.2	99.9	102.4	107.4	101.7	104.2	104.5	
Japan	m	m	100.2	99.5	m	m	100.6 ^d	102.7 ^d	m	m	100.3	100.6	101.0	98.4	98.7	105.3	
Korea	m	m	m	118.0	m	m	m	98.9	m	m	m	111.8	79.9	80.6	89.2	111.7	
Latvia	111.7	101.1	81.6	99.0	99.0	72.2	88.9	101.5	107.8	92.1	83.9	99.8	103.0	88.3	86.5	112.7	
Lithuania	m	m	m	107.6	85.8	82.4	106.4	83.5	m	m	107.1	102.1	95.9	81.7	88.0	116.3	
Luxembourg	90.8	97.5	101.2	113.8	m	m	m	101.6	m	m	m	111.9	89.6	86.7	90.9	112.1	
Mexico	81.6	83.3	90.5	89.8	73.9	81.2	79.7	104.9	79.6	82.8	87.6	93.9	86.8	82.2	m	106.9	
Netherlands	93.5	99.8	100.3	104.7	82.6	87.2	93.3	107.3	90.0	95.7	98.1	105.5	98.7	95.1	97.8	109.8	
New Zealand	96.8	101.2	97.8	107.1	84.4	88.7	89.0	103.5	92.8	97.1	95.0	105.9	83.4	85.1	88.2	115.2	
Norway	88.6	94.2	92.7	106.5	79.6	83.4	84.1	120.0	86.1	91.2	90.4	110.2	89.2	87.6	91.0	107.3	
Poland	89.9	92.1	94.3	118.0	87.2	91.0	85.4	109.3	89.1	91.7	91.6	115.4	81.0	83.3	90.6	119.3	
Portugal	87.7	99.5	92.6	104.4	106.1	104.0	105.9	99.4	92.2	100.6	95.9	103.1	105.8	102.5	102.5	111.5	
Slovak Republic	79.3	88.6	86.0	117.6	49.1	49.6	56.1	68.0	68.6	74.8	75.4	100.0	87.9	83.1	90.7	111.8	
Slovenia	115.3	113.9	112.0	112.1	112.5	118.6	122.7	119.0	114.6	115.0	114.6	113.7	104.5	96.7	98.8	116.6	
Spain	101.5	105.6	102.5	109.8	96.7	100.3	100.5	110.7	100.1	104.1	101.9	110.1	103.9	100.0	99.3	110.8	
Sweden	93.6	92.5	93.2	119.5	82.9	87.6	94.2	105.9	90.3	91.0	93.5	115.3	88.6	84.8	92.7	108.9	
Switzerland	m	m	m	m	m	m	m	m	m	m	m	m	90.4	88.5	93.2	108.0	
Türkiye	m	m	74.5	126.7	m	m	78.4	104.6	m	m	75.8	118.9	68.9	65.5	79.0	115.4	
United Kingdom	80.2	85.3	89.8	99.0	m	m	m	113.2	m	m	m	103.3	92.3	92.2	91.2	107.5	
United States	101.6	101.7	98.3	109.7	89.9	93.5	97.3	106.4	96.7	98.2	97.9	108.3	90.7	90.1	91.4	109.2	
OECD average	95.0	95.9	94.9	111.8	87.4	88.0	94.5	106.5	92.9	93.5	94.7	110.0	92.5	88.7	92.5	111.5	
EU22 average	98.3	99.6	98.0	111.5	89.0	88.5	96.9	104.2	95.5	96.0	97.2	109.1	97.5	91.8	94.7	112.0	
Partners																	
Argentina	m	m	m	m	m	m	m	m	m	m	m	m	89.7	84.4	98.5	96.0	
Brazil	m	m	m	m	m	m	m	m	m	m	m	m	88.0	87.9	98.3	100.9	
China	m	m	m	m	m	m	m	m	m	m	m	m	56.4	61.7	74.8	129.4	
India	m	m	m	m	m	m	m	m	m	m	m	m	60.2	65.4	76.8	128.1	
Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	68.6	71.8	81.1	121.9	
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	75.6	74.1	85.6	103.7	
South Africa	m	m	m	m	m	m	m	m	m	m	m	m	88.4	87.0	92.6	102.8	
G20 average	m	m	m	m	m	m	m	m	m	m	m	m	84.9	83.7	90.4	109.8	

Note: See Definitions and Methodology sections for more information. Data and more breakdowns available at <http://stats.oecd.org>, Education at a Glance Database.

1. Primary education includes pre-primary programmes.

Source: OECD/UIS/Eurostat (2022). See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

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

Table C2.3. Total expenditure on educational institutions as a percentage of GDP, by source of funds (2019)

By level of education

	Primary, secondary and post-secondary non-tertiary						Tertiary						Primary to tertiary					
	Initial funds (before transfers between public and private sectors)			Final funds (after transfers between public and private sectors)			Initial funds (before transfers between public and private sectors)			Final funds (after transfers between public and private sectors)			Initial funds (before transfers between public and private sectors)			Final funds (after transfers between public and private sectors)		
	Public	Private	International	Public	Private	International	Public	Private	International	Public	Private	International	Public	Private	International	Public	Private	International
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
OECD	Countries																	
Australia	3.5	0.7	0.0	3.4	0.7	0.0	1.0	0.9 ^d	x(8)	0.6	1.3 ^d	x(11)	4.5	1.6 ^d	x(14)	4.1	2.0 ^d	x(17)
Austria	2.8	0.1	a	2.8	0.1	a	1.6	0.2	a	1.6	0.2	a	4.4	0.3	a	4.4	0.3	a
Belgium	3.9	0.1	0.0	3.9	0.1	0.0	1.3	0.1	0.1	1.3	0.2	0.1	5.3	0.2	0.1	5.2	0.3	0.1
Canada ¹	m	m	m	3.2 ^a	0.4 ^d	x(5)	m	m	m	1.2	1.0 ^d	x(11)	m	m	m	4.4 ^a	1.4 ^d	x(17)
Chile	3.1	0.7	a	3.1	0.7	a	1.3	1.4	a	1.0	1.6	a	4.4	2.1	a	4.2	2.4	a
Colombia	3.4	0.9	0.0	3.4	0.9	0.0	m	m	0.0	0.5	0.9	0.0	m	m	0.0	3.9	1.9	0.0
Costa Rica	m	m	m	4.4	m	m	m	m	m	1.4	m	m	m	m	m	5.9	m	m
Czech Republic	2.9	0.2	0.0	2.9	0.2	0.0	0.9	0.2	0.1	0.9	0.2	0.1	3.8	0.4	0.1	3.8	0.4	0.1
Denmark	3.4	0.2	0.0	3.4	0.2	0.0	1.6	0.2	0.1	1.6	0.2	0.1	4.9	0.4	0.1	4.9	0.4	0.1
Estonia	2.9	0.1	0.2	3.1	0.1	0.0	0.9	0.2	0.4	1.0	0.2	0.2	3.8	0.4	0.5	4.1	0.4	0.2
Finland	3.7	0.0	0.0	3.7	0.0	0.0	1.4	0.1	0.1	1.4	0.1	0.1	5.1	0.1	0.1	5.1	0.1	0.1
France	3.4	0.3	0.0	3.3	0.3	0.0	1.2	0.3	0.0	1.1	0.3	0.0	4.6	0.5	0.0	4.5	0.7	0.0
Germany	m	m	m	2.7	0.4	0.0	m	m	m	1.0	0.2	0.0	m	m	m	3.7	0.6	0.0
Greece	m	m	0.0	2.6	0.2	0.0	0.7	0.1	0.1	0.7	0.1	0.1	m	m	0.2	3.3	0.3	0.1
Hungary	m	m	0.0	2.4	0.5	0.0	m	m	0.0	0.6	0.3	0.0	m	m	0.0	3.1	0.7	0.0
Iceland	4.3	0.1	0.0	4.3	0.1	0.0	1.1	0.1	0.0	1.1	0.1	0.0	5.5	0.2	0.0	5.5	0.2	0.0
Ireland	2.1	0.2	0.0	2.1	0.2	0.0	0.7	0.0	0.0	0.6	0.2	0.0	2.9	0.3	0.0	2.7	0.4	0.0
Israel	4.3	0.5	0.0	4.3	0.5	0.0	m	m	0.0	0.8	0.7	0.0	m	m	0.0	5.0	1.2	0.0
Italy	2.8	0.2	0.0	2.8	0.2	0.0	0.7	0.2	0.0	0.6	0.3	0.0	3.4	0.4	0.0	3.3	0.5	0.0
Japan	m	m	0.0	2.4	0.2	0.0	m	m	0.0 ^d	0.5 ^a	0.9 ^d	0.0 ^d	m	m	0.0	2.8	1.1	0.0
Korea	3.4	0.3 ^d	x(2)	3.4	0.4 ^d	x(5)	0.8	0.7 ^d	x(8)	0.6	0.9 ^d	x(11)	4.2	1.0 ^d	x(14)	4.0	1.3 ^d	x(17)
Latvia	m	m	0.1	2.7	0.2	0.0	m	m	0.3	0.8	0.5	0.1	m	m	0.4	3.5	0.6	0.1
Lithuania	2.1	0.1	0.2	2.3	0.1	0.0	0.6	0.3	0.2	0.7	0.3	0.1	2.7	0.4	0.3	3.0	0.4	0.1
Luxembourg	2.7	0.1	0.1	2.7	0.1	0.1	0.4	0.0	0.0	0.4	0.0	0.0	3.1	0.1	0.1	3.1	0.1	0.1
Mexico	2.7	0.6	0.0	2.6	0.6	0.0	0.8	0.6 ^d	x(8)	0.8	0.6	0.0	3.5	1.2	0.0	3.4	1.2	0.0
Netherlands	m	m	0.0	3.0	0.5	0.0	m	m	0.1	1.1	0.5	0.1	m	m	0.1	4.1	0.9	0.1
New Zealand	3.1	0.4	0.0	3.0	0.5	0.0	1.1	0.5	0.0	0.9	0.8	0.0	4.2	0.9	0.0	3.9	1.2	0.0
Norway	4.7	-0.1	0.0	4.6	0.0	0.0	1.8	0.1	0.0	1.8	0.1	0.0	6.6	0.0	0.0	6.4	0.1	0.0
Poland	2.7	0.3	0.2	2.8	0.3	0.1	1.1	0.1	0.0	1.0	0.2	0.0	3.8	0.5	0.2	3.8	0.6	0.1
Portugal	3.3	0.4	0.0	3.3	0.4	0.0	0.7	0.4	0.1	0.7	0.4	0.1	4.0	0.7	0.1	4.0	0.7	0.1
Slovak Republic	2.7	0.2	0.1	2.7	0.3	0.0	0.7	0.2	0.0	0.7	0.3	0.0	3.4	0.4	0.2	3.4	0.5	0.0
Slovenia	2.8	0.3	0.1	2.8	0.3	0.0	0.8	0.1	0.1	0.9	0.1	0.1	3.6	0.4	0.2	3.7	0.4	0.1
Spain	2.6	0.4	0.0	2.6	0.4	0.0	0.9	0.4	0.0	0.8	0.4	0.0	3.5	0.8	0.0	3.5	0.8	0.0
Sweden	3.9	0.0	0.0	3.9	0.0	0.0	1.3	0.2	0.1	1.3	0.2	0.1	5.2	0.2	0.1	5.2	0.2	0.1
Switzerland ²	m	m	m	m	m	m	1.3	m	0.0	1.2	m	0.0	m	m	m	m	m	m
Türkiye	2.7	0.9	0.0	2.7	0.9	0.0	1.1	0.5	0.0	1.1	0.5	0.0	3.8	1.4	0.0	3.8	1.4	0.0
United Kingdom	3.5	0.6	0.0	3.4	0.6	0.0	1.0	0.9	0.1	0.5	1.4	0.1	4.5	1.5	0.1	3.9	2.1	0.1
United States ³	m	m	a	3.2	0.3	a	m	m	a	0.9	1.6	a	m	m	a	4.1	1.9	a
OECD average	3.2	0.3	0.0	3.1	0.3	0.0	1.0	0.3	0.1	0.9	0.5	0.0	4.2	0.6	0.1	4.1	0.8	0.1
EU22 average	3.0	0.2	0.0	2.9	0.2	0.0	1.0	0.2	0.1	0.9	0.2	0.1	4.0	0.4	0.1	3.9	0.5	0.1
Partners	Argentina																	
Argentina	3.3	m	a	3.3	a	a	1.0	0.0	0.0	1.0	a	a	4.2	0.0	0.0	4.3	a	a
Brazil	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
China	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
India ⁴	m	m	m	2.9	m	m	m	m	m	1.5	m	m	m	m	m	4.5	m	m
Indonesia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
Saudi Arabia	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m	m
South Africa ⁴	m	m	m	5.3	m	m	m	m	m	0.9	m	m	m	m	m	6.2	m	m
G20 average	m	m	m	3.2	m	m	m	m	m	0.9	m	m	m	m	m	4.0	m	m

Note: See Definitions and Methodology sections for more information. Data and more breakdowns available at <http://stats.oecd.org>, Education at a Glance Database.

1. Primary education includes pre-primary programmes.

2. Year of reference 2018.

3. Figures are for net student loans rather than gross, thereby underestimating public transfers.

4. Year of reference 2020.

Source: OECD/UIS/Eurostat (2022). See Source section for more information and Annex 3 for notes (https://www.oecd.org/education/education-at-a-glance/EAG2022_X3-C.pdf).

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



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