

International comparisons of expenditures for education

The portion of total financial resources that a country chooses to invest in education is a critical decision that raises many issues for debate, for example, whether and to what extent education costs should be borne by the public or private sector. International comparisons of expenditures for education show considerable variation across countries in the share of national resources devoted to education, the sources (public or private) of funds spent on education, and the levels of education to which funds are allocated.

- In 1993, total expenditures on education institutions in the United States were 4.2 percent of the Gross Domestic Product (GDP) for the primary-secondary grade level, 2.5 percent for higher education, and 6.8 percent for all levels combined. While Canada and France spent a larger fraction for primary-secondary education, of the G-7 countries, only Canada spent a larger fraction than the United States for higher education and for all levels combined.
- In most G-7 countries, expenditures on higher education that came from public sources were more than twice the amount of those that came from private sources. However, in both the United States and Japan, the percentage of GDP spent on higher education that came from private sources (1.2 and 0.6 percent, respectively) was similar in size to the percentage that came from public sources (1.3 and 0.4 percent, respectively). For primary/secondary education, the proportion of GDP that came from private sources was highest in Germany, at 0.9 percent.
- In all of the G-7 countries, expenditures per student were larger for higher education than for primary/secondary education. In the United States and the United Kingdom, the average amount spent per student in higher education was more than twice the amount spent per primary-secondary student, compared to less than 10 percent higher in Italy.

Public and private expenditures on education institutions,¹ by level of education and country: 1993

G-7 country	As a percentage of GDP					Per student ²				
	Primary/secondary		Higher education		All levels and sources combined ⁶	Constant 1993 U.S. dollars ³		As a percentage of GDP per capita		
	Public	Private	Public	Private		Primary/ secondary ⁷	Higher education	Primary/ secondary ⁷	Higher education	
	sources ⁴	sources ⁵	sources ⁴	sources ⁵						
Canada	4.3	0.3	2.2	0.4	7.3	—	\$11,132	—	57.6	
France	4.0	0.3	0.9	0.2	6.1	\$4,649	6,033	24.9	32.3	
Germany	3.0	0.9	0.9	0.1	5.9	5,290	7,902	28.6	42.8	
Italy	3.6	0.0	0.8	0.1	5.1	4,821	5,169	27.2	29.2	
Japan	3.0	0.3	0.4	0.6	4.9	4,175	7,556	20.5	37.3	
United Kingdom	3.9	—	0.9	0.0	⁸ 5.0	3,915	8,241	22.6	48.6	
United States	3.8	0.4	1.3	1.2	6.8	5,987	14,607	24.4	60.2	

— Not available.

¹ Includes all institutions (public and private) with the exception of Germany and Italy, which include only public institutions, and the United Kingdom, which includes public and government-dependent private institutions.

² Per-student expenditures were calculated based on full-time-equivalent (FTE) enrollment figures, and expenditures from both public and private sources, with the exception of the United Kingdom, for which private source data were unavailable.

³ Purchasing Power Parity (PPP) indices were used to convert other currencies to U.S. dollars. Because the fiscal year has a different starting date in different countries, within-country Consumer Price Indices (CPIs) were used to adjust the PPP indices to account for inflation. See the supplemental note to this indicator for further explanation.

⁴ Public expenditures are defined as direct public expenditures on education institutions plus public subsidies to households and other private entities for education institutions (e.g., tuition and fees), excluding other public aid to students and households (e.g., subsidies for student living costs).

⁵ Private expenditures are defined as private payments from households and other private entities to education institutions, minus any portion derived from public subsidies.

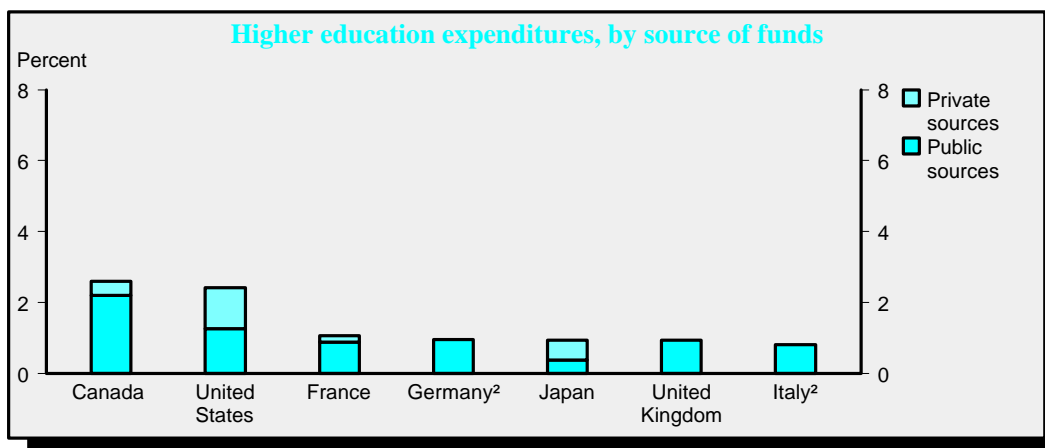
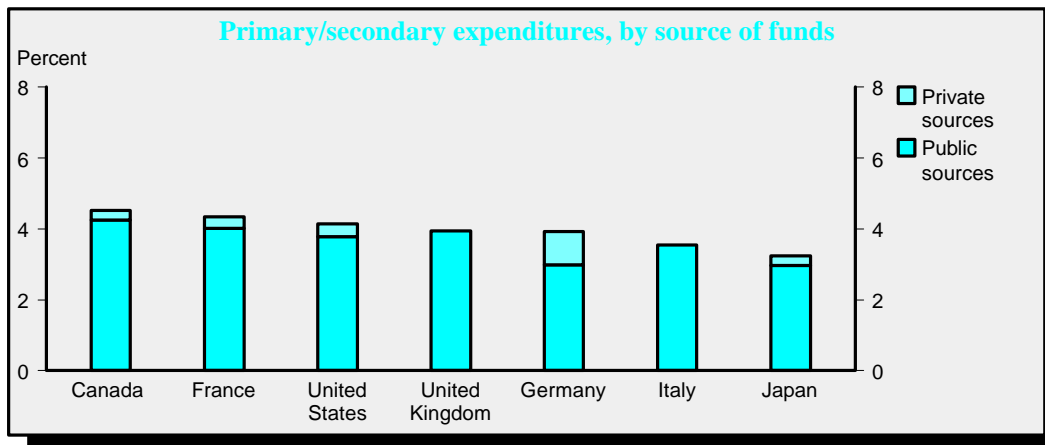
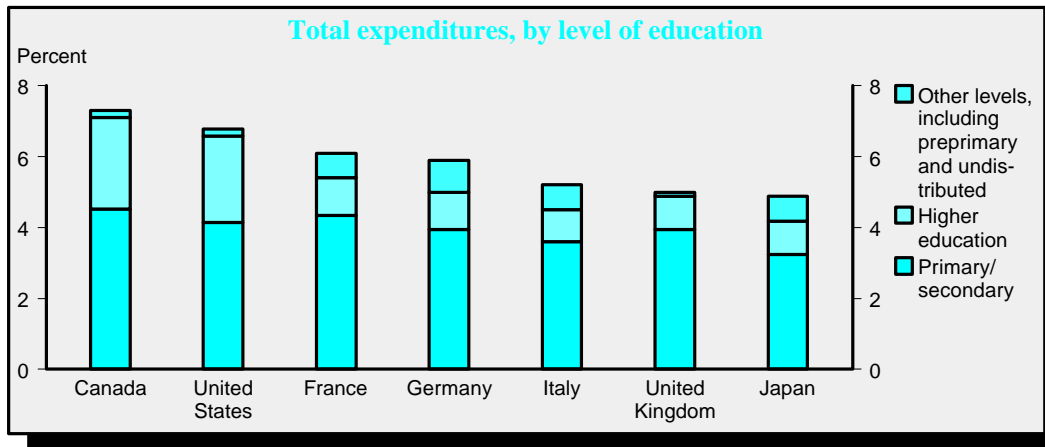
⁶ "All levels combined" includes expenditures on preprimary education and funds classified as "undistributed," a classification reserved for enrollments, expenditures, or programs that cannot be unambiguously assigned to International Standard Classification of Education (ISCED) defined levels. Examples of undistributed education can include nongraded special education or recreational nondegree adult education programs.

⁷ Primary/secondary per-student expenditures were calculated by adding primary and secondary FTE enrollments and by dividing the total FTE into the total expenditures. See the supplemental note to this indicator for further explanation.

⁸ Total expenditures in the United Kingdom do not include primary/secondary expenditures from private sources, for which data were unavailable.

SOURCE: Organization for Economic Co-operation and Development, Center for Educational Research and Innovation, *Education At A Glance: OECD Indicators*, 1996.

Public and private expenditures on education institutions¹ in G-7 countries as a percentage of GDP: 1993



¹ Includes all institutions (public and private) with the exception of Germany and Italy, which include only public institutions, and the United Kingdom, which includes public and government-dependent private institutions.

² Private sources are less than 0.2 percent, and therefore the percentages are not discernable in the graph.

SOURCE: Organization for Economic Co-operation and Development, Center for Educational Research and Innovation, *Education At A Glance: OECD Indicators*, 1996.

Note to Indicator 55: International comparisons of education expenditures

The purpose of this analysis is to compare expenditures for education in public and private institutions, relative to the Gross Domestic Product (GDP) and school enrollment, across the developed countries for which data are available.

Definitions

Public education expenditures include funds provided to both public and private schools by federal, state, and local governments either directly or through students. This includes expenditures at public schools funded by public sources and subsidies to students at private schools from government agencies.

Private education expenditures are expenditures financed by private sources—households, private nonprofit institutions, businesses, and corporations. For example, this includes expenditures supported by public and private school tuition and fees, and expenses for books and materials that must be purchased by the students themselves.

Gross Domestic Product (GDP) is an aggregate measure of the value of goods and services produced in a country. GDP is Gross National Product (GNP) less net property income from abroad.

Thus, this analysis focuses on education expenditures at both public and private schools funded by both public and private sources.

Expenditures in the United States

Primary and secondary education

For the United States, *public expenditures for primary and secondary education* include expenditures in local public school districts; private schools; and schools administered by religious organizations, funded by state and local taxes; federal programs administered by the U.S. Department of Education (ED); and federal programs operated outside of ED that are not administered by state or local education agencies (e.g., Head Start, Department of Defense Schools, and schools operated by the Bureau of Indian Affairs).

Also included are federal expenditures to operate ED and other activities, such as research, statistics, assessment, and school improvement, and state expenditures to operate state departments of education and other direct state expenditures, including state schools for the deaf and blind and reform schools.

Some expenditures, such as those for federal or state agency administration and those for non-graded special education programs, cannot be assigned to particular grade levels by any obviously universally superior method. These expenditures defy strict grade-level categorizations. Like some other countries, the United States has chosen to prorate these expenditures over the grade levels based on the relative size of enrollments, staffing, and salaries. Other countries, however, have chosen not to allocate such expenditures, classifying them, instead, as “undistributed.”

Higher education

Public expenditures for higher education in the United States include expenditures at both public and private colleges and universities funded by federal, state, and local governments. The Integrated Postsecondary Education Data System (IPEDS), the core postsecondary education data collection program for NCES, gathers institutional reports for revenue received by both public and private institutions from both public and private sources. Expenditures by public and private, nonprofit institutions are separated into public and private expenditures based on the share of current fund revenues from federal, state, and local sources.

Most federal aid goes to students who then spend it on education (e.g., tuition) and non-education (room and board) services. It was assumed that 60 percent of federally administered Pell grants were spent on education by students.

With the exception of Pell grant money, public expenditures for less-than-2-year public and private institutions, including “proprietary” schools, were not available; therefore, *public expenditures for higher education* in the United States are biased downward. However, since the students participating in these institutions are also excluded from higher education enrollments, the estimate of *public expenditures per student* would be biased upward if the per student public expenditures in less-than-2-year institutions were less than those in other higher education institutions.

Per student expenditures

Per student expenditures are calculated as total expenditures, funded by both public and private sources, divided by enrollment in both public and private schools. This is a measure of the average investment per student in the education system.

The data for per student expenditures in higher education come directly from tables in *Education At A Glance (EAG)*, published by the Organization for Economic Co-operation and Development in 1996. However, the EAG tables include per student expenditures broken down by early childhood, primary, secondary, and tertiary education.

For this indicator, the primary and secondary figures were recalculated to generate one expenditure figure for the primary and secondary levels combined. This was done by, first, adding the full-time-equivalent enrollment (FTE) numbers for primary and secondary education to determine total FTE. Second, total expenditures were calculated by multiplying the FTE numbers by expenditures per student, for primary and secondary education, respectively, and then adding these two figures together to determine total expenditures for primary-secondary education. Finally, total expenditures on primary and secondary education were divided by total enrollment in the primary and secondary levels to determine per student expenditures for primary-secondary education.

How students are classified

The International Standard Classification of Education (ISCED) was designed as an instrument for presenting statistics of education internationally. Many countries report education statistics to UNESCO and the Organization for Economic Co-operation and Development (OECD) using the ISCED. In this classification system, education is divided into several levels.

The following are summary definitions used in this analysis:

- *Education preceding the first level (preprimary education)*, where it is provided, usually begins at age 3, 4, or 5 (sometimes earlier) and lasts from 1–3 years. For the United States, this would be mostly nursery schools and kindergarten classes.
- *Education at the first level (primary education)* usually begins at age 5, 6, or 7 and lasts for about 5 or 6 years. For the United States, the first level starts with grade 1 and ends with grade 6.
- *Education at the second level (lower secondary education)* begins at about age 11 or 12 and lasts for about 3 years. For the United States, the second level starts with grade 7 and ends with grade 9.
- *Education at the third level (upper secondary education)* begins at about age 14 or 15 and lasts for about 3 years. For the United States, the third level starts with grade 10 and ends with grade 12.
- *Education at the fifth level (non-university higher education)* is provided at community colleges, vocational-technical colleges, and other degree-granting institutes whose programs typically take 2 years or more, but less than 4 years, to complete.
- *Education at the sixth level (university higher education)* is provided in undergraduate programs at 4-year colleges and universities in the United States and, generally, at universities in other countries. Completion of education at the third level (upper secondary education) is usually required as a minimum condition of admission, and admission is, in many cases, competitive.
- *Education at the seventh level (graduate and professional higher education)* is provided in graduate and professional schools that generally require a university diploma as a minimum condition for admission.
- *Education at the ninth level (undistributed)* is a classification reserved for enrollments, expenditures, or programs that cannot be unambiguously assigned to one of the aforementioned levels. Some countries, for example, assign nongraded special education or recreational nondegree adult education programs to this level. Other countries assign nothing to this level, preferring instead to allocate enrollments, expenditures, and programs to levels as best they can.

How expenditures are compared across countries

To compare expenditures per student in the United States to expenditures per student in other countries, expenditures must be denominated in a common currency. Conversion of other countries' expenditures to U.S. dollars facilitates comparison with expenditures in the United States. There are at least two methods of conversion: 1) market exchange rates, and 2) Purchasing Power Parity (PPP) indices.

The market exchange rate is the rate at which an individual can exchange the currencies of two countries. It is determined by relative confidence in the governments, their monetary systems, and the economies of the two countries and by the relative demand for the goods and services that the two

countries trade. Market exchange rates can be highly volatile.¹

PPP indices are calculated by comparing the cost of a fixed market basket of goods in each country. Changes over time in a PPP index are determined by the rates of inflation in each country. Since PPP indices are not volatile, they were used here to adjust expenditures and GDP figures.² Because the fiscal year has a different starting month in different countries, within-country GDP consumer price deflators from the OECD National Accounts database were used to adjust education expenditures where the national financial year does not coincide with the calendar year 1993.

Problems in comparing education expenditures across countries

Comparing national expenditures on education can be difficult because the data are dependent on numerous factors, including the size of the economy, the population, and enrollment rates. In addition, the coverage and character of the education expenditure data that countries submit to the OECD vary somewhat. Sometimes an individual expenditure item may be included in the expenditure data from one country, but may not be included in those from another. Below, is a discussion of some of the problems that exist in comparing education expenditures across countries.

Size of the economy: Because GDP levels are the measure against which education expenditures are compared in this indicator, a country's wealth has a significant effect on the amount of resources that can be devoted to education.

Size of the population: The youth population, constituting those between the ages of 5 and 29, is the population that demands the investment of resources in education and training. The greater this population is, the more a country has to spend on education; the smaller this population is, the less a country has to spend on education.

Enrollment rates: Enrollment rates also affect the amount of resources a country needs to invest in education. The proportion of persons between the ages of 5 and 29 who are enrolled either full time or part time in preprimary, primary, secondary, or tertiary education varies widely across countries. For example, this proportion ranges from less than 55 percent in the Czech Republic, Greece, Mexico, and Turkey to more than 67 percent in Australia, Belgium, Canada, and New Zealand.³

Discrepancies in expenditure data arise because one country may collect certain kinds of data that another country either does not collect, or does not collect in its "education" data collections. Or, one country may define what constitutes an "education" expenditure differently than another country does. Discrepancies between which expenditure items are included in one country's expenditure figures and not in another's tend to arise in four general domains:

Noninstructional (ancillary) services: Some countries provide fewer ancillary services in their schools and, thus, include fewer expenditures for such services in their education expenditure figures. Examples of ancillary services are school cafeterias; dormitories; intramural school sports programs; school health clinics or visiting school nurse services; attendance (i.e., truancy) services; and speech or psychological therapy services. U.S. schools tend to subsidize relatively more ancillary services through their education budgets than do schools in most other countries. In some countries (e.g., Germany), *none* of the aforementioned services are provided at the primary and lower secondary levels by many schools.

Private expenditures: Some countries' education systems receive large private contributions. The most common forms of private contributions to education are student tuition or fees; organizational subsidies, such as those provided by religious denominations to their own schools; and corporate in-kind contributions, such as those provided by German and Austrian firms to fund vocational courses on the shop floor for participating youth apprentices. Most national education statistics collections attempt to include estimates for such expenditures. However, other private expenditures can seem more ephemeral to education data gatherers. Students' or parents' own spending on school supplies, or community organizations' charitable grants and loans to individual students, for example, can only be estimated with the help of household expenditure surveys and diligent perusal of statistical collections outside the domain of traditional educational institutions.

The boundaries of education: Fewer (though, still some) inconsistencies arise when comparing just the *instructional* expenditures for *primary* and *secondary* public education in the *academic* track. But, the "borderlands" of education, in particular, tend to cause comparability problems. These borderlands include preprimary education and day care, special education, adult education, vocational/technical

education, and proprietary education. Some countries, for example, simply do not collect expenditure data for private “center-based” day care because they do not define this as “education.” Indeed, in some countries, even public day care is not managed by education authorities; rather, it is the responsibility of human services departments.

The exact location of each “boundary” also varies from country to country and even within each country. In Canada, for example, vocational/ technical students in Québec choose to enter vocational/technical college in the 12th grade, while in the other Canadian provinces with vocational/technical colleges, they enter in the 13th or 14th grade. Thus, vocational/technical students in the other provinces spend another year or two at the upper secondary level. The more time the average student spends in a level of education, the greater will be the expenditures at that level.

University research: Because university spending includes substantial expenditures on research, comparing expenditures on higher education can often be misleading. The proportion of total university spending that is invested in research varies widely, specifically because of variations in the proportion of total national research and development (R & D) that is performed within the domain of higher education institutions.

In addition to variations among countries regarding the production of R & D, countries have not reported their research spending to the same extent when submitting data that were used for this analysis. For example, some countries exclude separately funded or budgeted research, while others include nearly all research outlays by institutions of higher education, when reporting higher education expenditure figures.

Even these four domains do not include all the possible comparability problems. There remain, for

example, inconsistencies in how different countries treat public contributions to teacher retirement and fringe benefits, student financial aid, and hospitals.

The National Center for Education Statistics (NCES) has sponsored a study designed to examine the comparability of national figures on education expenditures. The two-volume study, entitled *International Expenditure Comparability Study*, involves 10 countries and examines in detail the content of the education expenditures data they reported to the OECD.

Thus far, participating education ministries have been receptive to the idea of improving comparability in the OECD data collection. Indeed, some countries had already modified their data submissions to the OECD for the 1991–92 school year, thus improving the comparability of education expenditures across countries for the data used for *The Condition of Education, 1996*. Further improvements were made to the data submissions to the OECD for the 1993–94 school year, the data used for this report. These changes were motivated in part by findings from the NCES expenditure comparability studies.⁴

NOTES:

¹ For a further argument against using market exchange rates, see Edith M. Rasek and Lawrence Mishel, *Short-changing Education*, Economic Policy Institute, January 1990.

² PPP Indices for other aggregates such as private consumption expenditures are available. See Stephen M. Barro, *International Comparisons of Education Spending: Some Conceptual and Methodological Issues*, SMB Economic Research, Inc., April 1990, for a discussion of the strengths and weaknesses of using various indices.

³ Organization for Economic Cooperation and Development, Centre for Educational Research and Innovation, *Education At a Glance, OECD Indicators*. Author: Paris, France, 1996, p. 57.

⁴ Stephen M. Barro. *Preliminary Findings from the Expenditure Comparability Study*. SMB Economic Research, Inc., June 1993.

Public and private expenditures on education institutions,¹ by level of education and country: 1993

G-7 country	As a percentage of GDP					Per student ²			
	Primary/secondary		Higher education		All levels and sources combined ³	Constant 1993 US dollars ⁴		As a percentage of GDP per capita	
	Public sources ⁵	Private sources ⁶	Public sources ⁵	Private sources ⁶		Primary/secondary ⁷	Higher education	Primary/secondary ⁷	Higher education
Canada	4.3	0.3	2.2	0.4	7.3	—	\$11,132	—	57.6
France	4.0	0.3	0.9	0.2	6.1	\$4,649	6,033	24.9	32.3
Germany	3.0	0.9	0.9	0.1	5.9	5,290	7,902	28.6	42.8
Italy	3.6	0.0	0.8	0.1	5.1	4,821	5,169	27.2	29.2
Japan	3.0	0.3	0.4	0.6	4.9	4,175	7,556	20.5	37.3
United Kingdom	3.9	—	0.9	0.0	⁸ 5.0	3,915	8,241	22.6	48.6
United States	3.8	0.4	1.3	1.2	6.8	5,987	14,607	24.4	60.2

— Not available.

¹ Includes all institutions (public and private) with the exception of Germany and Italy, which include only public institutions, and the United Kingdom, which includes public and government-dependent private institutions.

² Per-student expenditures were calculated based on full-time-equivalent (FTE) enrollment figures, and expenditures from both public and private sources, with the exception of the United Kingdom, for which private source data were unavailable.

³ Purchasing Power Parity (PPP) indices were used to convert other currencies to U.S. dollars. Because the fiscal year has a different starting date in different countries, within-country Consumer Price Indices (CPIs) were used to adjust the PPP indices to account for inflation. See the supplemental note to this indicator for further explanation.

⁴ Public expenditures are defined as direct public expenditures on education institutions plus public subsidies to households and other private entities for education institutions (e.g., tuition and fees), excluding other public aid to students and households (e.g., subsidies for student living costs).

⁵ Private expenditures are defined as private payments from households and other private entities to education institutions, minus any portion derived from public subsidies.

⁶ "All levels combined" includes expenditures on pre/primary education and funds classified as "undistributed," a classification reserved for enrollments, expenditures, or programs that cannot be unambiguously assigned to International Standard Classification of Education (ISCED) defined levels. Examples of undistributed education can include nongraded special education or recreational nondegree adult education programs.

⁷ Primary/secondary per-student expenditures were calculated by adding primary and secondary FTE and by dividing the total FTE into the total expenditures. See the supplemental note to this indicator for further explanation.

⁸ Total expenditures in the United Kingdom do not include primary/secondary expenditures from private sources, for which data were unavailable.

SOURCE: Organization for Economic Co-operation and Development, Center for Educational Research and Innovation, *Education At A Glance: OECD Indicators*, 1996.

Table 55-1 Education expenditures as a percentage of Gross Domestic Product (GPD) for primary and secondary education, by source of funds: 1993

Country	Direct public expenditures for education institutions	Total public subsidies to households and other private entities, excluding public subsidies for student living costs	Private payments to education institutions, excluding public subsidies to households and other private entities	Total expenditures from both public and private sources for education institutions	Total expenditures from public, private, and international sources for education institutions, plus public subsidies to households	Private payments other than to education institutions
Australia	3.65	0.03	0.43	4.10	4.45	0.34
Austria	3.54	0.01	0.02	3.58	3.59	0.02
Belgium	3.70	0.00	—	—	—	—
Canada	4.26	(¹)	0.26	4.52	4.52	(¹)
Czech Republic	3.35	0.00	—	—	—	—
Denmark	4.45	0.00	0.09	4.54	5.11	0.57
Finland	4.70	—	0.02	4.72	4.87	0.15
France	4.02	0.00	0.33	4.35	4.41	0.14
Germany	3.00	0.00	0.94	3.94	4.06	—
Greece	2.56	0.00	—	—	—	—
Hungary	4.11	0.00	0.42	4.53	4.54	0.00
Iceland	3.53	0.00	(¹)	3.53	3.65	0.12
Ireland	3.67	0.00	0.17	3.84	3.95	0.12
Italy	3.49	0.06	0.00	3.49	3.49	—
Japan	2.97	—	0.27	3.24	3.24	—
Korea	3.03	0.00	0.81	3.85	3.85	0.00
Mexico	2.99	—	—	—	—	—
Netherlands	3.03	0.11	0.06	3.20	3.39	0.28
New Zealand	4.40	0.10	—	—	—	—
Norway	4.45	0.00	—	—	—	—
Portugal	3.79	0.00	0.07	3.85	3.92	0.07
Spain	3.36	0.00	0.47	3.83	3.89	0.31
Sweden	4.69	0.00	0.01	4.70	5.14	0.43
Switzerland	4.16	0.05	—	—	—	—
Turkey	2.44	(²)	(²)	2.44	2.48	0.04
United Kingdom	3.91	0.04	—	—	—	0.03
United States	3.78	(¹)	0.37	4.15	4.15	0.02

— Not available.

¹ Data were included in another category of the item or in another item of the survey.

² Data were not applicable because the question survey item does not apply.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 349–352.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F1.12.

Table 55-2 Education expenditures as a percentage of Gross Domestic Product (GDP) for higher education, by source of funds: 1993

Country	Direct public expenditures for education institutions	Total public subsidies to households and other private entities, excluding public subsidies for student living costs	Private payments to education institutions, excluding public subsidies to households and other private entities	Total expenditures from both public and private sources for education institutions	Total expenditures from public, private, and international sources for education institutions, plus public subsidies to households	Private payments other than to education institutions
Australia	1.14	0.09	0.42	1.73	1.92	0.19
Austria	1.05	0.00	0.01	1.06	1.13	0.07
Belgium	0.97	0.00	—	—	—	—
Canada	1.73	0.46	0.40	2.59	2.84	0.38
Czech Republic	0.78	0.00	—	—	—	—
Denmark	1.34	0.00	0.00	1.35	2.16	0.81
Finland	1.75	—	0.01	1.76	2.24	0.48
France	0.89	0.00	0.17	1.06	1.14	0.08
Germany	0.94	0.01	0.10	1.05	1.16	—
Greece	0.84	0.00	—	—	—	—
Hungary	0.91	0.00	0.19	1.09	1.26	0.16
Iceland	0.67	0.00	0.05	0.72	1.23	0.51
Ireland	1.00	0.07	0.27	1.39	1.58	0.15
Italy	0.79	0.02	0.09	0.91	1.07	—
Japan	0.37	—	0.57	0.94	0.94	—
Korea	0.25	0.01	1.09	1.35	1.37	0.01
Mexico	0.72	—	—	—	—	—
Netherlands	1.25	0.14	0.04	1.44	1.76	0.38
New Zealand	1.20	0.32	—	—	—	—
Norway	1.50	0.00	—	—	—	—
Portugal	0.81	0.00	0.08	0.89	0.97	0.08
Spain	0.77	0.00	0.18	0.95	1.01	0.10
Sweden	1.46	0.00	0.14	1.60	2.30	0.69
Switzerland	1.16	0.01	—	—	—	—
Turkey	0.80	(*)	(*)	0.81	0.86	0.12
United Kingdom	0.68	0.25	0.00	0.93	1.18	0.21
United States	1.18	0.08	1.17	2.43	2.51	0.13

— Not available.

* Data were not applicable because the survey item does not apply.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 349–352.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F1.3.

Table 55-3 Education expenditures as a percentage of Gross Domestic Product (GDP) for all levels of education combined, by source of funds: 1993

Country	Direct public expenditures for education institutions	Total public subsidies to households and other private entities, excluding public subsidies for student living costs	Private payments to education institutions, excluding public subsidies to households and other private entities	Total expenditures from both public and private sources for education institutions	Total expenditures from public, private, and international sources for education institutions, plus public subsidies to households	Private payments other than to education institutions
Australia	4.92	0.21	0.84	5.96	6.49	0.53
Austria	5.31	0.01	0.12	5.44	5.57	0.13
Belgium	5.65	0.00	—	—	—	—
Canada	6.22	0.46	0.67	7.35	7.60	0.25
Czech Republic	5.02	0.00	—	—	—	—
Denmark	6.71	0.00	0.53	7.24	8.80	1.56
Finland	7.28	—	0.03	7.31	7.94	0.64
France	5.60	0.00	0.53	6.13	6.27	0.24
Germany	4.55	0.01	1.35	5.92	6.14	—
Greece	3.40	0.00	—	—	—	—
Hungary	5.89	0.00	0.72	6.61	6.79	0.18
Iceland	4.64	0.00	0.61	5.25	5.87	0.23
Ireland	5.24	0.11	0.46	5.81	6.15	0.30
Italy	4.96	0.08	0.03	5.08	5.25	—
Japan	3.66	—	1.20	4.86	4.86	—
Korea	3.72	0.05	1.95	5.72	5.75	0.01
Mexico	4.09	—	—	—	—	—
Netherlands	4.63	0.26	0.10	5.00	5.51	0.66
New Zealand	6.01	0.40	—	—	—	—
Norway	7.58	0.00	—	—	—	—
Portugal	5.28	0.00	0.15	5.43	5.58	0.15
Spain	4.54	0.00	0.76	5.30	5.42	0.55
Sweden	6.72	0.00	0.15	6.86	8.00	1.12
Switzerland	5.63	0.07	—	—	—	—
Turkey	3.28	(*)	(*)	3.29	3.38	0.12
United Kingdom	4.67	0.28	—	—	—	—
United States	5.15	0.08	1.61	6.84	6.92	0.16

— Not available.

* Data were not applicable because the survey item does not apply.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 349-352.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F1.4.

Table 55-4 Expenditures per student for early childhood education: 1993

Country	Type of institution	Full-time-equivalent enrollment	Expenditures per student, in 1993 constant U.S. dollars	Expenditures per student, as a percentage of GDP per capita
Australia	Public and private	—	—	—
Austria	Public	151,911	\$4,712	24.6
Belgium	Public and government-dependent	413,888	2,152	11.1
Canada	Public and private	252,398	5,270	27.3
Czech Republic	Public	332,828	1,676	19.8
Denmark	Public and private	209,541	4,584	23.9
Finland	Public and government-dependent	90,514	5,891	37.7
France	Public and private	2,549,255	2,678	14.3
Germany	Public	1,206,973	3,611	19.5
Greece	Public	—	—	—
Hungary	Public and private	396,215	1,376	22.9
Iceland	Public and private	—	—	—
Ireland	Public and private	121,894	1,866	13.5
Italy	Public	1,578,420	3,299	18.6
Japan	Public and private	1,950,887	2,294	11.3
Korea	Public and private	—	935	9.5
Mexico	Public	2,650,339	817	12.0
Netherlands	Public and private	371,726	2,635	14.8
New Zealand	Public and private	56,171	2,180	14.6
Norway	Public	100,215	6,451	33.9
Portugal	Public	77,737	1,794	15.2
Spain	Public and private	1,066,172	2,210	16.6
Sweden	Public and private	283,860	2,942	17.5
Switzerland	Public	139,125	2,335	10.1
Turkey	Public and private	138,504	871	15.7
United Kingdom	Public and government-dependent	237,806	3,508	20.7
United States	Public and private	4,434,598	3,551	14.6

— Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 353–354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F3.1.

Table 55-5 Expenditures per student for primary education: 1993

Country	Type of institution	Full-time-equivalent enrollment	Expenditures per student, in 1993 constant U.S. dollars	Expenditures per student, as a percentage of GDP per capita
Australia	Public and private	1,816,066	\$2,985	17.2
Austria	Public	365,428	4,291	22.4
Belgium	Public and government-dependent	738,330	2,953	15.3
Canada	Public and private	—	—	—
Czech Republic	Public	542,035	1,506	17.8
Denmark	Public and private	325,070	4,745	24.8
Finland	Public and government-dependent	391,994	4,095	26.2
France	Public and private	4,129,698	3,154	16.9
Germany	Public	3,614,112	2,815	15.2
Greece	Public	—	—	—
Hungary	Public and private	510,451	1,607	26.7
Iceland	Public and private	28,960	2,645	14.1
Ireland	Public and private	398,851	1,882	13.6
Italy	Public	2,863,279	4,107	23.2
Japan	Public and private	8,976,699	3,960	19.5
Korea	Public and private	—	1,715	17.4
Mexico	Public	13,517,525	741	10.9
Netherlands	Public and private	1,165,481	2,793	15.7
New Zealand	Public and private	326,916	2,659	17.8
Norway	Public	—	—	—
Portugal	Public	856,570	2,581	21.9
Spain	Public and private	2,545,628	2,293	17.2
Sweden	Public and private	610,596	4,917	29.2
Switzerland	Public	430,282	5,835	25.2
Turkey	Public and private	6,647,873	832	15.0
United Kingdom	Public and government-dependent	4,793,441	3,295	19.4
United States	Public and private	22,976,240	5,492	22.6

— Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 353–354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F3.2.

Table 55-6 Expenditures per student for secondary education: 1993

Country	Type or institution	Full-time-equivalent enrollment	Expenditures per student, in 1993 constant U.S. dollars	Expenditures per student, as a percentage of GDP per capita
Australia	Public and private	1,510,401	\$4,871	28.1
Austria	Public	606,671	6,721	35.1
Belgium	Public and government-dependent	936,099	5,373	27.8
Canada	Public and private	—	—	—
Czech Republic	Public	1,166,512	1,903	22.4
Denmark	Public and private	480,568	6,175	32.2
Finland	Public and government-dependent	447,616	4,769	30.5
France	Public and private	5,959,223	5,685	30.4
Germany	Public	7,513,222	6,481	35.1
Greece	Public	786,938	1,578	18.0
Hungary	Public and private	1,177,664	1,685	28.0
Iceland	Public and private	30,163	3,258	17.4
Ireland	Public and private	374,528	3,031	22.0
Italy	Public	4,938,465	5,235	29.6
Japan	Public and private	10,662,691	4,356	21.5
Korea	Public and private	—	2,026	20.6
Mexico	Public	5,761,010	1,477	21.7
Netherlands	Public and private	1,364,550	3,979	22.4
New Zealand	Public and private	355,707	3,951	26.4
Norway	Public	—	—	—
Portugal	Public	843,333	2,491	21.1
Spain	Public and private	4,613,880	3,033	22.8
Sweden	Public and private	688,234	5,651	33.6
Switzerland	Public	513,022	7,024	30.3
Turkey	Public and private	4,357,981	587	10.5
United Kingdom	Public and government-dependent	5,127,519	4,494	26.5
United States	Public and private	20,516,146	6,541	27.0

— Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 353–354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F3.3.

Table 55-7 Expenditures per student for higher education: 1993

Country	Type of institution	Full-time-equivalent enrollment	Expenditures per student, in 1993 constant U.S. dollars	Expenditures per student, as a percentage of GDP per capita
Australia	Public and private	593,783	\$9,036	52.0
Austria	Public	218,407	8,642	45.1
Belgium	Public and government-dependent	296,047	6,380	33.0
Canada	Public and private	1,300,582	11,132	57.6
Czech Republic	Public	147,951	4,788	56.5
Denmark	Public and private	166,555	8,045	42.0
Finland	Public and government-dependent	191,200	7,295	46.6
France	Public and private	1,887,452	6,033	32.3
Germany	Public	1,993,459	7,902	42.8
Greece	Public	303,966	2,502	28.5
Hungary	Public and private	130,609	5,189	86.4
Iceland	Public and private	7,059	5,059	27.1
Ireland	Public and private	99,188	7,076	51.3
Italy	Public	1,800,493	5,169	29.2
Japan	Public and private	3,145,390	7,556	37.3
Korea	Public and private	—	2,589	26.3
Mexico	Public	1,044,647	4,264	62.8
Netherlands	Public and private	451,366	8,665	48.8
New Zealand	Public and private	109,353	7,337	49.0
Norway	Public	140,249	8,343	43.8
Portugal	Public	182,251	5,667	48.0
Spain	Public and private	1,317,963	3,835	28.8
Sweden	Public and private	185,725	12,693	75.4
Switzerland	Public	114,604	15,731	67.9
Turkey	Public and private	996,109	2,696	48.5
United Kingdom	Public and government-dependent	1,127,737	8,241	48.6
United States	Public and private	10,417,787	14,607	60.2

— Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 353–354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F3.4.

Table 55-8 Expenditures per student for all levels of education combined: 1993

Country	Type of institution	Full-time-equivalent enrollment	Expenditures per student, in 1993 constant U.S. dollars	Expenditures per student, as a percentage of GDP per capita
Australia	Public and private	3,920,250	\$4,628	26.7
Austria	Public	1,342,418	6,565	34.3
Belgium	Public and government-dependent	2,384,363	4,616	23.9
Canada	Public and private	6,353,735	6,466	33.5
Czech Republic	Public	2,189,326	2,081	24.5
Denmark	Public and private	1,181,735	5,902	30.8
Finland	Public and government-dependent	1,121,324	5,167	33.0
France	Public and private	14,525,628	4,548	24.3
Germany	Public	16,284,370	5,450	29.5
Greece	Public	1,914,147	1,616	18.4
Hungary	Public and private	2,214,939	1,849	30.8
Iceland	Public and private	66,182	3,932	21.0
Ireland	Public and private	998,379	2,881	20.9
Italy	Public	11,180,657	5,021	28.4
Japan	Public and private	25,987,377	4,727	23.3
Korea	Public and private	—	2,132	21.6
Mexico	Public	22,973,521	1,102	16.2
Netherlands	Public and private	3,353,123	4,048	22.8
New Zealand	Public and private	848,146	3,681	24.6
Norway	Public	933,671	6,010	31.5
Portugal	Public	1,959,891	3,131	26.5
Spain	Public and private	9,543,643	2,916	21.9
Sweden	Public and private	1,768,415	5,702	33.9
Switzerland	Public	1,197,033	7,011	30.2
Turkey	Public and private	12,140,467	897	16.1
United Kingdom	Public and government-dependent	11,286,502	4,339	25.6
United States	Public and private	58,344,770	7,341	30.3

— Not available.

NOTE: For detailed information concerning coverage, methodology, and interpretation for specific countries, see *Education at a Glance* (1996), pp. 353–354.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, http://www.oecd.org/els/stats/eag/ind_list.htm, table F3.5.

Table 55-9 Basic reference statistics: 1993

Country	Gross Domestic Product (GDP) ^{1,2}	Purchasing Power Parity (PPP) Index	Adjustment factor ³	GDP, in U.S. dollars ^{1,4}	Total population	GDP per capita
Australia	414,680	1.3592	1.006166	\$306,972.42	17,573,000	\$17,468.41
Austria	2,124,072	13.865	1	153,196.68	7,993,000	19,166.36
Belgium	7,268,607	37.303	1	194,853.15	10,084,000	19,323.00
Canada	705,987	1.263	1.00788	563,380.98	28,941,000	19,466.53
Czech Republic	910,600	10.4	1	87,557.69	10,325,700	8,479.59
Denmark	873,237	8.7859	1	99,390.73	5,189,000	19,154.12
Finland	482,397	6.0862	1	79,260.79	5,066,000	15,645.63
France	7,082,790	6.5728	1	1,077,590.98	57,655,000	18,690.33
Germany	3,154,900	2.1029	1	1,500,261.54	81,179,000	18,480.91
Greece	16,760,352	184.34	1	90,920.86	10,368,000	8,769.37
Hungary	3,537,800	57.1	1	61,957.97	10,310,200	6,009.39
Iceland	410,860	82.926	1	4,954.54	265,000	18,696.37
Ireland	32,173	0.65477	1	49,136.34	3,563,000	13,790.72
Italy	1,550,150,000	1533.8	1	1,010,659.80	57,070,000	17,709.13
Japan	465,972,000	184.31	1.004823	2,540,390.55	124,670,000	20,376.92
Korea	267,145,900	620.9	1	430,255.92	43,663,405	9,853.93
Mexico	1,127,584	1.82	1	619,551.65	91,210,000	6,792.58
Netherlands	579,040	2.1344	1	271,289.36	15,290,000	17,742.93
New Zealand	78,804	1.5158	1.013804	52,706.04	3,470,750	15,185.78
Norway	733,665	8.9309	1	82,149.06	4,312,000	19,051.27
Portugal	13,625,623	116.96	1	116,498.14	9,876,000	11,796.09
Spain	60,905,100	116.96	1	520,734.44	39,086,000	13,322.79
Sweden	1,442,181	9.8332	1.013233	148,605.27	8,718,000	17,045.80
Switzerland	342,850	2.1316	1	160,841.62	6,938,000	23,182.71
Turkey	1,981,866,000	5989.8	1	330,873.48	59,489,000	5,561.93
United Kingdom	628,384	0.63735	1.024528	1,010,115.33	58,191,000	17,358.62
United States	6,259,900	1	1.010901	6,328,139.17	258,120,000	24,516.27

¹ In millions.

² This column represents GDP in each country's domestic currency.

³ The adjustment factor was used to shift the reference period for expenditure data from the national financial year to the calendar year 1993.

⁴ GDP in U.S. dollars, as used for the expenditure data in this analysis was calculated by dividing each country's GDP by the Purchasing Power Parity (PPP) index, and multiplying this figure by the adjustment factor.

NOTE: See the supplemental note to this indicator for a definition of GDP and an explanation of how PPP indices and adjustment factors were used to calculate expenditure data.

SOURCE: Organization for Economic Co-operation and Development, Center for Education Research and Innovation, *Education at a Glance, OECD Indicators*, 1996, table A2.