

## Education Expenditures by Country

*In 2017, the United States spent \$14,100 per full-time-equivalent (FTE) student on elementary and secondary education, which was 37 percent higher than the average of Organization for Economic Cooperation and Development (OECD) member countries of \$10,300 (in constant 2019 U.S. dollars). At the postsecondary level, the United States spent \$34,500 per FTE student, which was 102 percent higher than the average of OECD countries (\$17,100).*

This indicator uses material from the Organization for Economic Cooperation and Development (OECD) to compare countries' expenditures on education using two measures: *expenditures on public and private education institutions per full-time-equivalent (FTE) student* and *total government and private expenditures on education institutions as a percentage of gross domestic product (GDP)*. The OECD is an organization of 37 countries that collects and publishes an array of data on its member countries. Education expenditures are from public revenue sources (governments) and private revenue sources, and they include current and capital expenditures. Private sources include payments from households for school-based expenses such as tuition, transportation fees, book rentals, and food services, as well as public funding via subsidies to households, private fees for education services, and other private spending that goes through the educational institution. The *total government and private expenditures on education institutions as a percentage of GDP* measure allows for a comparison of

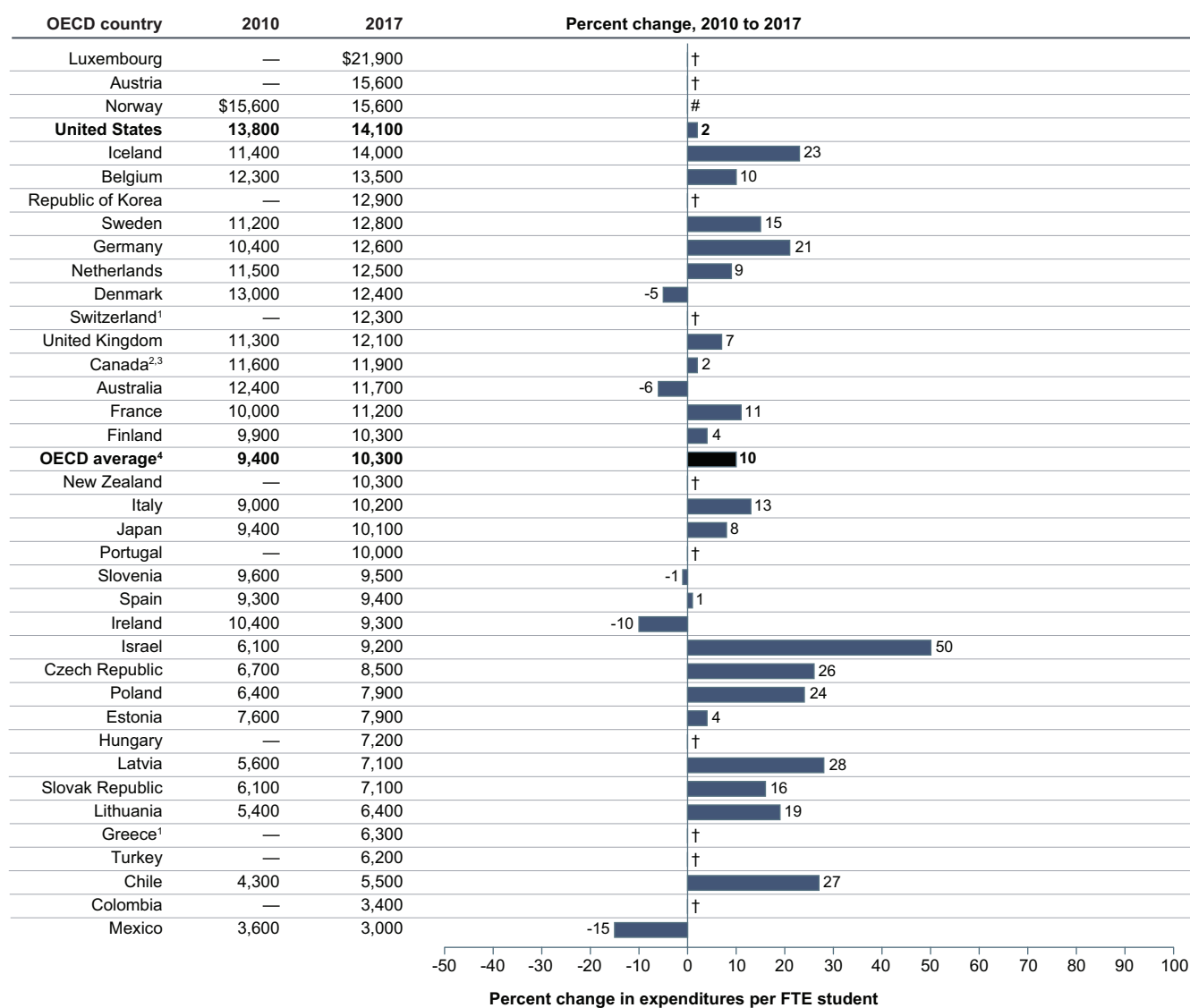
countries' expenditures relative to their ability to finance education. Purchasing power parity (PPP) indexes are used to convert other currencies into U.S. dollars. Monetary amounts are in constant 2019 dollars based on national Consumer Price Indexes.<sup>1</sup>

Expenditures per FTE student at the elementary/secondary level varied across OECD countries in 2017, ranging from \$3,000 in Mexico to \$21,900 in Luxembourg. The United States spent \$14,100 per FTE student at the elementary/secondary level, which was 37 percent higher than the average of OECD countries<sup>2</sup> reporting data (\$10,300).

Expenditures per FTE student at the postsecondary level also varied across OECD countries<sup>3</sup> in 2017, ranging from \$3,300 in Greece to \$53,800 in Luxembourg. The United States spent \$34,500 per FTE student at the postsecondary level, which was 102 percent higher than the average of OECD countries reporting data (\$17,100).

**Figure 1. Expenditures and percentage change in expenditures per full-time-equivalent (FTE) student for elementary and secondary education, by Organization for Economic Cooperation and Development (OECD) country: 2010 and 2017**

[In constant 2019 U.S. dollars]



— Not available.

† Not applicable.

# Rounds to zero.

<sup>1</sup> Includes public institutions only.<sup>2</sup> Education expenditures include preprimary education (for children ages 3 and older).<sup>3</sup> Education expenditures exclude postsecondary nondegree programs.

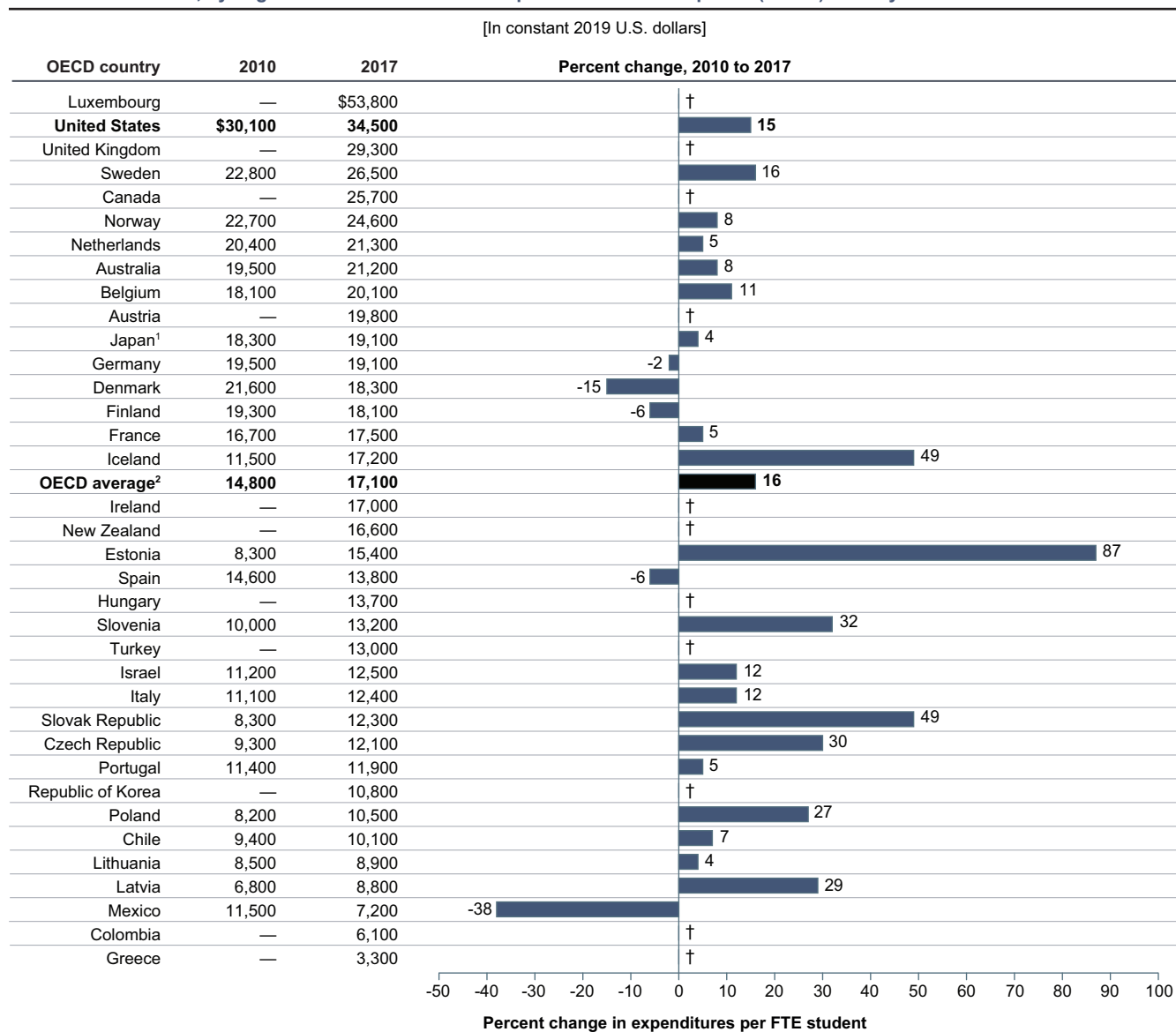
<sup>4</sup> Refers to the mean of the data values for all reporting Organization for Economic Cooperation and Development (OECD) countries, to which each country reporting data contributes equally. The average includes all current OECD countries for which a given year's data are available, even if they were not members of OECD in that year. NOTE: Includes both government and private expenditures. Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary nondegree programs) are included in elementary and secondary education unless otherwise noted. Data adjusted to U.S. dollars using the purchasing power parity (PPP) index. Constant dollars based on national Consumer Price Indexes, available on the OECD database cited in the SOURCE note below. Some data have been revised from previously published figures. Although rounded numbers are displayed, the figures are based on unrounded data.

SOURCE: Organization for Economic Cooperation and Development (OECD), Online Education Database, retrieved December 10, 2020, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2020*, table 605.10.

In 2017, the average of OECD countries' expenditures per FTE student at the elementary/secondary level was \$10,300, compared with \$9,400 in 2010.<sup>4</sup> In 22 of the 27 OECD countries with data available for both years, including the United States, expenditures per FTE student at the elementary/secondary level were higher in 2017 than in 2010, after adjusting for inflation. The percentage increases ranged from a low of less than one-half of 1 percent in Norway to a high of 50 percent in Israel. Five countries (Mexico, Ireland, Australia, Denmark, and Slovenia) had expenditures per FTE student at the elementary/secondary level that were lower in 2017 than in 2010. In the United States, expenditures per FTE student were 2 percent higher in 2017 (\$14,100) than in 2010 (\$13,800). Nineteen of the 27 countries with data available for both 2010 and 2017 had higher percentage

increases in expenditures than the United States. The exceptions were Norway (less than one-half of 1 percent) and Spain (1 percent), which had a lower percentage increase than the United States between 2010 and 2017, and the five countries that saw percentage decreases in expenditures between those years.

In 2017, the United States had the fourth highest expenditures per FTE student at the elementary/secondary level, after Luxembourg (\$21,900), Austria (\$15,600), and Norway (\$15,600). Of these three countries, only Norway had data available in 2010. The gap in expenditures between Norway and the United States was smaller in 2017 (\$1,500) than in 2010 (\$1,700), which was driven by an increase in spending in the United States.

**Figure 2. Expenditures and percentage change in expenditures per full-time-equivalent (FTE) student for postsecondary education, by Organization for Economic Cooperation and Development (OECD) country: 2010 and 2017**

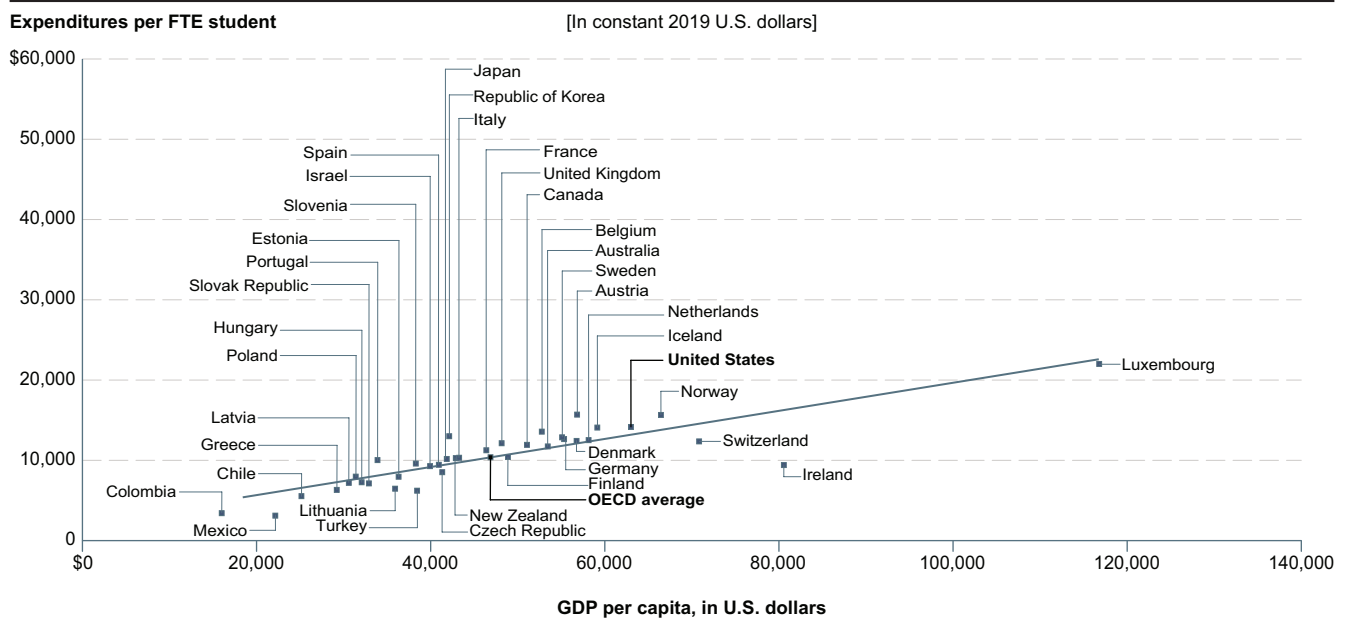
— Not available.

† Not applicable.

<sup>1</sup> Postsecondary nondegree programs included in both secondary and postsecondary education in one or both data years (2010 and 2017).<sup>2</sup> Refers to the mean of the data values for all reporting Organization for Economic Cooperation and Development (OECD) countries, to which each country reporting data contributes equally. The average includes all current OECD countries for which a given year's data are available, even if they were not members of OECD in that year. NOTE: Switzerland is excluded from this figure because data on expenditures were unavailable for 2010 and 2017. Includes both government and private expenditures. Data adjusted to U.S. dollars using the purchasing power parity (PPP) index. Constant dollars based on national Consumer Price Indexes, available on the OECD database cited in the SOURCE note below. Some data have been revised from previously published figures. Although rounded numbers are displayed, the figures are based on unrounded data.SOURCE: Organization for Economic Cooperation and Development (OECD), Online Education Database, retrieved December 10, 2020, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2020*, table 605.10.

In 2017, the average of OECD countries' expenditures per FTE student at the postsecondary level was \$17,100, compared with \$14,800 in 2010. Of the 25 OECD countries with data available in both years, expenditures per FTE student at the postsecondary level were higher in 2017 than in 2010 in 20 countries, including the United States. In the United States, expenditures per FTE student at the postsecondary level were 15 percent higher in 2017 (\$34,500) than in 2010 (\$30,100). Of the 20 countries with expenditures per FTE student that were higher in 2017

than in 2010, the percentage increase in expenditures per FTE student at the postsecondary level ranged from a low of 4 percent in Japan and Lithuania to a high of 87 percent in Estonia. The United States had the highest expenditures per FTE student in both 2010 and 2017 among the OECD countries reporting data in both years. Five countries (Mexico, Denmark, Finland, Spain, and Germany) had expenditures per FTE student at the postsecondary level that were lower in 2017 than in 2010.

**Figure 3. Expenditures per full-time-equivalent (FTE) student for elementary and secondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2017**

— Linear relationship between spending and country wealth for 37 OECD countries reporting data (elementary/secondary):  $r^2 = .74$ ; slope = 0.17; intercept = 2,189.

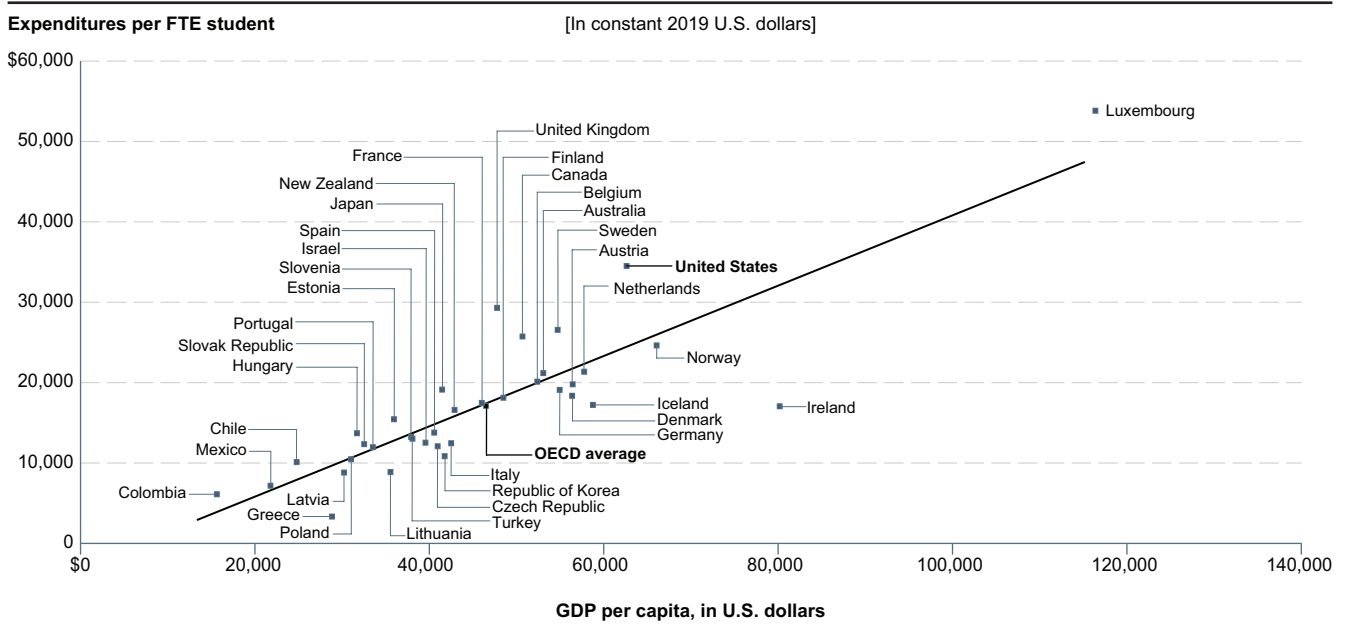
NOTE: Includes both government and private expenditures. Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary nondegree programs) are included in elementary and secondary education unless otherwise noted. Data on expenditures for Canada include preprimary education and exclude postsecondary nondegree programs. Data adjusted to U.S. dollars using the purchasing power parity (PPP) index. Constant dollars based on national Consumer Price Indexes, available on the OECD database cited in the SOURCE note below. "OECD average" refers to the mean of the data values for all reporting Organization for Economic Cooperation and Development (OECD) countries, to which each country reporting data contributes equally. The average includes all current OECD countries for which a given year's data are available, even if they were not members of OECD in that year.

SOURCE: Organization for Economic Cooperation and Development (OECD), Online Education Database, retrieved December 10, 2020, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2020*, table 605.10.

A country's wealth (defined as GDP per capita) is positively associated with its education expenditures per FTE student at the elementary/secondary and postsecondary levels. In 2017, of the 16 countries with a GDP per capita greater than the average of OECD countries (\$10,300) that also reported data for elementary/secondary education expenditures per FTE student, 15 countries had elementary/secondary education expenditures per FTE student that were higher than the average of OECD countries. These 15 countries were the United Kingdom, Finland, Canada, Belgium, Australia, Sweden, Germany, Denmark, Austria, the Netherlands, Iceland, the United States, Norway, Switzerland, and Luxembourg. The exception was Ireland, which had lower elementary/secondary expenditures per FTE student (\$9,300) than the average of OECD countries.

Of the 21 countries with a GDP per capita lower than the average of OECD countries that also reported data for elementary/secondary education expenditures per FTE student, 19 countries also had elementary/secondary education expenditures per FTE student that were lower than the average of OECD countries in 2017. These 19 countries were Colombia, Mexico, Chile, Greece, Latvia, Poland, Hungary, the Slovak Republic, Portugal, Lithuania, Estonia, Slovenia, Turkey, Israel, Spain, the Czech Republic, Japan, Italy, and New Zealand. The exceptions were France and the Republic of Korea, which had expenditures per FTE student at the elementary/secondary level that were higher than the average for OECD countries.

**Figure 4. Expenditures per full-time-equivalent (FTE) student for postsecondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2017**

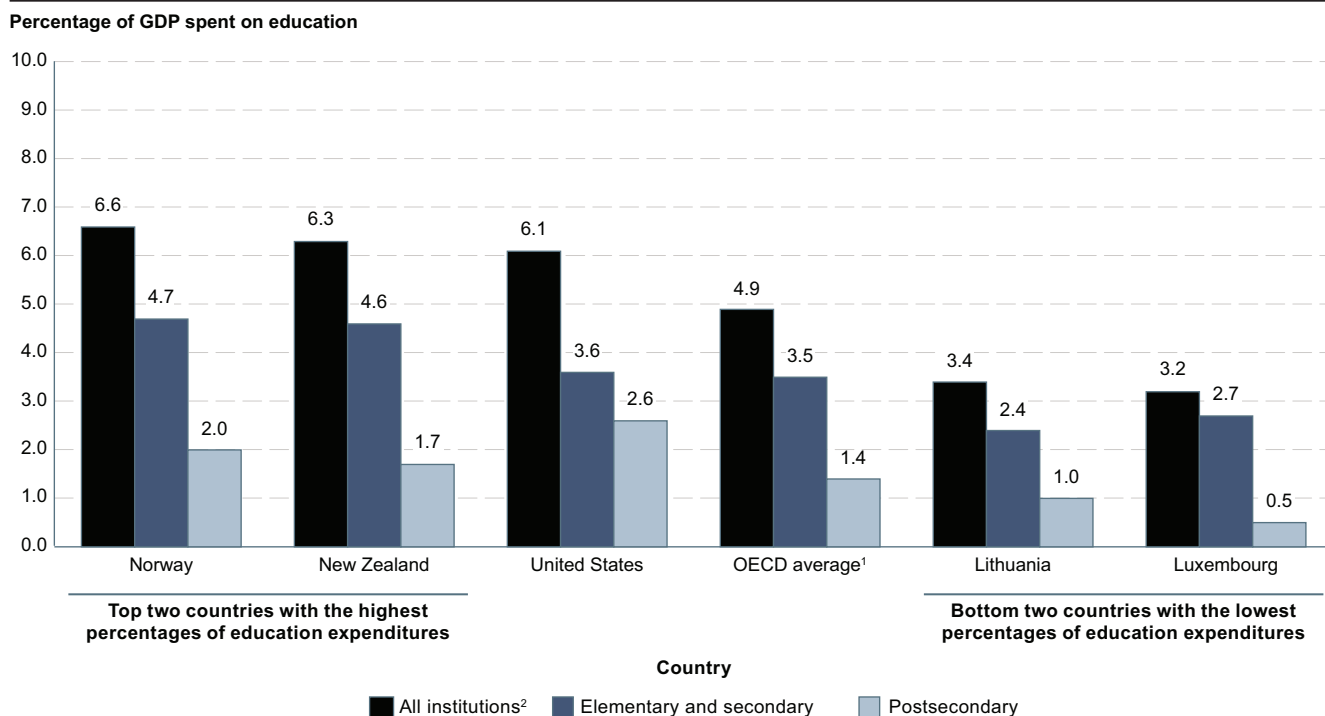


— Linear relationship between spending and country wealth for 36 OECD countries reporting data (postsecondary):  $r^2 = .74$ ; slope = 0.44; intercept = -2,939.  
 NOTE: Switzerland is excluded from this figure because data on expenditures were not available in 2017. Includes both government and private expenditures. Data on expenditures for Japan include International Standard Classification of Education (ISCED) level 4 (postsecondary nondegree programs). Data adjusted to U.S. dollars using the purchasing power parity (PPP) index. Constant dollars based on national Consumer Price Indexes, available on the OECD database cited in the SOURCE note below. "OECD average" refers to the mean of the data values for all reporting Organization for Economic Cooperation and Development (OECD) countries, to which each country reporting data contributes equally. The average includes all current OECD countries for which a given year's data are available, even if they were not members of OECD in that year.  
 SOURCE: Organization for Economic Cooperation and Development (OECD), Online Education Database, retrieved December 10, 2020, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2020*, table 605.10.

At the postsecondary level in 2017, of the 15 countries with a GDP per capita that was higher than the average of OECD countries that also reported data for postsecondary education expenditures per FTE student, 14 had postsecondary education expenditures per FTE student that were higher than the average of OECD countries. The exception was Ireland, which had lower expenditures per FTE student at the postsecondary level (\$17,000) than the average of OECD countries (\$17,100). Of the 21 countries

with a lower GDP per capita than the average of OECD countries that also reported data for postsecondary education expenditures per FTE student, 19 countries had education expenditures per FTE student that were lower than the average of OECD countries at the postsecondary level. The two exceptions were Japan and France; both countries reported higher postsecondary expenditures per FTE student (\$19,100 and \$17,500, respectively) than the average of OECD countries.

**Figure 5. Government and private expenditures on education institutions as a percentage of gross domestic product (GDP) for Organization for Economic Cooperation and Development (OECD) countries with the two highest and lowest percentages of expenditures for all institutions, by level of education: 2017**



<sup>1</sup> Refers to the mean of the data values for all reporting Organization for Economic Cooperation and Development (OECD) countries, to which each country reporting data contributes equally. The average includes all current OECD countries for which a given year's data are available, even if they were not members of OECD in that year.

<sup>2</sup> Includes expenditures that could not be reported by level of education.

NOTE: Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary nondegree programs) are included in elementary and secondary education. Although rounded numbers are displayed, the figures are based on unrounded data. Detail may not sum to totals because of rounding.

SOURCE: Organization for Economic Cooperation and Development (OECD), Online Education Database, retrieved September 16, 2020, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2020*, table 605.20.

Among the 35 OECD countries reporting data in 2017, the average total expenditures on education institutions constituted 4.9 percent of GDP. Norway reported the highest total expenditures on education institutions as a percentage of GDP (6.6 percent), followed by New Zealand, Chile, and the United Kingdom (all 6.3 percent), Israel (6.2 percent), and the United States (6.1 percent). Luxembourg reported the lowest total expenditures on education institutions as a percentage of GDP (3.2 percent), followed by Lithuania and Ireland (both 3.4 percent) and the Czech Republic and Slovak Republic (both 3.6 percent).

At the elementary/secondary level, the United States spent 3.6 percent of GDP on total expenditures on education institutions in 2017, higher than the average of OECD countries (3.5 percent). Nine countries spent

4.0 percent or more of GDP on elementary/secondary institutions. Israel and Norway reported the highest percentage of GDP spent on elementary/secondary institutions (both 4.7 percent). Lithuania reported the lowest percentage of GDP spent on elementary/secondary institutions (2.4 percent).

At the postsecondary level, the United States spent 2.6 percent of GDP on total expenditures on education institutions in 2017, higher than the average of OECD countries (1.4 percent) and higher than the percentages of all other OECD countries reporting data, except for Chile (2.7 percent). In addition to the United States and Chile, other countries that spent 2.0 percent or more of GDP on postsecondary institutions were Canada (2.3 percent) and Australia, the United Kingdom, and Norway (all 2.0 percent).

**Endnotes:**

<sup>1</sup> National Consumer Price Indexes are available at the OECD Online Education Database (<https://stats.oecd.org/Index.aspx>). The data used for this indicator can be found in the “Consumer price indices (CPIs)–Complete database” table under “Prices and Purchasing Power Parities,” “Consumer and Producer Price Indices,” “Consumer price indices (CPIs)–Complete database.”

<sup>2</sup> Throughout this indicator, the “average of OECD countries” refers to the simple average of the individual country values for all reporting OECD countries, to which each country reporting data contributes equally. The average includes all current OECD countries for which a given year’s data are available, even if they were not members of the OECD in that year. Countries excluded

from analyses in this indicator may be included in the OECD average.

<sup>3</sup> Switzerland is excluded from analyses of expenditures per FTE student at the postsecondary level because 2017 expenditure data were not available for this level.

<sup>4</sup> The 2010 average of OECD countries is based on 27 countries with available data, and the 2017 average of OECD countries is based on 37 countries. Users should exercise caution when comparing averages because of the impact of the inclusion or exclusion countries from the calculations due to available data. The 2010 average of OECD countries for the 27 countries with data available for both 2010 and 2017 is \$10,100.

**Reference tables:** *Digest of Education Statistics 2020*, tables 605.10 and 605.20

**Related indicators and resources:** [Enrollment Rates by Country](#); [International Comparisons: Mathematics and Science Achievement at Grades 4 and 8](#); [International Comparisons: Reading Literacy at Grade 4](#); [International Comparisons: Reading, Mathematics, and Science Literacy of 15-Year-Old Students](#); [International Educational Attainment](#); [Public School Expenditures](#)

**Glossary:** Constant dollars; Consumer Price Index (CPI); Elementary school; Expenditures per pupil; Full-time-equivalent (FTE) enrollment; Gross domestic product (GDP); International Standard Classification of Education (ISCED); Organization for Economic Cooperation and Development (OECD); Postsecondary education; Purchasing Power Parity (PPP) indexes; Secondary school