

## Education Expenditures by Country

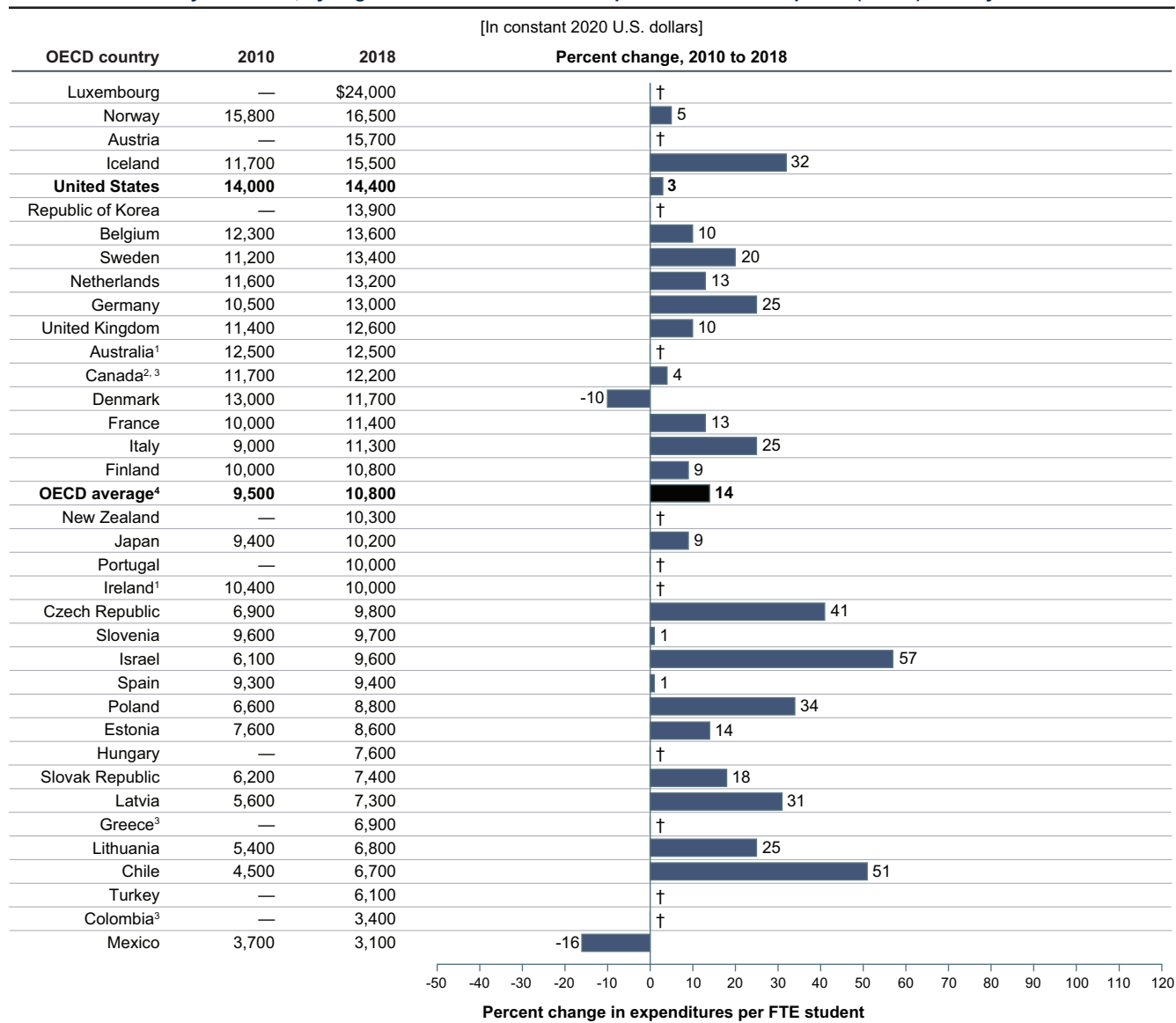
*In 2018, the United States spent \$14,400 per full-time-equivalent (FTE) student on elementary and secondary education, which was 34 percent higher than the average of Organization for Economic Cooperation and Development (OECD) member countries of \$10,800 (in constant 2020 U.S. dollars). At the postsecondary level, the United States spent \$35,100 per FTE student, which was double the average of OECD countries (\$17,600).*

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 38 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 2020 dollars based on national Consumer Price Indexes.<sup>1</sup>

Expenditures per FTE student at the elementary/secondary level varied across OECD countries<sup>2</sup> in 2018, ranging from \$3,100 in Mexico to \$24,000 in Luxembourg. The United States spent \$14,400 per FTE student at the elementary/secondary level,<sup>3</sup> which was 34 percent higher than the average of OECD countries<sup>4</sup> reporting data (\$10,800). The United States had the fifth highest expenditures per FTE student at the elementary/secondary level in 2018 after Luxembourg, Norway (\$16,500), Austria (\$15,700), and Iceland (\$15,500).

Expenditures per FTE student at the postsecondary level also varied across OECD countries<sup>5</sup> in 2018, ranging from \$3,000 in Colombia to \$48,900 in Luxembourg. Expenditures per FTE student at this level for the United States (\$35,100) were second highest, after Luxembourg, and double the average of OECD countries reporting data (\$17,600).

**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 2018**

— Not available.

† Not applicable.

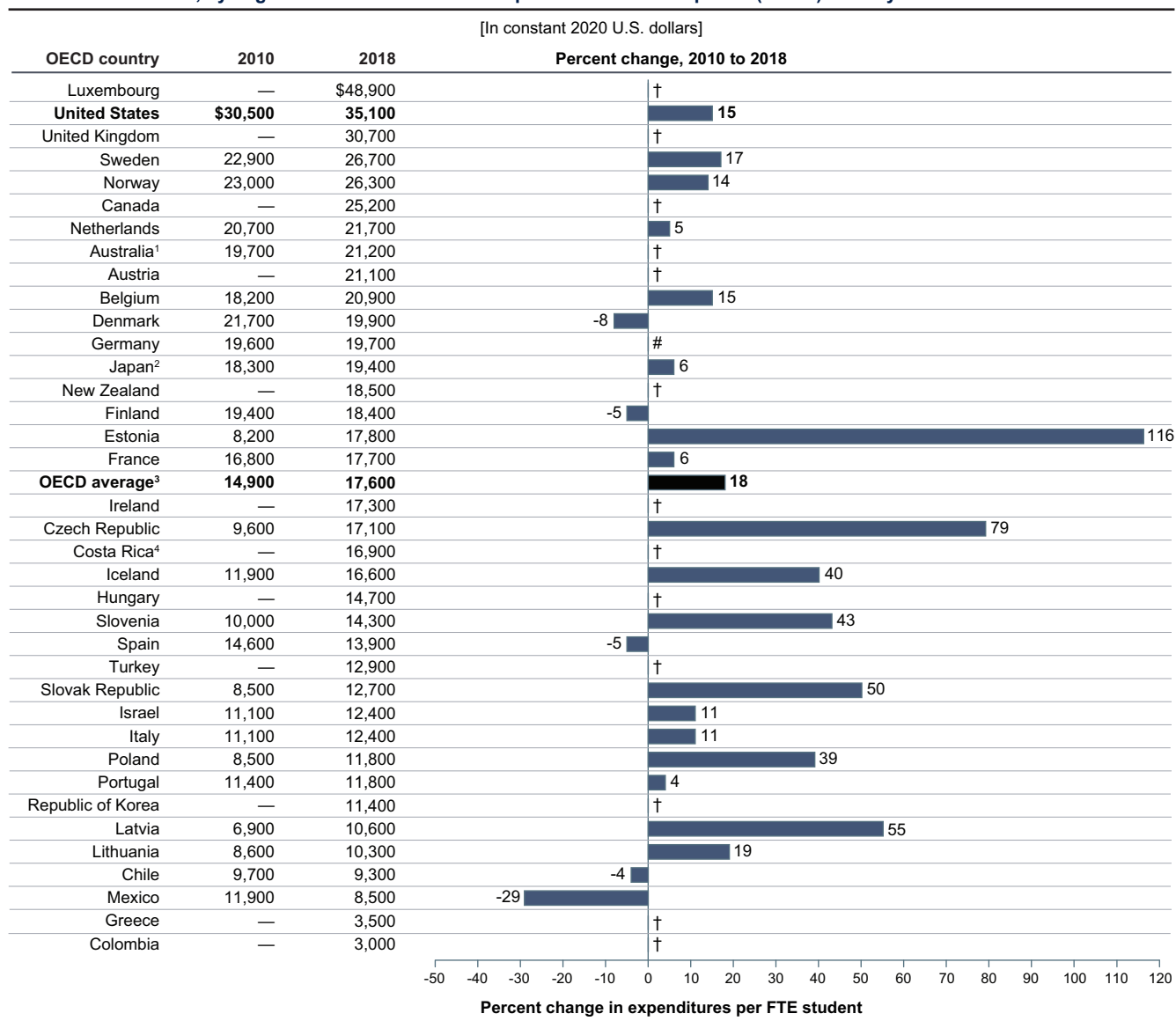
<sup>1</sup> Methodology and/or data sources have been revised between 2010 and 2018. As a result, percentage changes in expenditures between 2010 and 2018 are not comparable.<sup>2</sup> Elementary and secondary education expenditures include preprimary education (for children ages 3 and older).<sup>3</sup> Elementary and secondary education expenditures exclude postsecondary nondegree programs. Postsecondary nondegree figures are treated as negligible.<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: Costa Rica and Switzerland are excluded from this figure because data on expenditures were unavailable for 2010 and 2018. 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 October 7, 2021, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2021*, table 605.10.

In 2018, the average of OECD countries' expenditures per FTE student at the elementary/secondary level was \$10,800, compared with \$9,500 in 2010.<sup>6</sup> In 23 of the 25 OECD countries with data available for both years, including the United States, expenditures per FTE student at the elementary/secondary level were higher in 2018 than in 2010, after adjusting for inflation. In these countries, expenditures ranged from being 1 percent higher (Slovenia and Spain) to 57 percent higher (Israel) in 2018 compared with 2010. Two countries (Denmark

and Mexico) had expenditures per FTE student at the elementary/secondary level that were lower in 2018 than in 2010. In the United States, expenditures per FTE student were 3 percent higher in 2018 (\$14,400) than in 2010 (\$14,000). Twenty of the 25 countries with data available for both 2010 and 2018 had higher percentage changes in expenditures than the United States. The exceptions were Slovenia and Spain (both 1 percent higher in 2018 than in 2010), as well as Denmark and Mexico, the countries that had lower expenditures in 2018 than in 2010.

**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 2018**

— Not available.

† Not applicable.

# Rounds to zero.

<sup>1</sup> Methodology and/or data sources have been revised between 2010 and 2018. As a result, percentage changes in expenditures between 2010 and 2018 are not comparable.<sup>2</sup> Postsecondary nondegree programs included in both secondary and postsecondary education.<sup>3</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>4</sup> Includes public institutions only.

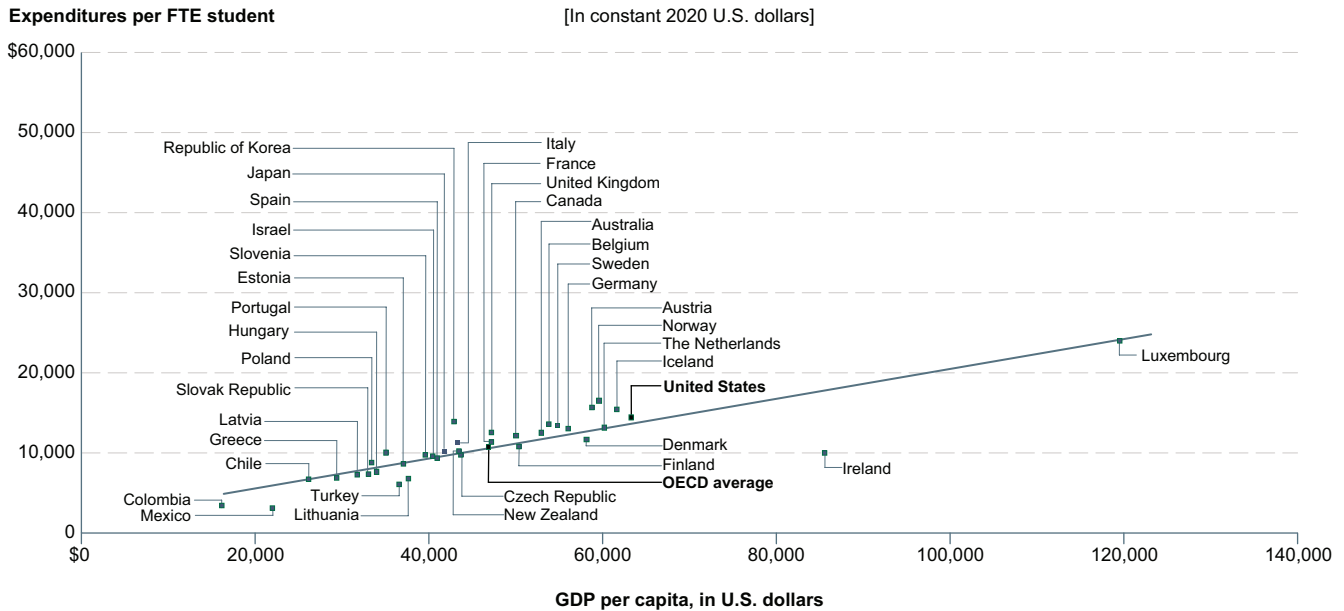
NOTE: Switzerland is excluded from this figure because data on expenditures were unavailable for 2010 and 2018. Includes both government and private expenditures.

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 October 7, 2021, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2021*, table 605.10.

In 2018, the average of OECD countries' expenditures per FTE student at the postsecondary level was \$17,600, compared with \$14,900 in 2010.<sup>7</sup> Of the 24 OECD countries with data available in both years, expenditures per FTE student at the postsecondary level were higher in 2018 than in 2010 in 19 countries, including the United States. In the United States, expenditures per FTE student at the postsecondary level were 15 percent higher in 2018 (\$35,100) than in 2010 (\$30,500). Of the

19 countries with expenditures per FTE student that were higher in 2018 than in 2010, the percentage change in expenditures per FTE student at the postsecondary level ranged from a low of less than one-half of 1 percent in Germany to a high of 116 percent in Estonia. Five countries (Chile, Finland, Spain, Denmark, and Mexico) had expenditures per FTE student at the postsecondary level that were lower in 2018 than in 2010.

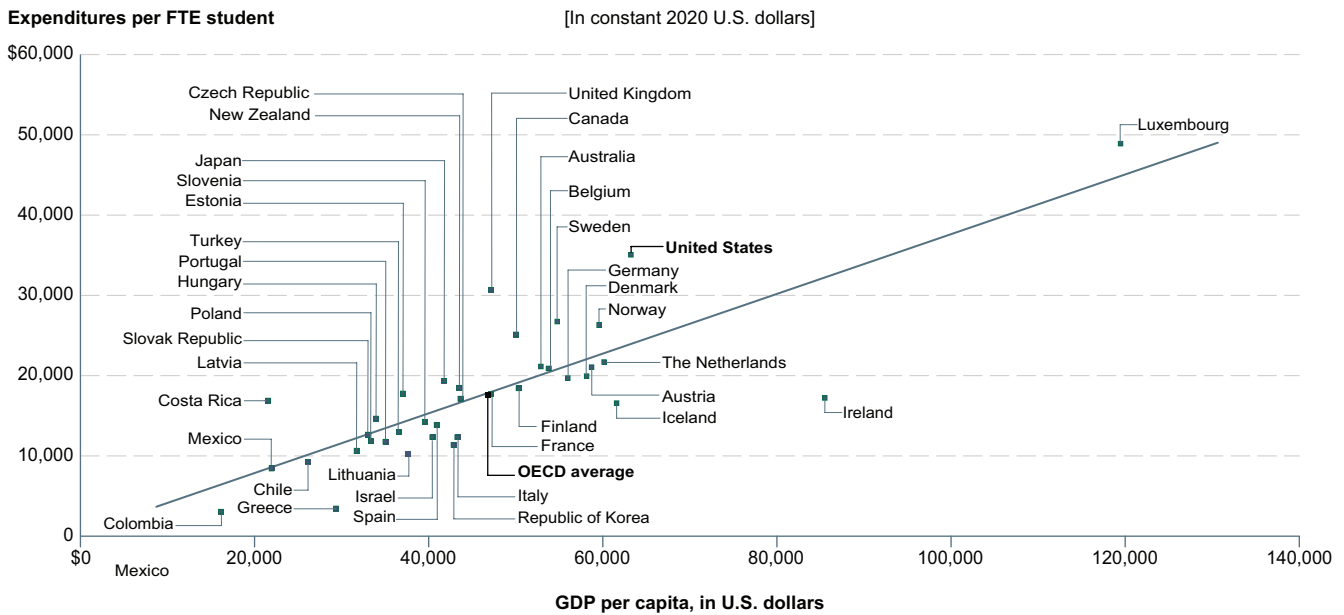
**Figure 3. Expenditures per full-time-equivalent (FTE) student for elementary and secondary education in selected Organization for Economic Cooperation and Development (OECD) countries, by gross domestic product (GDP) per capita: 2018**

— Linear relationship between spending and country wealth for 36 OECD countries reporting data (elementary/secondary):  $R^2 = .74$ ; slope = 0.18; intercept = 2,129.  
NOTE: Costa Rica and Switzerland are excluded from this figure because data on expenditures were not available for 2018. 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 except for Canada, Colombia, and Greece. Data on expenditures for Canada include preprimary education and exclude postsecondary nondegree programs. Data on expenditures for Colombia and Greece 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 October 7, 2021, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2021*, 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 2018, of the 16 countries with a GDP per capita greater than the \$46,800 average of OECD countries, 15 countries had elementary/secondary education expenditures per FTE student that were higher than the average of OECD countries.<sup>8</sup> These 15 countries were France, the United Kingdom, Canada, Finland, Australia, Belgium, Sweden, Germany, Denmark, Austria, Norway, the Netherlands, Iceland, the United States, and Luxembourg. The exception was Ireland, which had lower elementary/secondary expenditures per FTE student (\$10,000) than the average of OECD countries.

Of the 20 countries with a GDP per capita lower than the average of OECD countries, 18 countries also had elementary/secondary education expenditures per FTE student that were lower than the average of OECD countries in 2018.<sup>9</sup> These 18 countries were Colombia, Mexico, Chile, Greece, Latvia, the Slovak Republic, Poland, Hungary, Portugal, Turkey, Estonia, Lithuania, Slovenia, Israel, Spain, Japan, New Zealand, and the Czech Republic. The exceptions were the Republic of Korea and Italy, which had expenditures per FTE student at the elementary/secondary level (\$13,900 and \$11,300, respectively) 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: 2018**

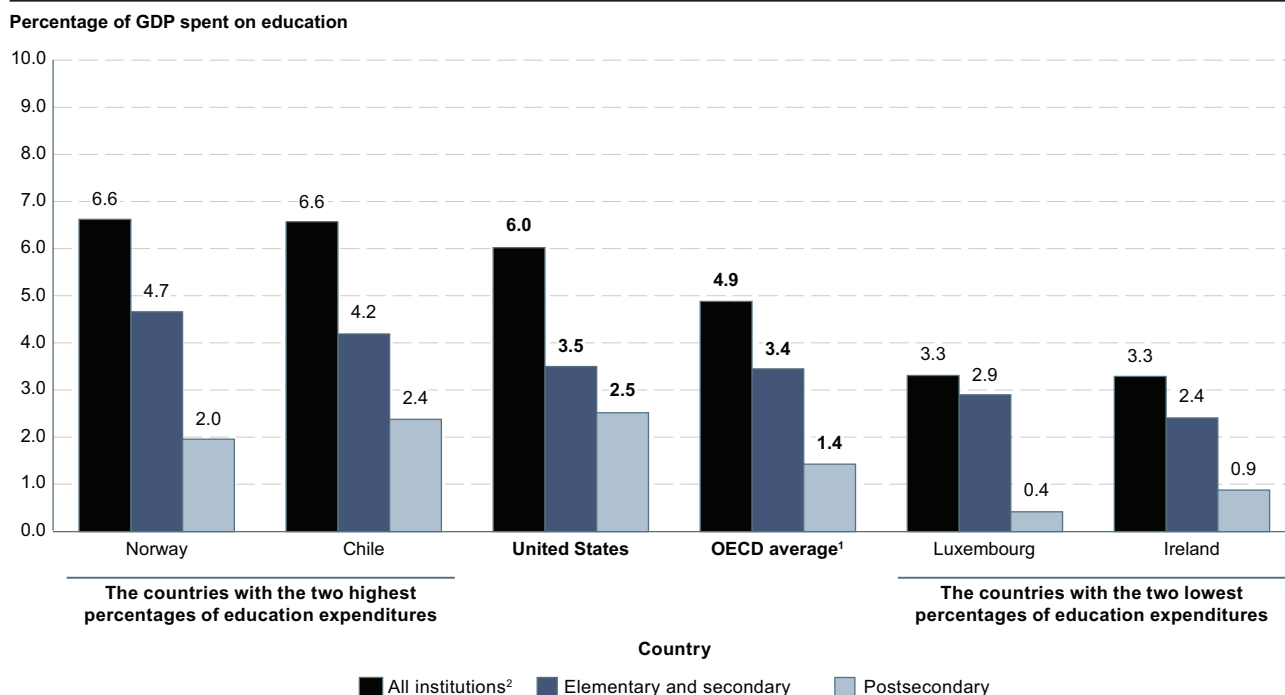


— Linear relationship between spending and country wealth for 37 OECD countries reporting data (postsecondary):  $R^2 = .65$ ; slope = 0.37; intercept = 392.  
 NOTE: Switzerland is excluded from this figure because data on expenditures were not available for 2018. Includes both government and private 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 October 7, 2021, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2021*, table 605.10.

At the postsecondary level in 2018, of the 16 countries with a GDP per capita that was higher than the average of OECD countries, 14 had postsecondary education expenditures per FTE student that were higher than the \$17,600 average of OECD countries.<sup>10</sup> The two countries that had expenditures per FTE student that were lower than the average of OECD countries were Ireland and Iceland (\$17,300 and \$16,600, respectively). Of the

21 countries with a lower GDP per capita than the average of OECD countries, 18 countries had postsecondary education expenditures per FTE student that were lower than the average of OECD countries. Three countries had expenditures per FTE student that were higher than the average of OECD countries: Estonia (\$17,800), New Zealand (\$18,500), and Japan (\$19,400).

**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: 2018**



<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 October 7, 2021, from <https://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2021*, table 605.20.

Among the 36 OECD countries reporting data in 2018, the average total expenditures on education institutions constituted 4.9 percent of GDP. Norway and Chile reported the highest total expenditures on education institutions as a percentage of GDP (both 6.6 percent), followed by Israel and New Zealand (both 6.2 percent), the United Kingdom (6.1 percent), and the United States (6.0 percent). Ireland and Luxembourg reported the lowest total expenditures on education institutions as a percentage of GDP (both 3.3 percent), followed by Lithuania (3.4 percent), the Slovak Republic and Greece (both 3.7 percent), and Hungary (3.8 percent).

At the elementary/secondary level, total expenditures for the United States on educational institutions in 2018 amounted to 3.5 percent of GDP. This was higher than the average of OECD countries (3.4 percent). Eight countries

spent 4.0 percent or more of GDP on elementary/secondary institutions. Israel reported the highest percentage of GDP spent on elementary/secondary institutions (4.8 percent). Lithuania reported the lowest percentage of GDP spent on elementary/secondary institutions (2.3 percent).

At the postsecondary level, total expenditures for the United States on education institutions in 2018 amounted to 2.5 percent of GDP. This was higher than the average of OECD countries (1.4 percent) and higher than the percentages of all other OECD countries reporting data. In addition to the United States, other countries that spent 2.0 percent or more of GDP on postsecondary institutions were Chile (2.4 percent), Canada (2.3 percent), and the United Kingdom (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> Costa Rica and Switzerland are excluded from analyses of expenditures per FTE student at the elementary/secondary level because 2018 expenditure data at this education level were not available for these countries.

<sup>3</sup> The U.S. national average for expenditures per FTE student at the elementary/second level masks important variations in expenditures at the state level. See *Digest* table 236.75 for more information on current expenditures on elementary/secondary education by state and jurisdiction.

<sup>4</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>5</sup> Switzerland is excluded from analyses of expenditures per FTE student at the postsecondary level because 2018 expenditure data at this education level were not available.

<sup>6</sup> The 2010 average of OECD countries is based on 27 countries with available data, and the 2018 average of OECD countries is based on 36 countries. Users should exercise caution when comparing averages because of the impact of the inclusion or exclusion of countries from the calculations due to available data. The 2018 average of OECD countries for the 27 countries with data available for both 2010 and 2018 is \$10,700.

<sup>7</sup> The 2010 average of OECD countries is based on 25 countries with available data, and the 2018 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 of countries from the calculations due to available data. The 2018 average of the 25 OECD countries with data available for both 2010 and 2018 is \$17,100.

<sup>8</sup> In addition to these 16 countries, Switzerland also had a higher GDP per capita than the OECD average, but it is excluded from this analysis because it did not report data for elementary/secondary education expenditures per FTE student.

<sup>9</sup> In addition to these 20 countries, Costa Rica also had a lower GDP per capita than the OECD average, but it is excluded from this analysis because it did not report data for elementary/secondary education expenditures per FTE student.

<sup>10</sup> In addition to these 16 countries, Switzerland also had a higher GDP per capita than the OECD average, but it is excluded from this analysis because it did not report data for postsecondary education expenditures per FTE student.

**Reference tables:** *Digest of Education Statistics 2021*, 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/High school