

Education Expenditures by Country

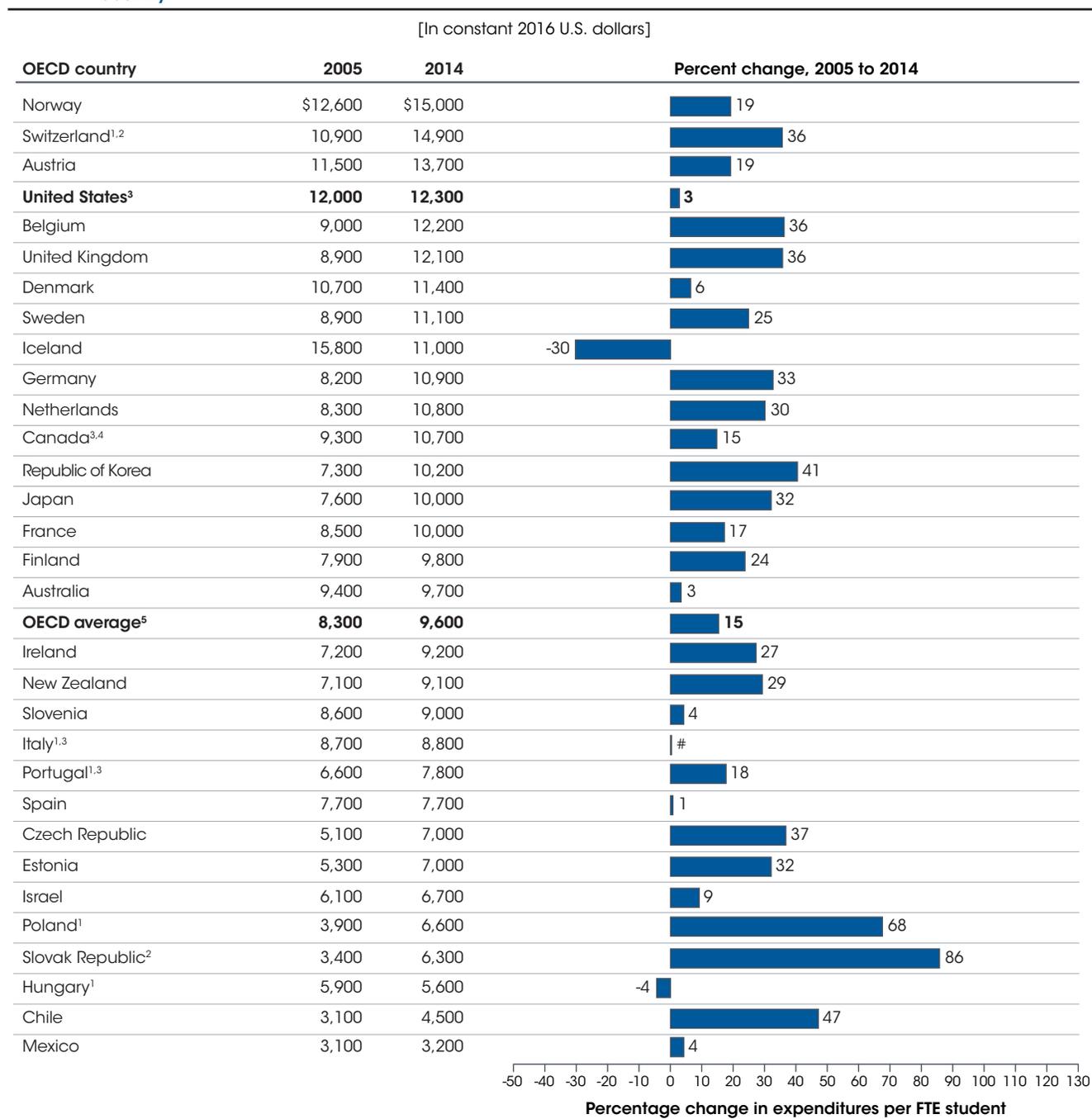
In 2014, the United States spent \$12,300 per full-time-equivalent (FTE) student on elementary and secondary education, which was 29 percent higher than the OECD average of \$9,600. At the postsecondary level, the United States spent \$29,700 per FTE student, which was 81 percent higher than the OECD average of \$16,400.

This indicator uses material from the Organization for Economic Cooperation and Development (OECD) to compare countries' expenditures on education using two measures: *expenditures by 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 35 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 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 2016 dollars based on national Consumer Price Indexes.¹

Expenditures per FTE student at the elementary/secondary level varied widely across OECD countries² in 2014, ranging from \$3,200 in Mexico to \$15,000 in Norway. The United States spent \$12,300 per FTE student at the elementary/secondary level, which was 29 percent higher than the average of \$9,600 for OECD member countries reporting data.

Expenditures per FTE student at the postsecondary level also varied across OECD countries in 2014, ranging from \$8,500 in Chile to \$29,700 in the United States. Expenditures per FTE student at the postsecondary level in the United States were 81 percent higher than the OECD average of \$16,400.

Figure 1. Expenditures and percentage change in expenditures per full-time-equivalent (FTE) student for elementary and secondary education from 2005 to 2014, by Organization for Economic Cooperation and Development (OECD) country

Rounds to zero.

¹ Education expenditures include public institutions only in one or both data years (2005 and 2014).

² Occupation-specific education corresponding to that offered at the vocational associate's degree level in the United States is included in elementary and secondary education instead of in higher education in one or both data years (2005 and 2014).

³ Education expenditures exclude postsecondary non-higher-education in one or both data years (2005 and 2014).

⁴ Elementary and secondary education expenditures include preprimary education (for children ages 3 and older) in one or both data years (2005 and 2014).

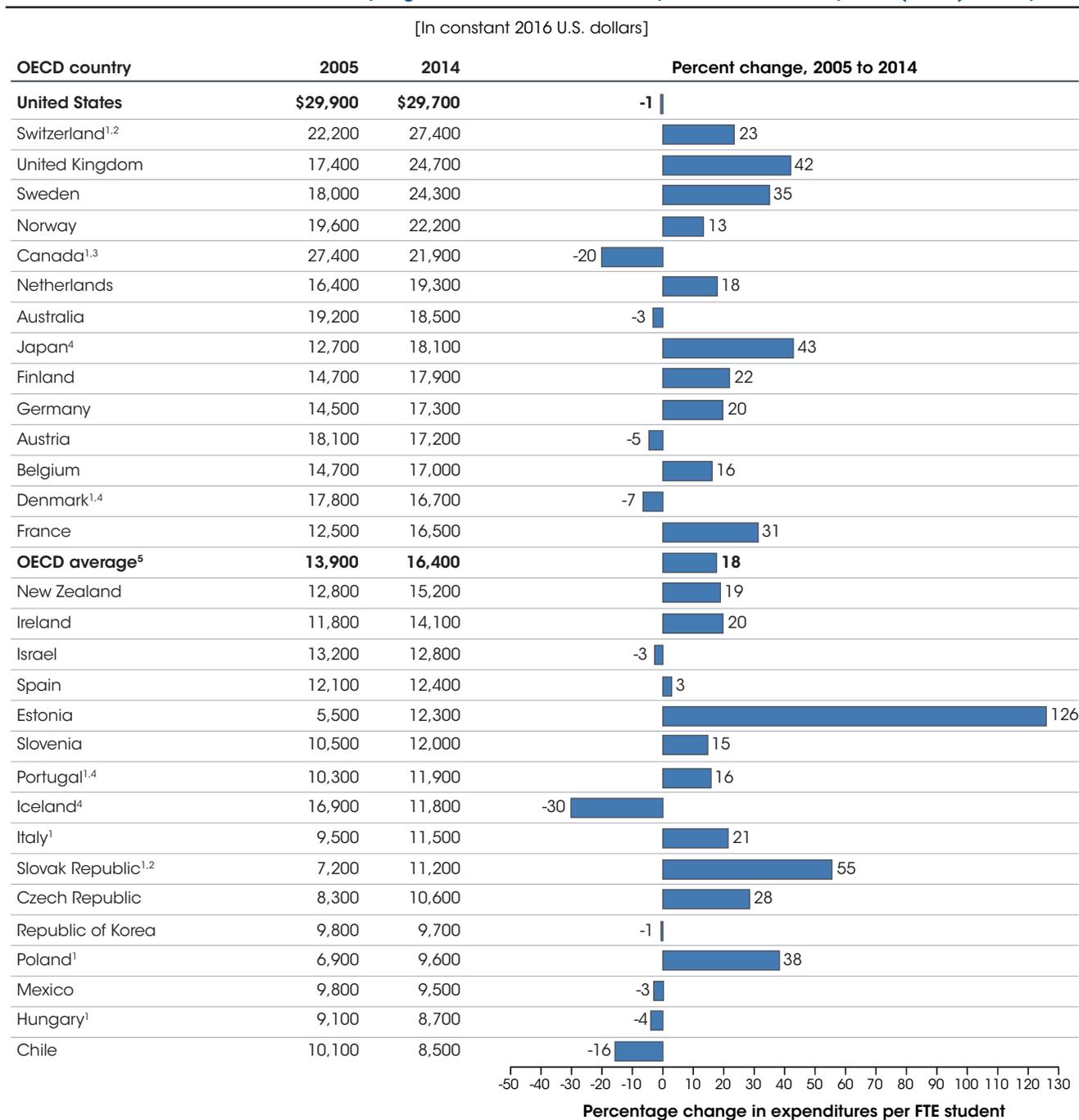
⁵ Refers to the mean of the data values for all reporting Organization for Economic Cooperation and Development (OECD) countries, to which each country reporting data contributes equally. The average includes all current OECD countries for which a given year's data are available, even if they were not members of OECD in that year.

NOTE: Data for Luxembourg, a country with one of the highest annual expenditures per FTE student, are excluded from the figure because of anomalies in that country's gross domestic product (GDP) per capita data (large revenues from international finance institutions in Luxembourg distort the wealth of the country's population). Data for Greece, Latvia, and Turkey are excluded because data on expenditures were not available for either 2005 or 2014. Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary non-higher-education) 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. Although rounded numbers are displayed, the figures are based on unrounded estimates.

SOURCE: Organization for Economic Cooperation and Development (OECD), *Education at a Glance 2017*; and Online Education Database, retrieved December 1, 2017, from <http://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2017*, table 605.10.

Across OECD countries, expenditures per FTE student at the elementary/secondary level were generally higher in 2014 than in 2005. However, countries with the highest expenditures per FTE student at the elementary/secondary level in 2014 generally also had high expenditures in 2005, and countries with the lowest expenditures per FTE student at this level in 2014 generally also had among the lowest expenditures in 2005. In 2014, OECD average expenditures per FTE student at the elementary/secondary level were \$9,600, compared with \$8,300 in 2005. Of the 31 OECD countries with expenditures per FTE student data available in both years, the average

expenditures per FTE student at the elementary/secondary level were higher in 2014 than in 2005 in 29 countries, including the United States. In the United States, annual expenditures per FTE were 3 percent higher in 2014, when they were \$12,300, than in 2005, when they were \$12,000. Of countries with expenditures per FTE student that were higher in 2014 than in 2005, the percentage increases ranged from a low of less than 1 percent in Italy to a high of 86 percent in the Slovak Republic. Only two countries (Iceland and Hungary) had expenditures per FTE student at the elementary/secondary level that were lower in 2014 than in 2005.

Figure 2. Expenditures and percentage change in expenditures per full-time-equivalent (FTE) student for postsecondary education from 2005 to 2014, by Organization for Economic Cooperation and Development (OECD) country

¹ Education expenditures include public institutions only in one or both data years (2005 and 2014).

² Occupation-specific education corresponding to that offered at the vocational associate's degree level in the United States is included in elementary and secondary education instead of in higher education in one or both data years (2005 and 2014).

³ Data for 2005 exclude occupation-specific education corresponding to that offered at the vocational associate's degree level in the United States.

⁴ Postsecondary non-higher-education included in both secondary and higher education in one or both data years (2005 and 2014).

⁵ 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.

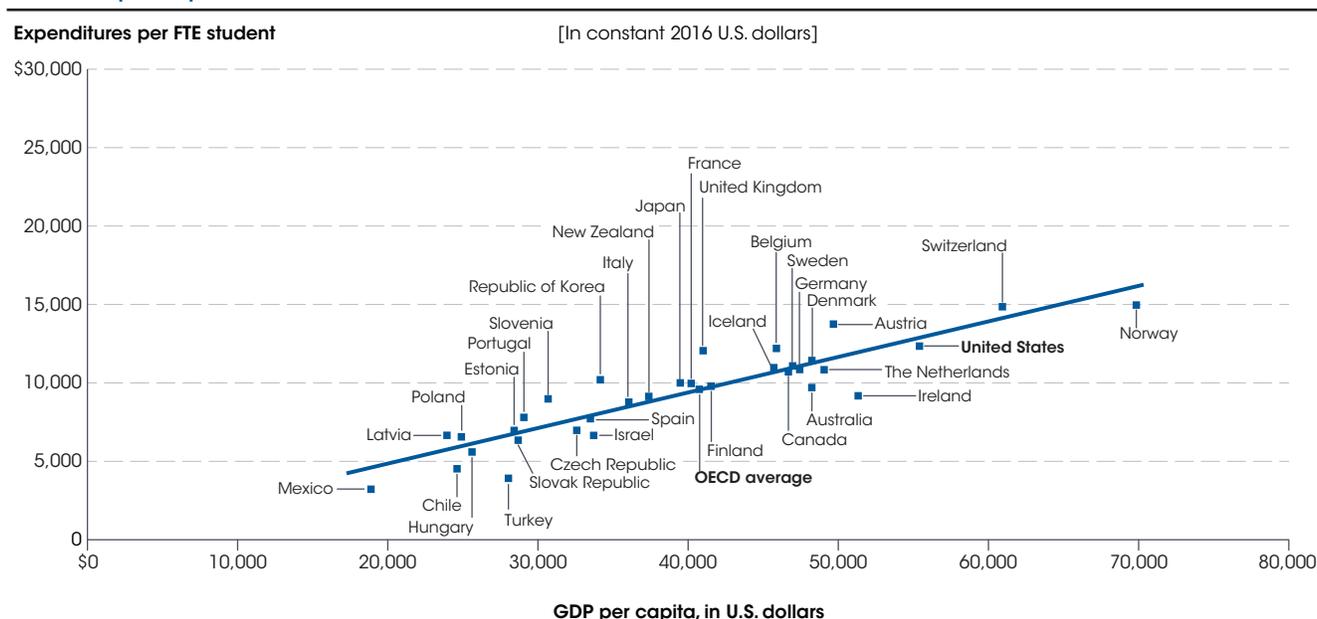
NOTE: Data for Luxembourg, a country with one of the highest annual expenditures per FTE student, are excluded from the figure because of anomalies in that country's gross domestic product (GDP) per capita data (large revenues from international finance institutions in Luxembourg distort the wealth of the country's population). Data for Greece, Latvia, and Turkey are excluded because data on expenditures were not available for either 2005 or 2014. 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. Although rounded numbers are displayed, the figures are based on unrounded estimates.

SOURCE: Organization for Economic Cooperation and Development (OECD), *Education at a Glance 2017*; and Online Education Database, retrieved December 1, 2017, from <http://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2017*, table 605.10.

Compared with the elementary/secondary level, there were more OECD countries where postsecondary expenditures per FTE student were lower in 2014 than in 2005. In 2014, OECD average expenditures per FTE student at the postsecondary level were \$16,400, compared with \$13,900 in 2005. Of the 31 OECD countries with expenditures per FTE student data available in both years, expenditures per FTE student at the postsecondary level were higher in 2014 than in 2005 in 20 countries. Of those 20 countries, the percentage increase in expenditures per

FTE student ranged from a low of 3 percent in Spain to a high of 126 percent in Estonia. Conversely, there were 11 countries, including the United States, where average expenditures per FTE student at the postsecondary level were lower in 2014 than in 2005. In the United States, expenditures per FTE student in 2014 were \$29,700, less than 1 percent lower than in 2005 (when they were \$29,900). However, the United States had the highest expenditures per FTE student of any OECD country in both 2005 and 2014 at the postsecondary level.

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: 2014



Linear relationship between spending and country wealth for 33 OECD countries reporting data (elementary/secondary): $r^2 = .82$; slope = 0.23; intercept = 322.

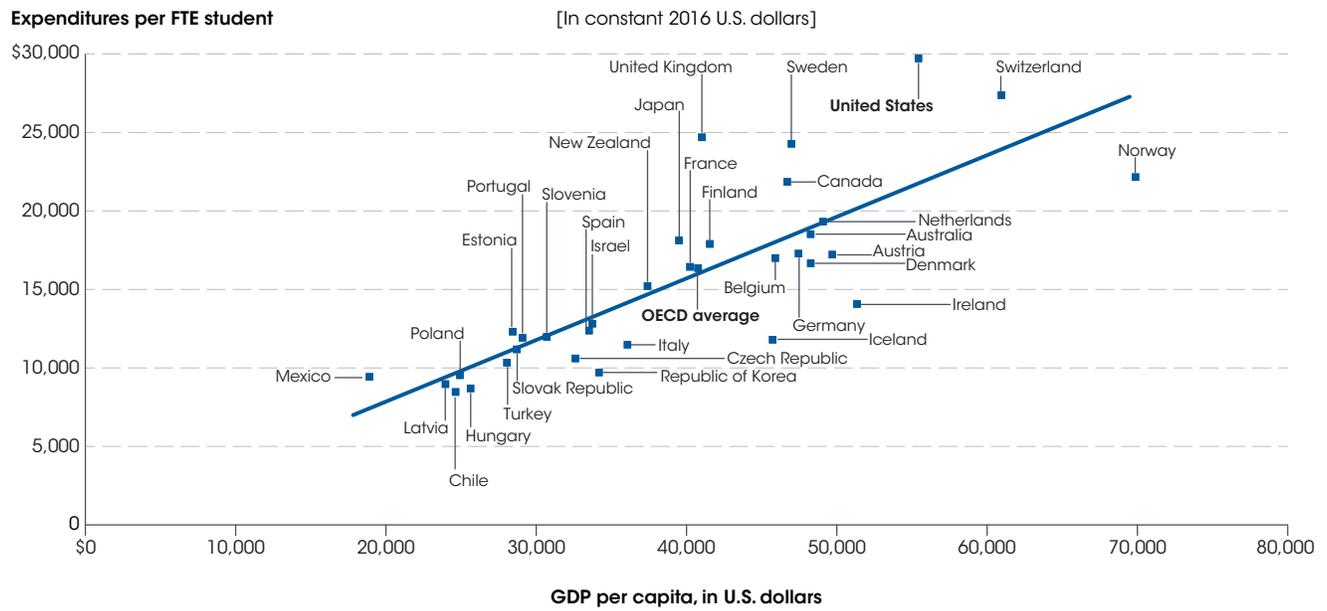
NOTE: Data for Luxembourg are excluded from the figure because of anomalies in that country's gross domestic product (GDP) per capita data (large revenues from international finance institutions in Luxembourg distort the wealth of the country's population). Data for Greece are excluded because data on expenditures were not available in 2014. Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary non-higher-education) are included in elementary and secondary education unless otherwise noted. Data on expenditures for Canada and Italy do not include postsecondary non-higher-education. Data on expenditures for Canada include preprimary education. Data on expenditures for Switzerland include public institutions only and include occupation-specific education corresponding to that offered at the vocational associate's degree level in the United States. 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.

SOURCE: Organization for Economic Cooperation and Development (OECD), *Education at a Glance 2017*; and Online Education Database, retrieved December 1, 2017, from <http://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2017*, 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 2014, of the 15 countries with a GDP per capita greater than the OECD average, 14 countries also had elementary/secondary education expenditures per FTE student that were higher than the OECD average. These 14 countries were Norway, Switzerland, the United States, Austria, the Netherlands, Denmark, Australia, Germany, Sweden, Canada, Belgium, Iceland, Finland, and the United Kingdom. The exception was Ireland, which had lower elementary/secondary expenditures per FTE student than the OECD average (\$9,200 vs. \$9,600).

Of the 18 countries with a GDP per capita lower than the OECD average, 15 countries also had elementary/secondary education expenditures per FTE student that were lower than the OECD average. These 15 countries were New Zealand, Italy, Israel, Spain, the Czech Republic, Slovenia, Portugal, the Slovak Republic, Estonia, Turkey, Hungary, Poland, Chile, Latvia, and Mexico. The exceptions were France, Japan, and the Republic of Korea, which had expenditures per FTE student at the elementary/secondary level that were higher than the OECD average.

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: 2014

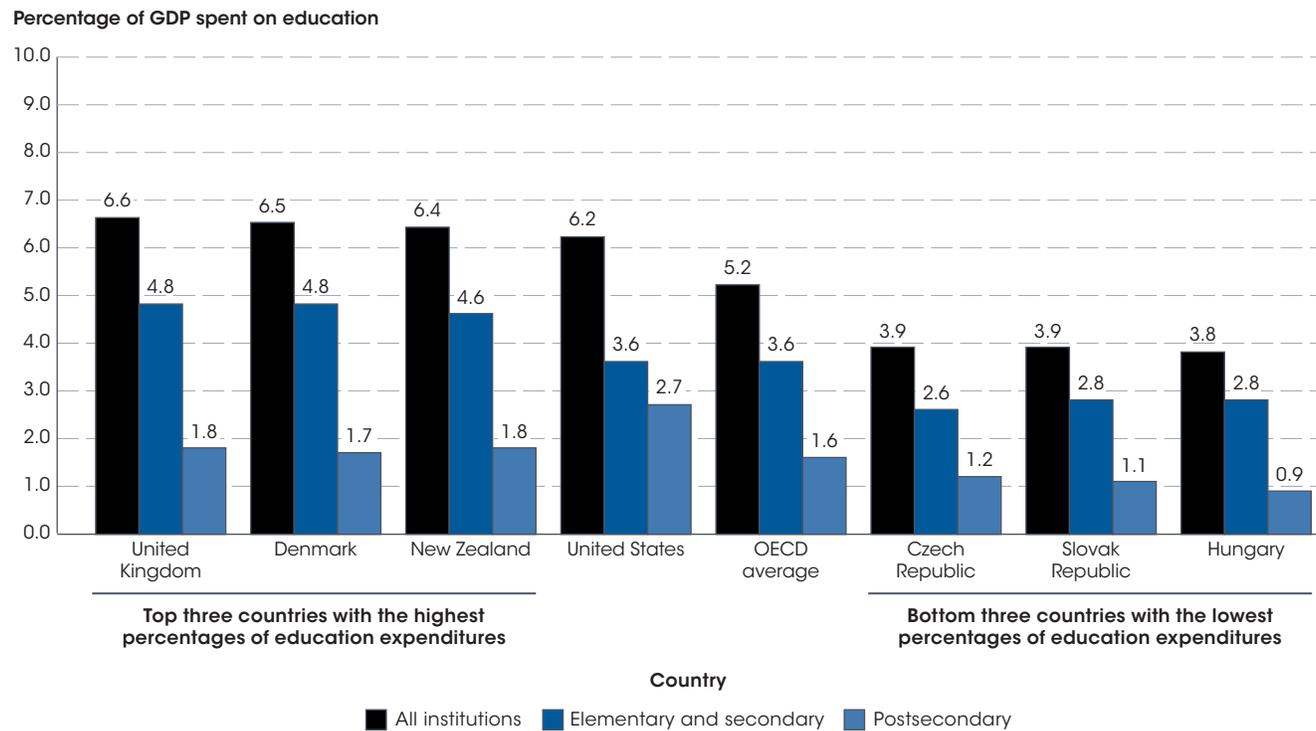


— Linear relationship between spending and country wealth for 33 OECD countries reporting data (postsecondary): $r^2 = .65$; slope = 0.39; intercept = 28.
 NOTE: Data for Luxembourg are excluded from the figure because of anomalies in that country's gross domestic product (GDP) per capita data (large revenues from international finance institutions in Luxembourg distort the wealth of the country's population). Data for Greece are excluded because data on expenditures were not available in 2014. Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary non-higher-education) are excluded from postsecondary education unless otherwise noted. Data on expenditures for Japan and Portugal include postsecondary non-higher-education. Data on expenditures for Canada, Denmark, the Slovak Republic, and Switzerland include public institutions only. Data on expenditures for Switzerland exclude occupation-specific education corresponding to that offered at the vocational associate's degree level in the United States. 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.
 SOURCE: Organization for Economic Cooperation and Development (OECD), *Education at a Glance 2017*; and Online Education Database, retrieved December 1, 2017, from <http://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2017*, table 605.10.

At the postsecondary level, 13 of the 15 countries with a GDP per capita that was higher than the OECD average also had education expenditures per FTE student that were higher than the OECD average. The two exceptions were Ireland and Iceland, both of which had lower expenditures per FTE student at the postsecondary level (\$14,100 and \$11,800, respectively) than the OECD average (\$16,400). Of the 18 countries with a lower GDP

per capita than the OECD average, 16 countries had education expenditures per FTE student that were lower than the OECD average at the postsecondary level. The two exceptions were Japan and France; both countries reported higher postsecondary expenditures per FTE student (\$18,100 and \$16,500, respectively) than the OECD average.

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 three highest and lowest percentages of expenditures for all institutions, by level of education: 2014



NOTE: Expenditures for International Standard Classification of Education (ISCED) level 4 (postsecondary non-higher-education) are included in elementary and secondary education. Although rounded numbers are displayed, the figures are based on unrounded estimates.

SOURCE: Organization for Economic Cooperation and Development (OECD), Online Education Database, retrieved December 1, 2017, from <http://stats.oecd.org/Index.aspx>. See *Digest of Education Statistics 2017*, table 605.20.

Among the 32 OECD countries reporting data in 2014, there were 18 countries that spent a higher percentage of GDP on total government and private expenditures on education institutions than the OECD average of 5.2 percent. The United Kingdom reported the highest total education expenditures as a percentage of GDP (6.6 percent), followed by Denmark (6.5 percent), New Zealand (6.4 percent), the Republic of Korea (6.3 percent), and the United States (6.2 percent). Conversely, 14 countries spent a percentage of GDP on total education expenditures that was lower than the OECD average. Hungary reported the lowest total education expenditures as a percentage of GDP (3.8 percent), followed by the Slovak Republic (3.9 percent) and the Czech Republic (3.9 percent).

In terms of countries' total government and private expenditures on education institutions by education level in 2014, the percentage of GDP that the United States spent on elementary and secondary education

(3.6 percent) was slightly lower than the OECD average. Sixteen other countries also spent a percentage of GDP on elementary and secondary education that was lower than the OECD average. In contrast, 15 countries spent more on elementary and secondary education as a percentage of GDP than the OECD average, and 9 of the 15 countries spent 4.0 percent or more of GDP. Elementary and secondary education as a percentage of GDP was highest in the United Kingdom (4.8 percent).

At the postsecondary level, total government and private expenditures on education institutions as a percentage of GDP by the United States (2.7 percent) were higher than the OECD average (1.6 percent) and were higher than those of all other OECD countries reporting data. In addition to the United States, only three other countries spent 2.0 percent or more of GDP on postsecondary education: Canada (2.6 percent), Chile (2.3 percent), and the Republic of Korea (2.3 percent).

Endnotes:

¹ National Consumer Price Indexes are available at the OECD Online Education Database (<http://stats.oecd.org/index.aspx>).

² Greece and Luxembourg are excluded from all analyses. Expenditure data at the elementary/secondary and postsecondary levels were not available in 2014 for Greece. For Luxembourg,

data on education expenditures were available in 2014 but are excluded because of anomalies in the country's GDP per capita data (large revenues from international finance institutions in Luxembourg distort the wealth of the country's population).

Reference tables: *Digest of Education Statistics 2017*, tables 605.10 and 605.20

Related indicators and resources: [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