

Technical Note

Gross Domestic Product (Third Estimate), Corporate Profits (Revised), and Gross Domestic Product by Industry, Second Quarter of 2020 September 30, 2020

This technical note provides background information about the source data and estimating methods used to produce the estimates presented in the GDP news release; a brief summary of "highlights" is available on BEA's Web site at www.bea.gov.

Coronavirus (COVID-19) Impact on Second-Quarter 2020 GDP

Real GDP decreased 31.4 percent at an annual rate (9.0 percent at a quarterly rate¹) in the second quarter of 2020, following a 5.0 percent annual rate decrease in the first quarter. The decline in second quarter GDP reflected the response to COVID-19, as "stay-at-home" orders issued in March and April were partially lifted in some areas of the country in May and June, and government pandemic assistance payments were distributed to households and businesses. This led to rapid shifts in activity, as businesses and schools continued remote work and consumers and businesses canceled, restricted, or redirected their spending.

The decline in second-quarter real GDP reflected decreases in consumer spending, exports, nonresidential fixed investment, private inventory investment, residential fixed investment, and state and local government spending that were partly offset by an increase in federal government spending. Imports, which are a subtraction in the calculation of GDP, decreased. The full economic effects of the COVID-19 pandemic cannot be quantified in the GDP estimate for the second quarter of 2020 because the impacts are generally embedded in source data and cannot be separately identified.

Sources of Revision to Real GDP

The 31.4 percent decrease in second-quarter real GDP reflected an upward revision of 0.3 percentage point from the "second" estimate. The updated estimates primarily reflected an upward revision to consumer spending that was partly offset by downward revisions to exports and nonresidential fixed investment.

- Within consumer spending, an upward revision to services was partly offset by a downward revision to goods. For services, the upward revision primarily reflected upward revisions to "other" services (notably, personal care), recreation (primarily, casino gambling), and health

¹ Percent changes in quarterly seasonally adjusted series are displayed at annual rates, unless otherwise specified. For more information, see the FAQ "[Why does BEA publish percent changes in quarterly series at annual rates?](#)"

care (notably, nursing home services). The contributions of these components were partly offset by a downward revision to transportation services (notably, motor vehicle maintenance and repair). The updated services estimates were based primarily on new and revised second-quarter Quarterly Services Survey (QSS) data from the Census Bureau. For goods, the leading contributors to the downward revision were gasoline and energy goods, based primarily on revised Energy Information Administration data, and motor vehicles, based on revised vehicle registrations data from Polk.

- Within exports, both goods and services were revised down. For goods, the leading contributor to the downward revision was industrial supplies and materials, notably petroleum exports, based primarily on revised Bureau of Labor Statistics (BLS) petroleum export prices. For services, the largest contributors to the downward revision were charges for the use of intellectual property as well as telecommunications, computer, and information services. The revision reflected updated data from BEA's International Transactions Accounts (ITAs).
- Within nonresidential fixed investment, the leading contributor to the downward revision was intellectual property products, notably research and development, based primarily on new Census QSS data.

Real final sales to private domestic purchasers, which measures private demand in the domestic economy and is derived as the sum of consumer spending and private fixed investment, decreased 32.4 percent in the second quarter, an upward revision of 0.7 percentage point. The upward revision primarily reflected the upward revision to consumer spending.

Prices

BEA's featured measure of inflation in the U.S. economy, the price index for gross domestic purchases, decreased 1.4 percent in the second quarter, an upward revision of 0.1 percentage point.

The price index for personal consumption expenditures (PCE) decreased 1.6 percent, an upward revision of 0.2 percentage point. Excluding food and energy prices, the PCE price index decreased 0.8 percent, also an upward revision of 0.2 percentage point. The revisions primarily reflected a revision to financial services prices based on new second-quarter data from the Federal Deposit Insurance Corporation.

Gross Domestic Income and Corporate Profits

Real gross domestic income (GDI), which measures output of the economy as the costs incurred and the incomes earned in the production of goods and services (as measured by GDP), decreased 33.5 percent in the second quarter, a downward revision of 0.4 percentage point from the previous estimate. The revision to real GDI primarily reflected a downward revision to state and local taxes on production and imports, based primarily on new second-quarter data from the Census Quarterly Summary of State and Local Tax Revenue.

Profits from current production decreased \$208.9 billion, or 10.3 percent (quarterly rate), in the second quarter. Domestic profits of financial corporations increased \$26.5 billion, domestic profits of

nonfinancial corporations decreased \$145.9 billion, and rest-of-the-world profits decreased \$89.5 billion.

- The decrease in second-quarter corporate profits was revised up \$18.0 billion from the preliminary estimate. The upward revision primarily reflected upward revisions to domestic nonfinancial industries, based primarily on updated Census Quarterly Financial Report data, and to rest-of-the-world profits, based on updated ITA data. For domestic financial industries, a downward revision to “other” financial industry profits, based primarily on new Quarterly Banking Profile data from the Federal Deposit Insurance Corporation, was partly offset by an upward revision to Federal Reserve Banks, based on new Federal Reserve Board data.

BEA’s profits measure that is conceptually most similar to S&P 500 profits—after-tax profits without inventory valuation and capital consumption adjustments—decreased \$182.0 billion in the second quarter. Second-quarter national after-tax profits (shown in line 11 of table 9 of the GDP news release) decreased 19.7 percent from the same quarter one year ago.

Bringing Together National, Industry, and State GDP Statistics

BEA has accelerated the release of its industry and state GDP statistics [to align with the quarterly estimates of national GDP](#). Starting with today’s GDP release, GDP by industry statistics are issued on the same day – and in the same news release – as the third estimate of national GDP. GDP by state statistics will follow in a separate news release within two days. [These three major dimensions of GDP are now synchronized](#) to cover the same quarter, giving users a fuller and more timely view of the U.S. economy.

Real GDP by Industry

Today’s release includes estimates of GDP by industry, or value added—a measure of an industry’s contribution to GDP. Private goods-producing industries decreased 34.4 percent, private services-producing industries decreased 33.1 percent, and government decreased 16.6 percent (table 12 of the news release). Overall, 20 of 22 industry groups contributed to the second-quarter decline in real GDP.

The leading contributors to the decrease in real GDP were accommodations and food services (led by food services and drinking places), health care and social assistance (led by ambulatory health care services), durable goods manufacturing (led by motor vehicles, bodies and trailers, and parts), and transportation and warehousing (led by air transportation). Finance and insurance (led by the securities and banking industries) and federal government increased in the second quarter.

Real value added for these industry groups generally reflected declines in compensation and gross operating surplus, accompanied by increases in subsidies, which are a subtraction in the calculation of value added. Many industries received assistance through various provisions of the CARES Act. Estimates for subsidies associated with forgivable Paycheck Protection Program loans are available by industry in [“Paycheck Protection Program Subsidies by Industry in the National Accounts, 2020Q2”](#).

Federal Government Economic Response to the COVID-19 Pandemic

Since the onset of the COVID-19 pandemic, several legislative acts, including the CARES Act, were signed into law. The acts established several temporary programs and provided additional funding for existing federal programs to support individuals, communities, and businesses impacted by the pandemic. Because the effects of the acts were in the form of transfers to individuals, subsidies to businesses, and grants to state and local governments, their effects on GDP show up indirectly through the components of GDP, such as consumer spending, business investment, and government spending. Thus, BEA cannot separately identify the total quarterly or annual effect of the acts on changes in GDP.

During the second quarter, several provisions from the acts took effect. Most significantly, provisions from the one-time [Economic Impact Payments](#) to individuals and expanded [Unemployment Insurance Program](#) benefits boosted government social benefits, while the portion of forgivable loans to businesses and nonprofits through the [Paycheck Protection Program](#) raised government subsidies and social benefit payments, respectively. Further information on these and other pandemic response programs, including estimates of the effects of these programs on federal government spending, is available in "[Effects of Selected Federal Pandemic Response Programs on Federal Government Receipts, Expenditures, and Saving](#)". Effects of these programs on personal income and outlays is available in "[Effects of Selected Federal Pandemic Response Programs on Personal Income](#)".

Annual Update of the Industry Economic Accounts

The industry estimates released today reflect the results of the 2020 Annual Update of the Industry Economic Accounts. The update covers the first quarter of 2015 through the first quarter of 2020. The full results of the annual update, including updated annual supply-use tables, can be found on the [BEA Web site](#). Additional information will be available in an article in the October 2020 issue of the Survey of Current Business, BEA's online monthly journal.

More Information

The complete set of national and industry estimates for the second quarter is available on [BEA's Web site](#), along with a table presenting the "[Key Source Data and Assumptions](#)" that underlie the statistics. In a few weeks, the Survey of Current Business will present a more detailed analysis of the estimates ("GDP and the Economy").

Erich H. Strassner
Associate Director, National Economic Accounts
Bureau of Economic Analysis
(301) 278-9612