

Technical Note

Gross Domestic Product (Third Estimate), Corporate Profits (Revised Estimate), and GDP by Industry, Second Quarter 2021

September 30, 2021

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 website at www.bea.gov.

COVID-19 Impact on Second-Quarter 2021 GDP

Real GDP increased 6.7 percent at an annual rate (1.6 percent at a quarterly rate¹) in the second quarter of 2021, following an increase of 6.3 percent at an annual rate (1.5 percent at a quarterly rate) in the first quarter. The increase in second quarter GDP reflected the continued economic recovery, reopening of establishments, and continued government response related to the COVID-19 pandemic. In the second quarter, government assistance payments in the form of loans to businesses and grants to state and local governments increased, while social benefits to households, such as the direct economic impact payments, declined. Real GDP for the second quarter of 2021 is 0.9 percent above the level of real GDP for the fourth quarter of 2019².

The increase in real GDP in the second quarter reflected increases in consumer spending, nonresidential fixed investment, exports, and state and local government spending that were partly offset by decreases in private inventory investment, residential fixed investment, and federal government spending. Imports, which are a subtraction in the calculation of GDP, increased. The full economic effects of the COVID-19 pandemic cannot be quantified in the GDP estimate for the second quarter of 2021 because the impacts are generally embedded in source data and cannot be separately identified.

Sources of Revision to Real GDP

The increase in second-quarter real GDP was revised up 0.1 percentage point from the "second" estimate. The updated estimates primarily reflected upward revisions to consumer spending, exports, and private inventory investment that were partly offset by an upward revision to imports.

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?](#)

² The fourth quarter of 2019 was the most recent quarter prior to the onset of the COVID-19 pandemic. Calculated as the percent change from the fourth quarter of 2019 to the second quarter of 2021 in news release table 3, line 1.

- Within consumer spending, both services and goods were revised up.
 - Within services, the leading contributors to the upward revision were health care (notably, outpatient services), “other” services (notably, personal care and clothing services), and transportation services (notably, air transportation). The revision to health care as well as personal care and clothing services reflected new and revised second-quarter Quarterly Services Survey (QSS) data from the Census Bureau. The revision to air transportation was based on new quarterly data from the Bureau of Transportation Statistics. The upward revisions were partly offset by a downward revision to financial services and insurance (notably, service charges and fees as well as portfolio management and investment advice services), based on QSS data and new Federal Deposit Insurance Corporation Call Report data.
 - Within goods, the leading contributor to the revision was food, based on updated data for the month of June from the Census Monthly Retail Sales survey.
- For exports, the revised estimates primarily reflected an upward revision to services (led by other business services, including financial services) based on updated statistics from BEA’s International Transactions Accounts (ITAs).
- Within imports, both goods and services were revised up, based primarily on updated ITA data. For goods, the leading contributor to the upward revision was industrial supplies and materials (notably, petroleum and products). For services, the leading contributor was an upward revision to transport (notably, passenger air transport).
- Within private inventory investment, upward revisions to retail (notably, general merchandise stores) and wholesale (notably, petroleum and petroleum products), both reflecting revised Census inventory data, were partly offset by a downward revision to “other” industries, based on updated inventory data for information industries from the Census Quarterly Financial Report.
- Within nonresidential fixed investment, a downward revision to intellectual property products (notably, research and development as well as software), based primarily on new and revised QSS data, was offset by upward revisions to structures (notably, manufacturing structures), based on revised May and June Census Value of Construction Put in Place data, and equipment (notably, computers and peripheral equipment), based on updated 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, increased 10.1 percent in the second quarter, an upward revision of 0.1 percentage point. The revision 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, increased 5.8 percent in the second quarter, unrevised from the second estimate. The price index for personal consumption expenditures (PCE) increased 6.5 percent, unrevised from the second estimate. Excluding food and energy prices, the PCE price index increased 6.1 percent, also unrevised.

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), increased 2.3 percent at an annual rate (0.6 percent at a quarterly rate) in the second quarter. The second-quarter increase in real GDI was revised up 0.7 percentage point from the previous estimate, primarily reflecting an upward revision to corporate profits.

Profits from current production increased \$267.8 billion, or 10.5 percent (quarterly rate), in the second quarter. Domestic profits of financial corporations increased \$52.8 billion, domestic profits of nonfinancial corporations increased \$221.3 billion, and rest-of-the-world profits decreased \$6.2 billion.

Estimates of corporate profits were affected by legal settlements in the second quarter. The national income and product accounts (NIPAs) record these settlements on an accrual basis in the quarter when the settlement is finalized, regardless of when they are recorded on a company's financial statement. A legal settlement paid by Johnson & Johnson reduced nonfinancial corporate profits for the second quarter by \$2.1 billion (\$8.5 billion at an annual rate). The estimate of GDI was not impacted because the settlement was recorded in the NIPAs as a business current transfer payment to persons, which offset the reduction in corporate profits.

The increase in second-quarter corporate profits was revised up \$33.3 billion from the preliminary estimate, reflecting an upward revision to domestic nonfinancial industries, based primarily on updated Census Quarterly Financial Report data, that was partly offset by downward revisions to rest-of-the-world profits, based on updated ITA data, and domestic financial industries profits, based primarily on updated earnings reports from publicly traded companies.

BEA's profits measure that is conceptually most similar to S&P 500 profits — national after-tax profits without inventory valuation and capital consumption adjustments — increased \$322.8 billion in the second quarter. Second-quarter national after-tax profits (shown in line 11 of table 9 of the GDP news release) increased 70.5 percent from the same quarter one year ago.

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 (shown in table 12 of the news release). Private goods-producing industries increased 4.7 percent at an annual rate (1.2 percent at a quarterly rate), private services-producing industries increased 7.8 percent (1.9 percent at a quarterly rate), and government increased 3.4 percent (0.8 percent at a quarterly rate).

Overall, 19 of 22 industry groups contributed to the second-quarter increase in real GDP (table 13). Within private goods-producing industries, the leading contributors to the increase were nondurable goods manufacturing (led by petroleum and coal products), construction, and durable goods manufacturing (led by other transportation equipment). Within private services-producing industries, the leading contributors to the increase in real GDP were accommodation and food services (led by food services and drinking places); information (led by data processing, internet publishing, and other information services); and professional, scientific, and technical services. The largest decrease offsetting the increase in services was retail trade (led by motor vehicle and parts dealers).

Federal Government Economic Response to the COVID-19 Pandemic

Since the onset of the COVID-19 pandemic, several [legislative acts](#), including the Coronavirus Aid, Relief, and Economic Security (CARES) Act, the Coronavirus Response and Relief Supplemental Appropriations (CRRSA) Act, and the American Rescue Plan (ARP) 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 effect of the Acts on changes in GDP.

It is possible, however, to identify the impacts of select recovery programs on aggregate federal government spending. In the second quarter, there was a decrease in social benefit payments to persons provided through the [Unemployment Insurance Program](#). Federal government subsidies to businesses increased, specifically in the form of additional Paycheck Protection Program loans and through the [Restaurant Revitalization Fund](#), as authorized by the ARP.

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](#).

Annual Update of the Industry Economic Accounts

The industry estimates released today reflect the results of the 2021 Annual Update of the Industry Economic Accounts (IEAs). The update covers 1999 through the first quarter of 2021. The reference year remains 2012. Today's update incorporates the results from the 2021 Annual Update of the National Income and Product Accounts (NIPAs) which included improvements for housing services and financial services. For details on methodology improvements as well as major source data incorporated see [The 2021 Annual Update of the National Income and Product Accounts](#) in the *August Survey of Current Business*.

This update includes several improvements that better align the IEAs and the NIPAs. Estimates of industry gross operating surplus were improved for the most recent year by making more direct use of GDI by industry data; estimates for motor vehicle and parts manufacturers were better aligned with

NIPA motor vehicle output by using the same underlying Wards Intelligence data; and estimates for utilities were changed to rely directly on quantity data from the Energy Information Administration, consistent with estimates of utilities in PCE services.

The full results of the annual update of the industry economic accounts, including updated annual supply-use tables, can be found on the [BEA website](#). Additional information will be available in an article in the forthcoming issue of the *Survey of Current Business*, BEA's online monthly journal.

More Information

The complete set of statistics for the second quarter is available on BEA's website, 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