

Technical Note

Gross Domestic Product (Second Estimate) Corporate Profits (Preliminary Estimate) Third Quarter 2021

November 24, 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 Third-Quarter 2021 GDP

Real GDP increased 2.1 percent at an annual rate (0.5 percent at a quarterly rate¹) in the third quarter of 2021, following an increase of 6.7 percent at an annual rate (1.6 percent at a quarterly rate) in the second quarter. In the third quarter, a resurgence of COVID-19 cases resulted in new restrictions and delays in the reopening of establishments in some parts of the country. Government assistance payments in the form of forgivable loans to businesses, grants to state and local governments, and social benefits to households all decreased. Advance Child Tax Credit payments authorized by the American Rescue Plan started in the third quarter and partly offset the decline in social benefits to households.

The increase in real GDP reflected increases in private inventory investment, consumer spending, state and local government spending, and nonresidential fixed investment that were partly offset by decreases in residential fixed investment, federal government spending, and exports. Imports, which are a subtraction in the calculation of GDP, increased. Real GDP for the third quarter of 2021 is 1.4 percent above the level of real GDP for the fourth quarter of 2019². The full economic effects of the COVID-19 pandemic cannot be quantified in the GDP estimate for the third 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 third-quarter real GDP was revised up 0.1 percentage point from the "advance" estimate. The updated estimates primarily reflected upward revisions to consumer spending, private inventory investment, and state and local government spending that were partly offset by downward

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 third quarter of 2021 in news release table 3, line 1.

revisions to exports, nonresidential fixed investment, and residential fixed investment. Imports were revised down.

- Within consumer spending, an upward revision to goods was partly offset by a downward revision to services. For goods, the leading contributor to the upward revision was motor vehicles and parts (notably, net purchases of used motor vehicles), based primarily on updated Census Monthly Retail Trade Survey data. For services, the leading contributors to the downward revision were “other” services (notably, personal care services), based primarily on new third-quarter Census Quarterly Services Survey (QSS) data, as well as transportation services (notably, motor vehicle rental), based on new data from publicly traded companies’ financial statements.
- The revision to private inventory investment was led by upward revisions to wholesale trade (notably, farm products and electrical goods) and “other” industries (notably, information), based on new and updated Census inventory data.
- The revision to state and local government spending primarily reflected an upward revision to structures investment (notably, highway and street construction), based on new September and revised July and August Census Value of Construction Put in Place (VPIP) data.
- For both exports and imports, the revised estimates primarily reflected updated data from BEA’s International Transactions Accounts as well as new and revised Census trade in goods data for September. Within exports, goods were revised down, led by industrial supplies and materials (notably, durable goods). Within imports, the leading contributor to the downward revision was travel.
- Within nonresidential fixed investment, the revised estimates reflected a downward revision to intellectual property products that was partly offset by upward revisions to structures and equipment.
 - For intellectual property products, the revised estimates reflected downward revisions to software (notably, prepackaged software), based primarily on new Census QSS data, as well as research and development (R&D), based primarily on new third-quarter R&D expense data from publicly traded companies’ financial statements.
 - For structures, the leading contributor to the upward revision was commercial and health care, based primarily on new and updated VPIP data.
 - For equipment, the leading contributor to the upward revision was information processing equipment (notably, computers and peripherals as well as communication equipment), primarily reflecting updated Census trade in goods data for September.
- Within residential fixed investment, the leading contributor to the downward revision was improvements, based primarily on new payroll data for September from the Bureau of Labor Statistics (BLS) Current Employment Statistics program.

Prices

BEA's featured measure of inflation in the U.S. economy, the price index for gross domestic purchases, increased 5.5 percent in the third quarter, an upward revision of 0.1 percentage point.

The price index for personal consumption expenditures (PCE) increased 5.3 percent, unrevised from the previous estimate. Excluding food and energy prices, the PCE price index increased 4.5 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 6.7 percent at an annual rate (1.6 percent at a quarterly rate) in the third quarter, following an increase of 4.3 percent (revised) at an annual rate (1.1 percent at a quarterly rate) in the second quarter. The average of real GDP and real GDI increased 4.4 percent at an annual rate (1.1 percent at a quarterly rate) in the third quarter, following an increase of 5.5 percent at an annual rate (1.3 percent at a quarterly rate) in the second quarter. The increase in current-dollar GDI for the third quarter primarily reflected increases in compensation and corporate profits.

- Within compensation, the leading contributor to the increase was wages and salaries. Both private and government wages increased, based primarily on employment, hours, and earnings data from the BLS Current Employment Statistics.
- Within corporate profits, the leading contributor to the increase was nonfinancial industry profits, based primarily on preliminary Census Quarterly Financial Report data and tabulations of publicly traded companies' earnings reports.

Subsidies, which are a subtraction in the calculation of GDI, decreased in the third quarter. Government pandemic assistance continued to support corporate profits and proprietors' income, but to a lesser extent than in previous quarters. Subsidies related to the [Restaurant Revitalization Fund](#) and for shuttered entertainment venues increased while assistance from the [Paycheck Protection Program](#) declined. More information on federal subsidy programs and their impacts on income measures is presented in [Effects of Selected Federal Pandemic Response Programs on Federal Government Receipts, Expenditures, and Saving](#) on BEA's website.

Profits from current production increased \$121.4 billion, or 4.3 percent (quarterly rate), in the third quarter. Domestic profits of financial corporations increased \$13.7 billion, domestic profits of nonfinancial corporations increased \$67.5 billion, and rest-of-the-world profits increased \$40.1 billion.

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 \$51.7 billion in the third quarter. Third-quarter national after-tax profits (shown in line 11 of table 9 of the GDP news release) increased 27.7 percent from the same quarter one year ago.

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. 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](#).

Updates to Second-Quarter Wages and Salaries

In addition to presenting updated estimates for the third quarter, today's release presents revised estimates of second-quarter wages and salaries, personal taxes, and contributions for government social insurance, based on updated data from the BLS Quarterly Census of Employment and Wages program. Wages and salaries are now estimated to have increased \$301.1 billion in the second quarter of 2021, an upward revision of \$101.3 billion. Real GDI increased 4.3 percent (annual rate) in the second quarter, an upward revision of 2.0 percentage points from the previously published estimate.

Impact of Hurricane Ida on Third Quarter 2021 Estimates

Hurricane Ida struck the United States on August 29 causing wind and flood damage in Louisiana, Mississippi, and Alabama. On September 1, the storm caused significant flash flooding in the northeast. These natural disasters disrupted consumption and business activities while provision of emergency and remediation services increased in response to the disasters. These impacts on production are included, but not separately identified, in the source data that BEA uses to prepare the estimates of GDP; consequently, it is not possible to estimate the overall impact of Hurricane Ida on 2021 third quarter GDP. The destruction of fixed assets, such as residential and nonresidential structures, does not directly affect GDP or personal income. BEA estimates of disaster losses are presented in [NIPA table 5.1](#), "Saving and Investment." BEA's preliminary estimates show that Hurricane Ida resulted in losses of \$58.0 billion in privately-owned fixed assets (\$232.0 billion at an annual rate) and \$4.0 billion in state and local government-owned fixed assets (\$16.0 billion at an annual rate).

BEA also estimates the insurance benefits paid and received as a result of major disasters. These benefits are recorded on an accrual basis in the quarter in which the disaster occurred and are classified as capital transfers; they do not directly affect the measures of GDP, personal income, or saving. BEA's

preliminary estimates, presented in [NIPA table 5.11U](#), "Capital Transfers," show domestic insurance companies expect to pay benefits for disaster losses related to Hurricane Ida in the amount of \$23.7 billion (\$94.8 billion at an annual rate), and foreign insurance companies expect to pay \$3.8 billion (\$15.2 billion at an annual rate).

For additional information, refer to "[How are the measures of production and income in the national accounts affected by a natural or man-made disaster?](#)"

More Information

The complete set of statistics for the third quarter is available on BEA's website. At 10:00 A.M., a table presenting the "[Key Source Data and Assumptions](#)" that underlie the statistics will also be available. In a few weeks, the Survey of Current Business, BEA's online monthly journal, will present a more detailed analysis of the estimates ("GDP and the Economy").

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