Technical Note

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

December 22, 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 2.3 percent at an annual rate (0.6 percent at a quarterly rate[1]) 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 exports, residential fixed investment, and federal government spending. 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 2019[2]. 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 0.2 percentage point from the “second” estimate. The updated estimates primarily reflected upward revisions to consumer spending and private inventory investment that were partly offset by a downward revision to exports. Imports were revised down.

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[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.

- Within consumer spending, an upward revision to services was partly offset by a downward revision to goods.

    - Within services, the leading contributors to the upward revision were recreation services (notably, live entertainment as well as spectator sports) and transportation services (notably, motor vehicle maintenance and repair as well as ground transportation). The revisions primarily reflected new third-quarter Quarterly Services Survey (QSS) data from the Census Bureau.

    - Within goods, the downward revision was widespread across nondurable goods; the largest contributor was food. The updated estimates primarily reflected revised September data from the Census Monthly Retail Trade Survey.

- Within private inventory investment, both farm and nonfarm inventory investment were revised up. For farm, the revision primarily reflected new Farm Income Forecast data from the U.S. Department of Agriculture. For nonfarm, the leading contributor to the upward revision was manufacturing (notably, petroleum and coal products), primarily reflecting revised Census book value data.

- For both exports and imports, the revised estimates primarily reflected updated data from BEA's International Transactions Accounts (ITAs). Within exports, a downward revision to services (led by charges for the use of intellectual property) was partly offset by an upward revision to goods (led by industrial supplies and materials). Within imports, the leading contributor to the downward revision was services (notably, charges for the use of intellectual property as well as transport).

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 1.4 percent in the third quarter, an upward revision of 0.3 percentage point. The 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, increased 5.6 percent in the third quarter, an upward revision of 0.1 percentage point from the second estimate.

The price index for personal consumption expenditures (PCE) increased 5.3 percent, unrevised from the second estimate. Excluding food and energy prices, the PCE price index increased 4.6 percent, revised up 0.1 percentage point.

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 5.8 percent at an annual rate (1.4 percent at a quarterly rate) in the third quarter. The third-quarter increase in real GDI was revised down 0.9 percentage point from the previous estimate, primarily reflecting a downward revision to corporate profits.

Profits from current production increased $96.9 billion, or 3.4 percent (quarterly rate), in the third quarter. Domestic profits of financial corporations increased $14.2 billion, domestic profits of nonfinancial corporations increased $31.6 billion, and rest-of-the-world profits increased $51.1 billion.

The increase in third-quarter corporate profits was revised down $24.6 billion from the preliminary estimate, reflecting a downward revision to domestic nonfinancial industries, based primarily on updated Census Quarterly Financial Report data. Partly offsetting this downward revision were upward revisions to rest-of-the-world profits, based on updated ITA data, and to domestic financial industries profits, based primarily on updated earnings reports from publicly traded companies.

The BEA profit measure that is conceptually most similar to S&P 500 profits—national after-tax profits without inventory valuation and capital consumption adjustments—increased $31.2 billion in the third quarter. Third-quarter national after-tax profits (shown in line 11 of table 9 of the GDP news release) increased 26.7 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 decreased 5.5 percent at an annual rate (1.4 percent at a quarterly rate), private services-producing industries increased 3.9 percent (1.0 percent at a quarterly rate), and government increased 5.1 percent (1.2 percent at a quarterly rate).

Overall, 14 of 22 industry groups contributed to the third-quarter increase in real GDP (table 13). Within private goods-producing industries, the decrease was widespread, led by construction. Within private services-producing industries, the leading contributors to the increase in real GDP were professional, scientific, and technical services (led by “miscellaneous,” which includes accounting, tax preparation, bookkeeping, and payroll services); finance and insurance (led by securities, commodity contracts, and investments); administrative and waste management services (led by administrative and support services); accommodation and food services; and information (led by motion picture and sound recording industries). Partly offsetting the increases in services-producing industries were decreases in retail trade (led by motor vehicle and parts dealers) and wholesale trade. Within government, the increase was primarily led by state and local government.

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.

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, 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").

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