Technical Note

Gross Domestic Product, Third Quarter 2020 (Second Estimate) Corporate Profits, Third Quarter 2020 (Preliminary Estimate)

November 25, 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 website at www.bea.gov.

COVID-19 Impact on Third-Quarter 2020 GDP

Real GDP increased 33.1 percent at an annual rate (7.4 percent at a quarterly rate[1]) in the third quarter of 2020, following a decrease of 31.4 percent at an annual rate (9.0 percent at a quarterly rate) in the second quarter. The increase in third quarter GDP reflected continued efforts to reopen businesses and resume activities that were postponed or restricted due to COVID-19. Real GDP for the third quarter of 2020 is 3.5 percent below the level of real GDP for the fourth quarter of 2019[2].

The increase in real GDP reflected increases in consumer spending, private inventory investment, exports, nonresidential fixed investment, and residential fixed investment that were partly offset by decreases in both federal and state and local 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 third quarter of 2020 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 unrevised from the “advance” estimate. The updated estimates primarily reflected upward revisions to nonresidential fixed investment, residential investment, and exports that were offset by downward revisions to state and local government spending, private inventory investment, and consumer spending. Imports were revised up.

- Within nonresidential fixed investment, an upward revision to intellectual property products was partly offset by a downward revision to equipment.

[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 2020 in news release table 3, line 1.

- Within intellectual property products, the revision primarily reflected upward revisions to research and development (R&D), based on new third-quarter R&D expense data from publicly traded companies' financial statements, and to software, based on new Census Bureau third-quarter Quarterly Services Survey (QSS) data.

- For equipment, the largest contributors to the downward revision were information processing equipment (notably, communication equipment), based primarily on updated Census trade in goods data for imports and transportation equipment (notably, light trucks), based primarily on new September truck registrations data from Polk.

- The upward revision to residential investment was led by single-family structures, based on new September and revised July and August Census Value of Construction Put in Place (VPIP) data.

- For exports and imports, the revised estimates primarily reflected updated statistics from BEA's International Transactions Accounts. Within exports, the upward revision was to services, notably other business services. Within imports, the upward revision was primarily attributable to industrial supplies and materials, notably durable goods.

- Within state and local government spending, the revision reflected a downward revision to structures investment, notably highways and streets, based on updated Census VPIP data.

- Within private inventory investment, a downward revision to manufacturing was partly offset by an upward revision to retail trade. The revisions primarily reflected new and revised monthly Census inventory data.

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

    - For services, the revision primarily reflected downward revisions to "other" services, transportation services (notably, air), and housing and utilities (notably, electricity and gas). Within other services, the leading contributors to the downward revision were professional services (led by legal services) and social services (led by child care). These downward revisions were partly offset by an upward revision to health care (notably, home health care and medical laboratories). For electricity and gas, the revision primarily reflected new August usage and unit value data from the Energy Information Administration. For other services components, the revised estimates were based primarily on new third-quarter Census QSS data.

    - For goods, upward revisions to clothing and footwear as well as furnishings and household equipment were partly offset by a downward revision to motor vehicles, mainly used motor vehicles. The revised estimates primarily reflected revised August and September Census Monthly Retail Trade Survey 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 38.5 percent in the third quarter, an upward revision of 0.4 percentage point. The revision reflected the upward revision to private fixed investment.

Prices

BEA's featured measure of inflation in the U.S. economy, the price index for gross domestic purchases, increased 3.3 percent in the third quarter, a downward revision of 0.1 percentage point, reflecting a new Bureau of Labor Statistics (BLS) employment cost index for state and local education.

The price index for personal consumption expenditures (PCE) increased 3.7 percent, unrevised from the advance estimate. Excluding food and energy prices, the PCE price index increased 3.5 percent, also unrevised from the advance estimate.

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 25.5 percent at an annual rate (5.8 percent at a quarterly rate) in the third quarter, following a decrease of 32.6 percent at an annual rate (9.4 percent at a quarterly rate) in the second quarter. The average of real GDP and real GDI increased 29.2 percent at an annual rate (6.6 percent at a quarterly rate) in the third quarter, following a decrease of 32.0 percent at an annual rate (9.2 percent at a quarterly rate) in the second quarter. The increase in current-dollar GDI for the third quarter primarily reflected increases in compensation, corporate profits, and proprietors' income. Subsidies, which are a subtraction in the calculation of GDI, increased.

- Within compensation, the leading contributor to the increase was wages and salaries. Both private and government wages increased based primarily on data from the BLS monthly Current Employment Statistics report.

- 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. Within proprietors' income, the increase reflected increases in both farm and nonfarm proprietors' income. Corporate profits and proprietors' income were in part bolstered by provisions from federal government pandemic response programs, such as the Paycheck Protection Program and tax credits for employee retention and paid sick leave, which provided financial support to businesses impacted by the pandemic in both the second and third quarters. More information on federal subsidy programs 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 $495.3 billion, or 27.1 percent (quarterly rate), in the third quarter. Domestic profits of financial corporations increased $24.5 billion, domestic profits of nonfinancial corporations increased $431.2 billion, and rest-of-the-world profits increased $39.6 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 $569.6 billion in the third quarter. Third-quarter national after-tax profits (shown in line 11 of table 9 of the GDP news release) increased 10.7 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 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.

It is possible, however, to identify the impacts of select recovery programs on aggregate federal government spending. In the third quarter, expanded Unemployment Insurance Program benefits boosted the level of government social benefits, and the portion of forgivable loans to businesses and nonprofits provided 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" on BEA's website.

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 decreased $617.3 billion in the second quarter of 2020, an upward revision of $64.8 billion. Real GDI decreased 32.6 percent (annual rate) in the second quarter, an upward revision of 0.9 percentage point from the previously published estimate.

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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