Technical Note

Gross Domestic Product (Third Estimate), Corporate Profits (Revised Estimate), and GDP by Industry, Third Quarter 2022

December 22, 2022

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.

Economic Factors and Third-Quarter 2022 GDP

Real GDP increased 3.2 percent at an annual rate (0.8 percent at a quarterly rate[1]) in the third quarter of 2022, in contrast to a decrease of 0.6 percent at an annual rate (0.1 percent at a quarterly rate) in the second quarter. The increase occurred amid continued inflation, a strengthening dollar, low unemployment, supply-chain disruptions, and rising interest rates. The economic effects of these factors cannot be quantified in the GDP estimate for the third quarter of 2022 because the impacts are generally embedded in source data and cannot be separately identified.

Real GDP turned up in the third quarter, compared to the second quarter. The upturn primarily reflected accelerations in nonresidential fixed investment and consumer spending, a smaller decrease in private inventory investment, and upturns in state and local government as well as federal government spending that were partly offset by a larger decrease in residential fixed investment. Imports, which are a subtraction in the calculation of GDP, turned down.

The increase in real GDP for the third quarter reflected increases in exports, consumer spending, nonresidential fixed investment, state and local government spending, and federal government spending, that were partly offset by decreases in residential fixed investment and private inventory investment. Imports decreased.

Sources of Revision to Real GDP

The increase in third-quarter real GDP was revised up 0.3 percentage point from the “second” estimate. The updated estimates primarily reflected upward revisions to consumer spending, nonresidential fixed

[1] Percent changes in quarterly seasonally adjusted series are displayed at annual rates, unless otherwise specified. For more information, refer to the FAQ “Why does BEA publish percent changes in quarterly series at annual rates?”

investment, and state and local government spending that were partly offset by downward revisions to private inventory investment and exports.

- 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 "other" services (notably social services and religious activities, professional services, and education) and financial services and insurance (specifically, imputed financial services as well as portfolio and investment advice services). The updated estimate primarily reflected new third-quarter Census Quarterly Services Survey (QSS) data as well as Federal Reserve Board tabulations of commercial banks' Call Reports.
  - Within goods, the downward revision was to durable goods (led by furnishings and durable household equipment), based primarily on revised Census Bureau Monthly Retail Trade Survey (MRTS) data.
- Within nonresidential fixed investment, structures and intellectual property products were revised up.
  - Within structures, the leading contributors to the upward revision were manufacturing as well as commercial and health care, based primarily on revised August and September Census Construction Value Put in Place (VPIP) data.
  - Within intellectual property products, the revision reflected upward revisions to research and development and to software, based primarily on new and updated QSS data.
- The upward revision to state and local government spending was led by structures investment (notably, highway and street construction), based on revised VPIP data.
- Within private inventory investment, a downward revision to retail trade (notably, general merchandise stores), primarily reflected revised monthly Census inventory data.
- For exports, the revised estimates reflected a downward revision to services (led by transport services) based on updated data from BEA's International Transactions Accounts (ITAs).

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 1.1 percent in the third quarter, 0.6 percentage point more than previously estimated, primarily reflecting the upward revisions to consumer spending and nonresidential fixed investment.

Prices

BEA's featured measure of inflation in the U.S. economy, the price index for gross domestic purchases, increased 4.8 percent in the third quarter, revised up 0.1 percentage point from the second estimate. Excluding food and energy, gross domestic purchases prices increased 5.0 percent, unrevised from the second estimate.

The price index for personal consumption expenditures (PCE) increased 4.3 percent, unrevised from the second estimate. Excluding food and energy prices, the "core" PCE price index increased 4.7 percent, an upward revision of 0.1 percentage point. Within PCE, an upward revision to financial services and insurance prices (specifically imputed financial services), primarily reflecting Federal Reserve Board tabulations of commercial banks' Call Reports, was partly offset by a downward revision to hospital prices, based primarily on updated BLS PPIs. For a comparison of PCE prices to BLS consumer price indexes, refer to NIPA Table 9.1U. Reconciliation of Percent Change in the CPI with Percent Change in the PCE Price Index.

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 0.8 percent at an annual rate in the third quarter. The third-quarter increase in real GDI was revised up 0.5 percentage point from the second estimate, primarily reflecting an upward revision to corporate profits. The average of real GDP and real GDI increased 2.0 percent at an annual rate in the third quarter, an upward revision of 0.4 percentage point.

- Within profits, an upward revision to domestic profits was partly offset by a downward revision to rest-of-the-world profits. The upward revision to domestic profits reflected both financial and nonfinancial corporate profits and was based on updated publicly traded company financial reports and Census Quarterly Financial Report data as well as new Federal Deposit Insurance Corporation data. The downward revision to rest-of-the-world profits was based on updated ITA data.

Profits from current production decreased $1.3 billion (less than one tenth of one percent) in the third quarter. Domestic profits of financial corporations decreased $1.8 billion, domestic profits of nonfinancial corporations increased $16.1 billion, and rest-of-the-world profits decreased $15.5 billion.

Estimates of corporate profits were affected by several settlements that were finalized in the third quarter. Settlements are recorded in the national income and product accounts (NIPAs) on an accrual basis in the quarter when the settlement is finalized, regardless of when they are recorded on a company's financial statement. In the third quarter, the following settlements reduced corporate profits by approximately $1.9 billion ($7.6 billion at an annual rate):

- Several broker-dealers and an affiliated investment adviser agreed to pay penalties and fines totaling approximately $1.3 billion ($5.2 billion at an annual rate) for violations of U.S. Securities and Exchange Commission regulatory requirements to maintain and preserve electronic communications.

- Credit Suisse agreed to pay $495 million ($2.0 billion at an annual rate) to settle a case with the New Jersey Attorney General's office related to residential mortgage-backed securities business.

- Google agreed to pay $407 million ($1.6 billion at an annual rate) in fines and penalties levied by the Russian and Australian governments.

- Navient (formerly Sallie Mae) agreed to pay $95 million ($0.4 billion at an annual rate) in restitution for borrowers who were steered into costly repayment plans and predatory loans.

The estimate of GDI was not impacted because the settlements were recorded in the NIPAs as business current transfer payments to government and to persons, which offset the reductions to corporate profits.

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—decreased $152.3 billion in the third quarter. Third-quarter national after-tax profits (shown in line 11 of table 9 of the GDP news release) increased 2.3 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 services-producing industries increased 4.9 percent (1.2 percent at a quarterly rate), government increased 0.6 percent (0.2 percent at a quarterly rate), and private goods-producing industries decreased 1.3 percent in the third quarter (0.3 percent at a quarterly rate).

Overall, 16 of 22 industry groups contributed to the third-quarter increase in real GDP. Within private services-producing industries, the leading contributors to the increase were information; professional, scientific, and technical services; and real estate and rental and leasing. Notable offsets include decreases in utilities as well as finance and insurance. The increase in government reflected an increase in state and local government that was partly offset by a decrease in federal government. Within private goods-producing industries, a decrease in construction was partly offset by an increase in mining.

One-Time Refundable Tax Credits Issued by States

Beginning in the third quarter of 2022, several state governments provided relief to the residents of their states by way of one-time refundable tax credits that were distributed directly to individuals. Refundable tax credits typically allow taxpayers who meet certain eligibility criteria to reduce the amount they are required to pay in income taxes, and if the credits exceed the taxpayer's total tax liability, the excess is paid to them as a refund.

Data typically are not available to separately estimate the value of these payments to individuals. The value of tax credits, which reduce the taxes received by governments, is generally embedded in the source data used to measure state and local income tax payments in the NIPAs. However, a combination of media reports and state-level administrative data were available to estimate the value of these one-time refundable tax credits issued in 2022. As a result, BEA recorded them as an increase in government expenditures (specifically as government social benefits to persons), rather than as a reduction in government receipts. Recording these payments as government social benefits provides a clearer picture of the amount of benefits received by qualified individuals and is consistent with the recording of federal refundable tax credits in the NIPAs and with national accounting guidelines.

As a result, within the government receipts and expenditures account, BEA estimates of state and local government social benefit payments (NIPA table 3.3, line 26) and personal current tax receipts (NIPA table 3.3, line 3) were revised up in the third quarter.

Impact of Hurricane Ian on Third Quarter 2022 Estimates

Hurricane Ian struck central and southwest Florida on September 28, and South Carolina on September 30, causing extensive wind, flood, and storm surge damage across the southeastern United States. This disaster disrupted usual consumer and business activities and prompted emergency services and remediation activities. These responses to this disaster 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 Ian on 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 Ian resulted in losses of $57.0 billion in privately-owned fixed assets ($228.0 billion at an annual rate) and $3.0 billion in state and local government-owned fixed assets ($12.0 billion at an annual rate).

BEA also estimates the insurance benefits paid and received because 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 Ian in the amount of $24.7 billion ($98.9 billion at an annual rate). The federal government's National Flood Insurance Program expects to pay an additional $10.0 billion ($40.0 billion at an annual rate); Florida Citizens Property Insurance Corporation expects to pay $2.5 billion ($10.0 billion at an annual rate); and foreign insurance companies expect to pay $9.1 billion ($36.3 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 disaster?" and "How are the fixed assets accounts (FAAs) and consumption of fixed capital (CFC) impacted by disasters?"

More Information

The complete set of statistics is available on BEA's website, along with a table presenting the Key Source Data and Assumptions that underlie the statistics for more recent quarters. In a few weeks, the *Survey of Current Business* will present a more detailed analysis of the estimates ("GDP and the Economy").

David B. Wasshausen
Acting Associate Director, National Economic Accounts
Chief, Expenditure and Income Division, National Economic Accounts
Bureau of Economic Analysis
(301) 278-9752