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.

Today’s release presents results from the annual update of the National Economic Accounts (NEAs), which includes the National Income and Product Accounts (NIPAs) as well as the Industry Economic Accounts. The update includes revised estimates for the first quarter of 2017 through the first quarter of 2022. Estimates of GDP and related components for the third estimate of the second quarter were calculated off of the updated first quarter 2022 statistics, which now reflect the annual update of the NEAs.

**Economic Factors and Second-Quarter 2022 GDP**

Real GDP decreased 0.6 percent at an annual rate (0.1 percent at a quarterly rate\(^1\)) in the second quarter of 2022, following a decrease of 1.6 percent at an annual rate (same as previously published) \(0.4\) percent at a quarterly rate) in the first quarter. The second-quarter decrease occurred amid continued inflation, low unemployment, ongoing supply-chain challenges, and rising interest rates. The economic effects of these factors cannot be quantified in the GDP estimate for the second quarter of 2022 because the impacts are generally embedded in source data and cannot be separately identified. For more information about COVID-19 impacts, refer to [Federal Recovery Programs and BEA Statistics](https://www.bea.gov) on our website. Real GDP for the second quarter of 2022 is 3.5 percent above the level of real GDP for the fourth quarter of 2019\(^2\).

The decrease in real GDP for the second quarter primarily reflected decreases in private inventory investment, residential fixed investment, federal government spending, and state and local government spending that were partly offset by increases in exports and consumer spending. Imports, a subtraction in the calculation of GDP, increased.

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\(^1\) 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?](https://www.bea.gov).

\(^2\) 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 2022 in news release table 3, line 1.
Sources of Revision to Real GDP

The decrease in second-quarter real GDP was the same as previously estimated in the “second” estimate. Upward revisions to consumer spending, federal government spending, and nonresidential fixed investment were offset by downward revisions to exports, residential fixed investment, and private inventory investment. Imports were revised down.

- 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, international travel), based on updated data from BEA’s International Transactions Accounts (ITAs), and food services and accommodations (mainly purchased meals and beverages), primarily based on revised Census Monthly Retail Trade Survey (MRTS) data.
  - Within goods, a downward revision to durable goods (led by motor vehicles and parts) was mostly offset by an upward revision to nondurable goods (led by food and beverages as well as gasoline and other energy goods). For motor vehicles and parts, the revision reflected a downward revision to new light trucks, based on revised Wards Intelligence unit sales and IHS-Polk registrations, as well as used autos and trucks. For food and beverages, the upward revision was based primarily on updated Census MRTS, and for gasoline and other energy goods, the revision was based primarily on new June Energy Information Administration (EIA) data.

- For exports and imports, revisions were based primarily on updated first and second quarter statistics from the ITAs.
  - Within exports, the downward revision was to services (led by other government goods and services, not elsewhere classified as well as “other” business services). The revised government services estimate in part reflected an ITA reclassification of military goods provided to Ukraine via the Presidential Drawdown Authority in the first and second quarters. For more information, refer to the U.S. International Transactions, 2nd Quarter 2022 release.
  - Within imports, the downward revision was led by services (mainly charges for the use of intellectual property).

- The downward revision to residential fixed investment was to improvements, based primarily on Bureau of Labor Statistics (BLS) remodelers’ payroll data.

- Within private inventory investment, a downward revision to “other” industries (led by information) was partly offset by upward revisions to construction, mining, and utilities (led by utilities) as well as manufacturing (led by nondurable goods), based primarily on updated inventory data from the Census Bureau and EIA.
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 0.5 percent in the second quarter, 0.3 percentage point more than previously estimated. The revision reflected upward revisions to consumer spending and nonresidential fixed investment that were partly offset by a downward revision to residential fixed investment.

**Prices**

BEA's featured measure of inflation in the U.S. economy, the price index for gross domestic purchases, increased 8.5 percent in the second quarter, revised up 0.1 percentage point from the second estimate. Excluding food and energy, gross domestic purchases prices increased 6.9 percent, revised up 0.1 percentage point from the second estimate.

The price index for personal consumption expenditures (PCE) increased 7.3 percent, revised up 0.2 percentage point. Excluding food and energy prices, the "core" PCE price index increased 4.7 percent, revised up 0.3 percentage point. The upward revision was led by used motor vehicle prices and reflected the incorporation of the CPI for used motor vehicles from the BLS, which replaced a PPI. 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 0.1 percent at an annual rate (less than 0.1 percent at a quarterly rate) in the second quarter. The second-quarter increase in real GDI was revised down 1.3 percentage points from the second estimate, primarily reflecting downward revisions to corporate profits, compensation, and proprietors’ income that were partly offset by a downward revision to subsidies, which are a subtraction in the calculation of GDI. The average of real GDP and real GDI decreased 0.3 percent at an annual rate (less than 0.1 percent at a quarterly rate) in the second quarter, a downward revision of 0.7 percentage point.

- Within profits, the revision primarily reflected downward revisions to financial and nonfinancial industries, based on updated publicly traded company financial report data, new Federal Deposit Insurance Corporation data, and Census Quarterly Financial Report data.

- Within compensation, the downward revision was led by private wages and salaries, based primarily on revised BLS Current Employment Statistics data.

- Within proprietors’ income, the downward revision was led by nonfarm income, based on updated Federal Reserve Board Industrial Production Index data and BLS PPIs.

- For subsidies, the downward revision primarily reflected the reclassification of outlays from the Community Development Financial Institutions Fund. The fund promotes economic revitalization and community development in low-income communities to mission-driven
lenders. These funds are now classified as loans and are recorded in the Financial Accounts of the United States.

Profits from current production increased $131.6 billion, or 4.6 percent (quarterly rate), in the second quarter. Domestic profits of financial corporations decreased $46.0 billion, domestic profits of nonfinancial corporations increased $152.2 billion, and rest-of-the-world profits increased $25.5 billion.

Estimates of corporate profits were affected by legal settlements in the second 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 May 2022, Allianz Global Investors U.S. LLC agreed to pay approximately $6 billion in fines and restitution to the U.S. Securities and Exchange Commission and investors.
- In June 2022, a settlement of approximately $1 billion was reached between insurance companies and victims of the Surfside, Florida condominium collapse.

These legal settlements paid by domestic corporations reduced financial corporate profits for the second quarter by $7.0 billion ($27.9 billion at an annual rate). 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.

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 $209.7 billion in the second quarter. Second-quarter national after-tax profits (shown in line 11 of table 9 of the GDP news release) increased 7.7 percent from the same quarter one year ago.

Second-Quarter 2022 Capital Transfers to State and Local Governments

Capital transfers received by state and local government are presented in NIPA table 5.11U. Typically, these transactions reflect federal capital grants (which includes investment grants and other capital transfers for transportation, housing and community services, and general public service), disaster related insurance benefits, and other specified transfers. In the second quarter of 2022, capital transfers to state and local government increased $467.5 billion (annual rate), primarily reflecting increases in capital grants from federal government and “other” capital transfers.

- Capital grants from federal government (presented on line 42 of 5.11U) increased $363.9 billion (annual rate) in the second quarter, primarily reflecting distributions from the Coronavirus State and Local Fiscal Recovery Funds program funded by the American Rescue Plan that support future capital expenditures, including investments in property, facilities, or equipment. More information can be found in the FAQ “How was federal assistance to the states authorized by the American Rescue Plan recorded in the NIPAs?”
- The increase in “other” capital transfers (line 43) reflects the National Opioid Settlement, a legal settlement between state and local governments and four U.S. corporations, drug distributors Cardinal Health, McKesson, and AmerisourceBergen, and drug manufacturer Johnson &
Johnson, that provides $25.9 billion ($103.5 billion at an annual rate) for opioid epidemic remediation. Settlements are recorded in the NIPAs on an accrual basis in the quarter when the settlement is finalized. The settlement was classified as a capital transfer from corporate business to state and local government. More information can be found in the FAQ “How does the 2022 national opioid settlement impact the NIPAs?”

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 10.4 percent in the second quarter (2.7 percent at a quarterly rate), private services-producing industries increased 2.0 percent (0.5 percent at a quarterly rate), and government decreased 0.2 percent (0.1 percent at a quarterly rate).

Overall, 9 of 22 industry groups contributed to the second-quarter decline in real GDP. Within private goods-producing industries, the leading contributors to the decrease were construction and nondurable goods manufacturing (led by chemical products manufacturing). Within private services-producing industries, the leading contributors to the increase were health care and social assistance (led by hospitals); professional, scientific, and technical services; real estate and rental and leasing; and accommodation and food services. Partly offsetting these increases was a decrease in wholesale trade. The decrease in government reflected a decrease in both federal as well as state and local governments.

Summary Results from the Annual Update

Today’s release presents results from the annual update of the National Economic Accounts (NEAs), which includes the NIPAs as well as the Industry Economic Accounts. The update includes revised estimates for the first quarter of 2017 through the first quarter of 2022.

The updated estimates show that real GDP increased at an average annual rate of 2.1 percent from 2016 to 2021, 0.2 percentage point higher than the previously published estimate. Over the same period, real GDI also increased 2.1 percent, 0.2 percentage point lower than previously published. The average of real GDP and real GDI over the same period was 2.1 percent, the same as previously published.

The average annual rate of change during recent business cycles were little changed from previously published estimates.

- For the period of economic expansion from the second quarter of 2009 through the fourth quarter of 2019, real GDP increased at an annual rate of 2.3 percent, the same as previously published.
- For the period of economic contraction from the fourth quarter of 2019 through the second quarter of 2020, real GDP decreased at an annual rate of 18.2 percent, an upward revision of 1.0 percentage point.
For the period of economic expansion from the second quarter of 2020 through the first quarter of 2022, real GDP increased at an annual rate of 8.1 percent, 0.2 percentage point higher than previously published.

Refer to Information on Updates to the National Economic Accounts for a summary of results through 2021, a discussion of methodology changes, and a table showing the major source data incorporated with the update. The upcoming November Survey of Current Business will feature an article describing the results of the annual update in more detail.

Updates for the First Quarter of 2022

For the first quarter of 2022, real GDP is now estimated to have decreased 1.6 percent, the same as previously published. Downward revisions to consumer spending (specifically services), nonresidential fixed investment (notably equipment and structures), and residential fixed investment were offset by upward revisions to private inventory investment, federal government spending, exports, and state and local government spending. Imports were revised down.

Real GDI is now estimated to have increased 0.8 percent in the first quarter; in the previously published estimates, first-quarter GDI was estimated to have increased 1.8 percent. The leading contributor to the downward revision was compensation from wages and salaries, based primarily on new first-quarter Bureau of Labor Statistics Quarterly Census of Employment and Wages data.

The average of real GDP and real GDI decreased 0.4 percent in the first quarter; in the previously published estimates, the average of GDP and GDI was estimated to have increased 0.1 percent.

In terms of industry contributions to GDP, today's release now shows that private goods-producing industries decreased 3.7 percent in the first quarter, an upward revision of 3.2 percentage points; private services-producing industries decreased 1.6 percent, a downward revision of 0.8 percentage point; and government increased 1.8 percent, a downward revision of 0.2 percentage point.

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 second-quarter estimates ("GDP and the Economy").

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