

Technical Note

Gross Domestic Product (Third Estimate), Corporate Profits (Revised Estimate), and GDP by Industry, First Quarter 2023

June 29, 2023

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 summary of "highlights" is available on BEA's website at www.bea.gov.

Real GDP and Related Aggregates

Real GDP increased at an annual rate of 2.0 percent (0.5 percent at a quarterly rate¹) in the first quarter of 2023, compared with an increase of 2.6 percent (0.6 percent at a quarterly rate) in the fourth quarter of 2022. The increase in first-quarter real GDP was revised up 0.7 percentage point from the "second" estimate. The increase in real GDP reflected increases in consumer spending, exports, state and local government spending, federal government spending, and nonresidential fixed investment that were partly offset by decreases in private inventory investment and residential fixed investment. Imports, which are a subtraction in the calculation of GDP, increased.

Sources of Revision to Real GDP

The updated estimates primarily reflected upward revisions to exports and consumer spending that were partly offset by downward revisions to nonresidential fixed investment and federal government spending. Imports were revised down.

- For both exports and imports, the revised estimates primarily reflected revised Census Bureau trade in goods data as well as results from the annual update of BEA's International Transactions Accounts (ITAs), which were incorporated on a best-change basis.
 - Within exports, both goods and services were revised up. For goods, the leading contributor was exports of "other" goods. For services, upward revisions to travel, charges for the use of intellectual property, and transport were partly offset by a downward revision to other business services.
 - Within imports, the downward revision was mainly to goods (led by consumer goods and nonautomotive capital goods).

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?](#)

- Within consumer spending, an upward revision to services was partly offset by a downward revision to goods.
 - Within services, the leading contributor to the upward revision was health care (led by physician services), based primarily on updated first-quarter Census Quarterly Services Survey (QSS) data.
 - Within goods, the downward revision was led by food and beverages, primarily based on updated Census Monthly Retail Trade Survey data.
- Within nonresidential fixed investment, downward revisions to intellectual property products and equipment were partly offset by an upward revision to structures. The downward revision to intellectual property products was led by software (mainly prepackaged software), based primarily on revised Census QSS data. The downward revision to equipment was led by information processing equipment (notably computers and peripheral equipment) based primarily on revised Census trade data. The upward revision to structures was led by manufacturing structures, based primarily on revised February and March Census Value of Construction Put in Place (VPIP) data.
- The downward revision to federal government spending primarily reflected updated ITA estimates of transfers of military equipment and supplies.

Compared with the fourth quarter, real GDP decelerated in the first quarter. Consistent with the prior estimate, the deceleration primarily reflected a downturn in private inventory investment and a slowdown in nonresidential fixed investment that were partly offset by an acceleration in consumer spending, an upturn in exports, and a smaller decrease in residential fixed investment. Imports turned up.

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 3.2 percent in the first quarter, an upward revision of 0.3 percentage point from the previous estimate, primarily reflecting 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 3.8 percent in the first quarter, the same as previously estimated. Excluding food and energy, gross domestic purchases prices increased 4.2 percent, a downward revision of 0.1 percentage point.

The price index for personal consumption expenditures (PCE) increased 4.1 percent in the first quarter, revised down 0.1 percentage point from the previous estimate. Excluding food and energy, the "core" PCE price index increased 4.9 percent, also revised down 0.1 percentage point. 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 the output of the economy as the costs incurred and the incomes earned in the production of goods and services (as measured by GDP), decreased 1.8 percent at an annual rate in the first quarter. The first-quarter decrease was revised up 0.5 percentage point from the previous estimate, led by an upward revision to corporate profits. The average of real GDP and real GDI increased 0.1 percent at an annual rate in the first quarter, revised up 0.6 percentage point from the previous estimate.

- The upward revision to profits reflected upward revisions to both domestic and rest-of-the-world profits. Within domestic profits, both financial and nonfinancial corporate profits were revised up, based on updated publicly traded company financial reports, Census Quarterly Financial Report data, and new Federal Deposit Insurance Corporation data. For rest-of-the-world profits, the revision reflected updated ITA data.

Profits from current production decreased \$121.5 billion, or 4.1 percent (quarterly rate), in the first quarter. Domestic profits of financial corporations decreased \$9.4 billion, domestic profits of nonfinancial corporations decreased \$102.9 billion, and rest-of-the-world profits (net) decreased \$9.2 billion.

The BEA profits measure that is conceptually most similar to S&P 500 profits—national after-tax profits without inventory valuation and capital consumption adjustments (shown in line 11 of table 9 of the GDP news release)—decreased \$33.3 billion, or 1.2 percent (quarterly rate), in the first quarter. First-quarter national after-tax profits decreased 5.1 percent from the same quarter one year ago.

Real GDP by Industry

Today's release includes estimates of real GDP by industry, or value added—a measure of an industry's contribution to GDP (shown in table 12 of the news release). In the first quarter, the value added of private services-producing industries increased 2.6 percent (0.6 at a quarterly rate), government increased 2.7 percent (0.7 at a quarterly rate), and private goods-producing industries decreased 0.7 percent (0.2 percent at a quarterly rate).

Overall, 15 of 22 industry groups contributed to the first-quarter increase in real GDP. Within private services-producing industries, the increase was led by health care and social assistance; retail trade; real estate and rental and leasing; and accommodation and food services. Partly offsetting these increases was a decrease in finance and insurance. The increase in government reflected increases in state and local as well as federal government. Within private goods-producing industries, decreases in both durable goods and nondurable goods manufacturing were partly offset by an increase in agriculture, forestry, fishing, and hunting.

Looking Ahead: 2023 Comprehensive Update of the National Economic Accounts

BEA will release initial results from the comprehensive (or benchmark) update of the National Economic Accounts (NEA), which include the National Income and Product Accounts as well as the Industry Economic Accounts, on September 28, 2023. Current-dollar measures of GDP and related components will be revised from the first quarter of 2013 through the first quarter of 2023. Current-dollar GDP by

industry statistics will be revised from the first quarter of 2005 through the first quarter of 2023, although revisions prior to the first quarter of 2013 will be offsetting across industries within each period. Gross domestic income (GDI) and select income components will be revised from the first quarter of 1979 through the first quarter of 2023.

Quantity and price measures will use 2017 as the reference year; currently, the reference year is 2012. Updating the reference year will not affect the percent changes in the price or quantity indexes (or in the chained-dollar estimates), because these changes are measured from chain-type indexes. Revisions to the percent changes in NEA estimates will reflect the incorporation of new and revised source data as well as changes in methodologies. For details, refer to [Information on Updates to the National Economic Accounts](#).

More Information

The complete set of statistics for the first 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, BEA's online journal, will present a more detailed analysis of the estimates ("GDP and the Economy").

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