Technical Note

Gross Domestic Product, Second Quarter 2022 (Advance Estimate)

July 28, 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 Second-Quarter 2022 GDP

Real GDP decreased 0.9 percent at an annual rate (0.2 percent at a quarterly rate[1]) in the second quarter of 2022, following a decrease of 1.6 percent at an annual rate (0.4 percent at a quarterly rate) in the first quarter. The 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 on our website. Real GDP for the second quarter of 2022 is 2.5 percent above the level of real GDP for the fourth quarter of 2019[2].

Key Source Data and Assumptions for the Advance Estimate

The advance estimate of GDP for the second quarter is based on source data that are incomplete and subject to updates. Three months of source data were available for consumer spending on goods; shipments of capital equipment; motor vehicle sales and inventories; manufacturing, wholesale, and retail trade inventories; exports and imports of goods; federal government outlays; and consumer, producer, and international prices. For major source data series for which only two months of data were available, or for which data for the second quarter are not yet available, BEA's assumptions were based on a variety of sources, most notably: private high-frequency payment card transactions data, industry and trade association reports that include volume data, such as health care patient visits and traveler throughput, as well as recreation services revenues and event attendance. More information on the source data and BEA assumptions that underlie the second-quarter estimate is shown in the Key Source Data and Assumptions table.

[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?.

[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.

Real GDP and Related Aggregates

Real GDP decreased 0.9 percent (annual rate) in the second quarter of 2022, following a decrease of 1.6 percent in the first quarter. The decrease in real GDP reflected decreases in private inventory investment, residential fixed investment, federal government spending, state and local government spending, and nonresidential fixed investment that were partly offset by increases in exports and consumer spending. Imports, which are a subtraction in the calculation of GDP, increased.

- The decrease in private inventory investment was led by retail trade (notably, general merchandise stores as well as motor vehicle dealers), based primarily on Census Bureau inventory book value data and unit inventory data from Wards Intelligence.

- Within residential fixed investment, the leading contributor to the decrease was brokers' commissions and other ownership transfer costs, based primarily on existing home sales data from the National Association of Realtors and new home sales data from the Census Bureau.

- Within federal government spending, a decrease in nondefense spending was partly offset by an increase in defense spending.

    - The decrease in nondefense spending was impacted by the sale of 72.3 million barrels of crude oil from the Strategic Petroleum Reserve (SPR), based on data from the Department of Energy. Within the National Economic Accounts, these sales are deducted from government consumption expenditures; therefore, an increase in sales results in a corresponding decrease in consumption expenditures. Because the oil sold by the government enters private inventories, there is no direct net effect on GDP.

    - Within defense, the increase was led by an increase in spending on intermediate goods and services based primarily on data from the Monthly Treasury Statement.

- Within state and local government spending, a decrease in gross investment was led by structures, based primarily on Census Value of Construction Put in Place (VPIP) data for April and May.

- Within nonresidential fixed investment, decreases in structures and equipment were mostly offset by an increase in intellectual property products.

- Estimates of exports and imports primarily reflected Census-BEA U.S. International Trade in Goods and Services data and the Census Advance Economic Indicators Report for June.

    - Within exports, both goods and services increased. Within goods, the leading contributors to the increase were industrial supplies and materials (notably petroleum and products); foods, feeds, and beverages; and nonfood and nonautomotive consumer goods. Within services, the increase was led by travel.

    - Within imports, the increase reflected an increase in services (mainly travel).

- Within consumer spending, an increase in services was partly offset by a decrease in goods.

    - The increase in services was led by food services and accommodations, health care, and "other" services. The increase in food services and accommodations was led by food services (mainly purchased meals and beverages), based on Census Bureau Monthly Retail Trade Survey (MRTS) data. Within health care, both hospitals and outpatient services increased, based primarily on patient volume data from trade sources and Bureau of Labor Statistics (BLS) Current Employment Statistics (CES) data. For other services, the leading contributor to the increase was international travel, based primarily on data from BEA's International Transactions Accounts.

    - Within goods, the decrease reflected both nondurable goods (led by food and beverages) and durable goods (led by recreational goods and vehicles as well as furnishings and durable household equipment), based primarily on Census Bureau MRTS 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, was unchanged in the second quarter after increasing 3.0 percent in the first quarter.

Prices

BEA's featured measure of inflation in the U.S. economy, the price index for gross domestic purchases, increased 8.2 percent in the second quarter, after increasing 8.0 percent in the first quarter. Excluding food and energy, gross domestic purchases prices increased 6.6 percent, after increasing 6.9 percent.

The price index for personal consumption expenditures (PCE) increased 7.1 percent in the second quarter, the same increase as in the first quarter. Excluding food and energy, the "core" PCE price index increased 4.4 percent, after increasing 5.2 percent. The second-quarter increase in core PCE prices reflected widespread increases in both goods and services, led by increases in the prices for housing and for transportation services. Prices were based primarily on BLS consumer and producer price indexes. 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.

Disposable Personal Income

Real disposable personal income (DPI) decreased 0.5 percent (at an annual rate) in the second quarter, compared with a decrease of 7.8 percent in the first quarter. Current-dollar DPI increased 6.6 percent (annual rate) in the second quarter, after decreasing 1.3 percent in the first quarter.

The increase in second-quarter current-dollar DPI primarily reflected an increase in compensation (notably, private and government wages and salaries), based primarily on BLS CES data. Proprietors' income (both nonfarm and farm), personal income receipts on assets, and rental income also increased.

The personal saving rate was 5.2 percent in the second quarter, compared with 5.6 percent in the first quarter.

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 $468.1 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 $26.0 billion ($100.4 billion at an annual rate) for opioid epidemic remediation. The national income and product accounts record legal settlements such as this on an accrual basis in the quarter when the settlement takes effect. 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?”

Looking Ahead: 2022 Annual Update of the National Economic Accounts

BEA will release results from the 2022 annual update of the National Economic Accounts, which includes the National Income and Product Accounts as well as the Industry Economic Accounts, on September 29, 2022. The update will present revised statistics for GDP, GDP by Industry, and gross domestic income that cover the first quarter of 2017 through the first quarter of 2022. For details, refer to Information on Updates to the National Economic Accounts.

More Information

The complete set of statistics for the second quarter is available on BEA's website. 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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