

Technical Note

Gross Domestic Product Fourth Quarter of 2018 (Initial Estimate)

February 28, 2019

This technical note provides background information about the source data and estimating methods used to produce the estimates presented in the GDP news release. The complete set of estimates for the fourth quarter is available on BEA's Web site at www.bea.gov; a brief summary of "highlights" is also posted on the Web site. In a few weeks, the *Survey of Current Business*, BEA's online monthly journal, will publish a more detailed analysis of the estimates ("GDP and the Economy").

Key Source Data and Assumptions for the Initial Estimate

The partial federal government shutdown that occurred in late December and January resulted in delays of many of the principal source data that are used to produce estimates of GDP. This "initial" estimate of GDP for the fourth quarter of 2018 reflects a combination of data and methods that are typically used for both the "advance" and "second" current quarterly estimates. As a result, the initial fourth quarter estimate 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; durable and nondurable goods manufacturing inventories; wholesale and retail trade inventories; exports and imports of goods; federal government outlays; and consumer, producer, and international prices. For public and private construction spending and for exports and imports of services, October and November data were incorporated. For consumer spending on services, quarterly data on revenue and expenses for services industries were not available. For major source data series for which only two months of data were available, BEA's key assumptions for the third month are shown in the "[Key Source Data and Assumptions](#)" table on the BEA Web site.

Real GDP and Related Aggregates

Real GDP increased 2.6 percent (annual rate) in the fourth quarter of 2018, following an increase of 3.4 percent in the third. The increase in real GDP in the fourth quarter primarily reflected increases in consumer spending, nonresidential fixed investment, exports, and private inventory investment that were partly offset by a decrease in residential investment. Imports, which are a subtraction in the calculation of GDP, increased.

The slowdown in real GDP growth in the fourth quarter primarily reflected decelerations in private inventory investment and consumer spending that were partly offset by a deceleration in imports and an upturn in exports.

- Within private inventory investment, the leading contributors to the slowdown were manufacturing and wholesale trade industries.

- The slowdown in consumer spending reflected decelerations in both services and goods. Within services, the leading contributor was food services and accommodations. Within goods, the slowdown was widespread within nondurable goods, except for gasoline and motor fuels, which increased after decreasing in the third quarter.
- The slowdown in imports was led by downturns in imports of petroleum and products and in non-automotive capital goods.
- Within exports, the leading contributors to the upturn were petroleum and products and non-automotive capital goods. In contrast, foods, feeds, and beverages decreased more in the fourth quarter than in the third.

Partial Federal Government Shutdown

Due to a lapse in appropriations, some federal government agencies were closed and some employees were furloughed from December 22nd through January 25th. The full effects of the partial federal government shutdown on the fourth quarter estimates cannot be quantified because they are embedded in the regular source data that underlie the estimates and cannot be separately identified. However, BEA did estimate the effects of a reduction in the labor services supplied by federal employees and a reduction in intermediate purchases of goods and services by nondefense agencies. BEA estimates the impact of these reductions in services provided by the federal government subtracted about 0.1 percentage point from real GDP growth in the fourth quarter. Congress authorized back pay for furloughed federal employees. As a result, the shutdown had no impact on current-dollar federal compensation and was reflected as a temporary increase in the prices paid for federal employee compensation. For more information, [an FAQ is available](#) on BEA's Web site.

Prices

BEA's featured measure of inflation in the U.S. economy, the price index for gross domestic purchases, measures the prices of goods and services purchased by U.S. residents, regardless of where the goods and services are produced. In the fourth quarter, this index increased 1.6 percent, compared with a 1.8 percent increase in the third. Excluding food and energy, gross domestic purchases prices increased 1.8 percent, the same increase as in the third.

The PCE price index increased 1.5 percent in the fourth quarter, following an increase of 1.6 percent. Excluding food and energy prices, the PCE price index increased 1.7 percent after increasing 1.6 percent.

Disposable Personal Income and Wages and Salaries in the Third and Fourth Quarters

In addition to presenting initial estimates for the fourth quarter, today's release presents revised estimates of third-quarter wages and salaries, personal taxes, and contributions for government social insurance. Wages and salaries are now estimated to have increased \$108.4 billion in the third quarter of 2018, an upward revision of \$13.6 billion. These estimates reflect new wage and salary tabulations for the third quarter from the BLS Quarterly Census of Employment and Wages. As a result, real disposable income (DPI) is now estimated to have increased 2.6 percent in the third quarter, an upward revision of 0.2 percentage point. Real gross domestic income (GDI) is now estimated to have increased 4.6 percent in the third quarter, an upward revision of 0.3 percentage point.

For the fourth quarter, real DPI increased 4.2 percent. The personal saving rate was 6.7 percent in the fourth quarter, compared with 6.4 percent in the third (revised).

Impact of California Wildfires on Fourth Quarter 2018 Estimates

In November of 2018, wildfires burned across the state of California. These natural disasters disrupted consumption and business activities while provision of emergency and remediation services increased in response to the disaster. These impacts on production 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 the California wildfires on 2018 fourth quarter GDP.

The destruction of fixed assets, such as residential and nonresidential structures, does not directly affect GDP or personal income. BEA estimates disaster losses in [NIPA table 5.1](#), "Saving and Investment." BEA's preliminary estimates show that the California wildfires resulted in losses of \$16.0 billion in privately-owned fixed assets (\$64.0 billion at an annual rate).

BEA also estimates the insurance benefits paid and received as a result 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 the California wildfires in the amount of \$6.3 billion (\$25.4 billion at an annual rate), and foreign insurance companies expect to pay \$8.9 billion (\$35.4 billion at an annual rate).

For additional information, see "[How are the measures of production and income in the national accounts affected by a natural or man-made disaster?](#)"

Modifications to Estimate Release Schedule

BEA will release an updated estimate of fourth quarter GDP and estimates of Gross Domestic Income and Corporate Profits on March 28, 2019. However, many of the principal source data used in constructing the estimates are subject to delay. For more information on BEA's updated data release schedule, please check <https://www.bea.gov/news/schedule>.

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