



Technical Note
Gross Domestic Product
First Quarter of 2016 (Advance Estimate)
April 28, 2016

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 first 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").

GDP

Real GDP increased 0.5 percent (annual rate) in the first quarter of 2016, following an increase of 1.4 percent in the fourth quarter of 2015. The deceleration in real GDP in the first quarter primarily reflected a larger decrease in nonresidential fixed investment, a deceleration in consumer spending, a downturn in federal government spending, an upturn in imports, and larger decreases in inventory investment and in exports that were partly offset by an upturn in state and local government spending and an acceleration in residential fixed investment.

Source Data for the Advance Estimate

The advance GDP estimate for the first quarter of 2016 is based on source data that are incomplete and subject to revision. Three months of source data were available for consumer spending on goods; shipments of capital equipment; motor vehicle sales and inventories; durable goods manufacturing inventories; exports and imports of goods; federal government outlays; and consumer, producer, and international prices. BEA's key assumptions for the third month for other major series are shown in table A. Among those assumptions are the following:

- an increase in nonresidential construction,
- an increase in residential construction,
- a decrease in nondurable manufacturing inventories, and
- an increase in non-motor-vehicle merchant wholesale and retail inventories.

Prices

The price index for personal consumption expenditures (PCE) increased 0.3 percent in the first quarter, the same increase as in the fourth quarter. Excluding food and energy prices, the PCE price index increased 2.1 percent after increasing 1.3 percent.

Disposable Personal Income

Real disposable personal income increased 2.9 percent in the first quarter, following an increase of 2.3 percent in the fourth. The personal saving rate was 5.2 percent in the first quarter, compared with 5.0 percent in the fourth.

Annual Revision Scheduled for July 29

The GDP news release on July 29, in addition to presenting the advance estimate of GDP for the second quarter of 2016, will present the annual revision of the national income and product accounts (NIPAs). GDP will be revised for the most recent 3 years (2013 through 2015) and for the first quarter of 2016.

The 2016 annual revision will incorporate the usual annual source data that are more complete and more detailed than those previously available, including:

- Census Bureau annual surveys of manufactures, of merchant wholesale trade, of retail trade, of services, and of state and local governments;
- Federal government budget data;
- Internal Revenue Service tabulations of tax returns for corporations and for sole proprietorships and partnerships; and
- Department of Agriculture farm income statistics.

Additionally, the revision will incorporate the following newly available source data and refinements to BEA's methods:

- Beginning with the advance estimate of GDP for the second quarter of 2016, BEA expects to incorporate newly available Census Bureau data on wholesale and retail trade inventories that are scheduled to be released in time for the advance estimates of the NIPAs. BEA currently estimates inventories for the quarter based on Census-reported inventory data for the first two months of the quarter and BEA assumptions for the third month. The scheduled accelerated release of this data by the Census Bureau will allow BEA to calculate a more accurate estimate of the change in private inventories component of GDP for the advance estimate.
- In November 2015, the Census Bureau released revised monthly estimates of construction spending for January 2005 through October 2015. BEA uses this data to prepare annual estimates of private fixed investment for residential structures. For the upcoming revision, BEA will incorporate revised Census data into its annual estimates of residential improvements for 2013 through 2015. Estimates for earlier years will be revised during a future revision of the NIPAs. For detail, see the FAQ "[How will the revised Census Bureau construction spending data affect BEA's quarterly and annual estimates of private fixed investment?](#)"
- As part of its regular review and update of seasonal adjustment factors, BEA will continue to refine or improve its seasonal adjustments for several GDP components. For more information, see the FAQ, "[How does BEA account for seasonality in GDP?](#)"

Brent R. Moulton
Associate Director for National Economic Accounts
Bureau of Economic Analysis
(202) 606-9606

**Table A. KEY ASSUMPTIONS FOR THE ADVANCE
ESTIMATE OF GDP FOR THE FIRST QUARTER OF 2016**

For many of the key series used to prepare the advance estimate of GDP, including retail sales, unit automobile and truck sales and inventories, manufacturers' shipments of nondefense capital goods, manufacturers' inventories of durable goods, exports of goods, imports of goods, federal defense spending, and consumer, producer, and international price indexes, actual data are available for all months of the quarter.

For the key series shown in this table, actual data for the third month of the quarter usually are not available in time for inclusion in the advance GDP estimate. BEA makes assumptions for the source data that are not yet available; assumptions for March 2016 are shown in the last column of the table. For most series shown, the data for February are preliminary and subject to further revision. Occasionally, the data for earlier months are also subject to revision.

All series shown in the table are in billions of dollars, seasonally adjusted at annual rates, and are published by the Census Bureau.

	Oct.	2015 Nov.	Dec.	Jan.	2016 Feb.	Mar.*
Private fixed investment:						
Nonresidential structures:						
1 Value of new nonresidential construction put in place.....	403.8	400.3	392.8	403.4	398.3	400.8
Residential structures:						
Value of new residential construction put in place:						
2 Single family.....	226.1	228.6	231.1	232.2	235.0	236.9
3 Multifamily.....	53.4	56.7	57.2	59.2	59.8	60.2
Change in private inventories:						
NOTE: Historical (Oct.–Jan.) data reflect concurrent seasonal factors.						
4 Change in inventories for nondurable manufacturing.....	2.6	-7.6	-17.7	-26.3	-18.1	-11.3
5 Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment....	3.5	-8.8	-11.0	10.4	-11.8	15.1
Government:						
State and local:						
Structures:						
6 Value of new construction put in place.....	269.2	263.9	270.9	279.6	274.5	277.1

*Assumption.