

# Technical Note

## Gross Domestic Product First Quarter of 2017 (Advance Estimate) April 28, 2017

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](http://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").

### Real GDP

Real GDP increased 0.7 percent (annual rate) in the first quarter of 2017, following an increase of 2.1 percent in the fourth quarter of 2016. The increase in real GDP reflected increases in business investment, exports, housing investment, and consumer spending. The increase in business investment reflected increases in both structures and equipment, notably a significant increase in mining exploration, shafts, and wells. The increase in exports reflected an increase in nondurable industrial supplies and materials, notably petroleum.

The deceleration in real GDP in the first quarter reflected a deceleration in consumer spending, and downturns in inventory investment and in state and local government spending. These movements were partly offset by an upturn in exports and accelerations in both nonresidential and residential fixed investment. Imports, which are a subtraction in the calculation of GDP, decelerated.

### Source Data for the Advance Estimate

The "advance" GDP estimate for the first quarter of 2017 is based on source data that are incomplete and subject to updates. Three months of source data are available for consumer spending on goods; shipments of capital equipment; motor vehicle sales and inventories; durable goods manufacturing inventories; 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 are available, BEA's key assumptions for the third month are shown in table A1. Recently benchmarked monthly retail trade data from the Census Bureau will be incorporated in the "second" estimate of GDP on a best-change basis.

On April 27, the Census Bureau released the "Advance Economic Indicators Report" that included newly available wholesale and retail trade inventories as well as exports and imports of goods for the month of March. Today's advance GDP estimates reflect these advance inventories and foreign trade statistics (table A2).

## Prices

The price index for personal consumption expenditures (PCE) increased 2.4 percent in the first quarter, following an increase of 2.0 percent in the fourth. Excluding food and energy prices, the PCE price index increased 2.0 percent after increasing 1.3 percent.

## Disposable Personal Income

Real disposable personal income increased 1.0 percent in the first quarter, following an increase of 2.0 percent in the fourth. The personal saving rate was 5.7 percent in the first quarter, compared with 5.5 percent in the fourth.

## Looking Ahead: 2017 Annual Update Scheduled for July 28<sup>th</sup>, 2017

BEA will release results from the 2017 annual update of the national income and product accounts (NIPAs) on July 28<sup>th</sup>, including the advance estimate of GDP for the second quarter of 2017. GDP will be revised for the most recent 3 years (2014-2016) and for the first quarter of 2017.

The 2017 annual update will incorporate the usual annual source data that are more complete and more detailed than previously available, including:

- Census Bureau annual surveys of manufactures; merchant wholesale trade; retail trade; services; and 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 update will include the following refinements to BEA's methods:

- Estimates for consumer spending will incorporate improved allocations of industry-based retail sales to consumer goods, reflecting increased use of retail scanner data and the Census Bureau's E-Commerce Report.
- The price index used to deflate fixed investment in prepackaged software will be based on a more representative Bureau of Labor Statistics Producer Price Index (PPI). Currently, the BEA price for prepackaged software is based on the PPI for "Application software publishing." Beginning with this annual update, BEA will use a broader PPI for "Software publishing, except games," which includes both applications and systems software publishing.

More information on the 2017 Annual Update will be included in the forthcoming May *Survey of Current Business* article, "GDP and the Economy."

David B. Wasshausen  
Chief, National Income and Wealth Division  
Bureau of Economic Analysis  
(301) 278-9715

**Table A1. KEY ASSUMPTIONS FOR THE ADVANCE  
ESTIMATE OF GDP FOR THE FIRST QUARTER OF 2017**

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, federal defense spending, and consumer, producer, and international price indexes, actual data are available for all months of the quarter.

For the key assumptions 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 2017 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.	2016 Nov.	Dec.	Jan.	2017 Feb.	Mar.
<b>Private fixed investment:</b>						
Nonresidential structures:						
1 Value of new nonresidential construction put in place.....	426.6	433.9	434.5	433.8	432.7	433.2
Residential structures:						
Value of new residential construction put in place:						
2 Single family.....	243.8	249.2	251.5	254.5	257.5	258.2
3 Multifamily.....	62.5	61.6	60.8	63.2	64.5	64.7
<b>Change in private inventories:</b>						
NOTE: Historical data reflect revisions to concurrent seasonal factors.						
4 Change in inventories for nondurable manufacturing.....	11.5	20.1	21.7	17.7	4.1	18.2

04/28/2017 8:30 AM

**Table A2. ADVANCE ECONOMIC INDICATORS REPORT DATA FOR THE ADVANCE  
ESTIMATE OF GDP FOR THE FIRST QUARTER OF 2017**

For the key data shown in this table, advance data for the third month of the quarter are available from the Census Bureau's Advance Economic Indicators Report for inclusion in the advance GDP estimate. For series shown, the data for March are preliminary and subject to further revision.

All series shown in the table are in billions of dollars and seasonally adjusted at annual rates.

	<b>2017</b>		
	Jan.	Feb.	Mar.
<b>Change in private inventories:</b>			
1 Merchant wholesalers inventories.....	591.8	593.2	592.8
2 Retail inventories.....	613.7	614.0	616.6
<b>Net exports of goods:</b>			
3 U.S. exports of goods, Census basis...	127.2	127.7	125.5
4 U.S. imports of goods, Census basis...	195.8	191.7	190.3

04/28/2017 8:30 AM