

Technical Note

Gross Domestic Product Fourth Quarter of 2016 (Advance Estimate)

January 27, 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 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").

Real GDP

Real GDP increased 1.9 percent (annual rate) in the fourth quarter of 2016, following an increase of 3.5 percent in the third quarter of 2016. The deceleration in real GDP in the fourth quarter reflected a downturn in exports, an acceleration in imports (which are a subtraction in the calculation of GDP), a deceleration in consumer spending, and a downturn in federal government spending. These movements were partly offset by an upturn in residential fixed investment, an acceleration in inventory investment, and an upturn in state and local government spending.

The downturn in exports was mainly attributable to a downturn in exports of foods, feeds, and beverages, reflecting a decrease in exports of soybeans in the fourth quarter. The decrease in the fourth quarter reflects a return to recent historical levels after an unusually strong increase in the third quarter.

Source Data for the Advance Estimate

The "advance" GDP estimate for the fourth quarter of 2016 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 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.

On January 26, 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 December. 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 2.2 percent in the fourth quarter, following an increase of 1.5 percent in the third. Excluding food and energy prices, the PCE price index increased 1.3 percent after increasing 1.7 percent.

Disposable Personal Income

Real disposable personal income increased 1.5 percent in the fourth quarter, following an increase of 2.6 percent in the third. The personal saving rate was 5.6 percent in the fourth quarter, compared with 5.8 percent in the third.

Looking Ahead: Advance Services Report

Beginning with the “second” estimate of GDP for the fourth quarter of 2016, BEA plans to incorporate newly available Census Bureau data from the “Advance Services Report.” Statistics from this report will reflect limited detail compared with the services data that are available as part of the Census Bureau’s Quarterly Services Survey, which BEA currently incorporates into its “third” estimates of private fixed investment in intellectual property products and consumer spending for services. Additional information is available in the BEA FAQ, [“How will BEA use the Census Bureau’s new Advance Services Report in its estimates?”](#)

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**Table A1. KEY ASSUMPTIONS FOR THE ADVANCE
ESTIMATE OF GDP FOR THE FOURTH 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, 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 December 2016 are shown in the last column of the table. For most series shown, the data for November are preliminary and subject to further revision. Occasionally, the data for earlier months are also subject to revision. (State and local government structures are no longer available in this table because of changes in BEA seasonal adjustment methodology.)

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

		2016					
		Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Private fixed investment:							
Nonresidential structures:							
1	Value of new nonresidential construction put in place.....	428.3	432.2	432.6	426.2	429.9	428.0
Residential structures:							
Value of new residential construction put in place:							
2	Single family.....	238.6	237.0	236.7	243.3	247.6	249.4
3	Multifamily.....	59.7	61.1	61.5	63.6	61.9	62.3
Change in private inventories:							
NOTE: Historical (Jul.–Oct.) data reflect concurrent seasonal factors.							
4	Change in inventories for nondurable manufacturing.....	-4.5	6.7	-10.4	6.9	7.8	16.9

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**Table A2. ADVANCE ECONOMIC INDICATORS REPORT DATA FOR THE ADVANCE
ESTIMATE OF GDP FOR THE FOURTH QUARTER OF 2016**

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 November and December are preliminary and subject to further revision.

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

	2016		
	Oct.	Nov.	Dec.
Change in private inventories:			
1 Merchant wholesalers inventories.....	589.4	595.2	601.1
2 Retail inventories.....	603.3	608.4	608.3
Net exports of goods:			
3 U.S. exports of goods, Census basis...	122.9	121.8	125.5
4 U.S. imports of goods, Census basis...	184.6	187.2	190.5

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