

# Technical Note

## Gross Domestic Product Fourth Quarter of 2016 (Second Estimate)

February 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 fourth 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. The March issue of the *Survey of Current Business*, BEA's online monthly journal, will include a more detailed analysis of the estimates ("GDP and the Economy").

### Sources of Revision to Real GDP

Real GDP was unrevised from the advance estimate, increasing 1.9 percent (annual rate) in the fourth quarter after increasing 3.5 percent in the third quarter. An upward revision to consumer spending was offset by downward revisions to gross private domestic investment and to state and local government consumption expenditures and gross investment.

- The upward revision to consumer spending reflected upward revisions to both goods and services. The upward revision to goods was primarily to motor vehicles and parts reflecting an upward revision to net purchases of used motor vehicles. The upward revision to used motor vehicles reflected the incorporation of revised Census Bureau's retail trade data. The revision to services reflected an upward revision to healthcare that was partly offset by a downward revision to final consumption expenditures of nonprofit institutions serving households (NPISH). These revisions reflect the incorporation of newly available information from the Census Bureau's Advance Quarterly Services Report.
- The downward revision to gross private domestic investment reflected downward revisions to nonresidential fixed investment in intellectual property products, to nonresidential fixed investment in equipment, and to inventory investment.
  - The downward revision to intellectual property products was in all three categories (software; research and development; and entertainment, literary, and artistic originals) and reflected the incorporation of newly available information from the Census Bureau's Advance Quarterly Services Report as well as newly available R&D expense data from company financial reports.
  - The downward revision to equipment primarily reflected an upward revision to aircraft exports, which are a subtraction in the calculation of fixed investment. The revision to

aircraft exports reflected the incorporation of newly available Census Bureau data on detailed export statistics for the month of December.

- The downward revision to inventory investment primarily reflected a downward revision to nonmerchant wholesalers for motor vehicles reflecting revised Census Bureau inventories data. The downward revision to farm inventories reflected newly available data from the Economic Research Service's farm income forecast.
- The downward revision to state and local government consumption expenditures and gross investment reflected the incorporation of revised and newly available construction statistics from the Census Bureau.

### **Revisions to Wages and Salaries in the Third and Fourth Quarters**

In addition to presenting revised 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 \$119.4 billion in the third quarter of 2016, an upward revision of \$10.0 billion. These estimates reflect the most recently available wage and salary tabulations for the third quarter from the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages (QCEW) program for all states. Real GDI is now estimated to have increased 5.0 percent in the third quarter, an upward revision of 0.2 percentage point. In addition to the revisions to third quarter wages and salaries, fourth quarter wages and salaries are now estimated to have increased \$78.8 billion, an upward revision of \$1.0 billion. The upward revision to the fourth quarter primarily reflects the incorporation of revised data for the months of September through December from the BLS Current Employment Statistics.

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**Table A. SOURCE DATA FOR THE ADVANCE AND SECOND ESTIMATES OF GDP FOR THE FOURTH QUARTER OF 2016**

This table shows the actual data used for the second estimate of GDP for the fourth quarter of 2016. For nonresidential and residential structures and nondurable manufacturing inventories, actual data for December were not available in time for inclusion in the advance GDP estimate and BEA made assumptions for these source data. For merchant wholesale and retail inventories and net exports, the revisions for December are calculated from the values from the Census Bureau's Advance Economic Indicators report. Merchant wholesale and retail inventories reflect concurrent seasonal factors for all months.

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

		<b>2016</b>					
		Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
<b>Private fixed investment:</b>							
Nonresidential structures:							
1	Value of new nonresidential construction put in place.....	428.3	432.2	432.6	426.6	430.1	430.1
	Revision.....	0.0	0.0	0.0	0.5	0.1	2.0
Residential structures:							
Value of new residential construction put in place:							
2	Single family.....	238.6	237.0	236.7	243.8	249.0	250.4
	Revision.....	0.0	0.0	0.0	0.5	1.4	0.9
3	Multifamily.....	59.7	61.1	61.5	62.5	62.0	63.7
	Revision.....	0.0	0.0	0.0	-1.1	0.1	1.4
<b>Change in private inventories:</b>							
4	Change in inventories for nondurable manufacturing.....	-4.5	6.7	-10.4	10.6	18.4	14.1
	Revision.....	0.0	0.0	0.0	3.6	10.6	-2.8
5	Change in inventories for merchant wholesale.....	-1.9	-11.6	9.1	-10.2	75.3	70.5
	Revision.....	---	---	---	---	---	-0.6
6	Change in inventories for retail industries..	-28.5	47.5	12.1	-35.4	67.1	3.9
	Revision.....	---	---	---	---	---	4.2
<b>Net exports of goods:</b>							
7	U.S. exports of goods, Census basis.....	123.8	124.7	126.1	122.6	121.6	126.6
	Revision.....	0.0	0.0	0.0	-0.3	-0.2	1.1
8	U.S. imports of goods, Census basis.....	182.5	183.8	182.1	184.7	187.2	190.9
	Revision.....	0.0	0.0	0.0	0.1	0.1	0.4