

GDP and the Economy

Second Estimates for the Fourth Quarter of 2016

REAL GROSS domestic product (GDP) increased 1.9 percent at an annual rate in the fourth quarter of 2016, according to the second estimates of the national income and product accounts (NIPAs) (chart 1 and table 1).¹ In the advance estimates, the increase in real GDP was also 1.9 percent. With the second estimate for the fourth quarter, the general picture of economic growth remains the same; the increase in consumer spending was larger than previously estimated, and increases in state and local government spending and in nonresidential fixed investment were smaller.² The second estimates reflect the incorporation of newly available information from the Census Bureau's Advance Quarterly Services Report; for details, see ["How will BEA use the Census Bureau's new Advance Quarterly Services Report in its estimates?"](#) on BEA's Web site.

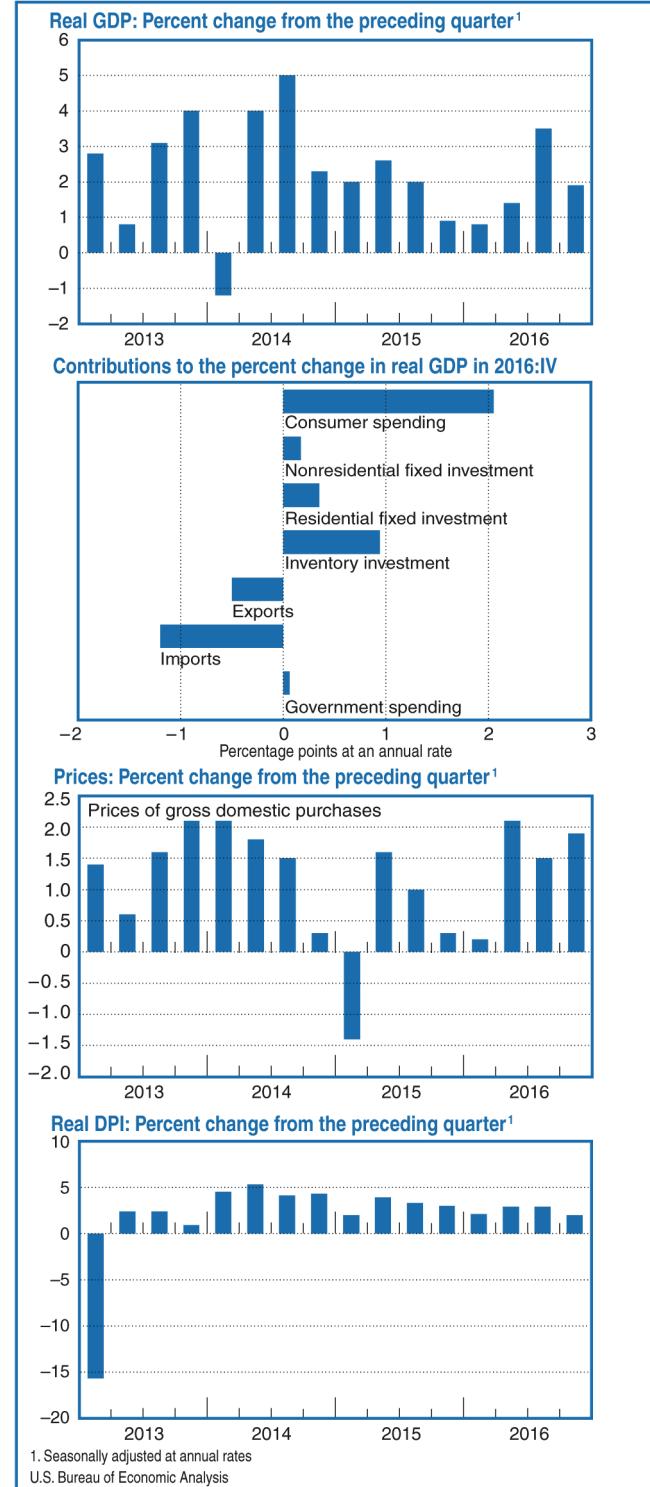
The fourth-quarter increase in real GDP reflected positive contributions from consumer spending, inventory investment, residential fixed investment, nonresidential fixed investment, and state and local government spending. These increases were partly offset by negative contributions from exports and federal government spending. Imports, which are a subtraction in the calculation of GDP, increased.

- Prices of goods and services purchased by U.S. residents increased 1.9 percent in the fourth quarter after increasing 1.5 percent in the third quarter. Energy prices increased more in the fourth quarter than in the third quarter, and food prices decreased less. Excluding food and energy, prices increased 1.5 percent in the fourth quarter after increasing 1.7 percent in the third quarter (see table 7).
- Real disposable personal income (DPI) increased 2.0 percent in the fourth quarter after increasing 2.9 percent in the third quarter (revised). Current-dollar DPI increased 4.0 percent after increasing 4.4 percent (revised). (See ["Revised Third-Quarter 2016 Income Estimates"](#) on page 10.)

1. "Real" estimates are in chained (2009) dollars, and price indexes are chain-type measures. Each GDP estimate for a quarter (advance, second, and third) incorporates increasingly comprehensive and improved source data; for more information, see ["The Revisions to GDP, GDI, and Their Major Components"](#) in the August 2014 SURVEY OF CURRENT BUSINESS. Quarterly estimates are expressed at seasonally adjusted annual rates, which reflect a rate of activity for a quarter as if it were maintained for a year.

2. In this article, "consumer spending" refers to "personal consumption expenditures," "inventory investment" refers to "change in private inventories," and "government spending" refers to "government consumption expenditures and gross investment."

Chart 1. GDP, Prices, Disposable Personal Income (DPI)



Lisa S. Mataloni prepared this article.

Real GDP Overview

Table 1. Real Gross Domestic Product (GDP) and Related Measures
 [Seasonally adjusted at annual rates]

	Share of current-dollar GDP (percent)	Change from preceding period (percent)				Contribution to percent change in real GDP (percentage points)			
		2016				2016			
		IV	I	II	III	IV	I	II	III
Gross domestic product¹	100.0	0.8	1.4	3.5	1.9	0.8	1.4	3.5	1.9
Personal consumption expenditures.....	68.9	1.6	4.3	3.0	3.0	1.11	2.88	2.03	2.05
Goods	22.2	1.2	7.1	3.5	5.7	0.25	1.51	0.77	1.23
Durable goods	7.6	-0.6	9.8	11.6	11.5	-0.05	0.70	0.84	0.83
Nondurable goods	14.5	2.1	5.7	-0.5	2.8	0.30	0.80	-0.07	0.40
Services	46.7	1.9	3.0	2.7	1.8	0.86	1.37	1.26	0.81
Gross private domestic investment.....	16.4	-3.3	-7.9	3.0	9.2	-0.56	-1.34	0.50	1.45
Fixed investment	16.2	-0.9	-1.1	0.1	3.2	-0.15	-0.18	0.02	0.51
Nonresidential	12.3	-3.4	1.0	1.4	1.3	-0.44	0.12	0.18	0.17
Structures.....	2.6	0.1	-2.1	12.0	-4.5	0.00	-0.06	0.30	-0.12
Equipment	5.6	-9.5	-2.9	-4.5	1.9	-0.59	-0.17	-0.26	0.11
Intellectual property products	4.1	3.7	9.0	3.2	4.5	0.15	0.35	0.13	0.18
Residential	3.8	7.8	-7.7	-4.1	9.6	0.29	-0.31	-0.16	0.35
Change in private inventories.....	0.3	.....	.....	.....	-0.41	-1.16	0.49	0.94	.....
Net exports of goods and services	-2.9	.....	.....	.....	0.01	0.18	0.85	-1.70	.....
Exports.....	12.0	-0.7	1.8	10.0	-4.0	-0.09	0.21	1.16	-0.50
Goods.....	7.8	0.1	1.7	14.4	-6.6	0.01	0.13	1.08	-0.54
Services	4.2	-2.2	1.9	2.0	1.0	-0.09	0.08	0.08	0.04
Imports.....	14.9	-0.6	0.2	2.2	8.5	0.09	-0.03	-0.31	-1.20
Goods.....	12.2	-1.3	0.0	0.5	10.6	0.16	0.00	-0.06	-1.21
Services	2.7	2.5	1.1	9.8	-0.4	-0.07	-0.03	-0.26	0.01
Government consumption expenditures and gross investment.....	17.5	1.6	-1.7	0.8	0.4	0.28	-0.30	0.14	0.06
Federal	6.6	-1.5	-0.4	2.4	-1.2	-0.10	-0.02	0.16	-0.08
National defense	3.9	-3.2	-3.2	2.0	-3.6	-0.13	-0.13	0.08	-0.14
Nondefense	2.8	0.9	3.8	3.0	2.3	0.03	0.10	0.08	0.06
State and local	10.9	3.5	-2.5	-0.2	1.3	0.39	-0.28	-0.02	0.14
Addenda:									
Gross domestic income (GDI) ² .....	.....	0.8	0.7	5.0	.....	.....	.....	.....	.....
Average of GDP and GDI .....	.....	0.8	1.1	4.3	.....	.....	.....	.....	.....
Final sales of domestic product	99.7	1.2	2.6	3.0	0.9	1.24	2.57	3.03	0.92
Goods	29.6	-1.4	2.2	7.6	2.3	-0.42	0.66	2.22	0.69
Services.....	62.4	1.1	2.4	2.1	1.2	0.68	1.48	1.34	0.75
Structures	8.0	7.4	-8.7	-0.6	5.3	0.57	-0.73	-0.05	0.41
Motor vehicle output	3.0	2.2	7.5	3.2	7.1	0.06	0.21	0.09	0.20
GDP excluding motor vehicle output	97.0	0.8	1.2	3.5	1.7	0.77	1.20	3.42	1.65
Final sales of computers	0.4	54.3	17.8	-9.0	-3.5	0.18	0.07	-0.04	-0.01
GDP excluding final sales of computers	99.6	0.7	1.3	3.6	1.9	0.65	1.34	3.55	1.87
Research and development (R&D)	2.6	0.6	11.8	-0.1	4.1	0.01	0.29	0.00	0.11
GDP excluding R&D	97.4	0.8	1.2	3.6	1.8	0.82	1.12	3.52	1.75

The deceleration in real GDP in the fourth quarter primarily reflected a downturn in exports, an acceleration in imports, 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 upturn in residential fixed investment primarily reflected upturns in investment in new single-family structures and in "other" structures.

The acceleration in inventory investment reflected a larger increase in nonfarm inventory investment that was partly offset by a downturn in farm inventory investment.

The downturn in exports reflected a downturn in goods exports and a slowdown in services exports.

The acceleration in imports reflected an acceleration in imports of goods that was partly offset by a downturn in imports of services.

The downturn in federal spending primarily reflected a downturn in national defense spending.

The upturn in state and local government spending primarily reflected an upturn in gross investment in structures that was partly offset by a deceleration in consumption expenditures.

In the third quarter of 2016, real gross domestic income (GDI), which measures the output of the economy as the incomes earned and the costs incurred in production, increased 5.0 percent (revised up 0.2 percentage point from the advance estimate). The fourth-quarter estimate will be available with the release of the third estimate of GDP in March when the source data become available.

1. The estimates of GDP under the contribution columns are also percent changes.

2. GDI is deflated by the implicit price deflator for GDP. The third-quarter change in GDI reflects the incorporation of revised wage and salary estimates.

NOTE. Percent changes are from NIPA tables 1.1.1 and 1.2.1, contributions are from NIPA tables 1.1.2 and 1.2.2, and shares are from NIPA table 1.1.10, or they are calculated from NIPA table 1.2.5.

Consumer Spending

Table 2. Real Personal Consumption Expenditures (PCE)

[Seasonally adjusted at annual rates]

	Share of current-dollar PCE (percent)	Change from preceding period (percent)				Contribution to percent change in real PCE (percentage points)			
		2016				2016			
		IV	I	II	III	IV	I	II	III
PCE ¹	100.0	1.6	4.3	3.0	3.0	1.6	4.3	3.0	3.0
Goods.....	32.2	1.2	7.1	3.5	5.7	0.37	2.23	1.12	1.80
Durable goods.....	11.1	-0.6	9.8	11.6	11.5	-0.07	1.04	1.22	1.21
Motor vehicles and parts....	3.8	-8.5	9.0	19.9	16.0	-0.33	0.32	0.68	0.57
Furnishings and durable household equipment....	3.1	4.9	9.2	6.0	4.3	0.12	0.22	0.15	0.10
Recreational goods and vehicles.....	3.1	6.8	14.5	9.7	14.6	0.20	0.42	0.29	0.42
Other durable goods.....	1.7	-3.6	4.2	6.2	6.8	-0.06	0.07	0.11	0.11
Non durable goods.....	21.1	2.1	5.7	-0.5	2.8	0.44	1.19	-0.09	0.59
Food and beverages purchased for off-premises consumption....	7.2	3.2	7.5	2.5	6.6	0.23	0.53	0.18	0.46
Clothing and footwear.....	2.9	-0.7	4.8	-0.8	0.1	-0.02	0.15	-0.02	0.00
Gasoline and other energy goods.....	2.2	5.8	-0.3	-2.4	-5.9	0.12	-0.01	-0.05	-0.13
Other nondurable goods....	8.8	1.3	6.0	-2.3	2.9	0.11	0.52	-0.20	0.26
Services.....	67.8	1.9	3.0	2.7	1.8	1.26	2.05	1.84	1.20
Household consumption expenditures.....	65.0	1.9	3.3	2.3	1.9	1.25	2.16	1.50	1.28
Housing and utilities.....	18.2	0.7	4.4	2.6	-1.1	0.13	0.80	0.47	-0.21
Health care.....	17.2	5.6	7.3	0.6	5.8	0.93	1.23	0.10	0.97
Transportation services.....	2.9	-1.3	-1.6	2.6	2.7	-0.04	-0.05	0.08	0.08
Recreation services.....	3.8	-0.6	-6.5	5.5	1.8	-0.02	-0.25	0.20	0.07
Food services and accommodations.....	6.6	2.5	2.7	2.2	-0.1	0.16	0.18	0.15	0.00
Financial services and insurance.....	7.5	-2.3	-0.5	4.4	1.6	-0.18	-0.03	0.33	0.13
Other services.....	8.7	3.0	3.2	1.8	2.7	0.26	0.28	0.16	0.24
Final consumption expenditures of NPISHs ²	2.8	0.3	-4.3	13.2	-2.6	0.01	-0.12	0.34	-0.07
Gross output of NPISHs ³ ...	11.1	3.8	5.5	3.6	3.7	0.41	0.60	0.39	0.41
Less: Receipts from sales of goods and services by NPISHs ⁴	8.4	5.0	8.9	0.6	5.9	0.40	0.71	0.05	0.48

NPISHs Nonprofit institutions serving households

1. The estimates under the contribution columns are also percent changes.

2. Gross operating expenses less primary sales to households.

3. Net of unrelated sales, secondary sales, and sales to business, to government, and to the rest of the world; excludes own-account investment (construction, software, and research and development).

4. Excludes unrelated sales, secondary sales, and sales to business, to government, and to the rest of the world; includes membership dues and fees.

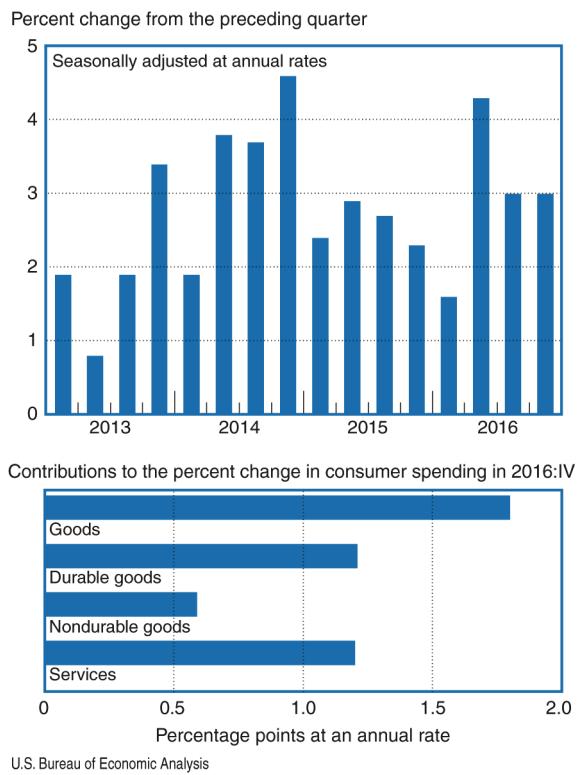
NOTE. Percent changes are from NIPA table 2.3.1, contributions are from NIPA table 2.3.2, and shares are calculated from NIPA table 2.3.5.

Consumer spending increased 3.0 percent in the fourth quarter, the same rate of increase as in the third quarter. An acceleration in spending for goods was offset by a deceleration in spending for services.

The acceleration in spending for goods reflected an upturn in spending for nondurable goods that was partly offset by a slight deceleration in spending for durable goods.

The upturn in spending for nondurable goods primarily reflected an upturn in "other" nondurable goods (mainly pharmaceutical products) and an acceleration in spending for food and beverages purchased for off-premises consumption.

The main contributors to the deceleration in spending for services were a downturn in housing and utilities (specifically electricity and gas), a downturn in spending by nonprofit institutions serving households, a deceleration in financial services and insurance, a downturn in food services and accommodations, and a deceleration in recreation services. These movements were partly offset by an acceleration in spending for health care.

Chart 2. Real Personal Consumption Expenditures

Private Fixed Investment

Table 3. Real Private Fixed Investment (PFI)
[Seasonally adjusted at annual rates]

	Share of current-dollar PFI (percent)	Change from preceding period (percent)				Contribution to percent change in real PFI (percentage points)			
		2016				2016			
		IV	I	II	III	IV	I	II	III
Private fixed investment¹	100.0	-0.9	-1.1	0.1	3.2	-0.9	-1.1	0.1	3.2
Nonresidential.....	76.3	-3.4	1.0	1.4	1.3	-2.68	0.75	1.05	1.04
Structures	16.3	0.1	-2.1	12.0	-4.5	0.02	-0.34	1.85	-0.75
Commercial and health care	5.8	22.6	12.6	34.2	6.3	1.04	0.63	1.65	0.36
Manufacturing	2.2	-10.7	-8.5	22.1	-34.1	-0.28	-0.21	0.49	-0.99
Power and communication	3.5	0.6	6.8	-0.1	-7.8	0.02	0.23	0.00	-0.29
Mining exploration, shafts, and wells.....	1.6	-32.7	-57.4	-30.0	23.6	-0.88	-1.60	-0.57	0.33
Other structures ²	3.2	4.2	22.1	9.6	-4.8	0.12	0.61	0.29	-0.16
Equipment	34.5	-9.5	-2.9	-4.5	1.9	-3.59	-1.06	-1.61	0.67
Information processing equipment	10.6	-3.0	-4.9	9.0	4.3	-0.32	-0.53	0.92	0.45
Computers and peripheral equipment	2.4	4.6	11.7	-4.2	-8.8	0.11	0.28	-0.11	-0.23
Other ³	8.2	-5.2	-9.6	13.6	8.6	-0.44	-0.81	1.03	0.68
Industrial equipment	7.5	-3.8	9.4	-2.5	4.6	-0.29	0.68	-0.19	0.34
Transportation equipment	9.4	-12.8	-5.4	-17.0	-1.2	-1.40	-0.55	-1.81	-0.09
Other equipment ⁴	7.0	-18.8	-8.5	-7.1	-0.3	-1.59	-0.65	-0.52	-0.02
Intellectual property products	25.4	3.7	9.0	3.2	4.5	0.90	2.14	0.80	1.12
Software ⁵	11.3	7.5	4.5	6.7	3.1	0.81	0.50	0.73	0.34
Research and development ⁶	11.3	1.2	17.0	-1.4	3.9	0.13	1.73	-0.16	0.43
Entertainment, literary, and artistic originals ...	2.8	-1.3	-3.0	8.6	13.1	-0.04	-0.08	0.22	0.34
Residential.....	23.7	7.8	-7.7	-4.1	9.6	1.74	-1.88	-0.98	2.17
Structures	23.4	7.8	-7.9	-4.3	9.7	1.71	-1.89	-1.00	2.15
Permanent site.....	10.2	-1.2	-13.5	-8.3	11.1	-0.12	-1.48	-0.87	1.07
Single family	8.2	-5.6	-17.1	-11.5	9.9	-0.48	-1.53	-0.97	0.76
Multifamily	2.1	20.1	2.7	5.3	16.1	0.35	0.05	0.10	0.31
Other structures ⁷	13.2	15.7	-3.2	-1.0	8.6	1.83	-0.41	-0.14	1.08
Equipment.....	0.3	9.6	3.6	7.2	6.0	0.03	0.01	0.02	0.02

1. The estimates under the contribution columns are also percent changes.

2. Consists primarily of religious, educational, vocational, lodging, railroads, farm, and amusement and recreational structures, net purchases of used structures, and brokers' commissions on the sale of structures.

3. Includes communication equipment, nonmedical instruments, medical equipment and instruments, photocopy and related equipment, and office and accounting equipment.

4. Consists primarily of furniture and fixtures, agricultural machinery, construction machinery, mining and oilfield machinery, service industry machinery, and electrical equipment not elsewhere classified.

5. Excludes software "embedded," or bundled, in computers and other equipment.

6. Excludes expenditures for software development, which are included in expenditures for software investment.

7. Consists primarily of manufactured homes, improvements, dormitories, net purchases of used structures, and brokers' commissions and other ownership transfer costs.

Note: Percent changes are from NIPA table 5.3.1; contributions are from NIPA table 5.3.2, and shares are calculated from NIPA table 5.3.5.

Private fixed investment accelerated in the fourth quarter, reflecting an upturn in residential fixed investment that was offset by a slight deceleration in nonresidential fixed investment.

The deceleration in nonresidential fixed investment was due to a downturn in structures that was mostly offset by an upturn in equipment and an acceleration in intellectual property products.

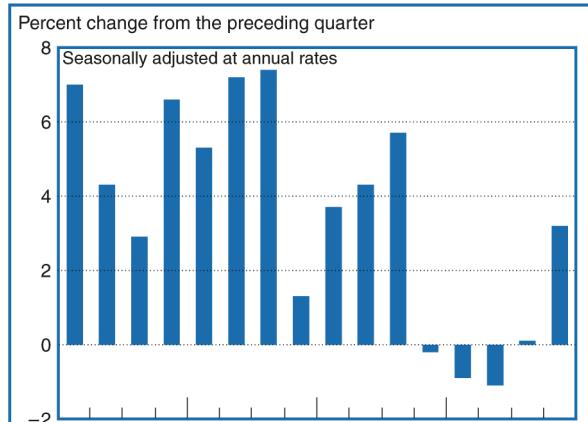
Within structures, all categories contributed to the downturn with the exception of mining exploration, shafts, and wells, which turned up after seven consecutive quarters of decline.

The upturn in equipment reflected a smaller decrease in transportation equipment, an upturn in industrial equipment, and a smaller decrease in "other" equipment that were partly offset by a deceleration in information processing equipment.

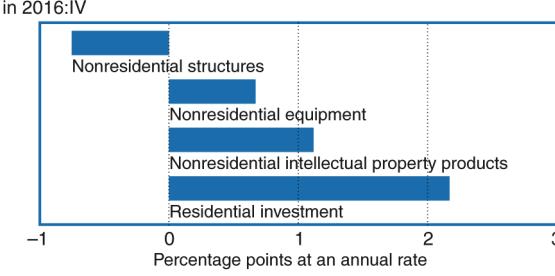
The acceleration in investment in intellectual property products reflected an upturn in research and development and an acceleration in entertainment, literary, and artistic originals that were partly offset by a deceleration in software.

The upturn in residential fixed investment primarily reflected upturns in single-family structures and in "other" structures (mainly brokers' commissions and other ownership transfer costs).

Chart 3. Real Private Fixed Investment



Contributions to the percent change in real private fixed investment in 2016:IV



U.S. Bureau of Economic Analysis

Inventory Investment

Table 4. Change in Real Private Inventories by Industry
 [Billions of chained (2009) dollars; seasonally adjusted at annual rates]

	Level					Change from preceding quarter			
	2015		2016			2016			
	IV	I	II	III	IV	I	II	III	IV
Change in private inventories¹	56.9	40.7	-9.5	7.1	46.2	-16.2	-50.2	16.5	39.1
Farm	-4.1	-5.1	-2.6	0.0	-5.3	-1.0	2.5	2.7	-5.3
Mining, utilities, and construction	9.9	-6.5	-9.9	-11.3	8.8	-16.4	-3.4	-1.4	20.2
Manufacturing	14.3	4.0	-19.5	0.6	3.6	-10.4	-23.5	20.1	3.0
Durable-goods industries	5.9	-0.6	-18.0	0.5	-2.4	-6.4	-17.4	18.5	-2.9
Nondurable-goods industries	8.4	4.5	-1.6	0.1	6.0	-3.9	-6.1	1.7	6.0
Wholesale trade	17.0	12.5	-3.7	3.6	35.5	-4.6	-16.2	7.3	31.9
Durable-goods industries	9.0	-10.5	-5.5	-5.7	27.3	-19.5	5.1	-0.2	33.1
Nondurable-goods industries	8.1	22.0	1.6	8.9	8.9	13.9	-20.4	7.3	0.0
Retail trade	13.1	35.3	14.6	13.3	4.1	22.1	-20.7	-1.3	-9.2
Motor vehicle and parts dealers	1.0	23.6	13.9	14.9	-0.5	22.6	-9.7	1.0	-15.4
Food and beverage stores	-0.1	0.4	2.3	0.9	1.5	0.5	1.9	-1.4	0.6
General merchandise stores	-0.9	0.6	-1.9	-3.0	-0.2	1.5	-2.5	-1.1	2.8
Other retail stores	13.3	11.0	0.3	0.7	3.2	-2.2	-10.7	0.4	2.5
Other industries	8.9	0.0	10.1	-0.3	0.4	-9.0	10.1	-10.4	0.7
Residual ²	-2.4	1.3	1.9	1.5	-1.6	3.7	0.6	-0.4	-3.2
Addenda: Ratios of private inventories to final sales of domestic business:³									
Private inventories to final sales	2.36	2.36	2.34	2.32	2.33	.....	.....	.....	.....
Nonfarm inventories to final sales	2.21	2.21	2.19	2.17	2.18	.....	.....	.....	.....
Nonfarm inventories to final sales of goods and structures	3.91	3.92	3.89	3.85	3.87	.....	.....	.....	.....

1. The levels are from NIPA table 5.7.6B.

2. The residual is the difference between the first line and the sum of the most detailed lines.

3. The ratios are from NIPA table 5.8.6B.

NOTE. The chained-dollar series are calculated as the period-to-period change in end-of-period inventories. Quarterly changes are stated at annual rates. Because the formula for the chain-type quantity indexes uses weights of more than one period, chained-dollar estimates are usually not additive.

Real inventory investment increased \$39.1 billion in the fourth quarter after increasing \$16.5 billion in the third quarter. The larger increase in inventory investment reflected a larger increase in wholesale trade and upturns in mining, utilities, and construction and in “other” industries. These movements were partly offset by a smaller increase in manufacturing and a downturn in farm inventory investment.

Farm inventory investment decreased \$5.3 billion in the fourth quarter after increasing \$2.7 billion in the third quarter.

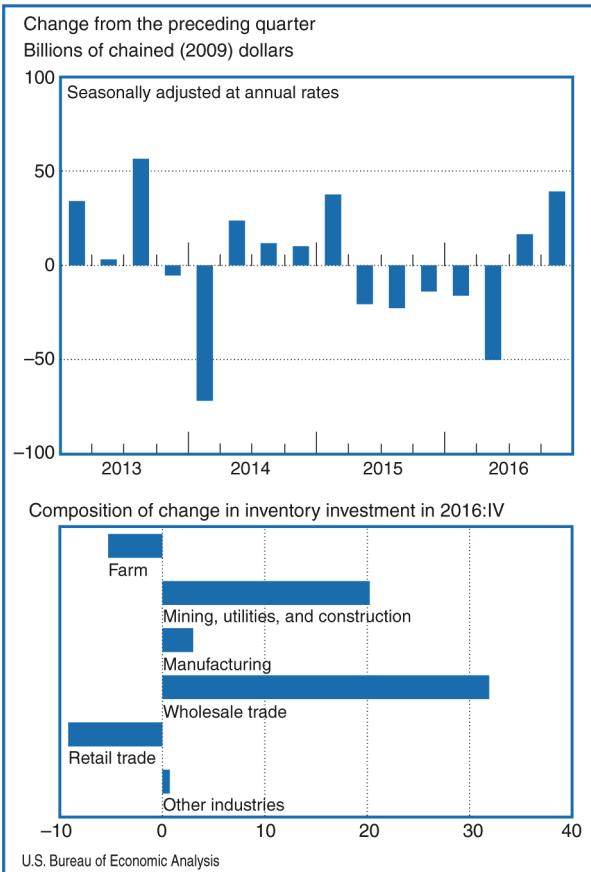
Mining, utilities, and construction increased \$20.2 billion after decreasing \$1.4 billion.

Manufacturing increased \$3.0 billion after increasing \$20.1 billion, reflecting a downturn in durable-goods industries that was partly offset by a larger increase in nondurable-goods industries.

Wholesale trade increased \$31.9 billion after increasing \$7.3 billion. The larger increase reflected an upturn in durable-goods industries that was partly offset by a slowdown in nondurable-goods industries.

Retail trade industries decreased \$9.2 billion after decreasing \$1.3 billion, primarily reflecting a downturn in motor vehicles and parts dealers.

Chart 4. Real Private Inventory Investment



Inventory Investment

The change in real private inventories, often called real private inventory investment, represents the change in the physical stock of goods held by businesses. It includes finished goods, goods at various stages of production, and raw materials.

The change in private inventories is a key component of gross domestic product (GDP), which measures output derived from current production. To include the value of currently produced goods that are not yet sold and to exclude the value of goods produced in previous periods, the change in private inventories must be included in the GDP calculation.

Thus, GDP can also be seen as the sum of final sales of domestic product and the change in private inventories (table 2).

For most industries, the estimates of change in private inventories are prepared by revaluing book-value estimates of inventories from the Census Bureau to a replacement-cost basis and calculating the change over a quarter or a year. BEA provides estimates for incomplete industry data.

Exports and Imports

Table 5. Real Exports and Imports of Goods and Services

[Seasonally adjusted at annual rates]

	Share of current-dollar exports and imports (percent)	Change from preceding period (percent)				Contribution to percent change in real exports and imports (percentage points)			
		2016				2016			
		IV	I	II	III	IV	I	II	III
Exports of goods and services¹	100.0	-0.7	1.8	10.0	-4.0	-0.7	1.8	10.0	-4.0
Exports of goods²	65.1	0.1	1.7	14.4	-6.6	0.06	1.10	9.22	-4.37
Foods, feeds, and beverages	5.9	-10.3	21.1	216.8	-55.5	-0.58	1.05	7.64	-5.27
Industrial supplies and materials	17.9	16.5	0.6	1.4	-2.3	2.62	0.11	0.33	-0.40
Capital goods, except automotive	23.1	-8.4	-0.9	-0.4	8.7	-2.10	-0.21	-0.04	1.91
Automotive vehicles, engines, and parts	6.5	-0.1	2.5	2.9	-10.6	-0.01	0.17	0.21	-0.73
Consumer goods, except food and automotive	8.6	-0.2	-8.1	12.0	2.4	-0.02	-0.74	1.01	0.21
Other	3.1	4.9	25.9	2.4	-2.8	0.14	0.71	0.08	-0.09
Exports of services²	34.9	-2.2	1.9	2.0	1.0	-0.79	0.68	0.75	0.34
Imports of goods and services¹	100.0	-0.6	0.2	2.2	8.5	-0.6	0.2	2.2	8.5
Imports of goods²	81.7	-1.3	0.0	0.5	10.6	-1.08	0.03	0.45	8.53
Foods, feeds, and beverages	4.8	18.5	-6.9	-14.7	9.4	0.81	-0.35	-0.76	0.45
Industrial supplies and materials	16.8	6.3	6.2	6.9	7.1	0.95	0.93	1.09	1.20
Capital goods, except automotive	21.4	-8.9	11.4	0.6	6.0	-2.02	2.36	0.13	1.32
Automotive vehicles, engines, and parts	12.8	0.5	-10.0	4.5	10.2	0.07	-1.37	0.57	1.28
Consumer goods, except food and automotive	21.2	-5.5	-5.1	-1.4	15.1	-1.22	-1.13	-0.30	3.07
Other	4.7	7.8	-8.5	-5.9	29.0	0.35	-0.41	-0.27	1.20
Imports of services²	18.3	2.5	1.1	9.8	-0.4	0.46	0.20	1.75	-0.04
Addenda:									
Exports of agricultural goods ³	6.3	1.0	0.0	1.3	1.6	.....	.....	.....	.....
Exports of nonagricultural goods	58.8	-2.4	-0.3	-0.4	11.9	.....	.....	.....	.....
Imports of nonpetroleum goods	75.2	0.0	0.0	0.0	0.0	.....	.....	.....	.....

1. The estimates under the contribution columns are also percent changes.

2. Exports and imports of certain goods, primarily military equipment purchased and sold by the federal government, are included in services.

3. Includes parts of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable nonautomotive consumer goods.

NOTE. Percent changes are from NIPA table 4.2.1, contributions are from NIPA table 4.2.2, and shares are calculated from NIPA table 4.2.5.

Exports of goods and services turned down in the fourth quarter. The downturn reflected a downturn in goods exports and a slight deceleration in services exports.

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

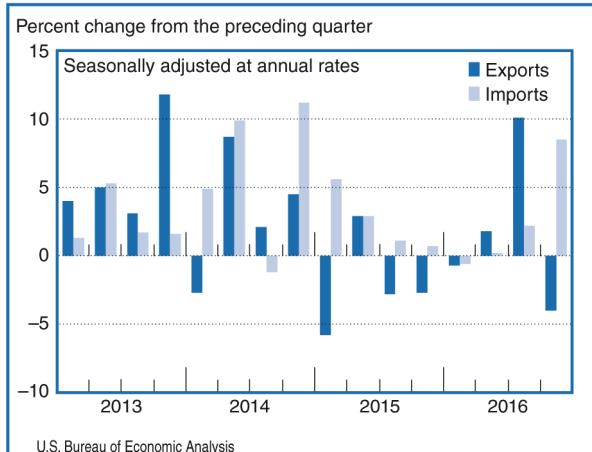
The deceleration in exports of services primarily reflected a downturn in travel that was partly offset by an upturn in exports of "other" business services.

Imports of goods and services accelerated in the fourth quarter. The acceleration reflected an acceleration in imports of goods that was partly offset by a downturn in imports of services.

The acceleration in goods imports reflected positive contributions from all categories and was led by an upturn in nonfood, nonautomotive consumer goods.

The downturn in services imports primarily reflected a downturn in charges for the use of intellectual property, which reflected the fees paid for the broadcast rights to the 2016 Summer Olympics in the third quarter of 2016.

Chart 5. Real Exports and Imports of Goods and Services



Government Spending

Table 6. Real Government Consumption Expenditures and Gross Investment (CEGI)
 [Seasonally adjusted at annual rates]

	Share of current-dollar CEGI (percent)	Change from preceding period (percent)				Contribution to percent change in real CEGI (percentage points)			
		2016				2016			
		IV	I	II	III	IV	I	II	III
Government consumption expenditures and gross investment	100.0	1.6	-1.7	0.8	0.4	1.6	-1.7	0.8	0.4
Consumption expenditures	81.1	-0.1	0.4	1.8	-0.8	-0.07	0.34	1.45	-0.64
Gross investment	18.9	9.0	-10.0	-3.6	5.4	1.66	-2.01	-0.68	0.99
Federal	37.9	-1.5	-0.4	2.4	-1.2	-0.58	-0.13	0.90	-0.45
National defense	22.1	-3.2	-3.2	2.0	-3.6	-0.72	-0.71	0.45	-0.81
Consumption expenditures	17.7	-3.3	-3.2	1.9	-4.8	-0.61	-0.58	0.34	-0.88
Gross investment	4.4	-2.4	-2.9	2.5	1.7	-0.11	-0.13	0.11	0.07
Nondefense	15.8	0.9	3.8	3.0	2.3	0.14	0.58	0.46	0.36
Consumption expenditures	12.0	1.8	4.7	3.2	2.0	0.21	0.55	0.37	0.24
Gross investment	3.7	-1.8	0.9	2.3	3.2	-0.07	0.03	0.09	0.12
State and local	62.1	3.5	-2.5	-0.2	1.3	2.17	-1.54	-0.14	0.80
Consumption expenditures	51.4	0.6	0.7	1.4	0.0	0.33	0.37	0.74	0.00
Gross investment	10.7	18.0	-16.0	-7.9	7.8	1.84	-1.92	-0.88	0.80

1. The estimates under the contribution columns are also percent changes.

Note. Percent changes are from NIPA table 3.9.1, contributions are from NIPA table 3.9.2, and shares are calculated from NIPA table 3.9.5.

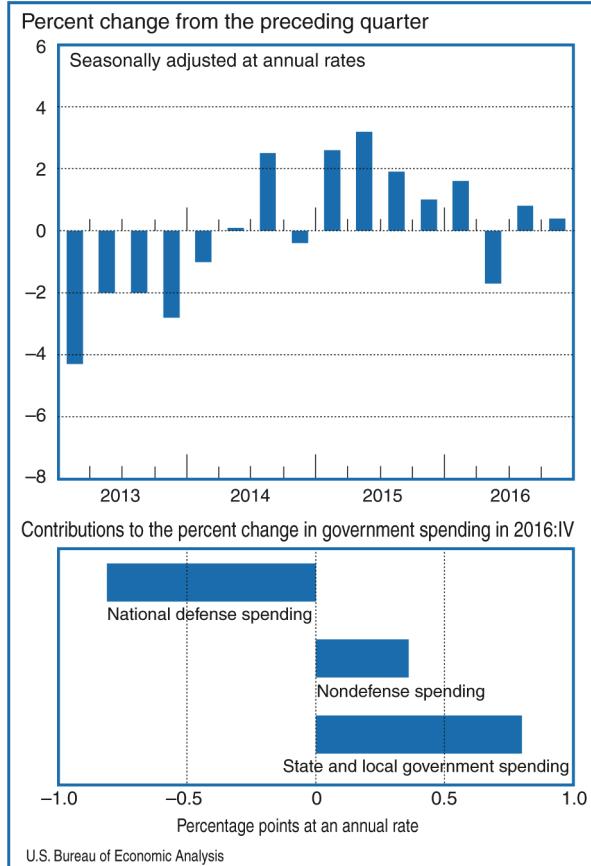
Government spending decelerated in the fourth quarter. The deceleration reflected a downturn in federal government spending that was partly offset by an upturn state and local government spending.

The downturn in federal government spending primarily reflected a downturn in federal defense spending.

The downturn in federal defense spending primarily reflected a downturn in consumption expenditures (mainly intermediate goods and services purchased).

The upturn in state and local government spending reflected an upturn in gross investment (specifically structures) and a slowdown in consumption expenditures.

Chart 6. Real Government Consumption Expenditures and Gross Investment



Government Spending

“Government consumption expenditures and gross investment,” or “government spending,” consists of two components: (1) consumption expenditures by federal government and by state and local governments and (2) gross investment by government and government-owned enterprises.

Government consumption expenditures consists of the goods and services that are produced by general government (less any sales to other sectors and investment goods produced by government itself). Governments generally provide services to the general public without charge. The value of government production—that is, government’s gross output—is measured as spending for labor and for intermediate goods and services and a charge for consumption of fixed capital (which represents a partial measure of the services provided by government-owned fixed capital).

Gross investment consists of new and used structures (such as highways and dams), of equipment, and of intellectual property products purchased or produced by government and government-owned enterprises.

Government consumption expenditures and gross investment excludes current transactions of government-owned enterprises, current transfer payments, interest payments, subsidies, and transactions in financial assets and nonproduced assets, such as land.

Prices

Table 7. Prices for Gross Domestic Purchases

[Percent change at annual rates; based on seasonally adjusted index numbers (2009=100)]

	Change from preceding period (percent)				Contribution to percent change in gross domestic purchases prices (percentage points)			
	2016				2016			
	I	II	III	IV	I	II	III	IV
Gross domestic purchases¹	0.2	2.1	1.5	1.9	0.2	2.1	1.5	1.9
Personal consumption expenditures	0.3	2.0	1.5	1.9	0.19	1.35	0.98	1.30
Goods	-4.0	0.8	-0.9	1.4	-0.87	0.17	-0.18	0.31
Durable goods	-0.9	-2.5	-4.1	-3.2	-0.06	-0.19	-0.30	-0.24
Nondurable goods	-5.6	2.5	0.8	4.0	-0.81	0.36	0.12	0.56
Services	2.4	2.6	2.6	2.2	1.06	1.18	1.16	0.98
Gross private domestic investment...	0.6	1.8	1.1	1.9	0.09	0.29	0.17	0.30
Fixed investment	0.6	2.2	1.4	1.9	0.10	0.35	0.21	0.30
Nonresidential	0.2	1.2	0.2	0.9	0.03	0.14	0.03	0.11
Structures	-1.5	3.2	-0.6	2.6	-0.04	0.08	-0.01	0.07
Equipment	0.3	0.1	1.0	-0.3	0.02	0.01	0.06	-0.02
Intellectual property products	1.3	1.4	-0.4	1.6	0.05	0.05	-0.02	0.06
Residential	2.0	5.6	5.2	5.1	0.07	0.20	0.19	0.18
Change in private inventories .....	.....	.....	.....	.....	-0.01	-0.06	-0.05	0.00
Government consumption expenditures and gross investment	-0.4	2.7	2.1	2.1	-0.08	0.47	0.37	0.35
Federal	1.5	2.1	1.7	1.6	0.10	0.14	0.11	0.11
National defense	0.9	2.1	1.6	1.5	0.04	0.08	0.06	0.06
Nondefense	2.3	2.2	1.7	1.9	0.06	0.06	0.05	0.05
State and local	-1.6	3.1	2.4	2.3	-0.17	0.33	0.26	0.25
Addenda:								
Gross domestic purchases:								
Food	-1.5	-1.8	-2.3	-1.3	-0.07	-0.09	-0.11	-0.06
Energy goods and services	-31.0	15.0	1.2	26.3	-0.98	0.35	0.03	0.63
Excluding food and energy	1.4	2.0	1.7	1.5	1.25	1.84	1.60	1.38
Personal consumption expenditures (PCE):								
Food and beverages purchased for off-premises consumption	-1.7	-1.8	-2.1	-1.2	.....	.....	.....	.....
Energy goods and services	-30.6	15.5	2.1	26.1	.....	.....	.....	.....
Excluding food and energy	2.1	1.8	1.7	1.2	.....	.....	.....	.....
Gross domestic product (GDP)	0.5	2.3	1.4	2.0	.....	.....	.....	.....
Exports of goods and services	-5.1	3.9	2.4	2.5	.....	.....	.....	.....
Imports of goods and services	-6.0	2.1	2.9	2.1	.....	.....	.....	.....

1. The estimates under the contribution columns are also percent changes.

Note: Most percent changes are from NIPA table 1.6.7; percent changes for PCE for food and energy goods and services and for PCE excluding food and energy are from NIPA table 2.3.7. Contributions are from NIPA table 1.6.8. GDP, export, and import prices are from NIPA table 1.1.7.

Note on Prices

BEA's gross domestic purchases price index is the most comprehensive index of prices paid by U.S. residents for all goods and services, regardless of whether those goods and services were produced domestically or imported. It is derived from prices of consumer spending, private investment, and government spending.

The GDP price index measures the prices of goods and services produced in the United States, including the prices of goods and services produced for export.

The difference between the gross domestic purchases price index and the GDP price index reflects the differences between imports prices (included in the gross domestic purchases index) and exports prices (included in the GDP price index). For other measures that are affected by import and export prices, see the FAQ ["How do the effects of dollar depreciation show up in the GDP accounts?"](#) on BEA's Web site.

Prices of goods and services purchased by U.S. residents, as measured by the price index for gross domestic purchases, increased 1.9 percent in the fourth quarter after increasing 1.5 percent in the third quarter. The acceleration primarily reflected an acceleration in the prices paid for consumer spending.

The acceleration in the prices paid for consumer spending reflected an upturn in the prices paid for goods that was partly offset by a deceleration in the prices paid for services.

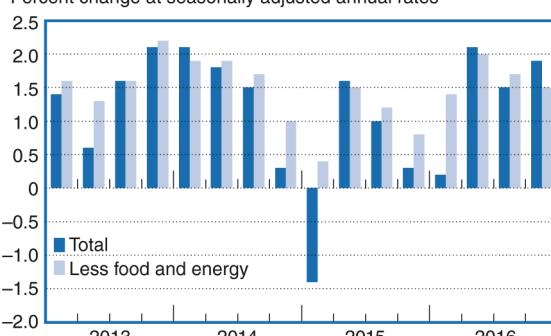
The upturn in the prices paid for goods reflected an acceleration in the prices paid for nondurable goods and a smaller decrease in the prices paid for durable goods. The acceleration in nondurable goods prices was mainly due to an upturn in the prices paid for gasoline and other energy goods.

Prices paid for nonresidential fixed investment accelerated in the fourth quarter, increasing 0.9 percent after increasing 0.2 percent. Upturns in the prices paid for structures and for intellectual property products were partly offset by a downturn in the prices paid for equipment.

Consumer prices excluding food and energy, a measure of the "core" rate of inflation, decelerated, increasing 1.2 percent after increasing 1.7 percent. Energy prices increased more in the fourth quarter than in the third quarter, and food prices decreased less.

Chart 7. Gross Domestic Purchases Prices

Percent change at seasonally adjusted annual rates



U.S. Bureau of Economic Analysis

Revisions

Table 8. Advance and Second Estimates for the Fourth Quarter of 2016

[Seasonally adjusted at annual rates]

	Change from preceding quarter (percent)			Contribution to percent change in real GDP (percentage points)		
	Advance estimate	Second estimate	Second estimate minus advance estimate	Advance	Second	Second estimate minus advance estimate
Gross domestic product (GDP)¹	1.9	1.9	0.0	1.9	1.9	0.0
Personal consumption expenditures	2.5	3.0	0.5	1.70	2.05	0.35
Goods	5.2	5.7	0.5	1.11	1.23	0.12
Durable goods	10.9	11.5	0.6	0.79	0.83	0.04
Nondurable goods	2.3	2.8	0.5	0.32	0.40	0.08
Services	1.3	1.8	0.5	0.58	0.81	0.23
Gross private domestic investment	10.7	9.2	-1.5	1.67	1.45	-0.22
Fixed investment	4.2	3.2	-1.0	0.67	0.51	-0.16
Nonresidential	2.4	1.3	-1.1	0.30	0.17	-0.13
Structures	-5.0	-4.5	0.5	-0.14	-0.12	0.02
Equipment	3.1	1.9	-1.2	0.18	0.11	-0.07
Intellectual property products	6.4	4.5	-1.9	0.26	0.18	-0.08
Residential	10.2	9.6	-0.6	0.37	0.35	-0.02
Change in private inventories .....	.....	.....	.....	1.00	0.94	-0.06
Net exports of goods and services .....	.....	.....	.....	-1.70	-1.70	0.00
Exports	-4.3	-4.0	0.3	-0.53	-0.50	0.03
Goods	-6.9	-6.6	0.3	-0.57	-0.54	0.03
Services	0.9	1.0	0.1	0.04	0.04	0.00
Imports	8.3	8.5	0.2	-1.17	-1.20	-0.03
Goods	10.9	10.6	-0.3	-1.25	-1.21	0.04
Services	-2.7	-0.4	2.3	0.08	0.01	-0.07
Government consumption expenditures and gross investment	1.2	0.4	-0.8	0.21	0.06	-0.15
Federal	-1.2	-1.2	0.0	-0.08	-0.08	0.00
National defense	-3.6	-3.6	0.0	-0.14	-0.14	0.00
Nondefense	2.3	2.3	0.0	0.06	0.06	0.00
State and local	2.6	1.3	-1.3	0.28	0.14	-0.14
Addenda:						
Final sales of domestic product	0.9	0.9	0.0	0.87	0.92	0.05
Gross domestic purchases price index	2.0	1.9	-0.1	.....	.....	.....
GDP price index	2.1	2.0	-0.1	.....	.....	.....

1. The estimates under the contribution columns are also percent changes.

The second estimate of the fourth-quarter increase in real GDP is the same as the advance estimate. Notable revisions include an upward revision to consumer spending and downward revisions to state and local government spending and to nonresidential fixed investment.

The upward revision to consumer spending reflected upward revisions to spending for services and for goods.

The upward revision to goods was primarily to motor vehicles and parts (specifically, net purchases of used motor vehicles).

The revision to services reflected an upward revision to spending for health care that was partly offset by a downward revision to spending by nonprofit institutions serving households. These revisions reflect the incorporation of newly available information from the Census Bureau's Advance Quarterly Services Report.

The downward revision to nonresidential investment reflected downward revisions to intellectual property products and to equipment that were partly offset by an upward revision to structures.

The downward revision to state and local government spending was primarily accounted for by a downward revision to investment in structures.

Major Source Data for the Second Estimates

Consumer spending: retail sales for November and December (revised) and advance quarterly services report data for the fourth quarter (new). Motor vehicle registrations data for December (new). Energy Information Administration data for motor vehicle fuels, lubricants, and fluids for November (new), for retail electricity usage and unit value for November (new), and for natural gas usage and unit value for October (revised) and November (new).

Nonresidential fixed investment: construction spending (value put in place) for October and November (revised) and December (new). Manufacturers' shipments (M3) of machinery and equipment for November and December (revised). Exports and imports for October and November (revised) and December (new). Advance quarterly services report data for the fourth quarter (new).

Residential fixed investment: construction spending (value put in place) for October and November (revised) and for December (new).

Inventory investment: manufacturers' inventories for October–December (revised) and detailed trade inventories for October and November (revised) and December (new).

Exports and imports: detailed international trade in goods and services for October and November (revised) and December (new).

Government spending: state and local construction spending (value put in place) for October and November (revised) and December (new).

Prices: BLS consumer price indexes for January 2012 to December 2016 (revised), reflecting updated seasonal adjustment factors.

Revised Third-Quarter 2016 Income Estimates

With the release of the second estimate of GDP, BEA also releases revised estimates of various income-related measures for the previous quarter. The revision reflected the incorporation of third-quarter tabulations from the quarterly census of employment and wages from the Bureau of Labor Statistics.

Wages and salaries increased \$119.4 billion, an upward revision of \$10.0 billion. Personal current taxes increased \$30.3 billion, a downward revision of \$0.5 billion. Domestic contributions for government social insurance, which is subtracted in calculating personal income, increased \$14.3 billion, an upward

revision of \$1.3 billion.

As a result of these revisions,

- Personal income increased \$181.7 billion, an upward revision of \$9.4 billion.
- Disposable personal income increased \$151.4 billion, an upward revision of \$9.9 billion.
- Personal saving increased \$5.2 billion, an upward revision of \$9.9 billion.
- The personal saving rate was 5.9 percent, an upward revision of 0.1 percentage point.
- Real GDI increased 5.0 percent, an upward revision of 0.2 percentage point.