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News Release

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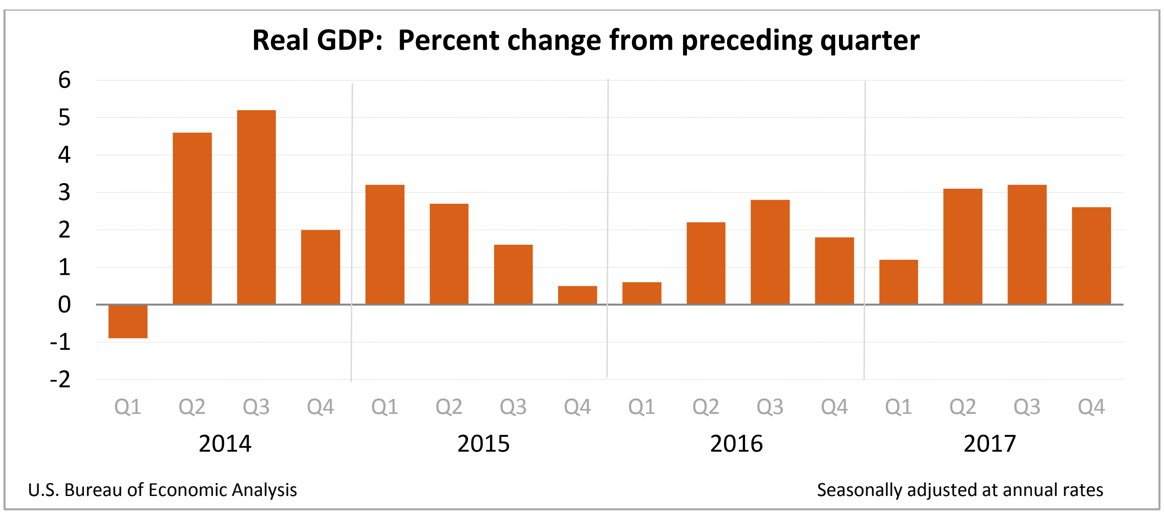
Gross Domestic Product: Fourth Quarter 2017 (Advance Estimate)

Real gross domestic product (GDP) increased at an annual rate of 2.6 percent in the fourth quarter of 2017 (table 1), according to the "advance" estimate released by the Bureau of Economic Analysis. In the third quarter, real GDP increased 3.2 percent.

The Bureau emphasized that the fourth-quarter advance estimate released today is based on source data that are incomplete or subject to further revision by the source agency (see "Source Data for the Advance Estimate" on page 3). The "second" estimate for the fourth quarter, based on more complete data, will be released on February 28, 2018.



The increase in real GDP in the fourth quarter reflected positive contributions from personal consumption expenditures (PCE), nonresidential fixed investment, exports, residential fixed investment, state and local government spending, and federal government spending that were partly offset by a negative contribution from private inventory investment. Imports, which are a subtraction in the calculation of GDP, increased (table 2).

The deceleration in real GDP growth in the fourth quarter reflected a downturn in private inventory investment that was partly offset by accelerations in PCE, exports, nonresidential fixed investment, state and local government spending, and federal government spending, and an upturn in residential fixed investment. Imports, which are a subtraction in the calculation of GDP, turned up.

Current-dollar GDP increased 5.0 percent, or $238.3 billion, in the fourth quarter to a level of $19,738.9 billion. In the third quarter, current-dollar GDP increased 5.3 percent, or $250.6 billion (table 1 and table 3).

The **price index for gross domestic purchases** increased 2.5 percent in the fourth quarter, compared with an increase of 1.7 percent in the third quarter (table 4). **The PCE price index** increased 2.8 percent, compared with an increase of 1.5 percent. Excluding food and energy prices, the PCE price index increased 1.9 percent, compared with an increase of 1.3 percent (appendix table A).

Personal Income (table 10)

Current-dollar personal income increased $178.9 billion in the fourth quarter, compared with an increase of $112.3 billion in the third. The acceleration in personal income primarily reflected an upturn in personal interest income and an acceleration in nonfarm proprietors' income.

Disposable personal income increased $139.0 billion, or 3.9 percent, in the fourth quarter, compared with an increase of $73.8 billion, or 2.1 percent, in the third. **Real disposable personal income** increased 1.1 percent, compared with an increase of 0.5 percent.

Personal saving was $384.4 billion in the fourth quarter, compared with $478.3 billion in the third. The **personal saving rate** -- personal saving as a percentage of disposable personal income -- was 2.6 percent in the fourth quarter, compared with 3.3 percent in the third.

2017 GDP

Real GDP increased 2.3 percent in 2017 (that is, from the 2016 annual level to the 2017 annual level), compared with an increase of 1.5 percent in 2016 (table 1).

The increase in real GDP in 2017 primarily reflected positive contributions from PCE, nonresidential fixed investment, and exports. Imports, which are a subtraction in the calculation of GDP, increased (table 2).

The acceleration in real GDP from 2016 to 2017 reflected upturns in nonresidential fixed investment and in exports and a smaller decrease in private inventory investment. These movements were partly offset by decelerations in residential fixed investment and in state and local government spending. Imports, which are a subtraction in the calculation of GDP, accelerated.

Current-dollar GDP increased 4.1 percent, or $762.3 billion, in 2017 to a level of $19,386.8 billion, compared with an increase of 2.8 percent, or $503.8 billion, in 2016 (table 1 and table 3).

The price index for gross domestic purchases increased 1.8 percent in 2017, compared with an increase of 1.0 percent in 2016 (table 4). The PCE price index increased 1.7 percent, compared with an increase of 1.2 percent. Excluding food and energy prices, the PCE price index increased 1.5 percent, compared with an increase of 1.8 percent (appendix table A).

During 2017 (measured from the fourth quarter of 2016 to the fourth quarter of 2017), real GDP increased 2.5 percent, compared with an increase of 1.8 percent during 2016. The price index for gross domestic purchases increased 1.9 percent during 2017, compared with an increase of 1.4 percent during 2016 (table 7).

Source Data for the Advance Estimate

Information on the assumptions used for unavailable source data in the advance estimate is provided in a Technical Note that is posted with the news release on BEA's Web site. A detailed "Key Source Data and Assumptions" file is also posted for each release. For information on updates to GDP, see the "Additional Information" section that follows.

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Next release: February 28, 2018 at 8:30 A.M. EST
Gross Domestic Product: Fourth Quarter 2017 (Second Estimate)

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Release Dates in 2018

Estimate	2017 Q4 and 2017 annual	2018 Q1	2018 Q2	2018 Q3
		Gross Domestic Product		
Advance	January 26	April 27	July 27	October 26
Second	February 28	May 30	August 29	November 28
Third	March 28	June 28	September 27	December 21
		Corporate Profits		
Preliminary	…	May 30	August 29	November 28
Revised	March 28	June 28	September 27	December 21

Additional Information

Resources

Additional resources available at www.bea.gov:

- Stay informed about BEA developments by reading the BEA blog, signing up for BEA's email subscription service, or following BEA on Twitter @BEA_News.
- Historical time series for these estimates can be accessed in BEA's interactive data application.
- Access BEA data by registering for BEA's data application programming interface (API).
- For more on BEA's statistics, see our monthly online journal, the *Survey of Current Business*.
- BEA's news release schedule
- NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts

Definitions

Gross domestic product (GDP) is the value of the goods and services produced by the nation's economy less the value of the goods and services used up in production. GDP is also equal to the sum of personal consumption expenditures, gross private domestic investment, net exports of goods and services, and government consumption expenditures and gross investment.

Current-dollar estimates are valued in the prices of the period when the transactions occurred—that is, at "market value." Also referred to as "nominal estimates" or as "current-price estimates."

Real values are inflation-adjusted estimates—that is, estimates that exclude the effects of price changes.

The ***gross domestic purchases price index*** measures the prices of final goods and services purchased by U.S. residents.

The ***personal consumption expenditure price index*** measures the prices paid for the goods and services purchased by, or on the behalf of, "persons."

Personal income is the income received by, or on behalf of, all persons from all sources: from participation as laborers in production, from owning a home or business, from the ownership of financial assets, and from government and business in the form of transfers. It includes income from domestic sources as well as the rest of world. It does not include realized or unrealized capital gains or losses.

Disposable personal income is the income available to persons for spending or saving. It is equal to personal income less personal current taxes.

Personal outlays is the sum of personal consumption expenditures, personal interest payments, and personal current transfer payments.

Personal saving is personal income less personal outlays and personal current taxes.

The ***personal saving rate*** is personal saving as a percentage of disposable personal income.

For more definitions, see the Glossary: National Income and Product Accounts.

Statistical conventions

Annual rates. Quarterly values are expressed at seasonally-adjusted annual rates (SAAR), unless otherwise specified. Dollar changes are calculated as the difference between these SAAR values. For detail, see the FAQ "Why does BEA publish estimates at annual rates?"

Percent changes in quarterly series are calculated from unrounded data and are displayed at annual rates, unless otherwise specified. For details, see the FAQ "How is average annual growth calculated?"

Calendar years and quarters. Unless noted otherwise, annual and quarterly data are presented on a calendar basis.

Quantities and prices. Quantities, or "real" volume measures, and prices are expressed as index numbers with a specified reference year equal to 100 (currently 2009). Quantity and price indexes are calculated using a Fisher-chained weighted formula that incorporates weights from two adjacent periods (quarters for quarterly data and annuals for annual data). "Real" dollar series are calculated by multiplying the published quantity index by the current-dollar value in the reference year (2009) and then dividing by 100. Percent changes calculated from real quantity indexes and chained-dollar levels are conceptually the same; any differences are due to rounding.

Chained-dollar values are not additive because the relative weights for a given period differ from those of the reference year. In tables that display chained-dollar values, a "residual" line shows the difference between the sum of detailed chained-dollar series and its corresponding aggregate.

Updates to GDP

BEA releases three vintages of the current quarterly estimate for GDP: "Advance" estimates are released near the end of the first month following the end of the quarter and are based on source data that are incomplete or subject to further revision by the source agency; "second" and "third" estimates are released near the end of the second and third months, respectively, and are based on more detailed and more comprehensive data as they become available.

Annual and comprehensive updates are typically released in late July. Annual updates generally cover at least the 3 most recent calendar years (and their associated quarters) and incorporate newly available major annual source data as well as some changes in methods and definitions to improve the accounts. Comprehensive (or benchmark) updates are carried out at about 5-year intervals and incorporate major periodic source data, as well as major conceptual improvements.

The table below shows the average revisions to the quarterly percent changes in real GDP between different estimate vintages, without regard to sign.

Vintage	Average Revision Without Regard to Sign (percentage points, annual rates)
Advance to second	0.5
Advance to third	0.6
Second to third	0.2
Advance to latest	1.3
Note - Based on estimates from 1993 through 2016. For more information on GDP updates, see Revision Information on the BEA Web site.	

The larger average revision from the advance to the latest estimate reflects the fact that periodic comprehensive updates include major statistical and methodological improvements.

Unlike GDP, an advance current quarterly estimate of GDI is not released because data on domestic profits and on net interest of domestic industries are not available. For fourth quarter estimates, these data are not available until the third estimate.

List of GDP News Release Tables

Table 1. Real Gross Domestic Product and Related Measures: Percent Change From Preceding Period

Line		2015	2016	2017	Seasonally adjusted at annual rates																Line
					2014				2015				2016				2017				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1	**Gross domestic product (GDP)**	**2.9**	**1.5**	**2.3**	**–0.9**	**4.6**	**5.2**	**2.0**	**3.2**	**2.7**	**1.6**	**0.5**	**0.6**	**2.2**	**2.8**	**1.8**	**1.2**	**3.1**	**3.2**	**2.6**	1
2	**Personal consumption expenditures**	**3.6**	**2.7**	**2.7**	**1.9**	**3.5**	**3.9**	**5.1**	**3.7**	**3.0**	**2.8**	**2.7**	**1.8**	**3.8**	**2.8**	**2.9**	**1.9**	**3.3**	**2.2**	**3.8**	2
3	Goods	4.6	3.7	3.9	2.4	6.2	4.5	5.7	4.2	4.5	4.4	2.8	2.1	6.0	3.2	4.7	0.7	5.4	4.5	8.2	3
4	Durable goods	7.7	5.5	6.7	5.5	13.2	7.7	8.3	7.8	8.6	5.0	4.2	1.0	8.5	9.4	9.2	–0.1	7.6	8.6	14.2	4
5	Nondurable goods	3.1	2.8	2.4	0.9	3.0	3.0	4.5	2.4	2.5	4.0	2.2	2.6	4.7	0.1	2.5	1.1	4.2	2.3	5.2	5
6	Services	3.2	2.3	2.2	1.7	2.1	3.6	4.7	3.4	2.3	2.0	2.6	1.7	2.8	2.7	2.1	2.5	2.3	1.1	1.8	6
7	**Gross private domestic investment**	**5.2**	**–1.6**	**3.2**	**–5.7**	**15.6**	**11.5**	**–1.3**	**13.1**	**0.8**	**2.0**	**–6.2**	**–4.0**	**–2.7**	**2.4**	**8.5**	**–1.2**	**3.9**	**7.3**	**3.6**	7
8	Fixed investment	3.9	0.7	4.0	5.1	10.2	9.2	0.3	4.1	4.7	3.4	–2.4	–0.2	1.4	1.5	1.7	8.1	3.2	2.4	7.9	8
9	Nonresidential	2.3	–0.6	4.7	7.2	9.4	10.5	–2.3	2.2	2.9	1.5	–5.1	–4.0	3.3	3.4	0.2	7.2	6.7	4.7	6.8	9
10	Structures	–1.8	–4.1	5.3	21.4	12.2	–1.8	4.7	–2.1	4.6	–15.2	–21.4	2.3	0.5	14.3	–2.2	14.8	7.0	–7.0	1.4	10
11	Equipment	3.5	–3.4	4.8	0.8	10.9	19.2	–11.8	8.2	0.8	10.0	–4.6	–13.1	–0.6	–2.1	1.8	4.4	8.8	10.8	11.4	11
12	Intellectual property products	3.8	6.3	4.2	7.0	5.1	7.7	8.2	–2.9	4.9	2.9	8.0	6.3	11.1	4.2	–0.4	5.7	3.7	5.2	4.5	12
13	Residential	10.2	5.5	1.7	–2.8	13.2	4.5	10.9	11.4	11.7	10.6	7.3	13.4	–4.7	–4.5	7.1	11.1	–7.3	–4.7	11.6	13
14	Change in private inventories	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14
15	**Net exports of goods and services**	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15
16	Exports	0.4	–0.3	3.4	–2.4	9.2	0.6	4.9	–4.5	3.7	–4.0	–2.3	–2.6	2.8	6.4	–3.8	7.3	3.5	2.1	6.9	16
17	Goods	–0.4	0.3	4.5	–6.0	10.7	2.2	4.6	–8.6	5.4	–4.9	–3.8	0.3	2.8	8.1	–3.4	10.8	2.2	1.8	12.6	17
18	Services	2.1	–1.5	1.1	5.9	5.9	–2.7	5.8	4.6	0.5	–2.1	0.7	–7.8	2.7	3.2	–4.6	1.0	6.2	2.5	–3.3	18
19	Imports	5.0	1.3	3.9	5.0	10.2	–1.0	10.8	6.7	3.3	1.7	0.0	–0.2	0.4	2.7	8.1	4.3	1.5	–0.7	13.9	19
20	Goods	5.2	0.9	4.3	5.8	11.0	–1.1	11.3	7.9	3.1	0.7	–0.4	–0.5	0.3	1.2	9.2	4.7	1.3	–0.2	16.8	20
21	Services	4.0	3.1	2.5	1.2	6.5	–0.5	8.6	1.4	4.4	6.5	1.6	1.1	1.0	9.0	3.2	2.5	2.2	–2.6	1.7	21
22	**Government consumption expenditures and gross investment**	**1.4**	**0.8**	**0.1**	**–0.6**	**1.1**	**2.1**	**–0.6**	**1.5**	**3.4**	**1.2**	**0.3**	**1.8**	**–0.9**	**0.5**	**0.2**	**–0.6**	**–0.2**	**0.7**	**3.0**	22
23	Federal	–0.1	0.0	0.2	–0.3	–1.6	3.1	–5.6	1.5	1.8	–1.1	2.5	–1.5	–0.9	1.6	–0.5	–2.4	1.9	1.3	3.5	23
24	National defense	–2.2	–0.7	0.3	–5.4	–1.6	2.4	–10.9	–1.0	2.1	–4.5	3.6	–2.7	–2.1	2.5	–3.2	–3.3	4.7	2.4	6.0	24
25	Nondefense	3.2	1.2	0.1	8.4	–1.5	4.1	3.3	5.5	1.3	4.2	0.9	0.2	0.8	0.3	3.6	–1.2	–1.9	–0.2	0.1	25
26	State and local	2.3	1.2	0.1	–0.8	2.8	1.5	2.6	1.5	4.5	2.6	–1.1	3.9	–1.0	–0.2	0.6	0.5	–1.5	0.2	2.6	26
	Addenda:																				
27	Gross domestic income (GDI)[1]	3.0	0.9	....	1.6	5.7	4.8	4.8	1.9	2.5	0.6	1.5	–0.3	0.2	4.1	–1.7	2.7	2.3	2.0	....	27
28	Average of GDP and GDI	2.9	1.2	....	0.3	5.2	5.0	3.4	2.6	2.6	1.1	1.0	0.1	1.2	3.4	0.0	2.0	2.7	2.6	....	28
29	Final sales of domestic product	2.6	1.9	2.4	0.9	3.7	4.8	2.3	1.8	3.4	1.9	1.2	1.2	2.9	2.6	0.7	2.7	2.9	2.4	3.2	29
30	Gross domestic purchases	3.5	1.7	2.4	0.2	4.9	4.8	3.0	4.8	2.7	2.4	0.7	0.8	1.9	2.4	3.3	1.0	2.8	2.7	3.6	30
31	Final sales to domestic purchasers	3.3	2.1	2.5	2.0	4.1	4.4	3.3	3.4	3.4	2.6	1.4	1.5	2.6	2.2	2.3	2.4	2.7	1.9	4.3	31
32	Final sales to private domestic purchasers	3.7	2.3	3.0	2.5	4.7	4.9	4.1	3.7	3.3	2.9	1.7	1.4	3.3	2.6	2.7	3.1	3.3	2.2	4.6	32
33	Gross national product (GNP)	2.7	1.4	....	–1.2	4.3	5.5	1.4	3.2	2.1	1.6	1.0	–0.3	2.6	2.6	2.6	0.9	2.8	3.7	....	33
34	Disposable personal income	4.2	1.4	1.2	4.3	5.3	4.2	5.9	4.3	3.8	1.8	2.9	0.2	1.9	0.7	–1.8	2.9	2.7	0.5	1.1	34
	Current-dollar measures:																				
35	GDP	4.0	2.8	4.1	0.7	7.0	7.1	2.6	3.2	5.0	3.0	1.3	0.8	4.7	4.2	3.8	3.3	4.1	5.3	5.0	35
36	GDI	4.1	2.1	....	3.3	8.1	6.8	5.4	1.9	4.7	2.0	2.4	–0.1	2.6	5.5	0.3	4.7	3.3	4.2	....	36
37	Average of GDP and GDI	4.0	2.5	....	2.0	7.6	7.0	4.0	2.5	4.8	2.5	1.8	0.4	3.7	4.9	2.1	4.0	3.7	4.7	....	37
38	Final sales of domestic product	3.8	3.2	4.2	2.5	6.0	6.8	2.9	1.8	5.7	3.3	2.0	1.6	5.4	4.1	2.7	4.8	4.0	4.5	5.7	38
39	Gross domestic purchases	3.9	2.7	4.2	2.5	6.7	6.4	3.2	3.5	4.1	3.4	1.0	0.9	4.1	3.9	5.3	3.6	3.6	4.5	6.2	39
40	Final sales to domestic purchasers	3.8	3.1	4.4	4.2	5.8	6.0	3.5	2.1	4.9	3.7	1.7	1.7	4.7	3.8	4.1	5.0	3.5	3.7	6.9	40
41	Final sales to private domestic purchasers	4.2	3.5	4.7	4.9	6.5	6.5	4.3	2.6	4.7	4.1	1.8	1.9	5.4	4.3	4.7	5.2	4.0	3.8	7.1	41
42	GNP	3.8	2.7	....	0.4	6.6	7.4	2.0	3.0	4.4	3.0	1.9	–0.1	5.1	4.0	4.7	2.9	3.8	5.8	....	42
43	Disposable personal income	4.5	2.6	2.9	6.5	7.1	5.5	5.7	2.6	5.6	3.2	3.1	0.9	4.0	2.5	0.1	5.2	3.0	2.1	3.9	43

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
See *Explanatory Note* at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Table 2. Contributions to Percent Change in Real Gross Domestic Product

Line		2015	2016	2017	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4	2016 Q1	2016 Q2	2016 Q3	2016 Q4	2017 Q1	2017 Q2	2017 Q3	2017 Q4	Line
					Seasonally adjusted at annual rates																
	Percent change at annual rate:																				
1	**Gross domestic product**	2.9	1.5	2.3	–0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	3.2	2.6	1
	Percentage points at annual rates:																				
2	**Personal consumption expenditures**	2.47	1.86	1.88	1.27	2.33	2.65	3.36	2.48	2.03	1.86	1.80	1.23	2.57	1.92	1.99	1.32	2.24	1.49	2.58	2
3	**Goods**	1.03	0.81	0.85	0.52	1.38	1.01	1.26	0.93	0.99	0.95	0.63	0.46	1.30	0.69	1.03	0.15	1.16	0.97	1.76	3
4	Durable goods	0.57	0.41	0.50	0.39	0.93	0.56	0.60	0.57	0.63	0.37	0.31	0.08	0.62	0.68	0.67	–0.01	0.56	0.63	1.02	4
5	Motor vehicles and parts	0.17	0.08	0.12	0.19	0.35	0.14	0.16	0.23	0.29	–0.01	–0.11	–0.09	0.18	0.36	0.32	–0.26	0.02	0.29	0.40	5
6	Furnishings and durable household equipment	0.14	0.12	0.12	0.06	0.28	0.13	0.14	0.11	0.13	0.15	0.14	0.09	0.15	0.10	0.09	0.08	0.15	0.15	0.26	6
7	Recreational goods and vehicles	0.18	0.18	0.20	0.09	0.22	0.25	0.20	0.14	0.13	0.17	0.23	0.11	0.25	0.16	0.22	0.21	0.26	0.02	0.26	7
8	Other durable goods	0.08	0.03	0.06	0.05	0.08	0.04	0.09	0.10	0.07	0.06	0.06	–0.03	0.04	0.06	0.04	–0.03	0.12	0.17	0.10	8
9	Nondurable goods	0.47	0.40	0.36	0.13	0.45	0.45	0.67	0.36	0.36	0.58	0.32	0.38	0.68	0.01	0.35	0.16	0.61	0.34	0.74	9
10	Food and beverages purchased for off-premises consumption	0.03	0.13	0.13	0.10	–0.02	0.03	0.03	0.06	–0.02	0.04	0.04	0.16	0.30	0.09	0.21	0.06	0.01	0.16	0.36	10
11	Clothing and footwear	0.08	0.05	0.05	0.02	0.17	0.08	0.21	0.00	0.07	0.05	0.05	0.02	0.11	0.03	0.03	–0.08	0.20	–0.01	0.26	11
12	Gasoline and other energy goods	0.09	0.02	–0.02	–0.11	–0.13	0.00	0.18	0.15	0.04	0.11	0.01	0.10	–0.08	–0.05	–0.03	–0.10	0.12	–0.04	–0.04	12
13	Other nondurable goods	0.27	0.20	0.20	0.12	0.43	0.35	0.24	0.15	0.27	0.38	0.22	0.10	0.34	–0.06	0.15	0.28	0.28	0.22	0.17	13
14	**Services**	1.44	1.05	1.03	0.74	0.96	1.64	2.10	1.56	1.04	0.90	1.17	0.77	1.28	1.23	0.97	1.17	1.08	0.52	0.82	14
15	Household consumption expenditures (for services)	1.42	0.95	1.02	0.84	0.87	1.68	2.15	1.71	0.90	0.72	0.93	0.78	1.24	1.08	0.98	1.11	1.11	0.65	0.77	15
16	Housing and utilities	0.21	0.16	0.12	0.58	–0.28	–0.03	0.50	0.50	–0.10	0.24	–0.01	0.20	0.35	0.27	–0.11	–0.04	0.42	0.00	0.25	16
17	Health care	0.57	0.43	0.35	–0.22	0.65	0.81	0.82	0.60	0.24	0.44	0.31	0.50	0.62	0.13	0.62	0.24	0.15	0.52	0.30	17
18	Transportation services	0.09	0.08	0.03	0.25	0.08	0.17	0.04	0.09	0.09	0.04	0.14	0.07	0.02	0.11	0.06	0.04	0.01	–0.04	–0.05	18
19	Recreation services	0.06	0.06	0.06	0.13	–0.12	0.12	0.09	0.05	0.08	–0.01	0.20	–0.01	–0.02	0.12	0.07	0.12	0.04	0.01	0.00	19
20	Food services and accommodations	0.19	0.11	0.06	–0.04	0.28	0.22	0.28	0.05	0.29	0.07	0.17	0.02	0.18	0.07	0.00	0.12	–0.03	0.09	0.02	20
21	Financial services and insurance	0.15	–0.09	0.17	–0.06	0.08	0.25	0.13	0.26	0.21	–0.09	0.01	–0.35	–0.12	0.13	0.07	0.40	0.14	0.13	0.05	21
22	Other services	0.15	0.20	0.23	0.20	0.18	0.14	0.29	0.17	0.08	0.02	0.10	0.35	0.20	0.25	0.27	0.23	0.38	–0.06	0.20	22
23	Final consumption expenditures of nonprofit institutions serving households	0.02	0.10	0.01	–0.10	0.09	–0.04	–0.06	–0.15	0.14	0.19	0.24	–0.01	0.04	0.15	–0.01	0.06	–0.04	–0.13	0.05	23
24	Gross output of nonprofit institutions	0.22	0.24	0.14	–0.43	0.37	0.36	0.43	0.10	0.05	0.16	0.29	0.20	0.38	0.19	0.36	0.12	–0.23	0.21	0.20	24
25	Less: Receipts from sales of goods and services by nonprofit institutions	0.20	0.14	0.13	–0.33	0.29	0.40	0.48	0.25	–0.09	–0.03	0.05	0.21	0.34	0.04	0.38	0.06	–0.19	0.34	0.15	25
26	**Gross private domestic investment**	0.87	–0.28	0.53	–0.93	2.47	1.90	–0.21	2.12	0.14	0.33	–1.08	–0.68	–0.45	0.40	1.34	–0.20	0.64	1.19	0.60	26
27	**Fixed investment**	0.64	0.12	0.65	0.76	1.56	1.45	0.04	0.67	0.77	0.55	–0.41	–0.05	0.22	0.25	0.28	1.27	0.53	0.40	1.27	27
28	Nonresidential	0.30	–0.08	0.58	0.85	1.16	1.31	–0.30	0.30	0.38	0.19	–0.67	–0.52	0.41	0.42	0.02	0.86	0.82	0.58	0.84	28
29	Structures	–0.06	–0.12	0.15	0.57	0.36	–0.05	0.14	–0.07	0.14	–0.50	–0.69	0.06	0.01	0.37	–0.06	0.39	0.20	–0.21	0.04	29
30	Equipment	0.21	–0.20	0.26	0.02	0.61	1.07	–0.76	0.49	0.06	0.58	–0.28	–0.82	–0.04	–0.12	0.10	0.24	0.48	0.58	0.62	30
31	Information processing equipment	0.07	0.03	0.12	0.07	0.25	–0.07	0.14	–0.02	0.08	0.23	0.04	–0.16	0.08	0.10	0.05	0.13	0.17	0.17	0.15	31
32	Computers and peripheral equipment	–0.02	–0.01	0.03	–0.07	0.09	–0.02	0.03	–0.11	0.02	0.05	–0.10	–0.02	0.01	0.00	–0.01	0.01	0.15	0.10	–0.13	32
33	Other	0.09	0.05	0.09	0.14	0.16	–0.05	0.12	0.09	0.06	0.18	0.14	–0.14	0.06	0.11	0.06	0.11	0.02	0.07	0.28	33
34	Industrial equipment	0.01	0.03	0.08	0.15	0.17	0.15	–0.22	0.00	0.12	–0.02	0.09	–0.07	0.08	0.03	0.07	0.09	0.14	0.09	0.03	34
35	Transportation equipment	0.16	–0.12	0.00	–0.03	0.22	0.41	–0.25	0.50	–0.06	0.37	–0.24	–0.37	0.01	–0.23	–0.05	–0.04	0.02	0.21	0.23	35
36	Other equipment	–0.04	–0.14	0.06	–0.17	–0.03	0.58	–0.43	0.00	–0.08	0.00	–0.17	–0.23	–0.21	–0.03	0.04	0.06	0.15	0.11	0.22	36
37	Intellectual property products	0.15	0.25	0.17	0.26	0.19	0.29	0.31	–0.11	0.19	0.11	0.31	0.24	0.43	0.17	–0.02	0.23	0.15	0.21	0.18	37
38	Software	0.10	0.13	0.11	0.18	0.21	0.19	0.05	0.11	0.07	0.05	0.12	0.17	0.19	0.12	0.04	0.09	0.13	0.15	0.14	38
39	Research and development	0.02	0.11	0.05	0.10	–0.01	0.09	0.23	–0.25	0.09	0.04	0.17	0.08	0.25	0.02	–0.07	0.13	0.02	0.05	0.04	39
40	Entertainment, literary, and artistic originals	0.02	0.01	0.01	–0.02	–0.01	0.01	0.03	0.03	0.02	0.03	0.01	0.00	–0.01	0.03	0.02	0.01	0.00	0.00	0.00	40
41	Residential	0.34	0.20	0.07	–0.09	0.40	0.14	0.35	0.37	0.39	0.36	0.26	0.47	–0.18	–0.18	0.26	0.41	–0.30	–0.18	0.42	41
42	**Change in private inventories**	0.23	–0.40	–0.12	–1.69	0.91	0.44	–0.26	1.45	–0.63	–0.22	–0.68	–0.64	–0.67	0.16	1.06	–1.46	0.12	0.79	–0.67	42
43	Farm	0.03	0.00	0.02	–0.45	0.04	0.05	–0.03	0.17	–0.06	0.01	–0.09	0.00	0.14	–0.05	–0.09	0.13	–0.04	0.07	0.04	43
44	Nonfarm	0.20	–0.39	–0.14	–1.25	0.87	0.40	–0.23	1.27	–0.57	–0.23	–0.59	–0.63	–0.81	0.20	1.15	–1.59	0.15	0.72	–0.71	44
45	**Net exports of goods and services**	–0.73	–0.23	–0.18	–1.14	–0.40	0.28	–1.02	–1.64	–0.03	–0.77	–0.28	–0.28	0.28	0.36	–1.61	0.22	0.21	0.36	–1.13	45
46	**Exports**	0.05	–0.04	0.40	–0.35	1.22	0.09	0.65	–0.59	0.47	–0.51	–0.29	–0.33	0.32	0.74	–0.47	0.85	0.42	0.25	0.82	46
47	Goods	–0.03	0.02	0.35	–0.60	0.97	0.21	0.41	–0.78	0.45	–0.43	–0.32	0.01	0.21	0.60	–0.27	0.81	0.18	0.15	0.96	47
48	Services	0.09	–0.06	0.05	0.25	0.25	–0.12	0.24	0.19	0.02	–0.09	0.03	–0.33	0.11	0.13	–0.19	0.04	0.25	0.10	–0.14	48
49	**Imports**	–0.78	–0.19	–0.58	–0.79	–1.62	0.18	–1.67	–1.05	–0.50	–0.25	0.01	0.04	–0.04	–0.37	–1.14	–0.63	–0.22	0.11	–1.96	49
50	Goods	–0.67	–0.11	–0.51	–0.76	–1.44	0.17	–1.44	–1.01	–0.38	–0.08	0.06	0.07	–0.02	–0.14	–1.05	–0.56	–0.16	0.03	–1.91	50
51	Services	–0.11	–0.09	–0.07	–0.03	–0.18	0.02	–0.23	–0.04	–0.12	–0.17	–0.05	–0.03	–0.03	–0.24	–0.09	–0.07	–0.06	0.07	–0.05	51
52	**Government consumption expenditures and gross investment**	0.25	0.13	0.02	–0.11	0.20	0.39	–0.11	0.27	0.60	0.21	0.05	0.32	–0.16	0.09	0.03	–0.11	–0.03	0.12	0.50	52
53	**Federal**	–0.01	0.00	0.01	–0.03	–0.11	0.22	–0.40	0.11	0.12	–0.07	0.17	–0.10	–0.06	0.11	–0.03	–0.16	0.13	0.09	0.23	53
54	National defense	–0.09	–0.03	0.01	–0.25	–0.07	0.11	–0.48	–0.04	0.08	–0.19	0.14	–0.11	–0.08	0.10	–0.13	–0.13	0.18	0.09	0.22	54
55	Consumption expenditures	–0.08	–0.03	–0.05	–0.03	–0.15	0.14	–0.47	0.07	0.01	–0.14	0.07	–0.09	–0.04	0.10	–0.16	–0.21	0.02	0.09	0.15	55
56	Gross investment	–0.02	0.00	0.06	–0.22	0.08	–0.03	–0.02	–0.11	0.08	–0.04	0.07	–0.01	–0.04	0.00	0.03	0.08	0.16	0.00	0.08	56
57	Nondefense	0.09	0.03	0.00	0.22	–0.04	0.11	0.09	0.15	0.04	0.11	0.02	0.00	0.02	0.01	0.10	–0.03	–0.05	–0.01	0.00	57
58	Consumption expenditures	0.07	0.02	–0.01	0.19	–0.06	0.10	0.04	0.15	0.02	0.11	0.03	–0.02	0.00	–0.01	0.06	–0.07	–0.05	0.06	0.01	58
59	Gross investment	0.01	0.01	0.01	0.03	0.02	0.01	0.04	0.00	0.01	0.00	–0.01	0.02	0.02	0.01	0.03	0.04	0.00	–0.06	–0.01	59
60	**State and local**	0.26	0.13	0.01	–0.09	0.31	0.17	0.28	0.17	0.48	0.28	–0.12	0.42	–0.11	–0.02	0.06	0.05	–0.16	0.03	0.28	60
61	Consumption expenditures	0.20	0.15	0.07	0.02	0.16	0.14	0.21	0.22	0.20	0.23	0.11	0.17	0.14	0.17	0.01	0.04	0.09	0.08	0.06	61
62	Gross investment	0.06	–0.02	–0.07	–0.10	0.14	0.03	0.08	–0.05	0.28	0.05	–0.23	0.25	–0.24	–0.18	0.05	0.01	–0.25	–0.05	0.21	62

See *Explanatory Note* at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Table 3. Gross Domestic Product: Level and Change From Preceding Period—Continues

Line		Billions of dollars						Billions of chained (2009) dollars									Line
		2017	Seasonally adjusted at annual rates					2017	Seasonally adjusted at annual rates					Change from preceding period			
			2016	2017					2016	2017				2017	2017		
			Q4	Q1	Q2	Q3	Q4		Q4	Q1	Q2	Q3	Q4		Q3	Q4	
1	**Gross domestic product (GDP)**	**19,386.8**	**18,905.5**	**19,057.7**	**19,250.0**	**19,500.6**	**19,738.9**	**17,092.7**	**16,851.4**	**16,903.2**	**17,031.1**	**17,163.9**	**17,272.5**	**376.5**	**132.8**	**108.6**	1
2	**Personal consumption expenditures**	**13,393.7**	**13,056.9**	**13,191.6**	**13,307.0**	**13,429.1**	**13,647.1**	**11,888.9**	**11,702.1**	**11,758.0**	**11,853.0**	**11,916.6**	**12,028.1**	**316.8**	**63.6**	**111.5**	2
3	**Goods**	**4,297.0**	**4,195.9**	**4,230.8**	**4,247.2**	**4,301.4**	**4,408.5**	**4,230.5**	**4,138.4**	**4,145.4**	**4,199.9**	**4,246.0**	**4,330.6**	**158.3**	**46.1**	**84.6**	3
4	Durable goods	1,474.5	1,440.2	1,443.2	1,456.6	1,477.6	1,520.5	1,702.1	1,647.9	1,647.3	1,677.8	1,712.9	1,770.6	107.1	35.1	57.7	4
5	Motor vehicles and parts	498.1	500.0	489.1	486.3	497.8	519.0	458.7	458.4	447.0	447.9	461.0	479.1	20.3	13.1	18.1	5
6	Furnishings and durable household equipment	339.0	328.2	332.9	335.9	339.1	348.2	412.6	393.4	397.8	406.6	415.3	430.6	27.9	8.7	15.3	6
7	Recreational goods and vehicles	405.8	389.2	397.9	405.8	406.2	413.1	633.8	598.6	613.8	633.1	634.4	654.1	56.7	1.3	19.7	7
8	Other durable goods	231.6	222.8	223.2	228.6	234.5	240.2	229.0	220.9	219.3	225.1	233.3	238.3	11.3	8.1	5.1	8
9	Nondurable goods	2,822.5	2,755.7	2,787.6	2,790.6	2,823.8	2,888.0	2,575.7	2,533.2	2,540.2	2,566.6	2,581.5	2,614.4	61.4	14.9	33.0	9
10	Food and beverages purchased for off-premises consumption	938.0	922.3	925.8	930.8	939.1	956.3	854.3	844.1	846.6	846.9	854.0	869.8	21.9	7.0	15.8	10
11	Clothing and footwear	400.5	395.3	396.0	399.5	399.8	406.6	387.7	381.6	378.0	387.0	386.7	398.9	9.0	–0.2	12.2	11
12	Gasoline and other energy goods	304.2	294.0	306.3	286.5	296.0	328.0	284.4	285.8	281.5	287.1	285.4	283.5	–4.6	–1.7	–1.9	12
13	Other nondurable goods	1,179.8	1,144.1	1,159.6	1,173.7	1,188.8	1,197.0	1,060.4	1,032.9	1,044.8	1,056.7	1,066.2	1,073.8	34.5	9.5	7.6	13
14	**Services**	**9,096.7**	**8,861.0**	**8,960.7**	**9,059.8**	**9,127.7**	**9,238.6**	**7,672.5**	**7,573.8**	**7,621.0**	**7,664.4**	**7,685.5**	**7,719.1**	**165.2**	**21.0**	**33.7**	14
15	Household consumption expenditures (for services)	8,721.6	8,493.5	8,584.9	8,683.1	8,755.2	8,863.2	7,353.9	7,254.6	7,299.2	7,344.1	7,370.4	7,401.9	162.9	26.3	31.5	15
16	Housing and utilities	2,433.3	2,369.9	2,387.2	2,425.8	2,443.2	2,477.0	2,044.2	2,030.7	2,028.9	2,045.9	2,045.8	2,056.2	19.0	–0.1	10.4	16
17	Health care	2,260.1	2,208.0	2,226.6	2,241.9	2,271.7	2,300.3	2,007.3	1,977.9	1,988.1	1,994.6	2,016.8	2,029.5	58.1	22.1	12.8	17
18	Transportation services	404.9	398.4	403.6	406.1	404.4	405.6	358.0	357.4	359.1	359.4	357.8	355.7	5.0	–1.6	–2.1	18
19	Recreation services	518.2	501.5	512.9	515.7	520.8	523.4	442.9	436.9	441.6	443.1	443.5	443.4	10.5	0.4	–0.1	19
20	Food services and accommodations	878.1	860.4	870.9	873.8	879.5	888.3	728.9	723.1	727.8	726.7	730.2	730.9	9.1	3.6	0.7	20
21	Financial services and insurance	1,053.1	1,007.1	1,025.9	1,047.1	1,060.2	1,079.1	751.8	731.8	745.5	750.3	754.8	756.5	23.1	4.5	1.7	21
22	Other services	1,173.8	1,148.1	1,157.8	1,172.7	1,175.3	1,189.6	1,028.4	1,005.7	1,015.5	1,031.4	1,029.0	1,037.7	38.2	–2.4	8.6	22
23	Final consumption expenditures of nonprofit institutions serving households	375.1	367.5	375.8	376.7	372.5	375.3	318.8	319.5	322.1	320.6	315.2	317.4	2.3	–5.3	2.2	23
24	Gross output of nonprofit institutions	1,472.1	1,446.1	1,461.5	1,458.3	1,474.4	1,494.4	1,252.3	1,247.9	1,252.9	1,243.5	1,252.2	1,260.6	23.1	8.7	8.4	24
25	Less: Receipts from sales of goods and services by nonprofit institutions	1,097.1	1,078.6	1,085.7	1,081.6	1,101.9	1,119.1	933.5	928.5	930.8	923.0	937.0	943.3	20.7	14.0	6.2	25
26	**Gross private domestic investment**	**3,210.7**	**3,126.2**	**3,128.7**	**3,178.1**	**3,249.2**	**3,286.5**	**2,950.3**	**2,905.7**	**2,897.0**	**2,924.7**	**2,976.5**	**3,003.0**	**92.0**	**51.9**	**26.5**	26
27	**Fixed investment**	**3,196.8**	**3,056.7**	**3,128.9**	**3,173.3**	**3,207.3**	**3,277.8**	**2,915.5**	**2,820.3**	**2,875.7**	**2,898.5**	**2,915.8**	**2,971.9**	**112.0**	**17.3**	**56.1**	27
28	Nonresidential	2,449.6	2,333.7	2,383.4	2,433.6	2,468.4	2,513.0	2,314.2	2,224.9	2,263.6	2,300.6	2,326.9	2,365.7	103.8	26.3	38.7	28
29	Structures	558.6	525.8	548.4	563.0	559.0	563.9	470.1	452.1	468.0	476.0	467.4	469.0	23.7	–8.6	1.6	29
30	Equipment	1,098.0	1,044.3	1,057.6	1,082.3	1,111.0	1,141.1	1,098.0	1,048.0	1,059.4	1,082.0	1,110.1	1,140.4	50.2	28.1	30.4	30
31	Information processing equipment	323.1	307.1	310.8	319.3	327.7	334.6	376.8	355.9	362.9	372.2	381.9	390.3	26.6	9.7	8.4	31
32	Computers and peripheral equipment	79.0	72.1	72.8	80.1	84.9	78.5	91.2	83.6	84.3	92.3	97.8	90.5	7.2	5.5	–7.3	32
33	Other	244.1	235.0	238.1	239.2	242.8	256.2	284.9	271.7	278.0	279.1	283.3	299.1	19.3	4.2	15.8	33
34	Industrial equipment	243.0	229.0	234.3	241.7	246.7	249.3	226.9	215.8	219.9	226.0	230.2	231.7	14.8	4.2	1.5	34
35	Transportation equipment	290.3	281.3	282.6	283.5	292.8	302.4	276.8	270.8	268.9	269.6	279.1	289.7	–0.7	9.5	10.6	35
36	Other equipment	241.6	226.9	229.9	237.8	243.8	254.8	228.4	215.3	218.2	225.2	230.2	240.2	11.5	5.0	10.0	36
37	Intellectual property products	793.0	763.7	777.4	788.2	798.4	808.1	750.5	728.3	738.6	745.3	754.8	763.1	30.0	9.5	8.3	37
38	Software	373.0	359.1	363.2	370.6	375.9	382.2	381.2	366.8	371.1	377.3	384.7	391.9	20.8	7.5	7.1	38
39	Research and development	334.5	320.8	329.5	332.2	336.5	339.9	289.7	282.2	287.6	288.4	290.7	292.3	8.2	2.2	1.6	39
40	Entertainment, literary, and artistic originals	85.5	83.7	84.7	85.4	86.1	86.0	82.2	81.6	82.0	82.1	82.2	82.2	1.8	0.1	0.0	40
41	Residential	747.2	723.0	745.5	739.7	738.9	764.7	597.5	589.8	605.5	594.1	587.0	603.4	10.1	–7.1	16.3	41
42	**Change in private inventories**	**13.8**	**69.5**	**–0.1**	**4.9**	**41.9**	**8.8**	**13.6**	**63.1**	**1.2**	**5.5**	**38.5**	**9.2**	**–19.8**	**33.0**	**–29.3**	42
43	Farm	2.9	–3.5	2.5	0.3	3.4	5.4	3.2	–2.9	2.7	1.2	3.6	5.5	3.8	2.3	2.0	43
44	Nonfarm	10.9	73.0	–2.7	4.6	38.5	3.3	10.3	66.8	–1.8	4.2	35.1	3.6	–24.2	30.9	–31.5	44
45	**Net exports of goods and services**	**–570.9**	**–564.3**	**–582.8**	**–567.2**	**–534.1**	**–599.3**	**–621.5**	**–631.1**	**–622.2**	**–613.6**	**–597.5**	**–652.6**	**–35.3**	**16.1**	**–55.1**	45
46	**Exports**	**2,343.9**	**2,241.5**	**2,295.6**	**2,314.9**	**2,345.9**	**2,419.2**	**2,191.3**	**2,124.4**	**2,162.3**	**2,181.1**	**2,192.4**	**2,229.5**	**71.3**	**11.3**	**37.1**	**46**
47	Goods	1,547.4	1,467.2	1,515.0	1,520.9	1,544.1	1,609.6	1,513.2	1,454.5	1,492.3	1,500.4	1,507.3	1,552.7	65.7	6.9	45.4	47
48	Services	796.5	774.3	780.6	794.0	801.8	809.6	680.5	670.6	672.2	682.3	686.6	680.8	7.7	4.3	–5.8	48
49	**Imports**	**2,914.8**	**2,805.8**	**2,878.4**	**2,882.1**	**2,880.1**	**3,018.5**	**2,812.8**	**2,755.5**	**2,784.5**	**2,794.8**	**2,790.0**	**2,882.1**	**106.5**	**–4.8**	**92.1**	49
50	Goods	2,380.8	2,285.1	2,353.0	2,350.3	2,345.2	2,474.8	2,314.4	2,260.7	2,286.7	2,294.3	2,292.9	2,383.6	94.4	–1.4	90.7	50
51	Services	534.0	520.7	525.5	531.9	534.8	543.8	496.3	492.4	495.5	498.2	494.8	496.9	12.3	–3.3	2.1	51

1. Real gross domestic income is gross domestic income deflated by the implicit price deflator for gross domestic product.

NOTE. Users are cautioned that particularly for components that exhibit rapid change in prices relative to other prices in the economy, the chained-dollar estimates should not be used to measure the component's relative importance or its contribution to the growth rate of more aggregate series. For accurate estimates of the contributions to percent changes in real gross domestic product, use table 2.

See *Explanatory Note* at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 3. Gross Domestic Product: Level and Change From Preceding Period—Table Ends

Line		Billions of dollars						Billions of chained (2009) dollars									Line
		2017	Seasonally adjusted at annual rates					2017	Seasonally adjusted at annual rates					Change from preceding period			
			2016	2017					2016	2017				2017	2017		
			Q4	Q1	Q2	Q3	Q4		Q4	Q1	Q2	Q3	Q4		Q3	Q4	
52	**Government consumption expenditures and gross investment**	**3,353.3**	**3,286.8**	**3,320.2**	**3,332.1**	**3,356.5**	**3,404.6**	**2,903.2**	**2,901.2**	**2,896.6**	**2,895.2**	**2,900.0**	**2,921.1**	**3.1**	**4.7**	**21.2**	52
53	**Federal**	**1,260.7**	**1,235.4**	**1,244.3**	**1,255.8**	**1,263.5**	**1,279.1**	**1,116.7**	**1,115.2**	**1,108.4**	**1,113.7**	**1,117.4**	**1,127.2**	**2.0**	**3.7**	**9.7**	53
54	National defense	744.5	727.6	730.2	741.4	746.7	759.7	668.8	664.1	658.6	666.2	670.2	680.1	1.8	4.0	9.8	54
55	Consumption expenditures	588.8	583.2	581.6	584.7	590.1	598.8	523.7	528.3	519.5	520.3	524.3	530.7	–8.0	4.0	6.4	55
56	Gross investment	155.7	144.4	148.6	156.6	156.5	160.8	145.3	135.7	139.1	146.2	146.2	149.7	10.2	–0.1	3.5	56
57	Nondefense	516.2	507.8	514.1	514.5	516.9	519.5	447.3	450.3	449.0	446.9	446.6	446.7	0.3	–0.3	0.1	57
58	Consumption expenditures	389.3	382.7	386.3	386.1	391.0	393.8	332.1	335.4	332.5	330.3	332.6	333.2	–1.4	2.3	0.6	58
59	Gross investment	127.0	125.1	127.8	128.4	125.9	125.7	115.2	115.0	116.7	116.7	114.0	113.4	1.7	–2.8	–0.5	59
60	**State and local**	**2,092.6**	**2,051.4**	**2,075.9**	**2,076.2**	**2,092.9**	**2,125.5**	**1,784.7**	**1,784.1**	**1,786.2**	**1,779.6**	**1,780.7**	**1,792.2**	**1.0**	**1.1**	**11.5**	60
61	Consumption expenditures	1,754.3	1,712.2	1,733.4	1,743.7	1,759.8	1,780.4	1,490.1	1,483.4	1,485.1	1,488.8	1,492.0	1,494.6	11.9	3.1	2.7	61
62	Gross investment	338.3	339.2	342.5	332.5	333.1	345.1	293.4	299.6	300.0	289.6	287.5	296.5	–11.0	–2.1	9.0	62
63	Residual	.....	.....	.....	.....	.....	.....	–133.7	–110.1	–113.8	–129.1	–139.3	–152.7	.....	.....	.....	63
	Addenda:																
64	Gross domestic income (GDI)[1]	.....	18,939.9	19,160.1	19,317.0	19,515.0	.....	.....	16,882.1	16,994.1	17,090.3	17,176.6	.....	.....	86.2	.....	64
65	Average of GDP and GDI	.....	18,922.7	19,108.9	19,283.5	19,507.8	.....	.....	16,866.8	16,948.7	17,060.7	17,170.2	.....	.....	109.5	.....	65
66	Final sales of domestic product	19,373.0	18,836.1	19,057.8	19,245.2	19,458.7	19,730.1	17,060.0	16,770.0	16,883.5	17,006.6	17,106.3	17,243.5	395.9	99.6	137.2	66
67	Gross domestic purchases	19,957.7	19,469.9	19,640.5	19,817.2	20,034.8	20,338.2	17,710.7	17,478.6	17,521.6	17,641.8	17,760.4	17,919.1	409.1	118.6	158.7	67
68	Final sales to domestic purchasers	19,943.8	19,400.4	19,640.7	19,812.4	19,992.9	20,329.4	17,678.9	17,397.7	17,502.7	17,618.3	17,703.5	17,891.0	428.6	85.2	187.5	68
69	Final sales to private domestic purchasers	16,590.5	16,113.6	16,320.4	16,480.3	16,636.4	16,924.8	14,790.3	14,509.8	14,619.9	14,737.6	14,818.4	14,985.2	427.6	80.9	166.8	69
70	**Gross domestic product**	**19,386.8**	**18,905.5**	**19,057.7**	**19,250.0**	**19,500.6**	**19,738.9**	**17,092.7**	**16,851.4**	**16,903.2**	**17,031.1**	**17,163.9**	**17,272.5**	**376.5**	**132.8**	**108.6**	70
71	Plus: Income receipts from the rest of the world	.....	882.1	895.9	914.8	952.1	.....	.....	723.7	731.1	745.1	772.3	.....	.....	27.2	.....	71
72	Less: Income payments to the rest of the world	.....	653.1	681.7	712.4	723.9	.....	.....	533.6	551.9	575.5	582.3	.....	.....	6.8	.....	72
73	**Equals: Gross national product**	.....	**19,134.5**	**19,272.0**	**19,452.4**	**19,728.9**	.....	.....	**17,041.1**	**17,081.0**	**17,198.0**	**17,352.8**	.....	.....	**154.8**	.....	73
74	Net domestic product	16,351.8	15,955.6	16,071.5	16,229.3	16,448.5	16,657.7	14,344.1	14,134.7	14,174.8	14,289.9	14,409.0	14,502.5	324.9	119.1	93.5	74

1. Real gross domestic income is gross domestic income deflated by the implicit price deflator for gross domestic product.

Note. Users are cautioned that particularly for components that exhibit rapid change in prices relative to other prices in the economy, the chained-dollar estimates should not be used to measure the component's relative importance or its contribution to the growth rate of more aggregate series. For accurate estimates of the contributions to percent changes in real gross domestic product, use table 2.

See *Explanatory Note* at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 4. Price Indexes for Gross Domestic Product and Related Measures: Percent Change From Preceding Period

Line		2015	2016	2017	Seasonally adjusted at annual rates																Line
					2014				2015				2016				2017				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1	**Gross domestic product (GDP)**	**1.1**	**1.3**	**1.8**	**1.6**	**2.2**	**1.9**	**0.6**	**–0.1**	**2.2**	**1.4**	**0.8**	**0.3**	**2.4**	**1.4**	**2.0**	**2.0**	**1.0**	**2.1**	**2.4**	1
2	**Personal consumption expenditures**	**0.3**	**1.2**	**1.7**	**2.1**	**1.8**	**1.2**	**–0.3**	**–1.6**	**1.7**	**1.3**	**0.2**	**0.6**	**2.1**	**1.7**	**2.0**	**2.2**	**0.3**	**1.5**	**2.8**	2
3	Goods	–2.9	–1.4	0.4	0.9	0.1	–0.7	–4.2	–7.6	1.0	–0.5	–3.4	–3.4	0.2	–0.6	1.3	2.7	–3.6	0.7	2.0	3
4	Durable goods	–2.1	–2.2	–2.1	–2.4	–2.2	–1.9	–3.1	–2.5	–0.9	–2.0	–2.1	–1.3	–2.8	–3.5	–3.2	1.0	–3.6	–2.5	–1.8	4
5	Nondurable goods	–3.3	–1.1	1.7	2.6	1.2	–0.2	–4.8	–10.0	2.0	0.2	–4.0	–4.4	1.8	1.0	3.7	3.6	–3.6	2.4	4.0	5
6	Services	1.9	2.5	2.3	2.7	2.7	2.2	1.8	1.5	2.0	2.2	1.9	2.6	3.0	2.9	2.3	2.0	2.2	1.9	3.1	6
7	**Gross private domestic investment**	**0.8**	**0.5**	**1.8**	**2.9**	**1.2**	**2.6**	**2.1**	**0.0**	**–0.4**	**0.7**	**–0.2**	**–0.4**	**1.7**	**1.0**	**1.7**	**1.7**	**2.6**	**1.9**	**1.0**	7
8	Fixed investment	1.1	0.6	1.7	3.1	1.2	2.6	2.2	0.8	–0.3	0.9	0.1	–0.2	1.5	1.2	1.6	1.6	2.5	1.9	1.1	8
9	Nonresidential	0.6	–0.3	1.0	1.7	1.2	1.4	1.4	0.8	–0.4	0.3	–0.6	–0.9	0.2	–0.3	0.6	1.5	1.9	1.1	0.6	9
10	Structures	1.8	0.1	2.8	5.7	5.0	5.7	4.8	0.3	–1.5	1.5	–0.4	–2.0	2.8	–0.3	2.3	3.1	3.8	4.5	2.1	10
11	Equipment	–0.1	–0.1	0.4	0.1	0.7	0.0	0.2	0.2	–0.7	–0.8	–0.3	0.1	–0.1	0.9	–0.4	0.7	0.8	0.2	–0.1	11
12	Intellectual property products	0.9	–0.7	0.7	1.3	–0.8	0.2	0.7	2.3	1.1	1.1	–1.1	–1.5	–1.0	–1.9	1.0	1.6	1.9	0.1	0.4	12
13	Residential	2.7	3.7	4.1	8.7	1.1	7.5	5.3	0.5	0.1	3.3	2.6	2.4	5.9	6.4	4.8	1.7	4.6	4.4	2.8	13
14	Change in private inventories	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14
15	**Net exports of goods and services**	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15
16	Exports	–5.0	–1.9	2.4	3.0	–0.1	–1.0	–7.0	–9.6	–1.0	–4.1	–5.9	–5.2	3.8	2.2	2.7	2.5	–0.1	3.3	5.8	16
17	Goods	–7.1	–3.7	2.4	3.2	–1.3	–2.5	–9.7	–12.6	–2.1	–6.1	–8.0	–10.2	5.3	2.4	1.9	2.6	–0.6	4.3	4.9	17
18	Services	–0.5	1.7	2.5	2.5	2.6	2.3	–1.1	–3.2	1.1	–0.2	–1.6	5.0	1.1	2.0	4.2	2.3	0.8	1.4	7.6	18
19	Imports	–7.8	–3.1	2.5	6.4	–3.1	–2.6	–7.7	–14.7	–5.4	–4.9	–8.0	–5.2	1.2	3.0	1.6	6.2	–1.0	0.4	6.0	19
20	Goods	–9.1	–3.7	2.7	7.3	–3.9	–3.2	–8.9	–16.7	–6.5	–5.5	–9.3	–6.3	1.2	3.9	1.8	7.4	–1.8	–0.6	6.2	20
21	Services	–1.6	–0.5	1.8	2.1	0.8	0.7	–1.8	–4.1	0.2	–2.4	–1.9	0.0	1.0	–0.7	0.5	1.1	2.7	5.0	5.0	21
22	**Government consumption expenditures and gross investment**	**0.6**	**0.8**	**2.5**	**1.8**	**1.5**	**1.9**	**0.4**	**–1.5**	**2.1**	**0.7**	**0.9**	**–1.3**	**2.6**	**1.1**	**1.3**	**4.8**	**1.6**	**2.3**	**2.8**	22
23	Federal	0.6	0.6	2.2	–1.0	1.2	1.2	0.5	0.6	0.3	0.3	–0.1	0.9	1.0	0.5	0.8	5.5	1.8	1.1	1.4	23
24	National defense	0.3	0.4	1.9	0.1	0.9	0.9	0.3	0.4	–0.2	0.1	–0.3	0.6	1.0	0.5	0.7	4.9	1.4	0.4	1.1	24
25	Nondefense	1.0	0.8	2.6	–3.0	1.8	1.7	0.8	0.9	1.1	0.7	0.2	1.4	1.1	0.5	0.8	6.3	2.3	2.1	2.0	25
26	State and local	0.6	0.9	2.7	3.7	1.6	2.4	0.4	–2.8	3.2	1.0	1.5	–2.7	3.6	1.5	1.7	4.4	1.5	3.0	3.7	26
	Addenda:																				
27	Final sales of domestic product	1.1	1.3	1.8	1.6	2.2	1.9	0.6	0.0	2.3	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	2.1	2.4	27
28	Gross domestic purchases	0.4	1.0	1.8	2.2	1.6	1.5	0.2	–1.3	1.4	1.1	0.2	0.1	2.1	1.5	1.8	2.6	0.9	1.7	2.5	28
29	Final sales to domestic purchasers	0.5	1.0	1.8	2.2	1.6	1.5	0.2	–1.2	1.5	1.1	0.3	0.2	2.1	1.6	1.8	2.5	0.9	1.7	2.5	29
30	Final sales to private domestic purchasers	0.4	1.1	1.7	2.3	1.7	1.4	0.2	–1.1	1.3	1.2	0.2	0.5	2.0	1.6	1.9	2.1	0.7	1.6	2.4	30
31	Gross national product (GNP)	1.1	1.3	....	1.6	2.2	1.9	0.6	–0.2	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	2.1	....	31
	Implicit price deflators:																				
32	GDP	1.1	1.3	1.8	1.7	2.3	1.8	0.6	–0.1	2.2	1.4	0.8	0.2	2.4	1.4	2.0	2.0	1.0	2.1	2.4	32
33	Gross domestic purchases	0.4	1.0	1.8	2.3	1.7	1.5	0.2	–1.3	1.4	1.1	0.3	0.1	2.1	1.5	1.9	2.5	0.8	1.7	2.5	33
34	GNP	1.1	1.3	....	1.7	2.3	1.8	0.6	–0.1	2.2	1.4	0.8	0.2	2.4	1.4	2.0	1.9	1.0	2.1	....	34

See *Explanatory Note* at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Table 5. Real Gross Domestic Product, Quantity Indexes

[Index numbers, 2009=100]

Line		2015	2016	2017	Seasonally adjusted					Line
					2016	2017				
					Q4	Q1	Q2	Q3	Q4	
1	**Gross domestic product**	**114.237**	**115.934**	**118.545**	**116.872**	**117.231**	**118.118**	**119.039**	**119.792**	1
2	**Personal consumption expenditures**	**114.393**	**117.520**	**120.737**	**118.840**	**119.408**	**120.372**	**121.018**	**122.150**	2
3	Goods	122.789	127.318	132.267	129.387	129.607	131.311	132.752	135.397	3
4	Durable goods	147.737	155.873	166.335	161.032	160.977	163.956	167.383	173.024	4
5	Nondurable goods	112.488	115.593	118.415	116.462	116.783	117.996	118.682	120.198	5
6	Services	110.402	112.917	115.402	113.917	114.628	115.280	115.597	116.103	6
7	**Gross private domestic investment**	**154.695**	**152.188**	**157.088**	**154.715**	**154.250**	**155.724**	**158.485**	**159.894**	7
8	Fixed investment	137.373	138.395	143.924	139.229	141.960	143.085	143.942	146.710	8
9	Nonresidential	136.126	135.323	141.677	136.207	138.581	140.843	142.456	144.828	9
10	Structures	106.212	101.864	107.274	103.173	106.806	108.617	106.654	107.019	10
11	Equipment	168.324	162.618	170.411	162.649	164.423	167.930	172.290	177.001	11
12	Intellectual property products	123.034	130.765	136.218	132.205	134.064	135.283	137.005	138.519	12
13	Residential	141.987	149.766	152.328	150.358	154.371	151.463	149.655	153.822	13
14	Change in private inventories	....	....	....	....	....	....	....	....	14
15	**Exports of goods and services**	**133.967**	**133.527**	**138.016**	**133.799**	**136.187**	**137.374**	**138.084**	**140.419**	15
16	**Imports of goods and services**	**134.751**	**136.463**	**141.835**	**138.942**	**140.407**	**140.924**	**140.682**	**145.327**	16
17	**Government consumption expenditures and gross investment**	**93.184**	**93.884**	**93.984**	**93.917**	**93.770**	**93.724**	**93.878**	**94.563**	17
18	Federal	91.493	91.536	91.704	91.583	91.024	91.461	91.766	92.565	18
19	State and local	94.196	95.310	95.366	95.334	95.445	95.097	95.155	95.768	19
	Addenda:									
20	Final sales of domestic product	112.275	114.402	117.119	115.129	115.908	116.753	117.437	118.379	20
21	Gross domestic purchases	114.871	116.791	119.552	117.986	118.276	119.087	119.888	120.959	21
22	Final sales to domestic purchasers	112.957	115.296	118.161	116.281	116.983	117.756	118.325	119.579	22
23	Final sales to private domestic purchasers	118.199	120.973	124.574	122.212	123.140	124.130	124.811	126.216	23
24	Gross national product	114.228	115.849	....	116.962	117.236	118.039	119.102	....	24

See *Explanatory Note* at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Table 6. Price Indexes for Gross Domestic Product

[Index numbers, 2009=100]

Line		2015	2016	2017	Seasonally adjusted					Line
					2016	2017				
					Q4	Q1	Q2	Q3	Q4	
1	**Gross domestic product**	**110.012**	**111.419**	**113.427**	**112.190**	**112.752**	**113.037**	**113.626**	**114.291**	1
2	**Personal consumption expenditures (PCE)**	**109.481**	**110.789**	**112.659**	**111.583**	**112.198**	**112.273**	**112.699**	**113.466**	2
3	Goods	102.695	101.209	101.574	101.392	102.062	101.127	101.307	101.800	3
4	Durable goods	90.430	88.460	86.619	87.376	87.587	86.793	86.244	85.854	4
5	Nondurable goods	108.961	107.800	109.585	108.788	109.746	108.735	109.392	110.467	5
6	Services	113.065	115.878	118.566	117.002	117.585	118.213	118.773	119.691	6
7	**Gross private domestic investment**	**106.477**	**106.978**	**108.852**	**107.569**	**108.014**	**108.697**	**109.207**	**109.489**	7
8	Fixed investment	107.148	107.801	109.647	108.385	108.808	109.485	109.999	110.295	8
9	Nonresidential	105.069	104.790	105.845	104.893	105.292	105.780	106.079	106.230	9
10	Structures	115.484	115.637	118.830	116.295	117.183	118.292	119.605	120.241	10
11	Equipment	99.761	99.634	100.002	99.651	99.832	100.032	100.084	100.060	11
12	Intellectual property products	105.753	104.966	105.665	104.844	105.248	105.754	105.775	105.885	12
13	Residential	115.883	120.157	125.049	122.580	123.102	124.503	125.862	126.730	13
14	Change in private inventories	....	....	....	....	....	....	....	....	14
15	**Exports of goods and services**	**106.481**	**104.458**	**106.956**	**105.516**	**106.168**	**106.136**	**107.006**	**108.515**	15
16	**Imports of goods and services**	**104.364**	**101.090**	**103.624**	**101.835**	**103.381**	**103.134**	**103.238**	**104.742**	16
17	**Government consumption expenditures and gross investment**	**111.825**	**112.676**	**115.501**	**113.291**	**114.624**	**115.088**	**115.741**	**116.550**	17
18	Federal	109.866	110.488	112.897	110.782	112.266	112.763	113.078	113.483	18
19	State and local	113.168	114.164	117.252	114.979	116.220	116.664	117.530	118.593	19
	Addenda:									
20	PCE excluding food and energy [1]	109.453	111.391	113.102	112.084	112.590	112.847	113.222	113.751	20
21	Market-based PCE [2]	108.186	109.067	110.662	109.756	110.390	110.288	110.627	111.342	21
22	Market-based PCE excluding food and energy [2]	107.934	109.467	110.841	110.024	110.539	110.617	110.886	111.324	22
23	Final sales of domestic product	110.116	111.554	113.557	112.324	112.883	113.166	113.756	114.424	23
24	Gross domestic purchases	109.564	110.661	112.692	111.393	112.100	112.340	112.818	113.512	24
25	Final sales to domestic purchasers	109.659	110.785	112.811	111.515	112.219	112.458	112.936	113.633	25
26	Final sales to private domestic purchasers	109.125	110.305	112.172	111.059	111.636	111.830	112.274	112.949	26
27	Gross national product	110.109	111.511	....	112.285	112.834	113.118	113.705	....	27
	Implicit price deflators:									
28	Gross domestic product	110.012	111.416	113.422	112.190	112.746	113.029	113.614	114.279	28
29	Final sales of domestic product	110.116	111.554	113.558	112.320	112.879	113.163	113.752	114.421	29
30	Gross domestic purchases	109.564	110.659	112.687	111.392	112.094	112.331	112.806	113.500	30
31	Final sales to domestic purchasers	109.659	110.785	112.812	111.511	112.215	112.454	112.931	113.629	31
32	Gross national product	110.109	111.509	....	112.284	112.827	113.108	113.692	....	32

1. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
2. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households. Percentage changes for these series are included in the addenda to table 8 and appendix table A.

See *Explanatory Note* at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 7. Real Gross Domestic Product: Annual Percent Change

Line		Percent change from preceding year								Percent change fourth quarter to fourth quarter								Line
		2010	2011	2012	2013	2014	2015	2016	2017	2010	2011	2012	2013	2014	2015	2016	2017	
1	**Gross domestic product (GDP)**	**2.5**	**1.6**	**2.2**	**1.7**	**2.6**	**2.9**	**1.5**	**2.3**	**2.7**	**1.7**	**1.3**	**2.7**	**2.7**	**2.0**	**1.8**	**2.5**	**1**
2	**Personal consumption expenditures (PCE)**	**1.9**	**2.3**	**1.5**	**1.5**	**2.9**	**3.6**	**2.7**	**2.7**	**3.1**	**1.5**	**1.3**	**2.0**	**3.6**	**3.0**	**2.8**	**2.8**	**2**
3	Goods	3.4	3.1	2.7	3.1	3.9	4.6	3.7	3.9	5.1	1.7	2.8	3.5	4.7	4.0	4.0	4.6	3
4	Durable goods	6.1	6.1	7.4	6.2	6.9	7.7	5.5	6.7	9.3	4.8	7.2	5.2	8.7	6.4	7.0	7.4	4
5	Nondurable goods	2.2	1.8	0.6	1.7	2.5	3.1	2.8	2.4	3.3	0.4	0.8	2.6	2.8	2.8	2.5	3.2	5
6	Services	1.2	1.8	0.8	0.6	2.4	3.2	2.3	2.2	2.0	1.4	0.6	1.3	3.0	2.6	2.3	1.9	6
7	**Gross private domestic investment**	**12.9**	**5.2**	**10.6**	**6.1**	**5.5**	**5.2**	**–1.6**	**3.2**	**11.1**	**9.6**	**3.7**	**9.3**	**4.7**	**2.2**	**0.9**	**3.3**	**7**
8	Fixed investment	1.5	6.3	9.8	5.0	6.2	3.9	0.7	4.0	5.5	8.4	7.0	5.2	6.1	2.4	1.1	5.4	8
9	Nonresidential	2.5	7.7	9.0	3.5	6.9	2.3	–0.6	4.7	8.1	9.0	5.2	4.8	6.1	0.3	0.7	6.3	9
10	Structures	–16.4	2.3	12.9	1.4	10.5	–1.8	–4.1	5.3	–4.0	8.0	4.1	5.8	8.8	–9.1	3.5	3.7	10
11	Equipment	15.9	13.6	10.8	4.6	6.6	3.5	–3.4	4.8	20.9	13.1	6.9	6.1	4.1	3.4	–3.7	8.8	11
12	Intellectual property products	1.9	3.6	3.9	3.4	4.6	3.8	6.3	4.2	1.8	4.1	3.4	2.2	7.0	3.2	5.2	4.8	12
13	Residential	–2.5	0.5	13.5	11.9	3.5	10.2	5.5	1.7	–5.2	6.0	15.7	6.8	6.3	10.3	2.5	2.3	13
14	Change in private inventories	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14
15	**Net exports of goods and services**	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	**15**
16	Exports	11.9	6.9	3.4	3.5	4.3	0.4	–0.3	3.4	10.1	4.2	2.2	5.9	3.0	–1.8	0.6	4.9	16
17	Goods	14.4	6.5	3.6	3.1	4.6	–0.4	0.3	4.5	10.9	4.8	1.2	7.0	2.7	–3.1	1.8	6.8	17
18	Services	6.8	7.6	3.0	4.4	3.6	2.1	–1.5	1.1	8.4	2.7	4.5	3.6	3.7	0.9	–1.8	1.5	18
19	Imports	12.7	5.5	2.2	1.1	4.5	5.0	1.3	3.9	12.0	3.5	0.3	2.5	6.2	2.9	2.7	4.6	19
20	Goods	14.9	5.8	2.1	1.2	4.9	5.2	0.9	4.3	13.6	3.4	0.1	2.7	6.6	2.8	2.5	5.4	20
21	Services	3.8	4.0	3.0	0.6	2.6	4.0	3.1	2.5	4.9	3.8	1.2	1.1	3.9	3.5	3.5	0.9	21
22	**Government consumption expenditures and gross investment**	**0.1**	**–3.0**	**–1.9**	**–2.9**	**–0.6**	**1.4**	**0.8**	**0.1**	**–1.1**	**–3.0**	**–2.2**	**–2.8**	**0.5**	**1.6**	**0.4**	**0.7**	**22**
23	Federal	4.4	–2.7	–1.9	–5.8	–2.4	–0.1	0.0	0.2	3.2	–4.0	–2.1	–6.7	–1.2	1.2	–0.3	1.1	23
24	National defense	3.2	–2.3	–3.4	–6.8	–4.0	–2.2	–0.7	0.3	2.0	–4.1	–3.9	–7.1	–4.0	0.0	–1.4	2.4	24
25	Nondefense	6.4	–3.4	0.9	–4.1	0.2	3.2	1.2	0.1	5.5	–3.9	1.0	–6.0	3.5	2.9	1.2	–0.8	25
26	State and local	–2.7	–3.3	–1.9	–0.8	0.5	2.3	1.2	0.1	–4.0	–2.3	–2.3	–0.1	1.5	1.9	0.8	0.5	26
	Addenda:																	
27	Gross domestic income (GDI)[1]	2.7	2.2	3.3	1.2	3.1	3.0	0.9	....	2.6	2.1	2.8	1.3	4.2	1.6	0.5	....	27
28	Average of GDP and GDI	2.6	1.9	2.7	1.5	2.8	2.9	1.2	....	2.7	1.9	2.1	2.0	3.5	1.8	1.2	....	28
29	Final sales of domestic product	1.1	1.7	2.1	1.5	2.7	2.6	1.9	2.4	2.0	1.5	1.7	2.0	2.9	2.0	1.9	2.8	29
30	Gross domestic purchases	2.9	1.6	2.1	1.3	2.7	3.5	1.7	2.4	3.2	1.7	1.0	2.2	3.2	2.6	2.1	2.5	30
31	Final sales to domestic purchasers	1.5	1.7	1.9	1.2	2.7	3.3	2.1	2.5	2.5	1.5	1.4	1.6	3.4	2.7	2.1	2.8	31
32	Final sales to private domestic purchasers	1.9	2.9	2.9	2.1	3.5	3.7	2.3	3.0	3.5	2.6	2.3	2.6	4.1	2.9	2.5	3.3	32
33	Gross national product	2.8	1.8	2.1	1.7	2.5	2.7	1.4	....	2.9	2.0	1.0	2.7	2.5	2.0	1.9	....	33
34	Real disposable personal income	1.0	2.5	3.2	–1.4	3.6	4.2	1.4	1.2	2.6	1.7	5.1	–2.8	4.9	3.2	0.2	1.8	34
	Price indexes:																	
35	Gross domestic purchases	1.5	2.4	1.8	1.4	1.7	0.4	1.0	1.8	1.6	2.4	1.7	1.4	1.4	0.4	1.4	1.9	35
36	Gross domestic purchases excluding food and energy[2]	1.3	1.8	1.8	1.5	1.8	1.1	1.4	1.7	1.4	1.9	1.7	1.7	1.6	1.0	1.5	1.8	36
37	GDP	1.2	2.1	1.8	1.6	1.8	1.1	1.3	1.8	1.8	1.9	1.9	1.6	1.6	1.0	1.5	1.9	37
38	GDP excluding food and energy[2]	1.4	1.9	1.8	1.7	1.9	1.3	1.6	1.8	1.6	1.9	1.8	1.9	1.7	1.2	1.7	1.8	38
39	PCE	1.7	2.5	1.9	1.3	1.5	0.3	1.2	1.7	1.3	2.7	1.8	1.2	1.2	0.4	1.6	1.7	39
40	PCE excluding food and energy[2]	1.3	1.5	1.9	1.5	1.6	1.3	1.8	1.5	1.0	1.9	1.8	1.5	1.5	1.3	1.9	1.5	40
41	Market-based PCE[3]	1.5	2.5	1.8	1.0	1.2	–0.1	0.8	1.5	1.1	2.8	1.6	0.9	0.8	0.1	1.3	1.4	41
42	Market-based PCE excluding food and energy[3]	1.0	1.4	1.8	1.2	1.2	1.1	1.4	1.3	0.7	1.9	1.5	1.1	1.2	1.1	1.5	1.2	42

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
3. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.

Note. Estimates under the *Percent change from the preceding year* columns are calculated from annual data. Estimates under the *Percent change fourth quarter to fourth quarter* columns are calculated from fourth quarter values relative to the same quarter one year prior.

See *Explanatory Note* at the end of the tables.

Source: U.S. Bureau of Economic Analysis

Table 8. Real Gross Domestic Product: Percent Change From Quarter One Year Ago

Line		2014				2015				2016				2017				Line
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1	**Gross domestic product (GDP)**	**1.7**	**2.7**	**3.2**	**2.7**	**3.8**	**3.3**	**2.4**	**2.0**	**1.4**	**1.2**	**1.5**	**1.8**	**2.0**	**2.2**	**2.3**	**2.5**	1
2	**Personal consumption expenditures (PCE)**	**2.0**	**2.7**	**3.2**	**3.6**	**4.0**	**3.9**	**3.6**	**3.0**	**2.6**	**2.8**	**2.8**	**2.8**	**2.9**	**2.7**	**2.6**	**2.8**	2
3	Goods	2.7	3.9	4.3	4.7	5.1	4.7	4.7	4.0	3.4	3.8	3.5	4.0	3.6	3.5	3.8	4.6	3
4	Durable goods	4.1	6.9	7.8	8.7	9.2	8.1	7.4	6.4	4.7	4.6	5.7	7.0	6.7	6.4	6.3	7.4	4
5	Nondurable goods	1.9	2.5	2.6	2.8	3.2	3.1	3.4	2.8	2.8	3.4	2.4	2.5	2.1	1.9	2.5	3.2	5
6	Services	1.7	2.1	2.6	3.0	3.5	3.5	3.1	2.6	2.1	2.3	2.4	2.3	2.5	2.4	2.0	1.9	6
7	**Gross private domestic investment**	**4.3**	**6.8**	**6.4**	**4.7**	**9.5**	**5.8**	**3.5**	**2.2**	**–1.9**	**–2.8**	**–2.7**	**0.9**	**1.7**	**3.3**	**4.5**	**3.3**	7
8	Fixed investment	4.7	6.1	7.7	6.1	5.9	4.5	3.1	2.4	1.3	0.5	0.1	1.1	3.2	3.6	3.8	5.4	8
9	Nonresidential	5.3	7.0	9.1	6.1	4.8	3.2	1.1	0.3	–1.2	–1.1	–0.7	0.7	3.5	4.3	4.6	6.3	9
10	Structures	12.5	13.0	8.1	8.8	3.1	1.3	–2.3	–9.1	–8.1	–9.0	–2.0	3.5	6.6	8.3	2.8	3.7	10
11	Equipment	4.1	6.1	12.3	4.1	6.0	3.5	1.4	3.4	–2.1	–2.4	–5.3	–3.7	0.8	3.1	6.4	8.8	11
12	Intellectual property products	2.0	4.1	5.2	7.0	4.4	4.4	3.2	3.2	5.5	7.0	7.4	5.2	5.1	3.3	3.5	4.8	12
13	Residential	2.5	2.7	2.4	6.3	9.9	9.6	11.2	10.3	10.8	6.4	2.6	2.5	2.0	1.3	1.3	2.3	13
14	Change in private inventories	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	14
15	**Net exports of goods and services**	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	....	15
16	Exports	4.3	5.3	4.6	3.0	2.4	1.1	0.0	–1.8	–1.3	–1.6	1.0	0.6	3.1	3.2	2.2	4.9	16
17	Goods	4.7	5.7	5.3	2.7	2.0	0.7	–1.1	–3.1	–0.9	–1.5	1.7	1.8	4.4	4.3	2.7	6.8	17
18	Services	3.3	4.4	3.2	3.7	3.3	2.0	2.1	0.9	–2.2	–1.7	–0.4	–1.8	0.5	1.3	1.2	1.5	18
19	Imports	3.4	4.6	3.9	6.2	6.6	4.9	5.6	2.9	1.2	0.5	0.7	2.7	3.8	4.1	3.2	4.6	19
20	Goods	3.7	5.0	4.2	6.6	7.2	5.2	5.7	2.8	0.7	0.0	0.2	2.5	3.8	4.1	3.7	5.4	20
21	Services	1.7	2.6	2.1	3.9	3.9	3.4	5.2	3.5	3.4	2.5	3.1	3.5	3.9	4.2	1.3	0.9	21
22	**Government consumption expenditures and gross investment**	**–1.9**	**–1.1**	**–0.1**	**0.5**	**1.0**	**1.6**	**1.4**	**1.6**	**1.7**	**0.6**	**0.4**	**0.4**	**–0.2**	**0.0**	**0.0**	**0.7**	22
23	Federal	–4.1	–3.2	–1.2	–1.2	–0.7	0.1	–0.9	1.2	0.4	–0.3	0.4	–0.3	–0.6	0.1	0.1	1.1	23
24	National defense	–5.4	–4.5	–2.2	–4.0	–2.9	–2.0	–3.7	0.0	–0.4	–1.4	0.3	–1.4	–1.5	0.1	0.1	2.4	24
25	Nondefense	–2.0	–1.1	0.5	3.5	2.8	3.5	3.5	2.9	1.6	1.5	0.5	1.2	0.9	0.2	0.1	–0.8	25
26	State and local	–0.3	0.3	0.6	1.5	2.1	2.5	2.8	1.9	2.4	1.1	0.4	0.8	0.0	–0.1	0.0	0.5	26
	Addenda:																	
27	Gross domestic income (GDI) [1]	1.7	2.6	3.7	4.2	4.3	3.5	2.4	1.6	1.1	0.5	1.4	0.5	1.3	1.8	1.3	....	27
28	Average of GDP and GDI	1.7	2.7	3.4	3.5	4.0	3.4	2.4	1.8	1.2	0.9	1.4	1.2	1.6	2.0	1.8	....	28
29	Final sales of domestic product	1.8	2.5	3.4	2.9	3.2	3.1	2.3	2.0	1.9	1.8	2.0	1.9	2.2	2.2	2.2	2.8	29
30	Gross domestic purchases	1.7	2.6	3.1	3.2	4.4	3.8	3.2	2.6	1.7	1.5	1.5	2.1	2.1	2.4	2.4	2.5	30
31	Final sales to domestic purchasers	1.7	2.5	3.3	3.4	3.8	3.6	3.1	2.7	2.2	2.0	1.9	2.1	2.4	2.4	2.3	2.8	31
32	Final sales to private domestic purchasers	2.5	3.3	4.0	4.1	4.4	4.0	3.5	2.9	2.3	2.3	2.2	2.5	2.9	2.9	2.8	3.3	32
33	Gross national product	1.8	2.5	3.1	2.5	3.6	3.0	2.1	2.0	1.1	1.2	1.5	1.9	2.2	2.2	2.5	....	33
34	Real disposable personal income	2.5	3.2	3.7	4.9	4.9	4.6	4.0	3.2	2.2	1.7	1.4	0.2	0.9	1.1	1.1	1.8	34
	Price indexes:																	
35	Gross domestic purchases	1.6	1.9	1.9	1.4	0.5	0.5	0.4	0.4	0.7	0.9	1.0	1.4	2.0	1.7	1.7	1.9	35
36	Gross domestic purchases excluding food and energy [2]	1.7	1.8	1.9	1.6	1.3	1.2	1.0	1.0	1.2	1.3	1.4	1.5	1.8	1.7	1.7	1.8	36
37	GDP	1.7	2.0	1.9	1.6	1.1	1.1	1.0	1.0	1.2	1.2	1.2	1.5	2.0	1.6	1.8	1.9	37
38	GDP excluding food and energy [2]	1.9	2.0	2.0	1.7	1.4	1.3	1.2	1.2	1.4	1.5	1.6	1.7	2.0	1.8	1.7	1.8	38
39	PCE	1.4	1.8	1.7	1.2	0.3	0.3	0.3	0.4	1.0	1.0	1.2	1.6	2.0	1.6	1.5	1.7	39
40	PCE excluding food and energy [2]	1.5	1.7	1.7	1.5	1.4	1.3	1.3	1.3	1.6	1.7	1.8	1.9	1.8	1.5	1.4	1.5	40
41	Market-based PCE [3]	1.0	1.5	1.3	0.8	–0.1	–0.1	–0.1	0.1	0.6	0.6	0.7	1.3	1.8	1.3	1.3	1.4	41
42	Market-based PCE excluding food and energy [3]	1.0	1.3	1.3	1.2	1.1	1.1	1.0	1.1	1.4	1.4	1.5	1.5	1.5	1.2	1.1	1.2	42

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.
2. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
3. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.

See *Explanatory Note* at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Table 9. Relation of Gross Domestic Product, Gross National Product, and National Income

[Billions of dollars]

Line		2015	2016	2017	Seasonally adjusted at annual rates					Line
					2016	2017				
					Q4	Q1	Q2	Q3	Q4	
1	**Gross domestic product (GDP)**	**18,120.7**	**18,624.5**	**19,386.8**	**18,905.5**	**19,057.7**	**19,250.0**	**19,500.6**	**19,738.9**	1
2	Plus: Income receipts from the rest of the world	812.9	844.3	....	882.1	895.9	914.8	952.1	....	2
3	Less: Income payments to the rest of the world	608.4	647.2	....	653.1	681.7	712.4	723.9	....	3
4	**Equals: Gross national product**	**18,325.2**	**18,821.6**	....	**19,134.5**	**19,272.0**	**19,452.4**	**19,728.9**	....	4
5	Less: Consumption of fixed capital	2,841.5	2,916.7	3,035.0	2,950.0	2,986.2	3,020.7	3,052.1	3,081.2	5
6	Less: Statistical discrepancy	–255.9	–147.2	....	–34.4	–102.4	–67.0	–14.4	....	6
7	**Equals: National income**	**15,739.6**	**16,052.0**	....	**16,218.9**	**16,388.2**	**16,498.7**	**16,691.2**	....	7
8	Compensation of employees	9,708.3	9,978.6	10,294.7	10,014.9	10,166.3	10,243.0	10,336.5	10,432.8	8
9	Wages and salaries	7,858.9	8,085.2	8,339.6	8,107.8	8,232.1	8,295.2	8,374.3	8,456.7	9
10	Supplements to wages and salaries	1,849.4	1,893.4	1,955.1	1,907.1	1,934.2	1,947.9	1,962.2	1,976.0	10
11	Proprietors' income with inventory valuation and capital consumption adjustments	1,318.8	1,341.9	1,385.7	1,354.6	1,380.2	1,378.6	1,381.9	1,401.9	11
12	Rental income of persons with capital consumption adjustment	662.5	707.3	744.5	718.9	730.8	740.3	747.2	759.7	12
13	Corporate profits with inventory valuation and capital consumption adjustments	2,117.5	2,073.5	....	2,155.2	2,109.0	2,123.4	2,213.7	....	13
14	Net interest and miscellaneous payments	583.4	570.6	585.3	566.5	588.2	598.3	599.8	554.8	14
15	Taxes on production and imports less subsidies	1,198.5	1,226.2	1,266.7	1,242.5	1,248.2	1,261.2	1,270.1	1,287.3	15
16	Business current transfer payments (net)	165.0	164.0	161.8	176.6	176.5	164.6	152.7	153.5	16
17	Current surplus of government enterprises	–14.3	–10.1	–10.7	–10.2	–11.0	–10.7	–10.6	–10.4	17
	Addenda:									
18	Gross domestic income (GDI)	18,376.6	18,771.6	....	18,939.9	19,160.1	19,317.0	19,515.0	....	18
19	Average of GDP and GDI	18,248.7	18,698.1	....	18,922.7	19,108.9	19,283.5	19,507.8	....	19
20	Statistical discrepancy as a percentage of GDP	–1.4	–0.8	....	–0.2	–0.5	–0.3	–0.1	....	20

Source: U.S. Bureau of Economic Analysis

Table 10. Personal Income and Its Disposition

[Billions of dollars]

Line		2015	2016	2017	Seasonally adjusted at annual rates					Line
					2016	2017				
					Q4	Q1	Q2	Q3	Q4	
1	**Personal income**[1]	**15,553.0**	**15,928.7**	**16,416.9**	**16,025.7**	**16,245.2**	**16,339.6**	**16,451.9**	**16,630.8**	1
2	Compensation of employees	9,708.3	9,978.6	10,294.7	10,014.9	10,166.3	10,243.0	10,336.5	10,432.8	2
3	Wages and salaries	7,858.9	8,085.2	8,339.6	8,107.8	8,232.1	8,295.2	8,374.3	8,456.7	3
4	Supplements to wages and salaries	1,849.4	1,893.4	1,955.1	1,907.1	1,934.2	1,947.9	1,962.2	1,976.0	4
5	Proprietors' income with inventory valuation and capital consumption adjustments	1,318.8	1,341.9	1,385.7	1,354.6	1,380.2	1,378.6	1,381.9	1,401.9	5
6	Farm	53.7	43.2	35.1	37.8	41.9	37.0	31.9	29.7	6
7	Nonfarm	1,265.1	1,298.7	1,350.5	1,316.7	1,338.4	1,341.6	1,350.0	1,372.1	7
8	Rental income of persons with capital consumption adjustment	662.5	707.3	744.5	718.9	730.8	740.3	747.2	759.7	8
9	Personal income receipts on assets	2,387.1	2,377.8	2,441.2	2,391.6	2,420.1	2,434.5	2,433.9	2,476.5	9
10	Personal interest income	1,367.3	1,415.3	1,475.9	1,438.5	1,476.6	1,465.1	1,460.6	1,501.4	10
11	Personal dividend income	1,019.8	962.5	965.3	953.0	943.5	969.4	973.2	975.1	11
12	Personal current transfer receipts	2,684.4	2,768.4	2,851.5	2,795.9	2,831.9	2,836.9	2,858.4	2,878.9	12
13	Less: Contributions for government social insurance, domestic	1,208.0	1,245.3	1,300.7	1,250.2	1,284.1	1,293.8	1,306.0	1,318.9	13
14	Less: Personal current taxes	1,937.9	1,960.1	2,039.9	1,977.2	2,018.8	2,007.9	2,046.4	2,086.3	14
15	**Equals: Disposable personal income**	**13,615.0**	**13,968.6**	**14,377.0**	**14,048.5**	**14,226.4**	**14,331.6**	**14,405.5**	**14,544.4**	15
16	Less: Personal outlays	12,786.7	13,288.0	13,891.2	13,537.0	13,671.8	13,805.9	13,927.2	14,160.0	16
17	**Equals: Personal saving**	**828.4**	**680.6**	**485.8**	**511.5**	**554.6**	**525.7**	**478.3**	**384.4**	17
18	Personal saving as a percentage of disposable personal income	6.1	4.9	3.4	3.6	3.9	3.7	3.3	2.6	18
	Addenda:									
19	Personal income excluding current transfer receipts, billions of chained (2009) dollars[2]	11,754.2	11,878.7	12,041.3	11,857.1	11,955.7	12,027.2	12,062.4	12,120.4	19
20	Disposable personal income, billions of chained (2009) dollars[2]	12,436.0	12,608.2	12,761.7	12,590.8	12,680.4	12,765.6	12,783.0	12,819.0	20

1. Personal income is also equal to national income less corporate profits with inventory valuation and capital consumption adjustments, taxes on production and imports less subsidies, contributions for government social insurance, net interest and miscellaneous payments, business current transfer payments (net), and current surplus of government enterprises, plus personal income receipts on assets, and personal current transfer receipts.
2. The current-dollar measure is deflated by the implicit price deflator for personal consumption expenditures.

Source: U.S. Bureau of Economic Analysis

Appendix Table A. Real Gross Domestic Product and Related Aggregates and Price Indexes: Percent Change From Preceding Period and Contributions to Percent Change

Line		2015	2016	2017	Seasonally adjusted at annual rates																Line
					2014				2015				2016				2017				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
	Percent change from preceding period																				
	Gross domestic product (GDP) and related aggregates:																				
1	GDP	2.9	1.5	2.3	–0.9	4.6	5.2	2.0	3.2	2.7	1.6	0.5	0.6	2.2	2.8	1.8	1.2	3.1	3.2	2.6	1
2	Goods	3.1	1.4	3.7	–7.8	9.2	10.6	–1.4	2.8	2.5	3.1	–0.7	–2.2	4.1	4.7	3.0	–1.6	7.3	9.6	3.3	2
3	Services	2.6	1.7	1.6	1.9	1.6	3.1	3.1	3.5	1.9	1.4	2.2	0.7	2.4	2.2	1.0	1.5	2.1	1.5	1.4	3
4	Structures	4.0	0.4	1.7	5.5	11.6	1.4	6.9	3.1	10.3	–1.7	–8.0	10.0	–5.2	0.1	3.4	10.3	–4.3	–6.2	9.0	4
5	Motor vehicle output	5.4	1.6	–0.7	5.0	12.6	13.0	–4.7	5.4	10.0	16.7	–17.1	2.8	9.4	2.7	–1.9	–7.3	0.8	–10.3	32.8	5
6	GDP excluding motor vehicle output	2.8	1.5	2.3	–1.1	4.4	5.0	2.2	3.2	2.5	1.2	1.1	0.5	2.0	2.8	1.9	1.5	3.1	3.6	1.8	6
7	Final sales of computers [1]	6.3	13.0	4.6	15.7	38.3	0.2	–21.6	11.8	31.5	1.2	8.5	38.9	12.3	–7.9	–7.8	23.3	22.3	–24.2	12.9	7
8	GDP excluding final sales of computers	2.8	1.4	2.2	–1.0	4.5	5.2	2.1	3.2	2.6	1.6	0.5	0.5	2.2	2.8	1.8	1.2	3.0	3.3	2.5	8
9	Research and development	1.2	4.9	2.8	2.7	–1.0	3.7	10.0	–9.2	4.0	1.8	7.4	3.3	11.2	2.2	–1.1	7.1	1.3	0.9	–1.2	9
10	GDP excluding research and development	2.9	1.4	2.2	–1.0	4.8	5.2	1.8	3.6	2.7	1.6	0.3	0.5	2.0	2.8	1.8	1.1	3.1	3.2	2.7	10
11	Farm gross value added [2]	7.8	12.4	–12.3	–21.3	3.9	–1.6	18.2	4.6	–0.2	29.8	–0.7	26.6	14.4	3.5	–3.8	–32.4	–13.9	–5.7	–5.2	11
12	Nonfarm business gross value added [3]	3.4	1.5	2.9	–1.4	5.8	6.9	2.3	4.0	3.3	1.3	0.3	0.2	2.5	3.3	2.2	1.8	3.9	4.0	3.2	12
	Price indexes:																				
13	GDP	1.1	1.3	1.8	1.6	2.2	1.9	0.6	–0.1	2.2	1.4	0.8	0.3	2.4	1.4	2.0	2.0	1.0	2.1	2.4	13
14	GDP excluding food and energy [4]	1.3	1.6	1.8	1.8	1.8	1.9	1.2	0.6	1.7	1.5	1.1	1.3	2.2	1.9	1.6	2.4	1.1	1.6	2.1	14
15	GDP excluding final sales of computers	1.1	1.3	1.8	1.6	2.2	1.9	0.6	–0.1	2.2	1.4	0.8	0.3	2.5	1.4	2.0	2.1	1.1	2.1	2.4	15
16	Gross domestic purchases	0.4	1.0	1.8	2.2	1.6	1.5	0.2	–1.3	1.4	1.1	0.2	0.1	2.1	1.5	1.8	2.6	0.9	1.7	2.5	16
17	Gross domestic purchases excluding food and energy [4]	1.1	1.4	1.7	1.8	1.7	1.8	1.2	0.4	1.4	1.3	1.0	1.1	2.0	1.7	1.4	2.3	1.3	1.6	1.9	17
18	Gross domestic purchases excluding final sales of computers to domestic purchasers	0.5	1.0	1.9	2.2	1.7	1.6	0.3	–1.3	1.5	1.1	0.3	0.2	2.2	1.5	1.9	2.6	0.9	1.7	2.5	18
19	Personal consumption expenditures (PCE)	0.3	1.2	1.7	2.1	1.8	1.2	–0.3	–1.6	1.7	1.3	0.2	0.6	2.1	1.7	2.0	2.2	0.3	1.5	2.8	19
20	PCE excluding food and energy [4]	1.3	1.8	1.5	1.5	2.0	1.6	1.1	0.9	1.7	1.5	1.2	2.1	2.0	2.0	1.3	1.8	0.9	1.3	1.9	20
21	Market-based PCE [5]	–0.1	0.8	1.5	1.8	1.3	0.9	–0.8	–2.0	1.6	1.0	–0.2	0.1	1.7	1.4	1.9	2.3	–0.4	1.2	2.6	21
22	Market-based PCE excluding food and energy [5]	1.1	1.4	1.3	1.2	1.5	1.3	0.7	0.7	1.5	1.2	1.0	1.7	1.5	1.6	1.1	1.9	0.3	1.0	1.6	22
	Contributions to percent change in real gross domestic product																				
	Percent change at annual rate:																				
23	**Gross domestic product**	**2.9**	**1.5**	**2.3**	**–0.9**	**4.6**	**5.2**	**2.0**	**3.2**	**2.7**	**1.6**	**0.5**	**0.6**	**2.2**	**2.8**	**1.8**	**1.2**	**3.1**	**3.2**	**2.6**	23
	Percentage points at annual rates:																				
24	Goods	0.93	0.41	1.09	–2.46	2.75	3.18	–0.41	0.85	0.77	0.93	–0.21	–0.64	1.21	1.39	0.88	–0.47	2.10	2.74	1.00	24
25	Services	1.61	1.04	1.03	1.14	0.98	1.92	1.90	2.14	1.18	0.84	1.37	0.46	1.46	1.39	0.61	0.91	1.32	0.93	0.86	25
26	Structures	0.32	0.04	0.14	0.41	0.86	0.11	0.53	0.25	0.80	–0.15	–0.67	0.76	–0.43	0.01	0.27	0.80	–0.36	–0.51	0.69	26
27	Motor vehicle output	0.15	0.05	–0.02	0.14	0.34	0.36	–0.14	0.16	0.28	0.47	–0.56	0.08	0.26	0.08	–0.06	–0.22	0.02	–0.30	0.78	27
28	Final sales of computers	0.02	0.05	0.02	0.06	0.14	0.00	–0.10	0.04	0.11	0.01	0.03	0.13	0.05	–0.03	–0.03	0.08	0.08	–0.10	0.04	28
29	Research and development	0.03	0.12	0.07	0.07	–0.02	0.09	0.24	–0.24	0.10	0.05	0.18	0.08	0.27	0.06	–0.03	0.18	0.03	0.02	–0.03	29

1. For some components of final sales of computers, includes computer parts.
2. Farm output less intermediate goods and services purchased.
3. Consists of GDP less gross value added of farm, of households and institutions, and of general government.
4. Food excludes personal consumption expenditures for purchased meals and beverages, which are classified in food services.
5. This index is a supplemental measure that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, financial services furnished without payment) and the final consumption expenditures of nonprofit institutions serving households.

See *Explanatory Note* at the end of the tables.
Source: U.S. Bureau of Economic Analysis

Explanatory Note: NIPA Measures of Quantities and Prices

Current-dollar GDP is a measure of the market value of goods, services, and structures produced in the economy in a particular period. Changes in current-dollar GDP can be decomposed into quantity and price components. Quantities, or "real" measures, and prices are expressed as index numbers with the reference year -- at present, the year 2009 -- equal to 100.

Annual changes in quantities and prices are calculated using a Fisher formula that incorporates weights from two adjacent years. (Quarterly changes in quantities and prices are calculated using a Fisher formula that incorporates weights from two adjacent quarters; quarterly indexes are adjusted for consistency to the annual indexes before percent changes are calculated.) For example, the 2008-09 annual percent change in real GDP uses prices for 2008 and 2009 as weights, and the 2008-09 annual percent change in GDP prices uses quantities for 2008 and 2009 as weights. These annual changes are "chained" (multiplied) together to form time series of quantity and price indexes. Percent changes in Fisher indexes are not affected by the choice of reference year. (BEA also publishes a measure of the price level known as the implicit price deflator (IPD), which is calculated as the ratio of the current-dollar value to the corresponding chained-dollar value, multiplied by 100. The values of the IPD are very close to the values of the corresponding "chain-type" price index.)

Index numbers of quantity and price indexes for GDP and its major components are presented in this release in tables 5 and 6. Percent changes from the preceding period are presented in tables 1, 4, 7, 8, and appendix table A. Contributions by major components to the percent change in real GDP are presented in table 2.

Measures of real GDP and its major components are also presented in dollar-denominated form, designated "chained (2009) dollar estimates." For most series, these estimates, which are presented in table 3, are computed by multiplying the current-dollar value in 2009 by a corresponding quantity index number and then dividing by 100. For example, if a current-dollar GDP component equaled $100 in 2009 and if real output for this component increased 10 percent in 2010, then the chained (2009) dollar value of this component in 2010 would be $110 (= $100 x 110 / 100). Percent changes calculated from chained-dollar estimates and from chain-type quantity indexes are the same; any differences will be small and due to rounding.

Chained-dollar values for the detailed GDP components will not necessarily sum to the chained-dollar estimate of GDP (or to any intermediate aggregate). This is because the relative prices used as weights for any period other than the reference year differ from those of the reference year. A measure of the extent of such differences is provided by a “residual” line, which indicates the difference between GDP (or other major aggregate) and the sum of the most detailed components in the table. For periods close to the reference year, when there usually has not been much change in the relative prices that are used as weights, the residuals tend to be small, and the chained-dollar estimates can be used to approximate the contributions to growth and to aggregate the detailed estimates. For periods further from the reference year, the residuals tend to be larger, and the chained-dollar estimates are less useful for analyses of contributions to growth. Thus, the contributions to percent change shown in table 2 provide a better measure of the composition of GDP growth. In particular, for components for which relative prices are changing rapidly, calculation of contributions using chained-dollar estimates may be misleading even just a few years from the reference year.

Reference "Chained-Dollar Indexes: Issues, Tips on Their Use, and Upcoming Changes," November 2003 *Survey*, pp. 8-16.