

GDP and the Economy

Advance Estimates for the First Quarter of 2018

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Real gross domestic product (GDP) increased at an annual rate of 2.3 percent in the first quarter of 2018, according to the advance estimates of the National Income and Product Accounts (NIPAs) (chart 1 and table 1).¹ In the fourth quarter, real GDP increased 2.9 percent.

The increase in real GDP in the first quarter reflected positive contributions from nonresidential fixed investment, consumer spending, exports, inventory investment, federal government spending, and state and local government spending (chart 2 and table 1).² Imports, which are a subtraction in the calculation of GDP, increased.

Chart 1. Real GDP: Percent Change From Preceding Quarter

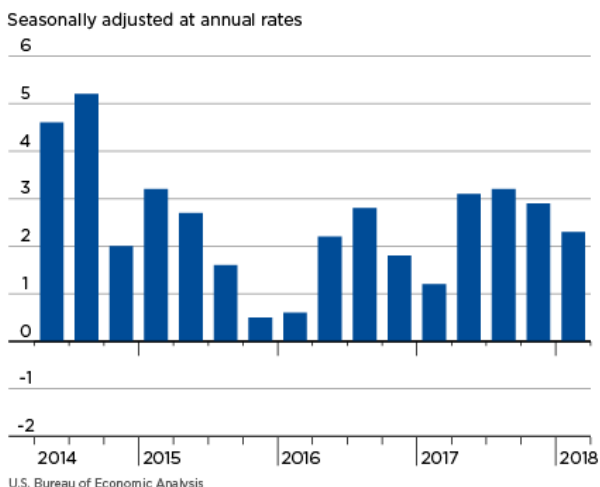
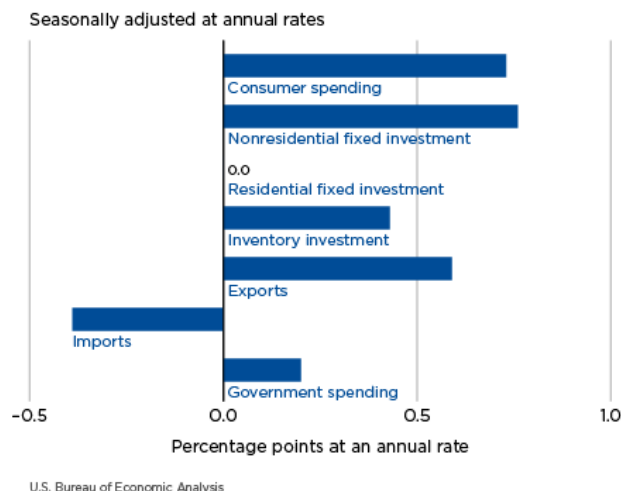


Chart 2. Real GDP: Contributions to the Percent Change in 2018:1



GDP Component Detail

Real GDP growth decelerated in the first quarter (table 1, line 1), reflecting decelerations in consumer spending, residential fixed investment, exports, and state and local government spending. These movements were partly offset by an upturn in private inventory investment. Imports, which are a subtraction in the calculation of GDP, decelerated.

- The deceleration in consumer spending (line 3) mainly reflected a downturn in spending for durable goods and a deceleration in spending for nondurable goods.
 - The main contributor to the downturn in durable goods (line 4) was a downturn in motor vehicles and parts.
 - The main contributors to the deceleration in nondurable goods (line 5) were a downturn in clothing and footwear and a deceleration in food and beverages purchased for off-premises consumption.
- The deceleration in residential fixed investment (line 13) reflected a downturn in “other” structures (mainly due to a downturn in brokers’ commissions and other ownership transfer costs and to a deceleration in improvements).
- The deceleration in exports (line 16) reflected a deceleration in exports of goods that was partly offset by an upturn in exports of services.
 - The deceleration in exports of goods reflected downturns in industrial supplies and materials (mainly petroleum and products) and in “other” goods and a deceleration in nonautomotive capital goods. These movements were partly offset by an upturn in exports of foods, feeds, and beverages (mainly soybeans) and by an acceleration in automotive vehicles, engines, and parts.
 - The upturn in exports of services mainly reflected upturns in travel and transport services.
- The deceleration in state and local government spending (line 26) reflected a downturn in investment in structures.
- The upturn in private inventory investment (line 14) mainly reflected an upturn in wholesale trade industries (for both durable and nondurable goods).

Table 1. Real Gross Domestic Product (GDP) and Related Measures

[Seasonally adjusted at annual rates]

Line		Share of current-dollar GDP (percent)	Change from preceding period (percent)				Contribution to percent change in real GDP (percentage points)			
		2018	2017			2018	2017			2018
		I	II	III	IV	I	II	III	IV	I
1	Gross domestic product¹	100.0	3.1	3.2	2.9	2.3	3.1	3.2	2.9	2.3
2	Personal consumption expenditures	69.0	3.3	2.2	4.0	1.1	2.24	1.49	2.75	0.73
3	Goods	22.1	5.4	4.5	7.8	-1.1	1.16	0.97	1.67	-0.24
4	Durable goods	7.5	7.6	8.6	13.7	-3.3	0.56	0.63	0.98	-0.25
5	Nondurable goods	14.6	4.2	2.3	4.8	0.1	0.61	0.34	0.69	0.01
6	Services	46.9	2.3	1.1	2.3	2.1	1.08	0.52	1.08	0.97
7	Gross private domestic investment	16.9	3.9	7.3	4.7	7.3	0.64	1.19	0.78	1.19
8	Fixed investment	16.7	3.2	2.4	8.2	4.6	0.53	0.40	1.31	0.76
9	Nonresidential	12.8	6.7	4.7	6.8	6.1	0.82	0.58	0.84	0.76
10	Structures	3.0	7.0	-7.0	6.3	12.3	0.20	-0.21	0.18	0.34
11	Equipment	5.8	8.8	10.8	11.6	4.7	0.48	0.58	0.63	0.27
12	Intellectual property products	4.1	3.7	5.2	0.8	3.6	0.15	0.21	0.03	0.14
13	Residential	3.9	-7.3	-4.7	12.8	0.0	-0.30	-0.18	0.46	0.00
14	Change in private inventories	0.2	.....	.....	.....	.....	0.12	0.79	-0.53	0.43
15	Net exports of goods and services	-3.2	.....	.....	.....	.....	0.21	0.36	-1.16	0.20
16	Exports	12.4	3.5	2.1	7.0	4.8	0.42	0.25	0.83	0.59
17	Goods	8.3	2.2	1.8	11.6	6.1	0.18	0.15	0.89	0.49
18	Services	4.1	6.2	2.5	-1.4	2.4	0.25	0.10	-0.06	0.10
19	Imports	15.6	1.5	-0.7	14.1	2.6	-0.22	0.11	-1.99	-0.39
20	Goods	12.8	1.3	-0.2	17.3	2.1	-0.16	0.03	-1.96	-0.26
21	Services	2.8	2.2	-2.6	1.1	4.8	-0.06	0.07	-0.03	-0.13
22	Government consumption expenditures and gross investment	17.2	-0.2	0.7	3.0	1.2	-0.03	0.12	0.51	0.20
23	Federal	6.5	1.9	1.3	3.2	1.7	0.13	0.09	0.20	0.11
24	National defense	3.9	4.7	2.4	5.5	1.8	0.18	0.09	0.21	0.07
25	Nondefense	2.6	-1.9	-0.2	-0.1	1.6	-0.05	-0.01	0.00	0.04
26	State and local	10.8	-1.5	0.2	2.9	0.8	-0.16	0.03	0.31	0.09
Addenda:										
27	Gross domestic income (GDI) ²	.....	2.3	2.4	0.9	.....	.....	.....	.....	.....
28	Average of GDP and GDI	.....	2.7	2.8	1.9	.....	.....	.....	.....	.....
29	Final sales of domestic product	99.8	2.9	2.4	3.4	1.9	2.94	2.37	3.41	1.89
30	Goods	29.4	7.3	9.6	2.6	3.0	2.10	2.74	0.78	0.88
31	Services	62.3	2.1	1.5	1.9	1.8	1.32	0.93	1.18	1.10
32	Structures	8.3	-4.3	-6.2	12.2	4.1	-0.36	-0.51	0.93	0.34
33	Motor vehicle output	2.8	0.8	-10.3	35.1	5.7	0.02	-0.30	0.83	0.16
34	GDP excluding motor vehicle output	97.2	3.1	3.6	2.1	2.2	3.04	3.45	2.05	2.16
35	Final sales of computers	0.4	22.3	-24.2	19.8	3.1	0.08	-0.10	0.07	0.01
36	GDP excluding final sales of computers	99.6	3.0	3.3	2.8	2.3	2.98	3.26	2.82	2.31
37	Research and development (R&D)	2.5	1.3	0.9	-0.4	2.9	0.03	0.02	-0.01	0.07
38	GDP excluding R&D	97.5	3.1	3.2	3.0	2.3	3.03	3.13	2.90	2.25

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

2. GDI is deflated by the implicit price deflator for GDP.

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 are calculated from NIPA table 1.2.5.

Prices

Prices for gross domestic purchases, goods and services purchased by U.S. residents, increased 2.8 percent in the first quarter of 2018 after increasing 2.5 percent in the fourth quarter of 2017 (table 2, line 1, and chart 3). The acceleration mainly reflected an acceleration in the prices paid for residential investment.

- The acceleration in prices paid for residential investment (line 13) reflected accelerations in new single-family construction and in brokers' commissions and other ownership transfer costs.
- Consumer prices excluding food and energy (line 25), a measure of the "core" rate of inflation, accelerated, increasing 2.5 percent in the first quarter after increasing 1.9 percent in the fourth quarter.

Chart 3. Prices of Gross Domestic Purchases

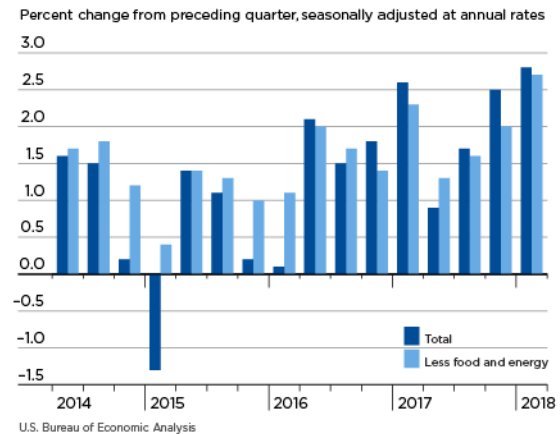


Table 2. Prices for Gross Domestic Purchases

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

Line		Change from preceding period (percent)				Contribution to percent change in gross domestic purchases prices (percentage points)			
		2017			2018	2017			2018
		II	III	IV	I	II	III	IV	I
1	Gross domestic purchases¹	0.9	1.7	2.5	2.8	0.9	1.7	2.5	2.8
2	Personal consumption expenditures	0.3	1.5	2.7	2.7	0.18	1.02	1.83	1.82
3	Goods	-3.6	0.7	1.8	2.0	-0.79	0.16	0.38	0.43
4	Durable goods	-3.6	-2.5	-2.1	-1.6	-0.27	-0.19	-0.15	-0.12
5	Nondurable goods	-3.6	2.4	3.8	3.9	-0.52	0.34	0.53	0.55
6	Services	2.2	1.9	3.2	3.1	0.97	0.87	1.44	1.39
7	Gross private domestic investment	2.6	1.9	1.0	2.8	0.40	0.30	0.16	0.46
8	Fixed investment	2.5	1.9	1.0	2.9	0.40	0.30	0.16	0.47
9	Nonresidential	1.9	1.1	0.6	1.3	0.23	0.14	0.07	0.16
10	Structures	3.8	4.5	1.9	3.4	0.11	0.12	0.05	0.09
11	Equipment	0.8	0.2	0.2	0.2	0.04	0.01	0.01	0.01
12	Intellectual property products	1.9	0.1	0.0	1.3	0.08	0.00	0.00	0.05
13	Residential	4.6	4.4	2.5	8.5	0.17	0.16	0.09	0.31
14	Change in private inventories	.....	.....	.....	.....	0.01	0.00	0.00	-0.01
15	Government consumption expenditures and gross investment	1.6	2.3	3.0	3.2	0.27	0.38	0.50	0.54
16	Federal	1.8	1.1	1.7	4.0	0.11	0.07	0.11	0.25
17	National defense	1.4	0.4	1.5	3.4	0.05	0.02	0.06	0.13
18	Nondefense	2.3	2.1	2.1	4.9	0.06	0.05	0.05	0.12
19	State and local	1.5	3.0	3.8	2.7	0.16	0.31	0.39	0.28
Addenda:									
Gross domestic purchases:									
20	Food	2.1	0.2	0.1	0.4	0.10	0.01	0.01	0.02
21	Energy goods and services	-16.0	8.4	28.2	12.4	-0.45	0.21	0.66	0.32
22	Excluding food and energy	1.3	1.6	2.0	2.7	1.21	1.49	1.82	2.48
Personal consumption expenditures (PCE):									
23	Food and beverages purchased for off-premises consumption	2.0	0.2	0.2	0.2	.....	.....	.....	.....
24	Energy goods and services	-16.0	8.4	27.7	12.9	.....	.....	.....	.....
25	Excluding food and energy	0.9	1.3	1.9	2.5	.....	.....	.....	.....
26	Gross domestic product (GDP)	1.0	2.1	2.3	2.0	.....	.....	.....	.....
27	Exports of goods and services	-0.1	3.3	5.8	3.9	.....	.....	.....	.....
28	Imports of goods and services	-1.0	0.4	6.1	9.3	.....	.....	.....	.....

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 the prices of personal consumption expenditures (PCE), private investment, and government consumption expenditures and gross investment.

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.

BEA also produces price indexes for all the components of GDP. The PCE price index is a measure of the total cost of consumer goods and services, including durable goods, nondurable goods, and services. PCE prices for food, for energy goods and services, and for all items except food and energy are also estimated and reported.

Because prices for food and for energy can be volatile, the price measure that excludes food and energy is often used as a measure of underlying, or "core," inflation. The core PCE price index includes purchased meals and beverages, such as restaurant meals and pet food. (See "[What is the core PCE price index?](#)" on BEA's Web site.)

BEA also prepares a supplemental PCE price index, the "market-based" PCE price index, that is based on market transactions for which there are corresponding price measures. This index excludes many imputed expenditures, such as financial services furnished without payment, that are included in PCE and in the PCE price index. BEA also prepares a market-based measure that excludes food and energy.

Personal Income

Personal income (table 3, line 1), which is measured in current dollars, decelerated slightly in the first quarter, increasing \$182.1 billion after increasing \$186.4 billion in the fourth quarter. Decelerations in personal interest income (line 17), in rental income (line 15), and in nonfarm proprietors' income (line 14) were mostly offset by accelerations in wages and salaries (line 3) and in government social benefits to persons (line 20).

- Personal current taxes (line 29) decreased \$40.1 billion in the first quarter after increasing \$50.1 billion in the fourth quarter.
- Disposable personal income (line 30) increased \$222.1 billion in the first quarter; in the fourth quarter, it increased \$136.3 billion.
- The personal saving rate (line 33)—personal saving as a percentage of disposable personal income—was 3.1 percent in the first quarter; in the fourth quarter, the saving rate was 2.6 percent.
- The accelerations in the first-quarter estimates of disposable personal income and the personal saving rate mostly result from the decrease in personal current taxes, which reflects the effects of the Tax Cuts and Jobs Act (TCJA). BEA estimates that the TCJA reduced

personal current taxes by \$115.5 billion at an annual rate (line 37). BEA's preliminary estimates of the effects of the TCJA are partly based on projections prepared by the Treasury Department's Office of Tax Analysis. For more information on the TCJA's effects on personal taxes, see [“How does the 2017 Tax Cuts and Jobs Act affect BEA's estimates of personal taxes?”](#)

- Wages and salaries in the first quarter were adjusted up by \$10.0 billion (line 36) at an annualized rate to account for bonuses that are not included in the monthly source data in the Current Employment Statistics from the Bureau of Labor Statistics. This adjustment reflects one-time bonuses paid by businesses reported publicly in response to the TCJA and was derived based on news releases covering estimates of the number of employees who received bonuses and the payment amounts.

Table 3. Personal Income and Its Disposition

[Billions of dollars; quarterly estimates are seasonally adjusted at annual rates]

Line		Level		Change from preceding period			
		2017	2018	2017			
		IV	I	II	III	IV	I
1	Personal income	16,655.3	16,837.4	94.3	129.4	186.4	182.1
2	Compensation of employees	10,463.3	10,596.3	76.7	113.1	107.2	133.0
3	Wages and salaries	8,485.2	8,601.5	63.1	97.4	92.6	116.4
4	Private industries	7,132.6	7,237.4	56.8	89.0	85.2	104.8
5	Goods-producing industries	1,391.8	1,423.5	9.3	16.6	15.3	31.8
6	Manufacturing	841.7	859.7	4.6	5.8	6.8	18.0
7	Services-producing industries	5,740.9	5,813.9	47.5	72.4	69.9	73.0
8	Trade, transportation, and utilities	1,322.7	1,335.5	7.1	12.2	14.9	12.7
9	Other services-producing industries	4,418.1	4,478.4	40.5	60.2	54.9	60.3
10	Government	1,352.5	1,364.2	6.3	8.4	7.4	11.6
11	Supplements to wages and salaries	1,978.1	1,994.8	13.6	15.7	14.6	16.6
12	Proprietors' income with IVA and CCAdj	1,403.1	1,419.2	-1.6	3.3	21.2	16.1
13	Farm	29.6	27.9	-4.8	-5.1	-2.4	-1.6
14	Nonfarm	1,373.6	1,391.3	3.3	8.4	23.6	17.7
15	Rental income of persons with CCAdj	757.4	761.7	9.5	6.9	10.2	4.2
16	Personal income receipts on assets	2,481.1	2,504.0	14.4	-0.6	47.2	22.9
17	Personal interest income	1,506.1	1,524.2	-11.5	-4.5	45.4	18.1
18	Personal dividend income	975.0	979.8	25.9	3.9	1.8	4.8
19	Personal current transfer receipts	2,873.2	2,910.6	5.1	21.4	14.9	37.3
20	Government social benefits to persons	2,812.6	2,848.9	4.3	20.7	14.1	36.4
21	Social security	935.4	961.0	6.8	7.2	5.4	25.6
22	Medicare	681.9	685.8	4.1	4.9	5.5	3.9
23	Medicaid	590.8	599.6	-4.0	6.0	7.5	8.7
24	Unemployment insurance	27.8	27.5	-1.7	-0.1	-0.7	-0.3
25	Veterans' benefits	100.2	103.3	2.5	1.2	0.9	3.2
26	Other	476.4	471.8	-3.4	1.6	-4.5	-4.7
27	Other current transfer receipts, from business (net)	60.7	61.6	0.7	0.7	0.8	1.0
28	<i>Less:</i> Contributions for government social insurance	1,322.8	1,354.4	9.7	14.7	14.4	31.6
29	<i>Less:</i> Personal current taxes	2,108.2	2,068.1	-10.9	50.2	50.1	-40.1
30	<i>Equals:</i> Disposable personal income (DPI)	14,547.1	14,769.2	105.2	79.2	136.3	222.1
31	<i>Less:</i> Personal outlays	14,167.3	14,307.1	134.1	121.2	240.1	139.8
32	<i>Equals:</i> Personal saving	379.8	462.1	-28.9	-42.1	-103.8	82.3
33	Personal saving as a percentage of DPI	2.6	3.1	.....	.....	.....	.....
Addenda:							
Percent change at annual rate							
34	Current-dollar DPI	.....	.....	3.0	2.2	3.8	6.2
35	Real DPI, chained (2009) dollars	.....	.....	2.7	0.7	1.1	3.4
The effects of special factors on changes in DPI							
In wages and salaries, private industries:							
36	One-time bonuses paid in response to the Tax Cut and Jobs Act (TCJA)	.....	.....	0.0	0.0	0.0	10.0
In personal current taxes:							
37	Effect of the TCJA	.....	.....	0.0	0.0	0.0	-115.5

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

Note. Dollar levels and percent changes are from NIPA tables 2.1 and 2.2B.

Chart 4. Real Disposable Personal Income

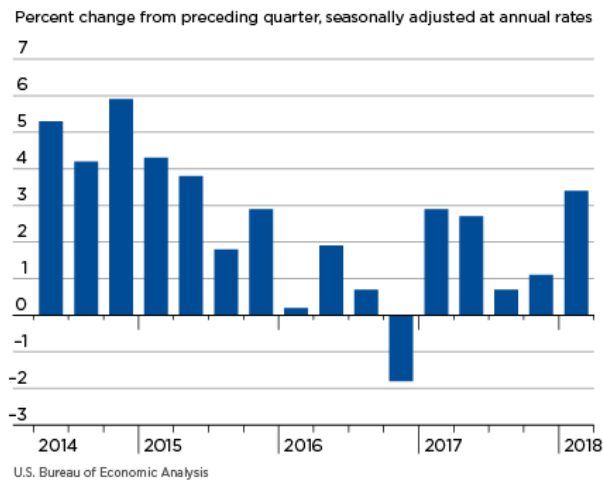
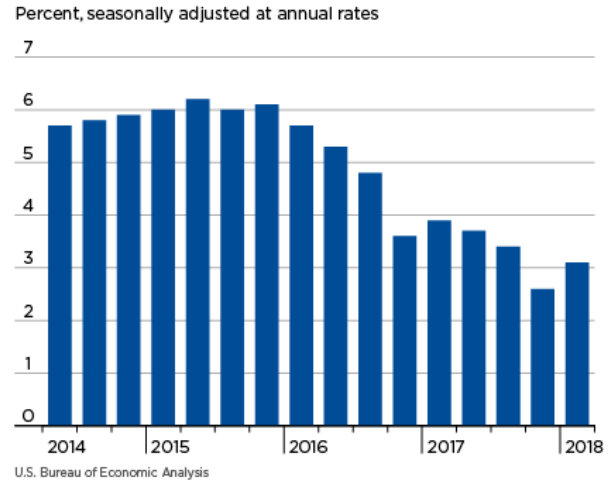


Chart 5. Personal Saving Rate



Information on Key Source Data, Assumptions, and Methodologies

A comprehensive table that presents the “[Key Source Data and Assumptions](#)” that are used to prepare each vintage of the estimate of GDP for the current quarter is available on BEA’s Web site. For the advance estimates that are released near the end of the month after the close of the quarter, the table shows the months of source data for the quarter that are available; for most components of GDP, 3 months of data are available. For the components for which only 2 months of source data are available, BEA’s assumptions for the third month are shown. Second estimates are released near the end of the second month after the close of the quarter, and third estimates are released near the end of the third month after the close of the quarter. With each vintage, the table is updated to add newly available and revised source data that have been incorporated into the estimates.

For additional details about the source data and the methodologies that are used to prepare the estimates, see “[Concepts and Methods of the U.S. National Income and Product Accounts](#)” on BEA’s Web site.

2018 Comprehensive Update of the National Income and Product Accounts

BEA will release the results of the 15th comprehensive (or benchmark) update of the national income and product accounts (NIPAs), along with the advance estimate of GDP for the second quarter of 2018, on July 27, 2018. Details on the planned statistical, definitional, and presentational changes are available in the April *Survey of Current Business* article “[Preview of the 2018 Comprehensive Update of the National Income and Product Accounts](#).” An article in the September Survey will describe the estimates in detail. Updated NIPA table stubs and news release stubs will be posted on [BEA’s Web site](#) in June.

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 January 2018 *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.”



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