

# GDP and the Economy

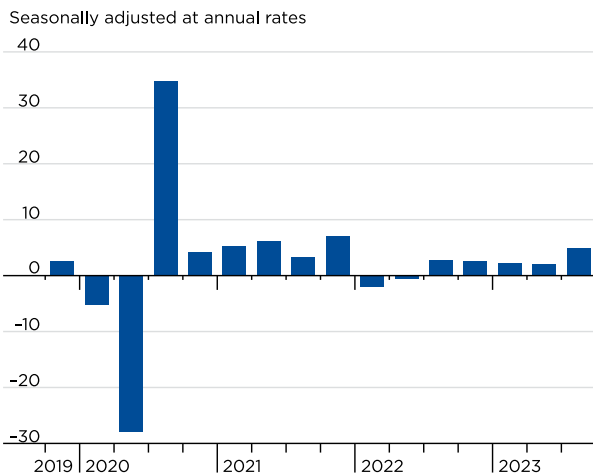
## Advance Estimates for the Third Quarter of 2023

October 30, 2023

*This article reflects GDP statistics published on October 26, 2023. Refer to the GDP product page for the [latest statistics](#).*

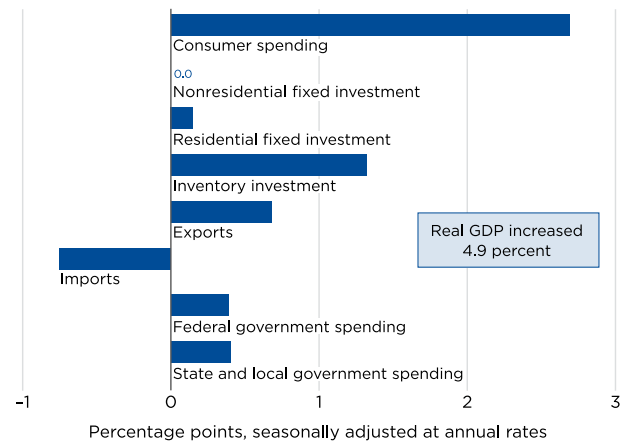
Real gross domestic product (GDP) increased at an annual rate of 4.9 percent in the third quarter of 2023, according to the “advance” estimate of the National Income and Product Accounts (chart 1 and table 1).<sup>1</sup> In the second quarter, real GDP increased 2.1 percent.

**Chart 1. Real GDP: Percent Change from Preceding Quarter**



GDP Gross domestic product  
U.S. Bureau of Economic Analysis

**Chart 2. Real GDP: Contributions to the Percent Change in 2023:Q3**



GDP Gross domestic product  
U.S. Bureau of Economic Analysis

## GDP by Expenditure

The increase in third-quarter real GDP reflected increases in consumer spending, private inventory investment, exports, state and local government spending, federal government spending, and residential fixed investment that were partly offset by a decrease in nonresidential fixed investment. Imports, which are a subtraction in the calculation of GDP, increased (chart 2 and table 1).<sup>2</sup>

- The increase in consumer spending reflected increases in both services and goods. Within services, the leading contributors to the increase were housing and utilities, health care, financial services and insurance, and food services and accommodations. Within goods, the increase was led by other nondurable goods as well as recreational goods and vehicles.
- Within private inventory investment, the increase was in nonfarm inventories, led by nondurable-goods manufacturing (mainly petroleum and coal product industries) and retail trade industries.
- Within exports, both goods and services increased. The increase in goods was led by durable goods (mainly nonautomotive capital goods and automotive vehicles, engines, and parts). The increase in services was led by travel.
- The increase in state and local government spending primarily reflected increases in state and local government employee compensation and in gross investment in structures.
- The increase in federal government spending reflected increases in both defense and nondefense spending.
  - The increase in defense spending was led by spending on services.
  - The increase in nondefense spending primarily reflected lower sales of crude oil from the Strategic Petroleum Reserve, based on data from the U.S. Department of Energy. Within the National Economic Accounts, sales are deducted from government consumption expenditures; therefore, a decrease in sales results in a corresponding increase in consumption expenditures. Because the oil sold by the government enters private inventories, there is no direct net effect on GDP.
- The increase in residential fixed investment primarily reflected an increase in new single-family construction. Partly offsetting this increase was a decrease in brokers' commissions and other ownership transfer costs.
- The decrease in nonresidential fixed investment reflected a decrease in equipment that was partly offset by increases in intellectual property products and structures. The decrease in equipment was led by information processing equipment (mainly computers and peripherals as well as communication equipment). The increase in intellectual property products was led by software. The increase in structures was led by manufacturing structures.
- Within imports, both goods and services increased. Within goods, the increase was led by automotive vehicles, engines, and parts as well as nondurable consumer goods. Within services, the leading contributor to the increase was transport (which includes air transportation).

Compared to the second quarter, the acceleration in GDP in the third quarter primarily reflected accelerations in consumer spending and private inventory investment and an upturn in exports. These movements were partly offset by a downturn in nonresidential fixed investment. Imports turned up.

Real final sales to private domestic purchasers, which measures private demand in the domestic economy and is derived as the sum of consumer spending and private fixed investment, increased 3.3 percent in the third quarter after increasing 1.7 percent in the second quarter.

**Table 1. Real Gross Domestic Product and Related Measures**

[Seasonally adjusted at annual rates]

Line	Series	Share of current-dollar GDP (percent)	Change from preceding period (percent)				Contribution to percent change in real GDP (percentage points)			
		2023	2022	2023			2022	2023		
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
1	<b>Gross domestic product (GDP)<sup>1</sup></b>	<b>100.0</b>	<b>2.6</b>	<b>2.2</b>	<b>2.1</b>	<b>4.9</b>	<b>2.6</b>	<b>2.2</b>	<b>2.1</b>	<b>4.9</b>
2	<b>Personal consumption expenditures</b>	<b>67.8</b>	<b>1.2</b>	<b>3.8</b>	<b>0.8</b>	<b>4.0</b>	<b>0.79</b>	<b>2.54</b>	<b>0.55</b>	<b>2.69</b>
3	Goods	22.6	0.0	5.1	0.5	4.8	-0.01	1.14	0.11	1.08
4	Durable goods	8.0	-1.0	14.0	-0.3	7.6	-0.08	1.07	-0.03	0.60
5	Nondurable goods	14.6	0.5	0.5	0.9	3.3	0.07	0.07	0.14	0.48
6	Services	45.3	1.8	3.1	1.0	3.6	0.80	1.40	0.44	1.62
7	<b>Gross private domestic investment</b>	<b>17.7</b>	<b>3.4</b>	<b>-9.0</b>	<b>5.2</b>	<b>8.4</b>	<b>0.62</b>	<b>-1.69</b>	<b>0.90</b>	<b>1.47</b>
8	Fixed investment	17.4	-5.4	3.1	5.2	0.8	-0.99	0.53	0.90	0.15
9	Nonresidential	13.5	1.7	5.7	7.4	-0.1	0.24	0.76	0.98	0.00
10	Structures	3.0	6.5	30.3	16.1	1.6	0.17	0.77	0.46	0.05
11	Equipment	5.0	-5.0	-4.1	7.7	-3.8	-0.26	-0.21	0.38	-0.19
12	Intellectual property products	5.4	6.1	3.8	2.7	2.6	0.32	0.20	0.15	0.14
13	Residential	3.9	-24.9	-5.3	-2.2	3.9	-1.23	-0.22	-0.09	0.15
14	Change in private inventories	0.4	---	---	---	---	1.61	-2.22	0.00	1.32
15	<b>Net exports of goods and services</b>	<b>-2.8</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>---</b>	<b>0.26</b>	<b>0.58</b>	<b>0.04</b>	<b>-0.08</b>
16	Exports	11.0	-3.5	6.8	-9.3	6.2	-0.41	0.76	-1.09	0.68
17	Goods	7.3	-6.3	12.0	-16.0	7.5	-0.52	0.89	-1.31	0.54
18	Services	3.7	3.1	-3.5	6.2	3.7	0.11	-0.13	0.22	0.14
19	Imports	13.8	-4.3	1.3	-7.6	5.7	0.66	-0.18	1.13	-0.75
20	Goods	11.3	-4.4	1.9	-6.5	5.9	0.55	-0.22	0.78	-0.63
21	Services	2.6	-3.9	-1.2	-12.2	4.8	0.11	0.04	0.35	-0.12
22	<b>Government consumption expenditures and gross investment</b>	<b>17.3</b>	<b>5.3</b>	<b>4.8</b>	<b>3.3</b>	<b>4.6</b>	<b>0.90</b>	<b>0.82</b>	<b>0.57</b>	<b>0.79</b>
23	Federal	6.5	9.8	5.2	1.1	6.2	0.59	0.33	0.07	0.39
24	National defense	3.6	7.7	1.9	2.3	8.0	0.27	0.07	0.08	0.28
25	Nondefense	2.8	12.6	9.5	-0.4	3.9	0.32	0.26	-0.01	0.11
26	State and local	10.8	2.8	4.6	4.7	3.7	0.31	0.49	0.50	0.40
<b>Addenda:</b>										
27	Gross domestic income (GDI) <sup>2</sup>	---	-3.0	0.5	0.7	---	---	---	---	---
28	Average of GDP and GDI	---	-0.3	1.4	1.4	---	---	---	---	---
29	Final sales of domestic product	---	1.0	4.6	2.1	3.5	---	---	---	---
30	Goods	31.5	6.2	-1.3	0.9	7.7	1.95	-0.40	0.29	2.40
31	Services	60.0	2.5	3.2	1.9	3.6	1.48	1.92	1.13	2.17
32	Structures	8.5	-9.6	8.9	7.7	3.6	-0.86	0.72	0.63	0.31

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 National Income and Product Accounts (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

The U.S. Bureau of Economic Analysis' (BEA's) featured measure of inflation in the U.S. economy, the price index for gross domestic purchases (goods and services purchased by U.S. residents), increased 3.0 percent in the third quarter after increasing 1.4 percent in the second quarter (table 2 and chart 3).

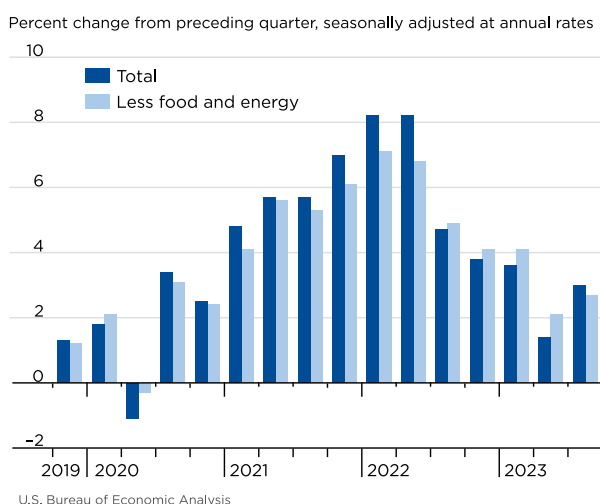
Within gross domestic purchases, food prices increased 1.8 percent in the third quarter after increasing 0.1 percent in the second quarter. Prices for energy goods and services increased 15.7 percent after decreasing 15.6 percent. Excluding food and energy, gross domestic purchases prices increased 2.7 percent after increasing 2.1 percent.

The price index for personal consumption expenditures (PCE) increased 2.9 percent in the third quarter after increasing 2.5 percent in the second quarter. The increase in PCE prices reflected increases in prices for both services and goods.

- Within services, price increases were widespread. The leading contributors were housing and utilities (mainly accounted for by housing) and financial services and insurance (led by financial service charges, fees, and commissions) as well as health care (led by hospitals).
- Within goods, the leading contributor to the increase was gasoline and other energy goods (led by motor vehicle fuels, lubricants, and fluids) that was partly offset by a decrease in recreational goods and vehicles (led by video, audio, photographic, and information processing equipment and media).

Excluding food and energy, the “core” PCE price index increased 2.4 percent in the third quarter after increasing 3.7 percent in the second quarter.

**Chart 3. Prices for Gross Domestic Purchases**



**Table 2. Prices for Gross Domestic Purchases**

[Percent change at annual rates; based on seasonally adjusted index numbers (2017=100)]

Line	Series	Change from preceding period (percent)				Contribution to percent change in gross domestic purchases prices (percentage points)			
		2022	2023			2022	2023		
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
<b>1</b>	<b>Gross domestic purchases<sup>1</sup></b>	<b>3.8</b>	<b>3.6</b>	<b>1.4</b>	<b>3.0</b>	<b>3.8</b>	<b>3.6</b>	<b>1.4</b>	<b>3.0</b>
<b>2</b>	<b>Personal consumption expenditures</b>	<b>4.1</b>	<b>4.2</b>	<b>2.5</b>	<b>2.9</b>	<b>2.72</b>	<b>2.73</b>	<b>1.63</b>	<b>1.93</b>
3	Goods	0.1	0.7	0.2	0.8	0.04	0.16	0.05	0.19
4	Durable goods	-1.6	-0.9	0.1	-4.4	-0.13	-0.07	0.01	-0.35
5	Nondurable goods	1.0	1.6	0.3	3.9	0.16	0.23	0.04	0.54
6	Services	6.3	6.0	3.6	4.0	2.69	2.57	1.58	1.74
<b>7</b>	<b>Gross private domestic investment</b>	<b>2.8</b>	<b>3.2</b>	<b>-0.1</b>	<b>1.9</b>	<b>0.49</b>	<b>0.56</b>	<b>-0.02</b>	<b>0.33</b>
8	Fixed investment	3.6	4.2	0.0	1.9	0.61	0.71	-0.01	0.33
9	Nonresidential	3.2	6.4	0.2	1.0	0.41	0.81	0.03	0.14
10	Structures	7.0	7.2	0.9	-1.8	0.18	0.20	0.03	-0.05
11	Equipment	5.9	7.9	-1.1	2.2	0.29	0.38	-0.06	0.11
12	Intellectual property products	-1.1	4.5	1.1	1.6	-0.06	0.24	0.06	0.08
13	Residential	4.9	-2.6	-0.9	5.2	0.20	-0.10	-0.03	0.19
14	Change in private inventories	---	---	---	---	-0.12	-0.15	-0.01	-0.01
<b>15</b>	<b>Government consumption expenditures and gross investment</b>	<b>3.2</b>	<b>1.5</b>	<b>-1.1</b>	<b>4.5</b>	<b>0.54</b>	<b>0.26</b>	<b>-0.18</b>	<b>0.74</b>
16	Federal	4.1	4.1	2.1	4.5	0.25	0.26	0.13	0.28
17	National defense	3.6	3.3	1.9	4.2	0.13	0.12	0.07	0.15
18	Nondefense	4.7	5.2	2.3	4.9	0.13	0.14	0.06	0.13
19	State and local	2.7	0.0	-2.9	4.5	0.29	0.00	-0.31	0.46
<b>Addenda:</b>									
Gross domestic purchases:									
20	Food	7.2	3.8	0.1	1.8	0.37	0.20	0.00	0.09
21	Energy goods and services	-11.9	-11.4	-15.6	15.7	-0.40	-0.36	-0.46	0.41
22	Excluding food and energy	4.1	4.1	2.1	2.7	3.78	3.72	1.90	2.50
Personal consumption expenditures:									
23	Food and beverages purchased for off-premises consumption	7.1	3.8	0.0	1.9	---	---	---	---
24	Energy goods and services	-10.3	-9.8	-15.6	15.9	---	---	---	---
25	Excluding food and energy	4.7	5.0	3.7	2.4	---	---	---	---
26	Gross domestic product	3.9	3.9	1.7	3.5	---	---	---	---
27	Exports of goods and services	-5.6	0.1	-3.9	4.0	---	---	---	---
28	Imports of goods and services	-4.3	-1.3	-4.8	0.1	---	---	---	---

1. The estimated prices for gross domestic purchases under the contribution columns are also percent changes.

Note. Most percent changes are from National Income and Product Accounts (NIPA) table 1.6.7; percent changes for personal consumption expenditures (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. Gross domestic product, export, and import prices are from NIPA table 1.1.7.

## Note on Prices

The U.S. Bureau of Economic Analysis' (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 gross domestic product (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 website.

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 website.)

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

Measured in current dollars, personal income increased \$199.5 billion in the third quarter, compared with an increase of \$239.6 billion in the second quarter (table 3). The increase in the third quarter reflected increases in compensation, proprietors' income, personal income receipts on assets, and rental income of persons that were partly offset by a decrease in personal current transfer receipts.

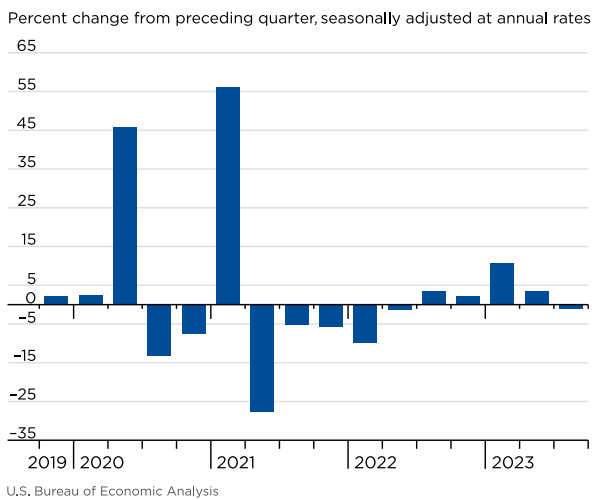
Personal current taxes increased \$103.7 billion in the third quarter after decreasing \$57.0 billion in the second quarter.

Current-dollar disposable personal income (DPI) increased \$95.8 billion, or 1.9 percent, in the third quarter after increasing \$296.5 billion, or 6.1 percent, in the second quarter. Personal outlays increased \$359.1 billion after increasing \$204.6 billion.

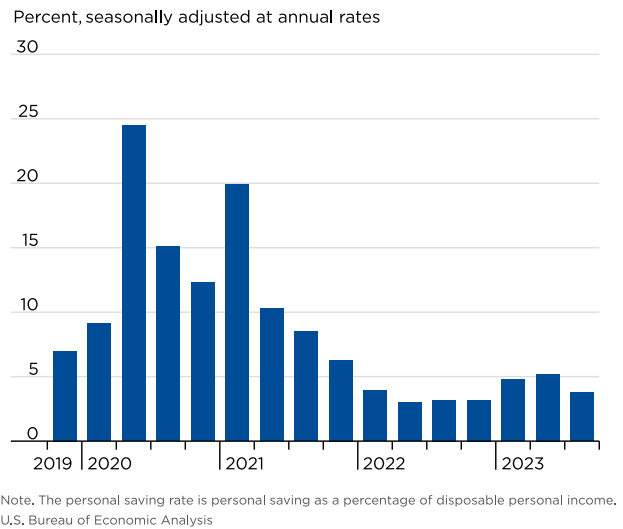
Real DPI (chart 4) decreased 1.0 percent in the third quarter, in contrast to an increase of 3.5 percent in the second quarter. Current-dollar DPI is deflated by the implicit price deflator for consumer spending, which increased 2.9 percent in the third quarter after increasing 2.5 percent in the second quarter.

The personal saving rate (chart 5)—personal saving as a percentage of DPI—was 3.8 percent in the third quarter, compared with 5.2 percent in the second quarter.

**Chart 4. Real Disposable Personal Income**



**Chart 5. Personal Saving Rate**



**Table 3. Personal Income and Its Disposition**  
 [Billions of dollars; quarterly estimates are seasonally adjusted at annual rates]

Line	Series	Level		Change from preceding period			
		2023		2022	2023		
		Q2	Q3	Q4	Q1	Q2	Q3
1	<b>Personal income</b>	<b>22,883.4</b>	<b>23,082.9</b>	<b>255.3</b>	<b>369.8</b>	<b>239.6</b>	<b>199.5</b>
2	Compensation of employees	14,171.7	14,361.1	65.8	290.2	206.5	189.4
3	Wages and salaries	11,749.7	11,911.4	45.6	248.4	184.3	161.7
4	Private industries	10,038.8	10,165.8	21.6	218.8	159.2	127.0
5	Goods-producing industries	1,843.0	1,873.3	9.4	33.9	33.1	30.3
6	Manufacturing	1,086.5	1,102.4	-1.3	16.7	19.4	15.9
7	Services-producing industries	8,195.8	8,292.5	12.2	184.9	126.0	96.8
8	Trade, transportation, and utilities	1,810.4	1,832.8	1.2	52.3	20.2	22.4
9	Other services-producing industries	6,385.4	6,459.7	11.0	132.7	105.8	74.4
10	Government	1,710.9	1,745.6	24.0	29.6	25.1	34.7
11	Supplements to wages and salaries	2,422.0	2,449.7	20.1	41.8	22.2	27.7
12	Proprietors' income with IVA and CCAdj	1,824.1	1,845.8	18.0	2.1	-3.3	21.8
13	Farm	58.2	53.4	0.0	-12.7	-13.0	-4.8
14	Nonfarm	1,765.9	1,792.5	18.0	14.8	9.7	26.6
15	Rental income of persons with CCAdj	961.1	974.5	14.4	38.3	15.3	13.4
16	Personal income receipts on assets	3,602.6	3,624.3	72.0	51.7	25.6	21.7
17	Personal interest income	1,754.8	1,790.9	59.1	37.7	10.4	36.1
18	Personal dividend income	1,847.8	1,833.4	12.9	14.0	15.2	-14.4
19	Personal current transfer receipts	4,120.1	4,093.8	91.9	28.7	17.7	-26.4
20	Government social benefits to persons	4,017.3	3,987.9	92.0	26.6	15.8	-29.4
21	Social security	1,353.8	1,361.4	11.4	114.1	13.8	7.6
22	Medicare	941.9	946.3	7.0	3.9	3.8	4.4
23	Medicaid	911.4	882.7	9.4	43.1	39.9	-28.7
24	Unemployment insurance	22.3	21.0	2.5	-0.2	0.3	-1.3
25	Veterans' benefits	172.6	172.8	0.9	-0.8	-0.3	0.3
26	Other	615.4	603.7	60.8	-133.6	-41.7	-11.7
27	Other current transfer receipts, from business (net)	102.8	105.9	-0.1	2.1	2.0	3.0
28	Less: Contributions for government social insurance	1,796.2	1,816.7	6.7	41.1	22.2	20.5
29	Less: Personal current taxes	2,706.7	2,810.3	-41.4	-332.0	-57.0	103.7
30	<i>Equals:</i> Disposable personal income	20,176.7	20,272.6	296.7	701.8	296.5	95.8
31	Less: Personal outlays	19,136.6	19,495.7	286.9	376.0	204.6	359.1
32	Personal consumption expenditures	18,419.0	18,734.3	232.9	352.5	149.4	315.3
33	Personal interest payments <sup>1</sup>	474.7	515.2	52.8	24.5	54.9	40.4
34	Personal current transfer payments	242.9	246.2	1.2	-1.0	0.3	3.3
35	<i>Equals:</i> Personal saving	1,040.1	776.9	9.8	325.8	91.9	-263.2
36	Personal saving as a percentage of DPI	5.2	3.8	---	---	---	---

**CCAdj**      Capital consumption adjustment

**DPI**        Disposable personal income

**IVA**        Inventory valuation adjustment

1. Consists of nonmortgage interest paid by households. Note that mortgage interest paid by households is an expense item in the calculation of rental income of persons.

Note. Dollar levels and percent changes are from National Income and Product Account tables 2.1 and 2.2B.



## Information on Key Source Data, Assumptions, and Methodologies

A comprehensive table that presents the [key source data and assumptions](#) (under “Current Release”) that are used to prepare each vintage of the estimate of gross domestic product (GDP) for the current quarter is available on the U.S. Bureau of Economic Analysis (BEA) website. 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 [NIPA Handbook: Concepts and Methods of the U.S. National Income and Product Accounts](#) on BEA's website.

1. “Real” estimates are in chained (2017) 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.”



### Subscribe to the SCB

The *Survey of Current Business* is published by the U.S. Bureau of Economic Analysis.  
Guidelines for citing BEA information.

### *Survey of Current Business*

[bea.gov/scb](http://bea.gov/scb)  
[scb@bea.gov](mailto:scb@bea.gov)