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GDP and the Economy Advance Estimates for the Second Quarter of 2018

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Real gross domestic product (GDP) increased at an annual rate of 4.1 percent in the second quarter of 2018, according to the advance estimates of the National Income and Product Accounts (NIPAs) (chart 1 and table 1).¹ In the first quarter, real GDP increased 2.2 percent (revised).

Estimates for 1929 through the first quarter of 2018 have been updated based on the results of the 15th comprehensive update of the NIPAs. For more information, see the 2018 Comprehensive Update on BEA's website.

The increase in real GDP in the second quarter reflected positive contributions from consumer spending, exports, nonresidential fixed investment, federal government spending, and state and local government spending. These contributions were partly offset by negative contributions from private inventory investment and residential fixed investment.² Imports, which are a subtraction in the calculation of GDP, increased (chart 2).

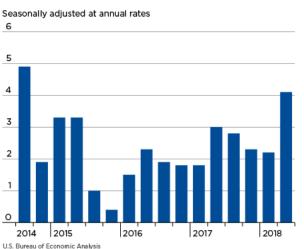
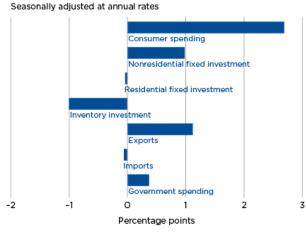


Chart 1. Real GDP: Percent Change From Preceding Quarter

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



U.S. Bureau of Economic Analysis

GDP Component Detail

The acceleration in real GDP growth in the second quarter reflected accelerations in consumer spending and in exports, a smaller decrease in residential fixed investment, and accelerations in federal government spending and in state and local government spending. These movements were partly offset by a downturn in private inventory investment and a deceleration in nonresidential fixed investment. Imports decelerated.

- The acceleration in consumer spending (line 2) reflected an upturn in spending on goods and an acceleration in spending on services.
- The upturn in goods (line 3) reflected an upturn in durable goods (mainly motor vehicles and parts) and an acceleration in nondurable goods (mainly due to an upturn in clothing and footwear).
- The main contributors to the acceleration in services (line 6) were health care, housing and utilities, and food services and accommodations.
- The deceleration in nonresidential fixed investment (line 9) reflected decelerations in equipment (mainly due to downturns in transportation equipment and in industrial equipment) and intellectual property products (mainly software).
- The downturn in private inventory investment (line 14) mainly reflected a downturn in wholesale trade industries (primarily nondurable goods).
- The acceleration in exports (line 16) reflected an acceleration in exports of goods that was partly offset by a small deceleration in exports of services.
- The acceleration in exports of goods (line 17) reflected an acceleration in nondurable goods that was partly offset by a downturn in durable goods. The main contributors to the acceleration in exports of nondurable goods were an acceleration in foods, feeds, and beverages (notably, soybeans) and an upturn in petroleum and products.

Line		Share of current- dollar GDP (percent)	Change from preceding period (percent)				Contribution to percent change in real GDP (percentage points)			
		2018	2017 2018			18	20	17	2018	
		II	III	IV	Ι	II	III	IV	I	II
1	Gross domestic product ¹	100.0	2.8	2.3	2.2	4.1	2.8	2.3	2.2	4.1
2	Personal consumption expenditures	69.0	2.2	3.9	0.5	4.0	1.52	2.64	0.36	2.69
3	Goods	22.1	4.1	6.8	-0.6	5.9	0.86	1.42	-0.13	1.24
4	Durable goods	7.5	7.7	12.7	-2.0	9.3	0.54	0.87	-0.15	0.64
5	Nondurable goods	14.6	2.3	4.0	0.1	4.2	0.32	0.55	0.02	0.59
6	Services	46.9	1.4	2.6	1.0	3.1	0.65	1.22	0.49	1.46
7	Gross private domestic investment	16.9	8.8	0.8	9.6	-0.5	1.47	0.14	1.61	-0.06
8	Fixed investment	16.7	2.6	6.2	8.0	5.4	0.44	1.04	1.34	0.94
9	Nonresidential	12.8	3.4	4.8	11.5	7.3	0.45	0.63	1.47	0.98
10	Structures	3.0	-5.7	1.3	13.9	13.3	-0.18	0.04	0.40	0.39
11	Equipment	5.8	9.8	9.9	8.5	3.9	0.56	0.56	0.49	0.23
12	Intellectual property products	4.1	1.7	0.7	14.1	8.2	0.08	0.03	0.58	0.35
13	Residential	3.9	-0.5	11.1	-3.4	-1.1	-0.02	0.41	-0.14	-0.04
14	Change in private inventories	0.2					1.04	-0.91	0.27	-1.00
15	Net exports of goods and services	-3.2					0.01	-0.89	-0.02	1.06
16	Exports	12.4	3.5	6.6	3.6	9.3	0.42	0.79	0.43	1.12
17	Goods	8.3	2.1	10.9	3.2	13.3	0.17	0.83	0.26	1.04
18	Services	4.1	6.3	-1.0	4.2	1.9	0.25	-0.04	0.18	0.08
19	Imports	15.6	2.8	11.8	3.0	0.5	-0.41	-1.68	-0.45	-0.06
20	Goods	12.8	2.5	14.2	2.4	1.0	-0.29	-1.62	-0.30	-0.12
21	Services	2.8	4.4	2.0	5.5	-1.9	-0.12	-0.06	-0.15	0.05
22	Government consumption expenditures and gross investment	17.2	-1.0	2.4	1.5	2.1	-0.18	0.41	0.27	0.37
23	Federal	6.5	-1.3	4.1	2.6	3.5	-0.08	0.26	0.17	0.22
24	National defense	3.9	-2.9	2.9	3.0	5.5	-0.11	0.11	0.11	0.21
25	Nondefense	2.6	1.1	5.7	2.1	0.6	0.03	0.15	0.06	0.02
26	State and local	10.8	-0.9	1.4	0.9	1.4	-0.10	0.15	0.10	0.15
	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	1.8	3.2	1.9	5.1	1.79	3.20	1.94	5.06
30	Goods	29.4	8.4	1.1	4.1	6.2	2.40	0.34	1.20	1.81
31	Services	62.3	1.2	2.1	1.2	3.0	0.74	1.32	0.73	1.85
32	Structures	8.3	-3.7	7.9	3.4	4.7	-0.32	0.64	0.28	0.39
33	Motor vehicle output	2.8	-3.8	23.2	9.5	-7.6	-0.10	0.58	0.26	-0.22
34	GDP excluding motor vehicle output	97.2	3.0	1.8	2.0	4.4	2.93	1.72	1.96	4.28

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

[Seasonally adjusted at annual rates]

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 2.3 percent in the second quarter of 2018 after increasing 2.5 percent in the first quarter (table 2, line 1, and chart 3). The deceleration mainly reflected a deceleration in the prices paid for consumer nondurable goods (line 5).

- The main contributors to the deceleration in consumer nondurable goods prices were gasoline and other energy goods as well as clothing and footwear.
- Consumer prices excluding food and energy (line 25), a measure of the "core" rate of inflation, decelerated, increasing 2.0 percent in the second quarter after increasing 2.2 percent in the first quarter.

Chart 3. Prices of Gross Domestic Purchases

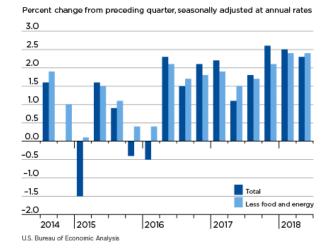


Table 2. Prices for Gross Domestic Purchases

				n prece		Contribution to percent change in gross						
Line		period (percent)			t)	domestic purchases prices (percentage points)						
Line		2017		2018		20	17	2018				
		III	IV	Ι	II	III	IV	Ι	II			
1	Gross domestic purchases ¹	1.8	2.6	2.5	2.3	1.8	2.6	2.5	2.3			
2	Personal consumption expenditures	1.6	2.7	2.5	1.8	1.06	1.81	1.63	1.23			
3	Goods	0.7	1.5	2.2	0.4	0.14	0.30	0.46	0.09			
4	Durable goods	-2.4	-2.2	-1.1	-1.4	-0.17	-0.16	-0.07	-0.10			
5	Nondurable goods	2.3	3.4	3.9	1.4	0.31	0.46	0.53	0.19			
6	Services	2.0	3.3	2.6	2.5	0.91	1.50	1.17	1.13			
7	Gross private domestic investment	1.9	1.3	2.5	3.1	0.33	0.22	0.42	0.53			
8	Fixed investment	2.0	1.2	2.5	3.2	0.34	0.21	0.42	0.54			
9	Nonresidential	1.3	0.7	0.7	2.0	0.17	0.09	0.09	0.26			
10	Structures	3.9	2.3	3.2	4.6	0.11	0.07	0.09	0.14			
11	Equipment	-0.5	-0.5	-0.3	0.9	-0.03	-0.03	-0.02	0.05			
12	Intellectual property products	2.0	1.2	0.4	1.6	0.09	0.05	0.02	0.07			
13	Residential	4.5	3.1	8.8	7.5	0.17	0.11	0.32	0.28			
14	Change in private inventories					0.00	0.02	0.01	-0.01			
15	Government consumption expenditures and gross investment	2.5	3.2	2.9	3.1	0.42	0.53	0.48	0.51			
16	Federal	1.2	1.3	1.8	2.1	0.08	0.08	0.11	0.13			
17	National defense	1.0	1.2	1.4	1.4	0.04	0.05	0.05	0.05			
18	Nondefense	1.5	1.4	2.4	2.9	0.04	0.04	0.06	0.08			
19	State and local	3.4	4.4	3.6	3.7	0.35	0.45	0.37	0.39			
	Addenda:											
	Gross domestic purchases:											
20	Food	0.3	0.1	0.4	1.1	0.01	0.01	0.02	0.05			
21	Energy goods and services	8.5	24.9	12.6	0.3	0.21	0.61	0.33	0.01			
22	Excluding food and energy	1.7	2.1	2.4	2.4	1.59	1.95	2.19	2.21			
	Personal consumption expenditures (PCE):											
23	Food and beverages purchased for off-premises consumption	0.3	0.2	0.2	1.2							
24	Energy goods and services	8.3	24.1	12.7	0.7							
25	Excluding food and energy	1.4	2.1	2.2	2.0							
26	Gross domestic product (GDP)	2.2	2.5	2.0	3.0							
27	Exports of goods and services	3.8	6.1	4.0	5.8							
28	Imports of goods and services	1.0	5.7	7.3	0.1							

[Percent change at annual rates; based on seasonally adjusted index numbers (2012=100)]

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 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.)

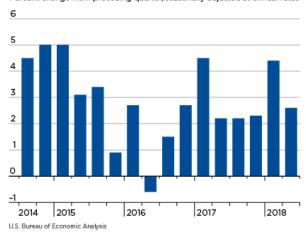
BEA also prepares a supplemental PCE price index, the "market-based" PCE price index, that is based on market transactions for which there are corresponding price measures. This index excludes many imputed expenditures, such as financial services furnished without payment, that are included in PCE and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

Personal Income

Personal income (table 3, line 1), which is measured in current dollars, decelerated in the second quarter, increasing \$183.8 billion after increasing \$215.8 billion in the first quarter. Decelerations in wages and salaries, government social benefits, personal interest income, and nonfarm proprietors' income were partly offset by accelerations in personal dividend income and rental income, a deceleration in contributions for government social insurance (a subtraction in the calculation of personal income), and an upturn in farm proprietors' income.

- Personal current taxes (line 29) increased \$16.3 billion in the second quarter after decreasing \$41.0 billion in the first quarter.
- Disposable personal income (line 30 and chart 4) increased \$167.5 billion in the second quarter after increasing \$256.8 billion in the first quarter.
- The personal saving rate (line 33 and chart 5)—personal saving as a percentage of disposable personal income—was 6.8 percent in the second quarter; in the first quarter the personal saving rate was 7.2 percent.
- Real disposable personal income (DPI) increased 2.6 percent in the second quarter after increasing 4.4 percent in the first quarter. Current-dollar DPI increased 4.5 percent after increasing 7.0 percent. The differences in the movements in real DPI and current-dollar DPI reflected a deceleration in the implicit price deflator for consumer spending, which is used to deflate DPI.

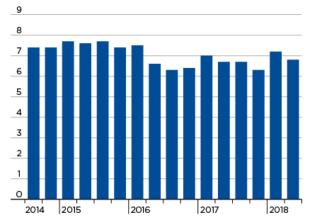
Chart 4. Real Disposable Personal Income



Percent change from preceding quarter, seasonally adjusted at annual rates

Chart 5. Personal Saving Rate

Percent, seasonally adjusted at annual rates



Note. The personal saving rate is personal saving as a percentage of disposable personal income. U.S. Bureau of Economic Analysis

Table 3. Personal Income and Its Disposition

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

		Le	vel	Change from preceding period				
Line		2018		2017		2018		
		Ι	II	III	IV	Ι	II	
1	Personal income	17,318.9	17,502.6	173.9	208.0	215.8	183.8	
2	Compensation of employees	10,709.6	10,818.9	131.3	97.4	141.0	109.3	
3	Wages and salaries	8,710.2	8,804.5	110.9	81.5	122.1	94.3	
4	Private industries	7,347.1	7,433.2	102.0	74.1	116.7	86.1	
5	Goods-producing industries	1,451.1	1,473.9	20.3	9.6	40.8	22.8	
6	Manufacturing	877.6	887.4	9.4	4.7	21.7	9.8	
7	Services-producing industries	5,896.1	5,959.3	81.7	64.5	75.9	63.2	
8	Trade, transportation, and utilities	1,345.9	1,358.9	14.4	4.8	20.0	13.0	
9	Other services-producing industries	4,550.1	4,600.4	67.3	59.7	55.9	50.3	
10	Government	1,363.1	1,371.3	8.9	7.4	5.5	8.2	
11	Supplements to wages and salaries	1,999.4	2,014.4	20.4	15.9	18.9	15.0	
12	Proprietors' income with IVA and CCAdj	1,549.9	1,569.1	12.5	18.6	23.8	19.2	
13	Farm	35.2	39.6	-5.2	-0.9	-0.2	4.4	
14	Nonfarm	1,514.7	1,529.5	17.6	19.5	24.0	14.8	
15	Rental income of persons with CCAdj	749.3	757.9	7.7	13.3	4.0	8.6	
16	Personal income receipts on assets	2,719.5	2,749.3	4.2	77.7	26.6	29.8	
17	Personal interest income	1,597.6	1,606.9	9.2	77.1	20.4	9.3	
18	Personal dividend income	1,121.9	1,142.4	-4.9	0.6	6.2	20.5	
19	Personal current transfer receipts	2,933.9	2,964.2	33.6	12.3	46.4	30.3	
20	Government social benefits to persons	2,875.7	2,905.2	33.9	11.0	44.3	29.5	
21	Social security	960.8	969.2	6.9	5.7	25.3	8.4	
22	Medicare	713.7	724.5	7.9	7.1	7.1	10.8	
23	Medicaid	590.3	602.1	14.3	-0.4	7.1	11.8	
24	Unemployment insurance	27.6	25.5	-0.2	-0.8	-0.5	-2.0	
25	Veterans' benefits	105.6	107.9	2.4	2.2	3.6	2.4	
26	Other	477.8	475.9	2.6	-2.8	1.7	-1.9	
27	Other current transfer receipts, from business (net)	58.2	59.0	-0.3	1.3	2.1	0.8	
28	Less: Contributions for government social insurance	1,343.4	1,356.7	15.4	11.3	26.1	13.4	
29	Less: Personal current taxes	2,029.9	2,046.3	34.3	22.4	-41.0	16.3	
30	Equals: Disposable personal income (DPI)	15,288.9	15,456.4	139.6	185.6	256.8	167.5	
31	Less: Personal outlays	14,194.8	14,405.3	136.5	230.0	111.5	210.5	
32	Equals: Personal saving	1,094.1	1,051.1	3.1	-44.5	145.2	-43.0	
33	Personal saving as a percentage of DPI	7.2	6.8					
	Addenda:							
	Percent change at annual rate							
34	Current-dollar DPI			3.9	5.1	7.0	4.5	
35	Real DPI, chained (2012) dollars			2.2	2.3	4.4	2.6	
CCAdj	Capital consumption adjustment							

CCAdjCapital consumption adjustmIVAGross domestic product

Note. Dollar levels and percent changes are from NIPA 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" that are used to prepare each vintage of the estimate of GDP for the current quarter is available on BEA's 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 "Concepts and Methods of the U.S. National Income and Product Accounts" on BEA's website.

Comprehensive Update of the National Income and Product Accounts

The estimates released on July 27, 2018, reflect the results of the 15th comprehensive update of the National Income and Product Accounts (NIPAs). The updated estimates reflect previously announced improvements and include the introduction of new not seasonally adjusted estimates for GDP, GDI, and their major components. An article in the September *Survey of Current Business* will describe the results in detail. For initial results of the comprehensive update, see the 2nd quarter 2018 "Advance" GDP news release. Revised NIPA table stubs and background materials are available on BEA's website.

- 1. "Real" estimates are in chained (2012) 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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