

GDP and the Economy

Advance Estimates for the Third Quarter of 2018

By Lisa S. Mataloni

Real gross domestic product (GDP) increased at an annual rate of 3.5 percent in the third quarter of 2018, according to the advance estimates of the National Income and Product Accounts (NIPAs) (chart 1 and table 1).¹ In the second quarter, real GDP increased 4.2 percent.

The increase in real GDP in the third quarter reflected positive contributions from consumer spending, inventory investment, state and local government spending, federal government spending, and nonresidential fixed investment. These contributions were partly offset by negative contributions from exports 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

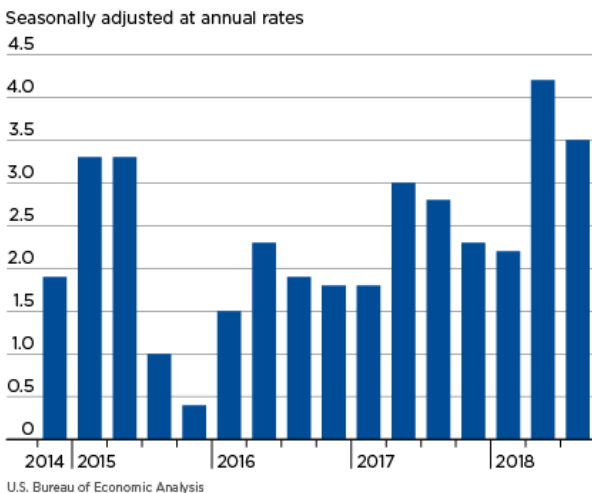
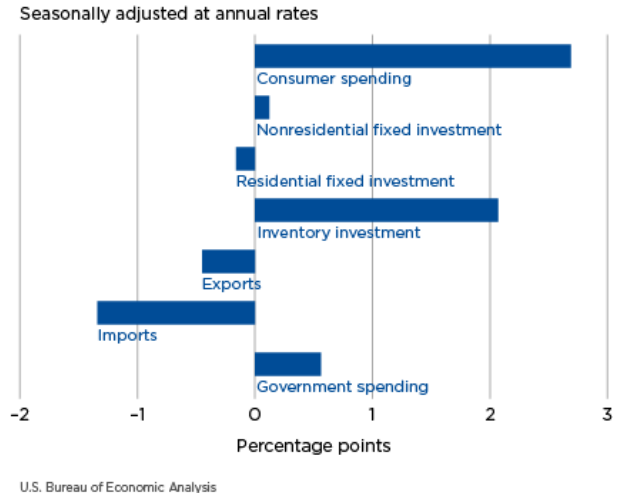


Chart 2. Real GDP: Contributions to the Percent Change in 2018:III



GDP Component Detail

The deceleration in real GDP growth in the third quarter primarily reflected a downturn in exports (line 16) and a deceleration in nonresidential fixed investment (line 9). These movements were partly offset by an upturn in nonfarm inventory investment (line 14). Imports increased in the third quarter after decreasing in the second quarter (line 19).

- The downturn in exports primarily reflected downturns in foods, feeds, and beverages (mainly soybeans), in petroleum and products, and in nonautomotive capital goods.
- The deceleration in nonresidential fixed investment primarily reflected a downturn in investment in structures (line 10). Decelerations in equipment (line 11) and in intellectual property products (line 12) also contributed to this deceleration. The main contributor to the downturn in structures was investment in mining exploration, shafts, and wells, which turned down following strong second-quarter growth.
- The upturn in inventory investment was widespread across most industries. The leading contributors were the wholesale trade and manufacturing industries.
- The upturn in imports was mostly accounted for by upturns in imported consumer durable goods (nonfood, nonautomotive) and in automotive vehicles, engines, and parts.

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		
		III	IV	I	II	III	IV	I	II	II
1	Gross domestic product¹	100.0	2.3	2.2	4.2	3.5	2.3	2.2	4.2	3.5
2	Personal consumption expenditures	68.1	3.9	0.5	3.8	4.0	2.64	0.36	2.57	2.69
3	Goods	21.2	6.8	-0.6	5.5	5.8	1.42	-0.13	1.16	1.20
4	Durable goods	7.2	12.7	-2.0	8.6	6.9	0.87	-0.15	0.60	0.48
5	Nondurable goods	14.1	4.0	0.1	4.0	5.2	0.55	0.02	0.56	0.72
6	Services	46.9	2.6	1.0	3.0	3.2	1.22	0.49	1.42	1.49
7	Gross private domestic investment	17.8	0.8	9.6	-0.5	12.0	0.14	1.61	-0.07	2.03
8	Fixed investment	17.5	6.2	8.0	6.4	-0.3	1.04	1.34	1.10	-0.04
9	Nonresidential	13.6	4.8	11.5	8.7	0.8	0.63	1.47	1.15	0.12
10	Structures	3.1	1.3	13.9	14.5	-7.9	0.04	0.40	0.43	-0.26
11	Equipment	6.0	9.9	8.5	4.6	0.4	0.56	0.49	0.27	0.03
12	Intellectual property products	4.5	0.7	14.1	10.5	7.9	0.03	0.58	0.45	0.35
13	Residential	3.9	11.1	-3.4	-1.3	-4.0	0.41	-0.14	-0.05	-0.16
14	Change in private inventories	0.4	.....	.....	.....	.....	-0.91	0.27	-1.17	2.07
15	Net exports of goods and services	-3.1	.....	.....	.....	.....	-0.89	-0.02	1.22	-1.78
16	Exports	12.3	6.6	3.6	9.3	-3.5	0.79	0.43	1.12	-0.45
17	Goods	8.1	10.9	3.2	13.5	-7.0	0.83	0.26	1.06	-0.59
18	Services	4.2	-1.0	4.2	1.5	3.5	-0.04	0.18	0.07	0.15
19	Imports	15.5	11.8	3.0	-0.6	9.1	-1.68	-0.45	0.10	-1.34
20	Goods	12.6	14.2	2.4	-0.4	10.3	-1.62	-0.30	0.06	-1.23
21	Services	2.9	2.0	5.5	-1.4	3.8	-0.06	-0.15	0.04	-0.11
22	Government consumption expenditures and gross investment	17.2	2.4	1.5	2.5	3.3	0.41	0.27	0.43	0.56
23	Federal	6.4	4.1	2.6	3.7	3.3	0.26	0.17	0.24	0.21
24	National defense	3.8	2.9	3.0	5.9	4.6	0.11	0.11	0.22	0.17
25	Nondefense	2.6	5.7	2.1	0.5	1.5	0.15	0.06	0.01	0.04
26	State and local	10.8	1.4	0.9	1.8	3.2	0.15	0.10	0.20	0.35
Addenda:										
27	Gross domestic income (GDI) ²	.....	1.5	3.9	1.6	.....	.....	.....	.....	.....
28	Average of GDP and GDI	.....	1.9	3.1	2.9	.....	.....	.....	.....	.....
29	Final sales of domestic product	99.6	3.2	1.9	5.4	1.4	3.20	1.94	5.33	1.43
30	Goods	29.4	1.1	4.1	6.5	6.5	0.34	1.20	1.91	1.89
31	Services	62.1	2.1	1.2	2.9	2.9	1.32	0.73	1.78	1.82
32	Structures	8.5	7.9	3.4	5.5	-2.4	0.64	0.28	0.47	-0.21
33	Motor vehicle output	2.8	23.2	9.5	-5.8	7.4	0.58	0.26	-0.17	0.20
34	GDP excluding motor vehicle output	97.2	1.8	2.0	4.5	3.4	1.72	1.96	4.33	3.30

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.

Impact of Hurricane Florence on Third-Quarter 2018 Estimates

Hurricane Florence made its initial landfall on September 14, 2018, causing damage and flooding in parts of the southeastern United States, most notably, the Carolinas. This natural disaster disrupted consumption and business activities, including utilities. In contrast, provision of emergency and remediation services likely increased in response to the disaster. These impacts on production are included, but not separately identified, in the source data that BEA uses to prepare the estimates of GDP; consequently, it is not possible to estimate the overall impact of Hurricane Florence on 2018 third-quarter GDP.

The destruction of fixed assets, such as residential and nonresidential structures, does not directly affect GDP or personal income. BEA estimates disaster losses in [NIPA table 5.1. Saving and Investment by Sector](#). BEA's preliminary estimates show that the impact of Hurricane Florence resulted in losses of \$35.0 billion in privately owned fixed assets (\$140.0 billion at an annual rate) and \$2.0 billion in state and local government-owned fixed assets (\$8.0 billion at an annual rate).

BEA also estimates the insurance benefits paid and received because of major disasters. These benefits are recorded on an accrual basis in the quarter in which the disaster occurred and are classified as capital transfers; they do not directly affect the measures of GDP, personal income, or saving. BEA's preliminary estimates, presented in [NIPA table 5.11U. Capital Transfers Paid and Received, by Sector and by Type](#), show domestic insurance companies expect to pay benefits for disaster losses related to Hurricane Florence in the amount of \$4.9 billion (\$19.8 billion at an annual rate). The federal government's National Flood Insurance Program expects to pay an additional \$5.0 billion (\$20.0 billion at an annual rate), and foreign insurance companies expect to pay \$0.6 billion (\$2.2 billion at an annual rate). These estimates can be found in [NIPA table 5.11U](#).

For additional information, see "[How are the measures of production and income in the national accounts affected by a natural or man-made disaster?](#)"

Prices

Prices for gross domestic purchases, goods and services purchased by U.S. residents, increased 1.7 percent in the third quarter after increasing 2.4 percent in the second quarter (table 2, line 1, and chart 3). Food prices decelerated (line 20), increasing 0.5 percent after increasing 1.1 percent. Energy goods and services accelerated, increasing 3.2 percent in the third quarter after increasing 0.4 percent in the second quarter. Gross domestic purchases prices excluding food and energy (line 22) increased 1.7 percent in the third quarter after increasing 2.5 percent in the second quarter.

Consumer prices excluding food and energy (line 25), a measure of the "core" rate of inflation, decelerated, increasing 1.6 percent in the third quarter after increasing 2.1 percent in the second quarter.

Chart 3. Prices for Gross Domestic Purchases

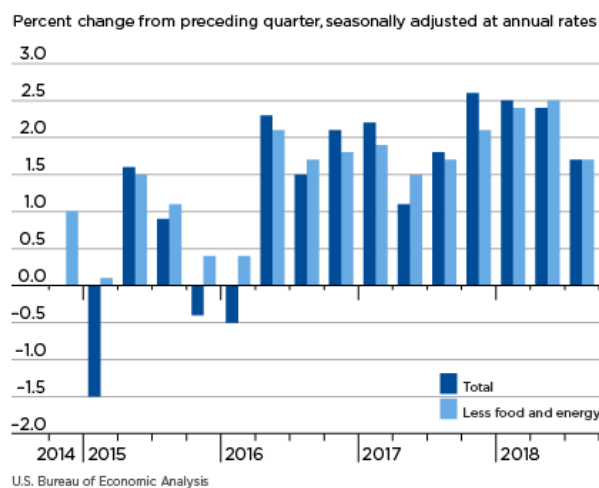


Table 2. Prices for Gross Domestic Purchases

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

Line		Change from preceding period (percent)				Contribution to percent change in gross domestic purchases prices (percentage points)			
		2017	2018			2017	2018		
		IV	I	II	III	IV	I	II	III
1	Gross domestic purchases¹	2.6	2.5	2.4	1.7	2.6	2.5	2.4	1.7
2	Personal consumption expenditures	2.7	2.5	2.0	1.6	1.81	1.63	1.32	1.05
3	Goods	1.5	2.2	0.4	-0.4	0.30	0.46	0.08	-0.08
4	Durable goods	-2.2	-1.1	-1.6	-1.0	-0.16	-0.07	-0.11	-0.07
5	Nondurable goods	3.4	3.9	1.4	-0.1	0.46	0.53	0.19	-0.01
6	Services	3.3	2.6	2.7	2.5	1.50	1.17	1.24	1.12
7	Gross private domestic investment	1.3	2.5	3.1	2.0	0.22	0.42	0.53	0.35
8	Fixed investment	1.2	2.5	3.2	2.0	0.21	0.42	0.53	0.34
9	Nonresidential	0.7	0.7	2.0	1.5	0.09	0.09	0.26	0.19
10	Structures	2.3	3.2	5.1	3.1	0.07	0.09	0.15	0.09
11	Equipment	-0.5	-0.3	0.8	1.2	-0.03	-0.02	0.05	0.07
12	Intellectual property products	1.2	0.4	1.4	0.8	0.05	0.02	0.06	0.03
13	Residential	3.1	8.8	7.3	4.0	0.11	0.32	0.27	0.15
14	Change in private inventories	.....	.....	.....	.....	0.02	0.01	-0.01	0.00
15	Government consumption expenditures and gross investment	3.2	2.9	3.3	2.0	0.53	0.48	0.55	0.33
16	Federal	1.3	1.8	2.0	1.5	0.08	0.11	0.13	0.09
17	National defense	1.2	1.4	1.3	1.1	0.05	0.05	0.05	0.04
18	Nondefense	1.4	2.4	3.0	2.0	0.04	0.06	0.08	0.05
19	State and local	4.4	3.6	4.1	2.3	0.45	0.37	0.42	0.24
Addenda:									
Gross domestic purchases:									
20	Food	0.1	0.4	1.1	0.5	0.01	0.02	0.05	0.02
21	Energy goods and services	24.9	12.6	0.4	3.2	0.61	0.33	0.01	0.09
22	Excluding food and energy	2.1	2.4	2.5	1.7	1.95	2.19	2.33	1.61
Personal consumption expenditures:									
23	Food and beverages purchased for off-premises consumption	0.2	0.2	1.2	0.4	.....	.....	.....	.....
24	Energy goods and services	24.1	12.7	0.7	3.3	.....	.....	.....	.....
25	Excluding food and energy	2.1	2.2	2.1	1.6	.....	.....	.....	.....
26	Gross domestic product	2.5	2.0	3.0	1.7	.....	.....	.....	.....
27	Exports of goods and services	6.1	4.0	5.8	0.1	.....	.....	.....	.....
28	Imports of goods and services	5.7	7.3	0.8	0.7	.....	.....	.....	.....

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, increased \$180.4 billion in the third quarter, after increasing \$180.7 billion in the second quarter. Accelerations in rental income, wages and salaries, and nonfarm proprietors' income were offset by a downturn in farm proprietors' income and a slowdown in dividend income.

Personal current taxes (line 29) increased \$25.4 billion in the third quarter after increasing \$11.7 billion in the second quarter.

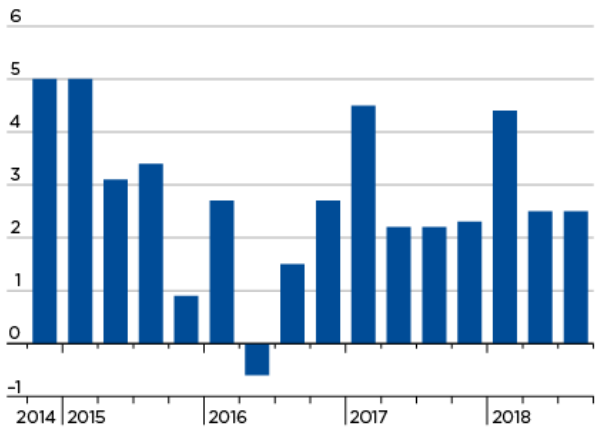
Disposable personal income (DPI) (line 30 and chart 4) increased \$155.0 billion in the third quarter, after increasing \$168.9 billion in the second quarter.

The personal saving rate (line 33 and chart 5)—personal saving as a percentage of DPI—was 6.4 percent in the third quarter; in the second quarter the personal saving rate was 6.8 percent.

Real DPI (line 35) increased 2.5 percent in the third quarter, the same increase as in the second quarter. Current-dollar DPI (line 34) increased 4.1 percent after increasing 4.5 percent in the same period. 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

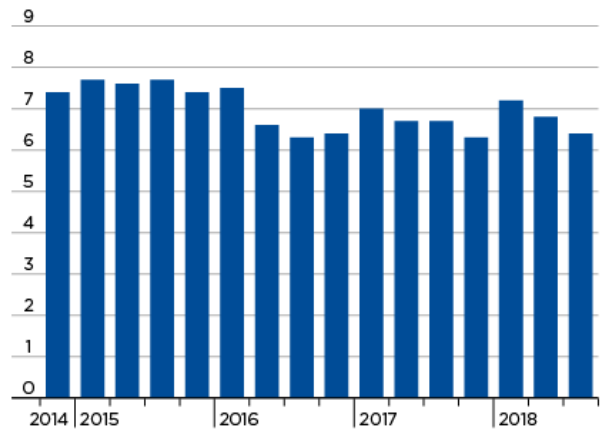
Percent change from preceding quarter, seasonally adjusted at annual rates



U.S. Bureau of Economic Analysis

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]

Line		Level		Change from preceding period			
		2018		2017	2018		
		II	III	IV	I	II	III
1	Personal income	17,499.8	17,680.2	208.0	216.1	180.7	180.4
2	Compensation of employees	10,820.7	10,934.8	97.4	141.5	110.6	114.2
3	Wages and salaries	8,806.2	8,905.0	81.5	122.5	95.5	98.8
4	Private industries	7,434.9	7,523.1	74.1	117.1	87.4	88.2
5	Goods-producing industries	1,476.2	1,490.2	9.6	41.9	23.9	14.0
6	Manufacturing	888.2	893.4	4.7	22.1	10.2	5.2
7	Services-producing industries	5,958.8	6,032.9	64.5	75.1	63.5	74.1
8	Trade, transportation, and utilities	1,358.9	1,374.3	4.8	18.8	14.2	15.4
9	Other services-producing industries	4,599.8	4,658.6	59.7	56.3	49.3	58.7
10	Government	1,371.2	1,381.9	7.4	5.5	8.1	10.7
11	Supplements to wages and salaries	2,014.5	2,029.8	15.9	19.0	15.1	15.3
12	Proprietors' income with IVA and CCAdj	1,568.5	1,580.5	18.6	23.8	18.6	12.0
13	Farm	37.0	29.0	-0.9	-0.2	1.8	-8.0
14	Nonfarm	1,531.5	1,551.5	19.5	24.0	16.8	20.0
15	Rental income of persons with CCAdj	754.2	767.5	13.3	4.0	5.0	13.2
16	Personal income receipts on assets	2,747.8	2,770.3	77.7	26.6	28.3	22.5
17	Personal interest income	1,606.5	1,615.2	77.1	20.4	8.9	8.6
18	Personal dividend income	1,141.2	1,155.1	0.6	6.2	19.3	13.9
19	Personal current transfer receipts	2,965.8	2,998.1	12.3	46.4	31.9	32.3
20	Government social benefits to persons	2,905.4	2,936.5	11.0	44.3	29.7	31.1
21	Social security	969.1	977.2	5.7	25.3	8.2	8.1
22	Medicare	724.5	739.9	7.1	7.1	10.8	15.4
23	Medicaid	602.6	609.7	-0.4	7.1	12.3	7.1
24	Unemployment insurance	25.5	24.7	-0.8	-0.5	-2.0	-0.8
25	Veterans' benefits	107.9	110.3	2.2	3.6	2.4	2.4
26	Other	475.8	474.7	-2.8	1.7	-2.0	-1.1
27	Other current transfer receipts, from business (net)	60.4	61.6	1.3	2.1	2.2	1.2
28	Less: Contributions for government social insurance	1,357.1	1,370.9	11.3	26.2	13.6	13.8
29	Less: Personal current taxes	2,041.7	2,067.1	22.4	-40.9	11.7	25.4
30	<i>Equals:</i> Disposable personal income (DPI)	15,458.1	15,613.1	185.6	257.0	168.9	155.0
31	Less: Personal outlays	14,403.8	14,613.4	230.0	111.5	208.9	209.7
32	<i>Equals:</i> Personal saving	1,054.3	999.6	-44.5	145.5	-40.0	-54.7
33	Personal saving as a percentage of DPI	6.8	6.4	.....	.....	.....	.....
Addenda:							
Percent change at annual rate							
34	Current-dollar DPI	.....	.....	5.1	7.0	4.5	4.1
35	Real DPI, chained (2012) dollars	.....	.....	2.3	4.4	2.5	2.5

CCAdj Capital consumption adjustment

IVA Inventory valuation adjustment

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](#),” (under Current Release) 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.

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.”