

GDP and the Economy

Advance Estimates for the Third Quarter of 2015

REAL GROSS domestic product (GDP) increased 1.5 percent at an annual rate in the third quarter of 2015, according to the advance estimates of the national income and product accounts (chart 1 and table 1).¹ In the second quarter, real GDP increased 3.9 percent.

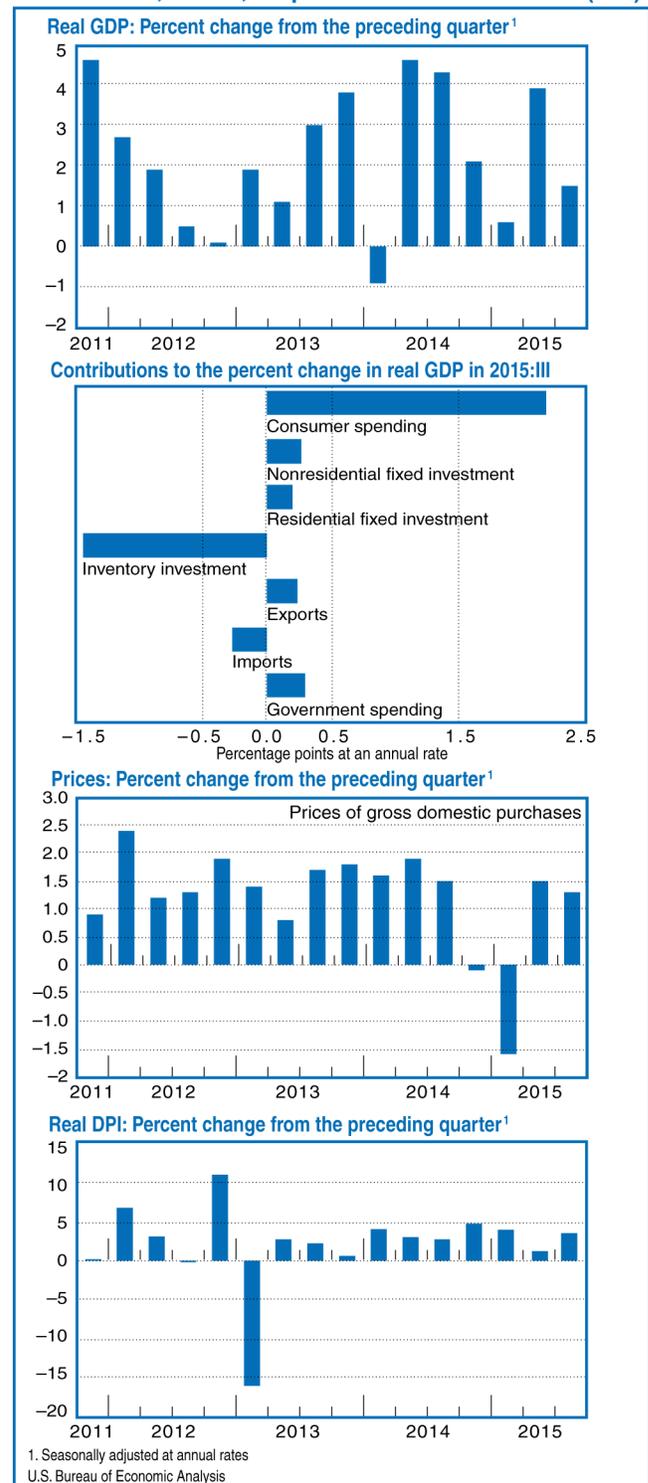
The increase in real GDP in the third quarter reflected positive contributions from consumer spending, state and local government spending, nonresidential fixed investment, exports, and residential fixed investment that were partly offset by a negative contribution from inventory investment. Imports, which are a subtraction in the calculation of GDP, increased.²

- Prices of goods and services purchased by U.S. residents increased 1.3 percent in the third quarter of 2015 after increasing 1.5 percent in the second quarter. Energy prices turned down in the third quarter, and food prices turned up. Excluding food and energy, gross domestic purchases prices increased 1.3 percent after increasing 1.2 percent (see table 2).
- Real disposable personal income (DPI) increased 3.5 percent in the third quarter after increasing 1.2 percent in the second quarter. Current-dollar DPI increased 4.8 percent after increasing 3.4 percent. The larger pickup in real DPI relative to the pickup in current-dollar DPI reflected a deceleration in the implicit price deflator for consumer spending, which is used to deflate DPI.
- The personal saving rate, personal saving as a percentage of current-dollar DPI, was 4.7 percent in the third quarter; in the second quarter, the rate was 4.6 percent.

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 August 2014 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."

Chart 1. GDP, Prices, Disposable Personal Income (DPI)



Real GDP Overview

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

[Seasonally adjusted at annual rates]

	Share of current-dollar GDP (percent)	Change from preceding period (percent)					Contribution to percent change in real GDP (percentage points)				
		2014		2015			2014		2015		
		III	IV	I	II	III	IV	I	II	III	
Gross domestic product ¹	100.0	2.1	0.6	3.9	1.5	2.1	0.6	3.9	1.5		
Personal consumption expenditures	68.6	4.3	1.8	3.6	3.2	2.86	1.19	2.42	2.19		
Goods	22.3	4.1	1.1	5.5	4.5	0.91	0.25	1.20	0.99		
Durable goods	7.4	6.1	2.0	8.0	6.7	0.44	0.14	0.57	0.48		
Nondurable goods	14.9	3.2	0.7	4.3	3.5	0.47	0.10	0.62	0.51		
Services	46.3	4.3	2.1	2.7	2.6	1.95	0.94	1.23	1.20		
Gross private domestic investment	16.6	2.1	8.6	5.0	-5.6	0.36	1.39	0.85	-0.97		
Fixed investment	16.2	2.5	3.3	5.2	2.9	0.39	0.52	0.83	0.47		
Nonresidential	12.8	0.7	1.6	4.1	2.1	0.09	0.20	0.53	0.27		
Structures	2.8	4.3	-7.4	6.2	-4.0	0.12	-0.22	0.18	-0.11		
Equipment	6.0	-4.9	2.3	0.3	5.3	-0.30	0.14	0.03	0.31		
Intellectual property products	4.1	6.9	7.4	8.3	1.8	0.27	0.29	0.33	0.07		
Residential	3.4	10.0	10.1	9.3	6.1	0.31	0.32	0.30	0.20		
Change in private inventories	0.3	.....	.....	.....	.....	-0.03	0.87	0.02	-1.44
Net exports of goods and services	-2.9	.....	.....	.....	.....	-0.89	-1.92	0.18	-0.03
Exports	12.6	5.4	-6.0	5.1	1.9	0.71	-0.81	0.64	0.24		
Goods	8.4	3.9	-11.7	6.5	0.7	0.36	-1.10	0.55	0.06		
Services	4.2	8.9	7.3	2.3	4.4	0.35	0.30	0.10	0.18		
Imports	15.5	10.3	7.1	3.0	1.8	-1.60	-1.12	-0.46	-0.27		
Goods	12.7	9.9	7.2	3.2	0.7	-1.29	-0.93	-0.41	-0.09		
Services	2.8	11.9	6.7	2.0	6.6	-0.31	-0.18	-0.05	-0.18		
Government consumption expenditures and gross investment	17.8	-1.4	-0.1	2.6	1.7	-0.26	-0.01	0.46	0.30		
Federal	6.8	-5.7	1.1	0.0	0.2	-0.41	0.08	0.00	0.02		
National defense	4.1	-10.3	1.0	0.3	-1.4	-0.47	0.04	0.01	-0.06		
Nondefense	2.7	2.1	1.2	-0.5	2.8	0.06	0.03	-0.01	0.08		
State and local	11.0	1.3	-0.8	4.3	2.6	0.15	-0.09	0.46	0.29		
Addenda:											
Gross domestic income (GDI) ² .....	.....	2.9	0.4	0.7	.....	.....	.....	.....	.....
Average of GDP and GDI .....	.....	2.5	0.5	2.3	.....	.....	.....	.....	.....
Final sales of domestic product	99.7	2.1	-0.2	3.9	3.0	2.10	-0.23	3.90	2.93		
Goods	30.3	-0.2	-1.8	5.9	-0.3	-0.06	-0.57	1.79	-0.09		
Services	62.0	2.7	2.1	2.0	2.3	1.63	1.28	1.24	1.40		
Structures	7.8	6.8	-0.9	12.2	2.4	0.50	-0.07	0.90	0.18		
Motor vehicle output	3.0	-11.3	1.4	14.5	14.9	-0.35	0.04	0.40	0.42		
GDP excluding motor vehicle output	97.0	2.5	0.6	3.6	1.1	2.42	0.60	3.52	1.08		
Final sales of computers	0.4	-26.7	29.8	41.5	1.6	-0.12	0.10	0.13	0.01		
GDP excluding final sales of computers	99.6	2.2	0.5	3.8	1.5	2.19	0.55	3.78	1.49		
Research and development (R&D)	2.6	5.5	5.2	9.7	2.3	0.14	0.13	0.25	0.06		
GDP excluding R&D	97.4	2.0	0.5	3.8	1.5	1.93	0.51	3.67	1.43		

1. The estimates of GDP 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 they are calculated from NIPA table 1.2.5.

The slowdown in third-quarter real GDP primarily reflected a downturn in inventory investment and slowdowns in exports, in nonresidential fixed investment, in consumer spending, in state and local government spending, and in residential fixed investment that were partly offset by a slowdown in imports.

The slowdown in consumer spending primarily reflected a slowdown in spending for goods; spending for services increased at about the same rate in the third quarter as in the second quarter.

The slowdown in spending for goods primarily reflected a downturn in food and beverages purchased for off-premises consumption and slowdowns in motor vehicles and parts (primarily used motor vehicles) and in clothing and footwear.

The very slight slowdown in spending for services primarily reflected a slowdown in food services and accommodations, a downturn in recreation services, and a slowdown in "other" services (mainly foreign travel) that were mostly offset by an upturn in housing and utilities (specifically electricity and natural gas) and by accelerations in financial services and insurance and in health care.

The slowdown in nonresidential fixed investment reflected a downturn in structures and a slowdown in intellectual property products that were partly offset by a pickup in equipment.

The slowdown in residential fixed investment reflected slowdowns in "other" structures and in multifamily structures that were partly offset by a pickup in single-family structures.

The downturn in inventory investment reflected a downturn in nonfarm inventory investment (which was widespread across industries) that was partly offset by an upturn in farm inventory investment.

The slowdown in exports reflected a slowdown in goods exports that was partly offset by a pickup in services exports.

The slowdown in imports reflected a slowdown in goods imports that was partly offset by a pickup in services imports.

The slowdown in state and local government spending primarily reflected a slowdown in structures investment. The slowdown in structures investment was partly offset by a pickup in compensation of state and local general government employees that reflected a pickup in employment.

Prices

Table 2. Prices for Gross Domestic Purchases

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

	Change from preceding period (percent)				Contribution to percent change in gross domestic purchases prices (percentage points)			
	2014		2015		2014		2015	
	IV	I	II	III	IV	I	II	III
Gross domestic purchases¹	-0.1	-1.6	1.5	1.3	-0.1	-1.6	1.5	1.3
Personal consumption expenditures	-0.4	-1.9	2.2	1.2	-0.29	-1.27	1.46	0.82
Goods	-4.6	-8.7	2.5	-0.2	-1.05	-1.96	0.53	-0.04
Durable goods	-3.3	-2.4	-0.2	-2.2	-0.24	-0.18	-0.02	-0.16
Nondurable goods	-5.3	-11.6	3.8	0.8	-0.80	-1.79	0.54	0.12
Services	1.7	1.6	2.1	1.9	0.76	0.69	0.93	0.86
Gross private domestic investment	1.8	-0.4	-1.0	1.5	0.29	-0.06	-0.16	0.24
Fixed investment	1.4	-0.4	-1.0	1.5	0.21	-0.07	-0.15	0.24
Nonresidential	0.6	-0.4	-1.0	1.0	0.07	-0.05	-0.12	0.13
Structures	1.0	-2.3	-2.4	1.4	0.03	-0.07	-0.07	0.04
Equipment	1.1	1.0	0.0	0.2	0.06	0.06	0.00	0.01
Intellectual property products	-0.5	-1.1	-1.5	2.1	-0.02	-0.04	-0.06	0.08
Residential	4.6	-0.4	-0.8	3.4	0.14	-0.01	-0.03	0.11
Change in private inventories .....	.....	.....	.....	.....	0.08	0.01	-0.01	0.01
Government consumption expenditures and gross investment	-0.4	-1.6	1.2	1.1	-0.08	-0.27	0.20	0.20
Federal	-0.2	0.1	0.8	1.0	-0.01	0.01	0.06	0.06
National defense	-0.5	-0.6	0.3	0.4	-0.02	-0.02	0.01	0.02
Nondefense	0.3	1.1	1.6	1.8	0.01	0.03	0.04	0.05
State and local	-0.6	-2.6	1.4	1.3	-0.07	-0.28	0.15	0.14
Addenda:								
Gross domestic purchases:								
Food	2.0	-0.6	-1.2	2.1	0.10	-0.03	-0.06	0.11
Energy goods and services	-23.3	-43.9	15.1	-1.4	-0.87	-1.78	0.42	-0.04
Excluding food and energy	0.8	0.2	1.2	1.3	0.70	0.21	1.14	1.20
Personal consumption expenditures (PCE):								
Food and beverages purchased for off-premises consumption	2.3	-0.2	-1.1	2.2	.....	.....	.....	.....
Energy goods and services	-24.9	-44.5	15.1	-1.9	.....	.....	.....	.....
Excluding food and energy	1.0	1.0	1.9	1.3	.....	.....	.....	.....
Gross domestic product (GDP)	0.1	0.1	2.1	1.2	.....	.....	.....	.....
Exports of goods and services	-6.9	-9.4	-1.0	-4.3	.....	.....	.....	.....
Imports of goods and services	-6.8	-17.2	-4.2	-3.2	.....	.....	.....	.....

1. The estimates of gross domestic purchases 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.

Prices paid by U.S. residents, as measured by the gross domestic purchases price index, increased 1.3 percent in the third quarter after increasing 1.5 percent in the second quarter. The slowdown primarily reflected a slowdown in consumer prices that was partly offset by an upturn in prices paid for fixed investment, primarily nonresidential fixed investment.

The slowdown in consumer prices reflected a downturn in the prices paid for goods and a slowdown in the prices paid for services.

The downturn in the prices paid for goods primarily reflected a slowdown in nondurable goods, which was more than accounted for by a downturn in gasoline and fuel oil prices.

The slowdown in prices paid for services primarily reflected slowdowns in health care and in financial services and insurance that were partly offset by a pickup in housing and utilities.

The upturn in prices paid for nonresidential fixed investment reflected upturns in the prices paid for intellectual property products (mainly in prices paid for software and for research and development) and in the prices paid for structures.

Excluding food prices, gross domestic purchases prices increased 1.3 percent in the third quarter after increasing 1.2 percent in the second quarter. Energy prices turned down, and food prices turned up.

Consumer prices excluding food and energy, a measure of the "core" rate of inflation, slowed, increasing 1.3 percent after increasing 1.9 percent.

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

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 the FAQ "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

Table 3. Personal Income and Its Disposition

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

	Level		Change from preceding period			
	2015		2014	2015		
	II	III	IV	I	II	III
Personal income	15,219.4	15,391.0	180.9	124.2	139.5	171.6
Compensation of employees.....	9,549.2	9,650.2	135.0	63.0	61.2	101.0
Wages and salaries.....	7,730.2	7,814.2	118.7	49.8	47.8	84.0
Private industries.....	6,465.2	6,538.1	113.7	41.5	39.2	72.9
Goods-producing industries.....	1,283.2	1,290.1	26.3	-4.9	-4.8	6.8
Manufacturing	789.2	794.9	15.0	-4.4	-2.9	5.6
Services-producing industries	5,181.9	5,248.0	87.4	46.4	44.0	66.1
Trade, transportation, and utilities	1,217.0	1,230.7	24.1	7.6	6.1	13.7
Other services-producing industries	3,964.9	4,017.3	63.3	38.8	37.9	52.4
Government.....	1,265.0	1,276.1	5.0	8.3	8.6	11.1
Supplements to wages and salaries	1,819.0	1,836.0	16.3	13.2	13.5	17.0
Proprietors' income with IVA and CCAdj.....	1,377.0	1,400.9	20.1	-8.4	7.5	23.9
Farm	56.9	64.8	-2.3	-14.3	-3.6	7.9
Nonfarm	1,320.1	1,336.1	22.4	5.9	11.2	15.9
Rental income of persons with CCAdj	654.1	663.5	10.0	8.5	17.1	9.4
Personal income receipts on assets	2,178.3	2,201.2	15.6	14.9	32.8	22.9
Personal interest income	1,313.4	1,333.2	1.7	-7.3	30.8	19.8
Personal dividend income	864.9	868.0	13.9	22.2	2.0	3.1
Personal current transfer receipts	2,651.3	2,675.6	14.5	54.8	25.5	24.2
Government social benefits to persons	2,608.4	2,632.1	14.5	54.5	25.0	23.7
Social security	869.4	874.6	6.6	17.9	7.8	5.2
Medicare.....	615.3	622.5	4.5	4.5	5.5	7.1
Medicaid.....	529.0	539.6	1.2	16.9	5.1	10.7
Unemployment insurance.....	33.1	33.3	-1.8	2.2	-1.9	0.2
Veterans benefits.....	94.1	95.1	2.9	4.1	3.3	1.0
Other	467.5	467.1	1.1	9.0	5.2	-0.4
Other current transfer receipts from business, net	42.9	43.4	0.0	0.3	0.5	0.5
Less: Contributions for government social insurance.....	1,190.6	1,200.3	14.3	8.6	4.7	9.8
Less: Personal current taxes.....	1,927.4	1,943.2	46.8	61.2	27.3	15.8
Equals: Disposable personal income (DPI)	13,292.0	13,447.8	134.1	62.9	112.2	155.9
Less: Personal outlays	12,674.5	12,811.1	125.6	-10.3	182.3	136.6
Equals: Personal saving	617.5	636.7	8.6	73.2	-70.1	19.3
Personal saving as a percentage of DPI.....	4.6	4.7				
Addenda: The effects of special factors on changes in DPI						
In government compensation:						
Federal pay raise.....			0.0	2.6	0.2	0.0
In supplements to wages and salaries:						
FICA increase in maximum taxable wages			0.0	0.8	0.0	0.0
In personal dividend income:						
Special dividend payment			0.0	8.8	-8.8	0.0
In government social benefits to persons:						
Cost-of-living adjustments (COLAs) ¹			0.0	16.7	0.0	0.0
Automatic Earnings Reappraisal Operation			2.9	-2.9	0.3	-0.3
ACA premium assistance tax credit			-1.3	8.1	3.8	-1.7
In employee contributions for government social insurance:						
FICA and SECA increase in maximum taxable wages			0.0	1.1	0.0	0.0
SMI premium increase			0.0	0.3	0.0	0.0
In personal current taxes:						
Refunds, settlements, and back taxes			0.0	43.8	0.0	0.0

1. Includes COLAs for social security, veterans benefits, railroad retirement, and supplemental security income. In the first quarter, the social security COLA boosted benefits \$14.4 billion.

NOTE: Dollar levels are from NIPA tables 2.1 and 2.2B.

ACA Affordable Care Act
FICA Federal Insurance Contributions Act
SECA Self-Employed Contributions Act

CCAdj Capital consumption adjustment
IVA Inventory valuation adjustment
SMI Supplementary Medical Insurance

Personal income, which is measured in current dollars, picked up in the third quarter, increasing \$171.6 billion after increasing \$139.5 billion in the second quarter. The pickup primarily reflected a pickup in wages and salaries and an upturn in farm proprietors' income that were partly offset by a slowdown in personal interest income.

The pickup in wages and salaries primarily reflected the pattern of monthly employment, hours, and earnings data from the Bureau of Labor Statistics for the third quarter.

The upturn in farm proprietors' income primarily reflected the pattern of crop prices received by farmers and of livestock market sales.

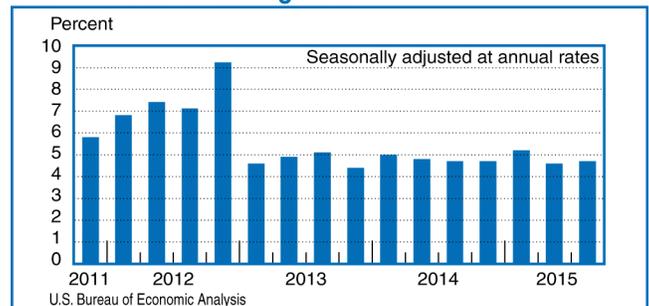
The slowdown in personal interest income primarily reflected the pattern of interest paid on Treasury Inflation-Protected Securities.

Personal current taxes slowed, reflecting a downturn in state and local income taxes that was partly offset by a pickup in federal income taxes.

Personal saving—disposable personal income less personal outlays—was \$636.7 billion in the third quarter, increasing \$19.3 billion after decreasing \$70.1 billion.

The personal saving rate was 4.7 percent in the third quarter; in the second quarter, the rate was 4.6 percent.

Chart 2. Personal Saving Rate



Source Data for the Advance Estimates

Table 4. Source Data and Key Assumptions for the Advance Estimates of GDP and Its Components for the Third Quarter of 2015

[Billions of dollars, seasonally adjusted at annual rates]

	2015					
	April	May	June	July	August	Sept. ¹
Private fixed investment:						
Nonresidential structures:						
Value of new nonresidential construction put in place.....	390.4	403.4	397.4	403.8	404.7	404.3
Residential structures:						
Value of new residential construction put in place:						
Single family.....	210.4	213.0	213.9	217.3	218.8	220.3
Multifamily.....	49.5	50.2	52.1	51.0	53.5	53.8
Change in private inventories:						
Change in inventories for nondurable manufacturing.....	0.2	11.0	6.6	-7.8	-18.9	-12.2
Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment.....	29.6	40.6	76.0	-7.4	24.4	-20.9
State and local government structures:						
Value of new construction put in place.....	265.6	268.6	278.4	274.3	275.6	274.9

1. Assumption.

Advance Estimates Reflect More Timely Source Data on Exports and Imports of Goods

In July 2015, the Census Bureau began releasing the new monthly report “Advance Report: U.S. International Trade in Goods” that provides more timely trade statistics. As a result, BEA’s advance estimates of GDP now incorporate source data on exports and imports of goods for all 3 months of the quarter. Previously, the advance estimates reflected Census Bureau data on exports of goods and on imports of goods for the first and second months of the

quarter and a BEA assumption for the third month.

Incorporating data for the third month (September 2015 for this estimate) from this report into the advance GDP estimates will result in improved early estimates of GDP and smaller revisions from the advance estimate to second estimate. For more information, see [“How will the Census Bureau’s new advance trade report impact BEA’s GDP estimate?”](#)

Source Data and Key Assumptions for the Advance Estimates of GDP

The advance estimates of many components of GDP are based on 3 months of source data, but the estimates of some components are based on only 2 months of data. For the following items, the number of months for which data are available is shown in parentheses.

Consumer spending: sales of retail stores (3), unit auto and truck sales (3), consumers’ shares of auto and truck sales (2), motor vehicle fuels data (3), and electricity and gas usage and unit-value data (3);

Nonresidential fixed investment: unit auto and truck sales (3), construction spending (value put in place) (2), manufacturers’ shipments of machinery and equipment (3), and exports and imports of machinery and equipment (3);

Residential fixed investment: construction spending (value put in place) (2), single-family housing starts (3), sales of new homes (3), and sales of existing houses (3);

Inventory investment: trade and nondurable-goods manufacturing inventories (2), durable-goods manufacturing inventories (3), and unit auto and truck inventories (3);

Net exports of goods and services: exports and imports of goods (3) and services (2) and values and quantities of petroleum imports (3);

Government spending: federal government outlays (3), state and local government construction spending (value put in place) (2), and state and local government employment (3);

Compensation: employment, average hourly earnings, and average weekly hours (3); and

Prices: consumer price indexes (3), producer price indexes (3), and values and quantities of petroleum imports (3).

Key assumptions

When source data were unavailable, BEA made various assumptions from June to September, including the following (table 4):

- A decrease in nonresidential structures,
 - An increase in single-family structures,
 - An increase in multifamily structures,
 - A decrease in nondurable-goods manufacturing inventories,
 - A decrease in nonmotor vehicle merchant wholesale and retail inventories, and
 - A decrease in state and local government structures.
- A more comprehensive list is available on BEA’s Web site.