

GDP and the Economy

Advance Estimates for the Second Quarter of 2017

REAL GROSS domestic product (GDP) increased 2.6 percent at an annual rate in the second quarter of 2017 after increasing 1.2 percent (revised) in the first quarter, according to the advance estimates of the national income and product accounts (NIPAs) (chart 1 and table 1).¹

The NIPA estimates for the first quarter of 2017 and for 2014 through 2016 have been updated. For more information, see “[The 2017 Annual Update of the National Income and Product Accounts](#)” in this issue of the SURVEY OF CURRENT BUSINESS.

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

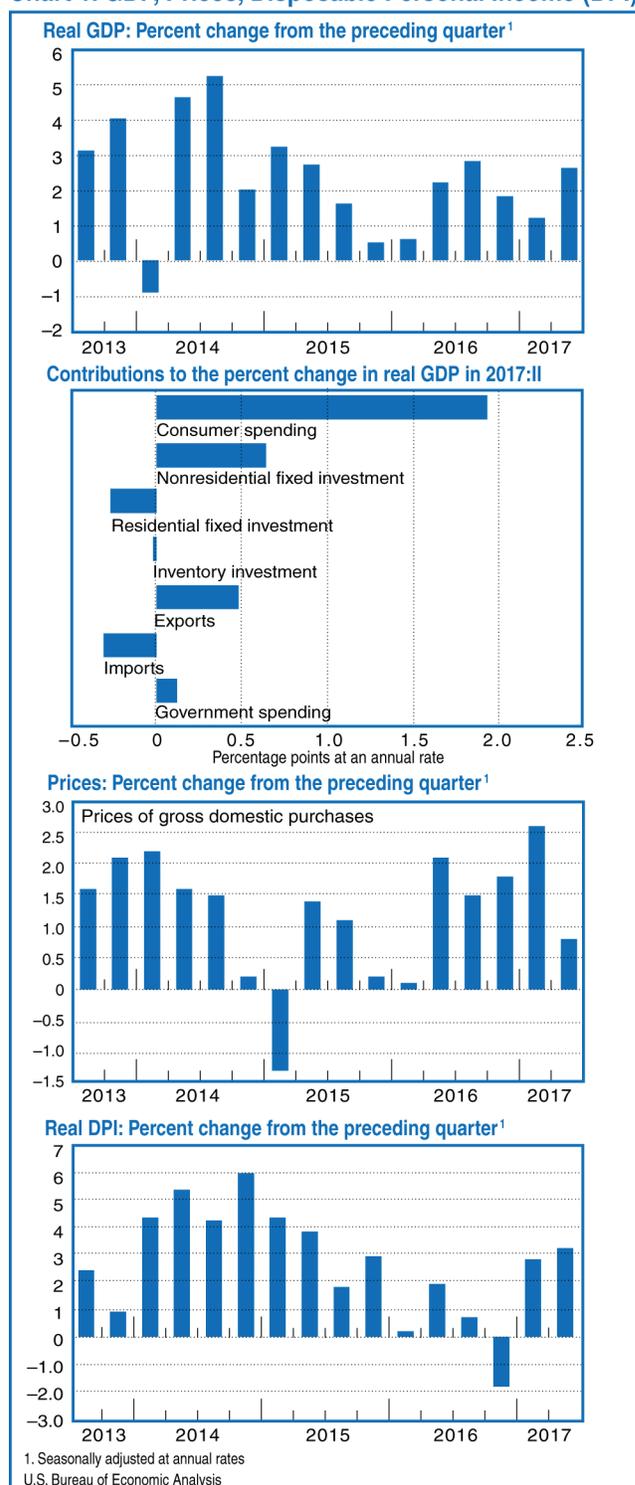
- Prices of goods and services purchased by U.S. residents increased 0.8 percent in the second quarter after increasing 2.6 percent (revised) in the first quarter. Energy prices turned down in the second quarter and food prices accelerated. Excluding food and energy, prices for gross domestic purchases prices increased 1.3 percent in the second quarter after increasing 2.3 percent (revised) in the first quarter (table 2).
- Real disposable personal income (DPI) increased 3.2 percent after increasing 2.8 percent (revised). Current-dollar DPI increased 3.5 percent after increasing 5.1 percent (revised). 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.
- The personal saving rate, personal saving as a percentage of current-dollar DPI, was 3.8 percent in the second quarter; in the first quarter, the rate was 3.9 percent (revised).

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.”

Lisa S. Mataloni prepared this article.

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)			
		2016		2017		2016		2017	
		II	III	IV	I	II	III	IV	I	II
Gross domestic product ¹	100.0	2.8	1.8	1.2	2.6	2.8	1.8	1.2	2.6
Personal consumption expenditures	69.1	2.8	2.9	1.9	2.8	1.92	1.99	1.32	1.93
Goods	22.1	3.2	4.7	0.7	4.7	0.69	1.03	0.15	1.02
Durable goods	7.6	9.4	9.2	-0.1	6.3	0.68	0.67	-0.01	0.47
Nondurable goods	14.5	0.1	2.5	1.1	3.8	0.01	0.35	0.16	0.55
Services	47.1	2.7	2.1	2.5	1.9	1.23	0.97	1.17	0.91
Gross private domestic investment	16.4	2.4	8.5	-1.2	2.0	0.40	1.34	-0.20	0.34
Fixed investment	16.5	1.5	1.7	8.1	2.2	0.25	0.28	1.27	0.36
Nonresidential	12.6	3.4	0.2	7.2	5.2	0.42	0.02	0.86	0.64
Structures	2.9	14.3	-2.2	14.8	4.9	0.37	-0.06	0.39	0.14
Equipment	5.6	-2.1	1.8	4.4	8.2	-0.12	0.10	0.24	0.44
Intellectual property products	4.1	4.2	-0.4	5.7	1.4	0.17	-0.02	0.23	0.06
Residential	3.8	-4.5	7.1	11.1	-6.8	-0.18	0.26	0.41	-0.27
Change in private inventories	0.0	.....	.....	.....	.....	0.16	1.06	-1.46	-0.02
Net exports of goods and services	-3.0	.....	.....	.....	.....	0.36	-1.61	0.22	0.18
Exports	12.1	6.4	-3.8	7.3	4.1	0.74	-0.47	0.85	0.48
Goods	7.9	8.1	-3.4	10.8	2.8	0.60	-0.27	0.81	0.22
Services	4.1	3.2	-4.6	1.0	6.5	0.13	-0.19	0.04	0.26
Imports	15.0	2.7	8.1	4.3	2.1	-0.37	-1.14	-0.63	-0.31
Goods	12.2	1.2	9.2	4.7	2.0	-0.14	-1.05	-0.56	-0.24
Services	2.8	9.0	3.2	2.5	2.4	-0.24	-0.09	-0.07	-0.06
Government consumption expenditures and gross investment	17.4	0.5	0.2	-0.6	0.7	0.09	0.03	-0.11	0.12
Federal	6.5	1.6	-0.5	-2.4	2.3	0.11	-0.03	-0.16	0.15
National defense	3.9	2.5	-3.2	-3.3	5.2	0.10	-0.13	-0.13	0.20
Nondefense	2.7	0.3	3.6	-1.2	-1.9	0.01	0.10	-0.03	-0.05
State and local	10.8	-0.2	0.6	0.5	-0.2	-0.02	0.06	0.05	-0.02
Addenda:									
Gross domestic income (GDI) ² .....	.....	4.1	-1.7	2.6	.....	.....	.....	.....	.....
Average of GDP and GDI .....	.....	3.4	0.0	1.9	.....	.....	.....	.....	.....
Final sales of domestic product	100.0	2.6	0.7	2.7	2.6	2.62	0.70	2.70	2.59
Goods	29.3	4.7	3.0	-1.6	5.6	1.39	0.88	-0.47	1.62
Services	62.6	2.2	1.0	1.5	2.0	1.39	0.61	0.91	1.22
Structures	8.1	0.1	3.4	10.3	-3.3	0.01	0.27	0.80	-0.27
Motor vehicle output	2.8	2.7	-1.9	-7.3	-0.3	0.08	-0.06	-0.22	-0.01
GDP excluding motor vehicle output	97.2	2.8	1.9	1.5	2.7	2.70	1.81	1.45	2.58
Final sales of computers	0.4	-7.9	-7.8	23.3	18.8	-0.03	-0.03	0.08	0.07
GDP excluding final sales of computers	99.6	2.8	1.8	1.2	2.5	2.81	1.79	1.16	2.50
Research and development (R&D)	2.6	2.2	-1.1	7.1	2.5	0.06	-0.03	0.18	0.06
GDP excluding R&D	97.4	2.8	1.8	1.1	2.6	2.72	1.79	1.06	2.50

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 acceleration in real GDP growth in the second quarter primarily reflected a smaller decrease in inventory investment, an acceleration in consumer spending, and an upturn in federal government spending. These movements were partly offset by a downturn in residential fixed investment and decelerations in exports and in nonresidential fixed investment.

The acceleration in consumer spending reflected an acceleration in spending for goods that was partly offset by a deceleration in services.

Spending for durable goods turned up, primarily reflecting a smaller decrease in motor vehicles and parts and an upturn in "other" durable goods (mainly jewelry).

Spending for nondurable goods accelerated, primarily reflecting upturns in clothing and footwear and in gasoline and other energy goods.

The deceleration in nonresidential fixed investment primarily reflected decelerations in structures (mainly mining exploration, shafts, and wells) and in intellectual property products that were partly offset by an acceleration in equipment.

The downturn in residential fixed investment primarily reflected a downturn in "other" structures (mainly in brokers' commissions and other ownership transfer costs and in improvements).

The smaller decrease in inventory investment reflected an upturn in nonfarm industries that was partly offset by a downturn in farm.

The deceleration in exports reflected a deceleration in goods exports that was partly offset by an acceleration in services exports.

The upturn in federal government spending reflected an upturn in national defense spending that was partly offset by a larger decrease in nondefense spending.

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)			
	2016		2017		2016		2017	
	III	IV	I	II	III	IV	I	II
Gross domestic purchases¹	1.5	1.8	2.6	0.8	1.5	1.8	2.6	0.8
Personal consumption expenditures	1.7	2.0	2.2	0.3	1.17	1.34	1.50	0.19
Goods	-0.6	1.3	2.7	-3.6	-0.13	0.28	0.57	-0.78
Durable goods	-3.5	-3.2	1.0	-3.4	-0.26	-0.24	0.07	-0.26
Nondurable goods	1.0	3.7	3.6	-3.6	0.14	0.52	0.50	-0.52
Services	2.9	2.3	2.0	2.1	1.30	1.06	0.92	0.97
Gross private domestic investment	1.0	1.7	1.7	2.3	0.16	0.28	0.27	0.37
Fixed investment	1.2	1.6	1.6	2.4	0.20	0.25	0.25	0.37
Nonresidential	-0.3	0.6	1.5	1.8	-0.03	0.08	0.19	0.22
Structures	-0.3	2.3	3.1	3.8	-0.01	0.06	0.08	0.11
Equipment	0.9	-0.4	0.7	0.8	0.05	-0.02	0.04	0.04
Intellectual property products	-1.9	1.0	1.6	1.8	-0.07	0.04	0.06	0.07
Residential	6.4	4.8	1.7	4.1	0.23	0.17	0.06	0.15
Change in private inventories .....	.....	.....	.....	.....	-0.04	0.02	0.02	0.00
Government consumption expenditures and gross investment	1.1	1.3	4.8	1.7	0.19	0.22	0.80	0.28
Federal	0.5	0.8	5.5	1.7	0.03	0.05	0.34	0.11
National defense	0.5	0.7	4.9	1.3	0.02	0.03	0.18	0.05
Nondefense	0.5	0.8	6.3	2.2	0.01	0.02	0.16	0.06
State and local	1.5	1.7	4.4	1.6	0.16	0.18	0.46	0.17
Addenda:								
Gross domestic purchases:								
Food	-2.4	-1.3	0.3	2.1	-0.12	-0.06	0.02	0.10
Energy goods and services	2.5	25.8	15.9	-16.1	0.06	0.62	0.40	-0.46
Excluding food and energy	1.7	1.4	2.3	1.3	1.57	1.28	2.14	1.20
Personal consumption expenditures (PCE):								
Food and beverages purchased for off-premises consumption	-2.1	-1.3	0.3	2.0	.....	.....	.....	.....
Energy goods and services	3.1	25.0	15.5	-16.1	.....	.....	.....	.....
Excluding food and energy	2.0	1.3	1.8	0.9	.....	.....	.....	.....
Gross domestic product (GDP)	1.4	2.0	2.0	1.0	.....	.....	.....	.....
Exports of goods and services	2.2	2.7	2.5	0.0	.....	.....	.....	.....
Imports of goods and services	3.0	1.6	6.2	-1.0	.....	.....	.....	.....

Prices paid by U.S. residents, as measured by the gross domestic purchases price index, increased 0.8 percent in the second quarter after increasing 2.6 percent (revised) in the first quarter. The deceleration primarily reflected a downturn in the prices of consumer goods and a deceleration in the prices paid by governments.

The downturn in the prices of consumer goods primarily reflected a downturn in the prices for gasoline and other energy goods.

Private fixed investment prices accelerated, primarily reflecting an acceleration in the prices paid for residential investment.

The deceleration in the prices paid by government primarily reflected decelerations in the prices paid for federal government employee compensation, for state and local government intermediate goods and services purchased (mainly petroleum), and for state and local employee compensation.

Consumer prices excluding food and energy, a measure of the “core” rate of inflation, slowed, increasing 0.9 percent after increasing 1.8 percent (revised).

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.

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 “[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			
	2017		2016		2017	
	I	II	III	IV	I	II
Personal income	16,243.3	16,362.2	117.9	-2.3	217.6	118.9
Compensation of employees	10,164.1	10,268.7	101.8	-66.5	149.1	104.6
Wages and salaries	8,230.0	8,319.0	87.9	-70.2	122.2	89.1
Private industries	6,899.5	6,981.6	78.2	-70.8	106.8	82.2
Goods-producing industries	1,349.3	1,348.2	12.7	-15.4	19.5	-1.1
Manufacturing	824.0	827.3	7.4	-13.2	12.4	3.3
Services-producing industries	5,550.2	5,633.4	65.5	-55.4	87.3	83.2
Trade, transportation, and utilities	1,288.8	1,307.7	8.3	-14.8	25.9	18.9
Other services-producing industries	4,261.5	4,325.7	57.2	-40.6	61.5	64.3
Government	1,330.5	1,337.4	9.6	0.5	15.3	6.9
Supplements to wages and salaries	1,934.1	1,949.7	14.0	3.8	27.0	15.6
Proprietors' income with IVA and CCAAdj	1,380.2	1,373.8	6.6	8.5	25.7	-6.4
Farm	41.9	33.0	-5.3	-3.6	4.0	-8.9
Nonfarm	1,338.4	1,340.8	11.8	12.1	21.6	2.5
Rental income of persons with CCAAdj	730.8	740.4	3.3	10.8	11.9	9.6
Personal income receipts on assets	2,420.1	2,432.5	1.9	18.4	28.5	12.4
Personal interest income	1,476.6	1,463.6	8.4	21.7	38.1	-13.0
Personal dividend income	943.5	968.8	-6.6	-3.3	-9.6	25.4
Personal current transfer receipts	2,831.9	2,843.9	17.2	18.5	35.9	12.0
Government social benefits to persons	2,773.4	2,784.8	16.7	18.3	35.5	11.3
Social security	916.1	923.0	5.7	6.3	10.1	6.9
Medicare	667.4	671.3	4.7	4.6	4.5	3.9
Medicaid	581.4	584.3	8.8	11.0	3.5	2.9
Unemployment insurance	30.2	28.6	-0.3	-1.0	-0.4	-1.6
Veterans benefits	95.5	98.0	0.2	1.1	1.5	2.5
Other	482.8	479.6	-2.4	-3.9	16.3	-3.2
Other current transfer receipts from business, net	58.4	59.2	0.5	0.2	0.5	0.7
Less: Contributions for government social insurance	1,283.8	1,297.1	12.9	-8.0	33.6	13.3
Less: Personal current taxes	2,018.4	2,015.2	33.1	-6.6	41.2	-3.2
Equals: Disposable personal income (DPI)	14,224.8	14,347.0	84.9	4.2	176.3	122.1
Less: Personal outlays	13,671.8	13,800.2	152.4	170.4	134.9	128.3
Equals: Personal saving	553.0	546.8	-67.5	-166.1	41.4	-6.2
Personal saving as a percentage of DPI	3.9	3.8				
Addenda:						
Percent changes in DPI at annual rates						
DPI			2.5	0.1	5.1	3.5
Real DP (chained 2009 dollars)			0.7	-1.8	2.8	3.2

CCAAdj Capital consumption adjustment IVA Inventory valuation adjustment

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

Personal income decelerated in the second quarter, increasing \$118.9 billion after increasing \$217.6 billion in the first quarter (revised). Most components contributed to the deceleration, notably personal interest income, wages and salaries, government social benefits, nonfarm proprietors' income, and farm proprietors' income. In contrast, personal dividend income turned up.

The deceleration in wages and salaries primarily reflected a deceleration in private wages and salaries.

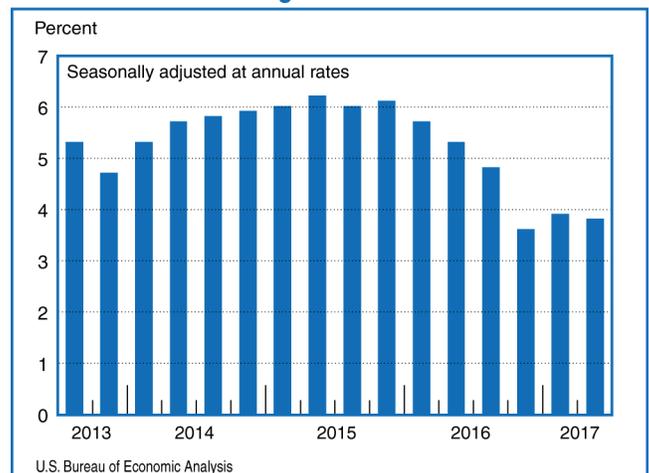
Personal current taxes turned down, reflecting a downturn in state and local income taxes and a deceleration in federal income taxes.

Disposable personal income, measured as personal income less personal current taxes, decelerated in the second quarter, increasing \$122.1 billion after increasing \$176.3 billion in the first quarter (revised).

Personal saving—disposable personal income less personal outlays—was \$546.8 billion in the second quarter, decreasing \$6.2 billion after increasing \$41.4 billion in the first quarter (revised).

The personal saving rate was 3.8 percent in the second quarter; in the first quarter, the rate was 3.9 percent (revised).

Chart 2. Personal Saving Rate



Source Data for the Advance Estimates for the Second Quarter of 2017

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

[Billions of dollars, seasonally adjusted at annual rates]

	2017					
	Jan.	Feb.	March	April	May	June ¹
Private fixed investment:						
Nonresidential structures:						
Value of new nonresidential construction put in place	444.3	443.6	440.9	436.7	433.6	435.1
Residential structures:						
Value of new residential construction put in place:						
Single family	255.2	257.4	258.4	260.7	259.9	262.7
Multifamily	62.6	63.2	64.2	64.1	62.0	62.7
Change in private inventories:						
Change in inventories for nondurable manufacturing	19.3	5.3	-5.1	-5.0	-16.7	-4.8

1. Assumption.

Table 4B. Census Bureau Data From the Advance Economic Indicators Report

[Billions of dollars, seasonally adjusted at annual rates]

	2017		
	April	May	June ¹
Change in private inventories:			
Merchant wholesale trade inventories	591.7	594.2	597.5
Retail trade inventories	613.8	617.4	621.1
Net exports of goods:			
U.S. exports of goods, Census basis	126.7	126.8	128.6
U.S. imports of goods, Census basis	193.8	193.1	192.4

1. The data for the third month of the quarter are preliminary and are subject to further revision.

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: nondurable-goods manufacturing inventories (2), trade inventories (3) 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 for June, including the following (table 4A):

- An increase in nonresidential structures,
- An increase in single-family structures,
- An increase in multifamily structures, and
- A smaller decrease in nondurable-goods manufacturing inventories.

A more comprehensive list is available on BEA's Web site.

Advance indicators data

Table 4b shows the data for wholesale and retail trade inventories and for exports and imports of goods from the Census Bureau's Advance Economic Indicators Report.