

GDP and the Economy

Advance Estimates for the Second Quarter of 2010

REAL GROSS domestic product (GDP) increased 2.4 percent in the second quarter of 2010, 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 3.7 percent (revised).

The NIPA estimates for the first quarter of 2010 and for 2007–2009 have been revised as part of the regular annual NIPA revision. See “Annual Revision of the National Income and Product Accounts” in this issue.

The deceleration in real GDP in the second quarter primarily reflected an acceleration in imports and a deceleration in inventory investment that were partly offset by an upturn in residential fixed investment, an acceleration in nonresidential fixed investment, an upturn in state and local government spending, and an acceleration in federal government spending.²

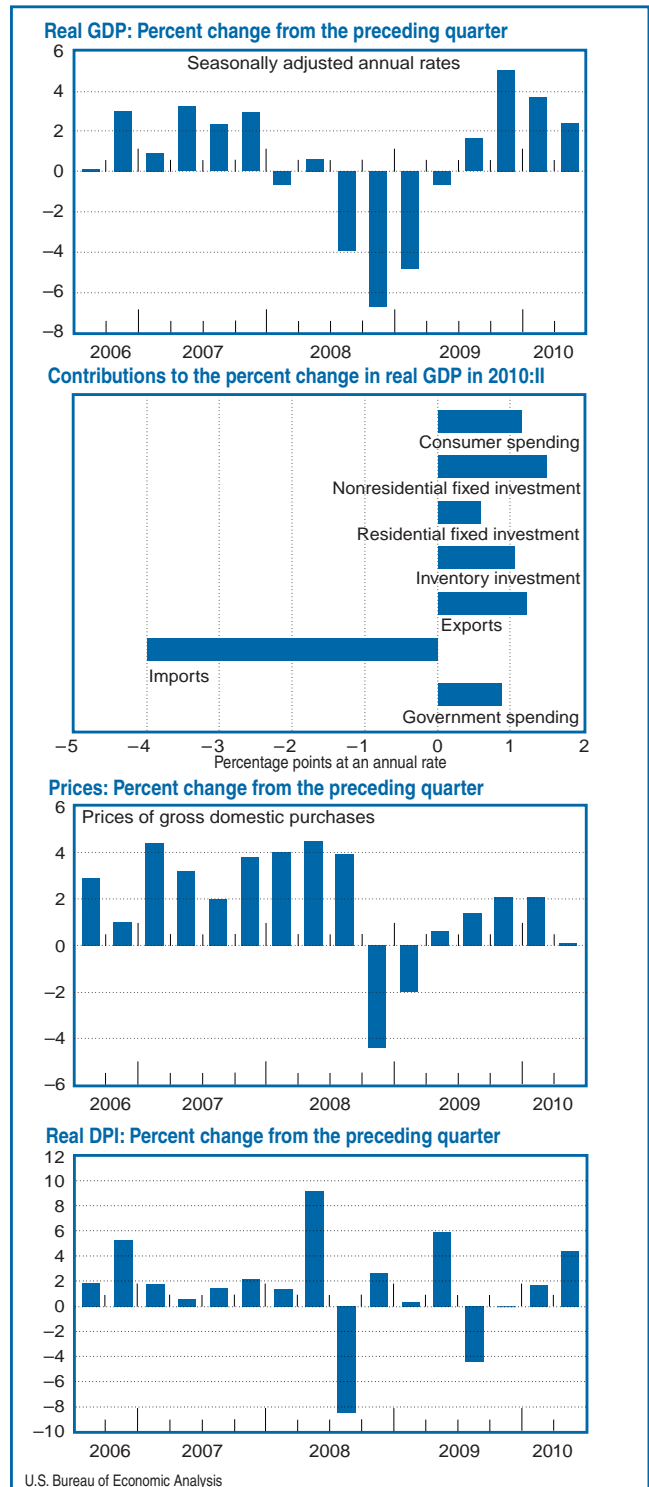
- Prices of goods and services purchased by U.S. residents increased 0.1 percent in the second quarter after increasing 2.1 percent in the first quarter (see page 3). Energy prices turned down in the second quarter, and food prices decelerated slightly. Excluding food and energy, gross domestic purchases prices increased 0.9 percent after increasing 1.6 percent. The federal pay raise for civilian and military personnel added 0.2 percentage point to the first-quarter increase in the gross domestic purchases price index.
- Real disposable personal income (DPI) increased 4.4 percent after increasing 1.7 percent. The acceleration resulted from a very slight acceleration in current-dollar personal income and a deceleration in personal current taxes.
- The personal saving rate, personal saving as a percentage of current-dollar DPI, was 6.2 percent in the second quarter; in the first quarter, it was 5.5 percent.

1. “Real” estimates are in chained (2005) 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. More information can be found at www.bea.gov/about/infoqual.htm and www.bea.gov/faq/national/gdp_accuracy.htm. Quarterly estimates are expressed at seasonally adjusted annual rates, which assumes that a rate of activity for a quarter is maintained for a year.

2. In this article, “consumer spending” refers to “personal consumption expenditures (PCE),” “inventory investment” refers to “change in private inventories,” and “government spending” refers to “government consumption expenditures and gross investment.”

Christopher Swann prepared this article.

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



Real GDP Overview

Table 1. Real Gross Domestic Product and Components

[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)			
	2010		2009		2010		2009		2010	
	II	III	IV	I	II	III	IV	I	II	
Gross domestic product ¹	100.0	1.6	5.0	3.7	2.4	1.6	5.0	3.7	2.4	
Personal consumption expenditures	70.4	2.0	0.9	1.9	1.6	1.41	0.69	1.33	1.15	
Goods.....	23.1	7.2	1.7	5.7	3.4	1.62	0.42	1.29	0.79	
Durable goods.....	7.4	20.1	-1.1	8.8	7.5	1.35	-0.07	0.62	0.53	
Nondurable goods.....	15.8	1.7	3.1	4.2	1.6	0.27	0.49	0.67	0.25	
Services.....	47.2	-0.5	0.5	0.1	0.8	-0.21	0.27	0.03	0.36	
Gross private domestic investment	12.7	11.8	26.7	29.1	28.8	1.22	2.70	3.04	3.14	
Fixed investment.....	12.1	0.7	-1.3	3.3	19.1	0.12	-0.12	0.39	2.09	
Nonresidential.....	9.6	-1.7	-1.4	7.8	17.0	-0.13	-0.10	0.71	1.50	
Structures.....	2.7	-12.4	-29.2	-17.8	5.2	-0.41	-1.01	-0.53	0.14	
Equipment and software.....	7.0	4.2	14.6	20.4	21.9	0.28	0.91	1.24	1.36	
Residential.....	2.5	10.6	-0.8	-12.3	27.9	0.25	-0.02	-0.32	0.59	
Change in private inventories.....	0.6	.....	.....	.....	.....	1.10	2.83	2.64	1.05
Net exports of goods and services	-3.5	.....	.....	.....	.....	-1.37	1.90	-0.31	-2.78
Exports.....	12.5	12.2	24.4	11.4	10.3	1.30	2.56	1.30	1.22	
Goods.....	8.7	18.7	31.7	14.0	14.1	1.29	2.19	1.09	1.13	
Services.....	3.8	0.1	10.2	5.8	2.3	0.01	0.37	0.21	0.09	
Imports.....	16.0	21.9	4.9	11.2	28.8	-2.67	-0.66	-1.61	-4.00	
Goods.....	13.3	27.4	6.2	12.0	35.4	-2.64	-0.68	-1.41	-3.96	
Services.....	2.7	1.5	-0.5	7.8	1.6	-0.03	0.02	-0.20	-0.04	
Government consumption expenditures and gross investment	20.5	1.6	-1.4	-1.6	4.4	0.33	-0.28	-0.32	0.88	
Federal.....	8.3	5.7	0.0	1.8	9.2	0.45	0.01	0.15	0.72	
National defense.....	5.6	9.0	-2.5	0.4	7.4	0.48	-0.13	0.02	0.40	
Nondefense.....	2.7	-0.9	5.6	5.0	13.0	-0.03	0.14	0.13	0.33	
State and local.....	12.2	-1.0	-2.3	-3.8	1.3	-0.12	-0.29	-0.48	0.16	

1. The estimates under the contribution columns are percent changes.

NOTE: Percent changes are from NIPA table 1.1.1, contributions are from NIPA table 1.1.2, and shares are from NIPA table 1.1.10.

Table 2. Real Gross Domestic Product (GDP) by Type of Product

[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)			
	2010		2009		2010		2009		2010	
	II	III	IV	I	II	III	IV	I	II	
Gross domestic product ¹	100.0	1.6	5.0	3.7	2.4	1.6	5.0	3.7	2.4	
Final sales of domestic product.....	99.4	0.4	2.1	1.1	1.3	0.50	2.19	1.09	1.33	
Change in private inventories.....	0.6	.....	.....	.....	.....	1.10	2.83	2.64	1.05
Goods.....	27.5	6.8	23.9	19.5	2.0	1.67	5.74	4.90	0.57	
Services.....	65.3	-0.2	0.8	0.0	1.3	-0.10	0.57	0.02	0.86	
Structures.....	7.2	-0.1	-15.9	-15.2	14.4	0.02	-1.30	-1.18	0.95	
Addenda:										
Motor vehicle output.....	2.2	145.5	13.7	42.3	-0.5	1.56	0.25	0.74	-0.01	
GDP excluding motor vehicle output.....	97.8	0.0	4.8	3.0	2.4	0.03	4.76	2.99	2.40	
Final sales of computers.....	0.6	-4.0	17.3	19.2	7.6	-0.02	0.09	0.10	0.04	
GDP excluding final sales of computers.....	99.5	1.6	5.0	3.7	2.4	1.61	4.92	3.63	2.35	

1. The estimates under the contribution columns are percent changes.

NOTE: Percent changes are from NIPA table 1.2.1, contributions are from NIPA table 1.2.2, and shares are calculated from NIPA table 1.2.5.

Consumer spending in the second quarter slowed, reflecting decelerations in both nondurable goods and durable goods. The largest contributor to the deceleration in nondurable goods was a downturn in food and beverages purchased for off-premises consumption. Spending for services picked up slightly, led by an upturn in financial services and insurance.

Nonresidential fixed investment accelerated. It was the largest quarterly percentage change since the first quarter of 2006, reflecting an upturn in structures and an acceleration in equipment and software. The upturn in structures was led by an upturn in power and communication structures. The largest contributor to the acceleration in equipment and software was an acceleration in industrial equipment.

Residential fixed investment turned up, mainly reflecting an upturn in "other" structures, especially brokers' commissions on the sale of residential structures.

Inventory investment slowed, contributing 1.05 percentage points to real GDP growth after contributing 2.64 percentage points.

Exports slowed somewhat. Goods exports increased about the same as in the first quarter, but services exports decelerated, mainly reflecting a slowdown in travel services.

Imports accelerated sharply, reflecting an acceleration in goods imports. The largest contributor to the acceleration in goods imports was an upturn in petroleum imports, but accelerations in nonautomotive capital goods, in automotive vehicles, engines, and parts, and in nonautomotive consumer goods also contributed. Imports of services slowed.

Federal government spending accelerated, reflecting pickups in national defense and nondefense spending.

State and local government spending turned up, mainly reflecting an upturn in investment in structures.

Real final sales of domestic product, real GDP less inventory investment, increased 1.3 percent after increasing 1.1 percent.

Motor vehicle output turned down, decreasing 0.5 percent after increasing 42.3 percent.

Final sales of computers decelerated, increasing 7.6 percent after increasing 19.2 percent.

Prices

Table 3. Prices for Gross Domestic Purchases

[Percent change at annual rates; based on seasonally adjusted index numbers (2005=100)]

	Change from preceding period (percent)				Contribution to percent change in gross domestic purchases prices (percentage points)			
	2009		2010		2009		2010	
	III	IV	I	II	III	IV	I	II
Gross domestic purchases ¹	1.4	2.1	2.1	0.1	1.4	2.1	2.1	0.1
Personal consumption expenditures	2.9	2.7	2.1	0.1	1.92	1.82	1.43	0.04
Goods	5.7	2.8	2.6	-3.6	1.19	0.61	0.57	-0.83
Durable goods	-2.5	0.7	-2.0	-1.6	-0.19	0.04	-0.15	-0.11
Nondurable goods	9.7	3.8	4.7	-4.6	1.38	0.56	0.72	-0.72
Services	1.7	2.7	1.8	1.9	0.73	1.21	0.85	0.86
Gross private domestic investment	-6.0	-0.7	-2.0	-0.9	-0.61	-0.05	-0.22	-0.11
Fixed investment	-4.8	-1.0	-1.4	-0.6	-0.60	-0.13	-0.16	-0.06
Nonresidential	-5.1	-2.4	-1.9	0.2	-0.52	-0.23	-0.18	0.02
Structures	-10.5	-2.1	0.9	2.7	-0.36	-0.07	0.02	0.07
Equipment and software	-2.4	-2.5	-3.1	-0.7	-0.16	-0.16	-0.20	-0.05
Residential	-3.3	4.3	0.6	-3.6	-0.08	0.10	0.01	-0.08
Change in private inventories					-0.01	0.07	-0.06	-0.05
Government consumption expenditures and gross investment	0.4	1.5	4.6	0.8	0.08	0.30	0.89	0.16
Federal	-0.1	1.5	4.5	0.8	0.00	0.13	0.35	0.06
National defense	0.3	1.6	5.3	1.1	0.02	0.09	0.28	0.06
Nondefense	-1.0	1.5	2.8	0.1	-0.02	0.04	0.07	0.00
State and local	0.8	1.5	4.6	0.8	0.08	0.18	0.54	0.10
Addenda:								
Gross domestic purchases:								
Food	-2.5	0.0	1.3	1.2	-0.13	0.00	0.07	0.07
Energy goods and services	39.7	20.2	15.2	-18.0	1.24	0.74	0.58	-0.76
Excluding food and energy	0.4	1.5	1.6	0.9	0.28	1.32	1.45	0.78
Personal consumption expenditures (PCE):								
Food	-2.4	-0.1	1.8	1.6				
Energy goods and services	41.5	18.0	16.4	-17.5				
Excluding food and energy	1.5	2.1	1.2	1.1				
"Market-based" PCE	3.0	2.2	1.7	-0.2				
Excluding food and energy	1.3	1.4	0.7	1.0				
Gross domestic product	0.7	-0.2	1.0	1.8				

1. The estimates under the contribution columns are 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 calculated from index numbers in NIPA table 2.3.4. Contributions are from NIPA table 1.6.8.

Prices paid by U.S. residents, as measured by the gross domestic purchases price index, slowed in the second quarter. Excluding food and energy, prices also slowed. About 0.2 percentage point of the first-quarter increase in the gross domestic purchases price index reflected the pay raise for civilian and military personnel, which is treated as an increase in the price of employee services purchased by government.

Consumer prices decelerated, reflecting a downturn in prices paid for goods. The largest contributor to the downturn was a downturn in prices paid for gasoline and other energy goods. Services prices picked up slightly.

Prices paid for nonresidential fixed investment turned up, reflecting a smaller decrease in prices paid for equipment and software and an acceleration in prices paid for structures.

Prices paid for residential fixed investment turned down, decreasing 3.6 percent after increasing 0.6 percent.

Prices paid by government decelerated. Prices paid by state and local governments decelerated, largely reflecting a downturn in petroleum prices. A slowdown in federal government prices followed the first-quarter pay raise.

The "market-based" PCE price index turned down mainly because of a downturn in energy prices. Excluding food and energy, the index picked up somewhat.

The GDP price index increased 1.8 percent, 1.7 percentage points more than the increase in the price index for gross domestic purchases, reflecting a downturn in import prices relative to a slight slowdown in export prices.

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 investment.

BEA also produces price indexes for all 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, energy goods and services, and for all items except food and energy are also estimated and reported. Because prices for food and 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 [FAQ 518](#) 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 the PCE price index. BEA also prepares a market-based measure that excludes food and energy.

Personal Income

Table 4. Personal Income and Its Disposition

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

	Level		Change from preceding period			
	2010		2009		2010	
	II	III	IV	I	II	
Personal income	12,485.7	-39.4	75.0	122.8	123.9	
Compensation of employees, received	7,934.5	-20.3	32.7	39.8	63.3	
Wage and salary disbursements	6,356.1	-23.8	21.0	18.8	52.4	
Private industries	5,161.6	-23.1	21.7	8.2	43.4	
Goods-producing industries	1,044.4	-16.3	-0.6	-10.0	8.3	
Manufacturing	662.1	-9.3	8.5	-2.5	6.3	
Services-producing industries	4,117.2	-6.9	22.4	18.1	35.1	
Trade, transportation, and utilities	999.3	-3.0	1.3	1.9	9.2	
Other services-producing industries	3,117.9	-3.8	21.0	16.3	25.9	
Government	1,194.6	-0.6	-0.7	10.6	9.1	
Supplements to wages and salaries	1,578.4	3.4	11.7	21.0	10.9	
Proprietors' income with IVA and CCAAdj	1,049.5	5.9	15.7	8.6	18.8	
Farm	36.6	0.0	8.2	0.6	-0.2	
Nonfarm	1,012.9	5.9	7.5	8.1	18.9	
Rental income of persons with CCAAdj	300.9	9.7	3.7	9.9	8.2	
Personal income receipts on assets	1,915.2	-34.8	-1.9	21.9	4.1	
Personal interest income	1,206.0	-16.2	-7.5	2.9	-2.7	
Personal dividend income	709.3	-18.6	5.6	19.0	6.9	
Personal current transfer receipts	2,282.9	-0.9	28.9	57.3	37.4	
Less: Contributions for government social insurance	997.3	-1.0	4.2	14.6	7.9	
Less: Personal current taxes	1,138.1	4.5	0.2	19.6	1.3	
Equals: Disposable personal income	11,347.6	-43.9	74.7	103.3	122.6	
Less: Personal outlays	10,640.5	126.2	82.1	98.2	36.6	
Equals: Personal saving	707.1	-170.1	-7.4	5.1	86.0	
Addenda: Special factors in personal income						
In government wages and salaries:						
Federal pay raise	7.3	0.0	0.0	7.2	0.1	
Reservists' pay	9.0	0.3	-0.4	0.2	-0.7	
In supplements to wages and salaries:						
Employer contributions for social insurance	8.3	0.0	0.0	8.3	0.0	
In personal current transfer receipts:						
Cost-of-living adjustments	0.0	0.0	0.0	0.0	0.0	
Social security retroactive payments	0.0	0.0	2.8	-2.8	0.0	
Emergency unemployment compensation	67.9	10.3	13.0	20.6	-11.6	
One-time ARRA payments	0.1	-52.0	-0.2	-0.1	0.0	
Refundable ARRA tax credits	32.6	0.0	0.1	32.5	0.0	
Other ARRA-related social benefit payments	28.8	43.8	7.2	-29.9	-41.1	
In contributions for government social insurance:						
Increase in taxable wage base	8.6	0.0	0.0	8.6	0.0	
Changes in premiums for supplementary medical insurance	2.2	0.0	0.0	2.2	0.0	
In personal current taxes:						
Federal tax law changes ("Making Work Pay")	-38.6	0.0	0.0	9.5	0.0	
Other ARRA-related tax effects	-81.5	0.0	0.0	-46.4	0.0	
Refunds, settlements, and other	4.8	0.0	0.0	4.8	0.0	

NOTE: Dollar levels are from NIPA tables 2.1 and 2.2B.
IVA Inventory valuation adjustment

CCAAdj Capital consumption adjustment

Personal income, which is measured in current dollars, accelerated slightly in the second quarter, increasing \$123.9 billion after increasing \$122.8 billion. The slight acceleration primarily reflected an acceleration in wage and salary disbursements that was largely offset by decelerations in personal current transfer receipts, in personal dividend income, and in supplements to wages and salaries.

Wage and salary disbursements accelerated. The acceleration primarily reflected monthly employment, hours, and earnings data.

Supplements to wages and salaries slowed. The slowdown primarily reflected a deceleration in employer contributions for government social insurance for regular state unemployment programs; first-quarter contributions had reflected increases in tax rates and wage caps for these programs.

Personal dividend income increased \$6.9 billion after increasing \$19.0 billion.

Personal current transfer receipts decelerated, primarily reflecting a deceleration in government social benefits to persons. A slowdown in federal benefits was partly offset by a pickup in state and local government benefits, reflecting Medicaid payments. The slowdown in federal benefits mainly reflected a deceleration in "other" government social benefits and a downturn in government unemployment benefits.

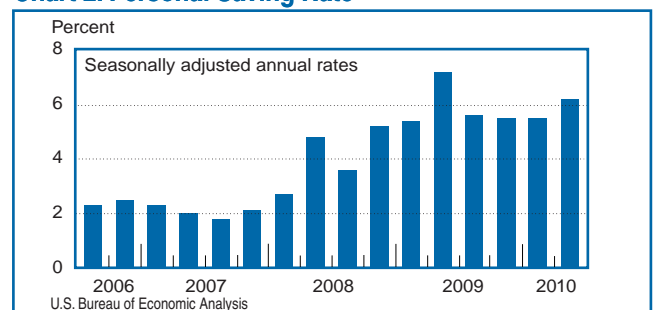
Personal current taxes decelerated, reflecting a larger decrease in state and local income taxes and a deceleration in federal income taxes.

Personal saving increased \$86.0 billion after increasing \$5.1 billion, reflecting a pickup in disposable personal income and a slowdown in personal outlays.

Saving

The personal saving rate was 6.2 percent in the second quarter. Beginning with the first quarter of 2008, the first quarter of a recession as defined by the National Bureau of Economic Research, the saving rate has averaged 5.2 percent on a quarterly basis, the highest rate since the third quarter of 1998.

Chart 2. Personal Saving Rate



Source Data for the Advance Estimates

Table 5. Source Data and Key Assumptions for the Advance Estimates of GDP for the Second Quarter of 2010

[Billions of dollars, seasonally adjusted at annual rates]

	2010					
	Jan.	Feb.	March	April	May	June ¹
Private fixed investment:						
Nonresidential structures:						
Value of new nonresidential construction put in place	281.5	275.9	275.1	277.2	275.6	276.4
Equipment and software:						
Manufacturers' shipments of complete aircraft	29.1	33.7	33.9	33.2	27.2	31.4
Residential structures:						
Value of new residential construction put in place:						
Single family	113.6	115.0	116.9	120.6	121.5	118.3
Multifamily	16.3	15.5	14.4	13.9	13.1	12.7
Change in private inventories:						
Change in inventories for nondurable manufacturing	16.9	38.0	4.9	8.9	-60.8	13.5
Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment	4.9	14.6	56.0	30.7	34.0	22.0
Net exports: ²						
Exports of goods:						
U.S. exports of goods, international-transactions-accounts basis	1,204.4	1,201.7	1,261.8	1,250.9	1,286.4	1,278.6
Excluding gold	1,185.5	1,186.8	1,241.8	1,234.1	1,272.8	1,264.2
Imports of goods:						
U.S. imports of goods, international-transactions-accounts basis	1,771.5	1,821.8	1,890.1	1,881.4	1,939.9	1,976.9
Excluding gold	1,761.6	1,813.2	1,879.4	1,868.6	1,929.4	1,965.5
Net exports of goods	-567.2	-620.1	-628.3	-630.5	-653.5	-698.3
Excluding gold	-576.2	-626.4	-637.6	-634.4	-656.6	-701.3
State and local government structures:						
Value of new construction put in place	265.0	261.3	269.6	273.5	275.1	274.3

1. Assumption.

2. Nonmonetary gold is included in balance-of-payments exports and

imports, but it is not used directly in estimating exports and imports in the national income and product accounts.

Source Data and Key Assumptions for the Advance Estimates of GDP

While the advance estimates of many components of GDP are based on 3 months of source data, some estimates 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.

Personal consumption expenditures: sales of retail stores (3), unit auto and truck sales (3), and consumers' shares of auto and truck sales (2);

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

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

Change in private inventories: 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 (2);

Government consumption expenditures and gross invest-

ment: federal 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

GDP prices: consumer price indexes (3), producer price indexes (3), and values and quantities of petroleum imports (2).

Unavailable source data

When source data were unavailable, BEA made various assumptions for June, including the following (table 5):

- A small increase in nonresidential structures,
 - An increase in aircraft shipments,
 - Decreases in single-family and in multifamily residential structures,
 - Increases in inventories of nondurable-goods manufacturing industries and of nonmotor vehicle merchant wholesale and retail trade industries,
 - A decrease in exports of goods (excluding gold) and an increase in imports of goods (excluding gold), and
 - A decrease in state and local government structures.
- A more comprehensive list is available on BEA's Web site.