

# GDP and the Economy

## Advance Estimates for the Third Quarter of 2006

IN the third quarter, U.S. economic growth slowed and inflation decelerated, according to the “advance” estimates of the national income and product accounts (NIPAs).<sup>1</sup>

Real GDP increased 1.6 percent, following a 2.6-percent increase in the second quarter (chart 1 and table 1).<sup>2</sup> The slowdown primarily reflected an acceleration in imports, a downturn in inventory investment, a larger decrease in residential investment, and decelerations in consumer spending for services and in state and local spending.<sup>3</sup>

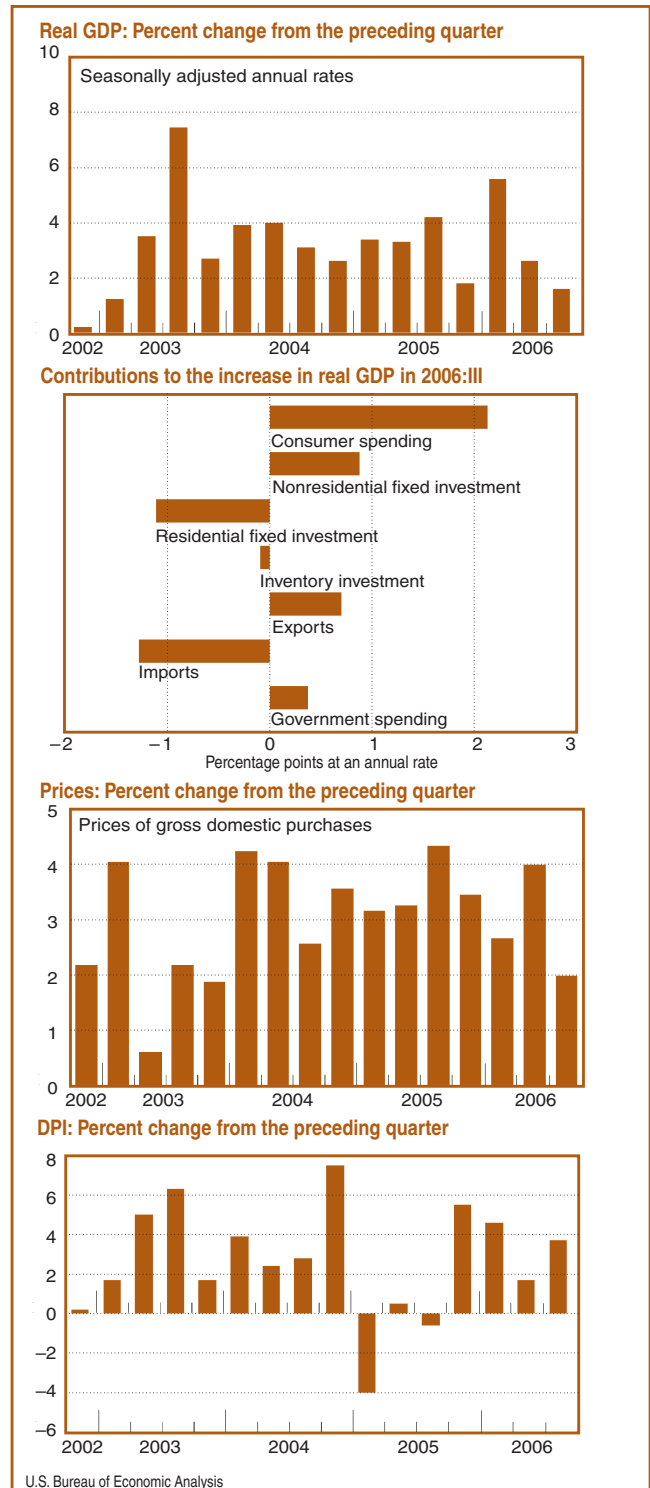
- Prices of goods and services purchased by U.S. residents increased 2.0 percent, following an increase of 4.0 percent. Energy prices decelerated sharply in the third quarter, while food prices accelerated.
- Real disposable personal income (DPI) increased 3.7 percent, stepping up from the 1.7-percent increase in the second quarter.
- The personal saving rate, personal saving as a percentage of current-dollar DPI, was -0.5 percent in the third quarter; it was -0.6 percent in the second quarter.
- Motor vehicle output turned up sharply, rising 25.7 percent after falling 9.4 percent. For more on BEA’s measure of real motor vehicle output and the motor vehicle component of the Federal Reserve Board’s industrial production index, see the box article “Motor Vehicle Output in GDP” (page 6).

1. Each GDP estimate for a quarter (advance, preliminary, and final) incorporates increasingly comprehensive and improved source data. More information can be found at <[www.bea.gov/bea/about/infoqual.htm](http://www.bea.gov/bea/about/infoqual.htm)> and <[www.bea.gov/bea/faq/national/gdp\\_accuracy.htm](http://www.bea.gov/bea/faq/national/gdp_accuracy.htm)>. Quarterly estimates are expressed at seasonally adjusted annual rates, a value that assumes the rate of activity for a quarter were maintained for a year.

2. “Real” estimates are in chained (2000) dollars, and price indexes are chain-type measures.

3. In this article, “consumer spending” refers to the NIPA series “personal consumption expenditures,” “inventory investment” refers to “change in private inventories,” and “Federal Government spending” refers to “Federal Government consumption expenditures and gross investment.”

**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)		
	2006		2006					2006		
	III	IV	I	II	III	IV	I	II	III	
<b>Gross domestic product<sup>1</sup>.....</b>	<b>100.0</b>	<b>1.8</b>	<b>5.6</b>	<b>2.6</b>	<b>1.6</b>	<b>1.8</b>	<b>5.6</b>	<b>2.6</b>	<b>1.6</b>	
<b>Personal consumption expenditures.....</b>	<b>70.3</b>	<b>0.8</b>	<b>4.8</b>	<b>2.6</b>	<b>3.1</b>	<b>0.53</b>	<b>3.38</b>	<b>1.81</b>	<b>2.13</b>	
Durable goods.....	8.1	-12.3	19.8	-0.1	8.4	-1.08	1.50	-0.01	0.66	
Nondurable goods.....	20.7	3.9	5.9	1.4	1.6	0.79	1.20	0.30	0.33	
Services.....	41.5	2.0	1.6	3.7	2.8	0.83	0.67	1.52	1.15	
<b>Gross private domestic investment.....</b>	<b>16.7</b>	<b>16.2</b>	<b>7.8</b>	<b>1.0</b>	<b>-2.0</b>	<b>2.51</b>	<b>1.31</b>	<b>0.17</b>	<b>-0.34</b>	
Fixed investment.....	16.3	2.8	8.2	-1.6	-1.4	0.46	1.34	-0.27	-0.24	
Nonresidential.....	10.6	5.2	13.7	4.4	8.6	0.52	1.36	0.45	0.88	
Structures.....	3.2	12.0	8.7	20.3	14.0	0.31	0.25	0.56	0.41	
Equipment and software.....	7.4	2.8	15.6	-1.4	6.4	0.21	1.11	-0.10	0.46	
Residential.....	5.7	-0.9	-0.3	-11.1	-17.4	-0.06	-0.02	-0.72	-1.12	
Change in private inventories.....	0.4	.....	.....	.....	.....	2.05	-0.03	0.44	-0.10	
<b>Net exports of goods and services.....</b>	<b>-6.1</b>	.....	.....	.....	.....	<b>-1.07</b>	<b>-0.04</b>	<b>0.42</b>	<b>-0.58</b>	
Exports.....	11.2	9.6	14.0	6.2	6.5	0.97	1.41	0.66	0.70	
Goods.....	7.9	11.5	17.3	6.0	10.0	0.80	1.20	0.45	0.75	
Services.....	3.2	5.5	6.7	6.7	-1.5	0.17	0.21	0.21	-0.05	
Imports.....	17.3	13.2	9.1	1.4	7.8	-2.04	-1.46	-0.24	-1.28	
Goods.....	14.6	14.1	9.4	-0.1	9.5	-1.84	-1.27	0.01	-1.31	
Services.....	2.7	8.3	7.4	9.9	-1.0	-0.20	-0.19	-0.25	0.03	
<b>Government consumption expenditures and gross investment.....</b>	<b>19.0</b>	<b>-1.1</b>	<b>4.9</b>	<b>0.8</b>	<b>2.0</b>	<b>-0.21</b>	<b>0.94</b>	<b>0.16</b>	<b>0.37</b>	
Federal.....	7.0	-4.6	8.8	-4.5	1.7	-0.33	0.61	-0.32	0.12	
National defense.....	4.6	-9.9	8.9	-2.0	-0.7	-0.49	0.41	-0.09	-0.03	
Nondefense.....	2.3	7.1	8.5	-9.3	6.9	0.16	0.20	-0.23	0.15	
State and local.....	12.1	1.0	2.7	4.0	2.1	0.13	0.33	0.48	0.25	

1. The estimates of GDP under the contribution columns are also 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.

Consumer spending increased 3.1 percent after increasing 2.6 percent, and contributed 2.13 percentage points to real GDP growth. An upturn in motor vehicles and parts, especially light trucks, led to an upturn in durable goods. Services decelerated; the largest contributor to the deceleration was net foreign travel.

Nonresidential investment accelerated, reflecting an upturn in equipment and software. Transportation equipment and information-processing equipment and software turned up.

Residential investment decreased for the fourth consecutive quarter. The 17.4-percent decrease subtracted 1.12 percentage points from real GDP growth and was the largest decrease since the first quarter of 1991.

Inventory investment turned down and subtracted 0.10 percentage point from real GDP growth; inventory investment by retail motor vehicle and parts dealers, by "other" industries, and by mining, utilities, and construction industries declined.

Exports picked up slightly, reflecting an upturn in automotive vehicles, engines, and parts and an acceleration in nonautomotive consumer goods.

Imports accelerated sharply, reflecting upturns in petroleum and products and in nonpetroleum industrial supplies and material and an acceleration in nonautomotive consumer goods.

An upturn in nondefense spending and a smaller reduction in defense spending resulted in an upturn in Federal Government spending.

**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)		
	2006		2006					2006		
	III	IV	I	II	III	IV	I	II	III	
<b>Gross domestic product<sup>1</sup>.....</b>	<b>100.0</b>	<b>1.8</b>	<b>5.6</b>	<b>2.6</b>	<b>1.6</b>	<b>1.8</b>	<b>5.6</b>	<b>2.6</b>	<b>1.6</b>	
Final sales of domestic product.....	99.6	-0.3	5.6	2.1	1.7	-0.28	5.61	2.11	1.68	
Change in private inventories.....	0.4	.....	.....	.....	.....	2.05	-0.03	0.44	-0.10	
Goods.....	31.2	3.1	12.8	3.6	2.6	0.97	3.86	1.12	0.81	
Services.....	57.9	0.8	2.4	2.4	2.6	0.46	1.39	1.40	1.50	
Structures.....	10.9	3.1	2.9	0.3	-6.4	0.33	0.33	0.04	-0.73	
<b>Addenda:</b>										
Motor vehicle output.....	3.2	-19.1	3.8	-9.4	25.7	-0.71	0.12	-0.31	0.72	
GDP excluding motor vehicle output.....	96.8	2.6	5.6	3.0	0.9	2.47	5.46	2.87	0.86	
Final sales of computers.....	0.6	33.8	9.5	6.7	16.9	0.20	0.07	0.04	0.10	
GDP excluding final sales of computers.....	99.4	1.6	5.6	2.5	1.5	1.56	5.52	2.51	1.48	

1. The estimates of GDP under the contribution columns are also 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.

Real final sales of domestic product, real GDP less inventory investment, increased 1.7 percent after increasing 2.1 percent.

Motor vehicle output turned up sharply, primarily reflecting a strong upturn in light trucks. See "Motor Vehicle Output in GDP."

Final sales of computers increased 16.9 percent, compared with a 6.7-percent increase.

## Prices

**Table 3. Prices for Gross Domestic Purchases**

[Percent change at annual rates; based on seasonally adjusted index numbers (2000=100)]

	Change from preceding period (percent)				Contribution to percent change in gross domestic purchases prices (percentage points)			
	2005		2006		2005		2006	
	IV	I	II	III	IV	I	II	III
<b>Gross domestic purchases<sup>1</sup></b> .....	<b>3.5</b>	<b>2.7</b>	<b>4.0</b>	<b>2.0</b>	<b>3.5</b>	<b>2.7</b>	<b>4.0</b>	<b>2.0</b>
<b>Personal consumption expenditures</b> .....	<b>2.9</b>	<b>2.0</b>	<b>4.0</b>	<b>2.5</b>	<b>1.93</b>	<b>1.35</b>	<b>2.66</b>	<b>1.64</b>
Durable goods .....	-1.3	-1.0	-0.8	-1.1	-0.10	-0.07	-0.06	-0.08
Nondurable goods .....	0.6	1.1	8.3	2.3	0.11	0.21	1.58	0.46
Services .....	5.0	3.1	2.9	3.3	1.92	1.22	1.15	1.26
<b>Gross private domestic investment</b> .....	<b>4.3</b>	<b>3.7</b>	<b>3.1</b>	<b>0.5</b>	<b>0.68</b>	<b>0.58</b>	<b>0.50</b>	<b>0.08</b>
Fixed investment .....	4.6	3.8	3.0	0.4	0.71	0.59	0.47	0.06
Nonresidential .....	3.5	3.7	3.0	0.8	0.34	0.36	0.30	0.08
Structures .....	16.8	12.4	10.7	5.7	0.41	0.32	0.29	0.16
Equipment and software .....	-1.0	0.6	0.1	-1.2	-0.07	0.04	0.01	-0.08
Residential .....	6.3	3.8	2.9	-0.4	0.37	0.23	0.17	-0.02
Change in private inventories .....					-0.03	-0.01	0.03	0.02
<b>Government consumption expenditures and gross investment</b> .....	<b>4.7</b>	<b>4.4</b>	<b>4.8</b>	<b>1.4</b>	<b>0.84</b>	<b>0.79</b>	<b>0.86</b>	<b>0.26</b>
Federal .....	0.4	7.6	3.8	1.3	0.03	0.49	0.25	0.09
National defense .....	1.0	6.7	4.1	1.7	0.04	0.29	0.18	0.07
Nondefense .....	-0.7	9.5	3.2	0.6	-0.01	0.20	0.07	0.01
State and local .....	7.3	2.6	5.4	1.5	0.81	0.30	0.61	0.17
<b>Addenda:</b>								
Gross domestic purchases:								
Food .....	2.3	2.6	1.7	3.0	0.22	0.24	0.16	0.28
Energy goods and services .....	14.8	-2.4	30.6	0.6	0.70	-0.11	1.37	0.03
Excluding food and energy .....	3.0	3.0	2.9	1.9	2.54	2.59	2.49	1.67
Personal consumption expenditures (PCE):								
Food .....	2.3	2.8	1.7	2.9				
Energy goods and services .....	9.8	0.1	29.7	3.7				
Excluding food and energy .....	2.5	2.1	2.7	2.3				
"Market-based" PCE .....	2.5	1.7	4.2	2.3				
Excluding food and energy .....	1.9	1.6	2.7	2.0				
Gross domestic product .....	3.3	3.3	3.3	1.8				

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 calculated from index numbers in NIPA table 2.3.4. Contributions are from NIPA table 1.6.8.

Inflation, as measured by the price index for gross domestic purchases, was 2.0 percent, compared with 4.0 percent in the second quarter, and was the slowest rate of inflation since the fourth quarter of 2003.

Consumer prices decelerated, reflecting a sharp deceleration in prices paid for gasoline, fuel oil, and other energy goods.

Prices of private fixed investment decelerated markedly, reflecting a deceleration in the prices paid for nonresidential structures and downturns in the prices paid for equipment and software and for residential investment.

Prices paid by government decelerated, reflecting decelerations in the prices paid by the Federal Government and by state and local governments.

Energy prices increased 0.6 percent after increasing 30.6 percent. Food prices accelerated.

Excluding food and energy prices, inflation was 1.9 percent, slower than the 2.9 percent registered in the second quarter.

Consumer prices excluding food and energy, a measure of the "core" rate of inflation, increased 2.3 percent, following a 2.7-percent increase.

The "market-based" PCE price index increased 2.3 percent after increasing 4.2 percent.

The GDP price index, a measure of prices paid for goods and services made domestically, increased 1.8 percent, 0.2 percentage point less than the increase in the price index for gross domestic purchases.

### Note on Prices

The gross domestic purchases price index measures the prices paid by U.S. residents for all goods and services. It is derived from the prices of personal consumption expenditures (PCE), gross private domestic investment, government consumption expenditures and gross investment, and imported goods and services. It differs from the GDP price index because it excludes price changes of exported goods and services.

The GDP price index measures the prices paid for the goods and services produced in the United States. It is derived from the prices of PCE, gross private domestic investment, net exports of goods and services, and govern-

ment consumption expenditures and gross investment. It differs from the gross domestic purchases price index because it excludes price changes of imported goods and services.

Differences between the two price indexes reflect the changes in the prices of imports relative to the changes in the prices of exports. For example, quarter-to-quarter changes in the price index for gross domestic purchases are generally greater than changes in the GDP price index if increases in import prices exceed increases in export prices or if decreases in import prices are smaller than decreases in export prices.

## 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		
	2006	2005	2006		
	III	IV	I	II	III
<b>Personal income</b> .....	<b>11,1052.5</b>	<b>221.0</b>	<b>237.7</b>	<b>179.6</b>	<b>151.5</b>
Compensation of employees, received .....	7,623.7	90.8	215.9	132.9	90.5
Wage and salary disbursements .....	6,152.7	71.8	183.1	111.1	71.5
Private industries .....	5,137.0	64.3	173.1	103.3	61.7
Goods-producing industries .....	1,210.1	11.0	52.4	24.0	8.8
Manufacturing .....	757.5	5.3	27.8	12.8	1.9
Services-producing industries .....	3,926.9	53.2	120.8	79.3	52.9
Trade, transportation, and utilities ....	1,012.9	9.4	28.7	18.2	11.1
Other services-producing industries	2,913.9	43.8	92.0	61.2	41.7
Government .....	1,015.7	7.5	10.0	7.8	9.8
Supplements to wages and salaries .....	1,471.0	19.0	32.9	21.7	19.0
Proprietors' income with IVA and CCAAdj .....	1,013.4	29.5	11.5	3.6	1.5
Farm .....	19.6	-1.0	-4.8	-6.4	2.1
Nonfarm .....	993.8	30.4	16.3	9.9	-0.5
Rental income of persons with CCAAdj .....	74.5	93.0	-4.7	-5.4	3.1
Personal income receipts on assets .....	1,685.0	47.5	22.1	45.4	37.3
Personal interest income .....	1,037.2	30.5	7.4	30.1	18.0
Personal dividend income .....	647.8	17.0	14.7	15.3	19.3
Personal current transfer receipts .....	1,618.8	-29.2	30.6	19.3	29.1
Less: Contributions for government social insurance .....	962.8	10.4	37.8	16.2	9.9
Less: Personal current taxes .....	1,384.1	32.6	85.0	46.0	5.5
<b>Equals: Disposable personal income</b> .....	<b>9,668.5</b>	<b>188.4</b>	<b>152.7</b>	<b>133.6</b>	<b>146.1</b>
Less: Personal outlays .....	9,715.2	84.2	154.0	158.5	138.2
<b>Equals: Personal saving</b> .....	<b>-46.8</b>	<b>104.1</b>	<b>-1.2</b>	<b>-24.9</b>	<b>7.8</b>
<b>Addenda: Special factors in personal income</b>					
In government wages and salaries:					
Federal pay raise .....	6.9	0.0	6.5	0.4	0.0
Reservists' pay .....	6.4	0.0	7.2	-1.2	0.4
In supplements to wages and salaries:					
Employer contributions for social insurance	4.6	0.0	4.6	0.0	0.0
In nonfarm proprietors' income:					
Hurricane-related destruction of uninsured business property .....	0.0	21.1	0.5	0.0	0.0
In rental income of persons:					
Hurricane-related destruction of uninsured residential property .....	0.0	101.1	2.6	0.0	0.0
In personal current transfer receipts:					
Social security retroactive payments .....	0.0	2.2	-2.2	0.0	0.0
Cost-of-living adjustments under Federal transfer programs .....	24.4	0.0	24.4	0.0	0.0
Medicare part D—prescription drug benefits	49.5	0.0	33.1	11.2	5.2
Hurricane-related net insurance settlements (personal property excluding housing) ....	0.0	-41.9	-3.6	0.0	0.0
In contributions for government social insurance:					
Increase in taxable wage base .....	6.5	0.0	6.5	0.0	0.0
Changes in premium for supplementary medical insurance .....	4.9	0.0	4.9	0.0	0.0
In personal current taxes:					
Federal tax law changes .....	-4.1	0.0	-4.1	0.0	0.0
Refunds, settlements, and other .....	26.2	0.0	26.2	0.0	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 only measured in current dollars, increased \$151.5 billion after increasing \$179.6 billion. The deceleration primarily reflected decelerations in wages and salaries and in personal interest income.

Compensation increased \$90.5 billion, compared with an increase of \$132.9 billion. A deceleration in wages and salaries was spread across private industries; wages and salaries in government accelerated.

Personal interest income slowed, reflecting a broad decline in interest rates over the quarter.

An acceleration in personal current transfer receipts primarily reflected an acceleration in state and local government benefits (mainly Medicaid payments).

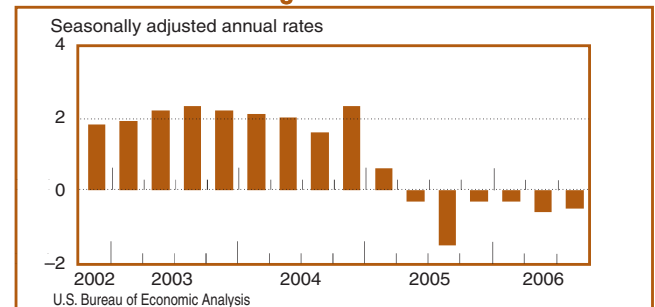
Personal current taxes decelerated sharply as a result of a downturn in state and local taxes and a deceleration in Federal income taxes. The decrease in state and local taxes reflected a return to more normal levels after strong second-quarter growth. The deceleration in Federal taxes was in both withheld taxes and in non-withheld taxes.

Current-dollar disposable personal income accelerated, reflecting a larger deceleration in personal current taxes than in personal income.

### Saving

Personal saving—disposable personal income less personal outlays—was -\$46.8 billion in the third quarter. Saving from current income may be near zero or negative when outlays are financed by borrowing (including borrowing financed through credit cards or home equity loans), by selling investments or other assets, or by using saving from previous periods. See “Personal Saving” on BEA’s Web site at [www.bea.gov/bea/faq/national/faq\\_personalsaving.pdf](http://www.bea.gov/bea/faq/national/faq_personalsaving.pdf).

**Chart 2. Personal Saving Rate**



## Source Data for the Advance Estimates

**Table 5. Monthly Advance Estimates of Key NIPA Components Based on Partial Data, 2006:III**

[Billions of dollars, seasonally adjusted at annual rates]

	2006					
	April	May	June	July	August	Sept. <sup>1</sup>
<b>Private fixed investment:</b>						
Nonresidential structures:						
Value of new nonresidential construction put in place .....	290.7	292.0	297.8	301.7	312.0	309.9
Equipment and software:						
Manufacturers' shipments of complete aircraft .....	27.0	34.0	37.7	30.6	34.8	34.7
Residential structures:						
Value of new residential construction put in place:						
Single family .....	446.5	435.5	424.2	411.5	400.3	394.5
Multifamily.....	56.1	55.0	54.7	55.5	55.7	54.9
<b>Change in private inventories:</b>						
Change in inventories for nondurable manufacturing.....	14.3	16.1	23.4	7.5	12.3	6.4
Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment .....	48.2	76.5	57.6	49.8	76.7	34.5
<b>Net exports:<sup>2</sup></b>						
Exports of goods:						
U.S. exports of goods, international-transactions-accounts basis .....	982.0	1,008.7	1,043.5	1,025.5	1,055.7	1,069.2
Excluding gold .....	975.1	999.3	1,033.2	1,017.8	1,045.4	1,060.2
Imports of goods:						
U.S. imports of goods, international-transactions-accounts basis .....	1,816.8	1,860.9	1,883.6	1,906.9	1,962.2	1,915.1
Excluding gold .....	1,811.4	1,853.9	1,877.5	1,900.9	1,957.2	1,909.6
Net exports of goods.....	-834.8	-852.2	-840.2	-881.4	-906.5	-845.8
Excluding gold .....	-836.4	-854.6	-844.3	-883.1	-911.9	-849.4
<b>State and local government structures:</b>						
Value of new construction put in place.....	247.6	252.3	254.8	251.1	254.7	252.9

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.

### Summary of the Source Data for the Advance Estimates of GDP for the Third Quarter of 2006

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.

*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 put in place (2), manufacturers' shipments of machinery and equipment other than aircraft (3), shipments of civilian aircraft (2), and exports and imports of machinery and equipment (2);

*Residential investment:* Construction put in place (2), single-family housing starts (3), sales of new homes (2), 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 and services (2);

*Government consumption expenditures and gross investment:* Federal outlays (3), state and local government construction put in place (2), and state and local government employment (3);

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

*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 September, including the following:

- An increase in nondurable-goods manufacturing inventories,
- An increase in nonmotor vehicle merchant wholesale and retail inventories,
- An increase in exports of goods excluding gold and a decrease in imports of goods excluding gold.

Table 5 shows the assumptions for key series; a more comprehensive list is available on BEA's Web site at [www.bea.gov/bea/dn/home/gdp.htm](http://www.bea.gov/bea/dn/home/gdp.htm).

### Motor Vehicle Output in GDP

In the third quarter of 2006, BEA's measure of real motor vehicle output increased 26 percent, compared with a decrease of 9 percent in the second quarter. The strong upturn reflected an acceleration in consumer spending and upturns in business investment and exports. However, motor vehicle unit production, as measured by the Federal Reserve Board, fell about 20 percent.

The divergence of unit production and real output in the third quarter demonstrates that unit production data is not always an accurate rule-of-thumb indicator of real motor vehicle output. These two measures often diverge in magnitude and direction of change (charts 1 and 2). The third-quarter decline in unit production suggests that the strong increase in dealer unit sales mostly came from motor vehicle inventories, which declined in the third quarter after an increase in the second quarter.

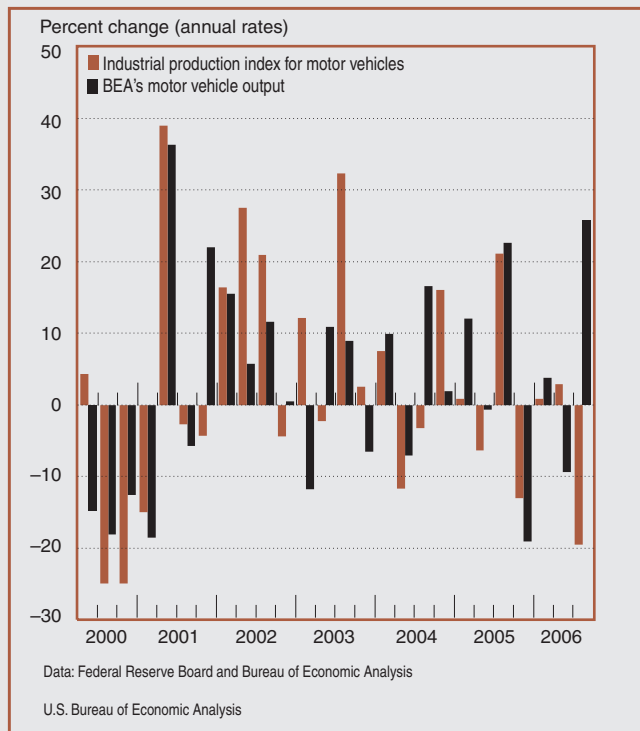
The divergence of unit production and real output also provides an opportunity to discuss key concepts behind BEA's measure of motor vehicle output.

**Margins.** BEA's measure of motor vehicle output includes the value added (including wages and salaries and commissions) from retail and wholesale margins (including sales taxes) for new and used domestic and imported vehicles. In contrast, the Federal Reserve's unit production measure does not include any retail and wholesale activity. In the third quarter, increased motor vehicle sales generated value added by retailers and wholesalers and boosted current-dollar motor vehicle output. Also, in the third quarter, margins on used motor vehicle transactions increased.

**Price effects.** The increase in BEA's real motor vehicle output was even stronger than the current-dollar measure because the price index that BEA uses to deflate some components of motor vehicle output and inventory values decreased significantly.

**Net exports.** BEA uses balance-of-payments data for nominal and real exports and imports, and the contribution of net exports was larger than that implied by the unit production data.

**Chart 1. Federal Reserve Board Unit Production Index and BEA's Measure of Motor Vehicle Output**



**Chart 2. Difference in Percent Changes in Motor Vehicle Output Measures**

