

GDP and the Economy

Preliminary Estimates for the Fourth Quarter of 2008

REAL GROSS domestic product (GDP) decreased at an annual rate of 6.2 percent in the fourth quarter of 2008, according to the “preliminary” estimates of the national income and product accounts (NIPAs) (chart 1 and table 1).¹ In the third quarter, real GDP declined 0.5 percent. The fourth-quarter decrease was the largest since the first quarter of 1982. It was revised down 2.4 percentage points from the “advance” estimate (see page 9). The revision, which was large by historical standards, reflected revisions to consumer spending, exports, and inventory investment.

The steeper decline in GDP growth in the fourth-quarter resulted mainly from a sharp downturn in exports and a larger decrease in investment in equipment and software (see page 2). In contrast, imports decreased much more in the fourth quarter than in the third quarter.²

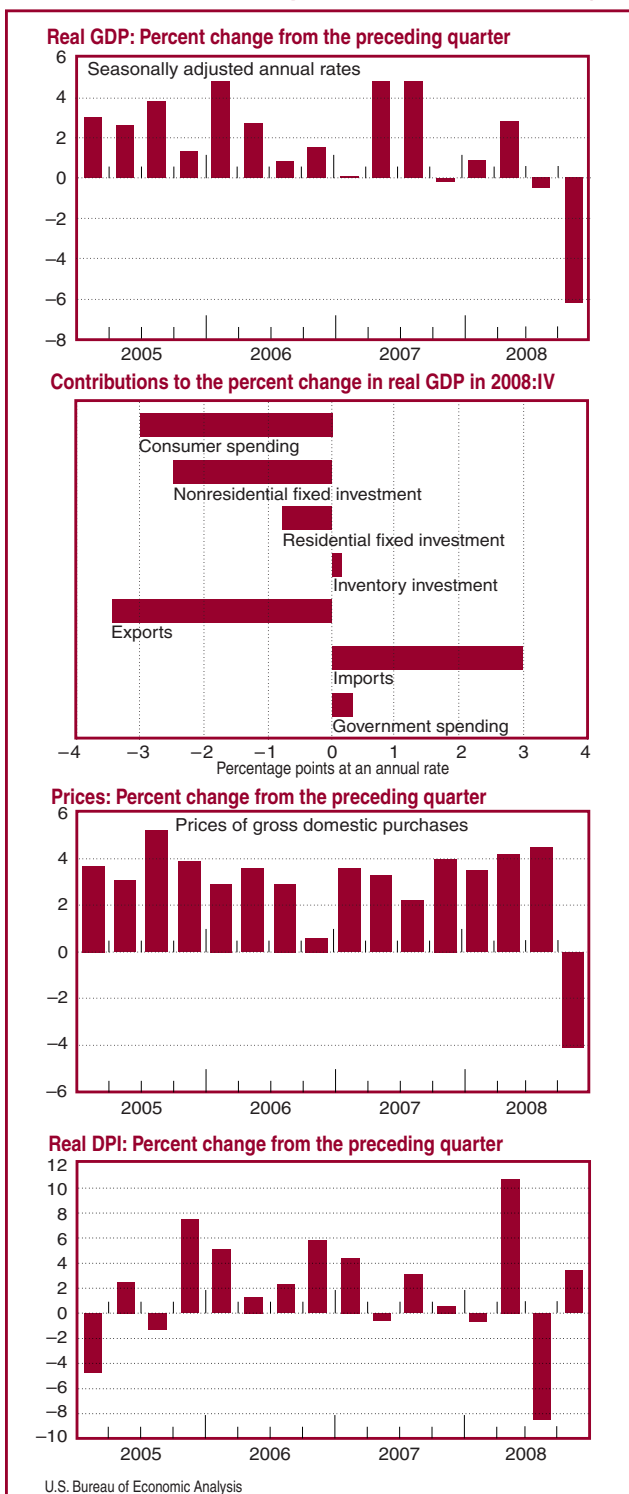
- Prices of goods and services purchased by U.S. residents fell 4.1 percent in the fourth quarter after rising 4.5 percent in the third quarter (see page 8). In the fourth quarter, energy prices turned down sharply, and food prices decelerated. Excluding food and energy, gross domestic purchases prices increased 1.1 percent after increasing 2.8 percent.
- Real disposable personal income (DPI) increased 3.4 percent in the fourth quarter; in the third quarter, real DPI decreased 8.5 percent (revised). The upturn reflected a sharp downturn in the PCE implicit price deflator that is used to deflate current-dollar DPI, and a smaller decrease in current-dollar DPI, which decreased 1.8 percent after decreasing 3.9 percent (revised).
- The personal saving rate was 3.2 percent in the fourth quarter, 0.3 percentage point more than the advance estimate; in the third quarter, it was 1.3 percent (revised).

1. “Real” estimates are in chained (2000) dollars, and price indexes are chain-type measures. 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/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 the NIPA series “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) | | | |
|----------------------------------------------------------------------|---------------------------------------|----------------------------------------|--------------|-------------|--------------|--------------|----------------------------------------------------------------|--------------|--------------|--|
| | 2008 | 2008 | | | | | 2008 | | | |
| | IV | I | II | III | IV | I | II | III | IV | |
| Gross domestic product¹..... | 100.0 | 0.9 | 2.8 | -0.5 | -6.2 | 0.9 | 2.8 | -0.5 | -6.2 | |
| Personal consumption expenditures..... | 69.9 | 0.9 | 1.2 | -3.8 | -4.3 | 0.61 | 0.87 | -2.75 | -3.01 | |
| Durable goods..... | 6.7 | -4.3 | -2.8 | -14.8 | -22.1 | -0.33 | -0.21 | -1.16 | -1.67 | |
| Nondurable goods..... | 20.0 | -0.4 | 3.9 | -7.1 | -9.2 | -0.08 | 0.80 | -1.57 | -1.95 | |
| Services..... | 43.2 | 2.4 | 0.7 | -0.1 | 1.4 | 1.02 | 0.28 | -0.03 | 0.61 | |
| Gross private domestic investment..... | 13.5 | -5.8 | -11.5 | 0.4 | -20.8 | -0.89 | -1.74 | 0.06 | -3.11 | |
| Fixed investment..... | 13.7 | -5.6 | -1.7 | -5.3 | -21.3 | -0.86 | -0.25 | -0.79 | -3.26 | |
| Nonresidential..... | 10.6 | 2.4 | 2.5 | -1.7 | -21.1 | 0.26 | 0.27 | -0.19 | -2.48 | |
| Structures..... | 4.0 | 8.6 | 18.5 | 9.7 | -5.9 | 0.30 | 0.64 | 0.36 | -0.24 | |
| Equipment and software..... | 6.6 | -0.6 | -5.0 | -7.5 | -28.8 | -0.04 | -0.37 | -0.55 | -2.24 | |
| Residential..... | 3.1 | -25.1 | -13.3 | -16.0 | -22.2 | -1.12 | -0.52 | -0.60 | -0.78 | |
| Change in private inventories..... | -0.2 | ..... | ..... | ..... | ..... | -0.02 | -1.50 | 0.84 | 0.16 | |
| Net exports of goods and services..... | -3.9 | ..... | ..... | ..... | ..... | 0.77 | 2.93 | 1.05 | -0.46 | |
| Exports..... | 12.2 | 5.1 | 12.3 | 3.0 | -23.6 | 0.63 | 1.54 | 0.40 | -3.44 | |
| Goods..... | 8.2 | 4.5 | 16.3 | 3.7 | -33.6 | 0.39 | 1.39 | 0.34 | -3.58 | |
| Services..... | 4.0 | 6.4 | 3.8 | 1.4 | 3.5 | 0.24 | 0.15 | 0.06 | 0.14 | |
| Imports..... | 16.1 | -0.8 | -7.3 | -3.5 | -16.0 | 0.14 | 1.39 | 0.65 | 2.99 | |
| Goods..... | 13.2 | -2.0 | -7.1 | -4.7 | -19.4 | 0.29 | 1.14 | 0.74 | 3.06 | |
| Services..... | 2.9 | 5.5 | -8.0 | 3.3 | 2.7 | -0.15 | 0.25 | -0.09 | -0.08 | |
| Government consumption expenditures and gross investment..... | 20.5 | 1.9 | 3.9 | 5.8 | 1.6 | 0.38 | 0.78 | 1.14 | 0.32 | |
| Federal..... | 7.8 | 5.8 | 6.6 | 13.8 | 6.7 | 0.41 | 0.47 | 0.97 | 0.50 | |
| National defense..... | 5.3 | 7.3 | 7.3 | 18.0 | 3.1 | 0.34 | 0.36 | 0.85 | 0.16 | |
| Nondefense..... | 2.5 | 2.9 | 5.0 | 5.1 | 15.1 | 0.06 | 0.11 | 0.12 | 0.34 | |
| State and local..... | 12.7 | -0.3 | 2.5 | 1.3 | -1.4 | -0.03 | 0.31 | 0.17 | -0.18 | |

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.

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) | | | |
|------------------------------------------------|---------------------------------------|----------------------------------------|------------|-------------|-------------|------------|----------------------------------------------------------------|-------------|-------------|--|
| | 2008 | 2008 | | | | | 2008 | | | |
| | IV | I | II | III | IV | I | II | III | IV | |
| Gross domestic product¹..... | 100.0 | 0.9 | 2.8 | -0.5 | -6.2 | 0.9 | 2.8 | -0.5 | -6.2 | |
| Final sales of domestic product..... | 100.2 | 0.9 | 4.4 | -1.3 | -6.4 | 0.89 | 4.32 | -1.35 | -6.41 | |
| Change in private inventories..... | -0.2 | ..... | ..... | ..... | ..... | -0.02 | -1.50 | 0.84 | 0.16 | |
| Goods..... | 29.4 | 0.9 | 4.9 | -4.2 | -19.2 | 0.29 | 1.49 | -1.29 | -6.18 | |
| Services..... | 61.3 | 2.7 | 1.7 | 1.5 | 1.7 | 1.62 | 1.02 | 0.87 | 1.04 | |
| Structures..... | 9.4 | -10.1 | 3.3 | -1.0 | -11.4 | -1.03 | 0.32 | -0.09 | -1.11 | |
| Addenda: | | | | | | | | | | |
| Motor vehicle output..... | 1.8 | -14.2 | -33.8 | 7.3 | -63.5 | -0.41 | -1.01 | 0.16 | -2.04 | |
| GDP excluding motor vehicle output..... | 98.2 | 1.3 | 4.0 | -0.7 | -4.4 | 1.28 | 3.84 | -0.67 | -4.20 | |
| Final sales of computers..... | 0.6 | 8.2 | 28.4 | -1.7 | -2.2 | 0.05 | 0.17 | -0.01 | -0.01 | |
| GDP excluding final sales of computers..... | 99.4 | 0.8 | 2.7 | -0.5 | -6.3 | 0.82 | 2.66 | -0.50 | -6.24 | |

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.

Consumer spending decreased more in the fourth quarter than in the third quarter, the largest decrease since the second quarter of 1980. The decrease reduced the percent change in real GDP by 3.01 percentage points and reflected decreases in consumer spending for goods; spending for services turned up.

Nonresidential fixed investment decreased much more than in the third quarter, the largest decrease since the first quarter of 1975. The fourth-quarter decrease reduced the percent change in real GDP by 2.48 percentage points. It reflected a much larger decrease in equipment and software and a downturn in structures.

Residential investment decreased 22.2 percent after decreasing 16.0 percent. It was the twelfth consecutive quarter of decline.

Inventory investment decelerated. It added 0.16 percentage point to the percent change in real GDP after adding 0.84 percentage point.

Exports turned down sharply, the first decrease since the third quarter of 2005 and the largest decrease since the fourth quarter of 1971. The downturn reflected widespread downturns in exports of goods. Exports of services picked up slightly.

Imports decreased much more than in the third quarter, decreasing 16.0 percent after decreasing 3.5 percent. It was the fifth consecutive quarter of decline and the largest decrease since the third quarter of 1980.

Federal government spending decelerated, reflecting a slowdown in national defense spending. Federal non-defense spending accelerated.

State and local government spending turned down.

Real final sales of domestic product, real GDP less inventory investment, decreased 6.4 percent, the largest decrease since the second quarter of 1980.

Motor vehicle output turned down sharply, decreasing 63.5 percent after increasing 7.3 percent. It subtracted 2.04 percentage points from the percent change in real GDP, and it was the largest decrease since the fourth quarter of 1970.

Final sales of computers decreased 2.2 percent after decreasing 1.7 percent.

Consumer Spending

Table 3. Real Personal Consumption Expenditures (PCE)

[Seasonally adjusted at annual rates]

| | Share of current-dollar PCE (percent) | Change from preceding period (percent) | | | | | Contribution to percent change in real PCE (percentage points) | | | |
|--------------------------------------------------|---------------------------------------|----------------------------------------|-------------|--------------|--------------|--------------|----------------------------------------------------------------|--------------|--------------|----|
| | | 2008 | | | | | 2008 | | | |
| | | IV | I | II | III | IV | I | II | III | IV |
| PCE ¹ | 100.0 | 0.9 | 1.2 | -3.8 | -4.3 | 0.9 | 1.2 | -3.8 | -4.3 | |
| Durable goods | 9.5 | -4.3 | -2.8 | -14.8 | -22.1 | -0.47 | -0.30 | -1.60 | -2.40 | |
| Motor vehicles and parts | 3.3 | -10.7 | -19.7 | -26.6 | -38.0 | -0.49 | -0.90 | -1.15 | -1.62 | |
| Furniture and household equipment | 4.0 | 1.8 | 14.0 | -8.2 | -8.6 | 0.07 | 0.55 | -0.35 | -0.36 | |
| Other ² | 2.3 | -2.3 | 2.4 | -4.6 | -17.2 | -0.05 | 0.06 | -0.11 | -0.42 | |
| Nondurable goods | 28.6 | -0.4 | 3.9 | -7.1 | -9.2 | -0.11 | 1.13 | -2.17 | -2.79 | |
| Food | 13.9 | 1.3 | 4.1 | -7.3 | -14.8 | 0.18 | 0.56 | -1.04 | -2.19 | |
| Clothing and shoes | 3.7 | 3.0 | 10.9 | -13.3 | -9.5 | 0.11 | 0.39 | -0.52 | -0.36 | |
| Gasoline, fuel oil, and other energy goods | 3.2 | -6.0 | -6.4 | -13.4 | 10.6 | -0.26 | -0.28 | -0.63 | 0.40 | |
| Other ³ | 7.8 | -1.8 | 6.2 | 0.2 | -7.9 | -0.14 | 0.46 | 0.02 | -0.63 | |
| Services | 61.9 | 2.4 | 0.7 | -0.1 | 1.4 | 1.44 | 0.40 | -0.04 | 0.87 | |
| Housing | 15.4 | 0.5 | 1.7 | 0.7 | 0.4 | 0.07 | 0.25 | 0.11 | 0.06 | |
| Household operation | 5.6 | 1.8 | -4.3 | -8.2 | 7.1 | 0.10 | -0.24 | -0.47 | 0.38 | |
| Electricity and gas | 2.3 | 7.4 | -11.0 | -20.7 | 14.2 | 0.16 | -0.27 | -0.53 | 0.31 | |
| Other household operation | 3.3 | -2.1 | 1.0 | 2.1 | 2.3 | -0.07 | 0.03 | 0.07 | 0.07 | |
| Transportation | 3.8 | 1.7 | -3.0 | -2.3 | -5.7 | 0.06 | -0.11 | -0.09 | -0.21 | |
| Medical care | 18.2 | 4.9 | 2.8 | 2.5 | 1.8 | 0.84 | 0.49 | 0.44 | 0.32 | |
| Recreation | 4.2 | -4.7 | 1.3 | -1.5 | 0.5 | -0.20 | 0.05 | -0.06 | 0.02 | |
| Other ⁴ | 14.6 | 4.1 | -0.3 | 0.2 | 2.1 | 0.57 | -0.05 | 0.03 | 0.30 | |

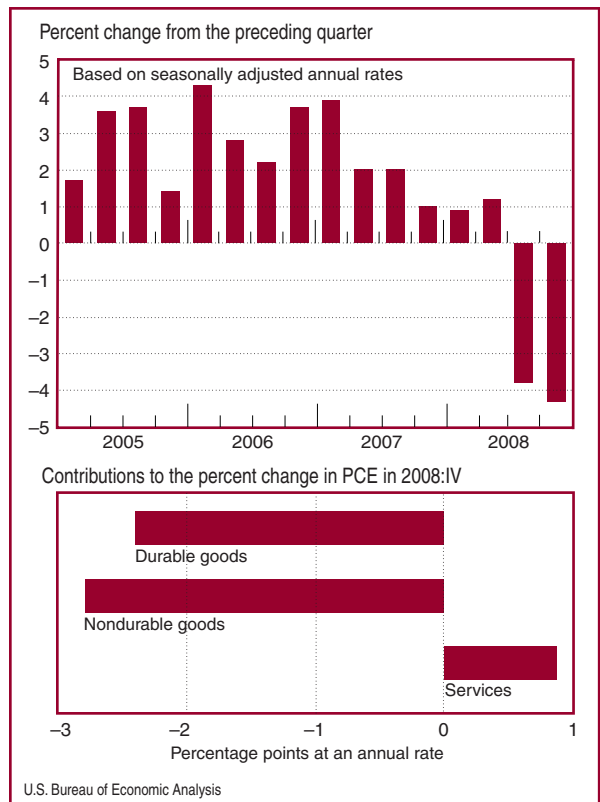
Spending for durable goods decreased more in the fourth quarter than in the third quarter; it reduced the percent change in real consumer spending by 2.40 percentage points. The fourth-quarter decrease was the largest since the first quarter of 1987. The larger fourth-quarter decrease primarily reflected larger decreases in motor vehicles and parts and in “other” durable goods.

Spending for nondurable goods also decreased more than in the third quarter. Spending for food decreased much more than in the third quarter, and spending for “other” nondurable goods turned down. In contrast, spending for gasoline, fuel oil, and other energy goods turned up.

Spending for services turned up, mainly reflecting an upturn in spending for electricity and gas and an acceleration in spending for “other” services.

1. The estimates under the contribution columns are also percent changes.
 2. Includes jewelry and watches, ophthalmic products and orthopedic equipment, books and maps, bicycles and motorcycles, guns and sporting equipment, photographic equipment, boats, and pleasure aircraft.
 3. Includes tobacco, toilet articles, drug preparations and sundries, stationery and writing supplies, toys, film, flowers, cleaning preparations and paper products, semidurable house furnishings, and magazines and newspapers.
 4. Includes personal care, personal business, education and research, religious and welfare activities, and net foreign travel.
 NOTE: Percent changes are from NIPA table 2.3.1, and contributions, from NIPA table 2.3.2; shares are calculated from NIPA table 2.3.5.

Chart 2. Real Personal Consumption Expenditures



Private Fixed Investment

Table 4. Real Private Fixed Investment (PFI)

[Seasonally adjusted at annual rates]

| | Share of current-dollar PFI (percent) | Change from preceding period (percent) | | | | | Contribution to percent change in real PFI (percentage points) | | | |
|---------------------------------------------------|---------------------------------------|----------------------------------------|--------------|--------------|--------------|--------------|----------------------------------------------------------------|--------------|---------------|----|
| | | 2008 | | | | | | | | |
| | | IV | I | II | III | IV | I | II | III | IV |
| Private fixed investment¹.... | 100.0 | -5.6 | -1.7 | -5.3 | -21.3 | -5.6 | -1.7 | -5.3 | -21.3 | |
| Nonresidential..... | 77.5 | 2.4 | 2.5 | -1.7 | -21.1 | 1.77 | 1.84 | -1.27 | -16.20 | |
| Structures..... | 29.5 | 8.6 | 18.5 | 9.7 | -5.9 | 2.04 | 4.36 | 2.50 | -1.56 | |
| Commercial and health care | 9.0 | -3.6 | 0.2 | -8.8 | -15.6 | -0.32 | 0.02 | -0.80 | -1.39 | |
| Manufacturing..... | 2.9 | 13.0 | 136.1 | 16.5 | 21.8 | 0.22 | 1.79 | 0.37 | 0.54 | |
| Power and communication.... | 4.0 | 23.2 | 0.5 | 6.8 | -10.8 | 0.70 | 0.02 | 0.24 | -0.41 | |
| Mining exploration, shafts, and wells..... | 8.0 | 15.5 | 31.6 | 45.3 | 1.4 | 0.84 | 1.72 | 2.60 | 0.11 | |
| Other structures ² | 5.6 | 12.8 | 17.3 | 1.9 | -7.9 | 0.59 | 0.81 | 0.10 | -0.41 | |
| Equipment and software..... | 48.0 | -0.6 | -5.0 | -7.5 | -28.8 | -0.27 | -2.52 | -3.78 | -14.64 | |
| Information processing equipment and software.... | 26.0 | 7.2 | 8.0 | -4.2 | -23.9 | 1.77 | 2.01 | -1.12 | -6.36 | |
| Computers and peripheral equipment..... | 4.0 | 16.1 | 13.0 | -22.4 | -36.9 | 0.68 | 0.56 | -1.13 | -1.71 | |
| Software ³ | 11.9 | 9.9 | 2.1 | -4.4 | -16.5 | 1.07 | 0.24 | -0.52 | -1.90 | |
| Other ⁴ | 10.2 | 0.2 | 13.0 | 5.3 | -26.1 | 0.02 | 1.20 | 0.53 | -2.75 | |
| Industrial equipment..... | 9.0 | 0.8 | -3.6 | -8.8 | -15.7 | 0.07 | -0.32 | -0.81 | -1.35 | |
| Transportation equipment..... | 4.1 | -14.0 | -46.6 | -44.7 | -70.2 | -1.04 | -3.95 | -3.21 | -4.93 | |
| Other equipment ⁵ | 8.9 | -12.5 | -3.2 | 18.0 | -22.7 | -1.07 | -0.26 | 1.37 | -2.00 | |
| Residential..... | 22.6 | -25.1 | -13.3 | -16.0 | -22.2 | -7.40 | -3.53 | -4.05 | -5.12 | |
| Structures..... | 22.1 | -25.4 | -13.7 | -16.0 | -22.3 | -7.38 | -3.57 | -3.97 | -5.05 | |
| Permanent site..... | 10.0 | -40.8 | -23.2 | -24.2 | -36.4 | -6.94 | -3.19 | -3.03 | -4.17 | |
| Single family..... | 7.8 | -46.2 | -30.7 | -30.4 | -41.3 | -6.92 | -3.66 | -3.20 | -3.87 | |
| Multifamily..... | 2.2 | -1.1 | 24.7 | 7.8 | -14.3 | -0.02 | 0.47 | 0.17 | -0.30 | |
| Other structures ⁶ | 12.2 | -3.6 | -3.1 | -7.6 | -7.8 | -0.44 | -0.38 | -0.94 | -0.88 | |
| Equipment..... | 0.5 | -4.9 | 8.0 | -17.4 | -16.6 | -0.02 | 0.03 | -0.08 | -0.07 | |

Private fixed investment decreased much more in the fourth quarter than in the third quarter. The largest contributor to the larger fourth-quarter decrease was nonresidential fixed investment.

Nonresidential fixed investment decreased 21.1 percent after decreasing 1.7 percent.

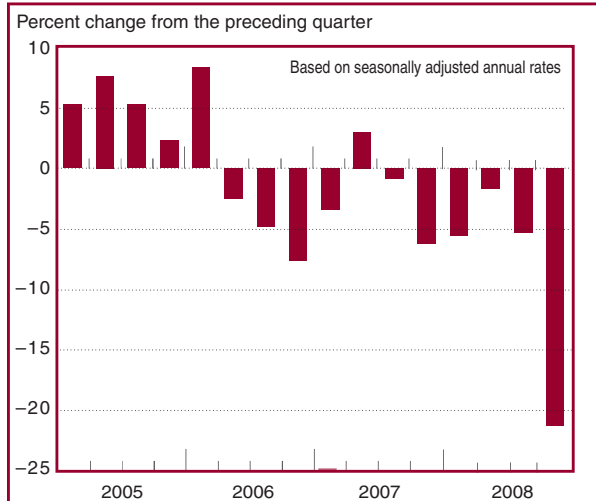
Investment in structures turned down, reflecting a sharp deceleration in mining exploration, shafts, and wells, a downturn in power and communication, a larger decrease in commercial and health care, and a downturn in "other" structures.

Equipment and software decreased much more than in the third quarter, decreasing 28.8 percent, the largest decrease since the first quarter of 1958. The fourth-quarter decrease reflected widespread decreases.

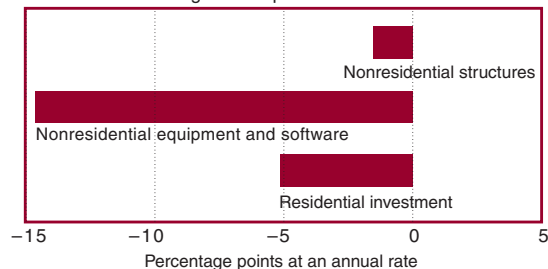
Residential investment also decreased more than in the third quarter, mainly reflecting a larger decrease in single-family structures and a downturn in multifamily structures.

1. The estimates of fixed investment under the contribution columns are also percent changes.
 2. Consists primarily of religious, educational, vocational, lodging, railroads, farm, and amusement and recreational structures, net purchases of used structures, and brokers' commissions on the sale of structures.
 3. Excludes software "embedded" or bundled, in computers and other equipment.
 4. Includes communication equipment, nonmedical instruments, medical equipment and instruments, photocopy and related equipment, and office and accounting equipment.
 5. Consists primarily of furniture and fixtures, agricultural machinery, construction machinery, mining and oilfield machinery, service industry machinery, and electrical equipment not elsewhere classified.
 6. Consists primarily of manufactured homes, improvements, dormitories, net purchases of used structures, and brokers' commissions on the sale of residential structures.
 NOTE: Percent changes are from NIPA table 5.3.1, contributions are from NIPA table 5.3.2, and shares are calculated from NIPA table 5.3.5.

Chart 3. Real Private Fixed Investment



Contributions to the change in real private fixed investment in 2008:IV



U.S. Bureau of Economic Analysis

Private Investment in Structures

Private investment in structures includes spending on structures by businesses, households and nonprofit institutions. Most structures are buildings; structures are classified as nonresidential or residential.

For more information, see the *BEA Briefing "How BEA Accounts for Investment in Private Structures"* in the February 2009 SURVEY.

Inventory Investment

Table 5. Real Change in Private Inventories by Industry
 [Billions of chained (2000) dollars; seasonally adjusted at annual rates]

| | Level | | | | | Change from preceding quarter | | | | |
|------------------------------------------------------------------------------------------------|--------------|--------------|--------------|--------------|--------------|-------------------------------|--------------|-------------|--------------|--|
| | 2008 | 2008 | | | | 2008 | | | | |
| | IV | I | II | III | IV | I | II | III | IV | |
| Change in private inventories¹ | -8.1 | -10.2 | -50.6 | -29.6 | -19.9 | -2.1 | -40.4 | 21.0 | 9.7 | |
| Farm..... | 10.5 | 6.0 | 2.4 | 2.2 | 3.6 | -4.5 | -3.6 | -0.2 | 1.4 | |
| Mining, utilities, and construction..... | -5.0 | -9.4 | -8.0 | -8.0 | -7.3 | -4.4 | 1.4 | 0.0 | 0.7 | |
| Manufacturing..... | 2.9 | 13.7 | -26.0 | -25.6 | 6.3 | 10.8 | -39.7 | 0.4 | 31.9 | |
| Durable-goods industries..... | 13.8 | 3.0 | -14.4 | -5.7 | 38.7 | -10.8 | -17.4 | 8.7 | 44.4 | |
| Nondurable-goods industries..... | -9.1 | 9.7 | -11.3 | -18.0 | -27.2 | 18.8 | -21.0 | -6.7 | -9.2 | |
| Wholesale trade..... | -1.5 | -5.1 | 1.0 | 4.2 | -3.3 | -3.6 | 6.1 | 3.2 | -7.5 | |
| Durable-goods industries..... | 3.5 | 5.6 | 2.3 | 19.7 | -10.8 | 2.1 | -3.3 | 17.4 | -30.5 | |
| Nondurable-goods industries..... | -4.2 | -8.4 | -0.8 | -10.8 | 5.6 | -4.2 | 7.6 | -10.0 | 16.4 | |
| Retail trade..... | -20.2 | -18.5 | -16.0 | 3.5 | -27.1 | 1.7 | 2.5 | 19.5 | -30.6 | |
| Motor vehicle and parts dealers..... | -26.6 | -10.3 | -13.0 | 5.1 | -9.8 | 16.3 | -2.7 | 18.1 | -14.9 | |
| Food and beverage stores..... | 0.8 | 0.3 | 0.6 | 0.9 | -0.2 | -0.5 | 0.3 | 0.3 | -1.1 | |
| General merchandise stores..... | -1.0 | -2.8 | 0.1 | -0.7 | -5.0 | -1.8 | 2.9 | -0.8 | -4.3 | |
| Other retail stores..... | 3.9 | -6.5 | -5.1 | -1.2 | -12.6 | -10.4 | 1.4 | 3.9 | -11.4 | |
| Other industries..... | 2.1 | 0.3 | -3.4 | -1.0 | 5.4 | -1.8 | -3.7 | 2.4 | 6.4 | |
| Residual ² | 3.2 | 2.3 | 0.0 | -12.1 | -0.3 | -0.9 | -2.3 | -12.1 | 11.8 | |
| Addenda: Ratios of private inventories to final sales of domestic business:³ | | | | | | | | | | |
| Private inventories to final sales..... | 2.38 | 2.37 | 2.32 | 2.34 | 2.39 | | | | | |
| Nonfarm inventories to final sales.... | 2.20 | 2.19 | 2.14 | 2.15 | 2.20 | | | | | |
| Nonfarm inventories to final sales of goods and structures..... | 3.55 | 3.56 | 3.45 | 3.48 | 3.64 | | | | | |

1. The levels are from NIPA table 5.6.6B.

2. The residual is the difference between the first line and the sum of the most detailed lines. It reflects that chained-dollar estimates are usually not additive, because they are based on quantity indexes that use weights of more than one period.

3. The ratios are from NIPA table 5.7.6B.

Inventory investment rose \$9.7 billion in the fourth quarter after rising \$21.0 billion in the third quarter.

Inventory investment in manufacturing industries rose \$31.9 billion after rising \$0.4 billion; the fourth-quarter increase stemmed mainly from an accumulation of durable-goods inventories in the fourth quarter after a drawdown in the third quarter.

Wholesale trade inventory investment fell \$7.5 billion after rising \$3.2 billion. The fourth-quarter drop reflected mainly a drawdown of durable-goods inventories after an accumulation in the third quarter.

Retail trade inventory investment decreased \$30.6 billion after increasing \$19.5 billion. The downturn reflected a liquidation of inventories by motor vehicle and parts dealers following a third-quarter buildup and a larger liquidation of inventories by "other" retail stores and by general merchandise stores.

The ratio of real private inventories to real final sales of domestic business increased to 2.39, the highest in more than a year.

Inventory Investment

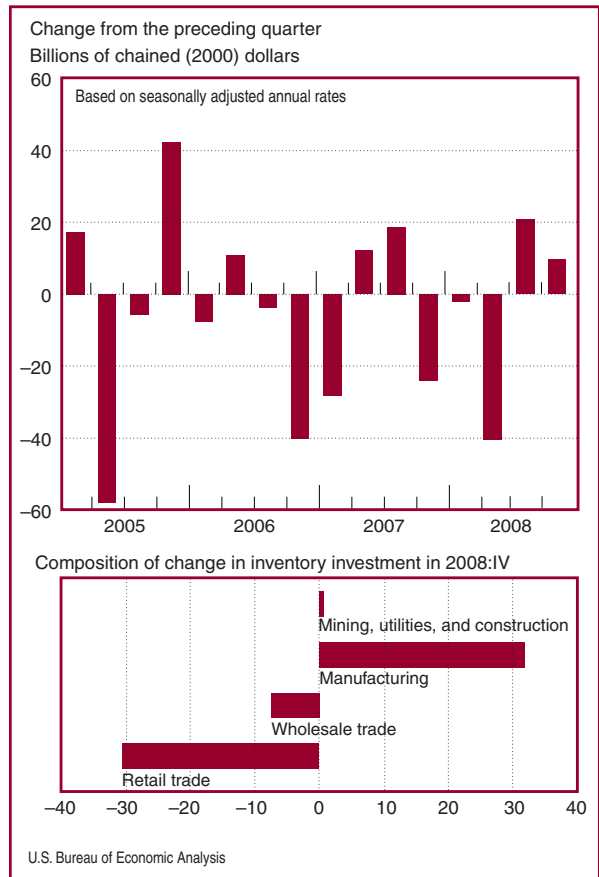
The real change in private inventories, often called real private inventory investment, represents the change in the physical stock of goods held by businesses. It includes finished goods, goods at various stages of production, and raw materials.

The change in private inventories is a key component of gross domestic product (GDP), which aims to measure output derived from current production. To include the value of currently produced goods that are not yet sold and to exclude the value of goods produced in previous periods, change in private inventories must be included in the GDP calculation.

Thus, GDP can also be seen as the sum of final sales of domestic product and the change in private inventories (table 2).

For most industries, the estimates of change in private inventories are prepared by revaluing book-value estimates of inventories from the Census Bureau to a replacement-cost basis and calculating the change over a quarter or year. BEA does not always have complete data for every industry.

Chart 4. Real Private Inventory Investment



Exports and Imports

Table 6. Real Exports and Imports of Goods and Services

[Seasonally adjusted at annual rates]

| | Share of current-dollar exports and imports (percent) | Change from preceding period (percent) | | | | | Contribution to percent change in real exports and imports (percentage points) | | | |
|------------------------------------------------------------------------|-------------------------------------------------------|----------------------------------------|-------------|-------------|--------------|--------------|--------------------------------------------------------------------------------|--------------|---------------|----|
| | | 2008 | | | | | 2008 | | | |
| | | IV | I | II | III | IV | I | II | III | IV |
| Exports of goods and services¹ | 100.0 | 5.1 | 12.3 | 3.0 | -23.6 | 5.1 | 12.3 | 3.0 | -23.6 | |
| Exports of goods² | 66.9 | 4.5 | 16.3 | 3.7 | -33.6 | 3.13 | 11.11 | 2.55 | -24.77 | |
| Foods, feeds, and beverages | 5.3 | 14.3 | 8.7 | -10.8 | -27.7 | 0.77 | 0.52 | -0.70 | -1.62 | |
| Industrial supplies and materials..... | 18.1 | 11.2 | 29.0 | 8.7 | -34.1 | 2.02 | 5.34 | 1.75 | -7.23 | |
| Capital goods, except automotive..... | 25.5 | -3.6 | 11.2 | 4.4 | -33.4 | -0.95 | 2.85 | 1.09 | -9.08 | |
| Automotive vehicles, engines, and parts..... | 6.2 | -11.5 | 4.3 | 25.9 | -56.6 | -0.84 | 0.29 | 1.52 | -4.79 | |
| Consumer goods, except automotive..... | 8.9 | 14.9 | 15.3 | 12.8 | -29.1 | 1.21 | 1.29 | 1.04 | -2.68 | |
| Other..... | 2.9 | 37.1 | 28.8 | -53.3 | 24.9 | 0.92 | 0.82 | -2.15 | 0.63 | |
| Exports of services² | 33.1 | 6.4 | 3.8 | 1.4 | 3.5 | 1.97 | 1.19 | 0.43 | 1.15 | |
| Imports of goods and services¹ | 100.0 | -0.8 | -7.3 | -3.5 | -16.0 | -0.80 | -7.30 | -3.50 | -16.00 | |
| Imports of goods² | 81.9 | -2.0 | -7.1 | -4.7 | -19.4 | -1.65 | -5.97 | -3.97 | -16.48 | |
| Foods, feeds, and beverages | 3.9 | -5.2 | 4.7 | -1.4 | 3.3 | -0.18 | 0.16 | -0.05 | 0.12 | |
| Industrial supplies and materials, except petroleum and products | 12.3 | -17.3 | -0.4 | 7.7 | -24.4 | -2.25 | -0.03 | 0.92 | -3.34 | |
| Petroleum and products | 14.5 | 17.6 | -38.1 | -6.6 | 40.7 | 2.74 | -8.59 | -1.29 | 5.83 | |
| Capital goods, except automotive..... | 18.6 | 1.1 | 8.9 | -5.4 | -29.0 | 0.21 | 1.52 | -0.97 | -5.74 | |
| Automotive vehicles, engines, and parts..... | 8.6 | -7.9 | -12.7 | -25.7 | -50.0 | -0.85 | -1.31 | -2.66 | -5.59 | |
| Consumer goods, except automotive..... | 20.0 | -6.5 | 8.2 | 4.3 | -30.8 | -1.30 | 1.49 | 0.80 | -6.65 | |
| Other..... | 4.0 | -0.1 | 23.2 | -17.7 | -27.4 | 0.00 | 0.78 | -0.71 | -1.10 | |
| Imports of services² | 18.1 | 5.5 | -8.0 | 3.3 | 2.7 | 0.86 | -1.29 | 0.51 | 0.46 | |
| Addenda: | | | | | | | | | | |
| Exports of agricultural goods ³ | 5.9 | 11.8 | 10.5 | -7.0 | -15.9 | | | | | |
| Exports of nonagricultural goods | 61.0 | 3.8 | 17.0 | 4.9 | -35.2 | | | | | |
| Imports of nonpetroleum goods | 67.3 | -6.4 | 4.0 | -4.1 | -30.4 | | | | | |

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

2. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

3. Includes parts of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable nonautomotive consumer goods.

NOTE: Percent changes are from NIPA table 4.2.1, contributions are from NIPA table 4.2.2, and shares are calculated from NIPA table 4.2.5.

Real exports of goods and services turned down sharply, decreasing 23.6 percent after increasing 3.0 percent. The downturn reflected widespread downturns in exports of goods. Exports of services picked up somewhat.

The downturn in exports of goods reflected large downturns in capital goods, in industrial supplies and materials, in automotive vehicles and parts, and in nonautomotive consumer goods. In contrast, "other" exports turned up.

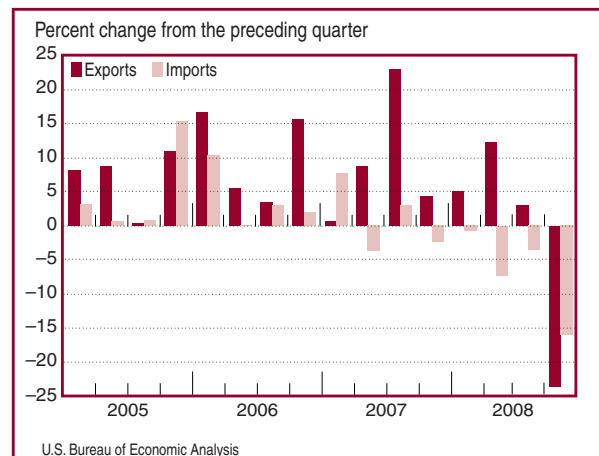
The pickup in exports of services mainly reflected upturns in "other" transportation services and in "other" exports of services. In contrast, travel and passenger fares both turned down, and other private services slowed.

Real imports decreased much more than in the third quarter, and it was the largest decrease since the third quarter of 1980.

Imports of goods decreased 19.4 percent after decreasing 4.7 percent. The larger fourth-quarter decrease reflected a downturn in nonautomotive consumer goods and larger decreases in nonautomotive capital goods and in industrial supplies and machinery. In contrast, imports of petroleum and products turned up sharply.

Imports of services slowed. The largest contributor to the slowdown was a downturn in royalties and license fees.

Chart 5. Real Exports and Imports of Goods and Services



Government Spending

Table 7. Real Government Consumption Expenditures and Gross Investment (CEGI)

[Seasonally adjusted at annual rates]

| | Share of current-dollar CEGI (percent) | Change from preceding period (percent) | | | | | Contribution to percent change in real CEGI (percentage points) | | | |
|-----------------------------------------------------------------------------|----------------------------------------|----------------------------------------|------------|-------------|-------------|--------------|-----------------------------------------------------------------|-------------|--------------|--|
| | 2008 | 2008 | | | | | 2008 | | | |
| | IV | I | II | III | IV | I | II | III | IV | |
| Government consumption expenditures and gross investment¹ | 100.0 | 1.9 | 3.9 | 5.8 | 1.6 | 1.9 | 3.9 | 5.8 | 1.6 | |
| Consumption expenditures..... | 82.4 | 3.2 | 2.1 | 5.8 | 2.2 | 2.60 | 1.76 | 4.77 | 1.78 | |
| Gross investment..... | 17.6 | -3.8 | 13.4 | 5.9 | -1.2 | -0.67 | 2.18 | 1.02 | -0.21 | |
| Federal | 38.0 | 5.8 | 6.6 | 13.8 | 6.7 | 2.09 | 2.38 | 4.92 | 2.46 | |
| National defense | 26.0 | 7.3 | 7.3 | 18.0 | 3.1 | 1.76 | 1.81 | 4.33 | 0.80 | |
| Consumption expenditures..... | 22.5 | 7.4 | 3.4 | 17.3 | 3.4 | 1.58 | 0.75 | 3.63 | 0.76 | |
| Gross investment..... | 3.4 | 6.0 | 38.7 | 22.7 | 1.1 | 0.18 | 1.06 | 0.70 | 0.04 | |
| Nondefense | 12.0 | 2.9 | 5.0 | 5.1 | 15.1 | 0.33 | 0.57 | 0.59 | 1.66 | |
| Consumption expenditures..... | 10.3 | 2.9 | 4.0 | 5.6 | 10.7 | 0.29 | 0.40 | 0.56 | 1.04 | |
| Gross investment..... | 1.7 | 2.8 | 11.8 | 1.5 | 48.0 | 0.04 | 0.17 | 0.02 | 0.62 | |
| State and local | 62.0 | -0.3 | 2.5 | 1.3 | -1.4 | -0.16 | 1.56 | 0.87 | -0.89 | |
| Consumption expenditures..... | 49.5 | 1.4 | 1.2 | 1.1 | 0.0 | 0.73 | 0.61 | 0.58 | -0.02 | |
| Gross investment..... | 12.5 | -6.8 | 7.8 | 2.3 | -6.7 | -0.89 | 0.95 | 0.29 | -0.87 | |

1. The estimates under the contribution columns are also percent changes.
 NOTE: Percent changes are from NIPA table 3.9.1, contributions from NIPA table 3.9.2, and shares are calculated from NIPA table 3.9.5.

Real government spending slowed, increasing 1.6 percent after increasing 5.8 percent. Federal government spending decelerated, and state and local government spending turned down.

The slowdown in Federal government spending reflected a deceleration in national defense spending. The deceleration primarily reflected a deceleration in consumption expenditures. In contrast, nondefense spending accelerated, reflecting a pickup in consumption expenditures and an upturn in investment in equipment and software.

The downturn in state and local government spending mainly reflected downturns in consumption expenditures and in investment in structures.

Government Spending

“Government consumption expenditures and gross investment,” or “government spending,” consists of two components: (1) consumption expenditures by federal government and by state and local governments and (2) gross investment by government and government-owned enterprises.

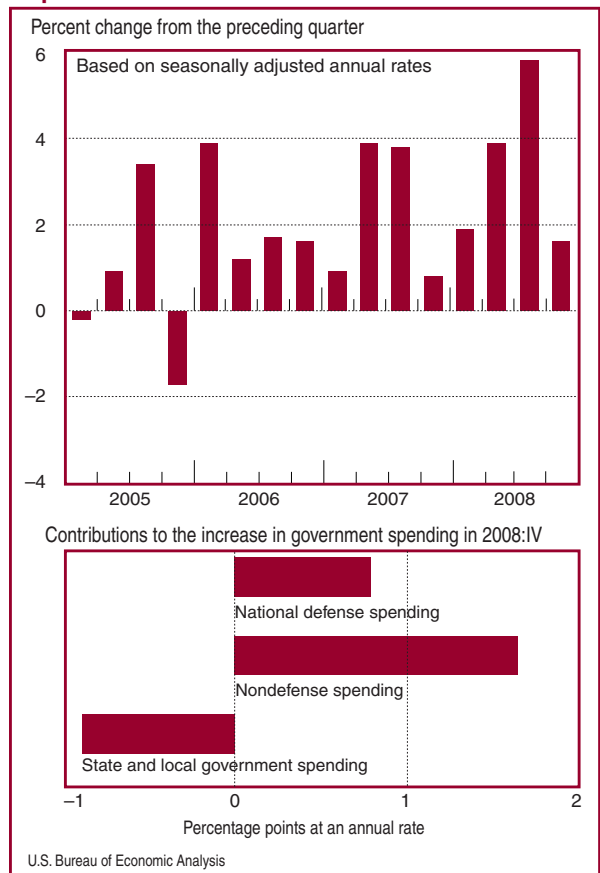
Government consumption expenditures consists of the goods and services that are produced by general government (less any sales to other sectors and investment goods produced by government itself). Governments generally provide services to the general public without charge. The value of government production—that is, government’s gross output—is measured as spending for labor and for intermediate goods and services and a charge for consumption of fixed capital.¹

Gross investment consists of new and used structures (such as highways and dams) and of equipment and software purchased or produced by government and government-owned enterprises.

Government consumption expenditures and gross investment excludes current transactions of government-owned enterprises, current transfer payments, interest payments, subsidies, and transactions in financial assets and nonproduced assets, such as land.

1. Consumption of fixed capital represents a partial measure of the services provided by government-owned fixed capital.

Chart 6. Real Government Consumption Expenditures and Gross Investment



Prices

Table 8. 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) | | | |
|-----------------------------------------------------------------------|----------------------------------------|------------|------------|-------------|---------------------------------------------------------------------------------------|-------------|-------------|--------------|
| | 2008 | | | | 2008 | | | |
| | I | II | III | IV | I | II | III | IV |
| Gross domestic purchases¹ | 3.5 | 4.2 | 4.5 | -4.1 | 3.5 | 4.2 | 4.5 | -4.1 |
| Personal consumption expenditures | 3.6 | 4.3 | 5.0 | -5.0 | 2.43 | 2.87 | 3.37 | -3.40 |
| Durable goods..... | -0.1 | -1.6 | -0.6 | -3.5 | -0.01 | -0.11 | -0.04 | -0.23 |
| Nondurable goods..... | 6.7 | 6.5 | 10.3 | -16.7 | 1.30 | 1.29 | 2.02 | -3.53 |
| Services..... | 2.8 | 4.2 | 3.4 | 0.9 | 1.13 | 1.69 | 1.39 | 0.36 |
| Gross private domestic investment | -0.5 | 0.4 | 2.0 | 3.7 | -0.07 | 0.05 | 0.27 | 0.48 |
| Fixed investment..... | -0.2 | 0.8 | 2.3 | 1.2 | -0.03 | 0.11 | 0.32 | 0.16 |
| Nonresidential..... | 0.6 | 2.3 | 4.2 | 4.6 | 0.06 | 0.23 | 0.43 | 0.46 |
| Structures..... | 2.7 | 3.3 | 7.1 | 7.3 | 0.09 | 0.12 | 0.26 | 0.27 |
| Equipment and software..... | -0.4 | 1.7 | 2.6 | 3.1 | -0.03 | 0.12 | 0.17 | 0.20 |
| Residential..... | -2.6 | -3.5 | -3.3 | -9.6 | -0.10 | -0.12 | -0.11 | -0.31 |
| Change in private inventories..... | ..... | ..... | ..... | ..... | -0.03 | -0.06 | -0.05 | 0.32 |
| Government consumption expenditures and gross investment | 6.2 | 7.0 | 4.4 | -5.9 | 1.15 | 1.32 | 0.85 | -1.17 |
| Federal..... | 5.6 | 5.1 | 2.7 | -3.4 | 0.38 | 0.36 | 0.19 | -0.25 |
| National defense..... | 5.1 | 6.3 | 3.1 | -4.5 | 0.24 | 0.29 | 0.15 | -0.23 |
| Nondefense..... | 6.8 | 2.8 | 1.9 | -0.9 | 0.15 | 0.06 | 0.04 | -0.02 |
| State and local..... | 6.6 | 8.1 | 5.5 | -7.3 | 0.77 | 0.96 | 0.66 | -0.92 |
| Addenda: | | | | | | | | |
| Gross domestic purchases: | | | | | | | | |
| Food..... | 4.7 | 6.1 | 8.5 | 5.4 | 0.44 | 0.57 | 0.80 | 0.51 |
| Energy goods and services..... | 24.2 | 35.5 | 25.1 | -66.5 | 1.21 | 1.79 | 1.34 | -5.56 |
| Excluding food and energy..... | 2.2 | 2.2 | 2.8 | 1.1 | 1.85 | 1.88 | 2.35 | 0.97 |
| Personal consumption expenditures (PCE): | | | | | | | | |
| Food..... | 4.9 | 6.5 | 8.5 | 5.6 | ..... | ..... | ..... | ..... |
| Energy goods and services..... | 19.0 | 27.4 | 31.7 | -65.1 | ..... | ..... | ..... | ..... |
| Excluding food and energy..... | 2.3 | 2.2 | 2.4 | 0.8 | ..... | ..... | ..... | ..... |
| "Market-based" PCE..... | 3.7 | 4.3 | 5.6 | -5.9 | ..... | ..... | ..... | ..... |
| Excluding food and energy..... | 2.1 | 1.8 | 2.5 | 1.0 | ..... | ..... | ..... | ..... |
| Gross domestic product..... | 2.6 | 1.1 | 3.9 | 0.5 | ..... | ..... | ..... | ..... |

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.

The price index for gross domestic purchases turned down sharply, decreasing 4.1 percent in the fourth quarter after increasing 4.5 percent in the third quarter. The main contributor to the downturn was a sharp downturn in prices of energy goods and services.

Consumer prices turned down sharply, decreasing 5.0 percent after increasing 5.0 percent. The downturn mainly reflected a sharp downturn in prices paid for gasoline, fuel oil, and other energy goods. Prices paid for electricity and gas services also turned down.

Prices paid for nonresidential fixed investment picked up very slightly, primarily reflecting an acceleration in prices paid for "other" equipment.

Prices of residential investment decreased 9.6 percent after decreasing 3.3 percent, mainly reflecting prices of single-family structures, which have decreased since the first quarter of 2007.

Prices paid by government turned down, decreasing 5.9 percent after increasing 4.4 percent. The downturn mainly reflected a downturn in prices paid for energy.

Consumer prices excluding food and energy, a measure of the "core" rate of inflation, slowed, increasing 0.8 percent after increasing 2.4 percent.

The GDP price index increased 0.5 percent, while the gross domestic purchases price index decreased 4.1 percent. The difference reflects a relatively larger downturn in import prices than in export prices. Import prices decreased 37.1 percent after increasing 9.2 percent. Export prices decreased 21.9 percent after increasing 6.7 percent.

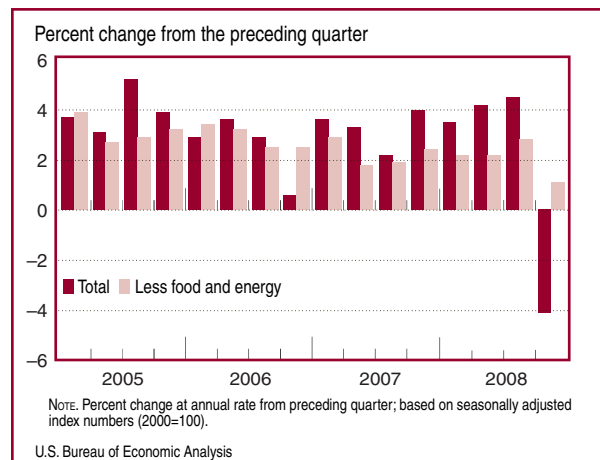
Note on Prices

BEA's gross domestic purchases price index is the most comprehensive index of prices paid by U.S. residents for all goods and services, regardless of whether those goods and services were produced domestically or imported. It is derived from prices of consumer spending, private investment, and government spending.

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 the imports prices (included in the gross domestic purchases index) and the exports prices (included in the GDP price index). For other measures that are affected by import and export prices, see the dollar depreciation [FAQ Answer ID 498](#) on BEA's Web site.

Chart 7. Gross Domestic Purchases Prices



Revisions

Table 9. Advance and Preliminary Estimates for the Fourth Quarter of 2008
 [Seasonally adjusted at annual rates]

| | Change from preceding quarter (percent) | | | Contribution to percent change in real GDP (percentage points) | | |
|-----------------------------------------------------------------------|-----------------------------------------|--------------|---------------------------|----------------------------------------------------------------|--------------|---------------------------|
| | Advance | Preliminary | Preliminary minus advance | Advance | Preliminary | Preliminary minus advance |
| Gross domestic product (GDP) ¹ | -3.8 | -6.2 | -2.4 | -3.8 | -6.2 | -2.4 |
| Personal consumption expenditures | -3.5 | -4.3 | -0.8 | -2.47 | -3.01 | -0.54 |
| Durable goods | -22.4 | -22.1 | 0.3 | -1.71 | -1.67 | 0.04 |
| Nondurable goods | -7.1 | -9.2 | -2.1 | -1.49 | -1.95 | -0.46 |
| Services | 1.7 | 1.4 | -0.3 | 0.74 | 0.61 | -0.13 |
| Gross private domestic investment | -12.3 | -20.8 | -8.5 | -1.80 | -3.11 | -1.31 |
| Fixed investment | -20.1 | -21.3 | -1.2 | -3.12 | -3.26 | -0.14 |
| Nonresidential | -19.1 | -21.1 | -2.0 | -2.26 | -2.48 | -0.22 |
| Structures | -1.8 | -5.9 | -4.1 | -0.07 | -0.24 | -0.17 |
| Equipment and software | -27.8 | -28.8 | -1.0 | -2.19 | -2.24 | -0.05 |
| Residential | -23.6 | -22.2 | 1.4 | -0.85 | -0.78 | 0.07 |
| Change in private inventories | | | | 1.32 | 0.16 | -1.16 |
| Net exports of goods and services | | | | 0.09 | -0.46 | -0.55 |
| Exports | -19.7 | -23.6 | -3.9 | -2.84 | -3.44 | -0.60 |
| Goods | -27.7 | -33.6 | -5.9 | -2.87 | -3.58 | -0.71 |
| Services | 0.6 | 3.5 | 2.9 | 0.03 | 0.14 | 0.11 |
| Imports | -15.7 | -16.0 | -0.3 | 2.93 | 2.99 | 0.06 |
| Goods | -18.8 | -19.4 | -0.6 | 2.95 | 3.06 | 0.11 |
| Services | 0.9 | 2.7 | 1.8 | -0.03 | -0.08 | -0.05 |
| Government consumption expenditures and gross investment | 1.9 | 1.6 | -0.3 | 0.38 | 0.32 | -0.06 |
| Federal | 5.8 | 6.7 | 0.9 | 0.44 | 0.50 | 0.06 |
| National defense | 2.1 | 3.1 | 1.0 | 0.11 | 0.16 | 0.05 |
| Nondefense | 14.5 | 15.1 | 0.6 | 0.33 | 0.34 | 0.01 |
| State and local | -0.5 | -1.4 | -0.9 | -0.06 | -0.18 | -0.12 |
| Addenda: | | | | | | |
| Final sales of domestic product | -5.1 | -6.4 | -1.3 | -5.12 | -6.41 | -1.29 |
| Gross domestic purchases price index | -4.6 | -4.1 | 0.5 | | | |
| GDP price index | -0.1 | 0.5 | 0.6 | | | |

1. The estimates for GDP under the contribution columns are also percent changes.

Real GDP decreased 6.2 percent in the fourth-quarter preliminary estimate, 2.4 percentage points more of a decrease than the advance estimate. The average revision (without regard to sign) between the advance estimate and the preliminary estimate is 0.5 percentage point. The largest downward revisions were to consumer spending for nondurable goods, inventory investment, and exports.

The downward revision to consumer spending reflected newly available Energy Information Administration data, revised Census Bureau data on retail sales, and revised Bureau of Labor Statistics seasonally adjusted consumer price indexes used for deflation. Gasoline, fuel oil, and other energy goods were revised down.

The downward revision to inventory investment reflected Census Bureau inventory data. Manufacturing inventories and wholesale trade inventories were revised down, while construction, mining, and utilities inventories were revised up.

Exports were revised down, reflecting newly available Census Bureau goods data. The largest contributor was a revision to nonautomotive capital goods.

Source Data for the Preliminary Estimates

Personal consumption expenditures: Retail sales for November and December (revised). Motor vehicle registrations for December (new). Retail electricity sales for November (revised) and December (new) and natural gas sales for November (new). Consumer price index, seasonal factors, October, November, and December (revised).

Nonresidential fixed investment: Construction spending (value put in place) for October and November (revised) and December (new). Manufacturers' shipments of machinery and equipment for November and December (revised).

Residential investment: Construction spending (value put in place) for October and November (revised) and December (new).

Change in private inventories: Manufacturers' inventories for November and December (revised) and trade inventories for November (revised) and December (new).

Exports and imports of goods and services: International transactions for October and November (revised) and December (new).

Government consumption expenditures and gross investment: State and local construction spending (value put in place) for October and November (revised) and December (new).

Personal Income for the Third Quarter

With the release of the preliminary estimates of GDP, BEA also releases revised estimates of various income-related measures for the previous quarter. This revision reflects the incorporation of newly available third-quarter tabulations from the Quarterly Census of Employment and Wages from the Bureau of Labor Statistics.

Wage and salary disbursements increased \$50.5 billion in the third quarter, an upward revision of \$11.7 billion. Personal current taxes increased \$124.6 billion, an upward revision of \$2.1 billion.

Contributions for government social insurance, which are subtracted in calculating personal income, increased \$4.6 billion, an upward revision of \$1.6 billion.

As a result of these revisions:

- Personal income increased \$18.2 billion, an upward revision of \$11.0 billion.
- Disposable personal income decreased \$106.3 billion, \$9.0 billion less of a decrease.
- Personal saving decreased \$128.1 billion, \$9.0 billion less of a decrease.
- The personal saving rate was 1.3 percent, an upward revision of 0.1 percentage point.