

GDP and the Economy

Advance Estimates for the Fourth Quarter of 2008

REAL GROSS domestic product (GDP) decreased at an annual rate of 3.8 percent in the fourth quarter of 2008, the largest decrease since the first quarter of 1982, according to the “advance” estimates of the national income and product accounts (NIPAs) (chart 1 and table 1).¹ Real GDP decreased 0.5 percent in the third quarter. For the year 2008, real GDP decelerated, increasing 1.3 percent after increasing 2.0 percent in 2007 (see page 6).

The largest contributors to the much larger fourth-quarter decrease in real GDP were a downturn in exports and a much larger decrease in investment in equipment and software. In contrast, imports decreased much more in the fourth quarter than in the third quarter, and inventory investment accelerated.²

- Prices of goods and services purchased by U.S. residents decreased 4.6 percent in the fourth quarter after increasing 4.5 percent in the third quarter (see page 3). Energy prices turned down sharply, and food prices decelerated. Excluding food and energy, gross domestic purchases prices increased 1.2 percent after increasing 2.8 percent.
- Real disposable personal income (DPI) increased 3.3 percent in the fourth quarter after decreasing 8.8 percent in the third quarter. The upturn in real DPI largely reflected the sharp downturn in the PCE implicit price deflator that is used to deflate current-dollar DPI; current-dollar DPI decreased 2.4 percent after decreasing 4.2 percent.
- The personal saving rate, personal saving as a percentage of current-dollar DPI, was 2.9 percent in the fourth quarter; in the third quarter, it was 1.2 percent.

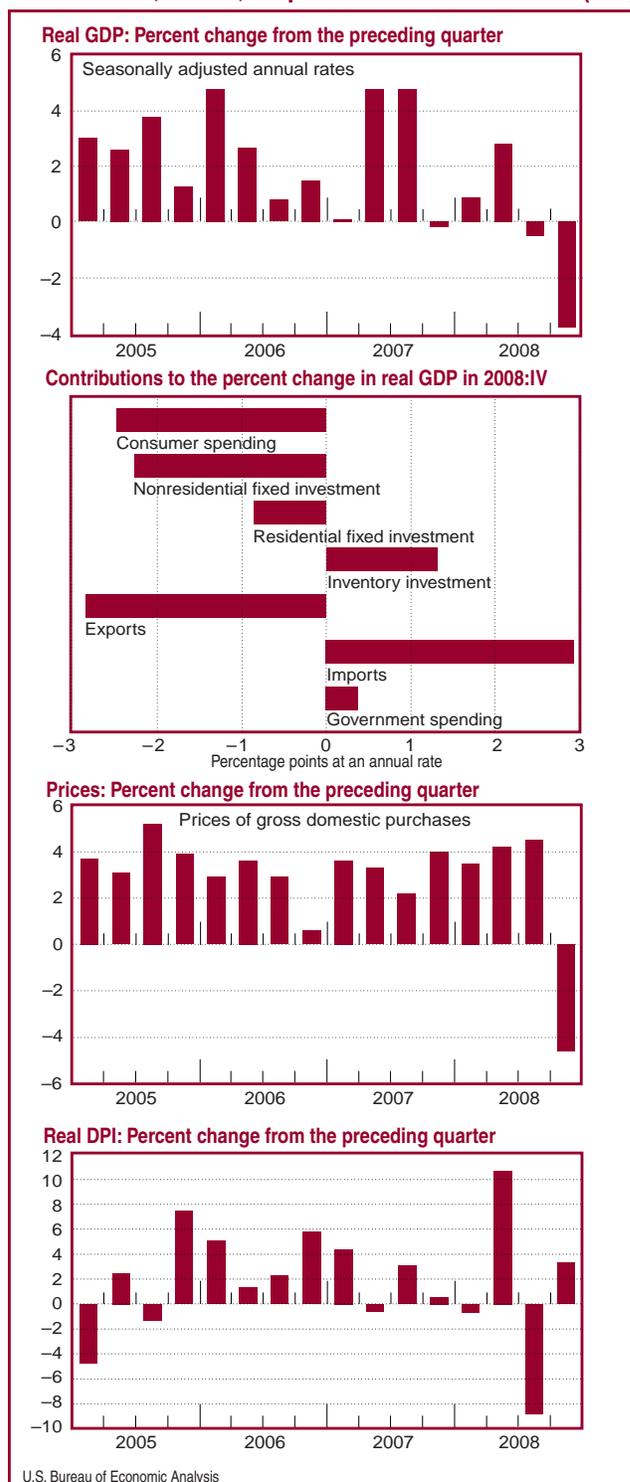
For a look at how the 2008 financial crisis affects the national accounts, see page 7. For a description of the 2009 comprehensive NIPA revision, see page 8.

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/bea/about/infoqual.htm and www.bea.gov/bea/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,” “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	-3.8	0.9	2.8	-0.5	-3.8	
Personal consumption expenditures.....	69.6	0.9	1.2	-3.8	-3.5	0.61	0.87	-2.75	-2.47	
Durable goods.....	6.6	-4.3	-2.8	-14.8	-22.4	-0.33	-0.21	-1.16	-1.71	
Nondurable goods.....	20.0	-0.4	3.9	-7.1	-7.1	-0.08	0.80	-1.57	-1.49	
Services.....	43.0	2.4	0.7	-0.1	1.7	1.02	0.28	-0.03	0.74	
Gross private domestic investment.....	13.7	-5.8	-11.5	0.4	-12.3	-0.89	-1.74	0.06	-1.80	
Fixed investment.....	13.7	-5.6	-1.7	-5.3	-20.1	-0.86	-0.25	-0.79	-3.12	
Nonresidential.....	10.6	2.4	2.5	-1.7	-19.1	0.26	0.27	-0.19	-2.26	
Structures.....	4.1	8.6	18.5	9.7	-1.8	0.30	0.64	0.36	-0.07	
Equipment and software.....	6.6	-0.6	-5.0	-7.5	-27.8	-0.04	-0.37	-0.55	-2.19	
Residential.....	3.1	-25.1	-13.3	-16.0	-23.6	-1.12	-0.52	-0.60	-0.85	
Change in private inventories.....	-0.1	.....	.....	.....	.....	-0.02	-1.50	0.84	1.32
Net exports of goods and services.....	-3.7	.....	.....	.....	.....	0.77	2.93	1.05	0.09
Exports.....	12.3	5.1	12.3	3.0	-19.7	0.63	1.54	0.40	-2.84	
Goods.....	8.3	4.5	16.3	3.7	-27.7	0.39	1.39	0.34	-2.87	
Services.....	4.0	6.4	3.8	1.4	0.6	0.24	0.15	0.06	0.03	
Imports.....	16.0	-0.8	-7.3	-3.5	-15.7	0.14	1.39	0.65	2.93	
Goods.....	13.1	-2.0	-7.1	-4.7	-18.8	0.29	1.14	0.74	2.95	
Services.....	2.9	5.5	-8.0	3.3	0.9	-0.15	0.25	-0.09	-0.03	
Government consumption expenditures and gross investment.....	20.4	1.9	3.9	5.8	1.9	0.38	0.78	1.14	0.38	
Federal.....	7.7	5.8	6.6	13.8	5.8	0.41	0.47	0.97	0.44	
National defense.....	5.3	7.3	7.3	18.0	2.1	0.34	0.36	0.85	0.11	
Nondefense.....	2.5	2.9	5.0	5.1	14.5	0.06	0.11	0.12	0.33	
State and local.....	12.7	-0.3	2.5	1.3	-0.5	-0.03	0.31	0.17	-0.06	

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 decreased slightly less in the fourth quarter than in the third quarter, and it reduced the percent change in real GDP by 2.47 percentage points. The decrease in spending for durable goods was the largest since the first quarter of 1987.

Nonresidential fixed investment decreased much more than in the third quarter; it reduced the percent change in real GDP by 2.26 percentage points. The 27.8 percent decrease in equipment and software followed a 7.5 percent decrease and was the largest since the first quarter of 1958. Structures turned down.

Residential investment decreased 23.6 percent after decreasing 16.0 percent.

Inventory investment picked up and added 1.32 percentage points to the percent change in real GDP.

Exports turned down sharply, the first decrease since the second quarter of 2003. The downturn mainly reflected widespread downturns in exports of goods. Exports of services slowed.

Imports decreased much more than in the third quarter. Nonautomotive consumer goods turned down, and both nonautomotive capital goods and automotive vehicles, engines and parts decreased more than in the third quarter. Petroleum and petroleum products turned up. Imports of services slowed.

Federal government spending decelerated, reflecting a slowdown in national defense spending. State and local government spending turned down.

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	-3.8	0.9	2.8	-0.5	-3.8	
Final sales of domestic product.....	100.1	0.9	4.4	-1.3	-5.1	0.89	4.32	-1.35	-5.12	
Change in private inventories.....	-0.1	.....	.....	.....	.....	-0.02	-1.50	0.84	1.32
Goods.....	29.6	0.9	4.9	-4.2	-12.4	0.29	1.49	-1.29	-3.90	
Services.....	61.0	2.7	1.7	1.5	1.7	1.62	1.02	0.87	1.03	
Structures.....	9.4	-10.1	3.3	-1.0	-9.5	-1.03	0.32	-0.09	-0.93	
Addenda:										
Motor vehicle output.....	1.8	-14.2	-33.8	7.3	-63.4	-0.41	-1.01	0.16	-2.04	
GDP excluding motor vehicle output.....	98.2	1.3	4.0	-0.7	-1.8	1.28	3.84	-0.67	-1.76	
Final sales of computers.....	0.6	8.2	28.4	-1.7	-0.4	0.05	0.17	-0.01	0.00	
GDP excluding final sales of computers.....	99.4	0.8	2.7	-0.5	-3.8	0.82	2.66	-0.50	-3.80	

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, decreased 5.1 percent, the largest decrease since the second quarter of 1980.

Motor vehicle output turned down sharply, decreasing 63.4 percent after increasing 7.3 percent. It subtracted 2.04 percentage points from the percent change in real GDP. The decrease was the largest decrease since the fourth quarter of 1970.

Excluding motor vehicle output, real GDP decreased 1.8 percent.

Final sales of computers decreased 0.4 percent after decreasing 1.7 percent in the third quarter.

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)			
	2008				2008			
	I	II	III	IV	I	II	III	IV
Gross domestic purchases¹	3.5	4.2	4.5	-4.6	3.5	4.2	4.5	-4.6
Personal consumption expenditures	3.6	4.3	5.0	-5.5	2.43	2.87	3.37	-3.74
Durable goods	-0.1	-1.6	-0.6	-3.9	-0.01	-0.11	-0.04	-0.26
Nondurable goods	6.7	6.5	10.3	-17.8	1.30	1.29	2.02	-3.78
Services	2.8	4.2	3.4	0.7	1.13	1.69	1.39	0.29
Gross private domestic investment	-0.5	0.4	2.0	2.0	-0.07	0.05	0.27	0.27
Fixed investment	-0.2	0.8	2.3	1.8	-0.03	0.11	0.32	0.24
Nonresidential	0.6	2.3	4.2	5.0	0.06	0.23	0.43	0.50
Structures	2.7	3.3	7.1	7.7	0.09	0.12	0.26	0.28
Equipment and software	-0.4	1.7	2.6	3.4	-0.03	0.12	0.17	0.22
Residential	-2.6	-3.5	-3.3	-8.2	-0.10	-0.12	-0.11	-0.26
Change in private inventories .....	.....	.....	.....	.....	-0.03	-0.06	-0.05	0.02
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	-3.5	0.38	0.36	0.19	-0.25
National defense	5.1	6.3	3.1	-4.7	0.24	0.29	0.15	-0.24
Nondefense	6.8	2.8	1.9	-0.7	0.15	0.06	0.04	-0.02
State and local	6.6	8.1	5.5	-7.4	0.77	0.96	0.66	-0.91
Addenda:								
Gross domestic purchases:								
Food	4.7	6.1	8.5	4.8	0.44	0.57	0.80	0.45
Energy goods and services	24.2	35.5	25.1	-68.9	1.21	1.79	1.34	-6.11
Excluding food and energy	2.2	2.2	2.8	1.2	1.85	1.88	2.35	1.02
Personal consumption expenditures (PCE):								
Food	4.9	6.5	8.5	4.9	.....	.....	.....	.....
Energy goods and services	19.0	27.4	31.7	-66.4	.....	.....	.....	.....
Excluding food and energy	2.3	2.2	2.4	0.6	.....	.....	.....	.....
"Market-based" PCE	3.7	4.3	5.6	-6.5	.....	.....	.....	.....
Excluding food and energy	2.1	1.8	2.5	0.8	.....	.....	.....	.....
Gross domestic product	2.6	1.1	3.9	-0.1	.....	.....	.....	.....

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 4.6 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 5.5 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 stepped up, mainly reflecting a pickup in the prices paid for "other" equipment and for transportation equipment.

Prices of residential investment decreased more than in the third quarter, decreasing 8.2 percent after decreasing 3.3 percent.

Prices paid by government turned down, decreasing 5.9 percent after increasing 4.4 percent. The downturn reflected downturns in prices paid both by the federal government and by state and local governments.

Consumer prices excluding food and energy, a measure of the "core" rate of inflation, slowed, increasing 0.6 percent after increasing 2.4 percent.

The GDP price index decreased 0.1 percent, while the gross domestic purchases prices index decreased 4.6 percent. The difference reflects a relatively larger downturn in import prices than in export prices. Import prices decreased 36.7 percent in the fourth quarter after increasing 9.2 percent in the third quarter. Export prices decreased 20.7 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. It is derived from the prices of personal consumption expenditures (PCE), private investment, and government consumption 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. However, 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.

BEA also prepares a supplemental PCE price index, the "market-based" PCE price index, which is based on market transactions for which there are corresponding price measures. This index excludes many imputed expenditures, such as services furnished without charge by financial intermediaries, that are included in PCE and the PCE price index. BEA also prepares a market-based measure that excludes food and energy.

More information on these market-based measures is available on BEA's Web site at www.bea.gov/bea/faq/national/markbsdPCE.htm. See also "Comparing the Consumer Price Index and the Personal Consumption Expenditures Price Index" in the November 2007 SURVEY OF CURRENT BUSINESS.

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				
	2008	2008				
	IV	I	II	III	IV	
Personal income	12,124.1	88.4	191.7	7.2	-35.3	
Compensation of employees, received	8,066.9	68.7	23.8	46.9	-13.5	
Wage and salary disbursements	6,553.3	52.5	13.3	38.8	-16.8	
Private industries	5,406.1	34.9	-0.4	23.8	-25.6	
Goods-producing industries	1,200.8	-0.5	-5.0	5.0	-16.9	
Manufacturing	731.8	-1.8	-3.4	-1.4	-11.8	
Services-producing industries	4,205.3	35.2	4.7	18.8	-8.7	
Trade, transportation, and utilities	1,030.5	2.1	-2.0	-1.0	-16.9	
Other services-producing industries	3,174.8	33.3	6.5	19.9	8.2	
Government	1,147.2	17.6	13.7	14.9	8.9	
Supplements to wages and salaries	1,513.6	16.2	10.5	8.1	3.3	
Proprietors' income with IVA and CCAj	1,060.5	-2.1	5.2	3.6	-20.0	
Farm	25.9	-5.5	-3.6	-5.6	-6.5	
Nonfarm	1,034.6	3.4	8.9	9.2	-13.6	
Rental income of persons with CCAj	89.6	0.5	19.5	9.9	21.1	
Personal income receipts on assets	1,999.6	-2.1	-1.8	3.4	-56.1	
Personal interest income	1,174.5	-18.1	-15.9	8.7	-42.9	
Personal dividend income	825.1	16.0	14.1	-5.3	-13.2	
Personal current transfer receipts	1,902.3	40.3	148.2	-53.6	29.6	
Less: Contributions for government social insurance	994.8	16.9	3.2	3.0	-3.6	
Less: Personal current taxes	1,498.2	14.5	-188.9	122.5	29.6	
Equals: Disposable personal income	10,625.9	74.0	380.5	-115.3	-64.8	
Less: Personal outlays	10,315.7	95.7	133.3	21.7	-244.2	
Equals: Personal saving	310.3	-21.8	247.3	-137.1	179.5	
Addenda: Special factors in personal income						
In government wages and salaries:						
Federal pay raise	8.1	7.8	0.3	0.0	0.0	
Reservists' pay	8.1	6.2	0.6	0.6	0.7	
In supplements to wages and salaries:						
Employer contributions for social insurance	2.7	2.7	0.0	0.0	0.0	
In nonfarm proprietors' income:						
Disasters	0.0	0.0	0.0	-2.9	2.9	
In rental income of persons:						
Disasters	0.0	0.0	0.0	-8.9	8.9	
In personal current transfer receipts:						
Social security retroactive payments	2.5	-2.3	0.0	0.0	2.5	
Cost-of-living adjustments under federal transfer programs	18.8	15.5	0.0	0.0	3.3	
Emergency unemployment compensation	14.2	0.0	0.0	14.1	0.1	
Disasters	0.0	0.0	0.0	9.0	-9.0	
Economic Stimulus Act of 2008 rebate payments	2.7	0.0	112.3	-107.8	-1.7	
In contributions for government social insurance:						
Increase in taxable wage base	5.7	5.7	0.0	0.0	0.0	
Changes in premium for supplementary medical insurance	2.5	2.5	0.0	0.0	0.0	
In personal current taxes:						
Federal tax law changes	-4.1	-4.1	0.0	0.0	0.0	
Refunds, settlements, and other	6.7	6.7	0.0	0.0	0.0	
Economic Stimulus Act of 2008 rebate payments	-6.2	0.0	-199.3	142.3	50.8	

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

CCAj Capital consumption adjustment

Personal income, which is only measured in current dollars, decreased \$35.3 billion in the fourth quarter after increasing \$7.2 billion in the third quarter. The downturn primarily reflected downturns in wage and salary disbursements, in nonfarm proprietors income, and in personal interest income that were partly offset by an acceleration in rental income of persons and an upturn in personal current transfer receipts.

Wage and salary disbursements turned down, primarily reflecting changes in monthly employment, hours, and earnings. Wages and salaries in private industries decreased \$25.6 billion after increasing \$23.8 billion.

Nonfarm proprietors' income turned down sharply, decreasing \$13.6 billion after increasing \$9.2 billion.

Rental income of persons accelerated, increasing \$21.1 billion after increasing \$9.9 billion. The acceleration primarily reflected a rebound from the effects of Hurricane Ike in the third quarter.

Personal interest income turned down, decreasing \$42.9 billion after increasing \$8.7 billion. The downturn was primarily due to a downturn in interest rates.

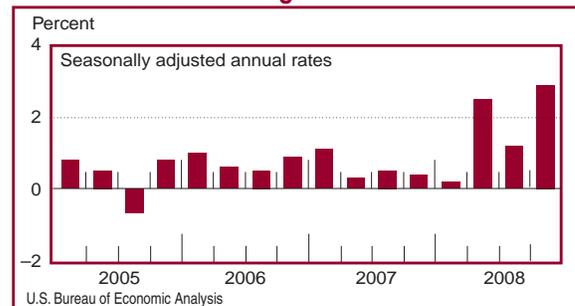
Personal current transfer receipts turned up, increasing \$29.6 billion after decreasing \$53.6 billion. The upturn primarily reflected the pattern of rebates to individuals from the Economic Stimulus Act of 2008.

Personal current taxes decelerated sharply, primarily reflecting the pattern of rebates for individuals with tax liabilities; these rebates were treated as an offset to personal current taxes.

Saving

Personal saving—disposable personal income less personal outlays—was \$310.3 billion in the fourth quarter, an increase of \$179.5 billion. The increase mainly reflected a very sharp \$244.2 billion decrease in personal outlays, the first decrease since the first quarter of 1958, that was partly offset by a \$64.8 billion decrease in disposable personal income.

Chart 2. Personal Saving Rate



Source Data for the Advance Estimates

Table 5. Monthly Advance Estimates of Key NIPA Components Based on Partial Data, 2008:IV

[Billions of dollars, seasonally adjusted at annual rates]

	2008					
	July	August	Sept.	Oct.	Nov.	Dec. ¹
Private fixed investment:						
Nonresidential structures:						
Value of new nonresidential construction put in place	417.0	416.1	426.9	425.1	428.2	426.6
Equipment and software:						
Manufacturers' shipments of complete aircraft	41.9	47.9	24.6	16.7	14.3	39.6
Residential structures:						
Value of new residential construction put in place:						
Single family	185.1	177.6	169.6	161.9	151.2	138.5
Multifamily.....	47.1	44.0	44.5	44.4	43.5	39.9
Change in private inventories:						
Change in inventories for nondurable manufacturing.....	4.6	10.4	-62.2	-57.0	-40.7	-69.6
Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment	91.3	20.5	-4.8	-66.7	-82.3	-119.9
Net exports:²						
Exports of goods:						
U.S. exports of goods, international-transactions-accounts basis	1,450.0	1,414.6	1,293.8	1,257.6	1,166.6	1,141.8
Excluding gold	1,427.8	1,403.3	1,274.1	1,243.2	1,153.3	1,131.0
Imports of goods:						
U.S. imports of goods, international-transactions-accounts basis	2,339.4	2,267.3	2,128.2	2,086.1	1,795.9	1,698.6
Excluding gold	2,325.9	2,260.3	2,110.6	2,077.7	1,789.2	1,694.1
Net exports of goods.....	-889.4	-852.7	-834.4	-828.6	-629.3	-556.8
Excluding gold	-898.1	-856.9	-836.5	-834.5	-635.9	-563.1
State and local government structures:						
Value of new construction put in place.....	284.6	291.4	288.7	292.3	295.2	293.7

1. Assumption.

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

ports, 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

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 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 (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 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 December, including the following (table 5):

- A decrease in nonresidential structures, an increase in aircraft shipments, and decreases in single-family and multifamily residential structures,
 - Decreases in inventories of nondurable-goods manufacturing and of nonmotor vehicle merchant wholesale and retail trade,
 - A decrease in exports of goods excluding gold and a larger decrease 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 at www.bea.gov/national/index.htm#supp.

Real GDP for 2008

Table 6. 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	2007	2008	2007	2008
Gross domestic product¹	100.0	2.0	1.3	2.0	1.3
Personal consumption expenditures	70.4	2.8	0.3	1.95	0.20
Durable goods.....	7.2	4.8	-4.4	0.38	-0.33
Nondurable goods.....	20.8	2.5	-0.4	0.50	-0.10
Services.....	42.5	2.6	1.5	1.07	0.62
Gross private domestic investment	14.0	-5.4	-5.9	-0.90	-0.91
Fixed investment	14.3	-3.1	-4.8	-0.50	-0.74
Nonresidential	10.9	4.9	1.8	0.52	0.20
Structures.....	3.9	12.7	11.8	0.40	0.41
Equipment and software.....	7.0	1.7	-2.9	0.13	-0.21
Residential	3.4	-17.9	-20.8	-1.02	-0.93
Change in private inventories.....	-0.3	.....	.....	-0.40	-0.17
Net exports of goods and services	-4.7	.....	.....	0.58	1.41
Exports.....	13.1	8.4	6.5	0.95	0.79
Goods.....	9.0	7.5	6.4	0.59	0.54
Services.....	4.0	10.5	6.8	0.36	0.25
Imports.....	17.7	2.2	-3.3	-0.37	0.62
Goods.....	14.8	1.7	-4.1	-0.25	0.64
Services.....	2.9	4.4	0.7	-0.12	-0.02
Government consumption expenditures and gross investment	20.2	2.1	2.9	0.40	0.58
Federal.....	7.5	1.6	6.0	0.11	0.43
National defense	5.1	2.5	7.1	0.12	0.34
Nondefense.....	2.4	-0.2	3.6	0.00	0.08
State and local.....	12.7	2.3	1.2	0.28	0.15

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.

Real GDP slowed, increasing 1.3 percent in 2008 after increasing 2.0 percent in 2007. The main contributors to the slowdown were decelerations in consumer spending and in nonresidential fixed investment.

Consumer spending decelerated sharply, increasing 0.3 percent after increasing 2.8 percent. Spending for durable goods turned down, mainly reflecting a downturn in motor vehicles and parts. Spending for nondurable goods also turned down and was widespread. Spending for services slowed, and except for medical care, it was widespread.

Nonresidential fixed investment slowed, increasing 1.8 percent after increasing 4.9 percent. The deceleration reflected a downturn in equipment and software.

Residential investment decreased throughout 2008, the third consecutive year of declines. It subtracted 0.93 percentage point from real GDP growth in 2008.

Net exports contributed 1.41 percentage points to real GDP growth in 2008 after contributing 0.58 percentage point in 2007. Exports of both goods and services slowed in 2008. Imports of goods turned down, adding 0.64 percentage point to real GDP growth in 2008 after subtracting 0.25 percentage point in 2007. Imports of services slowed.

Government spending picked up, reflecting an acceleration in national defense spending and an upturn in nondefense spending. State and local government spending slowed.

Chart 3. Contributions to the Increase in Real GDP in 2008

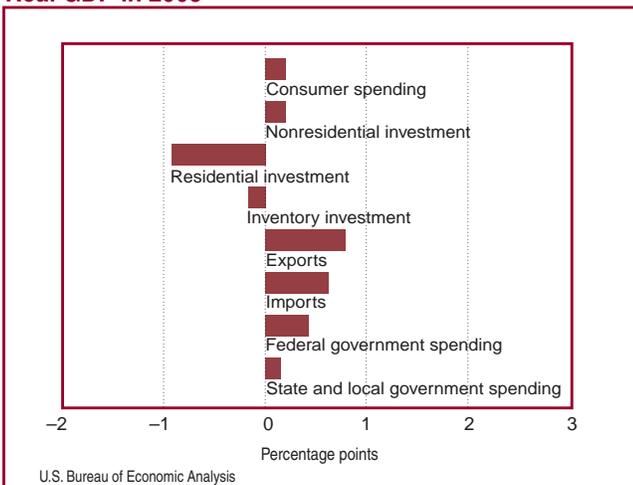
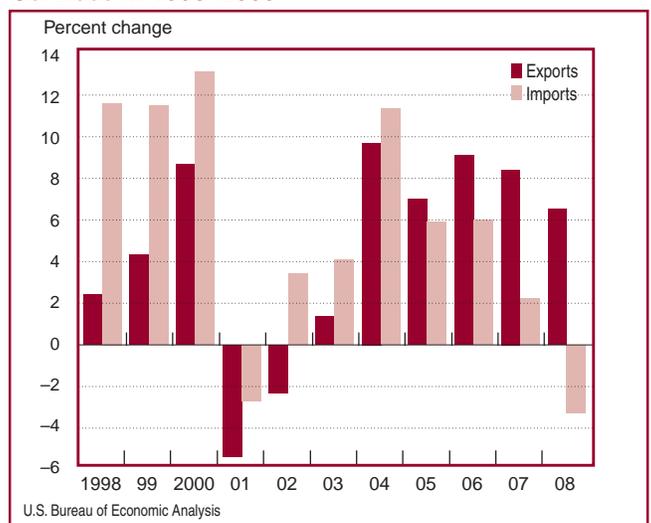


Chart 4. Real Exports and Imports of Goods and Services in 1998–2008



The 2008 Financial Crisis and the National Accounts

In 2008, the federal government responded to deteriorating financial markets by creating several new programs to provide assistance to private-sector institutions. This article discusses how the Bureau of Economic Analysis (BEA) national accounts treat these programs.

Troubled Asset Relief Program (TARP). This program was established in October 2008 by the Emergency Economic Stabilization Act of 2008 to support financial and other companies in order to help prevent severe financial market disruptions. Through various TARP programs, the Department of the Treasury is authorized to purchase or insure up to \$700 billion in assets in various programs. By the end of 2008, these programs had disbursed \$243 billion for preferred shares and warrants of more than 200 banks and other companies. A warrant is a security that permits its owner to purchase a specific number of shares of stock at a predetermined price.

Under the TARP's Capital Purchase Program, banks of all sizes received funds. Under the Targeted Investment Program, Citigroup received funding. Under the Systemically Significantly Failing Institutions Program, American International Group (AIG) received funding. And under the Automotive Industry Financing Program, GMAC received funding, and General Motors received a loan. In the near future, more funds will be disbursed through various TARP programs.

Transactions via TARP programs are not included in the "government consumption expenditures and gross investment" component of gross domestic product (GDP) and do not directly affect GDP. In general, purchases of financial assets are recorded in the Federal Reserve's flow of funds accounts, not in the national income and product accounts (NIPAs). However, consistent with the recommendations in the newly updated international guidelines, *System of National Accounts 2008 (SNA)*, in the fourth quarter of 2008, BEA recorded a portion of the purchase of preferred stock through the TARP as capital transfers; this portion was calculated as the difference between the actual prices paid for the financial assets and an estimate of their market value. These capital transfers recognize that the federal government paid over market value for these financial assets. Net government saving was not affected by the capital transfers, but net government lending or borrowing was reduced as shown in NIPA tables 3.1 and 3.2.¹

In most cases, BEA's estimate of these capital transfers was based on Congressional Budget Office (CBO) estimates, which were prepared on a net present value basis. CBO calculated the present value of the preferred stock

purchased by the Treasury Department by using a discount rate equivalent to the yield on actively traded preferred stock for each company, or if the institution did not have preferred stock, CBO used an average yield based on an industry index. CBO valued the warrants received with the preferred stock using a modified Black-Scholes model, which is widely used to calculate the market value of options and other financial instruments.²

Dividends on the preferred stock purchased through the TARP and held by the Treasury Department were classified as government income receipts on assets as shown in NIPA tables 3.1 and 3.2.

For consistency with the SNA recommendation that loans should be valued at the full amount the borrower is obliged to repay, an implicit capital transfer was not recorded for the loan to General Motors.

GSE program. In September 2008, the Treasury Department entered into Senior Preferred Stock Purchase Agreements with the government-sponsored enterprises (GSEs) Fannie Mae and Freddie Mac. Under the agreements, the Treasury Department received \$1.0 billion of preferred stock of each enterprise and warrants representing 79.9 percent of the common stock of each enterprise. Treasury also committed to purchase up to \$100 billion of senior preferred stock in each if the Federal Housing Finance Agency determines that their liabilities have exceeded their assets. In the fourth quarter, the Treasury Department purchased \$13.8 billion of Freddie Mac preferred stock according to this agreement. In the NIPAs, BEA treated 50 percent of this as a capital transfer, recognizing that the federal government paid over market value for the financial assets. Dividends received on the preferred stock were classified as government income receipts on assets as shown in NIPA tables 3.1 and 3.2.

Guarantee programs. In September 2008, the Treasury Department established the Temporary Guarantee Program for Money Market Funds to insure holdings of participating funds. The Federal Deposit Insurance Corporation (FDIC) also created the Temporary Liquidity Guarantee Program, which guarantees certain senior unsecured debt of banks, thrifts, and certain holding companies issued by June 30, 2009. The program also provides full guarantees for noninterest bearing accounts of participating institutions through the end of calendar year 2009. In the NIPAs, fees received by the Treasury Department and the FDIC related to these guarantee programs are treated as current transfer receipts from business as shown in NIPA tables 3.1, 3.2, and 3.7.

1. Government net saving is the difference between government current receipts and current expenditures. Government net lending or borrowing is the financing position of the government sector.

2. See *The Troubled Asset Relief Program: Report on Transactions Through December 31, 2008*, A CBO Report (Washington, DC: CBO, January 2009).

The Upcoming 2009 Comprehensive NIPA Revision

On July 31, 2009, the Bureau of Economic Analysis (BEA) will release the initial results of a comprehensive, or benchmark, revision to the national income and product accounts (NIPAs). Comprehensive revisions, and to a lesser extent annual revisions, provide the opportunity to introduce the major changes that are outlined in BEA's strategic plan for maintaining and improving the NIPAs. (BEA's strategic plan can be found on its Web site.) Comprehensive revisions cover a longer time span than annual revisions and encompass a wider range of revisions, including changes in definitions, classifications, and tables.

The most important source of information for comprehensive NIPA revisions is the benchmark input-output accounts. These accounts are used to establish the level of gross domestic product (GDP) for the benchmark year and to provide critical information for estimating GDP for periods after the benchmark year. In the comprehensive revision to be released in July 2009, the revised NIPA estimates will reflect the benchmark input-output accounts for 2002.

In addition, the upcoming comprehensive NIPA revision will include a new and improved classification system for personal consumption expenditures (PCE), a new treatment of disasters, and updated measures of misreported income.

PCE classification system. The PCE classification system that was introduced in the 2002 benchmark input-output accounts reflects the changes that have occurred in consumer buying patterns and brings the classification of consumption expenditures closer to the recommendations of the System of National Accounts. This new system maintains the current detailed items, but it makes numerous changes to commodities and commodity categories as well as to the functional aggregates and the type-of-product aggregates.

Treatment of disasters. Disasters, such as hurricanes and other major catastrophes, affect economic activity because production is interrupted and physical capital (such as buildings factories, oil refineries) is damaged or destroyed. Currently, insurance services output is treated so that these disasters do not affect GDP. However, the value of the losses due to the destruction and the insurance payments that cover or partially cover them are

reflected in the income measures of the NIPAs. In the 2009 comprehensive revision, the treatment of these losses and of the insurance payments will be changed to minimize their impact on current-period income, and they will be shown as capital transfers in the capital account.

Misreported income. Typically BEA adjusts the NIPA measures of income, primarily nonfarm proprietors' income and wages and salaries, to account for income that meets IRS filing requirements but is either underreported or not reported on tax returns. In the upcoming comprehensive revision, BEA will update the estimates of underreported income from updated and new source information.

For more detailed information about the upcoming comprehensive revision, see the following SURVEY articles and FAQs on BEA's Web site at www.bea.gov:

- "Preview of Revised NIPA Estimates for 2002: Effects of Incorporating the 2002 Benchmark Input-Output Accounts and Proposed Definition and Statistical Changes" (March 2008)
- "Preview of the 2009 Comprehensive Revision of the National Income and Product Accounts: New Classifications for Personal Consumption Expenditures" (May 2008)
- "Preview of the 2009 Comprehensive Revision of the National Income and Product Accounts: Changes in Definitions and Tables (forthcoming in March 2009)"
- "Preview of the 2009 Comprehensive Revision of the National Income and Product Accounts: Proposed Statistical and Methodological Changes (forthcoming in May 2009)"
- FAQ 126 "What is a NIPA benchmark or comprehensive revision?"
- FAQ 130 "How do benchmark estimates differ from annual revisions or monthly 'current' estimates?"
- FAQ 133 "What are the major sources of new data that are incorporated during a comprehensive revision?"
- FAQ 136 "What changes in definitions and classifications were introduced in the 2003 comprehensive revision?"

Advance information about the upcoming revision is on BEA's Web site; additional information will be posted as it becomes available.