



Technical Note
Gross Domestic Product
First Quarter of 2009 (Advance)
April 29, 2009

This technical note provides background information about the source data and estimating methods used to produce the estimates presented in the GDP news release. The complete set of estimates for the first quarter is available on BEA's Web site at www.bea.gov; a brief summary of "highlights" is also posted on the Web site. In a few weeks, the estimates will be published in BEA's monthly journal, the *Survey of Current Business*, along with a more detailed analysis of the estimates ("GDP and the Economy").

Real GDP

Real GDP decreased 6.1 percent (annual rate) in the first quarter, following a decrease of 6.3 percent in the fourth quarter. The slightly smaller decrease in real GDP in the first quarter than in the fourth reflected an upturn in consumer spending for goods and a larger decrease in imports that were mostly offset by larger decreases in inventory investment and in nonresidential structures and a downturn in federal government spending. The larger decrease in nonresidential structures reflected a sharp downturn in oil and natural gas drilling activity, based on source data from the American Petroleum Institute, and larger decreases in commercial and healthcare, power and communication, and other nonresidential structures reflecting Census Bureau value-put-in-place data.

Source Data for the Advance Estimate

The advance GDP estimate for the first quarter of 2009 is based on source data that are incomplete and subject to revision. Three months of source data were available for consumer spending on goods; shipments of capital equipment other than aircraft; motor vehicle sales and inventories; manufacturing durables inventories; federal government outlays; and consumer, producer, and international prices. Only two months of data were available for most other key data sources; BEA's assumptions for the third month are shown in table A. Among those assumptions are the following:

- a decrease in nondurable manufacturing inventories,
- a large decrease in non-motor-vehicle merchant wholesale and retail inventories, reflecting the sharp drop in February imports,
- a decrease in exports of goods, excluding gold, and
- a slight increase in imports of goods, excluding gold.

Prices

The price index for gross domestic purchases decreased 1.0 percent in the first quarter after decreasing 3.9 percent in the fourth quarter. Excluding food and energy prices, the price index for gross domestic purchases increased 1.4 percent in the first quarter, after increasing 1.2 percent in the fourth. The federal pay raise for civilian and military personnel, which is treated as an increase in the price of employee services purchased by the federal government, added about 0.3 percentage point to the change in the first quarter gross domestic purchases price index.

American Recovery and Reinvestment Act of 2009

The American Recovery and Reinvestment Act of 2009 (ARRA) was signed into law on February 17, 2009. Frequently referred to as the “stimulus bill,” the ARRA is estimated by the Congressional Budget Office to cost about \$787 billion over the next 10 years. These costs are split between about \$575 billion in additional spending and about \$212 billion in reduced revenues.

Because the effects of the bill will be spread across several sectors (federal government, state and local government, and individual and business taxpayers) and may be intermingled with other spending in the source data, BEA does not expect to be able to separately identify the total quarterly or annual effect of the ARRA on GDP. Given the timing of the passage of ARRA, however, it is likely that the effect on first quarter GDP was small.

Also, many ARRA-funded transactions, such as grants and tax cuts, are not directly included in GDP; the only government spending that is counted in GDP is spending on goods and services. Information on grants, transfers, and taxes, however, is included in BEA’s personal income and government sector estimates. In the first quarter, federal grants-in-aid to state and local governments were boosted \$9.3 billion (\$37.3 billion at an annual rate), primarily in Medicaid grants. Another provision of ARRA—the “Making Work Pay” tax credit—provides a tax credit of \$400 per person (\$800 for married couples filing jointly) subject to income limitations. While employers were required to adjust employee withholding by April 1, BEA’s estimates of disposable personal income reflect an assumption that a small impact of \$0.9 billion (\$3.7 billion at an annual rate) was included in March federal tax withholdings.

Troubled Asset Relief Program and Assistance to Government Sponsored Enterprises

The Emergency Economic Stabilization Act of 2008 established the Troubled Asset Relief Program (TARP), which authorized the Department of Treasury to purchase or insure up to \$700 billion in assets to relieve the financial crisis. The Housing and Economic Recovery Act of 2008 provided authorization to assist the

government sponsored enterprises (GSE) Fannie Mae and Freddie Mac; that assistance is being provided through the purchase of preferred stock in those enterprises. Federal spending associated with these programs has no direct impact on GDP, but is reflected in NIPA measures of capital transfers and government sector net lending and borrowing.

In both of these programs, the federal government purchased assets at prices that were higher than what would have been available in the private markets. For this reason, BEA records a portion of the purchase as a capital transfer, calculated as the difference between the actual price paid for the financial asset and an estimate of its market value. This treatment is consistent with the recommendations of the newly updated international guidelines, *System of National Accounts, 2008*. BEA measures these transactions similarly to the methods used by the Congressional Budget Office; however, BEA's measures do not reflect holding gains or losses that occur after the transaction takes place. For the first quarter, Treasury provided \$41.2 billion of capital to financial institutions; BEA recorded \$14.4 billion (\$57.7 billion at an annual rate) as a capital transfer. In addition, Treasury provided \$46 billion of capital to Fannie Mae and Freddie Mac; BEA recorded \$41.4 billion (\$165.6 billion at an annual rate) as a capital transfer.

For further information on the treatment of federal government activities related to the financial crisis, see the FAQ section of BEA's Web site, www.bea.gov.

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**Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP
FOR THE FIRST QUARTER OF 2009**

For many of the key series used to prepare the advance estimate of GDP, including retail sales, unit automobile and truck sales and inventories, manufacturers' shipments of nondefense capital goods (other than aircraft), manufacturers' inventories of durable goods, federal defense spending, and consumer, producer, and international price indexes, actual data are available for all months of the quarter.

For the key series shown in this table, actual data for the third month of the quarter usually are not available in time for inclusion in the advance GDP estimate. BEA makes assumptions for the source data that are not yet available; assumptions for March 2009 are shown in the last column of the table. For most series shown, the data for February are preliminary and subject to further revision. Occasionally, the data for earlier months are also subject to revision.

All series shown in the table are in billions of dollars, seasonally adjusted at annual rates, and are published by the Bureau of the Census.

	Oct.	2008 Nov.	Dec.	Jan.	2009 Feb.	Mar.*
Private fixed investment:						
Nonresidential structures:						
1 Value of new nonresidential construction put in place.....	423.1	413.9	406.9	389.5	390.7	390.1
Equipment and software:						
2 Manufacturers' shipments of complete aircraft.....	16.7	16.5	44.9	50.6	32.8	37.9
Residential structures:						
Value of new residential construction put in place:						
3 Single family.....	162.0	151.8	138.7	125.9	112.1	103.5
4 Multifamily.....	43.7	41.9	40.1	39.8	39.0	36.0
Change in private inventories:						
5 Change in inventories for nondurable manufacturing.....	-57.0	-45.9	-137.7	-28.8	-30.8	-33.6
5a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment...	-53.2	-106.2	-122.8	-53.5	-54.3	-109.0
Net exports:						
Exports of goods:						
6 U.S. exports of goods, international-transactions-accounts basis.....	1256.5	1164.5	1065.1	986.9	1016.3	975.0
6a Excluding gold.....	1242.2	1151.2	1052.5	971.3	1004.3	961.8
Imports of goods:						
7 U.S. imports of goods, international-transactions-accounts basis.....	2091.3	1804.0	1680.2	1550.0	1458.6	1460.1
7a Excluding gold.....	2082.8	1797.3	1675.5	1544.4	1451.4	1451.7
8 Net exports of goods.....	-834.8	-639.6	-615.1	-563.1	-442.3	-485.1
8a Excluding gold.....	-840.6	-646.1	-623.0	-573.1	-447.0	-489.9
Government:						
State and local:						
Structures:						
9 Value of new construction put in place.....	290.3	290.1	279.1	273.6	275.9	274.7

*Assumption.