



Technical Note
Gross Domestic Product
First Quarter of 2010 (Advance)
April 30, 2010

Errata: May 3, 2010, 4:30 PM - The technical note for gross domestic product, first quarter 2010 advance (released April 30, 2010) has been revised to correct an error in the reported ARRA provisions for government social benefits to persons and the resulting level of disposable personal income. The corrected values are shown below. The corrections did not alter the level of gross domestic, of disposable personal income, or of any other number shown in the GDP news release.

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 increased 3.2 percent (annual rate) in the first quarter of 2010, following an increase of 5.6 percent in the fourth quarter of 2009. The deceleration in real GDP in the first quarter mostly reflected decelerations in inventory investment and in exports. Consumer spending, in contrast, accelerated.

Source Data for the Advance Estimate

The advance GDP estimate for the first quarter of 2010 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:

- an increase in nondurable manufacturing inventories,
- an increase in non-motor-vehicle merchant wholesale and retail inventories,
- an increase in exports of goods, excluding gold, and
- an increase in imports of goods, excluding gold.

Prices

The price index for gross domestic purchases increased 1.7 percent in the first quarter after increasing 2.0 percent in the fourth quarter. Excluding food and energy prices, the price index for gross domestic purchases increased 1.1 percent in the first quarter, after increasing 1.5 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 0.2 percentage point to the first-quarter change in the gross domestic purchases price index.

American Recovery and Reinvestment Act of 2009

BEA's national accounts include the effects of the federal outlays and tax cuts included in the American Recovery and Reinvestment Act of 2009. Because most of the outlays and tax reductions from ARRA have been in the form of grants to state and local governments, tax reductions for individual and business taxpayers, and social benefits to households, their effects on GDP show up indirectly through the effects on GDP components such as consumer spending, residential investment, and state and local government spending. Thus, BEA's accounts do not directly identify the portion of GDP expenditures that is funded by ARRA. It is possible, however, to identify the effects of ARRA on components of income.

During the first quarter of 2010, ARRA provisions lowered personal taxes about \$121 billion (annual rate) and raised government social benefits to persons about \$112 billion, thus raising disposable personal income about \$233 billion. Corporate taxes were also lowered about \$13 billion. In addition, ARRA funded about \$96 billion in current grants to state and local governments (such as Medicaid and education grants), about \$16 billion in capital transfers to state and local governments and to home buyers, about \$7 billion in federal expenditures for goods and services, and about \$3 billion in subsidies for housing and energy. Further information, including estimates of the effects of ARRA for the quarters of 2009, is available at <http://www.bea.gov/recovery/index.htm>.

Note on the Source Data for Wages and Salaries

Beginning with the first quarter of 2010, BEA estimates of the change in private wages and salaries for the most recent quarter reflect monthly data on hours and earnings for *all employees* on private nonfarm payrolls from the Bureau of Labor Statistics (BLS) current employment statistics. Previously, the estimates used BLS data on hours and earnings for only *production and nonsupervisory workers* on private nonfarm payrolls. (BEA's estimates of wages and salaries also reflect BLS monthly data on employment, which have not changed.) Beginning with January 2010, BLS began featuring data on hours and earnings for all employees, which corresponds more closely to the population covered by BEA's national income statistics. As a consequence, beginning with the first quarter of 2010 (and January 2010 for monthly estimates), BEA's initial estimates of wages and salaries reflect these new, more comprehensive source data. The BLS monthly current employment statistics, however, do not include certain types of irregular pay, such as bonuses and stock options, which are included in the quarterly census of employment and wages. Therefore, BEA will continue to incorporate data from the more comprehensive quarterly census of employment and wages in the GDP estimates that are released about five months after the end of each quarter.

Brent R. Moulton
Associate Director for National Economic Accounts
Bureau of Economic Analysis
(202) 606-9606

**Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP
FOR THE FIRST QUARTER OF 2010**

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 2010 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.

	2009			2010		
	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.*
Private fixed investment:						
Nonresidential structures:						
1 Value of new nonresidential construction put in place.....	334.8	325.6	315.9	303.8	302.7	303.3
Equipment and software:						
2 Manufacturers' shipments of complete aircraft.....	34.0	37.0	48.3	30.2	31.5	29.4
Residential structures:						
Value of new residential construction put in place:						
3 Single family.....	111.3	113.0	114.7	115.5	115.4	118.7
4 Multifamily.....	23.2	21.4	19.6	17.6	17.6	18.2
Change in private inventories:						
5 Change in inventories for nondurable manufacturing.....	34.5	19.2	-3.0	14.2	30.2	15.4
5a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment...	9.3	38.4	-8.7	3.0	24.3	30.2
Net exports:						
Exports of goods:						
6 U.S. exports of goods, international-transactions-accounts basis.....	1120.6	1133.5	1189.0	1181.1	1182.1	1201.5
6a Excluding gold.....	1103.8	1121.7	1171.7	1162.2	1167.2	1186.5
Imports of goods:						
7 U.S. imports of goods, international-transactions-accounts basis.....	1662.6	1714.6	1811.9	1773.6	1797.5	1847.6
7a Excluding gold.....	1651.7	1703.4	1801.6	1763.7	1788.8	1838.1
8 Net exports of goods.....	-542.0	-581.0	-622.9	-592.5	-615.4	-646.1
8a Excluding gold.....	-547.9	-581.7	-629.9	-601.5	-621.6	-651.6
Government:						
State and local:						
Structures:						
9 Value of new construction put in place.....	287.7	280.5	274.3	269.6	264.7	267.2

*Assumption.