

Technical Note

Gross Domestic Product First Quarter of 2013 (Advance) April 26, 2013

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 2.5 percent (annual rate) in the first quarter of 2013, following an increase of 0.4 percent in the fourth quarter. The acceleration in real GDP in the first quarter reflected an upturn in private inventory investment, an acceleration in consumer spending, an upturn in exports, and a smaller decrease in federal government spending that were partly offset by an upturn in imports and a deceleration in nonresidential fixed investment.

Source Data for the Advance Estimate

The advance GDP estimate for the first quarter 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; motor vehicle sales and inventories; durable manufacturing 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
- a decrease in imports of goods, excluding gold.

Prices

The price index for gross domestic purchases—the prices paid by U.S. residents for goods and services wherever produced—increased 1.1 percent in the first quarter after increasing 1.6 percent in the fourth. Excluding food and energy prices, the price index for gross domestic purchases increased 1.3 percent after increasing 1.2 percent. The pay raise for military personnel added less than 0.1 percentage point to the first-quarter change in the gross domestic purchases price index.

Disposable Personal Income

Real disposable personal income (DPI) decreased 5.3 percent in the first quarter, following an increase of 6.2 percent in the fourth. The downturn in real DPI reflected the expiration of the "payroll tax holiday" in the first quarter and the acceleration of bonuses and personal dividends to the fourth quarter in anticipation of changes in individual tax rates. BEA estimates that companies paid special and accelerated dividends of \$39.5 billion in the fourth quarter, of which \$26.4 billion (\$105.6 billion at an annual rate) was paid to persons and is included in personal income.

The personal saving rate was 2.6 percent in the first quarter, compared with 4.7 percent in the fourth.

Comprehensive NIPA Revision Scheduled for July 31

On July 31, 2013, BEA will present the results of its comprehensive revision of the national income and product accounts (NIPAs). A series of articles in the *Survey of Current Business* discusses the revision in detail; these articles and other information about the revision are available on the BEA Web site at www.bea.gov/GDP-revisions.

The comprehensive revision will incorporate the results of the 2007 Benchmark Input-Output Accounts, as well as other improvements to the definitions, classifications, and methodologies used in the accounts. Many of these improvements reflect the recent update to the international guidelines for national accounts, the *System of National Accounts 2008*.

For this comprehensive revision, BEA is planning a number of major improvements, including:

- Expenditures by business, government, and nonprofit institutions on research and development will be recognized as fixed investment. Currently, these expenditures are treated as intermediate inputs. Based on preliminary estimates for 2007, this change will boost the level of GDP by about 2 percent, or about \$300 billion.
- Expenditures by business and nonprofit institutions on entertainment, literary, and artistic originals (such as theatrical movies, books, and musical recordings) will be recognized as fixed investment. Based on preliminary research for 2007, this change will boost the level of GDP by about 0.5 percent, or about \$70 billion.
- The tables presenting private nonresidential fixed investment will show three
 major categories: structures, equipment, and intellectual property products
 (which will consist of software, research and development, and entertainment,
 literary, and artistic originals). Currently, these tables show two major categories:
 structures and "equipment and software."
- BEA will measure the transactions of defined benefit pension plans on an accrual
 accounting basis and will recognize the cost of unfunded liabilities. Currently, the
 NIPAs measure pension-related compensation based on the cash contributions
 made by employers, which can differ from the pension benefits that are accrued
 by employees. These changes could raise or lower compensation of employees,

depending on whether the accrued measure of pension compensation is larger or smaller than the cash contributions. In addition, any accrued interest on unfunded pension liabilities will affect the profits of private employers and the net saving of government employers.

 The reference year for chain-type quantity and price indexes and chained-dollar estimates will be updated from 2005 to 2009.

Table A follows.

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Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP FOR THE FIRST QUARTER OF 2013

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, 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 2013 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.	2012 Nov.	Dec.	Jan.	2013 Feb.	Mar.*
Private fixed investment: Nonresidential structures: Value of new nonresidential construction put in place	302.1	318.6	327.5	308.3	309.6	309.0
Residential structures: Value of new residential construction put in place: Single family	141.5	144.5	146.3	151.6	158.1	162.4
3 Multifamily	23.9	24.4	26.0	27.6	27.0	27.7
Change in private inventories: NOTE: Historical (Oct.–Jan.) data may reflect concurrent seasonal factors.						
4 Change in inventories for nondurable manufacturing	-16.7	-8.8	5.1	31.1	-5.0	6.2
4a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment	52.2	40.3	30.8	116.2	2.6	19.9
Net exports: Exports of goods: U.S. exports of goods, international-transactions-						
accounts basis	1531.3	1553.0	1593.8	1570.2	1586.2	1582.9
5a Excluding gold	1504.0	1519.1	1544.8	1529.8	1542.5	1544.2
Imports of goods: 6 U.S. imports of goods, international-transactions-						
accounts basis	2239.6	2338.9	2266.7	2310.6	2308.9	2298.2
6a Excluding gold	2221.6	2316.0	2247.9	2290.2	2294.9	2279.3
7 Net exports of goods	-708.3	-785.9	-672.9	-740.4	-722.7	-715.3
7a Excluding gold	-717.6	-796.9	-703.1	-760.4	-752.4	-735.1
Government: State and local: Structures:						
8 Value of new construction put in place	248.3	249.7	244.2	245.3	248.1	246.7

^{*}Assumption.