



Technical Note
Gross Domestic Product
Fourth Quarter of 2012 (Advance)
January 30, 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 fourth 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 0.1 percent (annual rate) in the fourth quarter of 2012, following an increase of 3.1 percent in the third quarter. The downturn in real GDP in the fourth quarter reflected downturns in inventory investment, in federal government spending, in exports, and in state and local government spending that were partly offset by an upturn in nonresidential fixed investment, a larger decrease in imports, and an acceleration in consumer spending.

Source Data for the Advance Estimate

The advance GDP estimate for the fourth quarter of 2012 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,
- a decrease in exports of goods, excluding gold, and
- a decrease in imports of goods, excluding gold.

Federal government spending

Fourth-quarter federal government spending decreased at a 15.0 percent annual rate, reflecting a large decrease in national defense spending. The decrease in national defense spending is based on the *Monthly Treasury Statement* (MTS) for October, November, and December from the Department of the Treasury, which shows a large decrease in fourth-quarter outlays for Department of Defense-military programs other than for military personnel. (The MTS shows a fourth-quarter increase in outlays for military personnel, but that increase reflects special factors such as once-a-year lump sum payments that BEA distributes across the quarters of the year, and an extra pay day that BEA adjusts for in preparing accrual-based estimates.)

Effects of the Midwest Drought

BEA's GDP estimates reflect the continuing effects of this summer's extreme hot weather and drought in the Midwest on farm production. For the most part, the effects are embedded in the regular source data that are used by BEA and cannot be separately identified in components such as personal consumption expenditures or exports of goods.

The farm inventory investment estimates reflect the effects of the drought on farm production, particularly for corn and soybeans. The estimates for the fourth quarter of 2012 are based on farm income statistics from the U.S. Department of Agriculture released in November and on crop production reports for corn and soybeans released through January. In current dollars, the estimates indicate that the drought reduced farm inventory investment by about \$24 billion in the fourth quarter, after reducing farm inventory investment by about \$28 billion in the third quarter and \$12 billion in the second quarter. Adjusting for inflation, the change in farm inventories added 0.11 percentage point to the fourth-quarter change in real GDP after subtracting 0.38 percentage point from the third-quarter change and 0.17 percentage point from the second-quarter change.

For additional information about the methodology used to estimate the impacts of the drought, see the box "[Effects of the 2012 Midwest Drought on the NIPA Estimates](#)" in the October 2012 *Survey of Current Business*.

Prices

The price index for gross domestic purchases—the prices paid by U.S. residents for goods and services wherever produced—increased 1.3 percent in the fourth quarter after increasing 1.4 percent in the third. Excluding food and energy prices, the price index for gross domestic purchases increased 1.1 percent after increasing 1.2 percent.

Disposable Personal Income, Special Dividends, and Accelerated Compensation

Real disposable personal income (DPI) increased 6.8 percent in the fourth quarter, following an increase of 0.5 percent in the third. The acceleration in real DPI reflected accelerated and special dividends that were paid by many companies late in the quarter in anticipation of changes in individual income tax rates, as well as some acceleration in wages and salaries.

Based on reports from more than 2,000 companies from Compustat, BEA estimates that companies paid special or 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.

In addition to the special dividends, there is evidence that some companies accelerated their payment of bonuses or other types of irregular pay. In the absence of source data that cover these types of payments, BEA made a judgmental adjustment to its estimates of fourth-quarter wages and salaries, adding an additional \$15 billion (annual rate) to the regular estimate of wages and salaries. In May, BEA will incorporate fourth-quarter source data from the BLS quarterly census of employment and wages, which covers irregular pay.

The personal saving rate was 4.7 percent in the fourth quarter, compared with 3.6 percent in the third.

Hurricane Sandy

On October 29, Hurricane Sandy made landfall on the New Jersey coast and caused major damage and disruption throughout the Northeast region. Like other disasters, Hurricane Sandy disrupted many types of production through closures of factories, offices, and transportation facilities, while causing certain types of production, such as emergency services and rebuilding activities, to increase. These effects on production are included, but not separately identified, in the source data that BEA uses to prepare the estimates of GDP; consequently, BEA is not able to provide an estimate of the overall impact of Sandy on fourth-quarter GDP.

While the destruction of fixed assets, such as residential or nonresidential structures, does not directly affect GDP, national income, or personal income, BEA does track disaster losses as part of its fixed asset accounts. BEA's preliminary estimate is that \$35.8 billion in private fixed assets and \$8.6 billion in government fixed assets, measured at current cost, were lost due to Hurricane Sandy.

BEA also prepares estimates of the insurance benefits paid or received due to major disasters. These benefits are recorded on an accrual basis in the quarter in which the disaster occurs and are classified as capital transfers, and thus do not affect the measures of GDP, personal income, or saving. BEA's preliminary estimate is that domestic and foreign insurance companies expect to pay benefits for losses related to Sandy of \$20.6 billion (\$82.5 billion at an annual rate), and that the federal government's National Flood Insurance Program is expected to pay an additional \$7.5 billion (\$30.0 billion at an annual rate) in Sandy-related benefits.

For additional information, see "[How are the measures of production and income in the national accounts affected by a natural or man-made disaster?](#)"

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**Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP
FOR THE FOURTH QUARTER OF 2012**

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 December 2012 are shown in the last column of the table. For most series shown, the data for November 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.

	2012					
	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.*
Private fixed investment:						
Nonresidential structures:						
1 Value of new nonresidential construction put in place.....	297.7	295.5	297.0	296.5	294.5	295.5
Residential structures:						
Value of new residential construction put in place:						
2 Single family.....	127.7	131.6	136.4	141.4	143.3	145.6
3 Multifamily.....	21.9	22.4	22.6	23.8	23.9	24.2
Change in private inventories:						
NOTE: Historical (Jul.–Oct.) data may reflect concurrent seasonal factors.						
4 Change in inventories for nondurable manufacturing.....	4.6	16.9	35.5	-16.4	-9.9	11.7
4a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment...	54.0	41.8	64.5	44.8	38.7	45.2
Net exports:						
Exports of goods:						
5 U.S. exports of goods, international-transactions-accounts basis.....	1568.7	1544.7	1607.4	1532.1	1551.7	1550.3
5a Excluding gold.....	1542.7	1515.7	1569.7	1504.8	1517.7	1515.1
Imports of goods:						
6 U.S. imports of goods, international-transactions-accounts basis.....	2261.2	2251.0	2295.3	2241.2	2340.2	2300.8
6a Excluding gold.....	2244.7	2231.2	2276.2	2223.2	2317.2	2283.0
7 Net exports of goods.....	-692.6	-706.3	-687.9	-709.1	-788.5	-750.5
7a Excluding gold.....	-702.0	-715.5	-706.5	-718.4	-799.5	-767.9
Government:						
State and local:						
Structures:						
8 Value of new construction put in place.....	249.4	252.6	251.0	251.5	251.7	251.6

*Assumption.