

**Technical Note**  
**Gross Domestic Product, Fourth Quarter of 2003 (Advance) and the Year 2003**  
**January 30, 2004**

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 note also provides some perspective on the estimates. Additional material is available on BEA's Web site <[www.bea.gov](http://www.bea.gov)>. 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 ("The Business Situation").

**Fourth Quarter of 2003**

Real GDP: Based on data available at this time, BEA estimates that real GDP increased 4.0 percent (annual rate) in the fourth quarter of 2003 after increasing 8.2 percent in the third quarter. Consumer spending was mainly responsible for the slowdown, but residential and nonresidential fixed investment also slowed. In contrast, exports increased more than in the third quarter (as did imports, which are subtracted in the calculation of GDP), and inventory investment turned up.

Consumer spending increased 2.6 percent in the fourth quarter after increasing 6.9 percent in the third. The largest contributor to the slowdown was motor vehicle purchases, which turned down. Motor vehicle inventory investment turned up.

Real final sales of domestic product -- GDP less change in private inventories -- increased 3.4 percent in the fourth quarter after increasing 8.3 percent in the third.

Prices: The price index for gross domestic purchases increased 1.0 percent in the fourth quarter after increasing 1.8 percent in the third. Food and energy prices are more volatile than most other prices. In the fourth quarter, food prices accelerated, while energy prices turned down. Excluding these items, the price index for gross domestic purchases increased 1.1 percent after increasing 1.3 percent.

Disposable personal income and personal saving: Real disposable personal income (DPI) decreased 0.5 percent in the fourth quarter after increasing 6.3 percent in the third. Current-dollar DPI increased 0.1 percent after increasing 8.1 percent. The pattern of changes in DPI primarily reflected changes in personal current taxes, which in turn reflected the advance payments of the child tax credit sent to taxpayers during the third quarter. The personal saving rate -- saving as a percentage of DPI -- was 1.5 percent in the fourth quarter, down from 2.3 percent in the third quarter.

## **The Year 2003**

Real GDP increased 3.1 percent in 2003 (that is, from the 2002 annual level to the 2003 annual level), compared with an increase of 2.2 percent in 2002.

The step-up in GDP growth primarily reflected an upturn in equipment and software, a smaller decrease in nonresidential structures, and an upturn in exports that were partly offset by a downturn in private inventory investment.

The price index for gross domestic purchases increased 1.9 percent in 2003 after increasing 1.4 percent in 2002.

From the fourth quarter of 2002 to the fourth quarter of 2003, real GDP increased 4.3 percent.

### **Source Data for the Advance Estimate**

The advance GDP estimate for the fourth quarter is based on source data that are incomplete and that are 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. For the third month of the quarter, a decrease was assumed for exports of goods, excluding gold, and increases were assumed for:

- C Change in nondurable manufacturing inventories,
- C Change in non-motor-vehicle merchant wholesale and retail inventories, and
- C Imports of goods, excluding gold.

Brent R. Moulton  
Associate Director for National Economic Accounts  
Bureau of Economic Analysis  
(202) 606-9606  
January 30, 2004

Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP  
FOR THE FOURTH QUARTER OF 2003

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 December 2003 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.

	Jul.	Aug.	2003 Sep.	Oct.	Nov.	Dec. *
Private fixed investment:						
Nonresidential structures:						
1 Value of new total private construction put in place less residential (inc. improvements)...	217.2	214.4	216.7	216.2	215.1	215.6
Equipment and software:						
2 Manufacturers' shipments of complete aircraft.....	27.2	25.4	24.3	26.0	33.1	18.2
Residential structures:						
Value of new residential construction put in place:						
3 Single family.....	299.4	307.2	315.5	324.2	333.5	341.4
4 Multifamily.....	34.0	34.9	34.9	34.8	34.9	35.7
Change in private inventories:						
5 Change in inventories for nondurable manufacturing.....	-4.6	6.6	-0.8	-3.4	-0.1	1.8
5a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment..	15.2	3.9	43.0	20.4	37.8	28.5

Net exports:

Exports of goods:

6	U.S. exports of goods, international-transactions- accounts basis.....	724.2	692.1	716.5	739.7	765.8	746.2
6a	Excluding gold.....	720.5	685.1	711.3	734.8	761.3	742.0

Imports of goods:

7	U.S. imports of goods, international-transactions- accounts basis.....	1264.6	1228.8	1275.4	1305.1	1289.1	1295.7
7a	Excluding gold.....	1262.1	1223.4	1271.0	1301.0	1285.0	1292.1
8	Net exports of goods.....	-540.4	-536.6	-558.9	-565.3	-523.3	-549.6
8a	Excluding gold.....	-541.6	-538.3	-559.7	-566.2	-523.7	-550.2

Government:

State and local:

	Structures:						
9	Value of new construction put in place.....	200.7	201.7	202.8	203.4	205.7	204.6

---

\*Assumption.