

Technical Note
Gross Domestic Product
Second Quarter of 2004 (Advance)
July 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 complete set of estimates for the second quarter is available on BEA's Web site <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 ("The Business Situation").

Source Data for the Advance Estimate

The advance GDP estimate for the second quarter of 2004 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. The following assumptions were made for the third month of the quarter:

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

Annual Revision

Today's GDP news release presents results from the regular annual revision of the national income and product accounts. This year's revision, as usual, covers the estimates from the most recent three years. The revision incorporates source data that are more complete, more detailed, and otherwise more appropriate than those previously available. A detailed discussion of the results will be published in the August issue of the *Survey*.

In general, revisions to year-to-year growth rates were small; none exceeded 0.3 percentage point. For 2000-2003, real GDP grew at an average annual rate of 1.9 percent, the same as in the previously published estimates. For 2000-2003:

- real personal consumption expenditures grew at an average annual rate of 3.0 percent, the same as the previously published estimate;
- real nonresidential fixed investment declined at an average annual rate of 3.4 percent, compared with the previously published estimate of 3.0 percent; the downward revisions were primarily to software, reflecting data from the Census Bureau's annual

- survey of services for 2002 and 2003, and to communication equipment, reflecting preliminary shipments data from the 2002 Economic Census;
- real residential investment increased at an average annual rate of 4.6 percent, 0.4 percentage point more than the previously published estimate; the upward revision was primarily to single-family structures, reflecting Census Bureau value of construction put-in-place data for 2003;
- real inventories of private businesses decreased \$57.3 billion, compared with the previously published estimate of \$57.2 billion;
- real exports decreased at an average annual rate of 2.0 percent, compared with the previously published estimate of 1.9 percent; real imports increased at a rate of 1.7 percent, 0.2 percentage point more than the previously published estimate; both these revisions were primarily to services, reflecting the annual revision of BEA's international transactions accounts that was released in June.
- real government consumption expenditures and gross investment increased at an average annual rate of 3.5 percent, 0.2 percentage point more than the previously published estimate; the upward revision was to state and local government spending, reflecting Census Bureau Government Finances data for 2001 and 2002.

Some of the revisions to the quarterly growth rates of GDP were more sizeable. The largest revision to a quarterly growth rate was for the second quarter of 2001; the revised estimate for that quarter shows an increase in real GDP of 1.2 percent (annual rate), compared with the previously published estimate that showed a decrease of 0.6 percent. (The revision was mainly to inventories and reflected revised data on motor vehicle inventories from trade sources.)

Price Index for Market-Based Personal Consumption Expenditures

Recently there has been considerable interest in a supplementary price index that BEA introduced on its Web site last December. The price index for "market-based" personal consumption expenditures covers household purchases of goods and services for which explicit prices are charged. Thus, the index excludes most implicit prices (for example, the implicit price of bank services that are furnished without payment) and the expenses of nonprofit institutions. This index has been revised for 2001 through the first quarter of 2004 and is presented in table B of this technical note.

Brent R. Moulton
Associate Director for National Economic Accounts
Bureau of Economic Analysis
(202) 606-9606
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Table A. KEY ASSUMPTIONS FOR THE ADVANCE ESTIMATE OF GDP
FOR THE SECOND QUARTER OF 2004

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 June 2004 are shown in the last column of the table. For most series shown, the data for May 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.

	Jan.	Feb.	2004 Mar.	Apr.	May	Jun.*
Private fixed investment:						
Nonresidential structures:						
1 Value of new total private construction put in place less residential (inc. improvements)...	210.1	215.7	216.5	219.7	218.9	219.3
Equipment and software:						
2 Manufacturers' shipments of complete aircraft.....	26.8	26.6	27.7	24.6	31.3	23.7
Residential structures:						
Value of new residential construction put in place:						
3 Single family.....	348.0	348.1	353.5	360.1	364.9	361.3
4 Multifamily.....	35.6	36.8	37.6	37.5	37.7	37.4
Change in private inventories:						
5 Change in inventories for nondurable manufacturing.....	13.4	17.9	8.7	6.3	10.5	11.9
5a Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment.	1.0	53.0	41.0	34.9	60.8	36.2

Net exports:

Exports of goods:

6	U.S. exports of goods, international-transactions- accounts basis.....	740.2	779.2	807.6	791.4	824.5	822.6
6a	Excluding gold.....	735.1	775.3	803.5	787.9	820.8	819.0

Imports of goods:

7	U.S. imports of goods, international-transactions- accounts basis.....	1335.3	1376.4	1424.5	1427.2	1434.2	1452.7
7a	Excluding gold.....	1331.2	1372.0	1420.7	1423.4	1431.4	1449.1

8	Net exports of goods.....	-595.1	-597.2	-616.9	-635.9	-609.7	-630.0
8a	Excluding gold.....	-596.2	-596.7	-617.3	-635.5	-610.6	-630.0

Government:

State and local:

Structures:

9	Value of new construction put in place.....	205.4	204.5	218.1	219.9	219.7	219.8
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*Assumption.

Table B. Price Index for Market-Based Personal Consumption Expenditures

	Market-based PCE		Market-based PCE less food and energy	
	Index [2000=100]	Percent change	Index [2000=100]	Percent change
2001	101.941	1.9	101.668	1.7
2002	103.113	1.1	103.185	1.5
2003	105.040	1.9	104.388	1.2
[Seasonally adjusted at annual rates]				
2001:I	101.479	2.8	101.072	2.1
2001:II	102.003	2.1	101.408	1.3
2001:III	102.205	0.8	101.890	1.9
2001:IV	102.079	-0.5	102.304	1.6
2002:I	102.242	0.6	102.560	1.0
2002:II	102.966	2.9	103.011	1.8
2002:III	103.424	1.8	103.449	1.7
2002:IV	103.820	1.5	103.722	1.1
2003:I	104.601	3.0	103.952	0.9
2003:II	104.768	0.6	104.238	1.1
2003:III	105.294	2.0	104.572	1.3
2003:IV	105.496	0.8	104.790	0.8
2004:I	106.334	3.2	105.261	1.8
2004:II	107.315	3.7	105.818	2.1

NOTE. -- The price index for "market-based" personal consumption expenditures (PCE) is a supplemental measure prepared by the Bureau of Economic Analysis that is based on household expenditures for which there are observable price measures. It excludes most implicit prices (for example, the services furnished without payment by financial intermediaries) and the expenses of nonprofit institutions. More information is available on BEA's Web site at <http://www.bea.gov/bea/faq/national/FAQ.htm>.