

Annual Industry Accounts

Revised Statistics for 2005–2007

By Soo jeong Kim, Vincent A. Davis, Anna M. Jacobson, and Amanda S. Lyndaker

IN 2007, the slowdown in U.S. economic growth was widespread among industries; about half of all private industries contributed to the deceleration in real gross domestic product (GDP) growth to 2.0 percent from 2.8 percent in 2006. A steep slowdown in finance and insurance industries, a further decline in the construction industry, and a widespread deceleration in durable-goods manufacturing industries contributed the most to the slowdown, according to revised statistics of the Bureau of Economic Analysis (BEA) annual industry accounts, which were released on December 15, 2008.

Highlights for 2007 include the following:

- A downturn in the private goods-producing sector, led by an 11 percent decline in construction industries, subtracted from GDP growth for the first time since 2001 (chart 1) (page 23).
- The private services-producing sector contributed the most to the 2.0 percent growth in real GDP; professional and business services industries and

real estate and rental and leasing industries were the leading contributors (page 23).

- Slowdowns in the value-added price indexes for the construction and utilities industries were the largest contributors to the slowdown in the GDP price index. In contrast, the value-added price index for agriculture industries turned up sharply (page 24).¹
- The information-communications-technology (ICT)-producing industries grew 13 percent in 2007, contributing half a percentage point to economic growth (chart 2). In particular, the computer and electronic products manufacturing industry increased 20 percent, and the information and data-processing services industry increased 26 percent,

1. For a discussion on interpreting the value-added price index, see Robert E. Yuskavage and Mahnaz Fahim-Nader, "Gross Domestic Product by Industry for 1947–86: New Estimates Based on the North American Industry Classification System," SURVEY OF CURRENT BUSINESS 85 (December 2005): 77.

Chart 1. Industry Composition of GDP Growth

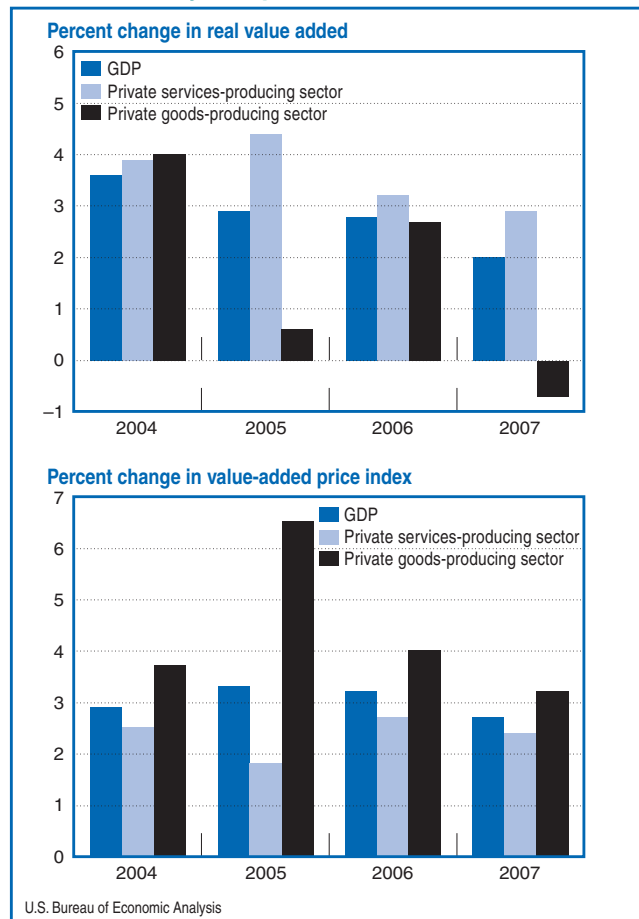
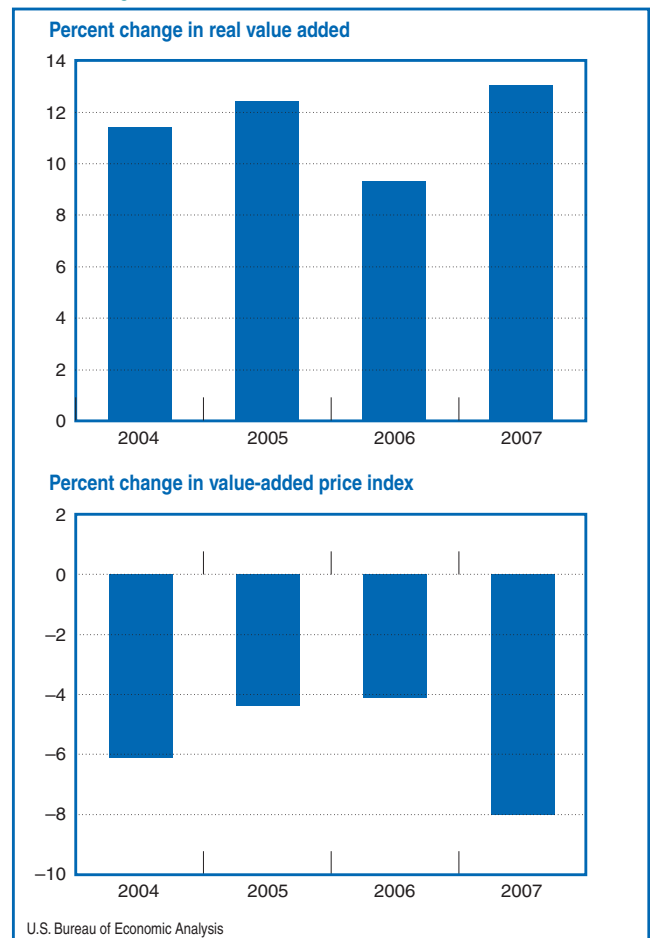


Chart 2. Information-Communications-Technology-Producing Industries



which was more than any other industry (page 23).

- Value-added prices for ICT industries fell twice as fast in 2007 as in 2006 and 2005 (page 24).

The revised statistics of the annual industry accounts presented in this article incorporate more accurate and detailed information on the industry composition of GDP growth than was available for the “advance” 2007 GDP by industry statistics released on April 29, 2008 (page 26).² In particular, these updated statistics incorporate Census Bureau annual survey data on industry output, Bureau of Labor Statistics data on producer prices, and BEA statistics on final demand and on industry returns to labor and capital from the 2008 annual revision of the national income and product accounts (NIPAs) (page 29).³

For 2007, these source data were compiled for the

2. See Brian M. Lindberg and Justin M. Monaldo, “Annual Industry Accounts, Advance Statistics on GDP by Industry for 2007,” *SURVEY OF CURRENT BUSINESS* 88 (May 2008): 38–50.

first time within an input-output (I-O) framework that balances and reconciles industry production and commodity usage. This framework provides information on value added for 65 industries and information on gross output and intermediate inputs for 65 industries and commodities (page 28). The previously published “advance” statistics for 2007 were developed from summary source data; value added was presented for 21 industry groups.

For a comparison of aggregate measures of goods and services in the annual industry accounts and the national income and products accounts, see page 27. For more information about data availability, see page 31.

3. Statistics on manufacturing gross output for 2007 are based on source data from the Census Bureau’s monthly Manufacturers’ Shipments, Inventories, and Orders (M3). Annual Survey of Manufactures data for 2007 will be included in the Census Bureau’s Economic Census to be released in 2009.

Imports as a Share of Domestic Supply

The strong impact of globalization over the last decade can be seen in the rising share of U.S. domestic supply of goods and services from imports. The U.S. domestic supply is the value of goods and services available for consumption in the U.S. by final consumers and by industries combined.¹

The “import share” of domestic supply increased considerably for manufactured goods. As shown in the table, the import share of overall manufactured goods increased 7 percentage points, from 20 percent in 1998 to 27 percent in 2007. Imports of manufactured goods totaled \$1,575.3 billion in 2007.

Import shares for several manufactured goods increased significantly.

- For computer and electronic products, the import share increased to 52 percent in 2007 from 36 percent in 1998. Imports of these products totaled \$272.5 billion in 2007.
- For motor vehicles, bodies and trailers, and parts, the import share rose to 38 percent from 27 percent in 1998. Imports of these products totaled \$235.1 billion in 2007.
- For apparel, the import share increased to 83 percent in 2007 from 58 percent in 1998. The 25 percentage points increase was the largest of all product categories in the annual I-O accounts. The import share for 2007 was also the highest of any product category. It reflected foreign producers’ comparative advantage in the labor-intensive apparel industry. Compensation comprised three-fourths of the value added of these products manufactur-

ers in the United States—among the highest of all U.S. private industries.

- For furniture and related products, compensation comprised three-fourths of value added. The import share increased to 30 percent in 2007 from 15 percent in 1998.
- For nonmanufactured goods and services—all services and agriculture, mining and construction—the import shares increased to 3 percent in 2007 from 2 percent in 1998.
- For oil and gas extraction products, the import share increased to 54 percent in 2007 from 44 percent in 1998. The 54 percent import share was higher than all other goods and services except apparel. This increase was the largest for nonmanufactured goods. Imports totaled \$280.5 billion in 2007.
- For insurance, the import share increased to 6 percent in 2007 from 2 percent in 1998—the largest increase in import share across all service categories.

Imported Share of U.S. Domestic Supply, 1998 and 2007

	Share of domestic supply (Percent)		Change in share (Percentage points)	Imports (Billions of dollars)
	1998	2007		
Manufactured goods	20.4	27.4	7.0	1,575.3
Computer and electronic products	36.3	52.4	16.1	272.5
Motor vehicles, bodies and trailers, and parts	26.8	37.9	11.1	235.1
Apparel and leather and allied products	58.2	83.3	25.1	127.4
Electrical equipment, appliances, and components	25.5	42.0	16.5	67.5
Furniture and related products	15.2	29.5	14.3	30.7
Textile mills and textile product mills	14.9	32.4	17.5	25.7
All other manufacturing	14.4	19.8	5.4	816.2
Selected goods and services				
Oil and gas extraction	44.1	53.9	9.8	280.5
Insurance carriers and related activities	2.4	6.0	3.6	42.1

1. The U.S. domestic supply and its sources—primarily domestic output and imports—are published for broad categories of goods and services in appendix table 26, and can be derived for more detailed categories with statistics published in summary-level I-O Use Tables. The domestic supply of a commodity equals its domestic output, plus imports, less the change in private inventories, less exports. Imports are reported at U.S. port value, that is, consistent with the producer values reported for domestic output.

Real Value Added

Table A. Percent Changes in Real Value Added by Industry Group

	2004	2005	2006	2007
Gross domestic product	3.6	2.9	2.8	2.0
Private industries	3.9	3.5	3.1	2.1
Agriculture, forestry, fishing, and hunting	6.7	8.5	-5.3	6.9
Mining	1.0	-3.8	7.4	0.1
Utilities	5.7	-5.9	1.1	1.2
Construction	0.3	-0.5	-4.1	-11.2
Manufacturing	5.6	0.9	5.5	2.9
Durable goods	5.8	5.5	8.1	4.8
Nondurable goods	5.3	-5.0	2.1	0.4
Wholesale trade	2.0	3.3	0.6	0.8
Retail trade	2.6	8.9	5.6	4.5
Transportation and warehousing	9.1	4.0	2.1	2.5
Information	11.7	8.7	2.7	8.1
Finance, insurance, real estate, rental, and leasing	2.9	4.2	4.1	2.0
Professional and business services	4.1	5.5	3.4	4.3
Educational services, health care, and social assistance	3.3	2.8	3.2	2.1
Arts, entertainment, recreation, accommodation, and food services	3.8	2.1	3.4	1.7
Other services, except government	0.2	2.0	-0.4	0.4
Government	0.5	0.7	0.5	1.3
Addenda:				
Private goods-producing industries ¹	4.0	0.6	2.7	-0.7
Private services-producing industries ²	3.9	4.4	3.2	2.9
Information-communications-technology-producing industries	11.4	12.4	9.3	13.0

In 2007, GDP growth was led by professional and business services, real estate and rental and leasing, information, and durable goods manufacturing.

In 2007, growth in agriculture was led by farms, notably from feed grains. Farm value added decreased in 2006.

In 2005, 2006, and 2007, growth in durable-goods manufacturing was led by growth in computer and electronic products manufacturing. In 2006, motor vehicles and parts also contributed significantly to growth.

In 2007, growth in transportation and warehousing value added reflected higher growth in air transportation; airlines continued to cut costs and boost productivity.

In 2006 and 2007, growth in professional and business services was led by miscellaneous professional, scientific, and technical services; demand for outsourced management consulting services and industry productivity rose.

Table B. Contributions to Growth in Real GDP by Industry Group

[Percentage points]

	2004	2005	2006	2007
Gross domestic product ³	3.6	2.9	2.8	2.0
Private industries	3.42	3.09	2.72	1.80
Agriculture, forestry, fishing, and hunting	0.07	0.09	-0.05	0.07
Mining	0.01	-0.06	0.14	0.00
Utilities	0.12	-0.12	0.02	0.02
Construction	0.01	-0.02	-0.21	-0.56
Manufacturing	0.68	0.10	0.65	0.34
Durable goods	0.40	0.38	0.54	0.32
Nondurable goods	0.28	-0.27	0.11	0.02
Wholesale trade	0.12	0.19	0.04	0.05
Retail trade	0.18	0.58	0.36	0.29
Transportation and warehousing	0.26	0.12	0.06	0.07
Information	0.51	0.38	0.12	0.33
Finance, insurance, real estate, rental, and leasing	0.60	0.85	0.83	0.41
Finance and insurance	0.08	0.59	0.49	0.00
Real estate and rental and leasing	0.52	0.26	0.33	0.41
Professional and business services	0.46	0.64	0.40	0.51
Professional, scientific, and technical services	0.52	0.38	0.40	0.50
Management of companies and enterprises	-0.09	0.05	-0.03	-0.04
Administrative and waste management services	0.03	0.21	0.03	0.06
Educational services, health care, and social assistance	0.26	0.22	0.25	0.16
Educational services	0.02	0.00	0.02	0.03
Health care and social assistance	0.24	0.22	0.23	0.13
Arts, entertainment, recreation, accommodation, and food services	0.14	0.08	0.13	0.06
Arts, entertainment, and recreation	0.03	0.01	0.04	0.02
Accommodation and food services	0.11	0.07	0.09	0.05
Other services, except government	0.00	0.05	-0.01	0.01
Government	0.06	0.09	0.07	0.17
Federal	0.04	0.01	-0.01	0.02
State and local	0.02	0.08	0.07	0.14
Addenda:				
Private goods-producing industries ¹	0.78	0.12	0.53	-0.14
Private services-producing industries ²	2.64	2.97	2.19	1.94
Information-communications-technology-producing industries	0.42	0.45	0.34	0.47

In 2007, slower real GDP growth reflected slower growth in finance and insurance, a larger decline in construction, and a deceleration in durable-goods manufacturing.

In 2007, the decline in construction reflected a continued decline in new residential construction.

In 2007, durable-goods manufacturing growth decelerated, reflecting slower growth in motor vehicles and parts; computer and electronic products; fabricated metal products; and machinery, and decreases in electrical equipment, appliances and components; furniture and related products; nonmetallic mineral products; and primary metals.

In 2007, nondurable-goods manufacturing decelerated, reflecting slower growth in the chemical products industry, a downturn in paper products, and a continued decrease in petroleum and coal products.

In 2005 and 2006, finance and insurance contributed about half a percentage point to GDP growth. In 2007, the slowdown reflected a downturn in the Federal Reserve banks, credit intermediation, and related activities and slowdowns in securities, commodity contracts, and investment services and in insurance carriers and related activities.

1. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.

2. Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and other services, except government.

3. The estimates of gross domestic product under the contribution columns are percent changes

Value-Added Prices

Table C. Percent Changes in Chain-Type Price Indexes for Value Added by Industry Group

	2004	2005	2006	2007
Gross domestic product	2.9	3.3	3.2	2.7
Private industries	2.8	2.8	3.0	2.5
Agriculture, forestry, fishing, and hunting.....	16.5	-13.6	-3.7	29.1
Mining.....	18.4	35.7	9.2	4.7
Utilities.....	3.3	5.9	12.6	2.0
Construction.....	8.4	12.8	11.3	6.4
Manufacturing.....	-0.5	2.8	1.0	-0.4
Durable goods.....	-1.1	-0.8	-1.6	-2.2
Nondurable goods.....	0.3	7.8	4.5	2.1
Wholesale trade.....	5.7	1.9	6.4	3.3
Retail trade.....	0.7	-2.5	-0.5	-1.5
Transportation and warehousing.....	-0.2	1.7	4.1	2.5
Information.....	-2.9	-3.3	-2.3	-3.1
Finance, insurance, real estate, rental, and leasing.....	3.0	2.0	2.1	2.6
Professional and business services.....	3.0	3.7	3.5	3.7
Educational services, health care, and social assistance.....	3.5	2.9	2.5	3.8
Arts, entertainment, recreation, accommodation, and food services.....	3.2	3.5	3.8	4.1
Other services, except government.....	3.1	2.9	4.6	5.0
Government	4.7	4.5	4.6	4.3
Addenda:				
Private goods-producing industries ¹	3.7	6.5	4.0	3.2
Private services-producing industries ²	2.5	1.8	2.7	2.4
Information-communications-technology-producing industries.....	-6.1	-4.4	-4.1	-8.0

In 2007, GDP price growth was led by professional and business services, real estate and rental and leasing, construction, and agriculture.

In 2007, agriculture was among the largest contributors to GDP price growth, reflecting sharp increases in feed grain and dairy prices.

In 2006, value-added price growth for utilities was the largest since 2001.

In 2007, the decline in durable-goods manufacturing value-added prices reflected declines in computer and electronic products; motor vehicles, bodies, and trailers, and parts; and wood products.

In 2006, the 6.4 percent growth in wholesale trade value-added prices was the largest increase since 1980.

Table D. Contributions to Growth in the Chain-Type Price Index for Gross Domestic Product by Industry Group

[Percentage points]

	2004	2005	2006	2007
Gross domestic product ³	2.9	3.3	3.2	2.7
Private industries	2.43	2.46	2.64	2.22
Agriculture, forestry, fishing, and hunting.....	0.17	-0.17	-0.04	0.28
Mining.....	0.24	0.50	0.17	0.09
Utilities.....	0.07	0.12	0.24	0.04
Construction.....	0.37	0.58	0.53	0.29
Manufacturing.....	-0.06	0.34	0.12	-0.04
Durable goods.....	-0.08	-0.06	-0.11	-0.15
Nondurable goods.....	0.02	0.40	0.23	0.10
Wholesale trade.....	0.33	0.11	0.37	0.19
Retail trade.....	0.05	-0.17	-0.03	-0.10
Transportation and warehousing.....	-0.01	0.05	0.12	0.07
Information.....	-0.13	-0.15	-0.10	-0.14
Finance, insurance, real estate, rental, and leasing.....	0.60	0.41	0.42	0.53
Finance and insurance.....	0.30	0.10	0.07	0.22
Real estate and rental and leasing.....	0.30	0.31	0.35	0.30
Professional and business services.....	0.34	0.42	0.41	0.44
Professional, scientific, and technical services.....	0.02	0.19	0.17	0.08
Management of companies and enterprises.....	0.22	0.17	0.11	0.23
Administrative and waste management services.....	0.10	0.07	0.13	0.14
Educational services, health care, and social assistance.....	0.27	0.23	0.20	0.29
Educational services.....	0.06	0.05	0.04	0.03
Health care and social assistance.....	0.22	0.18	0.15	0.26
Arts, entertainment, recreation, accommodation, and food services.....	0.12	0.13	0.14	0.15
Arts, entertainment, and recreation.....	0.03	0.03	0.03	0.03
Accommodation and food services.....	0.09	0.10	0.11	0.12
Other services, except government.....	0.07	0.07	0.10	0.11
Government	0.60	0.56	0.57	0.54
Federal.....	0.24	0.18	0.21	0.17
State and local.....	0.36	0.38	0.36	0.36
Addenda:				
Private goods-producing industries ¹	0.72	1.25	0.78	0.62
Private services-producing industries ²	1.71	1.21	1.86	1.60
Information-communications-technology-producing industries.....	-0.24	-0.17	-0.16	-0.32

In 2007, the slowdown in the GDP price index reflected slowdowns in construction and utilities.

In 2007, the slowdown in construction value-added prices was the largest contributor to the slowdown in GDP price growth.

In 2007, the deceleration in nondurable goods manufacturing prices largely reflected slower growth in petroleum and coal products and chemical products prices; plastics and rubber products prices turned down.

In 2007, value-added prices for management of companies and enterprises accelerated, reflecting increases in employment costs for corporate, subsidiary, and regional managing offices.

In 2007, the value-added prices for information-communications-technology producing industries continued to fall and contributed to the slowdown in GDP price growth. The decline reflected continued declines in output prices and increases in input prices.

1. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.

2. Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and other services, except government.

3. The estimates of gross domestic product under the contribution columns are percent changes

Real Gross Output, Value Added, and Intermediate Inputs

Table E. Percent Change in Chain-Type Quantity Indexes by Industry Group

	2005	2006	2007
Gross domestic product	2.9	2.8	2.0
Private industries			
Gross output.....	4.5	3.1	1.7
Value added.....	3.5	3.1	2.1
Intermediate inputs.....	5.6	3.1	1.4
Agriculture, forestry, fishing, and hunting			
Gross output.....	2.4	-0.3	-0.7
Value added.....	8.5	-5.3	6.9
Intermediate inputs.....	-2.0	3.1	-5.9
Mining			
Gross output.....	1.1	4.8	2.7
Value added.....	-3.8	7.4	0.1
Intermediate inputs.....	7.6	1.4	6.5
Utilities			
Gross output.....	1.4	0.7	0.4
Value added.....	-5.9	1.1	1.2
Intermediate inputs.....	13.9	0.1	-0.7
Construction			
Gross output.....	2.1	-1.9	-4.2
Value added.....	-0.5	-4.1	-11.2
Intermediate inputs.....	4.8	0.6	3.4
Manufacturing			
Gross output.....	3.9	1.4	-1.3
Value added.....	0.9	5.5	2.9
Intermediate inputs.....	5.4	-0.5	-3.2
Durable goods			
Gross output.....	5.2	2.4	-0.6
Value added.....	5.5	8.1	4.8
Intermediate inputs.....	5.1	-0.7	-3.6
Nondurable goods			
Gross output.....	2.4	0.3	-2.0
Value added.....	-5.0	2.1	0.4
Intermediate inputs.....	5.7	-0.4	-2.9
Wholesale trade			
Gross output.....	3.9	3.1	3.2
Value added.....	3.3	0.6	0.8
Intermediate inputs.....	5.2	8.6	8.1
Retail trade			
Gross output.....	5.7	4.3	2.1
Value added.....	8.9	5.6	4.5
Intermediate inputs.....	0.2	1.9	-2.2
Transportation and warehousing			
Gross output.....	2.7	2.2	0.1
Value added.....	4.0	2.1	2.5
Intermediate inputs.....	1.3	2.3	-2.3
Information			
Gross output.....	9.0	7.1	9.3
Value added.....	8.7	2.7	8.1
Intermediate inputs.....	9.3	10.8	10.2
Finance, insurance, real estate, rental, and leasing			
Gross output.....	6.7	5.0	2.4
Value added.....	4.2	4.1	2.0
Intermediate inputs.....	11.3	6.4	2.9
Professional and business services			
Gross output.....	4.9	4.3	5.0
Value added.....	5.5	3.4	4.3
Intermediate inputs.....	3.9	5.9	6.0
Educational services, health care, and social assistance			
Gross output.....	2.6	2.9	3.1
Value added.....	2.8	3.2	2.1
Intermediate inputs.....	2.3	2.4	4.7
Arts, entertainment, recreation, accommodation, and food services			
Gross output.....	2.4	3.6	1.8
Value added.....	2.1	3.4	1.7
Intermediate inputs.....	2.8	3.8	1.9
Other services, except government			
Gross output.....	2.9	2.5	1.3
Value added.....	2.0	-0.4	0.4
Intermediate inputs.....	4.0	5.9	2.3
Government			
Gross output.....	0.5	1.4	2.0
Value added.....	0.7	0.5	1.3
Intermediate inputs.....	0.1	2.8	3.0
Addenda:			
Private goods-producing industries¹			
Gross output.....	3.3	0.9	-1.5
Value added.....	0.6	2.7	-0.7
Intermediate inputs.....	5.0	-0.1	-2.0
Private services-producing industries²			
Gross output.....	5.1	4.1	3.3
Value added.....	4.4	3.2	2.9
Intermediate inputs.....	6.1	5.5	3.9
Information-communications-technology-producing industries			
Gross output.....	7.4	7.8	10.7
Value added.....	12.4	9.3	13.0
Intermediate inputs.....	2.8	6.3	8.6

In 2006, output for the agriculture industry declined while purchases of intermediate inputs rose due to increased use of inputs like fertilizer. The result was a decline in value added for the farm industry. In 2007, the real value-added for the agriculture industry turned up, reflecting growth in output but decreased demand for intermediate inputs.

In 2006 and 2007, real value added for construction decreased, reflecting decreased output of residential construction and increased intermediate inputs.

In 2007, motor vehicle industry output decreased, reflecting a decline in heavy truck manufacturing—the result of new fuel emissions regulations that pushed demand into 2006. In 2006 and 2007, real value added for motor vehicles rose, reflecting a decrease in the use of intermediate inputs and increased productivity in the auto and light-truck industry

In 2007, chemical manufacturing output decreased; a decline in pharmaceutical output was partially offset by a surge in fertilizer manufacturing output.

In 2007, value added and output for air transportation rose, reflecting a continued decline in intermediate inputs and higher productivity. In 2006, value-added growth slowed as rising prices reduced demand and real output growth slowed.

For 2005–2007, increased demand for miscellaneous professional, scientific, and technical services, specifically management consulting services, contributed to growth in professional and business services output. Also, strong growth in employment coupled with increased labor productivity contributed to real value-added growth for the entire industry group.

In 2007, value added for private goods-producing industries declined and subtracted from GDP growth for the first time since 2001. Output growth declined for the first time since 2002.

1. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.
 2. Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and other services, except government.

Revisions

Table F. Revisions to Percent Change in Real Value Added by Industry Group

	2005			2006			2007		
	Previously Published	Revised	Revision	Previously Published	Revised	Revision	Previously Published	Revised	Revision
Gross domestic product	3.1	2.9	-0.2	2.9	2.8	-0.1	2.2	2.0	-0.2
Private industries	3.4	3.5	0.1	3.5	3.1	-0.4	2.1	2.1	0.0
Agriculture, forestry, fishing, and hunting.....	4.9	8.5	3.6	0.9	-5.3	-6.2	1.4	6.9	5.5
Mining.....	-2.4	-3.8	-1.4	6.1	7.4	1.3	0.0	0.1	0.1
Utilities.....	-2.2	-5.9	-3.7	-2.3	1.1	3.4	5.3	1.2	-4.1
Construction.....	2.7	-0.5	-3.2	-6.0	-4.1	1.9	-12.1	-11.2	0.9
Manufacturing.....	1.0	0.9	-0.1	2.9	5.5	2.6	2.3	2.9	0.6
Durable goods.....	4.9	5.5	0.6	6.0	8.1	2.1	4.9	4.8	-0.1
Nondurable goods.....	-3.9	-5.0	-1.1	-1.0	2.1	3.1	-1.1	0.4	1.5
Wholesale trade.....	1.8	3.3	1.5	1.7	0.6	-1.1	0.9	0.8	-0.1
Retail trade.....	6.1	8.9	2.8	5.0	5.6	0.6	4.9	4.5	-0.4
Transportation and warehousing.....	4.1	4.0	-0.1	5.2	2.1	-3.1	3.1	2.5	-0.6
Information.....	11.5	8.7	-2.8	7.2	2.7	-4.5	9.0	8.1	-0.9
Finance, insurance, real estate, rental, and leasing.....	4.8	4.2	-0.6	5.8	4.1	-1.7	1.2	2.0	0.8
Professional and business services.....	4.0	5.5	1.5	3.8	3.4	-0.4	4.6	4.3	-0.3
Educational services, health care, and social assistance.....	1.8	2.8	1.0	3.5	3.2	-0.3	3.5	2.1	-1.4
Arts, entertainment, recreation, accommodation, and food services.....	1.3	2.1	0.8	3.1	3.4	0.3	1.9	1.7	-0.2
Other services, except government.....	-0.6	2.0	2.6	-0.3	-0.4	-0.1	2.1	0.4	-1.7
Government	0.7	0.7	0.0	0.4	0.5	0.1	1.2	1.3	0.1
Addenda:									
Private goods-producing industries ¹	1.3	0.6	-0.7	0.8	2.7	1.9	-1.5	-0.7	0.8
Private services-producing industries ²	4.0	4.4	0.4	4.2	3.2	-1.0	3.2	2.9	-0.3
Information-communications-technology-producing industries ³	11.3	12.4	1.1	11.7	9.3	-2.4	13.2	13.0	-0.2

1. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.
 2. Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance, real estate, rental, and leasing; professional and business services; educational services, health care, and social assistance; arts, entertainment, recreation, accommodation, and food

services; and other services, except government.

3. Consists of computer and electronic products; publishing industries (includes software); information and data processing services; and computer systems design and related services.

Revisions to Percent Change in Real Value Added by Industry Group Highlights

The revised statistics on industry value added did not meaningfully alter the general picture of the economy suggested by the “advance” statistics.

- The finance and insurance industry group and the construction industry were the largest contributors to the 2007 slowdown in real gross domestic product (GDP) growth in the previously published and revised statistics.
- In 2007, the direction of change in real value added was unrevised for 19 of 22 broad industry groups.
- In 2006, the revised statistics show an acceleration in private-goods producing sector growth and a deceleration in private services-producing sector growth, contrary to previously published statistics. Growth in

these two broad industry sectors was more balanced than previously reported.

- In 2007, the largest downward revisions in real value-added growth at the broad industry group level was 4.2 percentage points for the utilities industry and 1.8 percentage points for the “other services, except government” industry.
- The largest upward revision to real value-added growth in 2007 was for the agriculture, forestry, fishing, and hunting group (5.6 percentage points).
- In 2007, the previously published and revised statistics both show the professional and business services industry group contributed the most to real GDP growth, about 0.5 percentage point.

Aggregate Goods and Services Measures in the BEA Industry and National Accounts

The annual industry accounts includes value-added measures for goods-producing industries and services-producing industries. These measures are often compared with final-expenditure measures of goods and services from the national income and product accounts (NIPAs) (see table). While measures of value added by industry and final expenditures provide equivalent measures of total gross domestic product (GDP), there are differences between these two sets of statistics at a disaggregated level.

The differences include the following.

Concepts. The NIPA measure of goods represents final expenditures for goods in personal consumption expenditures, in business and government investment, and in net exports, while the annual industry accounts measure of the private goods-producing sector sums value added across all private goods-producing industries. In the NIPAs, the value of a purchased good implicitly includes the value added of all industries contributing to the various stages of the good's production and distribution. For example, in the NIPAs, the purchase of a computer by a consumer implicitly includes the value added of all the goods and services industries that contributed to the production and distribution of that computer. In the annual industry accounts, however, the value of this computer purchase will be apportioned among the specific industries that contributed to its production.

Classifications. In the annual industry accounts, GDP is separated into major industries in three sectors: private goods-producing industries, private services-producing industries, and government. An industry that produces

both goods and services output is classified wholly as either a goods-producing or a services-producing industry (including government) based on an industry's primary output. In the NIPAs, GDP is classified by type of product as either a good, service, or structure. In the annual industry accounts, structures are produced principally by the construction industry, which is classified as a goods-producing industry.

Valuations. GDP in the NIPAs is measured in purchasers' prices; therefore, wholesale trade, retail trade, and transportation margins are included in the final use value of GDP goods. In the annual industry accounts, however, value added is measured in producers' prices, and the value added of the wholesale trade, retail trade, and transportation industries is included in the private services-producing sector.

Imported goods. Imports are excluded from GDP in the annual industry accounts and the NIPAs. However, the annual industry accounts include the gross margins from distributing these imported goods mainly in the value added of the wholesale trade, retail trade, and transportation industries.

In general, growth in NIPA final goods and services expenditures reflects the value added of all private services-producing industries, private goods-producing industries, and government that contribute to the production of the goods and services. Adjusting for some of these differences—removing the construction industry and adding the wholesale and retail trade industries and the transportation industry to the private goods-producing sector—real value-added growth for private goods-producing industries would be much closer to the growth in the NIPA measure of the GDP of goods. Growth of private services-producing industries, after removing the wholesale and retail trade and transportation industries and adding government, would also be closer to the GDP of services measure but to a lesser extent.

For more information, see FAQ 367 at faq.bea.gov. See also "Comparing Aggregate Measures of Goods and Services Production in BEA's Industry and National Accounts." SURVEY 87 (May 2007): 17.

Growth Rates for Real GDP and Real Value Added by Industry

	Percent change			
	2004	2005	2006	2007
Value added of private goods-producing industries.....	4.0	0.6	2.7	-0.7
GDP of goods.....	4.7	4.3	5.4	3.1
Value added of private services-producing industries.....	3.9	4.4	3.2	2.9
GDP of services.....	2.8	2.2	2.3	2.8

Methodology

The annual I-O accounts and the GDP-by-industry accounts are created using an integrated methodology that makes the annual estimates of gross output, intermediate inputs, and value added by industry more timely and consistent than previously possible. Industry estimates are published for 65 detailed industries, as defined by the 1997 North American Industry Classification System (NAICS). Commodity estimates are published at the same level of detail plus four additional commodities.¹ Estimates of final uses and value added are also included in the annual estimates. Compared with previous methodologies, the integrated methodology is applied at a finer level of industry and commodity detail to enhance the accuracy of aggregate-level estimates.

The integrated annual I-O accounts and GDP-by-industry accounts are prepared in five steps:

Step one. Industry estimates of current-dollar value added for 2005–2007 are extrapolated forward from the annual industry accounts estimates for 2004, which were not revised, using the percentage changes in the annual estimates of gross domestic income (GDI) from the NIPAs. The GDI-by-industry estimates consist of compensation of employees, taxes on production and imports less subsidies, and gross operating surplus. Additionally, corporate data on profits before tax, net interest, and capital consumption allowances are converted from an enterprise basis to an establishment basis using data on employment. Finally, the statistical discrepancy (the difference between GDI and GDP from the NIPAs) is distributed among the industries. In general, annual revisions to the industry estimates of value added largely reflect revisions to the components of GDI and to the statistical discrepancy from the annual NIPA revision.

Step two. Industry estimates of gross domestic output for 2005–2007 are extrapolated from the 2004 estimates. The extrapolators for these estimates are prepared using a wide array of source data, including surveys from the Census Bureau, the Bureau of Labor Statistics, and other public and private sources.² (See page 29). Annual revisions to industry

estimates of gross output are due to revisions in these source data.

Step three. The initial commodity composition of intermediate inputs is calculated for each industry by a process that uses the previous year's direct requirements coefficients. First, gross output for each industry is revalued at previous year commodity prices. Next, the revalued gross output is multiplied by the industry's direct requirements coefficients from the previous year.³ Finally, the resulting commodity estimates of intermediate inputs for the industry are revalued in the commodity prices of the current year.

Step four. The initial commodity composition of each GDP expenditure component is estimated by applying commodity-flow relationships from the revised 1997 benchmark I-O accounts to the domestic supply of each commodity in the current year. The annual I-O use tables are then balanced using a biproportional adjustment procedure to ensure that intermediate and final use of commodities is consistent with domestic supply, that intermediate use is consistent with gross output and value added, and that final use is consistent with the final expenditure components from the NIPAs. The current-dollar measures of gross output, intermediate inputs, and value added are then incorporated into the GDP-by-industry accounts.

Step five. Price and quantity indexes for the GDP-by-industry accounts are prepared in three steps. First, indexes are derived for gross output by separately deflating each commodity produced by an industry that is included as part of its gross output. Second, indexes for intermediate inputs are derived by deflating all commodities that are consumed by an industry as intermediate inputs in the annual I-O use tables. Third, indexes for value added by industry are calculated using the double-deflation method in which real value added is computed as the difference between real gross output and real intermediate inputs.⁴

1. These special commodities consist of noncomparable imports, scrap, used and secondhand goods, rest of the world adjustment to final uses, and inventory valuation adjustment.

2. See the appendix table "Principle Sources of Data for Industry and Commodity Output and Prices." The estimates of the commodity composition of extrapolated industry gross output are largely consistent with the 1997 benchmark I-O relationships for nonmanufacturing industries and with current survey data for manufacturing industries.

3. Direct requirements coefficients specify the amount of each commodity required by the industry to produce a dollar of output.

4. Separate estimates of gross output and intermediate inputs are combined in a Fisher index-number formula in order to generate the indexes for value added by industry. This method is preferred because it requires the fewest assumptions about the relationships between gross output by industry and intermediate inputs by industry.

Source Data

Principal Sources of Data for Industry and Commodity Output and Prices—Continues

Industry and commodity	Source data for annual current-dollar statistics	Source data for price indexes
Agriculture, forestry, fishing and hunting		
Farms	New U.S. Department of Agriculture (USDA) data for 2007, revised USDA data for 2006 and 2005.	USDA prices received by farmer; Bureau of Labor Statistics (BLS) Producer Price Index (PPI).
Forestry, fishing and related activities	For forestry, new 2007 and revised 2006 and 2005 USDA data. For logging and forestry support activities, Census Bureau annual survey of manufactures (ASM) for 2006 and 2005, Census Bureau manufacturers shipments, inventories and orders survey (M3) for 2007; for fishing, hunting and trapping, National Oceanic and Atmospheric Administration (NOAA) Current Fishery Statistics Aquaculture of the United States for 2005–2007.	BLS PPI; national income and product accounts (NIPAs) personal consumption expenditure (PCE) implicit price indexes; NOAA domestic landing.
Mining		
Oil and gas extraction.....	U.S. Department of Energy (DOE) Energy Information Agency (EIA) data on quantities produced and prices.	BLS PPI; EIA data.
Mining, except oil and gas.....	For coal mining, EIA U.S. Coal Supply and Demand in Review; for uranium, EIA Marketing Annual Report; for all other, U.S. Geological Survey (USGS) Commodity Summaries.	EIA data; USGS; and BLS PPI.
Support activities for mining	For mining exploration, trade source data on drilling costs and footage drilled; all other support activities, USGS Mineral Commodity Summaries.	EIA; USGS; BLS PPI; and trade sources.
Utilities	For power generation and supply, EIA form 861; for natural gas distribution, EIA Natural Gas Monthly, new for 2007, revised for 2006 and 2005; for water, sewage and other systems, NIPA PCE water and sanitary services/maintenance.	BLS Consumer Price Index (CPI); BLS PPI.
Construction		
Residential	Census Bureau construction spending survey, new for 2007, revised for 2006 and 2005.	Census Bureau price deflator for new single-family houses under construction; BEA price index for multifamily home construction.
Non residential	Census Bureau construction spending survey new 2007, revised for 2006 and 2005; U.S. Department of Defense (DOD) expenditures; USDA expenditures.	BEA composite price indexes based on cost per square foot and cost indexes from trade source data and Census Bureau's price deflator for single-family houses under construction; BLS PPI.
Manufacturing	Shipments and inventories data from Census Bureau's M3 for 2007 and ASM for 2006 and 2005.	BLS PPI; NIPA price indexes based on DOD prices paid for military equipment; NIPA hedonic price indexes.
Wholesale trade	Census Bureau's monthly wholesale trade survey (MWTS) for 2007; Census Bureau's annual wholesale trade survey (AWTS) data for 2006 and 2005.	BLS PPI for sales; Census Bureau's AWTS data to derive margin rates
Retail trade	Census Bureau's monthly retail trade survey (MRTS) for 2007; Census Bureau's annual retail trade survey (ARTS) data for 2006 and 2005.	BLS CPI for sales; Census Bureau's ARTS data to derive margin rates.
Transportation and warehousing		
Air transportation.....	New Bureau of Transportation Statistics (BTS) Air Carrier Financial Statistics (ACFS) and Air Carrier Traffic Statistics (ACTS); and foreign trade statistics.	BLS PPI; BTS price deflators.
Rail transportation.....	For rail passenger, Amtrak Annual Report 2007; for rail freight, trade sources.	For rail passenger, BLS CPI; for freight, BLS PPI.
Water transportation.....	For freight, Army Corps of Engineers' Waterborne Commerce for 2007; for inland passenger travel on ferry boats and cruise ships, NIPA PCE for 2007; and trade source data on receipts.	BLS PPI; BLS CPI; trade source data.
Truck transportation.....	Census Bureau's services annual survey (SAS), preliminary for 2007 and revised for 2006 and 2005.	BLS PPI.
Transit and ground passenger transportation.....	BTS' National Transportation Statistics (NTS); BLS quarterly census of employment and wages (QCEW) data; PCE for ground passenger transportation.	PCE price indexes; QCEW data.
Pipeline transportation	Trade source data on receipts; Federal Energy Regulation Commission (FERC) form 6.	BLS PPI.
Other transportation and support activities	PCE; trade source data on receipts; ACFS and ACTS for 2007.	PCE; BLS PPI.
Warehousing and storage	Census Bureau's preliminary SAS data for 2007 and revised data for 2006 and 2005.	BLS PPI.
Information		
Publishing industries (includes software)	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005; BLS QCEW for 2007.	BEA price index for software; BLS PPI.
Motion picture and sound recording industries	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	PCE price indexes based on BLS CPI.
Broadcasting and telecommunications	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	BLS PPI.
Information and data processing services.....	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	PCE price indexes for information services; BLS PPI for data processing services.
Finance and insurance		
Federal Reserve banks, credit intermediation and related activities	Federal Deposit Insurance Corporation (FDIC) commercial bank call report data; Federal Reserve Board (FRB) data; Office of Thrift Supervision (OTS) data; BEA measures of financial services indirectly measured; private trade source data.	PCE implicit price deflators for financial services implicitly measured based on BLS quantity output indexes for commercial banks and employee hours for other depository institutions; BLS PPI and CPI.
Securities, commodity contracts, investments.....	Securities and Exchange Commission (SEC) Focus Report for 2006; Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	BLS PPI; PCE price indexes based on BLS CPI and BLS PPI.
Insurance carriers and related activities.....	For reinsurance carriers, life insurance, and property and casualty insurance, private trade source data, BLS QCEW data, and employer cost data.	PCE price indexes based on quantity extrapolations of property insurance premiums and benefits deflated with BLS CPI, composite input cost indexes for life insurance; quantity extrapolation of premium and benefits deflated with BLS PPI for medical insurance.
Funds, trusts, and other financial vehicles	NIPA imputed service charges for other financial institutions, Employee Benefits Security Administration (EBSA) data on pension funds.	BLS PPI and PCE price indexes based on quantity indexes for mutual funds sales deflator with BLS CPI.

See the abbreviations at the end of the table.

Source Data

Principal Sources of Data for Industry and Commodity Output and Prices—Table Ends

Industry and commodity	Source data for extrapolator	Source data for price indexes
Real estate and rental and leasing		
Real estate	For residential dwellings, Census Bureau's biannual American housing survey (AHS) and monthly current population survey (CPS) data on housing stock and rental price; USDA data on farm housing; for nonresidential dwellings, new Internal Revenue Service (IRS) tabulations of business tax returns for 2006; NIPA rental value of buildings owned by nonprofits.	For residential dwellings, BLS CPI based deflator; for nonresidential dwellings, BLS PPI; for real estate managers and agents, BLS PPI and trade source data.
Rental and leasing services and lessors of intangible assets	For rental and leasing services, Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005; for royalties, new IRS tabulations of business tax returns for 2006, and revised 2005 data.	BLS PPI; BTS and construction index.
Professional, scientific, and technical services		
Legal services	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	BLS PPI.
Computer systems design and related services	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	BEA price indexes for prepackage custom and own account software.
Miscellaneous professional, scientific and technical services	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	BLS PPI; BLS QCEW.
Management of companies and enterprises	BLS QCEW data.	BLS QCEW data.
Administrative and waste management services		
Administrative and support services	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005; BLS QCEW data.	PCE implicit price deflator based on BLS CPI data; BLS QCEW; BLS PPI.
Waste management and remediation services	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005; BLS QCEW data.	PCE implicit price deflator based on BLS CPI data; BLS QCEW; BLS PPI.
Educational Services	PCE data for education services based on data from the Department of Education and data from BLS consumer expenditure survey.	PCE price index based on trade source data for input costs.
Health care and social assistance		
Ambulatory health care services	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	PCE price index based on BLS CPI; BLS PPI.
Hospital and nursing and residential care facilities	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	PCE price index based on BLS CPI and Centers for Medicare and Medicaid services.
Social assistance	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	PCE price index based on trade source data on input costs.
Arts, entertainment, and recreation		
Performing arts, spectator sports, museums and related industries	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	PCE price index based on BLS CPI.
Amusement, gambling, and recreation industries	Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005.	PCE price index based on BLS CPI.
Accommodation and food services		
Accommodations	PCE for hotels and motels; for RV parks and bed and breakfasts, BLS QCEW data.	BLS PPI; PCE price index based on BLS CPI.
Food services and drinking places	Census Bureau ARTS.	ARTS; BLS PPI.
Other services, except government	For religious, grant making, civic and other non profits services, and personal services, and dry cleaning services, Census Bureau preliminary SAS data for 2007 and revised data for 2006 and 2005 and data from the National Center for Charitable Statistics (NCCS); for repair and maintenance, BLS QCEW; for private household services, PCE data.	BLS CPI; PCE price indexes based on BLS CPI.
Federal		
General government	NIPA government expenditure statistics; for federal structures, DOD investment expenditures data.	NIPA price index based on BLS PPI and BLS CPI; for military facilities, DOD data on employment, prices for military construction, construction cost indexes from trade sources.
Government enterprises	U.S. Postal Service (USPS) receipts; EIA data for electric utilities, Overseas Private Investment Corporation (OPIC), Federal Housing Administration data (FHA). Government agency data for specific federal enterprises.	BLS PPI; PCE price indexes based on BLS PPI and agency data.
State and local		
General	NIPA government expenditure statistics.	BLS PPI; PCE price index based on CPI.
Enterprises	NIPA statistics on government enterprises based on annual survey of government finances; Alaska Railroad Administration for Alaska ferries, waterports, and airports; EIA data for electric utilities; state and local structures Census Bureau's construction survey.	BLS PPI.
ACFS	Air Carrier Financial Statistics	NTS
AHS	American Housing Survey	OPIC
ASM	Annual Survey of Manufactures	OTS
ARTS	Annual Retail Trade Survey	PCE
AWTS	Annual Wholesale Trade Survey	PPI
BLS	Bureau of Labor Statistics	SAS
QCEW	Quarterly Census of Employment and Wages	SEC
BTS	Bureau of Transportation Statistics	USDA
CPI	Consumer Price Index	USGS
DOD	Department of Defense	USPS
DOE	Department of Energy	
EIA	Energy Information Administration	
FDIC	Federal Deposit Insurance Corporation	
FHA	Federal Housing Administration	
FERC	Federal Energy Regulatory Commission	
FRB	Federal Reserve Board	
IRS	Internal Revenue Service	
MRTS	Monthly Retail Trade Survey	
MWTS	Monthly Wholesale Trade Survey	
NCCS	National Center for Charitable Statistics	
NIPA	National Income and Product Accounts	
NOAA	National Oceanic and Atmospheric Administration	

Additional Information

Data Availability

The integrated annual GDP-by-industry and I-O estimates for 1998–2007 and historical estimates of GDP-by-industry for 1947–97 are available on BEA's Web site; go to www.bea.gov and click on "Annual Industry Accounts."

For the GDP-by-industry tables, click on "Interactive Tables" under "Gross Domestic Product (GDP) by Industry." Online tools are available for users to customize tables so that they show data only for the industries and years of interest. Tools are also available for creating graphs of data and downloading tables to update spreadsheets. A guide to the interactive GDP-by-industry

accounts tables is also available.

For I-O tables, from "Annual Industry Accounts," click on "Interactive Tables" under "Input-Output (I-O) Accounts." Online tools are available for users to create and store unique levels of aggregation of data for specific commodities and industries. Tools are also available for viewing and downloading entire I-O tables, including the "make" and "use" tables.

For a guide to the annual industry accounts tables, see Tameka R.L. Harris and Greg R. Linder, "Guide to the Annual Industry Accounts Tables," *SURVEY OF CURRENT BUSINESS* 85 (December 2005): 34–38.

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CIAD staff who prepared the estimates, and their areas of expertise, are listed below.

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Tables 1 through 26 follow.