# Annual Industry Accounts 

Revised Estimates for 2003-2005

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IN 2005, the services sector led real growth in the U.S. economy, reflecting continued strong growth in the following industry groups: Professional, scientific, and technical services; real estate and rental and leasing; and information. Thirty-one of the thirty-six detailed services-producing industries expanded in 2005. Growth in the goods sector was driven by the continued strength of durable-goods manufacturing and by accelerating growth in construction.

These conclusions are drawn from the 2006 annual update of the Bureau of Economic Analysis (BEA) annual industry accounts, released on December 11, 2006. This update includes revised and more detailed estimates of the gross-domestic-product-(GDP)-byindustry accounts for 2005, which are integrated with newly available input-output (I-O) accounts for 2005. This update also includes revised estimates of the integrated GDP-by-industry accounts and the annual I-O accounts for 2003 and 2004.

The revised estimates for 2005 provide information on value added for 65 industries and information on gross output and intermediate inputs for 65 industries and commodities. The previously published advance estimates for 2005 were prepared using a methodology developed for summary source data and were limited to value added for 21 industry groups. ${ }^{1}$

Highlights of the revised annual industry accounts include the following:

- The 2005 expansion was widespread among both goods-producing and services-producing industries; however, 8 of 25 goods-producing industries and 16 of 36 services-producing industries expanded at a slower rate in 2005 than in 2004.
- Real growth in the goods sector accelerated sharply to 4.8 percent in 2004 from 0.6 percent in 2003. In 2004, real growth in the goods sector exceeded real growth in the services sector ( 4.1 percent) for the first time since 2000 (chart 1).
- Durable-goods manufacturing increased 4.9 percent in 2005 after increasing 7.7 percent in 2004. In both years, durable-goods manufacturing contributed

[^0]Chart 1. Annual Growth in Real Value Added

U.S. Bureau of Economic Analysis
strongly to real GDP growth. Within durable-goods manufacturing, the largest contributor to real growth in 2003, 2004, and 2005 was computer and electronic products manufacturing, which experienced double-digit growth in 2005 for the third consecutive year.

- Accelerating growth in the retail trade and "administrative and waste management services" industries contributed significantly to real GDP growth in 2005.
- The largest contributors to real GDP growth in the services sector in 2005 were the following industry groups: Professional, scientific, and technical services; real estate and rental and leasing; and information. All three expanded at a slower rate in 2005 than in 2004.
- Information-communications-technology (ICT)producing industries experienced their second consecutive year of double-digit real growth in 2005, increasing 13.3 percent after increasing 13.7 percent
in 2004. ${ }^{2}$ These industries accounted for less than 4 percent of current-dollar GDP, but they accounted for more than 15 percent of real GDP growth.
- The value-added price index for the goods sector increased 6.1 percent in 2005, the largest increase since 1990 . Within goods, the value-added price index increased 43.8 percent for oil and gas extraction and 49.8 percent for petroleum and coal products manufacturing, reflecting the third straight year of strong increases in petroleum prices (chart 2).
- Continuing declines in the value-added price index for ICT-producing industries partly offset increases in the value-added price indexes for the oil and gas extraction and the petroleum and coal products manufacturing industries.
The revised annual industry accounts incorporate the most timely, most detailed, and most accurate source data available, including Census Bureau annual survey data on industry and commodity output, Bureau of Labor Statistics data on producer prices, and BEA estimates of final demand and industry returns to labor and capital from the 2006 annual revision of the national income and product accounts (NIPAs). These

2. The ICT-producing industry aggregate consists of computer and electronic products, publishing industries (includes software), information and data processing services, and computer systems design and related services.

Chart 2. Annual Growth in Chain-Type Price Indexes for Value Added

data were combined within an I-O framework that balances and reconciles industry production and commodity usage (see the appendix).

The remainder of this article is organized into four parts: First, a discussion of industry trends and developments; second, an analysis of the domestic output and domestic supply of commodities; third, a look at revisions to the previously published estimates; and fourth, an appendix that discusses the methodology used to revise the annual industry accounts. The detailed industry and commodity estimates are presented in tables 1-26 following the article (see the box "Data Availability").

## Industry Trends and Developments

## Real growth

Private goods-producing sector. Real growth in the goods sector slowed sharply to 2.1 percent in 2005 from 4.8 percent in 2004 and 0.6 percent in 2003 (table A). The goods sector, which accounts for about a fifth of current-dollar GDP, accounted for 12.8 percent of real GDP growth in 2005 and 24.1 percent in 2004 (table B). In 2004, growth in the goods sector exceeded growth in the services sector for the first time since 2000.

The 2005 deceleration in the goods sector was widespread; real growth in the manufacturing and "agriculture, forestry, fishing, and hunting" industry groups slowed, and growth in the mining industry group turned down. In contrast, growth in the construction

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

| Line |  | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Gross domestic product ....................................... | 1.6 | 2.5 | 3.9 | 3.2 |
| 2 | Private industries. | 1.4 | 2.7 | 4.2 | 3.3 |
| 3 | Agriculture, forestry, fishing, and hunting........................ | 5.5 | 7.5 | 6.1 | 0.1 |
| 4 | Mining ..................................................................... | -6.3 | -0.9 | 0.9 | -2.6 |
| 5 | Utilities . | 4.3 | 6.9 | 2.4 | 1.2 |
| 6 | Construction | -2.0 | -2.0 | 1.5 | 3.9 |
| 7 | Manufacturing.. | 2.8 | 1.1 | 6.5 | 2.2 |
| 8 | Durable goods ...................................................... | 1.7 | 2.6 | 7.7 | 4.9 |
| 9 | Nondurable goods | 4.2 | -0.8 | 4.9 | -1.3 |
| 10 | Wholesale trade........................................................ | 1.0 | 2.1 | 1.1 | 1.5 |
| 11 | Retail trade ............................................................... | 2.2 | 3.9 | 2.5 | 5.0 |
| 12 | Transportation and warehousing................................... | 2.2 | 2.0 | 5.2 | 4.0 |
| 13 | Information............................................................... | 2.1 | 3.0 | 11.4 | 9.0 |
| 14 | Finance, insurance, real estate, rental, and leasing .......... | 0.9 | 2.4 | 4.3 | 3.0 |
| 15 | Professional and business services........................ | -0.2 | 4.4 | 5.2 | 5.6 |
| 16 | Educational services, health care, and social assistance | 4.2 | 4.4 | 3.3 | 3.5 |
| 17 | Arts, entertainment, recreation, accommodation, and food services $\qquad$ | 1.7 | 3.1 | 3.0 | 1.4 |
| 18 | Other services, except government............................... | 0.3 | 2.0 | -0.5 | -0.7 |
| 19 | Government............................................................... | 1.7 | 1.3 | 0.5 | 0.7 |
|  | Addenda: |  |  |  |  |
| 20 | Private goods-producing industries ${ }^{1}$............................. | 1.3 | 0.6 | 4.8 | 2.1 |
| 21 | Private services-producing industries ${ }^{2}$.......................... | 1.5 | 3.3 | 4.1 | 3.7 |
| 22 | Information-communications-technology-producing industries ${ }^{3}$ $\qquad$ | 2.0 | 7.2 | 13.7 | 13.3 |

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.
industry group was strong, accelerating from 1.5 percent in 2004 to 3.9 percent in 2005, its strongest growth since 1998. The 2004 acceleration in real growth in the goods sector was broad-based. The agriculture, forestry, fishing, and hunting industry group was the only industry group to decelerate, increasing 6.1 percent in 2004 , compared with 7.5 percent in 2003.

The manufacturing industry group was the primary driver of both the deceleration in 2005 and the acceleration in 2004 in the goods sector, increasing 2.2 percent in 2005 after increasing 6.5 percent in 2004 and 1.1 percent in 2003. Manufacturing accounted for 8.4 percent of real GDP growth in 2005 and 20.3 percent in 2004. Despite slower growth, 12 of the 19 detailed manufacturing industries expanded in 2005, compared with 14 industries in 2004.

Within manufacturing, growth in durable goods decelerated in 2005, mainly because of slower growth in machinery, which increased 4.1 percent after increasing 14.3 percent in 2004, and a downturn in primary metals, which declined 1.0 percent after increasing 15.2 percent in 2004. Slower growth in these industries was partly offset by computer and electronic products manufacturing, which experienced double-digit
growth for the third consecutive year. The 19.9-percent growth in computer and electronic products accounted for more than 6 percent of real GDP growth in 2005, nearly six times this industry's share of currentdollar GDP. In 2004, durable-goods manufacturing growth accelerated sharply to 7.7 percent from 2.6 percent in 2003. The 2004 acceleration was due to strong upturns in primary metals, machinery, and other transportation equipment and an acceleration in fabricated metals.

Nondurable-goods manufacturing declined 1.3 percent in 2005 after increasing 4.9 percent in 2004 and decreasing 0.8 percent in 2003 . The largest contributors to both the 2005 acceleration and the 2004 deceleration in nondurable goods were petroleum and coal products and chemical products manufacturing. In 2005, strong downturns of 21.3 percent in petroleum and coal products and 1.7 percent in chemical products offset a strong upturn of 4.8 percent in the food, beverage, and tobacco industry. In 2004, petroleum and coal products turned up, growing 24.1 percent after declining 5.6 percent in 2003. Chemical products increased 8.3 percent after declining 0.5 percent in 2003.

Private services-producing sector. The services

Table B. Contributions to Growth in Real Gross Domestic Product Relative to Industry Group Size

| Line |  | 2003 |  |  | 2004 |  |  | 2005 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Share of real GDP growth ${ }^{1}$ | $\begin{gathered} \text { Share } \\ \text { of GDP }{ }^{2} \end{gathered}$ | Ratio ${ }^{3}$ | Share of real GDP growth ${ }^{1}$ | Share of GDP ${ }^{2}$ | Ratio ${ }^{3}$ | Share of real GDP growth ${ }^{1}$ | $\begin{gathered} \text { Share } \\ \text { of GDP }{ }^{2} \end{gathered}$ | Ratio ${ }^{3}$ |
| 1 | Gross domestic product. | 100.0 | 100.0 | 1.0 | 100.0 | 100.0 | 1.0 | 100.0 | 100.0 | 1.0 |
| 2 | Private industries | 92.4 | 87.1 | 1.1 | 94.6 | 87.3 | 1.1 | 90.9 | 87.4 | 1.0 |
| 3 | Agriculture, forestry, fishing, and hunting ................................... | 2.8 | 1.0 | 2.8 | 1.8 | 1.2 | 1.5 | 0.0 | 1.0 | 0.0 |
| 4 | Mining ................................................................................... | -0.4 | 1.3 | -0.3 | 0.3 | 1.5 | 0.2 | -1.3 | 1.9 | -0.7 |
| 5 | Utilities | 5.2 | 2.0 | 2.6 | 1.3 | 2.0 | 0.6 | 0.6 | 2.0 | 0.3 |
| 6 | Construction. | -4.0 | 4.5 | -0.9 | 1.8 | 4.6 | 0.4 | 5.9 | 4.9 | 1.2 |
| 7 | Manufacturing . | 6.0 | 12.4 | 0.5 | 20.3 | 12.3 | 1.6 | 8.4 | 12.1 | 0.7 |
| 8 | Durable goods. | 7.6 | 7.0 | 1.1 | 13.6 | 7.0 | 1.9 | 10.6 | 6.9 | 1.5 |
| 9 | Nondurable goods | -1.6 | 5.4 | -0.3 | 6.7 | 5.3 | 1.3 | -2.2 | 5.3 | -0.4 |
| 10 | Wholesale trade.. | 5.2 | 5.8 | 0.9 | 1.8 | 5.9 | 0.3 | 2.8 | 6.0 | 0.5 |
| 11 | Retail trade. | 10.8 | 6.9 | 1.6 | 4.4 | 6.7 | 0.7 | 10.3 | 6.6 | 1.6 |
| 12 | Transportation and warehousing. | 2.4 | 2.9 | 0.8 | 3.8 | 2.8 | 1.4 | 3.4 | 2.8 | 1.2 |
| 13 | Information.................. | 5.2 | 4.5 | 1.2 | 12.6 | 4.5 | 2.8 | 12.2 | 4.5 | 2.7 |
| 14 | Finance, insurance, real estate, rental, and leasing........................ | 19.6 | 20.5 | 1.0 | 22.3 | 20.6 | 1.1 | 18.8 | 20.4 | 0.9 |
| 15 | Finance and insurance.................................... | 11.2 | 7.9 | 1.4 | 4.4 | 7.8 | 0.6 | 5.3 | 7.7 | 0.7 |
| 16 | Real estate and rental and leasing ......................................... | 8.4 | 12.6 | 0.7 | 18.2 | 12.7 | 1.4 | 13.4 | 12.7 | 1.1 |
| 17 | Professional and business services... | 20.0 | 11.4 | 1.8 | 15.1 | 11.5 | 1.3 | 20.0 | 11.7 | 1.7 |
| 18 | Professional, scientific, and technical services ........................... | 10.4 | 6.7 | 1.6 | 13.3 | 6.8 | 2.0 | 14.4 | 6.9 | 2.1 |
| 19 | Management of companies and enterprises.............................. | 2.0 | 1.8 | 1.1 | 1.3 | 1.8 | 0.7 | 0.9 | 1.8 | 0.5 |
| 20 | Administrative and waste management services ......................... | 7.2 | 2.9 | 2.5 | 0.5 | 2.9 | 0.2 | 4.7 | 3.0 | 1.6 |
| 21 | Educational services, health care, and social assistance ................. | 13.6 | 7.8 | 1.7 | 6.7 | 7.8 | 0.9 | 8.4 | 7.8 | 1.1 |
| 22 | Educational services............................................................. | 1.2 | 0.9 | 1.3 | 0.5 | 0.9 | 0.6 | 0.6 | 0.9 | 0.7 |
| 23 | Health care and social assistance ........................................... | 12.4 | 6.9 | 1.8 | 5.9 | 6.9 | 0.9 | 7.8 | 6.9 | 1.1 |
| 24 | Arts, entertainment, recreation, accommodation, and food services | 4.4 | 3.6 | 1.2 | 2.8 | 3.6 | 0.8 | 1.6 | 3.6 | 0.4 |
| 25 | Arts, entertainment, and recreation ......................................... | 0.8 | 1.0 | 0.8 | 0.0 | 0.9 | 0.0 | 0.0 | 0.9 | 0.0 |
| 26 | Accommodation and food services .......................................... | 3.6 | 2.7 | 1.3 | 2.8 | 2.7 | 1.0 | 1.6 | 2.7 | 0.6 |
| 27 | Other services, except government ............................................. | 2.0 | 2.4 | 0.8 | -0.3 | 2.3 | -0.1 | -0.6 | 2.3 | -0.3 |
| 28 | Government .............................................................................. | 6.8 | 12.9 | 0.5 | 1.8 | 12.7 | 0.1 | 2.5 | 12.6 | 0.2 |
| 29 | Federal................................................................................. | 4.0 | 4.1 | 1.0 | 1.0 | 4.1 | 0.3 | -0.3 | 4.0 | -0.1 |
| 30 | State and local ........................................................................ | 2.8 | 8.8 | 0.3 | 0.8 | 8.6 | 0.1 | 2.8 | 8.5 | 0.3 |
|  | Addenda: |  |  |  |  |  |  |  |  |  |
| 31 | Private goods-producing industries ${ }^{4}$.......................................... | 4.4 | 19.3 | 0.2 | 24.1 | 19.6 | 1.2 | 12.8 | 19.9 | 0.6 |
| 32 | Private services-producing industries ${ }^{5}$........................................ | 88.0 | 67.8 | 1.3 | 70.5 | 67.7 | 1.0 | 77.8 | 67.5 | 1.2 |
| 33 | Information-communications-technology-producing industries ${ }^{6}$........ | 11.2 | 3.8 | 2.9 | 12.8 | 3.8 | 3.4 | 15.3 | 3.9 | 3.9 |
| 1. Equals the industry's contribution to growth in real GDP divided by the growth in real GDP times 100 . Shares of real GDP growth do not sum to 100 percent because the contribution of "not allocated by industry" is excluded. <br> 2. Equals the industry's value added divided by GDP times 100. <br> 3. Equals the industry's share of real GDP growth divided by its share of GDP. A ratio greater than 1 indicates the industry's contribution is large relative to its size in the economy. <br> 4. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing. <br> 5. 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. <br> 6. Consists of computer and electronic products; publishing industries (includes software); information and data processing services; and computer systems design and related services. |  |  |  |  |  |  |  |  |  |  |
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sector grew 3.7 percent in 2005 after growing 4.1 percent in 2004 and 3.3 percent in 2003. This sector accounted for nearly 80 percent of real GDP growth in 2005 and more than 70 percent of real GDP growth in 2004. However, this sector accounted for less than 70
percent of current-dollar GDP in both years. Despite slower growth in the services sector in 2005, 31 of the 36 services-producing industries expanded.

In 2005, the retail trade and "administrative and waste management services" industries contributed to

## Domestic Supply and Use of Oil and Gas Extraction and Petroleum and Coal Products

The annual industry accounts provide useful information for analyzing structural changes in the U.S. economy. In addition to showing industry interactions, they provide information on both the domestic supply and use of commodities. This box reviews the information the accounts provide about two commodities: (1) Oil and gas extraction products, primarily crude oil and natural gas, which have little practical use in their raw state, and (2) petroleum and coal products, the refined products derived from these raw materials.

Summary-level use tables (available on BEA's Web site) show that the domestic supply of oil and gas extraction products in current-dollar producer prices increased at an average annual rate of 22.5 percent between 1998 and 2005. Over the same period, real domestic supply was unchanged, indicating that the increase in current-dollar output was primarily due to an increase in producer prices (chart A).

Chart A. Domestic Supply of Oil and Gas Extraction Commodities


The level of real domestic supply did not change over this period, but the sources of domestic supply did change. Real domestic output declined at an average annual rate of 1.5 percent, and real imports increased at an average annual rate of 2.0 percent (table A).

Table A. Real Supply and Use of Oil and Gas Extraction Products [Billions of chained (2000) dollars] ${ }^{1}$

|  | 1998 | 2005 | Average annual growth in 1998-2005 |
| :---: | :---: | :---: | :---: |
| Domestic supply ${ }^{2}$.. | 231.9 | 231.7 | 0.0 |
| Domestic output............................. | 129.6 | 116.6 | -1.5 |
| Plus: Imports ................................. | 105.3 | 120.7 | 2.0 |
| Less: Exports................................ | 3.0 | 2.2 | -4.2 |
| Domestic use | 231.9 | 231.7 | 0.0 |
| Oil and gas extraction industry ........... | 14.9 | 21.3 | 5.2 |
| Petroleum and coal products manufacturing industry | 144.7 | 139.7 | -0.5 |
| Other industries ${ }^{3}$............................ | 72.6 | 70.5 | -0.4 |

1. Chained-dollar estimates are usually not additive because they are calculated using weights from more than one period.
2. Equals domestic output plus imports, less exports, less change in private inventory.
3. Includes net deposits into the strategic petroleum reserve.

The composition of real domestic use of oil and gas extraction products also changed over this period. Demand by the oil and gas extraction industry for its own primary output increased at an average annual rate of 5.2 percent. Although this industry's demand is a relatively small share of total demand for these products, this increase offset declining real demand in all other industries.
Real domestic use of petroleum and coal products increased at an average annual rate of 1.0 percent from 1998 to 2005, almost entirely because of an increase in personal consumption expenditures (table B). This increase in real final demand was primarily met by imports, which increased at an average annual rate of nearly 10 percent. Domestic output increased at an average annual rate of just 0.3 percent.

Table B. Real Supply and Use of Petroleum and Coal Products
[Billions of chained (2000) dollars] ${ }^{1}$

|  | 1998 | 2005 | $\begin{gathered} \text { Average } \\ \text { annual growth in } \\ 1998-2005 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Domestic supply ${ }^{2}$ | 230.7 | 248.0 | 1.0 |
| Domestic output............................ | 222.8 | 227.9 | 0.3 |
| Plus: Imports ................................ | 18.1 | 34.4 | 9.6 |
| Less: Exports.............................. | 12.9 | 11.3 | -1.9 |
| Domestic use. | 230.7 | 248.0 | 1.0 |
| Oil and gas extraction industry .......... | 0.5 | 0.7 | 4.6 |
| Petroleum and coal products manufacturing industry | 16.7 | 17.8 | 1.0 |
| Other industries ................................ | 134.5 | 139.1 | 0.5 |
| Personal consumption expenditures... | 79.1 | 90.6 | 2.0 |

[^1]strong growth in the services sector; retail trade growth accelerated to 5.0 percent from 2.5 percent in 2004, and "administrative and waste management services" growth accelerated to 5.3 percent from 0.8 percent in 2004. Despite slower growth, the "professional, scientific, and technical services," "real estate and rental and leasing," and information industry groups were the largest services-producing contributors to real GDP growth in 2005, accounting for nearly 40 percent of the growth. In 2004, growth in the information and "professional, scientific, and technical services" industry groups led the acceleration in the services sector, increasing 11.4 percent and 7.8 percent, respectively.

In both 2004 and 2005, the information industry group accounted for more than 12 percent of real GDP growth. Its contribution to growth was nearly three times its share of current-dollar GDP. Within the information industry group, growth was strong in the publishing industry (includes software) ( 12.9 percent in 2005 and 12.5 percent in 2004) and the broadcasting and telecommunications industry ( 7.4 percent in 2005 and 11.8 percent in 2004).

All three industries within the professional, scientific, and technical services industry group experienced decelerating growth in 2005 and accelerating growth in 2004. Despite decelerating in 2005, the "computer systems design and related services" and "miscellaneous professional, scientific, and technical services" industries remained strong, with growth of 7.5 percent and 8.8 percent, respectively. Growth in the legal services
industry slowed to 0.8 percent in 2005 , from 3.5 percent in 2004.

Within the transportation and warehousing industry group, truck transportation was the largest contributor to real GDP growth, increasing 4.6 percent in 2005 and 7.8 percent in 2004 . Real growth in pipeline transportation turned up strongly in 2005, increasing 19.6 percent after decreasing 0.3 percent in 2004 and 3.3 percent in 2003.

In contrast to services-sector growth patterns, the wholesale trade, retail trade, "finance and insurance," and "administrative and waste management services" industries experienced stronger growth in 2005 and weaker growth in 2004.

ICT-producing industries. In 2005, ICT-producing industries, which include detailed industries from both the goods and services sectors, continued to show strong growth, increasing 13.3 percent in 2005 after increasing 13.7 percent in 2004 and 7.2 percent in 2003. In 2005, ICT-producing industries accounted for 15.3 percent of real GDP growth, almost four times their share of current-dollar GDP. Computers and electronic products, the only goods-producing industry within the ICT-producing industries, accounted for 41 percent of the ICT-producing industries' contribution to real GDP growth.

## Value-added price growth

Changes in the value-added price index reflect changes in the prices of labor and capital (primary) inputs for

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an industry, including changes in the industry's unit profit margins. ${ }^{3}$ In general, an industry's value-added price index will increase if the industry's output prices increase more (or decrease less) than its intermediate (secondary) input prices. Alternatively, an industry's value-added price index will decline if its intermediateinput prices increase more (or decrease less) than its output prices.

Private goods-producing sector. The value-added price index for the goods sector increased 6.1 percent in 2005 after increasing 3.3 percent in 2004 and 3.2 percent in 2003. Strong value-added price growth in 2005 marked the third consecutive year that growth in the goods sector exceeded growth in the services sector. The 2005 increase in the goods sector accounted for 39.7 percent of GDP price growth, the largest share since 1966 (table C).

The large 2005 acceleration in the value-added price index for the goods sector was driven by increases in mining and nondurable-goods manufacturing. The value-added price index for mining increased 39.2 per-

[^2]cent in 2005 after increasing 19.0 percent in 2004 and 35.8 percent in 2003 (table D). Strong growth in the value-added price index for mining was primarily due

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

| Line |  | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Gross domestic product .............................................. | 1.7 | 2.1 | 2.8 | 3.0 |
| 2 | Private industries | 1.5 | 1.8 | 2.8 | 3.1 |
| 3 | Agriculture, forestry, fishing, and hunting.. | -7.5 | 11.5 | 17.0 | -13.4 |
| 4 | Mining .. | -4.2 | 35.8 | 19.0 | 39.2 |
| 5 | Utilities . | -1.7 | -0.8 | 4.4 | 4.2 |
| 6 | Construction | 4.8 | 5.0 | 7.4 | 8.7 |
| 7 | Manufacturing .................................................................. | -1.9 | -0.6 | -0.9 | 3.2 |
| 8 | Durable goods ............................................................ | -2.2 | -2.9 | -1.4 | -0.6 |
| 9 | Nondurable goods | -1.4 | 2.5 | -0.2 | 8.4 |
| 10 | Wholesale trade | 0.4 | 1.3 | 6.8 | 6.4 |
| 11 | Retail trade . | 1.8 | 0.5 | 1.4 | 0.4 |
| 12 | Transportation and warehousing. | 0.3 | 1.9 | -0.9 | 0.4 |
| 13 | Information.. | -0.9 | -1.7 | -2.9 | -3.7 |
| 14 | Finance, insurance, real estate, rental, and leasing | 3.1 | 2.4 | 2.9 | 2.3 |
| 15 | Professional and business services.......................... | 2.1 | 0.6 | 2.5 | 2.6 |
| 16 | Educational services, health care, and social assistance.......... | 3.8 | 2.7 | 3.3 | 3.0 |
| 17 | Arts, entertainment, recreation, accommodation, and food services $\qquad$ | 3.7 | 1.4 | 3.1 | 3.4 |
| 18 | Other services, except government..................................... | 4.2 | 3.0 | 3.8 | 3.9 |
| 19 | Government...................................................................... | 4.6 | 4.6 | 4.6 | 4.2 |
|  | Addenda: |  |  |  |  |
| 20 | Private goods-producing industries ${ }^{1}$.................................... | -0.8 | 3.2 | 3.3 | 6.1 |
| 21 | Private services-producing industries ${ }^{2}$................................. | 2.2 | 1.4 | 2.6 | 2.3 |
| 22 | Information-communications-technology-producing industries ${ }^{3}$ | -3.7 | -5.7 | -6.3 | -4.3 |

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

Table C. Contributions to Percent Change in the Chain-Type Price Index for Gross Domestic Product Relative to Industry Group Size

| Line |  | 2003 |  |  | 2004 |  |  | 2005 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Share of GDP price growth ${ }^{1}$ | $\begin{gathered} \text { Share } \\ \text { of GDP } 2 \end{gathered}$ | Ratio ${ }^{3}$ | Share of GDP price growth ${ }^{1}$ | $\begin{gathered} \text { Share } \\ \text { of GDP } 2 \end{gathered}$ | Ratio ${ }^{3}$ | Share of GDP price growth ${ }^{1}$ | $\begin{gathered} \text { Share } \\ \text { of GDP }{ }^{2} \end{gathered}$ | Ratio ${ }^{3}$ |
| 1 | Gross domestic product.. | 100.0 | 100.0 | 1.0 | 100.0 | 100.0 | 1.0 | 100.0 | 100.0 | 1.0 |
| 2 | Private industries. | 74.8 | 87.1 | 0.9 | 86.1 | 87.3 | 1.0 | 91.0 | 87.4 | 1.0 |
| 3 | Agriculture, forestry, fishing, and hunting ................................. | 5.2 | 1.0 | 5.2 | 6.4 | 1.2 | 5.4 | -5.3 | 1.0 | -5.3 |
| 4 | Mining....................................................................... | 17.1 | 1.3 | 13.2 | 8.9 | 1.5 | 6.0 | 18.7 | 1.9 | 9.8 |
| 5 |  | -1.0 | 2.0 | -0.5 | 3.2 | 2.0 | 1.6 | 2.7 | 2.0 | 1.3 |
| 6 | Construction................................................................. | 11.0 | 4.5 | 2.4 | 11.8 | 4.6 | 2.6 | 13.3 | 4.9 | 2.7 |
| 7 | Manufacturing ... | -3.8 | 12.4 | -0.3 | -3.9 | 12.3 | -0.3 | 13.0 | 12.1 | 1.1 |
| 8 | Durable goods................................................................... | -10.5 | 7.0 | -1.5 | -3.6 | 7.0 | -0.5 | -1.3 | 6.9 | -0.2 |
| 9 | Nondurable goods....................................................... | 6.7 | 5.4 | 1.2 | -0.4 | 5.3 | -0.1 | 14.3 | 5.3 | 2.7 |
| 10 | Wholesale trade ............................................................ | 3.8 | 5.8 | 0.7 | 13.9 | 5.9 | 2.4 | 12.7 | 6.0 | 2.1 |
| 11 | Retail trade................................................................... | 1.9 | 6.9 | 0.3 | 3.2 | 6.7 | 0.5 | 1.0 | 6.6 | 0.2 |
| 12 | Transportation and warehousing...... | 2.4 | 2.9 | 0.8 | -1.1 | 2.8 | -0.4 | 0.3 | 2.8 | 0.1 |
| 13 | Information..................................................................... | -3.8 | 4.5 | -0.8 | -4.6 | 4.5 | -1.0 | -5.7 | 4.5 | -1.3 |
| 14 | Finance, insurance, real estate, rental, and leasing...................... | 22.9 | 20.5 | 1.1 | 21.4 | 20.6 | 1.0 | 15.7 | 20.4 | 0.8 |
| 15 | Finance and insurance..................................................... | 5.7 | 7.9 | 0.7 | 11.1 | 7.8 | 1.4 | 5.7 | 7.7 | 0.7 |
| 16 | Real estate and rental and leasing ..................................... | 17.1 | 12.6 | 1.4 | 10.4 | 12.7 | 0.8 | 10.0 | 12.7 | 0.8 |
| 17 | Professional and business services .............................................. | 3.3 | 11.4 | 0.3 | 10.4 | 11.5 | 0.9 | 10.0 | 11.7 | 0.9 |
| 18 | Professional, scientific, and technical services ........................ | 0.0 | 6.7 | 0.0 | 1.4 | 6.8 | 0.2 | 4.0 | 6.9 | 0.6 |
| 19 | Management of companies and enterprises.......................... | 2.9 | 1.8 | 1.6 | 3.2 | 1.8 | 1.8 | 3.3 | 1.8 | 1.9 |
| 20 | Administrative and waste management services ....................... | 0.5 | 2.9 | 0.2 | 5.7 | 2.9 | 2.0 | 2.7 | 3.0 | 0.9 |
| 21 | Educational services, health care, and social assistance ................ | 10.0 | 7.8 | 1.3 | 9.3 | 7.8 | 1.2 | 8.0 | 7.8 | 1.0 |
| 22 | Educational services ..................................................... | 1.4 | 0.9 | 1.6 | 1.8 | 0.9 | 2.0 | 1.7 | 0.9 | 1.9 |
| 23 | Health care and social assistance ........................................ | 8.6 | 6.9 | 1.2 | 7.5 | 6.9 | 1.1 | 6.3 | 6.9 | 0.9 |
| 24 | Arts, entertainment, recreation, accommodation, and food services | 2.4 | 3.6 | 0.7 | 3.9 | 3.6 | 1.1 | 4.0 | 3.6 | 1.1 |
| 25 | Arts, entertainment, and recreation ..................................... | 1.4 | 1.0 | 1.4 | 1.1 | 0.9 | 1.2 | 1.0 | 0.9 | 1.1 |
| 26 | Accommodation and food services ....................................... | 1.4 | 2.7 | 0.5 | 3.2 | 2.7 | 1.2 | 3.0 | 2.7 | 1.1 |
| 27 | Other services, except government ......................................... | 3.3 | 2.4 | 1.4 | 3.2 | 2.3 | 1.4 | 3.0 | 2.3 | 1.3 |
| 28 |  | 28.1 | 12.9 | 2.2 | 20.7 | 12.7 | 1.6 | 17.7 | 12.6 | 1.4 |
| 29 | Federal ........................................................................... | 9.5 | 4.1 | 2.3 | 8.2 | 4.1 | 2.0 | 6.0 | 4.0 | 1.5 |
| 30 | State and local .................................................................. | 18.6 | 8.8 | 2.1 | 12.9 | 8.6 | 1.5 | 11.7 | 8.5 | 1.4 |
|  | Addenda: |  |  |  |  |  |  |  |  |  |
| 31 | Private goods-producing industries ${ }^{4}$.................................... | 29.0 | 19.3 | 1.5 | 23.2 | 19.6 | 1.2 | 39.7 | 19.9 | 2.0 |
| 32 | Private services-producing industries ${ }^{5}$................................... | 45.7 | 67.8 | 0.7 | 62.9 | 67.7 | 0.9 | 51.3 | 67.5 | 0.8 |
| 33 | Information-communications-technology-producing industries ${ }^{6}$....... | -11.0 | 3.8 | -2.9 | -9.3 | 3.8 | -2.4 | -5.7 | 3.9 | -1.5 |

[^3]5. 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 ervices, except governmen
6. Consists of computer and electronic products; publishing industries (includes software); information and data processing services; and computer systems design and related services.
to accelerating growth in the oil and gas extraction industry. In 2005, gross-output prices for the oil and gas extraction industry surged for the third consecutive year, contributing to strong growth in this industry's value-added price index.

Growth in the value-added price index for nondura-ble-goods manufacturing industries turned up in 2005, increasing 8.4 percent after decreasing 0.2 percent in 2004 and increasing 2.5 percent in 2003.

Private services-producing sector. In 2005, growth in the value-added price index for the services sector decelerated to 2.3 percent and accounted for just over half of GDP price growth. This slowdown was widespread; growth in the value-added price index decelerated (or declined more) in 6 of the 10 major servicesproducing industry groups. In 2004, the value-added price index for this sector increased 2.6 percent; this increase accounted for 62.9 percent of GDP price growth.

Despite decelerating growth in the value-added price index, the wholesale trade and "real estate and rental and leasing" industries were the largest contributors to value-added price growth in 2005, accounting for 22.7 percent of GDP price growth.

The value-added price index in the information industry declined at steadily increasing rates in each of the last 3 years, falling 1.7 percent in 2003, 2.9 percent in 2004, and 3.7 percent in 2005 . The value-added price index for three of the four industries within the information industry group declined in all 3 years.

Petroleum prices. Rising petroleum prices boosted the price of energy inputs within both the services and goods sectors, putting downward pressure on the value-added price index of petroleum-dependent industries. For example, the price for energy inputs in the air transportation industry increased 42.6 percent in 2005 and 26.2 percent in 2004, contributing to a de-
crease in the industry's value-added price index of 14.1 percent in 2005 and 18.0 percent in 2004.

ICT-producing industries. The value-added price index for ICT-producing industries continued to decline in 2005, decreasing 4.3 percent after decreasing 6.3 percent in 2004 and 5.7 percent in 2003. Declining value-added prices in ICT-producing industries partially offset the higher value-added prices in the "oil and gas extraction" and "petroleum and coal products" industries in 2005 and fully offset increases in these industries in 2004.

## Composition of value added

Value added for an industry equals the difference between the value of its gross output and the cost of its intermediate inputs (energy, materials, and purchased services). Value added consists of the industry's returns to labor and capital-its primary inputs to produc-tion-and the industry's net return to government. The return to labor is approximated by the industry's compensation of employees, and the return to capital is approximated by its gross operating surplus. The industry's net return to government is approximated by its taxes on production and imports less subsidies.

Economy-wide, labor (compensation) accounted for 56.5 percent of value added in 2005, down from 58.7 percent in 2001 (table E). Capital (gross operating surplus) accounted for 36.6 percent of value added in 2005, up from to 34.6 percent in 2001. This trend of changing value-added composition was evident in both the goods and services sectors, but it was more pronounced in the goods sector.

In the goods sector, labor accounted for 57.1 percent of value added in 2005 , compared with 63.1 percent in 2001. Capital accounted for 40.3 percent in 2005, up 5.8 percentage points from 34.5 percent in 2001. In comparison, the capital share decreased 2.6 percentage

Table E. Components of Value Added by Industry Sector as a Percentage of Value Added
[Percent]

| Line |  | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Gross domestic product. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 2 | Compensation of employees.. | 57.4 | 57.9 | 59.0 | 58.7 | 58.2 | 57.8 | 56.8 | 56.5 |
| 3 | Taxes on production and imports less subsidies...................................... | 6.9 | 6.8 | 6.8 | 6.6 | 6.9 | 6.9 | 7.0 | 6.9 |
| 4 | Gross operating surplus..................................................................... | 35.7 | 35.3 | 34.3 | 34.6 | 34.8 | 35.3 | 36.2 | 36.6 |
| 5 | Private goods-producing industries ${ }^{1}$....................................................... | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 6 | Compensation of employees................................................................... | 60.4 | 61.4 | 62.4 | 63.1 | 62.9 | 61.8 | 58.6 | 57.1 |
| 7 | Taxes on production and imports less subsidies. | 2.5 | 2.1 | 2.1 | 2.4 | 2.9 | 2.8 | 2.9 | 2.6 |
| 8 | Gross operating surplus........................................................................ | 37.1 | 36.5 | 35.5 | 34.5 | 34.2 | 35.5 | 38.5 | 40.3 |
| 9 | Private services-producing industries ${ }^{2}$. | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 10 | Compensation of employees.. | 51.5 | 51.9 | 53.2 | 52.7 | 51.8 | 51.3 | 50.9 | 50.9 |
| 11 | Taxes on production and imports less subsidies......................................... | 9.9 | 9.7 | 9.6 | 9.3 | 9.6 | 9.6 | 9.7 | 9.7 |
| 12 | Gross operating surplus........................................................................ | 38.7 | 38.3 | 37.1 | 38.0 | 38.6 | 39.0 | 39.5 | 39.4 |
| 13 | Information-communications-technology-producing industries ${ }^{3}$................ | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| 14 | Compensation of employees................................................................... | 71.5 | 75.2 | 83.5 | 85.8 | 79.3 | 76.8 | 76.0 | 73.7 |
| 15 | Taxes on production and imports less subsidies......................................... | 1.7 | 1.6 | 1.6 | 1.9 | 2.0 | 2.0 | 2.0 | 2.0 |
| 16 | Gross operating surplus.............................................................................. | 26.8 | 23.2 | 14.9 | 12.3 | 18.8 | 21.2 | 22.0 | 24.3 |

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
ervices, 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.
points between 1998 and 2001. In the durable-goods manufacturing industry, the share of value added accounted for by labor declined 3.3 percentage points, from 75.0 percent in 2001 to 71.7 percent in 2005. This decline follows a 7.3-percentage-point increase from 1998 to 2001.

In the services sector, labor accounted for 50.9 percent of value added in 2005, down 1.8 percentage points from 52.7 percent in 2001. Capital accounted for 39.4 percent in 2005, up 1.4 percentage points from 38.0 percent in 2001. Within the services sector, the largest changes in recent years to the composition of value added were in the information industry group: An 8.0-percentage-point decrease in the labor share of value added and an 8.1-percentage-point increase in the capital share of value added.

In ICT-producing industries, labor accounted for 73.7 percent of value added in 2005, down 12.1 percentage points from 85.8 percent in 2001. The capital share of value added increased 12.0 percentage points, from 12.3 percent in 2001 to 24.3 percent in 2005. This followed a decline of 14.5 percentage points between 1998 and 2001.

## Domestic Supply and Use of Commodities

Domestic supply is the value of goods and services available for domestic final and intermediate consumption and is estimated as the value of domestic

[^4]output plus imports less exports less the change in private inventories. Domestic output is the value of commodities produced by labor and property located within the United States. The domestic supply of commodities is consumed by persons as final consumption, by private businesses as intermediate inputs or fixed investment, or by government as intermediate inputs, gross investment, or final consumption.

Domestic goods output as a percentage of domestic goods supply fell to 87.7 percent in 2005 from 89.0 percent in 2004 and 89.2 percent in 2003; however, current-dollar domestic goods output increased 8.2 percent in 2005 and 8.6 percent in 2004. Imports as a percentage of domestic supply increased 0.8 percentage point to 22.1 percent in 2005 from 21.3 percent in 2004 (table F).

Table F. Components of Domestic Supply by Commodity Group as a Percentage of Domestic Supply
[Percent]

| Line |  | 2003 | 2004 | 2005 |
| :---: | :---: | :---: | :---: | :---: |
| 1 | Total domestic supply of all commodities ${ }^{1}$................. | 100.0 | 100.0 | 100.0 |
| 2 | Domestic output. | 97.6 | 97.5 | 97.0 |
| 3 | Plus: Imports .... | 7.1 | 7.6 | 8.0 |
| 4 | Less: Exports.. | 4.6 | 4.8 | 4.9 |
| 5 | Less: Change in private inventories........................... | 0.1 | 0.3 | 0.1 |
| 6 | Goods ${ }^{2}$ | 100.0 | 100.0 | 100.0 |
| 7 | Domestic output....................................................... | 89.2 | 89.0 | 87.7 |
| 8 | Plus: Imports ............................................................ | 19.9 | 21.3 | 22.1 |
| 9 | Less: Exports........................................................... | 8.7 | 9.0 | 9.0 |
| 10 | Less: Change in private inventories.............................. | 0.4 | 1.4 | 0.8 |
| 11 | Services ${ }^{3}$. | 100.0 | 100.0 | 100.0 |
| 12 | Domestic output....................................................... | 102.2 | 102.5 | 102.5 |
| 13 | Plus: Imports ............................................................ | 0.3 | 0.3 | 0.3 |
| 14 | Less: Exports........................................................... | 2.5 | 2.6 | 2.7 |
| 15 | Less: Change in private inventories.............................. | 0.0 | 0.1 | 0.1 |

1. Includes noncomparable imports, scrap, used goods, inventory valuation adjustment, and rest-of-theworld adjustments.
2. Consists of commodities from agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.
3. Consists of services from 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.

Within goods, the import share of manufactured commodities increased 0.6 percentage point to 26.5 percent in 2005 from 25.9 percent in 2004, and the import share of mining commodities increased 1.4 percentage points to 38.8 percent in 2005 from 37.4 percent in 2004. Net exports in 2005 were negative for nearly all 25 detailed goods commodities. Farms, "mining, except oil and gas," and "other" transportation equipment were the only significant exceptions.

Imports accounted for less than 1 percent of the domestic supply of services in both 2004 and 2005. Net exports in 2005 were negative for just 5 of the 36 detailed services commodities: Utilities; truck transportation; insurance carriers and related activities; performing arts, spectator sports, museums, and related activities; and other services, except government.

In 2005, 21.3 percent of the domestic supply of goods was consumed by households and nonprofit institutions serving households (personal consumption expenditures) while 69.5 percent was consumed by
private business as fixed investment or intermediate consumption. Government consumption expenditures, gross investment, and intermediate consumption accounted for 9.2 percent of the domestic supply of goods. For services, 50.8 percent of domestic supply was consumed by households and nonprofit institutions serving households, 44.1 percent by private business, and the remaining 5.1 percent by government.

## Revisions

The revised estimates of industry value added were prepared using the integrated annual GDP-by-industry and I-O accounts methodology and incorporated more complete, more detailed, and more reliable source data. The integrated accounts methodology combines the source data within an I-O framework that balances and reconciles industry production with commodity usage. The newly available source data include Census Bureau annual survey data on gross output, Bureau of Labor Statistics data on producer prices, and BEA estimates of final demand and industry returns to labor and capital from the 2006 annual revision of the NIPAs. The previously published estimates for 2005 were prepared using an abbreviated methodology.

For 2003 and 2004, the revised estimates incorporate revised NIPA estimates and, for manufacturing, newly available source data from the 2004 Annual Survey of Manufacturers (ASM). The previously published manufacturing estimates for 2004 reflected the use of Census Bureau manufacturers' shipments, inventories, and orders (M3) survey data. The previously
published manufacturing estimates for 2003 reflected the use of the 2003 ASM.

GDP-by-industry accounts. The overall pattern of growth in the revised estimates is consistent with previously published estimates for all years, confirming the pattern of decelerating growth in 2005 and accelerating growth in 2004.

Real growth in value added for private industries was revised down in 2005 because of downward revisions to the goods and services sectors (table G). Growth in the goods sector was revised down 0.6 percentage point to 2.1 percent, and growth in the services sector was revised down 0.4 percentage point to 3.7 percent in 2005. Real growth for private industries in 2004 was also revised down because of a downward revision of 0.8 percentage point in the services sector that more than offset an upward revision of 1.0 percentage point in the goods sector.

The largest source of revisions within the goods sector was the manufacturing industry group; it was revised down 1.8 percentage points for 2005 and up 1.7 percentage points for 2004. Within manufacturing, nondurable goods was revised down 2.9 percentage points for 2005 and revised up 2.2 percentage points for 2004.

Revisions to the nondurable-goods manufacturing industries were primarily due to revisions in the petroleum and coal products industry. In 2005, real value added for the petroleum and coal products industry was revised down significantly, reflecting both a large downward revision to current-dollar value added and an upward revision to the value-added price index for

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

| Line |  | 2003 |  |  | 2004 |  |  | 2005 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Previously published (percent) | Revised (percent) | Revision (percentage points) | Previously published (percent) | Revised (percent) | Revision (percentage points) | Previously published (percent) | Revised (percent) | Revision (percentage points) |
| 1 | Gross domestic product..................................................... | 2.7 | 2.5 | -0.2 | 4.2 | 3.9 | -0.3 | 3.5 | 3.2 | -0.3 |
| 2 | Private industries | 2.8 | 2.7 | -0.1 | 4.6 | 4.2 | -0.4 | 3.8 | 3.3 | -0.4 |
| 3 | Agriculture, forestry, fishing, and hunting ...................................... | 7.6 | 7.5 | -0.1 | 1.8 | 6.1 | 4.4 | -4.4 | 0.1 | 4.6 |
| 4 | Mining ................................................................................... | -1.5 | -0.9 | 0.6 | 2.3 | 0.9 | -1.4 | -2.6 | -2.6 | 0.0 |
| 5 | Utilities .................................................................................. | 7.8 | 6.9 | -0.9 | 1.1 | 2.4 | 1.3 | 0.4 | 1.2 | 0.7 |
| 6 | Construction. | -1.3 | -2.0 | -0.7 | 2.5 | 1.5 | -1.0 | 2.7 | 3.9 | 1.2 |
| 7 | Manufacturing ......................................................................... | 1.9 | 1.1 | -0.7 | 4.8 | 6.5 | 1.7 | 4.0 | 2.2 | -1.8 |
| 8 | Durable goods..................................................................... | 4.3 | 2.6 | -1.7 | 6.3 | 7.7 | 1.3 | 5.7 | 4.9 | -0.8 |
| 9 | Nondurable goods............................................................... | -1.2 | -0.8 | 0.4 | 2.7 | 4.9 | 2.2 | 1.6 | -1.3 | -2.9 |
| 10 | Wholesale trade ...................................................................... | 2.2 | 2.1 | -0.1 | 4.6 | 1.1 | -3.5 | 1.2 | 1.5 | 0.3 |
| 11 | Retail trade............................................................................. | 3.6 | 3.9 | 0.3 | 6.4 | 2.5 | -3.8 | 2.9 | 5.0 | 2.1 |
| 12 | Transportation and warehousing................................................. | 3.7 | 2.0 | -1.6 | 4.0 | 5.2 | 1.2 | 3.7 | 4.0 | 0.3 |
| 13 | Information ............................................................................. | 2.7 | 3.0 | 0.3 | 12.8 | 11.4 | -1.4 | 7.4 | 9.0 | 1.6 |
| 14 | Finance, insurance, real estate, rental, and leasing........................ | 3.4 | 2.4 | -1.1 | 3.8 | 4.3 | 0.5 | 4.1 | 3.0 | -1.2 |
| 15 | Professional and business services ............................................ | 3.2 | 4.4 | 1.2 | 6.4 | 5.2 | -1.3 | 5.9 | 5.6 | -0.3 |
| 16 | Educational services, health care, and social assistance ................ | 2.8 | 4.4 | 1.6 | 3.2 | 3.3 | 0.1 | 4.3 | 3.5 | -0.8 |
| 17 | Arts, entertainment, recreation, accommodation, and food services | 2.9 | 3.1 | 0.1 | 3.0 | 3.0 | 0.0 | 4.1 | 1.4 | -2.7 |
| 18 | Other services, except government ................................................ | 1.1 | 2.0 | 0.8 | 1.2 | -0.5 | -1.7 | 2.4 | -0.7 | -3.1 |
| 19 | Government .............................................................................. | 1.3 | 1.3 | 0.0 | 1.0 | 0.5 | -0.5 | 1.1 | 0.7 | -0.5 |
|  | Addenda: |  |  |  |  |  |  |  |  |  |
| 20 | Private goods-producing industries ${ }^{1}$.......................................... | 1.2 | 0.6 | -0.6 | 3.9 | 4.8 | 1.0 | 2.6 | 2.1 | -0.6 |
| 21 | Private services-producing industries ${ }^{2}$....................................... | 3.2 | 3.3 | 0.0 | 4.9 | 4.1 | -0.8 | 4.1 | 3.7 | -0.4 |
| 22 | Information-communications-technology-producing industries ${ }^{3}$....... | 6.7 | 7.2 | 0.5 | 12.9 | 13.7 | 0.8 | 11.9 | 13.3 | 1.4 |

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.
the industry. The revision to current-dollar value added reflects the incorporation of greater industry detail of NIPA business-income measures. The revisions to the value-added price index reflect the incorporation of revised producer price indexes from the Bureau of Labor Statistics. In addition, revisions to the price index reflect the use of the integrated accounts double-deflation methodology rather than the singledeflation methodology used to prepare the advance estimates. ${ }^{4}$

For 2004, real growth for the petroleum and coal products industry was revised up 29.4 percentage points. This revision reflects a large upward revision to current-dollar value added for the industry that resulted from incorporating revised NIPA business-income measures that incorporate new IRS tabulations for 2004.

In the services sector, the main sources of revision for 2004 were downward revisions to the wholesale trade industry ( 3.5 percentage points) and the retail trade industry ( 3.8 percentage points). The finance and insurance industry group was revised downward 2.4 percentage points for 2003 and 4.5 percentage points for 2005, resulting in a more stable growth pattern for this industry.

Real growth in ICT-producing industries, which comprises three industries from the services sector and one from the goods sector, was revised up for all 3

[^5]years.
Input-output (I-O) accounts. The revised I-O tables for 2003-2004 incorporated revised source data on gross output and value added by industry and on gross output and final uses of commodities. The effect of these revisions on intermediate and value-added inputs can be summarized by reviewing the revisions (in absolute value) to each industry's direct requirements coefficients. ${ }^{5}$

Nearly 80 percent of the 3,886 input coefficients calculated for each year were less than 0.01 (table I). Eighty-three coefficients in 2004 and 36 in 2003 were revised in absolute value by more than 0.01 . Of the revisions greater than 0.01 , about 60 percent ( 50 in 2004 and 21 in 2003) were less than 0.02 . Only eight coefficients in 2004 and two in 2003 were revised by more than 0.04 .

[^6]Table I. Revisions to I-O Direct Requirements Coefficients ${ }^{1}$

|  | 2003 | 2004 |
| :---: | :---: | :---: |
| Total count of direct requirements coefficients.. | 3,886 | 3,886 |
| Coefficients greater than 0.01 . | 833 | 824 |
| Revisions of |  |  |
| 0.01 to 0.019 (absolute value) ....................................................... | 21 | 50 |
| 0.02 to 0.029 (absolute value) | 10 | 21 |
| 0.03 to 0.039 (absolute value) ......................................................... | 3 | 4 |
| 0.04 or greater (absolute value)........................................................ | 2 | 8 |

1. For the purposes of this table, direct requirements coefficients were derived from the use table before edefinitions.
I-O Input-output

Table H. Revisions to Value Added by Industry Group
[Billions of dollars]

| Line |  | 2003 |  |  | 2004 |  |  | 2005 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Previously published | Revised | Revision | Previously published | Revised | Revision | Previously published | Revised | Revision |
| 1 | Gross domestic product..................................................... | 10,971.2 | 10,960.8 | -10.5 | 11,734.3 | 11,712.5 | -21.8 | 12,487.1 | 12,455.8 | -31.3 |
| 2 | Private industries ..................................................................... | 9,556.8 | 9,542.3 | -14.4 | 10,251.0 | 10,221.5 | -29.5 | 10,934.8 | 10,892.2 | -42.6 |
| 3 | Agriculture, forestry, fishing, and hunting ..................................... | 114.2 | 114.4 | 0.2 | 141.6 | 142.0 | 0.4 | 119.1 | 123.1 | 4.0 |
| 4 | Mining................................................................................... | 142.3 | 143.3 | 1.0 | 171.9 | 172.1 | 0.2 | 213.6 | 233.3 | 19.8 |
| 5 | Utilities.................................................................................. | 222.6 | 220.0 | -2.7 | 235.3 | 235.2 | -0.1 | 238.9 | 248.0 | 9.1 |
| 6 | Construction.......................................................................... | 501.0 | 496.2 | -4.7 | 549.5 | 541.0 | -8.5 | 593.5 | 611.1 | 17.6 |
| 7 | Manufacturing ........................................................................ | 1,369.2 | 1,359.3 | -9.9 | 1,420.1 | 1,434.8 | 14.7 | 1,496.5 | 1,512.5 | 16.0 |
| 8 | Durable goods................................................................... | 785.5 | 771.8 | -13.7 | 824.1 | 819.6 | -4.4 | 868.4 | 854.3 | -14.1 |
| 9 | Nondurable goods .............................................................. | 583.7 | 587.5 | 3.8 | 596.1 | 615.2 | 19.1 | 628.1 | 658.2 | 30.1 |
| 10 | Wholesale trade .................................................................... | 633.0 | 637.0 | 4.1 | 694.7 | 688.2 | -6.6 | 733.1 | 743.2 | 10.1 |
| 11 | Retail trade............................................................................ | 751.0 | 751.5 | 0.5 | 790.4 | 781.2 | -9.2 | 828.6 | 823.5 | -5.1 |
| 12 | Transportation and warehousing ................................................ | 321.6 | 316.6 | -5.0 | 332.9 | 330.1 | -2.8 | 362.2 | 344.6 | -17.6 |
| 13 | Information ............................................................................ | 491.8 | 489.1 | -2.7 | 538.7 | 529.2 | -9.5 | 578.3 | 555.2 | -23.1 |
| 14 | Finance, insurance, real estate, rental, and leasing....................... | 2,260.4 | 2,244.6 | -15.8 | 2,412.9 | 2,408.7 | -4.2 | 2,574.4 | 2,536.1 | -38.3 |
| 15 | Professional and business services ........................................... | 1,235.9 | 1,248.9 | 13.0 | 1,351.9 | 1,346.4 | -5.5 | 1,468.5 | 1,458.8 | -9.8 |
| 16 | Educational services, health care, and social assistance ................ | 850.6 | 857.3 | 6.7 | 909.0 | 914.7 | 5.7 | 977.4 | 975.3 | -2.1 |
| 17 | Arts, entertainment, recreation, accommodation, and food services | 398.8 | 398.9 | 0.1 | 424.3 | 424.0 | -0.4 | 455.9 | 444.6 | -11.2 |
| 18 | Other services, except government ............................................ | 264.3 | 265.3 | 0.9 | 277.7 | 274.1 | -3.6 | 294.6 | 282.8 | -11.8 |
| 19 | Government ............................................................................. | 1,414.5 | 1,418.4 | 3.9 | 1,483.3 | 1,490.9 | 7.6 | 1,552.3 | 1,563.6 | 11.3 |
|  | Addenda: |  |  |  |  |  |  |  |  |  |
| 20 | Private goods-producing industries ${ }^{1}$.......................................... | 2,126.7 | 2,113.3 | -13.5 | 2,283.1 | 2,289.9 | 6.8 | 2,422.7 | 2,480.1 | 57.3 |
| 21 | Private services-producing industries ${ }^{2}$....................................... | 7,430.0 | 7,429.1 | -1.0 | 7,967.9 | 7,931.6 | -36.2 | 8,512.1 | 8,412.2 | -99.9 |
| 22 | Information-communications-technology-producing industries ${ }^{3}$....... | 420.9 | 421.2 | 0.3 | 445.2 | 448.5 | 3.3 | 481.0 | 486.7 | 5.7 |

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; protessional and business services; educational services, health
care, and social assistance; arts, entertainment, recreation, accommodation, and food services; and othe
[^7]
## Appendix: Annual Industry Accounts Integrated 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. ${ }^{6}$ 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. ${ }^{7}$ 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 aggre-gate-level estimates.

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

Step one. Industry estimates of current-dollar value added for 2003-2005 are extrapolated forward from the annual industry accounts estimates for 2002, 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 2003-2005 are extrapolated from the 2002 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. ${ }^{8}$ An-

[^8]nual 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. ${ }^{9}$ 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. ${ }^{10}$ Third, indexes for valued 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. ${ }^{11}$

[^9]Tables 1 through 26 follow.


[^0]:    1. See Thomas F. Howells III and Kevin B. Barefoot, "Annual Industry Accounts: Advance Estimates for 2005," Survey of Current Business 86 (May 2006): 11-24.
[^1]:    1. Chained-dollar estimates are usually not additive because they are calculated using weights from more than one period.
    2. Equals domestic output plus imports, less exports, less change in private inventory.
[^2]:    3. For more information on value-added price indexes, see the box "Interpreting the Value-Added Price Index" in Robert E. Yuskavage and Mahnaz Fahim-Nader, "Gross Domestic Product by Industry for 1947-86," Survey 85 (December 2005): 77.
[^3]:    1. Equals the industry's contribution to the percent change in the chain-type price index for GDP divided by the percent change in the chain-type price index for GDP times 100. Shares of GDP price growth do not sum to 100 percent because the contribution of "not allocated by industry"
    2. Equals the industry's share of real GDP growth divided by its share of GDP. A ratio greater than 1 indiates the industry's contribution is large relative to its size in the economy
    3. Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing
[^4]:    Data Availability
    The integrated annual GDP-by-industry and I-O estimates for 1998-2005 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.

[^5]:    4. Single deflation best approximates the results obtained through double deflation when an industry's inputs prices and output prices are growing at about the same rate.
[^6]:    5. Direct requirements coefficients are calculated for an industry's intermediate inputs and value added by dividing the intermediate input or value added amounts by the industry's gross output.
[^7]:    ervices, 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.

[^8]:    6. For more information about the integrated annual industry accounts, see Brian C. Moyer, Mark A. Planting, Mahnaz Fahim-Nader, and Sherlene K.S. Lum, "Preview of the Comprehensive Revision of the Annual Industry Accounts," Survey 84 (March 2004): 38-51.
    7. These special commodities consist of noncomparable imports, scrap, used and secondhand goods, rest of the world adjustment to final uses, and inventory valuation adjustment.
    8. 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.
[^9]:    9. Direct requirements coefficients specify the amount of each commodity required by the industry to produce a dollar of output.
    10. Source data used to prepare the commodity price indexes for deflation can be found in Moyer et al., 48-49.
    11. 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.
