

# The 2016 Annual Update of the Industry Economic Accounts

## Initial Statistics for the Second Quarter of 2016

## Revised Statistics for 2013–2015 and the First Quarter of 2016

By Kevin B. Barefoot, William A. Jolliff, and Vanessa M. Vogel

ON NOVEMBER 3<sup>rd</sup>, the Bureau of Economic Analysis (BEA) released estimates of real gross domestic product (GDP) by industry for the second quarter of 2016 and revised quarterly and annual estimates beginning with 2013. These estimates reflect newly available source data for the second quarter of 2016 as well as new and revised data for 2013 through the first quarter of 2016, which were incorporated as part of this year's annual update of the industry economic accounts (IEAs).

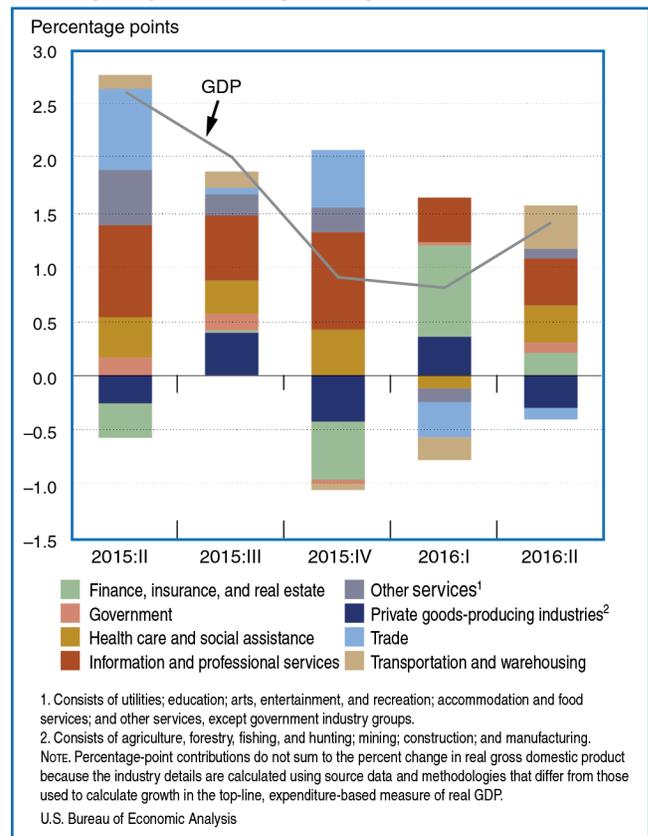
The revisions to the statistics for 2013 through the first quarter of 2016 also reflect the results from the 2016 annual update of the national income and product accounts (NIPAs) and the 2016 annual update of BEA's international transactions accounts (ITAs).<sup>1</sup>

The statistics show that economic growth in the second quarter was led by private-services producing industries; 15 of 22 major industry groups contributed to the overall 1.4 percent increase in real GDP. Eighty-four percent of this growth was accounted for by information and professional services, by transportation and warehousing, and by health care and social assistance, which together contributed 1.17 percentage points (chart 1).

With the release of the 2016 annual update of the IEAs, estimates of real gross output and real intermediate inputs are now available for the first time, for both annual and quarterly IEA statistics. Annual statistics

are available beginning with 1997. Quarterly statistics for the 22 major industry groups are available for the first quarter of 2005 forward.

**Chart 1. Contributions to Percent Change in Real GDP by Major Industry Group**



1. For more information, see Stephanie H. McCulla and Shelly Smith, "The 2016 Annual Update of the National Income and Product Accounts" SURVEY OF CURRENT BUSINESS 96 (August 2016) and C. Omar Kebbeh and Eric Bryda, "Annual Revision of the U.S. International Transactions Accounts" SURVEY 96 (July 2016).

## The Latest Snapshot of U.S. Producers

**Table 1. Percent Changes in Real Value Added by Industry Group**

[Seasonally adjusted at annual rates]

	2015				2016	
	I	II	III	IV	I	II
<b>Gross domestic product</b> .....	<b>2.0</b>	<b>2.6</b>	<b>2.0</b>	<b>0.9</b>	<b>0.8</b>	<b>1.4</b>
<b>Private industries</b> .....	<b>2.4</b>	<b>2.3</b>	<b>2.0</b>	<b>1.2</b>	<b>0.9</b>	<b>1.2</b>
Agriculture, forestry, fishing, and hunting .....	-5.7	-2.0	25.9	3.5	6.2	8.8
Mining .....	5.1	-17.9	-6.8	-19.5	-4.0	-20.4
Utilities .....	-23.8	20.5	6.0	-3.5	3.2	7.0
Construction .....	1.6	12.7	5.6	4.8	7.1	-3.7
Manufacturing .....	6.2	-2.6	0.7	-2.5	0.5	0.8
Durable goods .....	-1.1	-0.1	-1.8	1.2	-2.6	0.3
Nondurable goods .....	15.5	-5.5	3.7	-6.6	4.4	1.3
Wholesale trade .....	0.1	3.7	-1.8	2.4	-4.3	1.0
Retail trade .....	1.7	9.4	2.9	6.9	-0.8	-2.8
Transportation and warehousing .....	-9.5	4.5	5.0	-1.9	-6.7	14.0
Information .....	13.8	9.9	4.6	12.3	7.6	-0.2
Finance, insurance, real estate, rental, and leasing .....	3.4	-1.6	0.1	-2.6	4.2	1.0
Finance and insurance .....	2.6	-6.3	-2.8	-7.6	9.2	-0.1
Real estate and rental and leasing .....	3.8	1.1	1.7	0.2	1.7	1.6
Professional and business services .....	3.6	3.6	3.3	2.8	0.4	3.6
Professional, scientific, and technical services .....	5.8	4.8	2.6	3.3	3.4	3.7
Management of companies and enterprises .....	-1.4	-0.3	4.0	1.3	-6.1	7.3
Administrative and waste management services .....	1.9	3.1	4.5	2.6	-2.1	1.1
Educational services, health care, and social assistance .....	2.9	4.4	4.0	5.3	-2.0	3.6
Educational services .....	0.1	-0.8	1.5	1.4	-4.2	-3.1
Health care and social assistance .....	3.4	5.3	4.4	6.0	-1.6	4.7
Arts, entertainment, recreation, accommodation, and food services .....	0.0	4.0	2.0	4.8	-3.6	0.2
Arts, entertainment, and recreation .....	-0.1	3.2	2.3	7.8	-2.2	-0.2
Accommodation and food services .....	0.0	4.3	1.9	3.8	-4.1	0.4
Other services, except government .....	-1.0	3.0	-0.2	3.6	0.7	0.8
<b>Government</b> .....	<b>-0.2</b>	<b>1.2</b>	<b>1.1</b>	<b>-0.3</b>	<b>0.2</b>	<b>0.8</b>
Federal .....	0.3	-0.7	-0.5	-0.9	-0.2	1.1
State and local .....	-0.5	2.1	1.9	0.0	0.4	0.6
<b>Addenda:</b>						
Private goods-producing industries <sup>1</sup> .....	4.0	-1.5	2.0	-2.3	1.9	-1.6
Private services-producing industries <sup>2</sup> .....	1.9	3.4	2.0	2.2	0.7	2.0

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.

Real GDP increased 1.4 percent in the second quarter of 2016. Overall, 15 of 22 major industry groups contributed to real GDP growth.

Mining decreased 20.4 percent in the second quarter after decreasing 4.0 percent in the first quarter. The second-quarter decrease primarily reflected a 20.1 percent decrease in the oil and gas extraction industry.

Construction decreased 3.7 percent in the second quarter after increasing 7.1 percent in the first quarter. This was the first decrease after nine consecutive quarters of growth for this industry and the largest decrease since the first quarter of 2011.

Retail trade decreased 2.8 percent in the second quarter after decreasing 0.8 percent in the first quarter. The second-quarter decrease primarily reflected the decrease in general merchandise stores.

Transportation and warehousing, the leading contributor to real GDP growth, increased 14.0 percent in the second quarter after decreasing 6.7 percent in the first quarter. The second-quarter increase reflected a 51.7 percent increase in air transportation and a 16.5 percent increase in truck transportation.

Professional, scientific, and technical services increased 3.7 percent in the second quarter. This growth stemmed from an increase in miscellaneous professional, scientific, and technical services, which includes industries such as architectural and engineering services, scientific research and development services, and management consulting services.

Health care and social assistance, the second leading contributor to real GDP growth, increased 4.7 percent in the second quarter after decreasing 1.6 percent in the first quarter. The second-quarter growth reflected an increase in ambulatory health care services, which increased 5.7 percent after increasing 4.1 percent, and an increase in hospitals, which increased 7.0 percent after decreasing 6.6 percent.

Private goods-producing industries decreased 1.6 percent in the second quarter after increasing 1.9 percent in the first quarter.

Private services-producing industries increased 2.0 percent in the second quarter after increasing 0.7 percent in the first quarter.

## The Latest Snapshot of U.S. Producers

**Table 2. Contributions to Percent Change in Real GDP by Industry Group**

[Percentage points, seasonally adjusted at annual rates]

	2015				2016	
	I	II	III	IV	I	II
<b>Gross domestic product</b> <sup>1</sup> .....	<b>2.0</b>	<b>2.6</b>	<b>2.0</b>	<b>0.9</b>	<b>0.8</b>	<b>1.4</b>
<b>Private industries</b> .....	<b>2.08</b>	<b>2.01</b>	<b>1.71</b>	<b>1.04</b>	<b>0.82</b>	<b>1.06</b>
Agriculture, forestry, fishing, and hunting.....	-0.06	-0.02	0.23	0.03	0.06	0.08
Mining.....	0.12	-0.39	-0.13	-0.35	-0.05	-0.31
Utilities.....	-0.44	0.30	0.09	-0.06	0.05	0.10
Construction.....	0.06	0.48	0.22	0.19	0.29	-0.16
Manufacturing.....	0.71	-0.33	0.07	-0.30	0.06	0.09
Durable goods.....	-0.08	-0.01	-0.12	0.08	-0.17	0.02
Nondurable goods.....	0.79	-0.32	0.19	-0.38	0.23	0.07
Wholesale trade.....	0.01	0.22	-0.11	0.14	-0.27	0.06
Retail trade.....	0.09	0.52	0.17	0.39	-0.05	-0.17
Transportation and warehousing.....	-0.30	0.13	0.15	-0.06	-0.21	0.40
Information.....	0.58	0.43	0.21	0.55	0.35	-0.01
Finance, insurance, real estate, rental, and leasing.....	0.67	-0.32	0.02	-0.53	0.84	0.20
Finance and insurance.....	0.18	-0.47	-0.20	-0.56	0.62	-0.01
Real estate and rental and leasing.....	0.49	0.15	0.22	0.03	0.22	0.21
Professional and business services.....	0.42	0.42	0.39	0.34	0.06	0.44
Professional, scientific, and technical services.....	0.39	0.34	0.18	0.23	0.25	0.26
Management of companies and enterprises.....	-0.03	-0.01	0.08	0.03	-0.12	0.14
Administrative and waste management services.....	0.06	0.09	0.13	0.08	-0.07	0.04
Educational services, health care, and social assistance.....	0.23	0.36	0.33	0.44	-0.17	0.30
Educational services.....	0.00	-0.01	0.02	0.02	-0.05	-0.03
Health care and social assistance.....	0.23	0.37	0.31	0.42	-0.12	0.34
Arts, entertainment, recreation, accommodation, and food services.....	0.00	0.15	0.08	0.19	-0.15	0.01
Arts, entertainment, and recreation.....	0.00	0.03	0.02	0.08	-0.02	0.00
Accommodation and food services.....	0.00	0.12	0.05	0.11	-0.12	0.01
Other services, except government.....	-0.02	0.07	0.00	0.08	0.02	0.02
<b>Government</b> .....	<b>-0.04</b>	<b>0.16</b>	<b>0.15</b>	<b>-0.04</b>	<b>0.03</b>	<b>0.10</b>
Federal.....	0.01	-0.03	-0.02	-0.04	-0.01	0.05
State and local.....	-0.05	0.18	0.17	0.00	0.03	0.06
<b>Addenda:</b>						
Private goods-producing industries <sup>2</sup> .....	0.83	-0.26	0.39	-0.43	0.35	-0.30
Private services-producing industries <sup>3</sup> .....	1.24	2.28	1.32	1.48	0.47	1.36

GDP Gross domestic product

1. The estimates of gross domestic product under the contributions columns are percent changes.

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

3. 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.

Note. Percentage-point contributions do not sum to the percent change in real gross domestic product because the industry details are calculated using source data and methodologies that differ from those used to calculate growth in the top-line, expenditure-based measure of real GDP.

U.S. economic growth accelerated in the second quarter, increasing 1.4 percent after increasing 0.8 percent in the first quarter. Overall, 15 of 22 major industry groups contributed to the acceleration in economic activity.

Construction turned down in the second quarter, subtracting 0.16 percentage point from real GDP growth after contributing 0.29 percentage point in the first quarter.

Wholesale trade turned up in the second quarter, contributing 0.06 percentage point to real GDP growth after subtracting 0.27 percentage point in the first quarter.

Transportation and warehousing contributed 0.40 percentage point to real GDP growth in the second quarter after subtracting 0.21 percentage point in the first quarter. This industry group was the largest contributor to the acceleration in real GDP growth, primarily reflecting upturns in air transportation and truck transportation.

Finance and insurance turned down in the second quarter, subtracting 0.01 percentage point from real GDP growth after contributing 0.62 percentage point in the first quarter. The second-quarter downturn was primarily led by Federal Reserve banks, credit intermediation, and related activities.

Management of companies and enterprises turned up in the second quarter, contributing 0.14 percentage point to real GDP growth after subtracting 0.12 percentage point in the first quarter.

Health care and social assistance turned up in the second quarter, contributing 0.34 percentage point to real GDP growth after subtracting 0.12 percentage point in the first quarter. This upturn primarily reflected the upturn in hospitals, which contributed 0.16 percentage point after subtracting 0.16 percentage point in the first quarter.

## Annual Update Highlights

Annual updates are conducted to maintain the accuracy and relevance of BEA accounts, incorporating source data that are more complete and reliable than those previously available. Typically, annual updates affect the three most recent years of previously published estimates. This year's annual update features revised annual and quarterly estimates for 2013 through the first quarter of 2016. As is usual for the annual IEA revisions, the incorporation of more complete and revised source data and the results of the 2016 annual update of the NIPAs and the ITAs were the primary drivers of the revisions. Overall, the revised statistics continue to support the picture of the ongoing economic recovery observed in the previously published estimates.

Improvements incorporated during this annual update include the incorporation of new and revised source

data, the incorporation of the 2016 annual update of the NIPAs, and the expansion of industry detail for annual and quarterly statistics.

### Source data

This year's annual update incorporates the latest Census Bureau service annual survey (SAS) tabulations, which revised statistics for 2013 and 2014. In addition, newly available data for 2015 from the SAS replaced estimates based on the Census Bureau's quarterly services survey (QSS) data. Similarly, revised and newly available data from the Department of Treasury's Statistics of Income (SOI) Division led to revisions to underlying components of the current-dollar estimates of value added by industry, including corporate profits, nonfarm proprietors' income, and net interest for 2013 and 2014.

### Acknowledgments

Erich H. Strassner, Associate Director for Industry Economic Accounts, Thomas F. Howells III, Chief of the Industry Analysis Division (IAD), and David B. Wasshausen, former Chief of the Industry Sector Division (ISD), supervised the preparation of the estimates. Amanda S. Lyndaker, Chief of the Input-Output Statistics Branch, managed the economic information systems used to produce and review the statistics. William A. Jolliff, Chief of the Goods and International Trade Branch, Paul V. Kern, Chief of the Information, Business Services, and Travel and Tourism Satellite Accounts Branch, Edward T. Morgan, Chief of the Professional and Distributive Services Branch, and Patricia A. Washington, Chief of the Personal Services and Government Branch, provided guidance and contributed to the preparation of the industry statistics and analysis. Jeffrey A. Young and Jennifer Lee provided valuable assistance in the review and coordination of these statistics. Kali K. Kong, Special Assistant to the Associate Director, Maxine V. Tingle, and Patricia A. Wilkinson provided administrative and program assistance.

The following staff also contributed to the preparation of the statistics:

*Agriculture, mining, manufacturing, international trade, and inventories:* Kevin B. Barefoot (program manager), Justin M. Harper (program manager), David M. Curtis, Olivia M. Frank, Patrick Georgi, Cailyn M. Kreitz, Peter D. Kuhbach, Matthew Y. Park, Ethan Schein, and Blaire Thomson.

*Construction:* Jeffrey A. Young (section chief) and Chelsea K. Nelson.

*Finance, insurance, real estate, rental and leasing:* Sarah B. Osborne (program manager), Seth D. Markowitz, Luke M. Mendelsohn, and Jamie Williams.

*Health care; arts, entertainment and recreation; accommodation and food services:* Daniel W. Jackson (program manager), Aaron J. Baker, Alexander M. Eisenmann, and Taylor M. Grant.

*Information, business, and management services:* Mariapia E. Carbajal, Robert Omohundro, Andres F. Orozco, and Mandy C. Roberts.

*Other services, education, and government services:* Brian M. Lindberg (program manager), Darlene C. Robinson-Smith, and Linda Y. Wong.

*Professional services and value added:* Jennifer Lee (section chief), Richard Cao, Nikki Dubria, Teresa L. Gilmore, and Cyril P. McNeill.

*Retail and utilities:* Ricky L. Stewart (program manager) and Vanessa M. Vogel.

*Wholesale, transportation, and warehousing:* William H. Nicolls IV (program manager), Louis E. Feagans, and Marina Kotzavekiaris.

*Economic Information Systems:* Jeffrey A. Young (section chief), Matthew E. Calby (program manager), Kristie L. Flaherty, Gabriel W. Medeiros, Eugene N. Njinku, Nilay Patel, and Phillip J. Sporrer.

In addition, the Industry Economic Accounts Directorate expresses gratitude and appreciation for the contributions of staff from the National Economic Accounts Directorate and the International Economic Accounts Directorate.

## Annual Update Highlights

Additional improvements reflected in this annual update include the following:

- Revised Census Bureau construction spending data for nonresidential, residential, and public construction<sup>1</sup>
- More detailed refinery production data from the Energy Information Administration for the petroleum and coal products industry
- Newly available Census Bureau data from the 2014 Annual Survey of Manufactures, the 2014 Annual Retail Trade Survey, and the 2014 Annual Wholesale Trade Survey

### The 2016 annual update of the NIPAs

The IEAs are a consistent time series that are fully integrated with the NIPAs, thus the results of the 2016 annual update of the NIPAs directly affects the industry statistics.<sup>2</sup> The most significant revisions for 2013

---

1. The updated data include corrections issued by the Census Bureau to monthly estimates of private residential improvements for January 2005 through October 2015 as part of its November 2015 construction spending release. BEA will incorporate the corrected data for the years before 2013 with the release of the 2018 comprehensive update.

2. See Erich H. Strassner and David B. Wasshausen, “[Preview of the 2013 Comprehensive Revision of the Industry Economic Accounts: Statistical Changes](#)” SURVEY OF CURRENT BUSINESS 93 (June 2013).

through the first quarter of 2016 resulted from the incorporation of revised and newly available source data into the NIPA estimates of personal consumption expenditures (PCE), corporate profits, proprietors’ income, and net interest. Additionally, estimates of PCE and corporate profits were further revised to reflect ongoing improvements to the NIPA seasonal adjustment process.<sup>3</sup>

### Expansion of published industry statistics

With this annual update, real gross output and real intermediate input statistics are available for the first time. Annual statistics are available beginning with 1997. Quarterly statistics for the 22 industry sectors are available beginning with the first quarter of 2005. Quarterly statistics for 71 industries are available as part of the underlying detail for the IEAs beginning with the first quarter of 2012.<sup>4</sup> This expansion of published industry statistics provides opportunities for more in-depth analyses of economic trends.

---

3. For more information, see the box “[Update on BEA’s Work to Enhance Its Approach to Seasonal Adjustment](#),” in McCulla and Smith, 4.

4. BEA plans to carry this expanded publication of the quarterly statistics back to the first quarter of 2005 (the beginning of the quarterly GDP by industry time series) with the release of IEA’s 2018 comprehensive update.

## Revisions

The percent change in real GDP growth for the first quarter of 2016 was revised down 0.3 percentage point to 0.8 percent from the previously published 1.1 percent. This revision reflected downward revisions to both private goods-producing industries and services-producing industries. The direction of growth in real value added was revised in 6 of 22 major industry groups.

- The downward revision to real value added in health care and social assistance was the leading driver to the downward revision in real GDP; growth in this industry was revised down to -1.6 percent from 3.8 percent.
- Retail trade was the second leading driver to the downward revision to real value added. Growth in this industry was revised down to -0.8 percent from 4.8 percent.
- Durable-goods manufacturing drove the downward revision within private goods-producing industries.

This industry's growth was revised down to -2.6 percent from -0.6 percent.

Quarterly statistics for 2013 through 2015 were benchmarked to the corresponding annual estimates. Revisions to the statistics for these quarters typically follow the revisions to the annual data. Updated quarterly source data and revised seasonal factors also contributed to revisions to the quarterly estimates. Table 3 presents revisions to annual percent changes in real value added by industry group.

## 2015

Real growth in GDP was revised up 0.2 percentage point to 2.6 percent in 2015. Growth in the private services-producing industries led the increase; growth was revised up to 2.9 percent from the previously published increase of 2.7 percent. Growth in private goods-producing

Table 3. Revisions to Percent Change in Real Value Added by Industry Group

Line		2013			2014			2015		
		Revised	Previously Published	Revision	Revised	Previously Published	Revision	Revised	Previously Published	Revision
1	<b>Gross domestic product</b> .....	1.7	1.5	0.2	2.4	2.4	0.0	2.6	2.4	0.2
2	<b>Private industries</b> .....	1.8	1.6	0.2	2.6	2.5	0.1	2.8	2.8	0.0
3	Agriculture, forestry, fishing, and hunting .....	17.0	18.5	-1.5	-0.6	2.6	-3.2	2.4	8.9	-6.5
4	Mining .....	6.7	4.7	2.0	10.0	7.0	3.0	4.2	5.1	-0.9
5	Utilities .....	-0.8	-0.4	-0.4	-2.2	-4.0	1.8	-1.5	-5.2	3.7
6	Construction .....	2.8	2.6	0.2	1.7	0.9	0.8	4.9	5.0	-0.1
7	Manufacturing .....	2.0	1.5	0.5	1.0	1.6	-0.6	1.5	1.3	0.2
8	Durable goods .....	1.2	0.9	0.3	1.7	1.6	0.1	0.9	0.9	0.0
9	Nondurable goods .....	2.8	2.2	0.6	0.2	1.6	-1.4	2.3	1.8	0.5
10	Wholesale trade .....	3.2	3.2	0.0	3.8	3.3	0.5	3.0	2.9	0.1
11	Retail trade .....	2.9	2.7	0.2	2.8	1.8	1.0	3.7	3.6	0.1
12	Transportation and warehousing .....	1.1	0.5	0.6	1.2	0.8	0.4	-1.0	-2.1	1.1
13	Information .....	6.5	6.8	-0.3	0.2	3.9	-3.7	7.5	6.3	1.2
14	Finance, insurance, real estate, rental, and leasing .....	-0.7	-0.8	0.1	3.1	2.3	0.8	1.5	1.8	-0.3
15	Finance and insurance .....	-4.5	-3.3	-1.2	5.1	2.3	2.8	-0.3	1.4	-1.7
16	Real estate and rental and leasing .....	1.5	0.6	0.9	2.0	2.4	-0.4	2.5	2.0	0.5
17	Professional and business services .....	1.3	0.6	0.7	4.0	4.2	-0.2	4.3	4.8	-0.5
18	Professional, scientific, and technical services .....	0.1	-0.9	1.0	3.3	3.3	0.0	5.1	5.0	0.1
19	Management of companies and enterprises .....	5.3	5.1	0.2	7.5	6.9	0.6	2.4	5.2	-2.8
20	Administrative and waste management services .....	1.6	1.4	0.2	3.5	4.3	-0.8	3.5	4.0	-0.5
21	Educational services, health care, and social assistance .....	1.3	1.4	-0.1	1.9	2.1	-0.2	3.9	2.9	1.0
22	Educational services .....	-2.1	-2.0	-0.1	2.1	1.9	0.2	0.2	-0.1	0.3
23	Health care and social assistance .....	1.8	2.0	-0.2	1.9	2.2	-0.3	4.5	3.4	1.1
24	Arts, entertainment, recreation, accommodation, and food services .....	2.4	2.2	0.2	2.7	3.0	-0.3	2.8	1.8	1.0
25	Arts, entertainment, and recreation .....	3.0	3.0	0.0	3.6	3.0	0.6	3.5	2.8	0.7
26	Accommodation and food services .....	2.2	1.9	0.3	2.4	3.0	-0.6	2.6	1.4	1.2
27	Other services, except government .....	-0.8	-0.6	-0.2	2.1	2.5	-0.4	1.7	1.3	0.4
28	<b>Government</b> .....	-0.8	-0.8	0.0	-0.3	-0.2	-0.1	0.4	-0.3	0.7
29	Federal .....	-2.4	-2.4	0.0	-0.8	-0.9	0.1	-0.6	-0.7	0.1
30	State and local .....	0.0	0.0	0.0	0.0	0.2	-0.2	0.9	-0.2	1.1
	<b>Addenda:</b>									
31	Private goods-producing industries <sup>1</sup> .....	3.6	3.1	0.5	2.2	2.3	-0.1	2.6	3.1	-0.5
32	Private services-producing industries <sup>2</sup> .....	1.3	1.1	0.2	2.7	2.6	0.1	2.9	2.7	0.2
33	Information-communications-technology-producing industries <sup>3</sup> .....	7.0	6.1	0.9	2.5	5.0	-2.5	8.0	.....	.....

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 product manufacturing (excluding navigational, measuring, electromedical, and control instruments manufacturing); software publishers; broadcasting and telecommunications; data processing, hosting and related services; Internet publishing and broadcasting and Web search portals; and computer systems design and related services.

**Revisions**

producing industries led the increase; growth was revised up to 2.9 percent from the previously published increase of 2.7 percent. Growth in private goods-producing industries was revised down to 2.6 percent from 3.1 percent. Government was revised up 0.7 percentage point to 0.4 percent, largely reflecting an upward revision to state and local government. The direction of growth was unchanged in 19 of 22 major industry groups.

- The revision to health care and social assistance drove the upward revision to real value added. Growth in this industry was revised up to 4.5 percent from 3.4 percent. This revision reflected the incorporation of new Census Bureau service annual survey data for 2015. The increase in health care and social assistance marks the largest increase since 2008.
- The downward revision in private goods-producing industries was driven by the farm industry, which is in the agriculture, forestry, fishing, and hunting sector. These revisions reflect the incorporation of U.S. Department of Agriculture forecasts for 2015.

**2014**

Real GDP growth in 2014 was an unrevised 2.4 percent. Private services-producing industries led the growth in

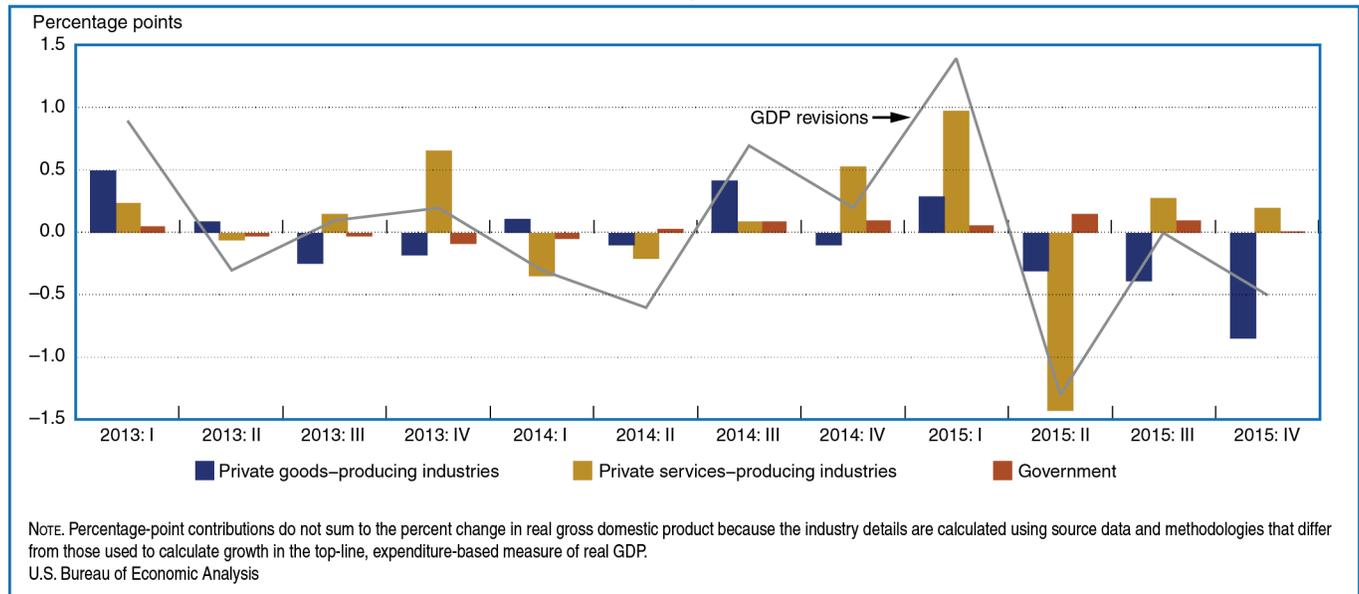
real GDP with a revised growth rate of 2.7 percent. The upward revision in private services-producing industries was offset by the downward revision in private goods-producing industries. The direction of growth was unchanged in 20 of 22 major industry groups.

- Finance and insurance was the leading contributor to the upward revision in private services-producing industries. This industry was revised up to 5.1 percent from 2.3 percent as a result of the incorporation of newly available data from the Statistics of Income (SOI).
- Nondurable-goods manufacturing was the leading contributor to the downward revision in private goods-producing industries. Growth in this industry was revised down to 0.2 percent from the previously published 1.6 percent.

**2013**

Real GDP was revised up to 1.7 percent from the previously published 1.5 percent, reflecting upward revisions in both private goods-producing industries and private services-producing industries. Private goods-producing industries was revised up to 3.6 percent from the previously published 3.1 percent. Private services-producing

**Chart 2. Contributions to the Revision in Percent Change in Real GDP**



## Revisions

industries was revised up to 1.3 percent from 1.1 percent. The direction of growth was revised in only 1 of the 22 major industry groups.

- Professional, scientific, and technical services was revised up to 0.1 percent from the previously published -0.9 percent. The leading contributor within this group was miscellaneous professional, scientific, and technical services, which was revised up 1.2 percentage points to 0.9 percent.
- Real estate and rental and leasing was the leading contributor to the upward revision in real GDP growth, primarily reflecting an upward revision to other real estate, which reflected the incorporation of newly available SOI data.
- Finance and insurance was the leading offsetting industry to the upward revision to real GDP. Growth in this industry was revised down to -4.5 percent from -3.3 percent. The leading contributor to the downward revision was Federal Reserve banks, credit intermediation, and related activities, which was revised down 2.9 percentage points to -8.3 percent as a result of incorporating newly available SOI data.
- Mining and nondurable-goods manufacturing drove the upward revision to private-goods producing industries. Mining was revised up to 6.7 percent from the previously published 4.7 percent.

### Data Availability and Methodology

**Data availability.** The full time series of industry statistics are available interactively on BEA's Web site. The GDP by industry section includes real, current-dollar, and price data for value added, gross output, intermediate inputs, and KLEMS statistics as well as access to the underlying detail tables. The input-output section includes an annual time series of make and use tables—both before and after redefinitions—as well as direct and total requirements tables. The 2007 benchmark input-output account is also available.

**Methodology.** For information on the methodology for preparing the annual statistics, see Donald D. Kim, Erich H. Strassner, and David B. Wasshausen, "Industry Economic Accounts: Results of the Comprehensive Revision and Revised Statistics for 1997–2012," *SURVEY OF CURRENT BUSINESS* 94 (February 2014).

For information on the methodology for preparing the quarterly statistics, see Erich H. Strassner and David B. Wasshausen, "New Quarterly Gross Domestic Product by Industry Statistics," *SURVEY* 94 (May 2014).

*Tables A and B follow.*

## Principal Sources of Data for the Annual Statistics

Table A. Principal Sources of Data for Annual Industry and Commodity Output and Prices—Continues

Industry and commodity	Source data for current-dollar statistics	Source data for price indexes
<b>Agriculture, forestry, fishing, and hunting</b>		
Farms	Farm output from the Bureau of Economic Analysis (BEA) national income and product accounts (NIPAs) based on U.S. Department of Agriculture (USDA) data.	NIPA prices based on USDA price indexes received by farmers; Bureau of Labor Statistics (BLS) Producer Price Index (PPI) data.
Forestry, fishing, and related activities	For forestry, NIPA farm output; for logging and forestry support activities, Census Bureau annual survey of manufactures (ASM), Census Bureau manufacturers shipments, inventories, and orders survey (M3) data; for fishing, hunting and trapping, commercial landings data from the National Oceanic and Atmospheric Administration.	BLS PPI; NIPA personal consumption expenditure (PCE) price indexes; USDA/National Agricultural Statistics Service unit prices.
<b>Mining</b>		
Oil and gas extraction	Energy Information Administration (EIA) data on quantities produced and prices.	BLS PPI and EIA.
Mining, except oil and gas	For coal mining, EIA <i>U.S. Coal Supply and Demand in Review</i> ; for uranium, EIA <i>Uranium Marketing Annual Report</i> ; for all other, U.S. Geological Survey (USGS) Mineral Commodity Summaries.	EIA, 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 <i>Mineral Commodity Summaries</i> .	EIA, USGS, BLS PPI, and trade sources.
<b>Utilities</b>		
	For electric power generation and supply, EIA forms 861 and 826; for natural gas distribution, EIA form 176 and <i>Natural Gas Monthly</i> ; for water, sewage and other systems, Census Bureau service annual survey (SAS).	BLS Consumer Price Index (CPI) and BLS PPI.
<b>Construction</b>		
Residential	Census Bureau construction spending (value-put-in-place) survey.	Census Bureau price deflator for new single-family houses under construction and BEA prices for multi-family home construction.
Nonresidential	Census Bureau construction spending (value-put-in-place) survey, U.S. Department of Defense (DOD) expenditures, USDA expenditures, and BLS occupational employment statistics.	BLS PPI and BEA composite prices based on trade source data and on the Census Bureau price deflator for single-family houses under construction.
<b>Manufacturing</b>		
	Census Bureau M3 shipments and inventories data, ASM data, nonemployer survey data, and EIA production data and BLS PPI.	BLS PPI and NIPA price indexes based on DOD prices paid for military equipment, and NIPA hedonic prices.
<b>Wholesale trade</b>		
	Census Bureau monthly wholesale trade survey and annual wholesale trade survey data.	BLS PPI and NIPA sales deflators.
<b>Retail trade</b>		
	Census Bureau monthly retail trade survey and annual retail trade survey (ARTS) data.	BLS PPI and NIPA sales deflators.

## Principal Sources of Data for the Annual Statistics

Table A. Principal Sources of Data for Annual Industry and Commodity Output and Prices—Continues

Industry and commodity	Source data for current-dollar statistics	Source data for price indexes
<b>Transportation and warehousing</b>		
Air transportation	Bureau of Transportation Statistics (BTS) <i>Air Carrier Financial Statistics (ACFS)</i> and <i>U.S. Air Carrier Traffic Statistics (ACTS)</i> and BEA foreign trade statistics.	BLS PPI.
Rail transportation	For rail passenger, <i>Amtrak Annual Report</i> ; for rail freight, Department of Transportation (DOT) Surface Transportation Board (STB) selected earnings data.	BLS PPI.
Water transportation	Census Bureau SAS data.	For freight, BLS PPI; for passenger, BLS CPI.
Truck transportation	Census Bureau SAS data.	BLS PPI.
Transit and ground passenger transportation	Census Bureau SAS data and PCE for ground passenger transportation.	NIPA PCE prices.
Pipeline transportation	Census Bureau SAS data.	BLS PPI.
Other transportation and support activities	Census Bureau SAS data.	BLS PPI and NIPA PCE prices.
Warehousing and storage	Census Bureau SAS data.	BLS PPI.
<b>Information</b>		
Publishing industries, except Internet (includes software)	Census Bureau SAS data.	BLS PPI and BEA price indexes for software.
Motion picture and sound recording industries	Census Bureau SAS data.	NIPA PCE prices.
Broadcasting and telecommunications	Census Bureau SAS data.	BLS PPI.
Data processing, Internet publishing, and other information services	Census Bureau SAS data.	BLS PPI and NIPA PCE prices.
<b>Finance and insurance</b>		
Federal Reserve banks, credit intermediation and related activities	Census Bureau SAS data, Federal Deposit Insurance Corporation commercial bank call report data, Federal Reserve Board (FRB) data, National Credit Union Administration, and NIPA measures of financial services indirectly measured.	FRB-priced services and NIPA PCE prices.
Securities, commodity contracts, and investments	Securities and Exchange Commission FOCUS Report and Census Bureau SAS data.	BLS PPI and NIPA PCE prices based on both BLS CPI and PPI.

## Principal Sources of Data for the Annual Statistics

Table A. Principal Sources of Data for Annual Industry and Commodity Output and Prices—Continues

Industry and commodity	Source data for current-dollar statistics	Source data for price indexes
<b>Finance and insurance</b>		
Insurance carriers and related activities	For property and casualty insurance, life insurance, and reinsurance, private trade source data and Census Bureau SAS; for medical and hospitalization Insurance, private trade source data and NIPA statistics on medical and hospital insurance premiums.	BLS PPI and NIPA PCE prices.
Funds, trusts, and other financial vehicles	NIPA imputed service charges for other financial institutions.	NIPA PCE prices.
<b>Real estate and rental and leasing</b>		
Real estate	For residential dwellings, NIPA housing data and USDA data on farm housing; for nonresidential structures, Internal Revenue Service (IRS) tabulations of business tax returns, NIPA rental value of buildings owned by nonprofits, and NIPA foreign trade statistics.	For residential dwellings, NIPA PCE prices and NIPA implicit price deflators for farm rents paid; for nonresidential structures, 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 SAS data; for royalties, IRS tabulations of business tax returns.	BLS PPI, BTS and construction index, mining, crude oil receipts.
<b>Professional, scientific, and technical services</b>		
Legal services	Census Bureau SAS data and BLS QCEW data	BLS PPI and NIPA PCE prices.
Computer systems design and related services	Census Bureau SAS data.	BEA price indexes for software.
Miscellaneous professional, scientific and technical services	Census Bureau SAS data, NIPA PCE, and BLS QCEW data.	BLS PPI, NIPA PCE prices, and BEA price index for R&D.
<b>Management of companies and enterprises</b>		
	BLS QCEW data.	BLS PPI.
<b>Administrative and waste management services</b>		
	Census Bureau SAS data; BLS QCEW for auxiliary industries.	BLS PPI.
<b>Educational services</b>		
	PCE data for education services based on data from the Department of Education and data from BLS consumer expenditure survey.	NIPA PCE prices.

## Principal Sources of Data for the Annual Statistics

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

Industry and commodity	Source data for current-dollar statistics	Source data for price indexes
<b>Health care and social assistance</b>	Census Bureau SAS data.	BLS PPI and NIPA PCE prices.
<b>Arts, entertainment, and recreation</b>	Census Bureau SAS data.	NIPA PCE prices.
<b>Accommodation and food services</b>	For hotels and motels, PCE; for all other traveler accommodations and bed and breakfasts, BLS QCEW data.	BLS PPI and NIPA PCE prices.
Accommodations		
Food services and drinking places	Census Bureau ARTS data.	BLS PPI.
<b>Other services, except government</b>	For religious, grant making, civic and other nonprofit services, personal services, and dry cleaning services, Census Bureau SAS data, PCE, and data from the National Center for Charitable Statistics; for repair and maintenance, BLS QCEW; for private household services, PCE.	BLS PPI and NIPA PCE prices.
<b>Federal</b>	NIPA government expenditure statistics; for federal structures, DOD investment expenditures.	NIPA price indexes based on BLS PPI and CPI; for military facilities, DOD data on employment, prices for military construction, and construction cost indexes from trade sources.
General government		
Government enterprises	U.S. Postal Service receipts, EIA data for electric utilities, and Federal Housing Administration data; government agency data for specific federal enterprises.	BLS PPI.
<b>State and local</b>	NIPA government expenditure statistics.	BLS PPI and NIPA PCE prices.
General government		
Government enterprises	NIPA statistics on government enterprises based on the Census Bureau annual survey of government finances; for Alaskan ferries, waterports, and airports, Alaska Railroad Administration; for electric utilities, EIA data; for state and local government structures, Census Bureau construction spending (value-put-in-place) survey.	BLS PPI.

## Principal Sources of Data for the Quarterly Statistics

Table B. Principal Sources of Data for Quarterly Industry and Commodity Output and Prices—Continues

Industry and commodity	Source data for current-dollar statistics	Source data for price indexes
<b>Agriculture, forestry, fishing, and hunting</b>		
Farms	Farm output from the Bureau of Economic Analysis (BEA) national income and product accounts (NIPAs) based on U.S. Department of Agriculture (USDA) data.	NIPA prices based on USDA price indexes received by farmers.
Forestry, fishing, and related activities	For forestry, Federal Reserve Board (FRB) industrial production index (IPI) and Bureau of Labor Statistics (BLS) Producer Price Index (PPI); for fishing, commercial fishery landings data from the National Oceanic and Atmospheric Administration.	BLS PPI and USDA/National Agricultural Statistics Service unit prices.
<b>Mining</b>		
Oil and gas extraction	FRB IPI and BLS PPI.	BLS PPI.
Mining, except oil and gas	FRB IPI and BLS PPI.	BLS PPI.
Support activities for mining	FRB IPI, BLS PPI, and NIPA fixed investment in mining exploration based on trade source data.	BLS PPI and NIPA prices based on trade source data.
<b>Utilities</b>		
	For electric power generation, transmission, and distribution, Energy Information Association (EIA) form 826; for natural gas distribution, EIA form 857; for water, sewage, and other systems, Census Bureau Quarterly Services Survey (QSS).	BLS Consumer Price Index (CPI) and BLS PPI.
<b>Construction</b>		
Residential	NIPA fixed investment in structures based primarily on Census Bureau construction spending (value-put-in-place) survey.	Census Bureau price deflator for new single-family houses under construction and BEA prices for multi-family home construction.
Nonresidential	NIPA fixed investment in structures based primarily on Census Bureau construction spending (value-put-in-place) survey.	BEA composite prices based on trade source data and on data from the Bureau of Reclamation and BLS PPI.
<b>Manufacturing</b>		
	Census Bureau Manufacturers' shipments, inventories, and orders survey (M3) and NIPA electronic computer shipments; for petroleum products, EIA production data and BLS PPI.	BLS PPI and NIPA price indexes based on Department of Defense (DOD) prices paid for military equipment, and NIPA hedonic prices.
<b>Wholesale trade</b>		
	Census Bureau monthly wholesale trade survey data.	BLS PPI and NIPA sales deflators.
<b>Retail trade</b>		
	Census Bureau monthly retail trade survey data.	BLS PPI and NIPA sales deflators.

## Principal Sources of Data for the Quarterly Statistics

Table B. Principal Sources of Data for Quarterly Industry and Commodity Output and Prices—Continues

Industry and commodity	Source data for current-dollar statistics	Source data for price indexes
<b>Transportation and warehousing</b>		
	For air transportation, NIPA personal consumption expenditures (PCE) and Census Bureau QSS data; for rail transportation, Surface Transportation Board freight earnings data; for water, truck, transit and ground passenger, pipeline transportation, and warehousing, Census Bureau QSS data.	For air transportation, BLS PPI; for rail, BLS PPI for rail passenger transportation and BLS PPI for freight; for water transportation, BLS PPI, BLS CPI, and trade source data; for truck transportation, BLS PPI; for transit and ground passenger transportation, NIPA PCE prices; for pipeline transportation, BLS PPI; for warehousing, BLS PPI; for other transportation and support activities, NIPA PCE prices and BLS PPI.
<b>Information</b>		
	Census Bureau QSS data, BLS quarterly census of employment and wages (QCEW), and box office revenues from trade source data.	For publishing industries (including software), BEA prices for software and BLS PPI; for information and data processing, NIPA PCE prices and BLS PPI.
<b>Finance and insurance</b>		
Federal Reserve banks, credit intermediation, and related activities	Census Bureau QSS data, Federal Deposit Insurance Corporation commercial bank call report data, FRB data, National Credit Union Administration data, and NIPA measures of financial services indirectly measured.	NIPA PCE prices.
Securities, commodity contracts, and investments	Census Bureau QSS data and Securities and Exchange Commission FOCUS reports.	BLS PPI and NIPA PCE prices.
Insurance carriers and related activities	NIPA PCE, Census Bureau QSS data, and trade source data.	BLS PPI and NIPA PCE prices.
Funds, trusts, and other financial vehicles	NIPA PCE and NIPA imputed service charges for other financial institutions.	NIPA PCE prices.
<b>Real estate and rental and leasing</b>		
Real estate	For residential dwellings, NIPA PCE, NIPA housing data, and NIPA private fixed investment; for nonresidential structures, NIPA government receipts, BEA foreign expenditures from the international transactions accounts, and BLS QCEW data.	For residential dwellings, NIPA PCE prices and NIPA implicit price deflators for farm rents paid; for nonresidential structures, BLS PPI and NIPA implicit price deflators for nonprofit imputed rents.
Rental and leasing services and lessors of intangible assets	For rental and leasing services, Census Bureau QSS data and NIPA PCE rental income.	BLS PPI and NIPA prices.
<b>Professional, scientific, and technical services</b>		
	Census Bureau QSS data; for veterinary services, NIPA PCE data and BLS QCEW data.	For legal services, BLS PPI and NIPA PCE prices; for computer systems design and related services, BEA price indexes for software; for miscellaneous services, BLS PPI, NIPA PCE prices, and BEA price index for R&D.

## Principal Sources of Data for the Quarterly Statistics

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

Industry and commodity	Source data for current-dollar statistics	Source data for price indexes
<b>Management of companies and enterprises</b>	BLS QCEW data.	BLS PPI.
<b>Administrative and waste management services</b>	Census Bureau QSS data; BLS QCEW data.	BLS PPI and NIPA PCE prices.
<b>Educational services</b>	NIPA PCE data.	NIPA PCE prices based on trade source data for input costs.
<b>Health care and social assistance</b>	Census Bureau QSS data.	For ambulatory health care services, NIPA PCE prices based on BLS CPI and BLS PPI; for hospitals and nursing and residential care facilities, NIPA PCE prices based on BLS CPI and Center for Medicare and Medicaid Services; for social assistance, NIPA PCE prices based on trade source data.
<b>Arts, entertainment, and recreation</b>	Census Bureau QSS data.	NIPA PCE prices.
<b>Accommodation and food services</b>	NIPA PCE data.	For accommodations, BLS PPI and NIPA PCE prices; for food services, NIPA PCE prices.
<b>Other services, except government</b>	For repair and maintenance, personal services, and grantmaking, civic, professional, and similar organizations, Census Bureau QSS data; for religious, labor, and political organizations, NIPA PCE data; for private households, NIPA compensation.	BLS PPI and NIPA PCE prices.
<b>Federal</b>		
General government	NIPA government expenditures statistics.	NIPA prices based on BLS PPI, BLS CPI, DOD data on employment and prices, BLS employment cost indexes, and construction cost indexes from trade source data.
Government enterprises	U.S. Postal Service quarterly reports, EIA monthly data for electric utility sales and revenue data for publicly owned utilities, and NIPA PCE data for broader aggregates for other components.	BLS PPI and NIPA PCE prices.
<b>State and local</b>		
General government	NIPA government expenditure statistics.	NIPA PCE prices.
Government enterprises	NIPA statistics on government enterprises based on the Census Bureau annual survey of government finances; for Alaskan ferries, waterports, and airports, Alaska Railroad Administration; for electric utilities, EIA data; for state and local government structures, Census Bureau construction spending (value-put-in-place) survey.	BLS PPI and NIPA PCE prices.