

# **Industry Economic Accounts**







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The Bureau of Economic Analysis (BEA) prepares the annual industry accounts for the United States, which consist of the integrated gross-domestic-product (GDP)-by-industry and annual inputoutput (I-O) accounts. Beginning with 1998, the annual industry accounts provide time series of detailed, consistent information on the changing structure of the U.S. economy, including the annual contributions of private industries and government to the Nation's GDP and the annual flow of goods and services used in the production processes of industries and going to the final uses that comprise GDP in BEA's national income and product accounts (NIPAs).

Industries are defined according to the North American Industry Classification System of the United States (NAICS). Estimates are published for 61 private industries and for 4 government classifications and are available approximately 11 months after the end of the reference year. In addition, advance GDP-by-industry accounts estimates for 20 private industry groups and for 2 government classifications are published approximately 4 months after the end of the reference year.

The NAICS-based GDP-by-industry estimates for gross output, intermediate inputs, and value added are available for 1987–97. Pre-1998 GDP-by-industry estimates for gross output (1977–97) and value-added and its components (1947–97), based on the Standard Industrial Classification (SIC) system, are also available.

## Gross-Domestic-Product (GDP)-by-Industry Accounts

The GDP-by-industry accounts include estimates of value added by industry. Value added is a measure of the contribution of each private industry and of government to the Nation's GDP. It is defined as an industry's gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (energy, raw materials, semifinished goods, and purchased services). BEA

publishes current-dollar estimates of an industry's gross output and intermediate inputs, as well as the composition of its value added, which consists of compensation of employees, gross operating surplus, and taxes on production and imports, less subsidies. Chain-type price and quantity indexes of gross output, intermediate inputs, and value added are published by industry. Contributions to the percent change in real GDP are also published by industry group.

#### Uses of the accounts

The GDP-by-industry accounts can be used to examine changes in the structure of the U.S. economy and the importance of an industry and its contribution to GDP. Specifically, the estimates can be used

- To identify changes in labor and capital shares:
- To study production, capacity, and productivity across industries; or
- To compare price changes across the industries.

Continued

### Annual Input-Output (I-O) Accounts

The annual input-output (I-O) accounts provide a time series of detailed, consistent information on the flow of goods and services that make up the production processes of industries. For each year, beginning with 1998, the accounts show how industries interact as they provide inputs to, and use outputs from, each other to produce GDP.

The I-O accounts are presented in standard make and use tables and several supplementary tables, which consist of modified standard make and use tables and four requirements tables.

The standard tables include a make table and a use table. The make table shows the commodities that are produced by each industry. The use table shows the inputs to industry production and the commodities that are consumed by final users.

The supplementary make and use tables are modified standard make and use tables. The modifications or redefinitions consist of moving the outputs and inputs of some secondary production activities between industries. Redefinitions, which are necessary for the derivation of the requirements tables, are made in cases where the production process for the secondary product is very dissimilar to that for the industry's primary product. For example, the production process for restaurant services provided

in hotels is very different from that of lodging services. Therefore, for the supplementary tables, the inputs and output for these restaurant services are moved or redefined from the hotel industry to the restaurant industry.

The requirements tables are derived from the supplementary make and use tables. The direct requirements table shows the amount of a commodity that is required by an industry to produce a dollar of the industry's output. The total requirements tables show the production that is required, directly and indirectly, from each industry and each commodity to deliver a dollar of a commodity to final users.

#### Uses of the accounts

The annual I-O accounts can be used to study changes in structure of the U.S. economy and the relative importance of an industry to all other industries. The accounts are an important tool for analysis because they show the production functions of individual industries and the interactions among producers and between producers and final users in the economy. Specifically, these accounts can be used

- To study production capacity and productivity across industries; or
- To examine the direct and indirect effects of changes in final uses on industries and commodities; for example, to estimate the effects of a strike or a

natural disaster on the economy, or, supplemented with additional information, to estimate the effects of an increase in U.S. exports on employment

#### **Availability**

For more detailed information, see the following articles in the Survey of Current Business, BEA's monthly journal.

- "Annual Industry Accounts: Advanced Estimates for 2004" (May 2005)
- "Annual Industry Accounts: Revised Estimates for 2001–2003" (January 2005)
- "Gross Domestic Product by Industry for 1987–2000: New Estimates on the North American Industry Classification System" (November 2004)
- "Improved Annual Industry Accounts for 1998–2003: Integrated Annual Input-Output Accounts and Gross-Domestic-Product-by-Industry Accounts" (June 2004)

#### For more information

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The articles are available on our Web site at <www.bea.gov>. The estimates are also available on our Web site in free, interactively accessible files and in free downloadable files.

Table 1. Value Added by Industry Group, 2001–2004
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Line			In billions of c	urrent dollars		As a percentage of GDP			
LITTE		2001	2002	2003	2004	2001	2002	2003	2004
1	Gross domestic product	10,128.0	10,487.0	11,004.0	11,735.0	100.0	100.0	100.0	100.0
2	Private industries	8,869.7	9,154.1	9,604.2	10,276.6	87.6	87.3	87.3	87.6
3	Private goods-producing industries	2,027.5	2,028.1	2,147.8	2,299.5	20.0	19.3	19.5	19.6
4	Private goods-producing industries	97.9	96.9	113.9	116.6	1.0	0.9	1.0	1.0
5	Mining	118.7	104.9	130.3	147.5	1.2	1.0	1.2	1.3
6	Construction	469.5	479.1	501.3	541.4	4.6	4.6	4.6	4.6
/	Manufacturing	1,341.3	1,347.2	1,402.3	1,494.0	13.2	12.8	12.7	12.7
8	Durable goods	778.9	771.9	798.0	862.6	1.7	7.4	7.3	7.4
9	Nondurable goods	562.5	575.3	604.4	631.4	5.6	5.5	5.5	5.4
10	Private services-producing industries	6,842.2	7,126.0	7,456.3	7,977.0	67.6	68.0	67.8	68.0
11	Utilities	202.3	210.7	222.2	241.2	2.0	2.0	2.0	2.1
12 13	Wholesale trade	607.1	624.9	645.4	688.1	6.0	6.0	5.9	5.9
14	Retail trade Transportation and warehousing	691.6 296.9	744.3 304.4	770.5 319.3	797.6 338.6	6.8 2.9	7.1 2.9	7.0 2.9	6.8 2.9
15	Information	476.9	470.0	493.8	547.2	2.9	4.5	4.5	4.7
16	Finance, insurance, real estate, rental, and leasing	2,059.2	2,148.2	2,250.3	2,423.7	20.3	20.5	20.4	20.7
17	Professional and business services	1,165.9	1,190.0	1,244.3	1.341.4	11.5	11.3	11.3	11.4
18	Educational services, health care, and social assistance	739.3	799.0	851.2	903.9	7.3	7.6	7.7	7.7
19	Arts, entertainment, recreation, accommodation, and food services	361.5	382.3	396.4	419.8	3.6	3.6	3.6	3.6
20	Other services, except government	241.5	252.1	263.0	275.5	2.4	2.4	2.4	2.3
21	Government	1,258.3	1,332.9	1,399.9	1,458.4	12.4	12.7	12.7	12.4
22	Federal	385.7	415.8	447.1	465.4	3.8	4.0	4.1	4.0
23	State and local	872.6	917.1	952.8	993.0	8.6	8.7	8.7	8.5

Table 2. Components of Value Added by Industry Group, 2000-2003

Lina			In billions of cu	ırrent dollars		As a percentage of value added				
Line		2000	2001	2002	2003	2000	2001	2002	2003	
1 2 3 4	Gross domestic product Compensation of employees Taxes on production and imports less subsidies Gross operating surplus	<b>9,817.0</b> 5,787.3 664.6 3,365.1	10,128.0 5,947.2 673.3 3,507.4	<b>10,487.0</b> 6,074.9 724.4 3,687.7	11,004.0 6,294.5 751.3 3,958.2	100.0 59.0 6.8 34.3	100.0 58.7 6.6 34.6	100.0 57.9 6.9 35.2	100.0 57.2 6.8 36.0	
5 6 7 8	Private industries. Compensation of employees Taxes on production and imports less subsidies. Gross operating surplus.	<b>8,614.3</b> 4,776.4 675.0 3,162.8	<b>8,869.7</b> 4,882.4 684.4 3,302.8	<b>9,154.1</b> 4,942.8 737.5 3,473.8	9,604.2 5,108.3 765.3 3,730.6	100.0 55.4 7.8 36.7	100.0 55.0 7.7 37.2	100.0 54.0 8.1 37.9	100.0 53.2 8.0 38.8	
9 10 11 12	Private goods-producing industries <sup>1</sup> Compensation of employees Taxes on production and imports less subsidies Gross operating surplus	<b>2,081.5</b> 1,298.7 44.7 738.1	<b>2,027.5</b> 1,279.3 48.5 699.7	<b>2,028.1</b> 1,271.9 59.5 696.6	<b>2,147.8</b> 1,305.5 58.8 783.5	100.0 62.4 2.1 35.5	100.0 63.1 2.4 34.5	100.0 62.7 2.9 34.4	100.0 60.8 2.7 36.5	
13 14 15 16	Private services-producing industries <sup>2</sup>	<b>6,532.8</b> 3,477.8 630.3 2,424.7	<b>6,842.2</b> 3,603.1 635.9 2,603.1	<b>7,126.0</b> 3,670.8 678.1 2,777.1	<b>7,456.3</b> 3,802.8 706.5 2,947.0	100.0 53.2 9.6 37.1	100.0 52.7 9.3 38.0	100.0 51.5 9.5 39.0	<b>100.0</b> 51.0 9.5 39.5	
17 18 19 20	Government.  Compensation of employees  Taxes on production and imports less subsidies.  Gross operating surplus.	<b>1,202.7</b> 1,010.8 -10.5 202.3	<b>1,258.3</b> 1,064.8 -11.0 204.5	<b>1,332.9</b> 1,132.1 -13.1 213.9	1,399.9 1,186.2 -14.0 227.6	<b>100.0</b> 84.0 -0.9 16.8	<b>100.0</b> 84.6 -0.9 16.3	<b>100.0</b> 84.9 -1.0 16.0	<b>100.0</b> 84.7 -1.0 16.3	
21 22 23 24	Addenda: Manufacturing Compensation of employees Taxes on production and imports less subsidies Gross operating surplus	<b>1,426.2</b> 918.9 40.6 466.8	<b>1,341.3</b> 876.8 41.7 422.8	<b>1,347.2</b> 869.3 44.4 433.4	<b>1,402.3</b> 897.0 45.5 459.8	100.0 64.4 2.8 32.7	100.0 65.4 3.1 31.5	100.0 64.5 3.3 32.2	100.0 64.0 3.2 32.8	

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.

Table 3. Percent Changes in Real Value Added by Industry Group

Line		2001	2002	2003	2004	Average annual rate of change 1995– 2000
1	Gross domestic product	0.8	1.9	3.0	4.4	4.1
2	Private industries	0.9	1.8	3.1	4.6	4.6
3	Private goods-producing industries	-4.3	1.1	2.8	3.1	4.7
4	Agriculture, forestry, fishing, and hunting	-6.3	6.8	5.5	-6.4	6.5
5	Mining	-5.3	-2.2	-7.0	2.2	-1.1
6	Construction	0.2	-2.6	-0.3	2.2	3.0
7	Manufacturing	-5.6	2.3	4.5	4.3	5.4
8	Durable goods	-6.0	1.3	6.1	5.9	8.9
9	Nondurable goods	-5.0	3.7	2.4	2.2	0.4
10	Private services-producing industries	2.6	2.0	3.2	5.1	4.6
11	Utilities	-4.9	6.0	5.9	5.4	1.3
12	Wholesale trade	7.0	1.6	-1.9	3.3	7.2
13	Retail trade	7.0	5.3	5.6	5.2	6.5
14	Transportation and warehousing	-2.6	1.9	5.0	3.3	4.4
15	Information	4.0	-0.3	5.7	9.8	8.0
40	Finance, insurance, real estate, rental, and					
16	leasing	3.9	1.4	3.2	5.6	4.4
17	Professional and business services	-0.7	1.3	3.5	4.8	5.3
18	Educational services, health care, and social assistance	3.2	3.8	2.8	2.7	1.4
	Arts, entertainment, recreation,					
19	accommodation, and food services	-0.7	1.8	1.9	4.5	3.7
20	Other services, except government	-1.7	-0.8	0.5	7.1	0.1
21	Government	0.8	1.5	1.4	1.2	1.2

Table 4. Contributions to Percent Change in Real Gross Domestic **Product by Industry Group** 

Line		2001	2002	2003	2004	Average annual rate of change 1995– 2000
	Percent change:					
1	Gross domestic product	0.8	1.9	3.0	4.4	4.1
	Percentage points:					
2	Private industries	0.80	1.60	2.68	4.02	4.04
3	Private goods-producing industries	-0.92	0.23	0.54	0.60	1.02
4	Agriculture, forestry, fishing, and hunting	-0.06	0.06	0.05	-0.07	0.08
5	Mining	-0.07	-0.02	-0.08	0.03	-0.01
6	Construction	0.01	-0.12	-0.01	0.10	0.12
7	Manufacturing	-0.80	0.31	0.58	0.54	0.83
8	Durable goods	-0.51	0.10	0.45	0.42	0.80
9	Nondurable goods	-0.29	0.21	0.13	0.12	0.03
10	Private services-producing industries	1.72	1.38	2.14	3.42	3.03
11	Utilities	-0.10	0.12	0.12	0.11	0.02
12	Wholesale trade	0.41	0.09		0.19	0.44
13	Retail trade	0.46	0.36	0.39	0.36	0.44
14	Transportation and warehousing	-0.08	0.06	0.15	0.10	0.14
15	Information	0.19	-0.01	0.25	0.44	0.35
16	Finance, insurance, real estate, rental, and leasing	0.76	0.28	0.66	1.14	0.84
17	Professional and business services	-0.08	0.20	0.39	0.55	0.57
17	Educational services, health care, and	0.00	0.10	0.00	0.00	0.57
18	social assistance	0.22	0.28	0.21	0.21	0.09
	Arts, entertainment, recreation,		•			
19	accommodation, and food services	-0.03	0.07	0.07	0.16	0.13
20	Other services, except government	-0.04	-0.02	0.01	0.17	0.00
21	Government	0.10	0.19	0.18	0.15	0.15

Consists of agriculture, forestry, fishing, and hunting; mining; construction; and manufacturing.
 Consists of utilities; wholesale trade; retail trade; transportation and warehousing; information; finance, insurance,

Table 5. The Use of Commodities by Industries, 2003 [Millions of dollars]

VOCA Gross operating surplus  Total value added  Total industry output	Total intermediate inputs V001 Compensation of employees	14 government	accommodation, and food services	care, and social 12 assistance Arts, entertainment, recreation.	11 services  Fducational services health	10 estate, rental, and leasing	08 warehousing	Agriculture, forestry, fishing, 01 and hunting		Commodities industries
-7,439 84,786 <b>113,907</b> <b>275,114</b>	<b>161,206</b> 36,560	3,239 117 122	391	12	5,099	15,855	7,658 1,112	62,082 441 5,320 941 47,478 11,158	01	Agriculture, forestry, fishing, and hunting
14,500 76,909 <b>130,331</b> <b>243,658</b>	113,327 38,922	378 35 1,316	470	91	21,271	19,638	6,590 615	33,299 2,763 2,763 22,940 3,537 337	02	Mining
37,503 132,220 <b>222,153</b> <b>356,063</b>	<b>133,910</b> 52,430	510 234 67	709	335	5,952	5,183	24,910 400	11 83,389 203 2,790 7,763 1,390 64	83	Utilities
6,209 162,034 <b>501,277</b> <b>954,849</b>	<b>453,573</b> 333,034	10,955 1,229 745	2,233	114	78,758	35,030	16,143 10,188	928 5,807 3,204 1,195 215,537 24,291 47,217	04	Con- struction
6,209 45,514 162,034 459,818 <b>501,277 1,402,317</b> <b>954,849 3,915,201</b>	<b>2,512,884</b> 896,985	41,740 2,919 45,938	17,867	2,364	307,848	100,040	115,050 39,917	145,135 174,213 42,452 8,100 1,244,970 214,029 10,302	05	Manufac- turing
143,464 156,221 <b>645,370</b> <b>909,712</b>	<b>264,342</b> 345,685	7,073 3,416 9,176	4,856	667	87,135	43,150	15,369 13,247	2,452 19 5,121 2,218 43,930 24,467 2,046	06	Whole- sale trade
151,576 186,071 <b>770,475</b> <b>1,132,670</b>	<b>362,195</b> 432,828	8,200 4,710 615	6,204	498	132,660	83,179	20,434 15,985	260 14 11,655 4,289 63,170 6,945 3,378	07	Retail trade
14,233 101,011 <b>319,285</b> <b>592,450</b>	<b>273,166</b> 204,041	7,501 1,080 16,422	4,280	486	51,324	30,773	68,662 8,180	9 5,902 2,864 1,439 62,225 10,534 1,485	80	Trans- portation and ware- housing
38,842 230,228 <b>493,789</b> <b>1,037,731</b>	<b>543,943</b> . 224,719	14,075 4,649 9,972	15,059	2,334	124,577	65,930	10,346 206,909	10 1 4,473 2,987 70,737 11,251 633	09	Infor- mation
38,842 224,809 24,077 9,837 230,228 1,468,087 346,416 161,038 493,789 2,250,295 1,244,270 851,197 ,037,731 3,438,658 2,007,122 1,372,799	<b>1,188,363</b> 557,399	24,920 8,813 15,965	20,685	847	249,789	618,640	26,796 29,223	2,016 1,837 46,650 32,327 88,789 10,590 10,478	10	Finance, insurance, real sestate, rental, and leasing
24,077 346,416 <b>1,244,270</b> <b>2,007,122</b>	<b>762,853</b> 873,777	24,973 13,792 7,526	30,232	2,603	307,983	138,574	27,221 74,611	5,564 110 14,223 9,659 85,729 12,847 7,206	==	Profes- sional and business services
9,837 161,038 <b>851,197</b> <b>1,372,799</b>	<b>521,603</b> 680,322	10,625 14,345 244	21,526	11,941	126,242	130,686	16,341 34,006	552 9 10,618 9,205 117,071 15,721 2,473	12	Educational services, health care, and social assistance
44,670 104,335 <b>396,447</b> <b>719,613</b>	<b>323,166</b> 247,442	7,771 3,046 396	20,339	635	49,957	68,421	8,889 16,385	9,949 48 14,679 6,637 96,385 16,979 2,652	13	Arts, enter- tainment, recreation, accom- modation, and food services
17,491 61,412 <b>263,047</b> <b>472,178</b>	209,130 184,144	6,217 3,673 266	4,533	767	43,274	44,897	5,497 12,588	464 9 5,515 3,620 62,556 7,837 7,420	14	Other services, except govern-ment
-13,977 . 227,636 . <b>1,399,889</b> . <b>2,305,015</b> .	905,126 1,186,230	38,525 10,398 25,950	24,961	32,740	219,158	76,103	42,411 58,228	2,121 11,615 48,625 48,499 231,999 33,762 32	15	Govern- ment
			174,345	56,434	219,158 1,811,027	76,103 <b>1,476,099</b> 1,805,325	412,316 521,593	231,552 316,712 218,364 133,954 2,461,277 405,337 95,905		Total inter- mediate
7,760,881 1,666,980		395,478 52,550 28,412 —75,404	612,353	<b>56,434</b> 1,509,600	171,670	,805,325	138,821 286,090	47,922 72 195,724 1,301,616 312,811 902,437	F010	Personal con- sumption expend- ir itures
,666,980		-75,404			167,624	82,340	9,676 53,462	35,698 704,792 573,197 76,704 38,891	F020	Private fixed investment in
-1,224		-14 -15,748					871 475	1,912 1,912 8,983 2,123	F030	Change Exports of in goods private and inventories services
942,868		164 247 98,742	660	689	66,925	80,842	60,176 26,265	24,859 4,739 1,132 71 506,780 70,575	F040	xports of goods and services
-1,440,979		-1,984 -177,578	-195	-741	-16,645	-20,239	-11,960 -4,257	24,859 -26,769 4,739 -125,508 1,132 -1,407 7,1 -1,075,128 70,575 21,432	F050	Imports of goods and services
942,868 -1,440,979 2,075,522		1,718,683 -2,445			23,898		994 6,358	-1,136 702 224,468 94,705 9,295	F100	Govern- ment con- sumption expend- itures and gross investment
11,004,047		393,644 1,771,480 –144,021	612,819	1,509,549	413,472	1,948,268	198,577 368,393	45,050 -82,384 195,449 929,331 1,410,152 492,940 941,329		Total final uses (GDP)
19,732,832		600,345 1,843,933 –9,302	787,163	1,565,982	2,224,498	3,424,367	610,893 889,986	276,602 234,328 413,812 1,063,285 3,871,429 898,277 1,037,234		Total commodity output

Includes noncomparable imports, scrap, used goods, inventory valuation adjustment, and rest-of-the-world adjustments. GDP Gross Domestic Product.