Improved Estimates of Gross Product by Industry, 1959–94

By Robert E. Yuskavage

$\mathcal{I}$N THIS article, the Bureau of Economic Analysis (BEA) presents new estimates of gross product, or gross product originating (GPO), by industry for 1994 and revised estimates for 1959–93.[1] The estimates reflect the results of the recent comprehensive revision of the national income and product accounts (NIPA's), and they incorporate newly available source data and methodological changes for GPO by industry.[2]

The following major improvements are incorporated into this GPO revision and were also incorporated into the comprehensive NIPA revision: Improved chain-type measures of real GPO that eliminate the overstatement of real growth for periods after the base year and the under-

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1. The previously published estimates of gross product by industry for 1947–90 appeared in the November 1993 issue of the SURVEY OF CURRENT BUSINESS, and the estimates for 1991–93, in the April 1995 issue. Revised GPO estimates for 1947–58 will be released after the release of the revised NIPA estimates for 1929–58 in the fall of 1996.

2. The GPO and the gross domestic product (GDP) estimates in this article do not reflect the results of the recently released annual NIPA revision, which is presented in this issue of the SURVEY. The effect of not incorporating these results is small. The growth rate of real GDP for 1993 is revised up 0.1 percentage point to 2.3 percent, and the growth rate for 1994 is unrevised.

Gross Product Originating: Definition and Relationship to Gross Domestic Product

Gross product, or gross product originating (GPO), by industry is the contribution of each private industry and government to gross domestic product (GDP). An industry's GPO, often referred to as its "value added," is equal to its gross output (sales or receipts and other operating income, commodity taxes, and inventory change) minus its intermediate inputs (consumption of goods and services purchased from other industries or imported).

In concept, GDP measured as the sum of GPO in all industries is the same as GDP measured in two other ways: As the sum of expenditures (consumer spending, investment, net exports, and government consumption expenditures and gross investment) and as the sum of the costs incurred (such as compensation of employees, net interest, and indirect business taxes) and the profits earned in production. In practice, BEA uses only the latter two ways to estimate GDP, but because of less than perfectly consistent source data, the resulting totals are not the same.

The current-dollar estimate of GDP is defined as the sum of the expenditure components, and gross domestic income is defined as the sum of costs incurred and profits earned; the difference between GDP and gross domestic income is the statistical discrepancy. Because the current-dollar GPO estimates are measured as the sum of distributions by industry of the components of gross domestic income, the sum of the current-dollar GPO estimates also differs from current-dollar GDP by the statistical discrepancy.

Real GDP is also measured as the sum of the expenditure components, using the formula for calculating chain-type measures. However, estimates of real gross domestic income are not prepared, because price indexes cannot be associated with income measures as they can be with the goods and services that make up the expenditure measures. Real GPO estimates for most industries are derived using the formula for calculating chain-type measures with separate estimates of gross output and intermediate inputs. (See the box "Computation of the Chain-Type Quantity Indexes for Double-Deflated Industries" on page 142 for information on how output and inputs are combined in these calculations.)

The sum of the chain-dollar GPO estimates differs from chain-dollar GDP by the chain-dollar statistical discrepancy, which is shown as part of private industry GPO, and by the discrepancy entitled "not allocated by industry," which is the difference between chain-dollar GDP and the sum of chain-dollar GPO for the detailed industries and the statistical discrepancy. The value of the category "not allocated by industry" reflects the lack of additivity of detailed chain-dollar GPO estimates because of the formula used to calculate chain-type measures of real output and because of the use of the expenditures measure of real GDP.

The statistical discrepancy is included in the GPO of private industries partly because of BEA's judgement that the current-dollar expenditure components used to measure GDP are more accurate than the current-dollar estimates of gross domestic income and that most of the measurement problems affect the GPO of private industries. For example, the adjustments to source data to account for tax-return misreporting, which are based on periodic IRS audit studies and rough estimates of the amounts of income not detected by these audits, are larger for the cost components of gross domestic income than for the expenditure components of GDP. In addition, it is BEA's judgement that the real expenditure components used to measure GDP are more accurate than the real GPO estimates. The amount of detailed expenditures data that are available for weighting the price indexes used in calculating GDP is greater than that for gross outputs and intermediate inputs used in calculating GPO, and little information is collected annually on the composition of inputs or of nonmanufacturing outputs. For some industries, no source data are available to measure gross output, and the resulting GPO estimates are prepared using less reliable methodologies.

statement of real growth for periods before the base year, a new treatment of government investment that provides a more complete picture of investment through the consistent treatment of fixed assets whether purchased by the public or the private sector, and a quality-adjusted BEA price index for selected semiconductor products.[3] Other major improvements include the following: An improved industry allocation of commodity taxes, a newly available 1987 employment matrix for the estimation of profits and capital consumption on an establishment basis, and newly available information on the composition of inputs from the 1987 benchmark input-output table and the 1992 Economic Censuses. In addition, new and redesigned tables are introduced to update the presentation of the GPO estimates to reflect the improved measures of real output and to provide detail on the cost components of GPO.

The release of the new and improved GPO estimates is the latest step in a continuous GPO improvement program that BEA initiated in 1988.[4] Earlier improvements included improved estimation techniques for most services-producing industries, the incorporation of services prices and import prices into the estimation of real inputs, and the resumption of an annual publication schedule. Future improvement efforts

will focus on integrating the GPO series with the benchmark input-output accounts and with other BEA industry estimates.[5]

The first part of this article discusses the relative performance of various industries in terms of growth rates and industry shares. The second part discusses the revisions to the GPO estimates, and the third part describes the methodology used to prepare the GPO estimates. Detailed tables following the text present the current-dollar GPO estimates for 1959–94 and the real estimates for 1977–94.

Industry Growth Rates and Shares

Comparisons of gross product growth rates and shares of gross domestic product (GDP) across industries provide indications of the relative performance of particular industries or industry groups. For example, a comparison of the growth rate of real gross product for an industry with the growth rate of real GDP indicates whether that industry is adding to (or is reducing) the economy's growth and whether that industry is becoming a larger (or a smaller) part of the total economy. A comparison of the share of current-dollar GDP accounted for by the gross product of an industry over time indicates whether that industry's claim on the economy's resources is increasing (or decreasing).

Real growth rates

Real GDP increased at an average annual rate of 2.6 percent for 1977–94 (chart 1 and table 1). The gross product of all industry groups increased over this period; the increases ranged from 4.9 percent for wholesale trade to 0.9 percent for mining. Manufacturing increased 2.3 percent, 0.3 percentage point less than the increase in GDP; durable goods increased 2.5 percent, 0.1 percentage point less than GDP.

Growth rates for 1977–94 for more detailed industry groups are shown in table 15.[6] Among

industries with comparable definitions over the entire period, nine recorded average annual increases in real gross product of 5 percent or more. The two fastest growing industries were security and commodity brokers, which increased 10.5 percent, and agricultural services, forestry, and fishing, which increased 7.2 percent. Other fast growing industries included coal mining, industrial machinery and equipment, rubber and miscellaneous plastics products, transportation by air, transportation services, motion pictures, and social services.[7] Increases of more than 5 percent were also recorded in two industry combinations: Communications (which consists of the telephone and telegraph and the radio and television industries) and "business, miscellaneous professional, and other services."

The growth rates of nine industries decreased for 1977–94. The three largest decreases were in manufacturing: Tobacco products, down 5.1 percent; leather and leather products, down 2.4 percent; and primary metal industries, down 1.1 percent. The decreases in the remaining six industries—two in manufacturing, two in transportation and public utilities, one in mining, and one in services—were all less than 1 percent.

Average annual growth rates for the subperiods 1977–87 and 1987–94 are also shown in table 15.[8] For 1977–87, real GDP increased at an average annual rate of 2.8 percent. The growth rates of all industry groups increased during this period; the largest increase was in wholesale trade (4.8 percent). Manufacturing increased 2.7 percent, 0.1 percentage point less than the increase in GDP.

For 1987–94, real GDP increased 2.3 percent. The growth rates of all industry groups increased; the largest increase was in wholesale trade (4.9 percent). Manufacturing increased 1.6 percent, 0.7 percentage point less than the increase in GDP. Nondurable goods increased 0.9 percent, largely reflecting a decline in petroleum and coal products; durable goods increased 2.2 percent. In contrast, for 1992–94, manufacturing grew at an annual rate of 4.8 percent, compared with a 2.8-percent increase in GDP; durable goods increased 7.1 percent.

Contributions to real GDP growth.—Differences in growth rates alone do not indicate the extent to which industries contribute to the growth of real GDP; their contribution also depends on the industry's size in the first year of the period being measured. Table 2 shows contributions by industry groups to real GDP growth for each year in 1978–94.[9] For example, real GPO for mining increased 6.6 percent in 1994, 3.1 percentage points

CHART 1

Real Gross Product by Industry Group: Average Annual Change for 1977–94
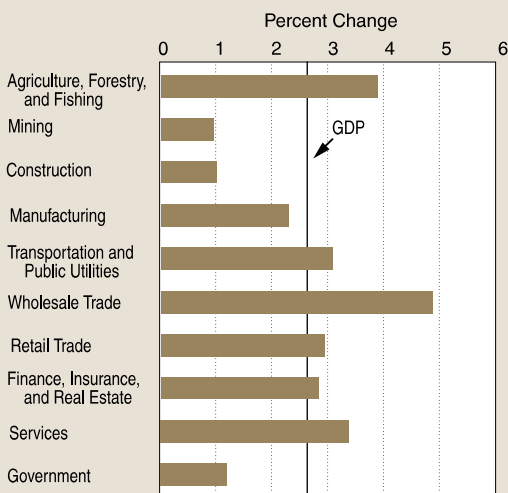
U.S. Department of Commerce, Bureau of Economic Analysis

Table 1.—Real Gross Domestic Product by Industry Group: Average Annual Rates of Change, Selected Periods

[Percent]

	1977–94	1977–87	1987–94	1987–92	1992–94
Gross domestic product	**2.6**	**2.8**	**2.3**	**2.0**	**2.8**
Private industries	**2.8**	**3.1**	**2.4**	**2.1**	**3.3**
Agriculture, forestry, and fishing	3.9	3.8	4.1	5.1	1.5
Mining	.9	.5	1.6	1.3	2.4
Construction	1.0	1.1	.8	–.8	5.0
Manufacturing	2.3	2.7	1.6	.4	4.8
Durable goods	2.5	2.7	2.2	.3	7.1
Nondurable goods	2.0	2.8	.9	.5	2.0
Transportation and public utilities	3.1	2.7	3.6	2.9	5.2
Transportation	2.6	2.3	3.0	1.9	5.7
Communications	5.0	5.3	4.6	3.8	6.3
Electric, gas, and sanitary services	2.0	1.1	3.3	3.2	3.6
Wholesale trade	4.9	4.8	4.9	4.7	5.2
Retail trade	2.9	3.4	2.3	1.3	4.6
Finance, insurance, and real estate	2.8	3.2	2.3	2.5	1.9
Services	3.4	3.9	2.6	2.9	2.0
Government	**1.2**	**1.2**	**1.1**	**1.5**	**.1**

7. For the industrial machinery and equipment industry, the growth rate for 1977–94 was computed using the 1977 value for the 1972 SIC "machinery, except electrical" industry, which is roughly comparable in definition to the 1987 SIC "industrial machinery and equipment" industry.

8. The selection of 1987 as a breakpoint reflects that it was the base year for the previously published estimates and that it was also the year of a major updating of the SIC.

9. For these calculations, current-dollar estimates for GDP, and for GPO for each industry group, are extrapolated for each year by the industry's chain-type quantity index to derive an estimate of change for the period in the prices of the initial year. Dollar-based contributions are then computed as a percentage of the total change in GDP for the period. These contributions are then used to estimate the percentage-point contributions of industry

more than the increase in GDP. However, because mining is a relatively small industry group, it contributed only 0.1 percentage point to the growth in GDP.

Shares of current-dollar GDP

For 1959–94, the share of current-dollar GDP accounted for by private services-producing industries increased from 48.8 percent to 62.0 percent, while the share accounted for by private goods-producing industries declined from 38.8 percent to 24.2 percent (table 3 and chart 2).[10] The increase in the share for the private services-producing industries is the result of both above-average real growth and above-average growth in prices. The increase was more than accounted for by "services" and by finance, insurance, and real estate (FIRE), whose shares rose 9.9 percentage points and 4.8 percentage points, respectively. Among the industries in these groups, the increase was broad-based, but is particularly noticeable in banking, business services, and health services (table 11).

The decline in the share of goods-producing industries was concentrated in manufacturing. Manufacturing's share fell 10.4 percentage points, from 27.7 percent to 17.3 percent. Within manufacturing, the share of durable goods declined 6.4 percentage points, and the share of nondurable goods declined 4.0 percentage points.

The share of government increased from 12.8 percent to 13.4 percent. The increase was more than accounted for by State and local government; the share of the Federal Government declined.

Composition of current-dollar GPO.—Current-dollar GPO is measured as the incomes and profits earned in production in each industry; it is equal to gross domestic income, whose components can be divided into categories that approximate returns to labor and returns to capital. Differences over time and among industry groups in returns to labor and capital can thus be observed using these approximations. The return to labor from production can be approximated using compensation of employees. The return to capital from production can be approximated using the remaining components of GPO except indirect business tax and nontax liability, which is excluded because it can be viewed as a part of the pre-tax return to capital that accrues to government rather than to business.[11]

For the economy as a whole, compensation of employees as a share of GDP increased slightly, from nearly 56 percent in 1959 to nearly 58 percent in 1994, while the share of "other" GPO

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groups to the growth in real GDP. For years in which relative prices changed significantly, the detail may not add to the corresponding totals.

10. For this comparison, private services-producing industries are defined to consist of the following industry groups: Transportation and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and "services." Private goods-producing industries are defined to consist of agriculture, forestry, and fishing; mining; construction; and manufacturing.

11. "Other" GPO is the sum of proprietors' income, corporate profits, net interest, capital consumption allowances, business transfer payments, and the current surplus of government enterprises less subsidies. Proprietors' income is included in "other" GPO as a return to capital from production; however, an unknown portion of proprietors' income represents a return to labor.

Table 2.—Contributions to Percent Change in Real Gross Domestic Product

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994
Gross domestic product	**5.0**	**2.9**	**–0.3**	**2.5**	**–2.1**	**4.0**	**6.8**	**3.7**	**3.0**	**2.9**	**3.8**	**3.4**	**1.3**	**–1.0**	**2.7**	**2.2**	**3.5**
Private industries	**4.7**	**2.7**	**–.4**	**2.4**	**–2.1**	**4.1**	**6.7**	**3.4**	**2.7**	**2.6**	**3.5**	**3.1**	**1.0**	**–1.1**	**2.7**	**2.2**	**3.4**
Agriculture, forestry, and fishing	–.4	.3	0	.7	.1	–.6	.4	.5	–.1	0	–.1	.2	.3	0	.2	–.1	.2
Mining	.1	–.3	.3	0	–.2	–.3	.4	.2	–.1	.1	.4	–.2	.1	0	–.1	0	.1
Construction	.2	.1	–.3	–.4	–.5	.2	.6	.5	.1	0	.2	.1	–.1	–.3	0	.1	.3
Manufacturing	1.2	.8	–1.1	.9	–1.2	1.2	2.1	.6	–.2	1.4	1.3	–.1	–.3	–.7	.2	.5	1.1
Durable goods	.8	.3	–.6	.5	–1.1	.6	1.9	.3	–.2	.8	1.0	–.1	–.2	–.5	.1	.4	.9
Nondurable goods	.3	.5	–.5	.4	–.1	.6	.2	.3	0	.6	.3	0	–.1	–.1	.1	.1	.3
Transportation and public utilities	.4	.4	.1	.1	–.3	.6	.4	0	0	.7	.3	.1	.3	.3	.2	.4	.5
Transportation	.2	.2	–.1	–.1	–.1	.4	.2	0	.1	.1	0	0	.1	.2	.1	.2	.2
Communications	.3	.2	.3	.2	0	.2	–.1	0	0	.3	.1	0	.2	.1	.1	.1	.2
Electric, gas, and sanitary services	0	0	0	.1	–.2	.1	.2	0	–.1	.3	.2	.1	.1	.1	0	.1	.1
Wholesale trade	.5	.4	–.1	.5	.2	.1	.9	.3	.8	–.2	.4	.4	–.1	.4	.4	.2	.5
Retail trade	.7	0	–.3	.3	0	.8	.9	.6	.6	–.3	.5	.3	–.1	–.2	.2	.3	.5
Finance, insurance, and real estate	.8	.8	.6	.3	0	.4	.8	.4	0	.8	.9	.5	.1	–.1	.7	.2	.5
Services	.8	.5	.4	.3	.1	.4	1.0	.7	.5	.7	.9	.8	.5	–.1	.4	.3	.4
Statistical discrepancy [1]	–.1	.4	–.1	–.5	–.6	1.2	–.9	–.1	.5	–.9	–.6	1.2	.1	–.1	.6	.2	–.4
Government	**.3**	**.1**	**.2**	**0**	**0**	**.1**	**.1**	**.3**	**.3**	**.3**	**.3**	**.3**	**.3**	**–.1**	**0**	**0**	**0**

1. Equals GDP measured as the sum of expenditures less gross domestic income.   NOTE—For information on the calculation of the contributions to percent change, see footnote 9 in the text.

declined (table 12). Labor and capital shares varied among industry groups. The labor share of GPO in manufacturing consistently exceeded the average for the total economy, but it declined slightly over the period, largely because the share in nondurable goods declined. The labor share of GPO in both FIRE and "services" increased substantially, while the capital share, mainly proprietors' income, in those industries fell.

CHART 2

Shares of Current-dollar GDP

Percent of GDP
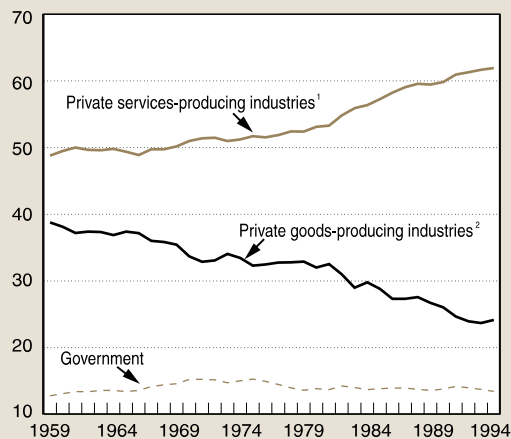
1. Consists of transportation and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services.
2. Consists of agriculture, forestry, and fishing; mining; construction; and manufacturing.

U.S. Department of Commerce, Bureau of Economic Analysis

Revisions to the GPO Estimates

The first section in this part of the article discusses the impact of the revisions to the GPO estimates. The second section discusses the major sources of the revisions, and the third section discusses the changes in the presentation of the GPO estimates.

Impact of the revisions

Current-dollar estimates.—The pattern of the revisions to current-dollar GPO largely reflects the pattern of the comprehensive NIPA revisions to GDP and of the revisions by industry to the components of gross domestic income. Table 4 presents revisions to current-dollar GDP by industry group for selected years.

For 1959–82, the GPO of most private industries was revised very little. The exceptions are the revisions to nondurable goods manufacturing (mainly petroleum and coal products) and to wholesale trade, which resulted from the improved treatment of commodity taxes. For 1983–93, the largest upward revision was to FIRE (mainly due to nonfarm housing services) beginning in 1984. Other large upward revisions were to mining (mainly to oil and gas extraction) for each year 1984–92 and to wholesale trade, beginning in 1991. The largest downward revisions were to agriculture, forestry, and fishing

Table 3.—Gross Product by Industry Group in Current Dollars as a Percentage of Gross Domestic Product, Selected Years

[Percent]

	1959	1963	1972	1977	1982	1987	1992	1994
Gross domestic product	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
Private industries	**87.2**	**86.4**	**84.8**	**85.5**	**85.8**	**86.1**	**86.0**	**86.6**
Agriculture, forestry, and fishing	4.0	3.6	3.0	2.7	2.4	1.9	1.8	1.7
Mining	2.5	2.2	1.6	2.7	4.6	1.9	1.5	1.3
Construction	4.7	4.7	5.1	4.6	4.0	4.6	3.7	3.9
Manufacturing	27.7	26.9	23.5	22.8	20.0	18.9	17.0	17.3
Durable goods	16.1	15.9	13.9	13.7	11.6	10.9	9.2	9.7
Nondurable goods	11.6	11.0	9.5	9.1	8.4	8.0	7.9	7.6
Transportation and public utilities	8.9	8.9	8.8	8.9	9.0	9.0	8.5	8.7
Transportation	4.5	4.2	3.9	3.8	3.4	3.4	3.1	3.2
Communications	2.0	2.2	2.5	2.5	2.7	2.7	2.6	2.7
Electric, gas, and sanitary services	2.4	2.5	2.4	2.6	2.9	2.9	2.8	2.8
Wholesale trade	7.1	7.0	7.1	7.0	6.8	6.4	6.5	6.7
Retail trade	9.7	9.4	9.6	9.4	8.9	9.3	8.7	8.8
Finance, insurance, and real estate	13.6	14.1	14.3	14.0	15.6	17.7	18.4	18.4
Services	9.5	10.3	11.7	12.6	14.6	16.7	19.2	19.4
Statistical discrepancy [1]	–.4	–.6	.3	.9	–.1	–.4	.7	.5
Government	**12.8**	**13.6**	**15.2**	**14.5**	**14.2**	**13.9**	**14.0**	**13.4**
Addenda:								
Private goods-producing industries [2]	38.8	37.4	33.1	32.8	31.0	27.3	24.0	24.2
Private services-producing industries [3]	48.8	49.6	51.4	51.9	54.8	59.1	61.3	62.0

1. Equals GDP measured as the sum of expenditures less gross domestic income.
2. Consists of agriculture, forestry, and fishing; mining; construction; and manufacturing.

3. Consists of transportation and public utilities; wholesale trade; retail trade; finance, insurance, and real estate; and services.

(mainly to farms) beginning in 1988; to retail trade beginning in 1986; and to nondurable goods manufacturing (mainly to petroleum and coal products) for most years.

For government, revisions were relatively large for all years, reflecting the new treatment of government investment and, beginning in 1984, the new definitions for the Federal Government retirement programs. General government GPO was revised up for each year during 1959–93.

Real growth rates.—For 1977–93, revisions to the rates of growth in real GPO did not alter the picture of growth by industry that was shown by the previously published estimates (table 5). After revision, wholesale trade remains the fastest growing industry group. Previously, construction was the slowest growing industry group; now, construction and mining are tied for the slowest.

The average annual growth rate for manufacturing was revised down 0.1 percentage point for 1977–93, the same as the revision for GDP.[12] For durable goods, the real growth rate was revised down 0.5 percentage point. For 1977–87,

the growth rate for manufacturing was revised up 0.3 percentage point, and for 1987–93, it was revised down 0.9 percentage point. This downward revision is largely attributable to revisions to the preliminary estimates for 1993, which were based on incomplete source data, and to the use of the chain-type measure of real growth for manufacturing, beginning with 1988.

Chain-type measures of real growth are more appropriate than fixed-weighted measures because they avoid the substitution bias that results from changes in relative prices as one moves farther from a fixed base year. This substitution bias is especially apparent in manufacturing, because the continuous decline in computer prices has had a major impact on relative prices in manufacturing. In the previously published estimates, the use of the benchmark-years-weighted measure for manufacturing had a significant effect on the estimate of the growth in real manufacturing GPO for 1977–87.[13] In the revised estimates, as previously noted, the use of the chain-type measure in place of the fixed-weighted measure for 1987–93 was a major factor in the downward revision of the growth rate in manufacturing for that period.

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12. For 1977–87, the previously published rates of change for GDP and for manufacturing were calculated using benchmark-years-weighted quantity indexes. These quantity indexes differ from the chain-type indexes because the price weights are for adjacent benchmark years. For 1987–93, the fixed (1987) weighted quantity indexes that were used for nonmanufacturing industries for all periods were also used for GDP and for manufacturing.

13. See the box "The Measurement of Change in Real GPO by Industry" in Parker, "Gross Product by Industry, 1977–90," 36–37. The use of the chain-type measure in place of the benchmark-years-weighted measure resulted in a minimal revision of the growth rate in manufacturing for the 1977–87 period.

Table 4.—Revisions to Gross Domestic Product by Industry Group in Current Dollars, Selected Years

[Billions of dollars]

	1959			1967			1977			1982			1987			1993		
	Previously published	Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision	Previously published	Revised	Revision
Gross domestic product	494.2	507.2	13.0	814.3	833.6	19.3	1,974.1	2,026.9	52.8	3,149.6	3,242.1	92.5	4,539.9	4,692.3	152.4	6,343.3	6,550.2	206.9
Private industries	442.4	442.4	0	715.5	715.7	.2	1,727.0	1,733.3	6.3	2,761.6	2,780.2	18.6	3,994.6	4,039.1	44.5	5,561.8	5,650.0	88.2
Agriculture, forestry, and fishing	20.3	20.3	0	24.9	24.9	0	54.4	54.3	–.1	77.0	77.1	.1	88.5	88.6	.1	107.3	105.3	–2.0
Mining	12.5	12.5	0	15.2	15.2	0	54.1	54.1	0	146.1	149.5	3.4	83.0	88.3	5.3	89.4	89.0	–.4
Construction	23.7	23.7	0	39.5	39.5	0	93.9	93.8	–.1	129.4	129.8	.4	213.0	217.0	4.0	234.2	243.6	9.4
Manufacturing	142.2	140.3	–1.9	223.7	220.8	–2.9	466.8	462.4	–4.4	647.5	649.8	2.3	877.8	889.0	11.2	1,118.3	1,116.5	–1.8
Durable goods	81.7	81.7	0	134.1	134.1	0	277.7	277.6	–.1	372.9	377.4	4.5	501.9	513.3	11.4	603.5	612.3	8.8
Nondurable goods	60.5	58.6	–1.9	89.6	86.7	–2.9	189.1	184.7	–4.4	274.6	272.3	–2.3	375.9	375.7	–.2	514.8	504.3	–10.5
Transportation and public utilities	44.9	45.0	.1	70.3	70.5	.2	179.2	179.5	.3	292.1	293.2	1.1	419.8	420.7	.9	559.3	566.2	6.9
Transportation	22.7	22.7	0	32.7	32.7	0	76.3	76.2	–.1	108.9	109.2	.3	152.7	157.9	5.2	207.9	207.6	–.3
Communications	10.1	10.1	0	18.3	18.3	0	50.0	50.1	.1	88.6	88.6	0	127.6	124.9	–2.7	169.8	173.4	3.6
Electric, gas, and sanitary services	12.2	12.3	.1	19.3	19.5	.2	52.9	53.2	.3	94.7	95.3	.6	139.5	137.9	–1.6	181.5	185.2	3.7
Wholesale trade	34.2	36.1	1.9	54.8	57.8	3.0	137.9	142.3	4.4	216.5	219.6	3.1	303.1	301.0	–2.1	413.1	423.1	10.0
Retail trade	49.1	49.1	0	78.2	78.2	0	190.4	190.2	–.2	286.6	288.1	1.5	441.8	435.8	–6.0	592.4	571.1	–21.3
Finance, insurance, and real estate	68.9	69.0	.1	117.3	117.4	.1	283.6	283.7	.1	503.9	504.2	.3	809.7	830.7	21.0	1,180.6	1,214.0	33.4
Services	48.4	48.4	0	90.8	90.8	0	255.7	255.5	–.2	469.8	471.8	2.0	782.5	784.6	2.1	1,264.8	1,266.1	1.3
Statistical discrepancy [1]	–1.8	–2.1	–.3	.8	.6	–.2	10.9	17.5	6.6	–7.4	–2.9	4.5	–24.8	–16.6	8.2	2.3	55.1	52.8
Government	51.7	64.8	13.1	98.8	117.9	19.1	247.1	293.5	46.4	388.0	461.9	73.9	545.3	653.2	107.9	781.6	900.2	118.6

1. Equals GDP measured as the sum of expenditures less gross domestic income.

Shares of current-dollar GDP.—The industry shares of current-dollar GDP were not much affected by the revisions. However, government's share was raised each year during 1959–94; the amount of the revision ranged from a high of 2.3 percentage points in 1959 to a low of 1.4 percentage points in 1993. For each year during 1959–75, manufacturing's share was revised down by about 1 percentage point; during 1976–93, it was revised down by smaller amounts, but by no less than 0.4 percentage point. The drop in the manufacturing share was primarily due to downward revisions to the share of petroleum and coal products.

Major definitional and statistical changes

The revisions to the GPO estimates arise from incorporating the definitional and statistical changes introduced in January 1996 in the comprehensive NIPA revision and from statistical changes introduced in this GPO revision.

NIPA revisions.—The comprehensive NIPA revision released in January included definitional, statistical, and other changes that affect the GPO estimates. The most important of these changes was the introduction of the annual chain-type quantity index as the featured measure of real growth. In the GPO revision, chain-type measures were introduced for each of the 51 GPO industries for which the "double-deflation" method is used to compute real GPO.[14] For the 15 industries for which real GPO is computed using other methods, real GPO was calculated by linking two fixed-weighted quantity indexes; 1987 weights were used for 1977–87, and 1992 weights were used beginning with 1988.

The revised GPO series also incorporates the new NIPA treatment of government investment and the definitional change to Federal Government compensation of employees. Recognition of government expenditures for structures and equipment as fixed investment results in the inclusion of the services of government fixed assets—measured as depreciation, or consumption of fixed capital—in GDP and general government GPO for all years.[15] In the previously published estimates, general government GPO was defined to consist only of compensation of employees.

14. For an explanation of this method, see the section "Real (chained-dollar) estimates" in "Methodology."

15. This change does not affect the GPO of government enterprises, because the inclusion of the consumption of fixed capital in the gross product of government enterprises is offset by a corresponding reduction in the surplus of government enterprises. It should be noted that the new treatment of investment still does not provide an estimate of the full value of the services of general government fixed assets, the new component that enters GDP. These services, which are now recorded as current-account purchases, are measured using the convention that these services equal the estimate of general government consumption of fixed capital; that is, the net rate of return on general government fixed assets is assumed to be zero.

Table 5.—Revisions to Average Annual Rates of Change of Real Gross Domestic Product by Industry Group, Selected Periods

[Percent]

	1977–93			1977–87			1977–82			1982–87			1987–93		
	Previously published [1]	Revised	Revision	Previously published [1]	Revised	Revision	Previously published [1]	Revised	Revision	Previously published [1]	Revised	Revision	Previously published [1]	Revised	Revision
Gross domestic product	**2.6**	**2.5**	**–0.1**	**2.9**	**2.8**	**–0.1**	**1.7**	**1.6**	**–0.1**	**4.0**	**4.1**	**0.1**	**2.1**	**2.1**	**0**
Private industries	**2.7**	**2.7**	**0**	**2.9**	**3.1**	**.2**	**1.5**	**1.7**	**.2**	**4.4**	**4.5**	**.1**	**2.2**	**2.2**	**0**
Agriculture, forestry, and fishing	3.0	3.4	.4	3.3	3.8	.5	2.8	5.3	2.5	3.8	2.2	–1.6	2.5	2.8	.3
Mining	.7	.6	–.1	–.1	.5	.6	–2.6	–.9	1.7	2.6	1.9	–.7	1.9	.8	–1.1
Construction	.5	.6	.1	1.1	1.1	0	–2.9	–4.2	–1.3	5.3	6.8	1.5	–.6	–.2	.4
Manufacturing	2.1	2.0	–.1	2.4	2.7	.3	.1	.3	.2	4.9	5.2	.3	1.7	.8	–.9
Durable goods	2.5	2.0	–.5	2.7	2.7	0	–.3	–.3	0	5.8	5.8	0	2.2	1.0	–1.2
Nondurable goods	1.6	2.0	.4	2.0	2.8	.8	.5	1.3	.8	3.6	4.3	.7	.9	.6	–.3
Transportation and public utilities	3.1	2.9	–.2	2.9	2.7	–.2	1.1	1.8	.7	4.9	3.6	–1.3	3.5	3.3	–.2
Transportation	3.2	2.4	–.8	2.7	2.3	–.4	–.3	.1	.4	5.8	4.5	–1.3	4.0	2.7	–1.3
Communications	4.9	4.8	–.1	5.7	5.3	–.4	6.6	7.6	1.0	4.8	3.0	–1.8	3.7	4.1	.4
Electric, gas, and sanitary services	1.8	1.9	.1	1.2	1.1	–.1	–1.5	–1.0	.5	4.0	3.3	–.7	2.7	3.2	.5
Wholesale trade	4.7	4.7	0	5.9	4.8	–1.1	5.1	4.2	–.9	6.8	5.5	–1.3	2.7	4.4	1.7
Retail trade	3.0	2.8	–.2	3.3	3.4	.1	1.2	1.3	.1	5.5	5.6	.1	2.5	1.7	–.8
Finance, insurance, and real estate	2.7	2.8	.1	3.1	3.2	.1	3.5	3.4	–.1	2.7	3.0	.3	2.1	2.2	.1
Services	3.4	3.4	0	3.8	3.9	.1	3.1	3.3	.2	4.5	4.5	0	2.6	2.7	.1
Government	**1.3**	**1.2**	**–.1**	**1.4**	**1.2**	**–.2**	**1.3**	**.8**	**–.5**	**1.5**	**1.6**	**.1**	**1.1**	**1.3**	**.2**

1. Previously published rates of change are based on benchmark-years-weighted measures for GDP and for manufacturing for 1977–87, 1977–82, and for 1982–87. Fixed-weighted measures are used for all industry groups for 1987–93, and for nonmanufacturing industries and for private industries for all periods. A combination of the two measures is used for GDP and for manufacturing for 1977–93.

The definitional change to Federal Government compensation of employees affects GPO for both general government and government enterprises. For civilian retirement programs, contributions beginning with 1969 now include payments to the Civil Service Retirement Fund for interest and unfunded liability. For military retirement programs, contributions beginning with 1984 will now be the actual contributions to the fund. Previously, the value of these contributions had been "imputed" to equal the value of the benefits paid.

Several other major statistical changes to the NIPA's also affected the GPO estimates. The incorporation of the newly available data from the 1991 Residential Finance Survey on rental payments and on the value of tenant- and owner-occupied units led to large upward revisions to both gross output and GPO of nonfarm housing services, and the improved adjustments for misreporting on tax returns substantially increased the GPO of several services industries. Other NIPA changes that affected the gross output estimates used in the double-deflation method of estimating real GPO included the following: Revised estimates of petroleum and natural gas exploration, which affected the oil and gas extraction industry; revised estimates of both residential and nonresidential construction, which affected the construction industry; and revised estimates of personal consumption expenditures, which affected several financial and services industries.

GPO statistical changes.—A number of statistical changes specific to the GPO estimates were also introduced.

Commodity taxes.—The most important of the statistical changes incorporated into the GPO estimates was the improved treatment of commodity taxes beginning with 1959. Commodity taxes—which are taxes that vary with the consumption,

production, or sale of products—are included in industry gross output. These taxes are part of the "indirect business tax and nontax liability" component of GPO.

The most important change in the treatment of commodity taxes, which affected both current-dollar and real industry GPO measures, was the improved industry assignment of specific Federal Government excise taxes. The new assignments more closely reflect the regulations and practices that determine which industry is liable for tax collection during the periods the taxes were imposed. Of these new assignments, the one with the largest impact is the shift of the Federal excise tax on gasoline and gasohol from petroleum and coal products in manufacturing to wholesale trade, beginning with 1959.[16] This change in industry assignment recognizes that the tax is due when fuel is withdrawn from the terminals, which are classified in wholesale trade, whether the terminals are owned independently or by an integrated petroleum company.

The real measures of ad valorem commodity taxes assigned to manufacturing industries were improved by holding constant both commodity prices and tax rates from the base period. In the previously published estimates, the procedure held constant only tax rates and yielded the correct result only for quantity-based commodity taxes.

Semiconductor prices.—For the comprehensive NIPA revision, BEA prepared quality-adjusted annual price indexes for memory and for microprocessor metal-oxide semiconductor integrated circuits (chips) for 1974–94. These indexes, which were incorporated into the NIPA estimates of exports and imports of semiconductors, have also been incorporated into the GPO estimates of real industry gross output and real intermediate inputs, beginning with 1977.

For gross output, the new price indexes were weighted together with appropriate producer price indexes from the Bureau of Labor Statistics to develop a composite deflator to cover all products of the semiconductor manufacturing industry. For intermediate inputs, the same composite index was used for the purchases by other industries of domestically produced semi-

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16. The following Federal excise taxes were also affected by the reassignments: The diesel and special motor fuels taxes, which were shifted from retail trade to wholesale trade, beginning with 1988; the heavy-duty truck tax, which was shifted from motor vehicles and equipment manufacturing to wholesale trade, beginning with 1983; the imported petroleum products tax, which was shifted from petroleum and coal products to wholesale trade, beginning with 1990; and the imported chemical products tax, which was shifted from chemical and allied products manufacturing to wholesale trade, beginning with 1990.

conductors; the NIPA import price index was used for imported inputs. The incorporation of these new price indexes resulted in upward revisions to the growth rates for both semiconductor output and inputs, especially after 1992; the most noticeable effect was to raise real gross output and real GPO in the electronic and other electric equipment industry for 1992–93.

Employment matrix.—For the current-dollar GPO estimates, a newly available Census Bureau employment matrix for 1987 that converts the NIPA industry estimates of corporate profits and capital consumption allowances from a company basis to an establishment basis was introduced. The new matrix is based on data from the 1987 Economic Censuses and covers all private nonfarm industries except private households. A matrix based on 1982 Economic Census data had been used in the previously published estimates. The new matrix was used to revise the profits and depreciation estimates beginning with 1983.

Changes affecting real GPO.—Revisions to the estimates of real GPO reflect the previously discussed changes to current-dollar GPO and to real gross output and intermediate inputs, as well as the shift from benchmark-years-weighted and fixed-weighted measures to chain-type measures. In addition, the revisions reflect other changes to gross output and intermediate inputs and changes in the methods used for estimating the composition of inputs.

Revisions to gross output primarily resulted from benchmarking to the final—rather than to the preliminary—levels of the 1987 input-output (I-O) table and from incorporating the preliminary gross output levels from the 1992 I-O table, which are largely based on data from the 1992 Economic Censuses. Benchmarking to the 1987 I-O table also affected the estimates of gross output for 1983–86. In addition, beginning with 1988, new and revised annual survey data from the Census Bureau were used to interpolate between 1987 and 1992 and to extrapolate from 1992.

New and improved estimates of the composition of inputs were introduced for all "double-deflated" industries. The revised estimates incorporate the input composition from the final 1987 benchmark I-O table, which affects input compositions beginning with 1983, and data from the 1992 Economic Censuses on the cost of materials, fuels, and energy for selected industries. In the previously published estimates, input compositions for 1987 were from a preliminary I-O table.

The revised estimates for 1983–86 are primarily interpolations based on the 1982 and 1987 input compositions; for the revised estimates for 1988–94, the input composition for all double-deflated industries is generally assumed to be the same as that for 1987.[17]

Presentational changes

The following changes have been made to the presentation of the GPO estimates: Chain-type measures of real GPO are shown in chained dollars and as quantity indexes; the industry group contributions to the annual percent changes in real GDP are shown; a new table is added presenting information on the composition of current-dollar GPO; the definition of "private industries" is changed to include the statistical discrepancy; the definition of the category "not allocated by industry" is changed to reflect the introduction of chained-dollar estimates; and the tables showing industry shares of real GDP and the fixed-weighted measures of real GDP are dropped.[18] Each of these changes is discussed below.

In the previously published estimates, real GPO for 1977–87 was shown in two tables: One table showed benchmark-years-weighted indexes for GDP and for all manufacturing industries and fixed (1987) weighted indexes for all other industries; and the other table showed constant-dollar GPO for all industries calculated using fixed (1987) weights. (Beginning with 1988, both the indexes and the constant-dollar estimates were shown using fixed (1987) weights.) In the revised presentation, the table of indexes (table 13) shows chain-type indexes for selected years from 1977–94, and the table of real dollars (table 14) shows chained dollars for all years 1987–94.

A new table (table 12) shows the composition of current-dollar GPO, which is measured as the sum of industry distributions of the components of gross domestic income. (Previously this detail was available only by request.)

The definition of "private industries" was changed to include the statistical discrepancy, which is the difference between GDP and gross

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17. In the previously published estimates, real inputs for three industries—construction, fabricated metal products, and industrial machinery and equipment—were estimated beginning with 1988 by assuming no change from the 1987 relationship between real inputs and real gross output. The special procedure was used for these industries because their input compositions were judged to have changed since 1987 in ways that would result in significant errors in industry real inputs; in the current revision, based on the new information from the final 1987 benchmark I-O table and 1992 Economic Censuses, this special procedure has been dropped.

18. In addition to these changes, the industry "social services and membership organizations," shown in the previously published estimates, has been split into a "social services" industry and a "membership organizations" industry.

domestic income. Previously, the statistical discrepancy was treated as a separate "industry," and current-dollar GPO was equal to the sum of GPO for private industries, GPO for government, and the statistical discrepancy. The change reflects BEA's judgement that the GPO of private industries is affected by most of the measurement problems that cause the current-dollar expenditure components used to measure GDP to be more accurate than the current-dollar estimates of gross domestic income.

The definition of the category "not allocated by industry" was changed to reflect the introduction of chained-dollar estimates. Previously, this category consisted of the following: The "residual," or the statistical discrepancy in constant dollars; the difference between constant-dollar

GDP and the sum of the estimates of constant-dollar GPO; and, for 1977–86, the effect of using the benchmark-years-weighted formula for calculating real GDP and real manufacturing GPO. In the new presentation, "not allocated by industry" consists of the difference between chain-dollar GDP and the sum of chain-dollar GPO for the detailed industries—private and government—and the statistical discrepancy. The value of "not allocated by industry" reflects the lack of additivity of the detailed chain-dollar GPO estimates because of the formula used to calculate chain-type measures of real output and the use of the expenditures measure of real GDP.

The table showing industry shares of real GDP has been replaced because of BEA's judgement that, for most analytical uses, shares in current

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Computation of the Chain-Type Quantity Indexes for Double-Deflated Industries

For this comprehensive revision, BEA introduces annual chain-type quantity indexes as the measure of real gross output, intermediate inputs, and GPO for industries and industry groups. Each link in the chain-type quantity index is a Fisher quantity index for two adjacent years. Each annual Fisher quantity index, in turn, is the geometric mean of Laspeyeres and Paasche quantity indexes for the two adjacent years.

The formulas below summarize the computation of the Fisher chain-type quantity indexes of real gross output, intermediate inputs, and GPO for an industry or industry group. In the notation, L refers to the Laspeyeres quantity index; P refers to the Paasche quantity index; F refers to the Fisher quantity index; and C refers to the Fisher chain-type quantity index. The subscripts indicate time periods; $L_{t-1,t}$ is the Laspeyeres quantity index for the two adjacent years, $t-1$ and t. The superscript GO refers to gross output; II refers to intermediate inputs; and GPO refers to gross product originating. Lowercase p and q refer to detailed prices and quantities, respectively.

Laspeyeres quantity indexes for gross output, intermediate inputs, and GPO, respectively, are

$$L_{t-1,t}^{GO} = \frac{\sum p_{t-1}^{GO} q_t^{GO}}{\sum p_{t-1}^{GO} q_{t-1}^{GO}},$$

$$L_{t-1,t}^{II} = \frac{\sum p_{t-1}^{II} q_t^{II}}{\sum p_{t-1}^{II} q_{t-1}^{II}}, \quad \text{and}$$

$$L_{t-1,t}^{GPO} = \frac{(\sum p_{t-1}^{GO} q_t^{GO}) - (\sum p_{t-1}^{II} q_t^{II})}{(\sum p_{t-1}^{GO} q_{t-1}^{GO}) - (\sum p_{t-1}^{II} q_{t-1}^{II})}.$$

Paasche quantity indexes for gross output, intermediate inputs, and GPO are

$$P_{t-1,t}^{GO} = \frac{\sum p_t^{GO} q_t^{GO}}{\sum p_t^{GO} q_{t-1}^{GO}},$$

$$P_{t-1,t}^{II} = \frac{\sum p_t^{II} q_t^{II}}{\sum p_t^{II} q_{t-1}^{II}}, \quad \text{and}$$

$$P_{t-1,t}^{GPO} = \frac{(\sum p_t^{GO} q_t^{GO}) - (\sum p_t^{II} q_t^{II})}{(\sum p_t^{GO} q_{t-1}^{GO}) - (\sum p_t^{II} q_{t-1}^{II})}.$$

Fisher quantity indexes for gross output, intermediate inputs, and GPO are

$$F_{t-1,t}^{GO} = \sqrt{L_{t-1,t}^{GO} \times P_{t-1,t}^{GO}},$$

$$F_{t-1,t}^{II} = \sqrt{L_{t-1,t}^{II} \times P_{t-1,t}^{II}}, \quad \text{and}$$

$$F_{t-1,t}^{GPO} = \sqrt{L_{t-1,t}^{GPO} \times P_{t-1,t}^{GPO}}.$$

Fisher chain-type quantity indexes for gross output, intermediate inputs, and GPO for years following the base year are

$$C_t^{GO} = C_{t-1}^{GO} \times F_{t-1,t}^{GO},$$

$$C_t^{II} = C_{t-1}^{II} \times F_{t-1,t}^{II}, \quad \text{and}$$

$$C_t^{GPO} = C_{t-1}^{GPO} \times F_{t-1,t}^{GPO}.$$

In the base year (1992 for this comprehensive revision),

$$C_t^{GO} = C_t^{II} = C_t^{GPO} = 100.$$

The above formulas are applied to GPO industries, to industry groups such as durable goods manufacturing, and to aggregates such as private industries.

dollars (as shown in table 11) are a better indicator of an industry's relative size in the economy in any one period. Industry shares in real dollars, whether measured in chained dollars or in constant dollars, are dependent on the choice of the base period and therefore are not good indicators of relative size.

Methodology

This part of the article discusses the methodologies—that is, the source data and estimating procedures—used to prepare the estimates of current-dollar and real GPO. Previously published tables that summarize the methodology have been updated to incorporate the major changes introduced in this revision of the GPO estimates.

Current-dollar estimates

As noted in the box "Gross Product Originating: Definition and Relationship to Gross Domestic Product" on page 133, the current-dollar GPO estimates are prepared as the sum of the distributions by industry of the components of gross domestic income. This section describes the methodology for distributing the current-dollar estimates of these components.

For most components of gross domestic income, the estimates are based on source data that provide industry distributions on either a company basis or an establishment basis. Only the estimates with distributions based on establishment data can be used directly to calculate industry GPO. For those components that are estimated from Internal Revenue Service (IRS) tabulations of business tax returns, which have company-based distributions, the industry distributions may need to be converted to an establishment basis. This conversion is particularly necessary for large multi-establishment companies that typically have establishments classified in different Standard Industrial Classification (SIC) industries. For the components of gross domestic income for which the source data provide no industry distribution, BEA has developed establishment-based industry distributions from related sources. Table 6 shows the major source data for each component of gross domestic income, the availability and type of industrial distribution in the source data, and the data or assumptions used, when necessary, to develop establishment-based industry distributions.[19]

The methodology used to convert corporate profits before tax and corporate capital consumption allowances is based primarily on special Census Bureau matrices of the employment of establishments of corporations. These matrices present employment of these establishments cross-classified by (1) the company-industry classification assigned by IRS in preparing the tabulations of corporate tax returns and (2) the establishment-industry classification assigned by the Census Bureau in the economic censuses. For integrated petroleum companies, the results of applying this matrix are supplemented by information from Department of Energy tabulations of the net income and depreciation of energy companies on an establishment basis. Adjustments to the matrix also are made, when necessary, to reflect publicly available information about large mergers, acquisitions, or changes in company diversification that have occurred since 1987, the year covered by the latest matrix.

Real (chained-dollar) estimates

The real, or chained-dollar, GPO estimates for each industry, industry group, and for all private industries are derived as the product of the chain-type quantity index (divided by 100) and the corresponding 1992 current-dollar value. As in the previously published real GPO estimates, which were calculated using both benchmark-years-weighted and fixed-weighted indexes, three methods are used to calculate quantity indexes: Double deflation, extrapolation, and direct deflation.[20] The method chosen depends on the availability and reliability of source data.

- In the double-deflation method, real GPO is calculated using the chain-type formula, as shown in the box "Computation of the Chain-Type Quantity Indexes for Double-Deflated Industries" on page 142. For this method, separate estimates of gross output and of intermediate inputs enter into the calculation of real GPO. For farms and for nonfarm housing services, complete and consistent current-dollar series are available for gross output and for intermediate inputs. For most other industries, suitable intermediate input series are not available; instead they are obtained by subtracting current-dollar GPO from current-dollar gross output.

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19. For additional information about the methodology used to estimate the components of gross domestic income, see table 1 in "Updated Summary Methodologies" in this issue of the SURVEY.

20. For information about the effects of the choice of methods, see Parker, "Gross Product by Industry, 1977–90," 43–46.

- In the extrapolation method, real GPO is calculated by extrapolating the current-dollar value of GPO for 1992 (the present base period) in both directions by the quantity indicator. In most industries for which this method is used, the quantity indicator is usually the number of persons engaged in production or the number of hours worked.

- In the direct-deflation method, real GPO is derived by deflating current-dollar GPO, usually by a chain-type measure of gross output prices or by earnings.

Table 7 identifies which of the three methods for calculating real GPO is used for each industry. For industries for which the double-deflation method is not used, the table also shows the key source data used in the preparation of real GPO.

Real GPO calculated using the double-deflation method requires detailed information on gross output and intermediate inputs. Table 8 provides a summary description of the principal source data used to prepare the gross output estimates.

The current-dollar intermediate input estimates are derived in four steps: (1) The input compositions for 1977, 1982, and 1987 are derived from BEA's benchmark I-O tables; (2) the input compositions for 1978–81 and for 1983–86 are estimated by interpolating the detailed compositions from 1977, 1982, and 1987; (3) the imported and domestically produced shares of each detailed input for 1977–87 are estimated; and (4) the input compositions for 1988–94 are estimated,

Table 6.—Major Sources for Current-Dollar Gross Product Originating by Industry

Component	Major source data	Industrial distribution	
		Distribution available in source data	Data or assumption used if distribution by establishment is not available in source data
Compensation of employees:			
Wages and salaries	BLS tabulations of wages and salaries of employees covered by State unemployment insurance and Office of Personnel Management data on wages and salaries of Federal Government employees.	Establishment.	
Employer contributions for social insurance.	Federal budget data	None	Social Security Administration and BLS tabulations.
Other labor income	Department of Labor tabulations of pension plans, HCFA and BLS data on health insurance, trade association data for other types.	None, except pensions	BLS employer cost for employee compensation.
Proprietors' income with inventory valuation adjustment:			
Farm	Department of Agriculture farm statistics ..	Establishment.	
Nonfarm:			
Proprietors' income	IRS tabulations of business tax returns	Company	Assumed to be equivalent to an establishment distribution.
Inventory valuation adjustment	BLS prices and IRS inventory data	Establishment.	
Rental income of persons	Census Bureau American Housing Survey, BLS Consumer Expenditures Survey, and IRS tabulations of business and individual tax returns.	Establishment.	
Corporate profits with inventory valuation adjustment:			
Corporate profits before tax	IRS tabulations of business tax returns	Company	Census Bureau company-establishment employment matrix and Department of Energy establishment data for energy companies.
Inventory valuation adjustment	BLS prices and IRS inventory data	Establishment.	
Net interest:			
Corporate	IRS tabulations of business tax returns	Company	None.
Noncorporate	IRS tabulations of business tax returns	Company	Assumed to be equivalent to an establishment distribution.
Business transfer payments	IRS tabulations of business tax returns	Company	Industry-specific payments are assigned to those industries; other are based on IRS company industry distribution.
Indirect business tax and nontax liability ...	Federal budget data and Census Bureau data on State and local governments.	None	Industry-specific payments are assigned to those industries; property taxes are based on BEA capital stock distribution.
Subsidies less current surplus of government enterprises.	Federal budget data and Census Bureau data on State and local governments.	Establishment.	
Capital consumption allowances:			
Corporate	IRS tabulations of business tax returns	Company	Same as corporate profits before tax.
Noncorporate	IRS tabulations of business tax returns	Company	Assumed to be equivalent to an establishment basis.
Government consumption of fixed capital ..	BEA capital stock estimates	Type of agency.	

BEA   Bureau of Economic Analysis
BLS   Bureau of Labor Statistics

IRS   Internal Revenue Service
HCFA   Health Care Financing Administration

primarily based on the 1987 composition and on information from the 1992 Economic Censuses.

Real intermediate inputs are prepared by deflating each of the detailed current-dollar inputs; imports and domestic production are deflated separately. Prices for domestically produced intermediate inputs are largely based on the prices used to prepare the estimates of real gross output, as shown in table 8. For services prices, additional detail is shown in table 9. The import prices are developed from a variety of sources, primarily from Bureau of Labor Statistics (BLS) import price series, and are the same as those used for the NIPA estimates of imports. (For years before 1981, however, many of the detailed BLS import prices are not available, and the prices used reflect rates of change of more aggregate BLS import prices or of corresponding domestic prices based on the producer price indexes.)

Tables 8 through 15 follow.

Table 7.—Methods for Estimating Real Gross Product Originating

Industry [1]	Method	Major source data [2]
Agriculture, forestry, and fishing	Double deflation.	
Mining	Double deflation.	
Construction	Double deflation.	
Manufacturing	Double deflation.	
Transportation:		
Railroad transportation	Double deflation.	
Local and interurban passenger transit	Double deflation.	
Trucking and warehousing	Double deflation.	
Water transportation	Extrapolation	BEA persons engaged in production.
Transportation by air	Double deflation.	
Pipelines, except natural gas	Double deflation.	
Transportation services	Extrapolation	BEA persons engaged in production.
Communications	Double deflation.	
Electric, gas, and sanitary services	Double deflation.	
Wholesale trade	Double deflation.	
Retail trade	Double deflation.	
Finance, insurance, and real estate:		
Depository institutions	Extrapolation	BEA persons engaged in production.
Nondepository institutions	Extrapolation	BEA persons engaged in production.
Security and commodity brokers	Double deflation.	
Insurance carriers	Double deflation.	
Insurance agents, brokers, and service	Double deflation.	
Real estate:		
Nonfarm housing services	Double deflation.	
Other real estate	Direct deflation	Index of rent for office buildings from trade source and BEA estimates.
Holding and other investment offices	Extrapolation	BEA persons engaged in production.
Services		
Hotels and other lodging places	Double deflation.	
Personal services	Double deflation.	
Business services	Extrapolation	BLS employment weighted by Census Bureau receipts.
Auto repair, services, and parking	Double deflation.	
Miscellaneous repair services	Double deflation.	
Motion pictures	Double deflation.	
Amusement and recreation services	Double deflation.	
Health services	Double deflation.	
Legal services	Double deflation.	
Educational services	Double deflation.	
Social services	Direct deflation	BEA average wages and salaries per full-time equivalent employee.
Membership organizations	Direct deflation	BEA average wages and salaries per full-time equivalent employee.
Other services	Direct deflation	BEA average wages and salaries per full-time equivalent employee.
Private households	Direct deflation	BLS prices.
Government		
General government		
Compensation of employees	Extrapolation	National income and product accounts.
Consumption of fixed capital	Direct deflation	National income and product accounts.
Goverment enterprises	Extrapolation	BEA and Census Bureau employment and BLS output indexes.

1. Titles are for the 1987 SIC; methods also apply to comparable industry in the 1972 SIC.
2. Source data provide either a price index for deflation of gross product originating or a quantity extrapolator of base-year value of gross product originating.

BEA   Bureau of Economic Analysis
BLS   Bureau of Labor Statistics

Table 8.—Principal Source Data and Estimating Methods for Gross Output

Industry [1]	Current dollars	Chained dollars
	Extrapolator or interpolator of benchmark values [2]	Price index for deflation or quantity extrapolator of base-year value
Agriculture, forestry, and fishing:		
Farms	Cash receipts from marketings, inventory change, and other receipts from USDA.	Prices received by farmers from USDA.
Agricultural services	Receipts for agricultural services, forestry, and fishing from IRS tabulations of business tax returns less gross output of forestry and fishing.	Index of selected prices paid by farmers from USDA.
Forestry	Shipments of logging camps and contractors from Census Bureau quinquennial census and annual survey.	PPI's.
Fishing	Value of fish landed from NOAA	Fish landed from NOAA.
Mining:		
Metal mining	Physical quantity produced times average price: For uranium, physical quantity and average price from DOE; for all others, quantities and prices from USGS.	Quantity produced from USGS.
Coal mining	Physical quantity produced times average price, both from DOE.	Quantity produced from DOE.
Oil and gas extraction	Physical quantity produced times average price, both from DOE, except natural gas liquids (PPI).	Quantity produced from DOE.
Oil and gas field services	Petroleum and natural gas well drilling and exploration: Footage drilled and cost per foot from trade source.	Footage drilled from trade source.
Nonmetallic minerals, except fuels	Physical quantity produced times average price, both from USGS.	Quantity produced from USGS.
Construction:		
For the Department of Defense	Expenditures from DOD	For most military construction, BEA indexes based on DOD prices; for other construction, cost indexes from trade sources and government agencies.
For State and local highways	Expenditures from Census Bureau annual survey of government spending.	For new construction, cost indexes from government agencies; for maintenance and repair, CPI for home maintenance and repair services.
For private electric and gas utilities	Expenditures from Federal regulatory agencies and trade sources.	Cost indexes from trade sources and government agencies.
For farms, excluding residential	Expenditures from USDA	Cost index from trade source and price deflator for new single-family houses under construction from Census Bureau.
For other nonresidential:		
New construction	Value put in place from Census Bureau construction survey.	Cost indexes from trade sources and government agencies and price deflator for new single-family houses under construction from Census Bureau.
Maintenance and repair	Value put in place from Census Bureau construction survey.	CPI for home maintenance and repair services.
For other residential:		
New construction	Value put in place from Census Bureau construction survey.	Price deflator for new single-family houses under construction from Census Bureau.
Maintenance and repair	Expenditures by owner-occupants from BLS survey and by landlords from Census Bureau survey.	CPI for home maintenance and repair services.
Manufacturing	Shipments and inventory change from Census Bureau annual survey.	PPI's, BEA computer price index, BEA semiconductor price index, and BEA price indexes based on DOD prices paid for military equipment.
Transportation:		
Railroad transportation	Total operating revenue for Class I railroads and AMTRAK.	Composite index of IPD for Class I freight, from revenue ton-miles from trade source, and of IPD for AMTRAK passenger, from passenger miles from NRPC.
Local and interurban passenger transit:		
Taxicabs	PCE	CPI for taxi fares.
Intercity buses	Operating revenues from trade source	Passenger miles from ICC and trade source.
School buses	Wages and salaries from BLS	Employment from BLS.
Other local transit	Operating revenues of private local transit systems from trade source.	Passenger trips from trade source.
Trucking and warehousing	For 1977-83, operating revenues for Class I motor carriers of property from ICC; for 1984 forward, Census Bureau annual survey.	Ton-miles from trade source.
Transportation by air	Operating revenues of air carriers and of Federal Express from DOT and public sources.	For passenger, revenue passenger miles for domestic and for international travel from DOT. For freight and mail, ton-miles for domestic and international freight and for domestic and international mail from DOT. For all other, composite index of IPD for passenger, freight, and mail.
Pipelines, except natural gas	Operating revenues from trade source	Ton-miles from trade source.
Communications:		
Radio and television broadcasting	Advertising expenditures from trade source; PCE for cable television.	For advertising, cost indexes from trade source. For cable television, CPI for cable television.
Telephone and telegraph	For 1977-92, revenues from FCC. For 1992 forward, Census Bureau annual survey.	PPI's.

Table 8.—Principal Source Data and Estimating Methods for Gross Output—Continued

Industry [1]	Current dollars	Chained dollars
	Extrapolator or interpolator of benchmark values [2]	Price index for deflation or quantity extrapolator of base-year value
Electric, gas, and sanitary services:		
Electric utilities	For private utilities, revenues from DOE. For rural co-operatives, revenues from USDA.	Kilowatt hours from trade source.
Gas utilities	Revenues of gas pipeline and utilities from trade source.	BTU's from trade source.
Sanitary services	Receipts from IRS tabulations of business tax returns	CPI for water and sewerage maintenance.
Wholesale trade:		
Merchant wholesalers	Ratio of gross margin to sales (margin rate) times sales: For 1977-82, margin rate from quinquennial census and sales from Census Bureau annual survey; for 1983 forward, both from annual survey.	Sales deflated by PPI's.
Manufacturers' sales branches and sales offices	For equipment rental, interpolation of quinquennial census receipts; for 1993 forward, judgmental trend. For other receipts, manufacturing shipments from Census Bureau annual survey.	For equipment rental, IPD from BEA capital stock statistics. For other receipts, shipments deflated by PPI's.
Agents and brokers	Merchant wholesalers margin rate times sales: For 1977-82, margin rate from quinquennial census and sales from Census Bureau annual survey; for 1983 forward, both from annual survey.	Merchant wholesalers sales deflated by PPI's.
Retail trade:		
Eating and drinking places	Sales from quinquennial census and from Census Bureau annual survey.	CPI's.
Other	Ratio of gross margin to sales (margin rate) times sales: For 1977-82, margin rate from quinquennial census and sales from Census Bureau annual survey; for 1983 forward, both from annual survey.	Sales deflated by CPI's.
Finance, insurance, and real estate:		
Security and commodity brokers	Securities commissions, revenue from sale of investment company securities, profits on underwriting/selling, gains on trading accounts and other revenues excluding interest, and revenues earned by exchanges; receipt items from SEC and interest from SEC and BEA.	For securities commissions, number of public securities orders from SEC and trade sources; for mutual funds, IPD for securities commissions; for underwriting, new securities registrations from SEC and trade sources; for other revenue for 1977-87, BEA price from trade source data on merger and acquisition fees; for all others, IPD for GDP.
Insurance carriers	Net premiums for health, auto, accident, property, and workers' compensation insurance from trade sources; PCE for expense of handling life insurance.	For health and life insurance, IPD's for PCE. For all others, composite index of BEA IPD for workers' compensation and CPI for auto and property insurance.
Insurance agents, brokers, and service	Receipts from IRS tabulations of business tax returns	Insurance carrier deflators weighted by commissions from trade source.
Real estate:		
Nonfarm housing services	PCE for owner- and tenant-occupied nonfarm dwellings ...	IPD for PCE.
Services:		
Hotels and other lodging places	Receipts from Census Bureau quinquennial census and annual survey.	Room-rate index from trade source.
Personal services	Receipts from Census Bureau quinquennial census and annual survey.	CPI's.
Automotive repair, services, and parking	Receipts from Census Bureau quinquennial census and annual survey.	CPI's.
Miscellaneous repair services	Receipts from Census Bureau quinquennial census and annual survey.	CPI's and average annual earnings from BLS.
Motion pictures	Receipts from Census Bureau quinquennial census and annual survey.	CPI for admissions.
Amusement and recreation services	Receipts from Census Bureau quinquennial census and annual survey.	CPI's.
Health services:		
Hospitals	Receipts from trade sources	HCFA index of input prices and CPI for hospital room. PPI beginning in 1993.
Other health services	Receipts from Census Bureau quinquennial census and annual survey.	CPI's and HCFA index of input prices. PPI for physicians services beginning in 1994.
Legal services	Receipts from Census Bureau quinquennial census and annual survey.	CPI for legal services.
Educational services	PCE for private education	IPD for PCE.

1. Source data and estimating methods apply to both the 1972 SIC and 1987 SIC definition of the industries shown in this table. Industry titles are 1987 SIC titles.
2. Benchmark values are derived from the 1977, 1982, and 1987 input-output (I-O) tables. Preliminary I-O data are used as benchmarks for 1992. Gross output estimates are prepared only for industries for which the double-deflation method is used for estimating real GPO.

BEA   Bureau of Economic Analysis
BLS   Bureau of Labor Statistics
CPI   Consumer Price Index (BLS)
DOC   U.S. Department of Commerce
DOD   U.S. Department of Defense
DOE   U.S. Department of Energy
DOT   U.S. Department of Transportation

FCC   Federal Communications Commission
HFCA   Health Care Financing Administration
ICC   Interstate Commerce Commission
IPD   Implicit price deflator (BEA)
IRS   Internal Revenue Service
NOAA   National Oceanic and Atmospheric Administration
NRPC   National Railroad Passenger Corporation
PCE   Personal consumption expenditures (BEA)
PPI   Producer Price Index (BLS)
SEC   Securities and Exchange Commission
USDA   U.S. Department of Agriculture
USGS   U.S. Geological Survey (Office of Minerals, formerly Bureau of the Mines)

Table 9.—Principal Sources of Service Input Prices

Service input [1]	Source [2]
Agricultural services	IPD for agricultural services gross output.
Railroad transportation:	
Dining car receipts, business travel	CPI for food away from home.
Rail freight transportation	IPD for freight gross output.
Other railroad services	IPD for freight gross output.
Local and interurban passenger transit:	
Services from local private transit systems	IPD for local transit system gross output.
Taxicabs	CPI for taxi fares.
Other	IPD for intercity buses gross output.
Trucking and warehousing	IPD for trucking and warehousing gross output.
Water transportation	IPD for water transportation.
Transportation by air:	
Domestic passenger	IPD for domestic passenger gross output.
International passenger	IPD for international passenger gross output.
Freight and express	IPD for freight and express gross output.
Other air services	IPD for transportation by air.
Pipelines, except natural gas	IPD for pipelines, except natural gas gross output.
Transportation services:	
Private carline services	IPD for boxcar rental.
Other	IPD for transportation services gross output.
Telephone and telegraph:	
Telephone	IPD for telephone gross output.
Telegraph services	PPI for telephone services.
Radio and television broadcasting	IPD for radio and television broadcasting gross output.
Electric, gas, and sanitary services:	
Electric utilities	PPI for electric power.
Gas pipeline	IPD for gas pipeline gross output.
Gas utilities	IPD for gas utility gross output.
Sanitary services	CPI for water and sewerage maintenance.
Wholesale trade:	
Merchant wholesalers and agents and brokers	IPD for merchant wholesalers and agents and brokers gross output.
Manufacturers' sales offices and sales branches	IPD for manufacturers' sales offices and sales branches gross output.
Retail trade:	
Eating and drinking	IPD for eating and drinking gross output.
Other	IPD for other retail trade gross output.
Depository institutions:	
Imputed service charges	IPD for financial services furnished without payment by commercial banks.
Other	CPI for financial services.
Nondepository institutions:	
Imputed service charges	IPD for financial services furnished without payment by savings and loan associations.
Other	CPI for personal financial services.
Security and commodity brokers:	
Securities underwriting	IPD for underwriting gross output.
Securities commissions	IPD for securities commission gross output.
Services allied with exchange of securities	IPD for security and commodity brokers gross output.
Other services	BEA price index for merger and acquisition fees for 1977–87; IPD for GDP, 1988 forward.
Insurance carriers:	
Automobile insurance	CPI for automobile insurance.
Nonlife insurance services, except automobile	CPI for property and household insurance.
Other	IPD for insurance carrier gross output.
Insurance agents, brokers, and service	IPD for insurance agents, brokers, and service gross output.
Real estate services:	
Nonfarm business rental and property management	Rental rate per square foot from trade source.
Farm rental	IPD for rental value of farm housing PCE.
Rent paid by nonprofits	IPD for capital consumption allowance of nonprofit organizations.
Royalties for oil and gas mining	IPD for oil and gas extraction gross output.
Royalties, except oil and gas mining	IPD for PCE.
Condominium association fees and assessments by cooperatives ...	CPI for home maintenance and repair services.
Other	IPD for other real estate gross output.
Personal services:	
Funeral and burial expenses	CPI for funeral expenses.
Other	CPI for laundry and dry cleaning.
Business services:	
Advertising	Cost indexes by type of media from trade sources.
Maintenance, cleaning, disinfecting, and exterminating	CPI for home maintenance and repair services.

Table 9.—Principal Sources of Service Input Prices—Continued

Service input [1]	Source [2]
Photofinishing	IPD for film development PCE.
Other business services	IPD for business services gross output.
Auto repair, services, and parking:	
Repairs, tire retreading, parking, and washing	CPI for automobile maintenance and repair.
Other	CPI for other auto-related fees.
Miscellaneous repair services:	
Radio, TV, refrigeration and air conditioning, and electrical and electronic repairs.	CPI for appliance and furniture repairs.
Other	CPI for maintenance and repair.
Motion pictures services	CPI for admissions.
Amusement and recreation services:	
Sports, recreation, and amusements	CPI for other entertainment services; BEA composite index of input prices.
Theatrical, dance, symphony, and spectator sports productions	CPI for admissions.
Health services:	
Physicians services	CPI for physicians; PPI in 1994.
Other	CPI for other medical professionals.
Legal services	CPI for legal services.
Education services:	
Vocational schools, except high schools	IPD for commercial and vocational schools PCE.
Higher education and related services	IPD for private higher education PCE.
Social services	Average annual earnings from BLS.
Membership organizations:	
Membership organization expenses	BEA composite index of input prices.
Business associations	Average annual earnings from BLS.
Professional organizations	BEA composite index of input prices.
Other services:	
Noncommercial museums and art galleries	IPD for other services gross output.
Accounting, auditing, and bookkeeping services	CPI for personal financial and legal services fees.
Other	IPD for other services gross output.
Government enterprises:	
Postal services	PPI's for seven types of services.
Imported services:	
Rail freight transportation	PPI for railroad freight.
Water transportation, n.e.c	Charter prices from trade source.
Air transportation fares	BLS import price index for air passenger fares.

1. For this table, services consist of the primary output of (1) private businesses in the agricultural services, transportation and public utilities, trade, finance, insurance, and real estate, and services industries as defined by the 1987 Standard Industrial Classification, and (2) similar services provided by government enterprises. Prices for imported services are shown separately at the end of the table if they differ from prices used for corresponding domestic services. Prices for inputs of manufactured goods are primarily PPI's and IPI's.

2. Sources of price indexes for gross output IPD's are shown in table 8, except for other transportation, other real estate, business services and other services. The IPD's for the gross output of these industries were estimated from the IPD's for GPO for these industries and from information on inputs from the input-output tables.

BEA Bureau of Economic Analysis

BLS Bureau of Labor Statistics
CPI Consumer Price Index
GDP Gross domestic product
GPO Gross product originating
IPD Implicit price deflator
PCE Personal consumption expenditures
PPI Producer Price Index
IPI International Price Index (BLS)

Table 10.—Gross Domestic Product by Industry in Current Dollars, Selected Years

[Billions of dollars]

Line		1959	1967	1977	1982	1987	1987	1988	1989	1990	1991	1992	1993	1994
1	**Gross domestic product**	**507.2**	**833.6**	**2,026.9**	**3,242.1**	**4,692.3**	**4,692.3**	**5,049.6**	**5,438.7**	**5,743.8**	**5,916.7**	**6,244.4**	**6,550.2**	**6,931.4**
2	**Private industries**	**442.4**	**715.7**	**1,733.3**	**2,780.2**	**4,039.1**	**4,039.1**	**4,354.6**	**4,699.4**	**4,951.4**	**5,077.2**	**5,370.8**	**5,650.0**	**6,000.0**
3	**Agriculture, forestry, and fishing**	**20.3**	**24.9**	**54.3**	**77.1**	**88.6**	**88.6**	**88.9**	**101.9**	**108.7**	**102.9**	**112.4**	**105.3**	**117.8**
4	Farms	18.9	22.2	47.2	65.1	65.1	65.1	63.8	76.2	79.6	72.9	80.5	72.0	82.2
5	Agricultural services, forestry, and fishing	1.4	2.7	7.1	12.0	23.5	23.5	25.2	25.8	29.1	30.0	31.9	33.3	35.7
6	**Mining**	**12.5**	**15.2**	**54.1**	**149.5**	**88.3**	**88.3**	**99.9**	**96.3**	**112.3**	**101.1**	**92.2**	**89.0**	**90.1**
7	Metal mining	.9	.7	2.2	3.3	3.4	3.4	4.8	4.9	4.8	5.3	5.5	4.9	5.0
8	Coal mining	1.5	1.9	10.3	16.2	13.3	13.3	13.2	13.0	13.2	12.9	13.6	12.5	13.8
9	Oil and gas extraction	8.9	10.7	38.1	125.6	63.7	63.7	73.7	70.3	86.4	74.9	65.0	63.6	62.8
10	Nonmetallic minerals, except fuels	1.2	1.9	3.6	4.4	8.0	8.0	8.2	8.0	7.8	8.0	8.2	8.1	8.5
11	**Construction**	**23.7**	**39.5**	**93.8**	**129.8**	**217.0**	**217.0**	**233.4**	**242.2**	**245.2**	**228.8**	**229.7**	**243.6**	**269.2**
12	**Manufacturing**	**140.3**	**220.8**	**462.4**	**649.8**	**889.0**	**889.0**	**971.3**	**1,013.4**	**1,031.4**	**1,028.1**	**1,063.6**	**1,116.5**	**1,197.1**
13	Durable goods	81.7	134.1	277.6	377.4	514.4	513.3	556.6	574.9	572.8	558.3	573.4	612.3	673.1
14	Lumber and wood products	4.2	5.6	16.3	16.7	31.5	31.9	32.7	33.6	31.8	30.0	32.0	35.3	41.0
15	Furniture and fixtures	2.1	3.3	6.5	9.3	14.6	14.6	15.0	15.7	15.4	15.1	16.2	17.6	19.0
16	Stone, clay, and glass products	5.4	6.6	15.0	15.9	24.9	23.7	24.0	24.9	24.8	22.9	25.1	25.7	27.9
17	Primary metal industries	12.0	17.7	33.4	37.2	35.2	35.2	43.5	45.1	42.6	39.6	39.0	40.8	44.2
18	Fabricated metal products	9.4	16.7	35.1	46.7	61.5	61.6	66.2	68.3	69.4	67.6	70.1	74.5	82.5
19	Machinery, except electrical	13.1	24.0	54.9	82.4	93.1								
20	Industrial machinery and equipment						94.6	106.4	113.8	114.8	105.7	108.6	111.9	119.3
21	Electric and electronic equipment	11.2	19.8	39.3	61.5	96.4								
22	Electronic and other electric equipment						83.3	88.4	96.7	94.9	98.2	98.6	111.8	130.0
23	Motor vehicles and equipment	10.2	16.4	36.7	34.7	57.9	57.9	59.6	53.0	46.1	42.3	52.8	66.2	84.1
24	Other transportation equipment	8.1	14.2	19.1	38.1	56.8	55.6	55.6	57.7	60.5	62.0	56.5	53.2	47.6
25	Instruments and related products	3.4	6.2	13.4	23.5	26.7	39.1	47.1	46.6	52.2	54.6	54.2	53.6	54.5
26	Miscellaneous manufacturing industries	2.5	3.5	7.8	11.5	15.8	15.8	18.1	19.5	20.2	20.3	20.1	21.8	23.1
27	Nondurable goods	58.6	86.7	184.7	272.3	374.6	375.7	414.7	438.5	458.5	469.8	490.2	504.3	524.0
28	Food and kindred products	16.1	22.2	42.6	63.4	78.0	78.0	81.7	87.7	94.2	99.1	102.1	103.7	108.1
29	Tobacco products	2.9	3.5	5.6	8.3	13.1	13.1	14.3	14.9	16.4	17.8	18.4	16.5	16.6
30	Textile mill products	4.8	7.0	13.0	15.0	20.1	20.1	20.5	20.9	21.7	22.3	25.4	25.5	25.6
31	Apparel and other textile products	4.9	7.7	14.8	18.7	22.8	22.8	23.9	25.2	25.2	25.9	27.2	27.3	27.8
32	Paper and allied products	5.5	8.2	17.9	26.5	38.3	38.1	44.0	45.8	45.3	44.8	45.8	47.6	49.0
33	Printing and publishing	6.8	10.8	24.4	38.6	62.4	62.4	66.8	72.2	73.9	75.9	79.7	81.7	85.7
34	Chemicals and allied products	10.7	15.7	39.2	57.5	85.1	85.1	97.0	104.9	110.3	114.1	120.5	126.5	132.4
35	Petroleum and coal products	1.9	3.4	9.6	19.9	22.7	22.7	31.9	28.8	33.0	29.7	28.2	29.8	29.7
36	Rubber and miscellaneous plastics products	3.5	5.9	14.5	20.1	28.1	29.4	30.2	33.5	34.0	35.7	38.1	41.1	45.0
37	Leather and leather products	1.7	2.2	3.0	4.3	3.9	3.9	4.3	4.5	4.6	4.4	4.8	4.6	4.1
38	**Transportation and public utilities**	**45.0**	**70.5**	**179.5**	**293.2**	**420.7**	**420.7**	**443.6**	**461.1**	**482.3**	**511.8**	**528.8**	**566.2**	**606.4**
39	Transportation	22.7	32.7	76.2	109.2	158.0	157.9	168.5	170.8	176.4	185.8	192.8	207.6	222.8
40	Railroad transportation	8.7	9.1	15.6	19.1	21.9	21.9	22.9	19.8	19.6	21.9	22.1	23.0	24.3
41	Local and interurban passenger transit	1.8	2.5	4.0	5.5	8.5	8.5	8.7	9.2	9.0	10.2	10.9	11.3	11.7
42	Trucking and warehousing	7.2	11.8	30.8	42.4	64.3	64.3	69.6	72.9	75.8	77.9	82.2	88.4	95.1
43	Water transportation	1.7	2.6	4.9	7.3	8.3	8.2	8.8	9.4	9.7	10.7	10.3	10.3	10.6
44	Transportation by air	1.8	4.7	13.8	19.2	34.6	34.6	38.0	38.0	39.4	40.8	43.0	48.6	51.1
45	Pipelines, except natural gas	.5	.7	2.7	7.2	6.3	6.3	5.3	5.1	5.0	5.0	4.9	5.2	5.7
46	Transportation services	.9	1.4	4.4	8.5	14.1	14.1	15.2	16.5	17.8	19.4	19.6	20.8	24.3
47	Communications	10.1	18.3	50.1	88.6	124.9	124.9	132.3	136.3	146.6	154.1	161.0	173.4	188.3
48	Telephone and telegraph	9.1	16.7	44.9	78.6	111.0	107.4	111.2	112.6	119.0	123.6	129.5	137.4	148.6
49	Radio and television	1.0	1.6	5.2	10.0	13.9	17.5	21.1	23.7	27.6	30.5	31.5	35.9	39.7
50	Electric, gas, and sanitary services	12.3	19.5	53.2	95.3	137.8	137.9	142.8	154.0	159.3	171.8	175.0	185.2	195.3
51	**Wholesale trade**	**36.1**	**57.8**	**142.3**	**219.6**	**300.3**	**301.0**	**336.5**	**356.4**	**367.3**	**388.2**	**406.5**	**423.1**	**461.9**
52	**Retail trade**	**49.1**	**78.2**	**190.2**	**288.1**	**436.5**	**435.8**	**459.3**	**490.2**	**503.5**	**517.4**	**544.3**	**571.1**	**609.9**
53	**Finance, insurance, and real estate**	**69.0**	**117.4**	**283.7**	**504.2**	**830.3**	**830.7**	**892.4**	**960.6**	**1,025.2**	**1,082.7**	**1,148.8**	**1,214.0**	**1,273.7**
54	Banking	7.4	12.5	33.3	70.9	129.7								
55	Depository institutions						145.0	145.6	155.0	169.2	192.5	200.1	202.0	212.1
56	Credit agencies other than banks	1.1	2.1	6.8	3.7	29.0								
57	Nondepository institutions						13.7	15.6	18.1	21.5	23.8	28.3	35.3	31.0
58	Security and commodity brokers	1.6	3.7	7.2	16.2	38.5	38.5	37.2	42.1	39.7	37.3	49.5	62.9	69.5
59	Insurance carriers	5.4	9.0	28.9	31.8	50.7	50.7	64.0	67.9	69.3	84.3	83.4	99.6	104.1
60	Insurance agents, brokers, and service	2.2	3.8	10.5	16.0	29.3	29.4	32.7	33.6	37.1	37.5	39.5	42.0	45.3
61	Real estate	50.7	84.6	195.8	354.6	535.0	535.3	589.5	636.7	673.0	695.7	735.8	762.4	802.3
62	Nonfarm housing services	35.6	60.9	140.6	263.4	393.0	393.0	427.0	459.9	492.3	519.6	553.5	568.7	605.2
63	Other real estate	15.1	23.7	55.2	91.1	142.0	142.3	162.6	176.8	180.7	176.1	182.3	193.7	197.1
64	Holding and other investment offices	.5	1.8	1.2	11.0	18.2	18.2	7.8	7.3	15.5	11.6	12.3	9.8	9.3
65	**Services**	**48.4**	**90.8**	**255.5**	**471.8**	**785.1**	**784.6**	**877.8**	**965.5**	**1,059.4**	**1,107.6**	**1,200.8**	**1,266.1**	**1,342.7**
66	Hotels and other lodging places	2.7	4.8	12.9	24.4	36.5	36.5	39.9	43.7	46.1	48.4	51.0	54.6	56.1
67	Personal services	5.2	8.3	13.5	19.7	32.6	31.2	36.0	37.0	38.2	38.7	41.0	44.5	46.5
68	Business services	5.9	13.4	43.0	91.8	175.1	142.4	163.3	179.0	199.0	197.7	218.9	233.4	253.5
69	Auto repair, services, and parking	2.5	4.8	13.3	22.1	39.8	39.8	44.1	45.2	48.9	49.6	51.1	54.0	57.4
70	Miscellaneous repair services	1.2	2.1	5.8	9.5	13.5	13.5	15.4	16.6	17.7	16.9	17.5	19.2	19.4
71	Motion pictures	1.1	1.9	4.4	7.3	13.7	14.6	15.6	20.1	20.4	20.1	20.0	22.1	24.8
72	Amusement and recreation services	2.4	3.9	10.5	16.8	26.1	27.3	30.2	34.3	39.1	41.7	47.9	48.7	52.2
73	Health services	11.0	21.6	75.3	146.3	229.4	229.4	250.4	276.3	307.9	337.7	369.1	384.8	408.3
74	Legal services	2.9	5.5	16.8	32.7	61.4	61.1	69.4	74.2	80.7	83.7	90.1	92.3	94.4
75	Educational services	2.0	4.8	12.2	19.8	31.2	31.2	34.1	37.0	39.8	43.9	46.3	48.5	51.4
76	Social services	.7	1.7	6.2	11.3	20.6	20.6	23.0	26.2	29.6	33.0	36.9	40.1	43.4
77	Membership organizations	3.4	6.1	12.6	18.6	26.3	26.3	29.7	32.4	35.0	37.5	38.9	42.1	44.5
78	Miscellaneous professional services	3.8	7.9	23.2	45.2	71.3								
79	Other services						103.1	118.4	134.6	147.8	149.6	162.2	171.2	180.0
80	Private households	3.6	4.2	5.9	6.3	7.7	7.7	8.3	8.9	9.4	9.1	10.1	10.7	10.8
81	**Statistical discrepancy** [1]	**–2.1**	**.6**	**17.5**	**–2.9**	**–16.6**	**–16.6**	**–48.6**	**11.6**	**16.1**	**8.8**	**43.7**	**55.1**	**31.3**
82	**Government**	**64.8**	**117.9**	**293.5**	**461.9**	**653.2**	**653.2**	**694.9**	**739.2**	**792.5**	**839.5**	**873.6**	**900.2**	**931.3**
83	**Federal**	**35.0**	**56.9**	**120.0**	**188.5**	**255.2**	**255.2**	**266.9**	**279.1**	**293.5**	**312.9**	**321.4**	**322.5**	**327.1**
84	General government	31.8	51.6	106.1	164.0	221.3	221.3	230.0	240.5	252.7	268.1	274.4	276.6	275.7
85	Government enterprises	3.2	5.3	13.9	24.5	33.9	33.9	36.9	38.6	40.8	44.7	47.0	45.9	51.4
86	**State and local**	**29.8**	**60.9**	**173.5**	**273.4**	**398.1**	**398.1**	**428.1**	**460.2**	**499.0**	**526.6**	**552.2**	**577.7**	**604.3**
87	General government	26.1	54.9	160.9	255.2	364.7	364.7	391.0	419.8	456.3	482.6	506.6	529.9	551.4
88	Government enterprises	3.7	6.0	12.7	18.2	33.4	33.4	37.0	40.3	42.7	44.0	45.6	47.8	52.9

1. Equals GDP measured as the sum of expenditures less gross domestic income.

NOTE.—Estimates for the year 1987 are shown on the basis of both the 1972 and 1987 Standard Industrial Classi-
fication (SIC). The estimate based on the 1972 SIC is shown first and is comparable with estimates back to 1977;
the estimate based on the 1987 SIC is shown second and is comparable with estimates after 1987.

Table 11.—Gross Product by Industry in Current Dollars as a Percentage of Gross Domestic Product, Selected Years

[Percent]

Line		1959	1967	1977	1982	1987	1987	1988	1989	1990	1991	1992	1993	1994
1	**Gross domestic product**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2	**Private industries**	**87.2**	**85.9**	**85.5**	**85.8**	**86.1**	**86.1**	**86.2**	**86.4**	**86.2**	**85.8**	**86.0**	**86.3**	**86.6**
3	**Agriculture, forestry, and fishing**	**4.0**	**3.0**	**2.7**	**2.4**	**1.9**	**1.9**	**1.8**	**1.9**	**1.9**	**1.7**	**1.8**	**1.6**	**1.7**
4	Farms	3.7	2.7	2.3	2.0	1.4	1.4	1.3	1.4	1.4	1.2	1.3	1.1	1.2
5	Agricultural services, forestry, and fishing	.3	.3	.4	.4	.5	.5	.5	.5	.5	.5	.5	.5	.5
6	**Mining**	**2.5**	**1.8**	**2.7**	**4.6**	**1.9**	**1.9**	**2.0**	**1.8**	**2.0**	**1.7**	**1.5**	**1.4**	**1.3**
7	Metal mining	.2	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
8	Coal mining	.3	.2	.5	.5	.3	.3	.3	.2	.2	.2	.2	.2	.2
9	Oil and gas extraction	1.8	1.3	1.9	3.9	1.4	1.4	1.5	1.3	1.5	1.3	1.0	1.0	.9
10	Nonmetallic minerals, except fuels	.2	.2	.2	.1	.2	.2	.2	.1	.1	.1	.1	.1	.1
11	**Construction**	**4.7**	**4.7**	**4.6**	**4.0**	**4.6**	**4.6**	**4.6**	**4.5**	**4.3**	**3.9**	**3.7**	**3.7**	**3.9**
12	**Manufacturing**	**27.7**	**26.5**	**22.8**	**20.0**	**18.9**	**18.9**	**19.2**	**18.6**	**18.0**	**17.4**	**17.0**	**17.0**	**17.3**
13	Durable goods	16.1	16.1	13.7	11.6	11.0	10.9	11.0	10.6	10.0	9.4	9.2	9.3	9.7
14	Lumber and wood products	.8	.7	.8	.5	.7	.7	.6	.6	.6	.5	.5	.5	.6
15	Furniture and fixtures	.4	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
16	Stone, clay, and glass products	1.1	.8	.7	.5	.5	.5	.5	.5	.4	.4	.4	.4	.4
17	Primary metal industries	2.4	2.1	1.6	1.1	.8	.8	.9	.8	.7	.7	.6	.6	.6
18	Fabricated metal products	1.9	2.0	1.7	1.4	1.3	1.3	1.3	1.3	1.2	1.1	1.1	1.1	1.2
19	Machinery, except electrical	2.6	2.9	2.7	2.5	2.0								
20	Industrial machinery and equipment						2.0	2.1	2.1	2.0	1.8	1.7	1.7	1.7
21	Electric and electronic equipment	2.2	2.4	1.9	1.9	2.1								
22	Electronic and other electric equipment						1.8	1.8	1.8	1.7	1.7	1.6	1.7	1.9
23	Motor vehicles and equipment	2.0	2.0	1.8	1.1	1.2	1.2	1.2	1.0	.8	.7	.8	1.0	1.2
24	Other transportation equipment	1.6	1.7	.9	1.2	1.2	1.2	1.1	1.1	1.1	1.0	.9	.8	.7
25	Instruments and related products	.7	.7	.7	.7	.6	.8	.9	.9	.9	.9	.9	.8	.8
26	Miscellaneous manufacturing industries	.5	.4	.4	.4	.3	.3	.4	.4	.4	.3	.3	.3	.3
27	Nondurable goods	11.6	10.4	9.1	8.4	8.0	8.0	8.2	8.1	8.0	7.9	7.9	7.7	7.6
28	Food and kindred products	3.2	2.7	2.1	2.0	1.7	1.7	1.6	1.6	1.6	1.7	1.6	1.6	1.6
29	Tobacco products	.6	.4	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.2
30	Textile mill products	.9	.8	.6	.5	.4	.4	.4	.4	.4	.4	.4	.4	.4
31	Apparel and other textile products	1.0	.9	.7	.6	.5	.5	.5	.5	.4	.4	.4	.4	.4
32	Paper and allied products	1.1	1.0	.9	.8	.8	.8	.9	.8	.8	.8	.7	.7	.7
33	Printing and publishing	1.3	1.3	1.2	1.2	1.3	1.3	1.3	1.3	1.3	1.3	1.3	1.2	1.2
34	Chemicals and allied products	2.1	1.9	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.9	1.9	1.9
35	Petroleum and coal products	.4	.4	.5	.6	.5	.5	.6	.5	.6	.5	.5	.5	.4
36	Rubber and miscellaneous plastics products	.7	.7	.7	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
37	Leather and leather products	.3	.3	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1	.1
38	**Transportation and public utilities**	**8.9**	**8.5**	**8.9**	**9.0**	**9.0**	**9.0**	**8.8**	**8.5**	**8.4**	**8.7**	**8.5**	**8.6**	**8.7**
39	Transportation	4.5	3.9	3.8	3.4	3.4	3.4	3.3	3.1	3.1	3.1	3.1	3.2	3.2
40	Railroad transportation	1.7	1.1	.8	.6	.5	.5	.5	.4	.3	.4	.4	.4	.4
41	Local and interurban passenger transit	.4	.3	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
42	Trucking and warehousing	1.4	1.4	1.5	1.3	1.4	1.4	1.4	1.3	1.3	1.3	1.3	1.3	1.4
43	Water transportation	.3	.3	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
44	Transportation by air	.4	.6	.7	.6	.7	.7	.8	.7	.7	.7	.7	.7	.7
45	Pipelines, except natural gas	.1	.1	.1	.2	.1	.1	.1	.1	.1	.1	.1	.1	.1
46	Transportation services	.2	.2	.2	.3	.3	.3	.3	.3	.3	.3	.3	.3	.4
47	Communications	2.0	2.2	2.5	2.7	2.7	2.7	2.6	2.5	2.6	2.6	2.6	2.6	2.7
48	Telephone and telegraph	1.8	2.0	2.2	2.4	2.4	2.3	2.2	2.1	2.1	2.1	2.1	2.1	2.1
49	Radio and television	.2	.2	.3	.3	.3	.4	.4	.4	.5	.5	.5	.5	.6
50	Electric, gas, and sanitary services	2.4	2.3	2.6	2.9	2.9	2.9	2.8	2.8	2.8	2.9	2.8	2.8	2.8
51	**Wholesale trade**	**7.1**	**6.9**	**7.0**	**6.8**	**6.4**	**6.4**	**6.7**	**6.6**	**6.4**	**6.6**	**6.5**	**6.5**	**6.7**
52	**Retail trade**	**9.7**	**9.4**	**9.4**	**8.9**	**9.3**	**9.3**	**9.1**	**9.0**	**8.8**	**8.7**	**8.7**	**8.7**	**8.8**
53	**Finance, insurance, and real estate**	**13.6**	**14.1**	**14.0**	**15.6**	**17.7**	**17.7**	**17.7**	**17.7**	**17.8**	**18.3**	**18.4**	**18.5**	**18.4**
54	Banking	1.5	1.5	1.6	2.2	2.8								
55	Depository institutions						3.1	2.9	2.8	2.9	3.3	3.2	3.1	3.1
56	Credit agencies other than banks	.2	.3	.3	.1	.6								
57	Nondepository institutions						.3	.3	.3	.4	.4	.5	.5	.4
58	Security and commodity brokers	.3	.4	.4	.5	.8	.8	.7	.8	.7	.6	.8	1.0	1.0
59	Insurance carriers	1.1	1.1	1.4	1.0	1.1	1.1	1.3	1.2	1.2	1.4	1.3	1.5	1.5
60	Insurance agents, brokers, and service	.4	.5	.5	.5	.6	.6	.6	.6	.6	.6	.6	.6	.7
61	Real estate	10.0	10.1	9.7	10.9	11.4	11.4	11.7	11.7	11.7	11.8	11.8	11.6	11.6
62	Nonfarm housing services	7.0	7.3	6.9	8.1	8.4	8.4	8.5	8.5	8.6	8.8	8.9	8.7	8.7
63	Other real estate	3.0	2.8	2.7	2.8	3.0	3.0	3.2	3.3	3.1	3.0	2.9	3.0	2.8
64	Holding and other investment offices	.1	.2	.1	.3	.4	.4	.2	.1	.3	.2	.2	.1	.1
65	**Services**	**9.5**	**10.9**	**12.6**	**14.6**	**16.7**	**16.7**	**17.4**	**17.8**	**18.4**	**18.7**	**19.2**	**19.3**	**19.4**
66	Hotels and other lodging places	.5	.6	.6	.8	.8	.8	.8	.8	.8	.8	.8	.8	.8
67	Personal services	1.0	1.0	.7	.6	.7	.7	.7	.7	.7	.7	.7	.7	.7
68	Business services	1.2	1.6	2.1	2.8	3.7	3.0	3.2	3.3	3.5	3.3	3.5	3.6	3.7
69	Auto repair, services, and parking	.5	.6	.7	.7	.8	.8	.9	.8	.9	.8	.8	.8	.8
70	Miscellaneous repair services	.2	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3	.3
71	Motion pictures	.2	.2	.2	.2	.3	.3	.3	.4	.4	.3	.3	.3	.4
72	Amusement and recreation services	.5	.5	.5	.5	.6	.6	.6	.6	.7	.7	.8	.7	.8
73	Health services	2.2	2.6	3.7	4.5	4.9	4.9	5.0	5.1	5.4	5.7	5.9	5.9	5.9
74	Legal services	.6	.6	.8	1.0	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4
75	Educational services	.4	.6	.6	.6	.7	.7	.7	.7	.7	.7	.7	.7	.7
76	Social services	.1	.2	.3	.3	.4	.4	.5	.5	.5	.6	.6	.6	.6
77	Membership organizations	.7	.7	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6	.6
78	Miscellaneous professional services	.7	.9	1.1	1.4	1.5								
79	Other services						2.2	2.3	2.5	2.6	2.5	2.6	2.6	2.6
80	Private households	.7	.5	.3	.2	.2	.2	.2	.2	.2	.2	.2	.2	.2
81	**Statistical discrepancy** [1]	**–.4**	**.1**	**.9**	**–.1**	**–.4**	**–.4**	**–1.0**	**.2**	**.3**	**.1**	**.7**	**.8**	**.5**
82	**Government**	**12.8**	**14.1**	**14.5**	**14.2**	**13.9**	**13.9**	**13.8**	**13.6**	**13.8**	**14.2**	**14.0**	**13.7**	**13.4**
83	**Federal**	**6.9**	**6.8**	**5.9**	**5.8**	**5.4**	**5.4**	**5.3**	**5.1**	**5.1**	**5.3**	**5.1**	**4.9**	**4.7**
84	General government	6.3	6.2	5.2	5.1	4.7	4.7	4.6	4.4	4.4	4.5	4.4	4.2	4.0
85	Government enterprises	.6	.6	.7	.8	.7	.7	.7	.7	.7	.8	.8	.7	.7
86	**State and local**	**5.9**	**7.3**	**8.6**	**8.4**	**8.5**	**8.5**	**8.5**	**8.5**	**8.7**	**8.9**	**8.8**	**8.8**	**8.7**
87	General government	5.1	6.6	7.9	7.9	7.8	7.8	7.7	7.7	7.9	8.2	8.1	8.1	8.0
88	Government enterprises	.7	.7	.6	.6	.7	.7	.7	.7	.7	.7	.7	.7	.7

1. Equals GDP measured as the sum of expenditures less gross domestic income.

NOTE.—Percentages for the year 1987 are shown on the basis of both the 1972 and 1987 Standard Industrial Classification (SIC). The percentage based on the 1972 SIC is shown first and is comparable with percentages back to 1977; the percentage based on the 1987 SIC is shown second and is comparable with percentages after 1987.

Table 12.—Components of Gross Product as a Percentage of Gross Domestic Product by Industry Group, Selected Years

[Percent]

Line		1959	1963	1967	1972	1977	1982	1987	1992	1994
1	**Gross domestic product**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
2	Compensation of employees	55.5	56.0	57.0	58.7	58.4	59.5	58.8	58.4	57.8
3	Indirect business tax and nontax liability	8.3	8.9	8.4	9.0	8.2	7.9	7.8	8.1	8.3
4	Other GPO	36.7	35.7	34.4	32.0	32.6	32.7	33.8	32.8	33.5
5	Statistical discrepancy [1]	–.4	–.6	.1	.3	.9	–.1	–.4	.7	.5
6	Private industries	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
7	Compensation of employees	52.1	52.1	53.0	54.3	54.3	55.0	54.2	54.3	53.8
8	Indirect business tax and nontax liability	9.4	10.2	9.8	10.6	9.6	9.2	9.0	9.5	9.6
9	Other GPO	39.0	38.4	37.1	34.7	35.0	35.8	37.2	35.4	36.1
10	Statistical discrepancy [1]	–.4	–.6	.1	.3	.9	–.1	–.4	.7	.5
11	Agriculture, forestry, and fishing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
12	Compensation of employees	17.3	18.9	19.1	16.9	20.7	22.2	24.3	27.3	29.5
13	Indirect business tax and nontax liability	6.2	6.6	6.9	6.2	5.8	4.6	5.1	5.3	5.5
14	Other GPO	76.5	74.6	73.9	76.9	73.5	73.3	70.6	67.4	65.0
15	Mining	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
16	Compensation of employees	35.2	33.1	34.9	39.1	31.3	25.6	33.5	35.3	36.8
17	Indirect business tax and nontax liability	8.0	9.2	9.9	11.4	8.7	18.5	10.7	11.6	12.0
18	Other GPO	56.8	57.7	55.2	49.4	60.0	55.9	55.8	53.1	51.3
19	Construction	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
20	Compensation of employees	70.3	70.3	70.4	71.1	69.0	72.5	66.7	69.1	68.0
21	Indirect business tax and nontax liability	1.8	1.9	1.7	2.4	2.1	1.9	1.8	2.2	2.1
22	Other GPO	28.0	27.8	27.8	26.4	28.9	25.6	31.5	28.7	29.9
23	Manufacturing	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
24	Compensation of employees	68.3	67.7	68.6	70.2	70.2	73.6	68.5	68.0	65.9
25	Indirect business tax and nontax liability	6.8	7.0	5.6	5.2	4.1	3.6	3.5	4.2	4.2
26	Other GPO	24.9	25.3	25.8	24.6	25.7	22.9	28.0	27.8	30.0
27	Durable goods	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
28	Compensation of employees	71.3	70.2	71.4	73.7	74.5	80.0	74.7	76.6	71.8
29	Indirect business tax and nontax liability	4.3	4.7	3.0	2.3	2.3	2.2	2.1	2.6	2.6
30	Other GPO	24.4	25.1	25.6	24.0	23.2	17.9	23.3	20.8	25.6
31	Nondurable goods	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
32	Compensation of employees	64.2	64.2	64.3	65.1	63.7	64.7	60.1	58.0	58.2
33	Indirect business tax and nontax liability	10.3	10.4	9.6	9.5	6.9	5.5	5.4	6.0	6.2
34	Other GPO	25.6	25.4	26.1	25.5	29.4	29.8	34.4	36.0	35.6
35	Transportation and public utilities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
36	Compensation of employees	53.7	50.1	50.9	52.0	51.0	51.3	45.6	45.4	43.6
37	Indirect business tax and nontax liability	10.1	10.0	9.7	11.4	10.4	8.7	9.0	10.1	9.8
38	Other GPO	36.2	39.9	39.4	36.6	38.6	40.0	45.4	44.5	46.6
39	Wholesale trade	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
40	Compensation of employees	50.0	51.0	51.7	52.2	53.3	59.2	60.2	58.8	56.3
41	Indirect business tax and nontax liability	24.8	27.0	26.6	26.5	22.5	17.8	21.8	22.7	22.8
42	Other GPO	25.1	22.0	21.7	21.2	24.1	23.0	18.0	18.5	20.9
43	Retail trade	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
44	Compensation of employees	56.2	59.0	58.8	60.0	60.5	61.6	60.2	61.0	59.8
45	Indirect business tax and nontax liability	10.2	12.0	12.6	14.9	15.2	16.1	17.6	18.5	18.7
46	Other GPO	33.6	28.9	28.7	25.1	24.3	22.4	22.2	20.6	21.5
47	Finance, insurance, and real estate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
48	Compensation of employees	18.4	18.8	19.2	21.4	22.5	23.3	24.9	24.1	24.6
49	Indirect business tax and nontax liability	14.3	16.1	16.9	18.7	17.8	15.4	13.9	14.2	14.6
50	Other GPO	67.3	65.1	63.9	59.9	59.7	61.3	61.2	61.6	60.8
51	Services	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
52	Compensation of employees	58.8	60.3	61.2	65.6	65.8	69.8	70.2	71.6	72.3
53	Indirect business tax and nontax liability	2.6	2.7	2.4	2.6	2.5	2.3	2.6	2.5	2.6
54	Other GPO	38.6	37.0	36.4	31.8	31.7	27.9	27.2	25.9	25.1
55	Government	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
56	Compensation of employees	77.0	78.6	81.8	84.3	85.4	85.7	85.7	86.1	85.4
57	Indirect business tax and nontax liability	0	0	0	0	0	0	0	0	0
58	Other GPO	23.0	21.4	18.2	15.7	14.6	14.3	14.3	13.9	14.6

1. Equals GDP measured as the sum of expenditures less gross domestic income.

Table 13.—Quantity Indexes for Gross Domestic Product by Industry, Selected Years

[1992=100]

Line		1977	1982	1987	1987	1988	1989	1990	1991	1992	1993	1994
1	**Gross domestic product**	68.5	74.0	90.5	90.5	93.9	97.1	98.3	97.3	100.0	102.2	105.8
2	**Private industries**	66.5	72.3	90.1	90.1	93.7	97.0	98.2	96.9	100.0	102.6	106.7
3	**Agriculture, forestry, and fishing**	53.9	69.9	77.9	77.9	71.8	78.5	90.3	89.8	100.0	91.9	102.9
4	Farms	62.3	80.9	79.1	79.1	70.3	80.5	90.5	88.3	100.0	88.1	104.2
5	Agricultural services, forestry, and fishing	30.8	40.4	74.6	74.6	75.6	73.0	89.6	93.5	100.0	101.4	100.7
6	**Mining**	89.3	85.4	93.6	93.6	113.2	100.6	105.0	105.6	100.0	98.3	104.8
7	Metal mining	36.1	39.7	49.1	49.1	59.0	60.8	66.9	92.6	100.0	94.8	81.4
8	Coal mining	51.4	62.9	73.3	73.3	80.5	83.6	88.5	89.9	100.0	102.7	119.3
9	Oil and gas extraction	105.9	96.0	100.9	100.9	127.2	107.9	113.0	111.0	100.0	97.3	104.1
10	Nonmetallic minerals, except fuels	76.1	61.4	103.7	103.7	103.9	99.5	94.8	98.1	100.0	101.9	104.8
11	**Construction**	93.1	75.2	104.3	104.3	108.3	109.7	107.8	99.7	100.0	102.8	110.2
12	**Manufacturing**	74.9	76.2	97.9	97.9	104.4	104.0	102.5	98.8	100.0	103.0	109.8
13	Durable goods	75.9	74.6	98.8	98.6	107.4	106.9	104.8	99.1	100.0	104.8	114.7
14	Lumber and wood products	87.4	75.3	123.5	125.1	124.7	121.0	115.5	106.6	100.0	89.7	98.5
15	Furniture and fixtures	78.5	79.0	104.3	104.3	104.0	104.3	97.7	92.2	100.0	110.1	113.8
16	Stone, clay, and glass products	99.5	71.3	98.4	93.7	97.9	102.3	101.7	91.4	100.0	99.7	104.5
17	Primary metal industries	133.6	106.0	98.9	98.9	105.4	101.0	100.0	99.1	100.0	107.5	109.9
18	Fabricated metal products	83.7	83.2	103.0	103.2	110.1	107.4	103.6	97.4	100.0	106.0	118.4
19	Industrial machinery and equipment	44.0	54.4	82.7	84.1	97.7	103.4	104.3	95.4	100.0	106.6	117.4
20	Electronic and other electric equipment	....	....	....	79.2	86.5	94.1	93.9	97.3	100.0	115.3	140.4
21	Motor vehicles and equipment	151.3	88.5	132.3	132.3	140.5	121.5	107.6	88.5	100.0	114.6	137.7
22	Other transportation equipment	90.5	107.9	134.3	131.6	135.5	128.2	122.2	113.1	100.0	91.4	79.9
23	Instruments and related products	....	....	....	90.0	109.8	103.7	108.1	107.0	100.0	94.7	93.8
24	Miscellaneous manufacturing industries	79.1	69.8	93.0	93.0	106.0	110.1	110.0	104.6	100.0	104.8	111.0
25	Nondurable goods	73.8	78.8	97.2	97.5	100.9	100.5	99.8	98.4	100.0	100.8	104.1
26	Food and kindred products	64.8	86.8	93.9	93.9	102.4	100.4	101.0	100.2	100.0	100.1	102.7
27	Tobacco products	289.7	256.7	173.2	173.2	167.3	148.0	135.3	117.2	100.0	95.0	119.8
28	Textile mill products	70.0	69.4	85.7	85.7	84.4	86.0	88.8	90.7	100.0	101.7	107.1
29	Apparel and other textile products	77.2	76.4	93.1	93.1	97.7	100.0	97.4	97.0	100.0	99.1	102.2
30	Paper and allied products	81.6	76.9	94.3	93.8	98.3	95.5	96.3	97.4	100.0	108.9	108.4
31	Printing and publishing	84.5	91.0	105.5	105.5	108.9	110.2	106.0	101.4	100.0	97.0	98.0
32	Chemicals and allied products	67.6	66.2	91.6	91.6	91.7	92.5	97.3	96.1	100.0	101.4	103.9
33	Petroleum and coal products	79.8	69.3	128.5	128.5	131.5	118.3	100.7	100.2	100.0	95.9	94.9
34	Rubber and miscellaneous plastics products	44.0	51.0	73.5	76.9	81.2	90.6	90.4	92.8	100.0	107.3	120.1
35	Leather and leather products	122.4	115.6	98.0	98.0	98.7	102.6	99.9	94.9	100.0	95.7	81.7
36	**Transportation and public utilities**	66.2	72.5	86.7	86.7	89.4	90.7	93.5	97.3	100.0	105.1	110.7
37	Transportation	72.8	73.1	91.0	90.9	90.2	90.1	91.7	96.2	100.0	106.4	111.8
38	Railroad transportation	64.1	61.0	85.1	85.1	90.2	81.6	84.7	98.4	100.0	108.6	118.9
39	Local and interurban passenger transit	86.1	79.7	102.8	102.8	95.2	98.8	94.6	96.3	100.0	100.1	102.0
40	Trucking and warehousing	97.9	84.2	93.8	93.8	92.4	92.0	89.7	95.6	100.0	107.5	109.0
41	Water transportation	111.7	117.0	104.0	103.0	100.6	102.4	103.6	108.4	100.0	101.2	106.0
42	Transportation by air	38.5	49.7	81.1	81.1	78.7	80.6	92.0	91.6	100.0	105.2	116.0
43	Pipelines, except natural gas	127.8	129.7	122.6	122.6	110.4	111.7	98.0	106.5	100.0	116.0	123.3
44	Transportation services	45.2	62.1	87.3	87.3	92.7	98.9	98.3	98.0	100.0	106.2	112.1
45	Communications	49.6	71.6	82.8	82.8	87.4	87.2	92.7	97.2	100.0	105.7	113.1
46	Telephone and telegraph	....	....	....	85.4	89.1	87.5	93.2	96.5	100.0	105.2	110.9
47	Radio and television	....	....	....	71.2	80.4	86.0	90.9	100.1	100.0	107.3	121.2
48	Electric, gas, and sanitary services	76.2	72.5	85.3	85.4	90.2	94.6	96.4	98.6	100.0	103.2	107.4
49	**Wholesale trade**	49.5	60.7	79.2	79.4	84.6	90.1	88.7	93.8	100.0	103.0	110.7
50	**Retail trade**	67.0	71.3	93.7	93.6	98.8	101.7	100.4	98.1	100.0	103.5	109.4
51	**Finance, insurance, and real estate**	64.7	76.3	88.4	88.5	93.2	96.0	96.6	96.3	100.0	101.0	103.8
52	Depository institutions	....	....	....	107.8	107.2	107.8	107.4	103.2	100.0	98.4	98.6
53	Nondepository institutions	....	....	....	89.1	89.1	88.4	90.4	93.3	100.0	113.1	120.0
54	Security and commodity brokers	27.4	39.2	80.1	80.1	78.6	87.7	83.3	76.7	100.0	131.4	150.3
55	Insurance carriers	89.3	80.0	67.5	67.5	80.1	85.5	84.2	91.1	100.0	88.8	91.6
56	Insurance agents, brokers, and service	67.6	81.7	96.5	97.0	101.1	98.5	103.5	98.8	100.0	101.8	106.2
57	Real estate	62.9	75.0	86.6	86.6	92.1	94.9	96.1	96.3	100.0	100.6	103.1
58	Nonfarm housing services	61.4	77.1	87.3	87.3	90.4	93.3	95.0	97.0	100.0	99.9	103.3
59	Other real estate	66.9	69.7	84.8	85.0	96.7	99.5	99.1	94.3	100.0	102.9	102.3
60	Holding and other investment offices	47.2	61.1	88.4	88.4	93.6	97.4	100.0	103.9	100.0	104.3	105.2
61	**Services**	59.3	69.8	86.8	86.7	91.5	95.7	98.4	97.8	100.0	101.8	104.1
62	Hotels and other lodging places	78.1	75.9	83.8	83.8	89.2	94.1	96.5	96.7	100.0	103.1	103.2
63	Personal services	92.1	82.4	101.1	96.7	107.3	104.3	101.8	98.1	100.0	104.6	105.4
64	Business services	....	....	....	82.1	87.4	93.8	98.9	96.1	100.0	107.0	112.8
65	Auto repair, services, and parking	69.4	76.7	97.8	97.8	103.7	101.8	105.7	101.8	100.0	99.7	101.0
66	Miscellaneous repair services	88.0	101.1	105.1	105.1	117.1	123.9	122.6	109.2	100.0	98.5	96.4
67	Motion pictures	48.5	63.9	88.3	94.5	96.4	116.0	110.6	104.1	100.0	109.8	118.2
68	Amusement and recreation services	44.7	56.2	69.6	72.5	76.5	82.9	89.4	90.3	100.0	98.2	101.1
69	Health services	69.5	82.3	91.5	91.5	92.4	94.0	96.7	98.3	100.0	98.4	99.8
70	Legal services	70.9	79.8	92.8	92.4	100.4	101.1	101.5	98.5	100.0	97.5	96.2
71	Educational services	70.7	75.5	90.2	90.2	92.6	94.5	95.7	99.6	100.0	101.1	102.9
72	Social services	37.4	49.9	71.9	71.9	76.6	82.9	88.2	94.1	100.0	106.7	111.7
73	Membership organizations	73.7	73.4	81.4	81.4	87.1	93.1	98.3	99.1	100.0	104.9	110.0
74	Other services	....	....	....	80.6	89.0	97.6	98.9	97.9	100.0	103.3	105.2
75	Private households	104.2	75.4	88.5	88.5	94.3	99.7	101.4	93.6	100.0	102.5	101.1
76	**Government**	82.1	85.7	92.7	92.7	94.9	97.0	99.2	100.0	100.0	100.2	100.3
77	**Federal**	90.6	91.4	98.3	98.3	99.2	100.1	102.0	102.2	100.0	97.9	94.9
78	General government	89.8	91.2	99.2	99.2	99.9	100.7	102.1	102.4	100.0	97.4	93.6
79	Government enterprises	95.8	93.3	92.6	92.6	94.8	96.7	100.9	100.7	100.0	101.1	103.0
80	**State and local**	77.1	82.3	89.5	89.5	92.4	95.3	97.7	98.8	100.0	101.5	103.4
81	General government	77.5	82.2	89.2	89.2	92.2	95.1	97.6	98.7	100.0	101.8	103.8
82	Government enterprises	71.9	83.1	92.6	92.6	94.7	97.0	98.6	99.2	100.0	98.1	98.8
	Addenda:											
83	Electronic equipment and instruments [1]	54.5	64.3	82.9	82.9	94.0	97.5	98.7	100.7	100.0	107.8	123.2
84	Depository and nondepository institutions [2]	77.9	95.5	105.5	105.5	104.9	105.4	105.3	102.0	100.0	100.3	101.2
85	Business, miscellaneous professional, and other services [3]	41.1	56.1	81.5	81.5	88.1	95.4	98.9	96.9	100.0	105.4	109.5

1. The combination of 1987 SIC industries electronic and other electric equipment and instruments and related products is the equivalent of 1972 SIC industries electric and electronic equipment and instruments and related products.

2. The combination of 1987 SIC industries depository institutions and nondepository institutions is the equivalent of 1972 SIC industries banking and credit agencies other than banks.

3. The combination of 1987 SIC industries business services and other services is the equivalent of 1972 SIC industries business services and miscellaneous professional services.

NOTE.—Indexes for the year 1987 are shown on the basis of both the 1972 and 1987 SIC. The index based on the 1972 SIC is shown first and is comparable with indexes back to 1977; the index based on the 1987 SIC is shown second and is comparable with indexes after 1987. Industry titles are from the 1987 SIC.

Table 14.—Real Gross Domestic Product by Industry, 1987–94

[Billions of chained (1992) dollars]

Line		1987	1988	1989	1990	1991	1992	1993	1994
1	**Gross domestic product**	**5,648.4**	**5,862.9**	**6,060.4**	**6,138.7**	**6,079.0**	**6,244.4**	**6,383.8**	**6,604.2**
2	**Private industries**	**4,838.7**	**5,033.8**	**5,212.2**	**5,271.5**	**5,205.4**	**5,370.8**	**5,508.7**	**5,728.7**
3	**Agriculture, forestry, and fishing**	**87.6**	**80.7**	**88.2**	**101.5**	**100.9**	**112.4**	**103.3**	**115.7**
4	Farms	63.7	56.6	64.8	72.8	71.1	80.5	70.9	83.9
5	Agricultural services, forestry, and fishing	23.8	24.1	23.3	28.6	29.8	31.9	32.3	32.1
6	**Mining**	**86.4**	**104.4**	**92.8**	**96.9**	**97.5**	**92.2**	**90.7**	**96.7**
7	Metal mining	2.7	3.2	3.3	3.7	5.1	5.5	5.2	4.5
8	Coal mining	9.9	10.9	11.3	12.0	12.2	13.6	13.9	16.2
9	Oil and gas extraction	65.7	82.8	70.2	73.5	72.2	65.0	63.3	67.7
10	Nonmetallic minerals, except fuels	8.5	8.5	8.1	7.7	8.0	8.2	8.3	8.6
11	**Construction**	**239.6**	**248.8**	**251.9**	**247.5**	**229.0**	**229.7**	**236.1**	**253.1**
12	**Manufacturing**	**1,041.6**	**1,110.9**	**1,106.0**	**1,090.1**	**1,050.4**	**1,063.6**	**1,095.3**	**1,168.0**
13	Durable goods	565.1	616.1	613.1	600.7	568.1	573.4	601.2	657.9
14	Lumber and wood products	40.0	39.9	38.7	37.0	34.1	32.0	28.7	31.5
15	Furniture and fixtures	16.9	16.9	16.9	15.8	14.9	16.2	17.8	18.4
16	Stone, clay, and glass products	23.5	24.6	25.6	25.5	22.9	25.1	25.0	26.2
17	Primary metal industries	38.6	41.1	39.4	39.0	38.6	39.0	41.9	42.9
18	Fabricated metal products	72.3	77.1	75.2	72.6	68.2	70.1	74.2	82.9
19	Industrial machinery and equipment	91.3	106.2	112.4	113.4	103.7	108.6	115.8	127.6
20	Electronic and other electric equipment	78.1	85.3	92.8	92.6	96.0	98.6	113.6	138.4
21	Motor vehicles and equipment	69.9	74.2	64.2	56.8	46.8	52.8	60.6	72.8
22	Other transportation equipment	74.4	76.6	72.5	69.1	64.0	56.5	51.6	45.1
23	Instruments and related products	48.8	59.6	56.2	58.6	58.1	54.2	51.3	50.9
24	Miscellaneous manufacturing industries	18.7	21.4	22.2	22.2	21.1	20.1	21.1	22.4
25	Nondurable goods	477.8	494.5	492.6	489.3	482.2	490.2	494.1	510.2
26	Food and kindred products	95.9	104.6	102.5	103.1	102.3	102.1	102.2	104.8
27	Tobacco products	31.8	30.7	27.2	24.9	21.5	18.4	17.5	22.0
28	Textile mill products	21.8	21.5	21.9	22.6	23.1	25.4	25.9	27.3
29	Apparel and other textile products	25.3	26.6	27.2	26.5	26.4	27.2	26.9	27.8
30	Paper and allied products	43.0	45.1	43.8	44.1	44.6	45.8	49.9	49.7
31	Printing and publishing	84.1	86.8	87.9	84.5	80.8	79.7	77.3	78.2
32	Chemicals and allied products	110.4	110.4	111.4	117.3	115.8	120.5	122.1	125.1
33	Petroleum and coal products	36.3	37.1	33.4	28.4	28.3	28.2	27.1	26.8
34	Rubber and miscellaneous plastics products	29.3	30.9	34.5	34.4	35.3	38.1	40.9	45.7
35	Leather and leather products	4.7	4.7	4.9	4.8	4.5	4.8	4.6	3.9
36	**Transportation and public utilities**	**458.4**	**472.7**	**479.9**	**494.7**	**514.7**	**528.8**	**555.8**	**585.3**
37	Transportation	175.3	173.8	173.8	176.7	185.5	192.8	205.1	215.5
38	Railroad transportation	18.8	19.9	18.0	18.7	21.7	22.1	24.0	26.2
39	Local and interurban passenger transit	11.2	10.4	10.8	10.3	10.5	10.9	10.9	11.1
40	Trucking and warehousing	77.1	75.9	75.6	73.7	78.5	82.2	88.3	89.6
41	Water transportation	10.6	10.3	10.5	10.7	11.1	10.3	10.4	10.9
42	Transportation by air	34.9	33.8	34.6	39.5	39.4	43.0	45.2	49.9
43	Pipelines, except natural gas	6.0	5.4	5.4	4.8	5.2	4.9	5.7	6.0
44	Transportation services	17.1	18.1	19.3	19.2	19.2	19.6	20.8	21.9
45	Communications	133.3	140.8	140.4	149.3	156.5	161.0	170.1	182.1
46	Telephone and telegraph	110.6	115.4	113.4	120.7	125.0	129.5	136.3	143.7
47	Radio and television	22.4	25.3	27.1	28.6	31.5	31.5	33.7	38.1
48	Electric, gas, and sanitary services	149.4	157.8	165.5	168.7	172.6	175.0	180.6	188.0
49	**Wholesale trade**	**322.9**	**343.9**	**366.4**	**360.6**	**381.3**	**406.5**	**418.6**	**450.0**
50	**Retail trade**	**509.2**	**537.6**	**553.4**	**546.4**	**534.1**	**544.3**	**563.2**	**595.4**
51	**Finance, insurance, and real estate**	**1,016.5**	**1,070.2**	**1,102.7**	**1,109.9**	**1,106.6**	**1,148.8**	**1,159.8**	**1,192.8**
52	Depository institutions	215.7	214.5	215.7	214.9	206.6	200.1	196.9	197.2
53	Nondepository institutions	25.3	25.3	25.0	25.6	26.4	28.3	32.0	34.0
54	Security and commodity brokers	39.6	38.9	43.4	41.2	38.0	49.5	65.1	74.4
55	Insurance carriers	56.3	66.7	71.3	70.2	75.9	83.4	74.0	76.3
56	Insurance agents, brokers, and service	38.3	39.9	38.9	40.8	39.0	39.5	40.2	41.9
57	Real estate	637.4	677.3	698.5	706.8	708.5	735.8	740.4	758.4
58	Nonfarm housing services	482.9	500.3	516.4	525.6	536.7	553.5	552.9	571.9
59	Other real estate	155.0	176.3	181.3	180.7	171.8	182.3	187.6	186.4
60	Holding and other investment offices	10.9	11.5	12.0	12.3	12.8	12.3	12.8	12.9
61	**Services**	**1,041.4**	**1,099.1**	**1,149.5**	**1,181.7**	**1,174.2**	**1,200.8**	**1,222.1**	**1,249.6**
62	Hotels and other lodging places	42.7	45.5	47.9	49.2	49.3	51.0	52.5	52.6
63	Personal services	39.6	43.9	42.7	41.7	40.2	41.0	42.8	43.1
64	Business services	179.7	191.3	205.3	216.5	210.4	218.9	234.3	247.0
65	Auto repair, services, and parking	50.0	53.0	52.0	54.0	52.0	51.1	51.0	51.6
66	Miscellaneous repair services	18.4	20.5	21.7	21.5	19.1	17.5	17.2	16.9
67	Motion pictures	18.9	19.2	23.2	22.1	20.8	20.0	21.9	23.6
68	Amusement and recreation services	34.7	36.7	39.7	42.8	43.3	47.9	47.0	48.4
69	Health services	337.5	341.0	347.0	356.9	362.9	369.1	363.1	368.3
70	Legal services	83.3	90.5	91.2	91.5	88.8	90.1	87.9	86.7
71	Educational services	41.7	42.8	43.7	44.3	46.1	46.3	46.8	47.6
72	Social services	26.5	28.2	30.6	32.5	34.7	36.9	39.3	41.2
73	Membership organizations	31.7	33.9	36.3	38.3	38.6	38.9	40.8	42.8
74	Other services	130.7	144.4	158.4	160.4	158.8	162.2	167.5	170.6
75	Private households	8.9	9.5	10.1	10.2	9.4	10.1	10.3	10.2
76	**Statistical discrepancy** [1]	**−20.0**	**−56.4**	**13.0**	**17.2**	**9.0**	**43.7**	**53.7**	**29.8**
77	**Government**	**810.0**	**829.0**	**847.7**	**867.0**	**873.7**	**873.6**	**875.1**	**875.8**
78	**Federal**	**315.8**	**318.7**	**321.7**	**327.7**	**328.3**	**321.4**	**314.7**	**305.0**
79	General government	272.3	274.1	276.2	280.3	281.0	274.4	267.3	256.8
80	Government enterprises	43.5	44.5	45.4	47.4	47.3	47.0	47.5	48.4
81	**State and local**	**494.3**	**510.5**	**526.2**	**539.4**	**545.4**	**552.2**	**560.3**	**570.8**
82	General government	452.0	467.3	481.9	494.5	500.1	506.6	515.6	525.8
83	Government enterprises	42.3	43.2	44.2	45.0	45.3	45.6	44.7	45.1
84	**Not allocated by industry** [2]	**31.1**	**6.3**	**2.0**	**20.6**	**6.1**	**0**	**7.0**	**−14.5**

1. Equals the current-dollar statistical discrepancy deflated by the implicit price deflator for gross domestic product.
2. Equals GDP less the statistical discrepancy and the sum of GPO of the detailed industries.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive.

Table 15.—Average Annual Rates of Change for Real Gross Domestic Product by Industry, Selected Periods

[Percent]

Line		1977–94	1977–87	1987–94	1987–92	1992–94
1	**Gross domestic product**	**2.6**	**2.8**	**2.3**	**2.0**	**2.8**
2	**Private industries**	**2.8**	**3.1**	**2.4**	**2.1**	**3.3**
3	**Agriculture, forestry, and fishing**	**3.9**	**3.8**	**4.1**	**5.1**	**1.5**
4	Farms	3.1	2.4	4.0	4.8	2.1
5	Agricultural services, forestry, and fishing	7.2	9.3	4.4	6.0	.4
6	**Mining**	**.9**	**.5**	**1.6**	**1.3**	**2.4**
7	Metal mining	4.9	3.1	7.5	15.3	–9.8
8	Coal mining	5.1	3.6	7.2	6.4	9.2
9	Oil and gas extraction	–.1	–.5	.4	–.2	2.0
10	Nonmetallic minerals, except fuels	1.9	3.1	.2	–.7	2.4
11	**Construction**	**1.0**	**1.1**	**.8**	**–.8**	**5.0**
12	**Manufacturing**	**2.3**	**2.7**	**1.6**	**.4**	**4.8**
13	Durable goods	2.5	2.7	2.2	.3	7.1
14	Lumber and wood products	.7	3.5	–3.4	–4.4	–.7
15	Furniture and fixtures	2.2	2.9	1.2	–.8	6.7
16	Stone, clay, and glass products	.3	–.1	1.6	1.3	2.2
17	Primary metal industries	–1.1	–3.0	1.5	.2	4.8
18	Fabricated metal products	2.1	2.1	2.0	–.6	8.8
19	Industrial machinery and equipment	5.9	6.5	4.9	3.5	8.4
20	Electronic and other electric equipment	....	....	8.5	4.8	18.5
21	Motor vehicles and equipment	–.6	–1.3	.6	–5.5	17.3
22	Other transportation equipment	–.7	4.0	–6.9	–5.3	–10.6
23	Instruments and related products	....	....	.6	2.1	–3.1
24	Miscellaneous manufacturing industries	2.0	1.6	2.6	1.5	5.4
25	Nondurable goods	2.0	2.8	.9	.5	2.0
26	Food and kindred products	2.7	3.8	1.3	1.3	1.3
27	Tobacco products	–5.1	–5.0	–5.1	–10.4	9.5
28	Textile mill products	2.5	2.0	3.2	3.1	3.5
29	Apparel and other textile products	1.7	1.9	1.3	1.4	1.1
30	Paper and allied products	1.7	1.5	2.1	1.3	4.1
31	Printing and publishing	.9	2.2	–1.0	–1.1	–1.0
32	Chemicals and allied products	2.6	3.1	1.8	1.8	1.9
33	Petroleum and coal products	1.0	4.9	–4.2	–4.9	–2.6
34	Rubber and miscellaneous plastics products	6.1	5.3	6.6	5.4	9.6
35	Leather and leather products	–2.4	–2.2	–2.6	.4	–9.6
36	**Transportation and public utilities**	**3.1**	**2.7**	**3.6**	**2.9**	**5.2**
37	Transportation	2.6	2.3	3.0	1.9	5.7
38	Railroad transportation	3.7	2.9	4.9	3.3	9.0
39	Local and interurban passenger transit	1.0	1.8	–.1	–.6	1.0
40	Trucking and warehousing	.6	–.4	2.2	1.3	4.4
41	Water transportation	–.3	–.7	.4	–.6	3.0
42	Transportation by air	6.7	7.7	5.2	4.3	7.7
43	Pipelines, except natural gas	–.2	–.4	.1	–4.0	11.1
44	Transportation services	5.5	6.8	3.6	2.8	5.9
45	Communications	5.0	5.3	4.6	3.8	6.3
46	Telephone and telegraph	....	....	3.8	3.2	5.3
47	Radio and television	....	....	7.9	7.0	10.1
48	Electric, gas, and sanitary services	2.0	1.1	3.3	3.2	3.6
49	**Wholesale trade**	**4.9**	**4.8**	**4.9**	**4.7**	**5.2**
50	**Retail trade**	**2.9**	**3.4**	**2.3**	**1.3**	**4.6**
51	**Finance, insurance, and real estate**	**2.8**	**3.2**	**2.3**	**2.5**	**1.9**
52	Depository institutions	....	....	–1.3	–1.5	–.7
53	Nondepository institutions	....	....	4.3	2.3	9.5
54	Security and commodity brokers	10.5	11.3	9.4	4.5	22.6
55	Insurance carriers	.2	–2.8	4.4	8.2	–4.3
56	Insurance agents, brokers, and services	2.7	3.6	1.3	.6	3.0
57	Real estate	2.9	3.2	2.5	2.9	1.5
58	Nonfarm housing services	3.1	3.6	2.4	2.8	1.7
59	Other real estate	2.5	2.4	2.7	3.3	1.1
60	Holding and other investment offices	4.8	6.5	2.5	2.5	2.5
61	**Services**	**3.4**	**3.9**	**2.6**	**2.9**	**2.0**
62	Hotels and other lodging places	1.7	.7	3.0	3.6	1.6
63	Personal services	.8	.9	1.2	.7	2.6
64	Business services	....	....	4.7	4.0	6.2
65	Auto repair, services, and parking	2.2	3.5	.5	.4	.5
66	Miscellaneous repair services	.5	1.8	–1.2	–1.0	–1.8
67	Motion pictures	5.4	6.2	3.2	1.1	8.7
68	Amusement and recreation services	4.9	4.5	4.8	6.6	.5
69	Health services	2.2	2.8	1.3	1.8	–.1
70	Legal services	1.8	2.7	.6	1.6	–1.9
71	Educational services	2.2	2.5	1.9	2.1	1.4
72	Social services	6.6	6.8	6.5	6.8	5.7
73	Membership organizations	2.4	1.0	4.4	4.2	4.9
74	Other services	....	....	3.9	4.4	2.6
75	Private households	–.2	–1.6	1.9	2.5	.5
76	**Government**	**1.2**	**1.2**	**1.1**	**1.5**	**.1**
77	**Federal**	**.3**	**.8**	**–.5**	**.3**	**–2.6**
78	General government	.2	1.0	–.8	.2	–3.3
79	Government enterprises	.4	–.3	1.5	1.5	1.5
80	**State and local**	**1.7**	**1.5**	**2.1**	**2.2**	**1.7**
81	General government	1.7	1.4	2.2	2.3	1.9
82	Government enterprises	1.9	2.6	.9	1.5	–.6
	Addenda:					
83	Electronic equipment and instruments [1]	4.9	4.3	5.8	3.8	11.0
84	Depository and nondepository institutions [2]	1.6	3.1	–.6	–1.1	.6
85	Business, miscellaneous professional, and other services [3]	5.9	7.1	4.3	4.2	4.7

1. The combination of 1987 SIC industries electronic and other electric equipment and instruments and related products is the equivalent of 1972 SIC industries electric and electronic equipment and instruments and related products.

2. The combination of 1987 SIC industries depository institutions and nondepository institutions is the equivalent of 1972 SIC industries banking and credit agencies other than banks.

3. The combination of 1987 SIC industries business services and other services is the equiva- lent of 1972 SIC industries business services and miscellaneous professional services.

NOTE.—Industry titles are from the 1987 SIC.