

# Bureau of Economic Analysis

## Survey of Current Business

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April 1994

### Special in this issue

#### **33. Integrated Economic and Environmental Satellite Accounts**

BEA has designed a new set of accounts to provide a statistical picture for analysis of the interaction of the economy and the environment. The new accounts extend the definition of capital in BEA's existing accounts to cover natural and environmental resources. They would supplement, not replace, the existing accounts.

#### **50. Accounting for Mineral Resources: Issues and BEA's Initial Estimates**

Mineral resources, when estimated as part of the supplemental accounts described in the companion article summarized above, add between 3 and 7 percent (depending on the valuation method) to the Nation's private stock of capital. From 1958 to 1991, in current dollars, additions to the stock more than offset depletion; in constant dollars, additions about offset depletion. Factoring mineral resources into measures of income and capital stock lowers the average rate of return in the mineral industry from 23 percent to between 4 and 5 percent.

#### **73. Benchmark Input-Output Accounts for the U.S. Economy, 1987**

The U.S. input-output (I-O) accounts present a detailed picture of how industries interact—providing input to, and taking output from, each other—to produce GDP. In preparing the 1987 benchmark I-O accounts, BEA developed a set of abbreviated procedures to speed up completion, and it initiated some improvements in the tables.

### Regular features

#### **1. Business Situation**

U.S. economic activity slowed in the first quarter of 1994. Real GDP increased 2.6 percent, down from a 7.0-percent increase in the fourth quarter of 1993. At 2.3 percent, inflation remained moderate. In 1993, corporate profits increased \$59.4 billion, up from a \$37.7 billion increase in 1992.

#### **117. Total and Per Capita Personal Income by State and Region**

In the fourth quarter of 1993, personal income picked up, as farm income rebounded from a third-quarter drop that was due to floods in the Midwest, drought in the Southeast, and reduced subsidy payments. For the year 1993, per capita personal income in 42 States increased faster than prices.

#### **127. Local Area Personal Income: Estimates for 1990–92 and Revisions to the Estimates for 1981–91**

Estimates of personal income and per capita personal income for counties and metropolitan areas have been revised to incorporate newly available source data and changes in the definitions of county-based metropolitan areas.

#### **31. Selected Monthly Estimates**

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#### **BEGINNING WITH THIS ISSUE**

A new section presents monthly estimates for personal income, the disposition of personal income, and U.S. international transactions in goods and services. The three tables in this section, which will appear each month, are on pages 31–32.

The "Current Business Statistics" section has been discontinued. The list of sources for these series, which was published in last month's SURVEY, is reprinted beginning on page S-1 of this issue.

# THE BUSINESS SITUATION

This article was prepared by Daniel Larkins, Larry R. Moran, and Ralph W. Morris.

**T**HE ECONOMY'S uneven expansion continued in the first quarter of 1994, according to the advance estimates of the national income and product accounts (NIPA's). The growth of real gross domestic product (GDP) slowed to 2.6 percent from 7.0 percent in the fourth quarter of 1993 (chart 1).<sup>1</sup> The deceleration was accounted for by sharply slower growth in the production of goods other than motor vehicles and by a downturn in the production of structures; the production of motor vehicles surged again in the first quarter, and the production of services registered another modest increase (table 1)

Real gross domestic purchases also grew less in the first quarter than in the fourth—4.1 percent after 6.7 percent. The slowdown was more than accounted for by final sales to domestic purchasers; inventory investment accelerated sharply (table 2). Within final sales, residential and non-residential fixed investment increased less than in the fourth quarter, as did personal consumption expenditures, and government purchases dropped after no change.

Exports and imports are the link between goods and services produced in the United States (GDP) and goods and services purchased by U.S. residents (gross domestic purchases). In the first quarter, exports turned down, and imports slowed sharply. In the fourth quarter, both exports and imports had increased substantially.

The fixed-weighted price index for gross domestic purchases increased 2.3 percent in the first quarter, the same rate as in the fourth quarter. The fixed-weighted price index for GDP increased 2.9 percent after increasing 2.3 percent. The difference between the fourth-quarter increases in the two indexes reflects a step-up in the prices of exports and a downturn in the prices of imports.

*Northridge earthquake.*—The Northridge earthquake struck southern California on the morning of January 17. The destruction it caused—and the reconstruction and relief efforts that resulted—

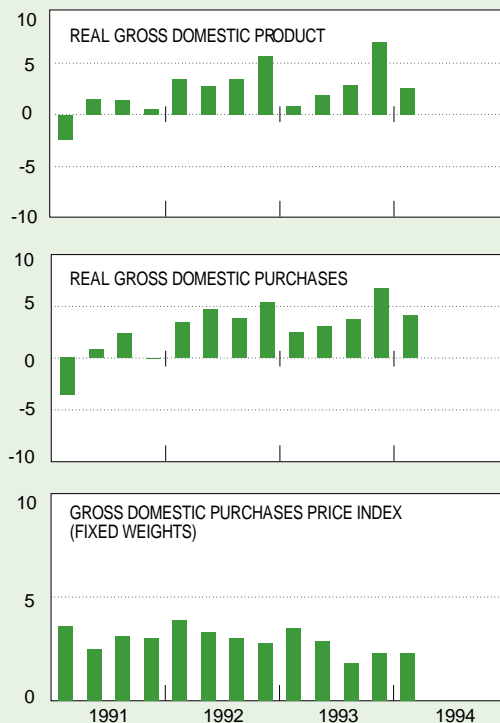
affected the components of first-quarter GDP and gross domestic purchases, but most of these effects are embedded in the source data that are used to estimate the components. Thus, the effects of the earthquake and reconstruction cannot be disentangled from the effects of unseasonably cold weather in much of the Nation or, indeed, from the effects of any other factor.

However, the Bureau of Economic Analysis did estimate the extent of the earthquake's damage to fixed capital. It is estimated that the earthquake caused the consumption of fixed capital (including residential capital) owned by business to increase \$41 billion in constant dollars

CHART 1

### Selected Measures: Change From Preceding Quarter

Percent



Note: Percent change at annual rate from preceding quarter, based on seasonally adjusted estimates.

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

1. Quarterly estimates in the NIPA's are expressed at seasonally adjusted annual rates, and quarterly changes are differences between these rates. Quarter-to-quarter percent changes are annualized. Real, or constant-dollar, estimates are expressed in 1987 dollars.

and \$47 billion in current dollars (at annual rates). Reflecting the increase in consumption of fixed capital, real *net* domestic product (NDP) decreased 1.1 percent in the first quarter; if there had been no earthquake, real NDP would

have increased about 2.4 percent. (NDP is GDP less the consumption of fixed capital.)

The consumption of fixed capital is deducted in the calculation of two components of personal income: Rental income of persons with cap-

**Table 1.—Real Gross Domestic Product, by Major Type of Product**

[Seasonally adjusted at annual rates]

	Billions of 1987 dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				1993			1994
		1993			1994	II	III	IV	I
	1994:I	II	III	IV	I				
<b>Gross domestic product</b> .....	<b>5,259.0</b>	<b>23.9</b>	<b>36.2</b>	<b>87.3</b>	<b>33.4</b>	<b>1.9</b>	<b>2.9</b>	<b>7.0</b>	<b>2.6</b>
Goods .....	2,161.0	8.9	5.8	56.0	30.1	1.7	1.1	11.2	5.8
Motor vehicles .....	240.5	-2.6	-10.2	21.7	25.4	-4.9	-18.6	53.0	56.3
Other .....	1,920.5	11.5	16.0	34.3	4.7	2.5	3.5	7.5	1.0
Services .....	2,617.7	12.2	19.2	9.3	11.7	1.9	3.0	1.4	1.8
Structures .....	480.3	2.8	11.1	22.1	-8.4	2.5	10.1	20.3	-6.7

NOTE.—Most series are found in table 1.4 of the "Selected NIPA Tables." Output of motor vehicles is the sum of auto output and truck output from tables 8.4 and 8.6, respectively.

**Table 2.—Real Gross Domestic Product, Real Gross Domestic Purchases, and Real Final Sales to Domestic Purchasers**

[Seasonally adjusted at annual rates]

	Billions of 1987 dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				1993			1994
		1993			1994	II	III	IV	I
	1994:I	II	III	IV	I				
<b>Gross domestic product</b> .....	<b>5,259.0</b>	<b>23.9</b>	<b>36.2</b>	<b>87.3</b>	<b>33.4</b>	<b>1.9</b>	<b>2.9</b>	<b>7.0</b>	<b>2.6</b>
Less: Exports of goods and services .....	605.0	5.2	-1.3	28.1	-15.0	3.6	-9	20.4	-9.3
Plus: Imports of goods and services .....	709.3	20.5	9.8	26.3	4.8	13.3	6.0	16.4	2.8
<b>Equals: Gross domestic purchases</b> .....	<b>5,363.3</b>	<b>39.3</b>	<b>47.2</b>	<b>85.4</b>	<b>53.3</b>	<b>3.1</b>	<b>3.7</b>	<b>6.7</b>	<b>4.1</b>
Less: Change in business inventories .....	30.5	-16.3	-6.5	2.0	22.0	.....	.....	.....	.....
Farm .....	-2	-4.1	-8.8	8.5	4.2	.....	.....	.....	.....
Nonfarm .....	30.7	-12.2	2.3	-6.5	17.8	.....	.....	.....	.....
<b>Equals: Final sales to domestic purchasers</b> .....	<b>5,332.8</b>	<b>55.5</b>	<b>53.8</b>	<b>83.5</b>	<b>31.2</b>	<b>4.4</b>	<b>4.2</b>	<b>6.6</b>	<b>2.4</b>
Personal consumption expenditures .....	3,539.8	28.9	36.9	37.3	32.9	3.4	4.4	4.4	3.8
Nonresidential fixed investment .....	634.1	22.0	10.5	30.9	8.4	16.6	7.4	22.5	5.5
Residential investment .....	232.2	-5.2	5.9	15.1	5.0	-9.5	11.9	31.7	9.1
Government purchases .....	926.8	9.8	.6	0	-14.9	4.3	.3	0	-6.2

NOTE.—Dollar levels are found in tables 1.2 and 1.6 of the "Selected NIPA Tables." Percent changes are found in table 8.1.

**Table 3.—Motor Vehicle Output, Sales, and Inventories**

[Seasonally adjusted at annual rates]

	Billions of 1987 dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				1993			1994
		1993			1994	II	III	IV	I
	1994:I	II	III	IV	I				
<b>Output</b> .....	<b>240.5</b>	<b>-2.6</b>	<b>-10.2</b>	<b>21.7</b>	<b>25.4</b>	<b>-4.9</b>	<b>-18.6</b>	<b>53.0</b>	<b>56.3</b>
Autos .....	138.0	.9	-9.9	11.5	13.0	3.0	-28.4	47.1	48.6
Trucks .....	102.5	-3.5	-3	10.2	12.4	-15.7	-1.5	61.7	67.5
<b>Final sales</b> .....	<b>235.6</b>	<b>14.1</b>	<b>-7.7</b>	<b>13.8</b>	<b>24.1</b>	<b>32.9</b>	<b>-14.2</b>	<b>31.0</b>	<b>54.0</b>
Autos .....	136.4	7.2	-4.9	2.9	17.2	27.8	-15.2	10.4	71.5
Trucks .....	99.2	6.9	-2.8	10.9	6.9	40.8	-12.7	65.3	33.4
<b>Change in business inventories</b> .....	<b>4.9</b>	<b>-16.7</b>	<b>-2.5</b>	<b>7.9</b>	<b>1.4</b>	.....	.....	.....	.....
Autos .....	1.6	-6.3	-5.1	8.7	-4.2	.....	.....	.....	.....
Trucks .....	3.3	-10.4	2.6	-8	5.6	.....	.....	.....	.....

NOTE.—Dollar levels for cars and trucks are found in tables 8.4 and 8.6, respectively, of the "Selected NIPA Tables."

ital consumption adjustment, and proprietors' income with inventory valuation and capital consumption adjustments. These incomes are not estimated on a constant-dollar basis in the NIPA's; the estimates reported below are in current dollars and are expressed at annual rates.

Earthquake damage to residential capital other than repairable damage reduced rental income of persons by \$31 billion, about one-third of which was offset by insurance benefits. Earthquake damage to fixed capital other than repairable damage reduced proprietors' income by \$2½ billion, about half of which was offset by insurance benefits.

The source data used to estimate first-quarter corporate profits are not yet available; however, other data indicate that profits were reduced by about \$29 billion by the earthquake. Non-repairable damage to corporate equipment and structures amounted to \$13½ billion, about one-third of which was offset by insurance benefits. In addition, benefits paid by insurance companies reduced profits by about \$20 billion.

*Motor vehicles.*—Motor vehicle output and sales jumped sharply for the second consecutive quarter; inventories also increased. The first-quarter jump in output was about the same as the jump in the fourth quarter, and it was evenly split between autos and trucks. The first-quarter jump in sales was about twice the fourth-quarter jump, and it was mostly accounted for by autos. The increase in inventories was much smaller than in the fourth quarter, and it was more than accounted for by trucks.

Output increased 56.3 percent in the first quarter after increasing 53.0 percent in the fourth (table 3). Truck output increased 67.5 percent after increasing 61.7 percent; auto output increased 48.6 percent after increasing 47.1 percent.

Final sales increased 54.0 percent in the first quarter after increasing 31.0 percent in the fourth. Auto sales increased 71.5 percent after increasing 10.4 percent. Domestic-car sales accounted for nearly three-fourths of the first-quarter increase in new-car sales. In units, domestic-car sales increased to 7.5 million from 7.1 million, and imported-car sales increased to 2.0 million from 1.9 million. Truck sales increased 33.4 percent after increasing 65.3 percent. Light domestic trucks accounted for nearly all of the first-quarter increase; sales of minivans, sport utilities, and full-size pickups remained very strong. In units, light domestic trucks increased to 5.9 million from 5.5 million, light imported trucks increased

to 0.2 million from 0.1 million, and "other" trucks were unchanged at 0.4 million.

About half of the first-quarter jump in motor vehicle sales was accounted for by consumers. Business and net exports accounted for most of the rest.

Sales to consumers increased 29.3 percent after increasing 26.3 percent; auto sales accounted for three-fourths of the first-quarter jump. The strength in first-quarter sales to consumers is consistent with recent improvements in consumer attitudes and incomes. The Index of Consumer Sentiment (prepared by the University of Michigan's Survey Research Center) jumped from 84.0 in the fourth quarter to 93.0 in the first, its highest level in 5 years. Real disposable personal income increased 2.7 percent, the fourth consecutive increase; over the past four quarters, it has increased 3.9 percent. In addition, interest rates on new-vehicle loans remained low; for example, the rate on 48-month new car loans at commercial banks averaged 7.54 percent in February.

The first-quarter increase in motor vehicle inventories was more than accounted for by trucks. Auto inventories decreased in the first quarter after increasing in the fourth; based on units, the inventory-sales ratio for domestic new cars was unchanged at 2.5—just above the traditional industry target of 2.4.

### Prices

The fixed-weighted price index for gross domestic purchases increased 2.3 percent in the first quarter, the same rate as in the fourth quarter (table 4). A slowdown in food prices and a downturn in energy prices roughly offset an acceleration in prices paid by the Federal Government for employee services.

Prices of personal consumption expenditures increased 2.1 percent after increasing 2.8 percent. A slowdown in food prices mainly reflected downturns in the prices of fresh fruits and vegetables and slowdowns in the prices of seafood and poultry. Gasoline and oil contributed the most to the downturn in energy prices, but electricity and gas also contributed; fuel oil and coal turned up. Slowdowns were widespread in prices of other personal consumption expenditures; two exceptions were transportation services and durable goods excluding both motor vehicles and "furniture and household equipment."

Prices of nonresidential fixed investment increased 1.8 percent after increasing 1.2 percent. Prices of nonresidential structures in-

creased somewhat less in the first quarter than in the fourth. Prices of producers' durable equipment increased after little change. Prices of transportation equipment posted the largest increase in 3 years, and prices of information processing equipment decreased again, reflecting a decrease in computer prices.

Prices of residential investment increased 2.2 percent after increasing 3.2 percent. The first-quarter increase was substantially below the 3.9-percent average rate of increase over the preceding six quarters and substantially above the

1.0-percent average rate of increase over the six quarters before that.

Prices of government purchases increased 3.7 percent after increasing 1.0 percent. Prices paid by the Federal Government increased 4.6 percent after increasing 0.5 percent; the step-up was attributable to a pay raise for Federal employees.<sup>2</sup> Prices paid by State and local governments increased 3.0 percent after increasing 1.5 percent; prices of goods turned up, and prices of serv-

2. In the NIPA's, an increase in the rate of Federal employee compensation is treated as an increase in the price of employee services purchased by the Federal Government.

### First-Quarter 1994 Advance GDP Estimate: Source Data and Assumptions

The advance GDP estimate for the first quarter is based on the following major source data, some of which are subject to revision. (The number of months for which data were available is shown in parentheses.)

*Personal consumption expenditures.* Sales of retail stores (3) and unit auto and truck sales (3);

*Nonresidential fixed investment.* Unit auto and truck sales (3), construction put in place (2), manufacturers' shipments of machinery and equipment (3), and exports and imports of machinery and equipment (2);

*Residential investment.* Construction put in place (2) and housing starts (3);

*Change in business inventories.* Manufacturing and trade inventories (2) and unit auto and truck inventories (3);

*Net exports of goods and services.* Exports and imports of goods and services (2);

*Government purchases.* Military outlays (3), other Federal outlays (2), State and local construction put in place (2), and State and local employment (3);

*GDP prices.* Consumer Price Index (3), Producer Price Index (3), price indexes for nonpetroleum merchandise exports and imports (3), and values and quantities of petroleum imports (2).

The Bureau of Economic Analysis (BEA) made assumptions for the source data that were not available. A table detailing these assumptions is available on the Department of Commerce's Economic Bulletin Board or from BEA; the assumptions are summarized in table A.

Table A.—Summary of Major Data Assumptions for Advance Estimate, 1994:1

[Billions of dollars, seasonally adjusted at annual rates]

	1993			1994		
	October	November	December	January	February	March
Fixed investment:						
Nonresidential structures:						
Buildings, utilities, and farm:						
Value of new nonresidential construction put in place .....	135.6	138.7	139.0	132.2	129.6	136.8 <sup>1</sup>
Producers' durable equipment:						
Manufacturers' shipments less exports, aircraft industry, nondefense .....	4.3	3.1	5.2	1.0	2.5	11.5 <sup>2</sup>
Manufacturers' shipments, other than aircraft industry .....	344.2	366.9	375.5	355.4	373.0	370.3 <sup>2</sup>
Residential structures:						
Value of new residential construction put in place:						
1-unit structures .....	139.5	144.5	150.8	150.6	151.4	155.6 <sup>1</sup>
2-or-more-unit structures .....	10.5	11.2	11.3	10.6	10.8	11.2 <sup>1</sup>
Change in business inventories nonfarm:						
Change in inventories for manufacturing and trade (except nonmerchant wholesalers) for industries other than motor vehicles and equipment in trade .....	6.1	37.0	-32.9	15.1	53.1	35.0 <sup>1</sup>
Net exports:						
Exports of merchandise:						
U.S. exports, excluding gold, balance-of-payments basis .....	457.2	459.9	486.8	457.3	440.6	456.9 <sup>1</sup>
Imports of merchandise:						
U.S. imports, excluding gold, balance-of-payments basis .....	611.9	599.3	595.1	593.5	603.2	610.1 <sup>1</sup>
Net merchandise trade (exports less imports) .....	-154.7	-139.3	-108.3	-136.2	-162.6	-153.2 <sup>1</sup>
Government purchases:						
State and local:						
Structures:						
Value of new construction put in place .....	116.1	120.7	124.6	112.0	110.2	118.8 <sup>1</sup>

1. Assumed.

2. Aircraft industry shipments, which were available through March, were used (along with exports and imports) to estimate the first-quarter change in producers' durable equipment

for aircraft. Shipments of complete civilian aircraft, the usual source data, are available only through February.

ices increased somewhat more than in the fourth quarter.

The price index for GDP, which measures the prices paid for goods and services produced in the United States, increased 2.9 percent after increasing 2.3 percent. This index, unlike the index for gross domestic purchases, includes prices of exports and excludes prices of imports. Export prices increased more in the first quarter than in the fourth. All major end-use categories of exports except nonautomotive capital

**Table 4.—Price Indexes (Fixed Weights): Change From Preceding Quarter**

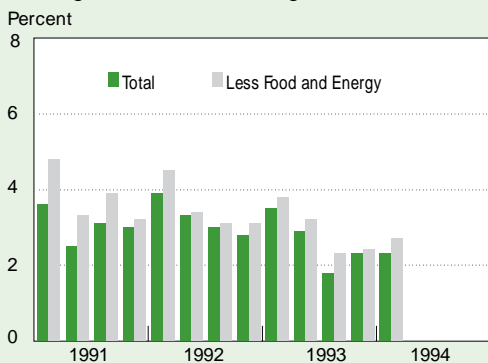
[Percent change at annual rates; based on seasonally adjusted index numbers (1987=100)]

	1993			1994
	II	III	IV	I
<b>Gross domestic product</b> .....	<b>2.8</b>	<b>2.1</b>	<b>2.3</b>	<b>2.9</b>
Less: Exports of goods and services .....	2.8	.6	.7	3.7
Plus: Imports of goods and services .....	3.8	-2.7	1.1	-1.6
<b>Equals: Gross domestic purchases</b> .....	<b>2.9</b>	<b>1.8</b>	<b>2.3</b>	<b>2.3</b>
Less: Change in business inventories .....				
<b>Equals: Final sales to domestic purchasers</b> .....	<b>2.9</b>	<b>1.8</b>	<b>2.3</b>	<b>2.4</b>
Personal consumption expenditures .....	2.9	1.4	2.8	2.1
Food .....	2.3	.3	3.2	1.1
Energy .....	-1.5	-4.2	2.4	-1.5
Other personal consumption expenditures .....	3.4	2.0	2.8	2.5
Nonresidential fixed investment .....	2.5	1.9	1.2	1.8
Nonresidential structures .....	3.8	3.4	3.2	2.5
Producers' durable equipment .....	1.8	1.0	.1	1.3
Residential investment .....	5.0	4.6	3.2	2.2
Government purchases .....	2.6	2.5	1.0	3.7
<b>Addenda:</b>				
Merchandise imports .....	4.1	-3.4	.3	-1.7
Petroleum and products .....	16.1	-36.6	-27.5	-32.0
Other merchandise .....	3.0	.5	3.2	1.2

NOTE.—Percent changes in major aggregates are found in table 8.1 of the "Selected NIPA Tables." Most index number levels are found in tables 7.1 and 7.2.

**CHART 2**

**Gross Domestic Purchases Prices (Fixed Weights): Change From Preceding Quarter**



Note—Percent change at annual rate from preceding quarter, based on seasonally adjusted index numbers (1987=100).

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and consumer goods contributed to the step-up. Import prices turned down. The price of imported petroleum and products posted its third straight drop of roughly 30 percent; all other major end-use categories of imports except industrial supplies and materials contributed to the downturn.

**Personal income**

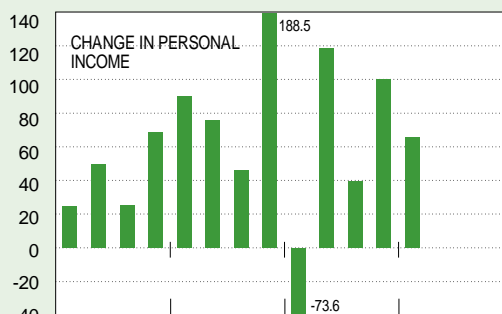
Real disposable personal income (DPI) increased 2.7 percent in the first quarter after increasing 5.4 percent in the fourth (chart 3). The deceleration was more than accounted for by a slowdown in current-dollar DPI, which increased 4.1 percent after increasing 7.8 percent. The personal saving rate—saving as a percentage of current-dollar DPI—decreased 0.3 percentage point to 3.7 percent, its lowest level in the current expansion.

Personal income increased \$65.4 billion in the first quarter after increasing \$100.0 billion in the

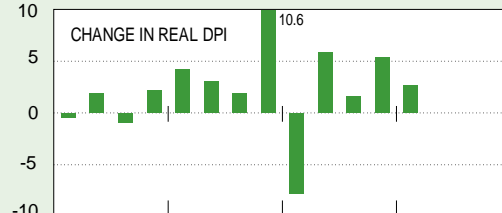
**CHART 3**

**Selected Personal Income and Saving Measures**

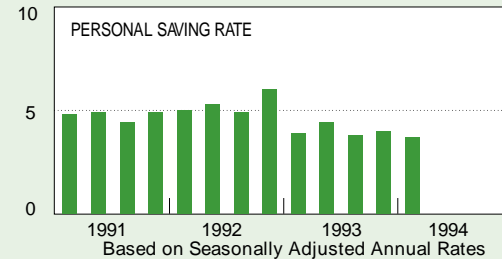
Billions \$



Percent



Percent



Note—Changes are from preceding quarter.

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fourth (table 5). Proprietors' income and rental income of persons more than accounted for the slowdown.

Farm proprietors' income increased \$3.6 billion after increasing \$31.6 billion. Federal subsidy payments to farm proprietors decreased \$4.1 billion after increasing \$14.5 billion. If the subsidies and the adjustments for the effects of last year's floods and drought on fourth-quarter income are excluded, farm proprietors' income increased \$4.5 billion in the first quarter after increasing \$11.0 billion in the fourth; the slowdown reflected weaker increases in farm prices and lower livestock production.

Nonfarm proprietors' income increased \$5.0 billion after increasing \$13.0 billion. The deceleration reflected slowdowns in residential construction and in retail sales. Rental income of persons decreased \$12.9 billion after increasing \$2.7 billion. As mentioned earlier, nonfarm proprietors' income and rental income in the first

quarter were reduced by adjustments for damage resulting from the Northridge earthquake.

Wage and salary disbursements increased \$51.1 billion after increasing \$34.2 billion. Wages and salaries in both private industry and government increased more in the first quarter than in the fourth. In private industry, a step-up to \$44.5 billion from \$31.6 billion was concentrated in the service and distributive industries; manufacturing also contributed, reflecting bonus payments to employees in the motor vehicle industry. In government, a step-up to \$6.6 billion from \$2.6 billion mainly reflected the Federal pay raise; the rest was accounted for by an adjustment to State and local government compensation that reflected rescue and cleanup efforts associated with the earthquake.

Transfer payments increased \$14.8 billion after increasing \$11.3 billion. The step-up was due to cost-of-living adjustments (COLA's) to benefits under social security and several other Federal

**Table 5.—Personal Income and Its Disposition**

[Billions of dollars; seasonally adjusted at annual rates]

	Level	Change from preceding quarter					Level	Change from preceding quarter			
	1994:I	1993			1994		1994:I	1993			1994
		II	III	IV	I			II	III	IV	I
Wage and salary disbursements .....	3,200.7	108.4	32.7	34.2	51.1	In farm proprietors' income:					
Commodity-producing industries .....	789.5	24.4	4.3	9.9	10.2	Agricultural subsidy payments .....		-7.4	-11.0	14.5	-4.1
Manufacturing .....	595.8	20.6	1.2	6.3	8.0	Uninsured losses to residential and business property and crop losses due to Midwest floods and Southeast drought <sup>1</sup> .....		0	-9.3	6.1	3.2
Other .....	193.7	3.8	3.1	3.6	2.2	In nonfarm proprietors' income:					
Distributive industries .....	733.5	26.2	5.3	5.7	13.4	Uninsured losses to business property: <sup>1</sup>					
Service industries .....	1,075.8	55.6	16.6	15.9	21.1	Due to Midwest floods .....		0	-7	.7	0
Government .....	602.0	2.2	6.5	2.6	6.6	Due to Northridge, California earthquake .....		0	0	0	-1.4
Other labor income .....	371.9	8.1	8.1	8.2	9.0	In rental income of persons with CCAdj:					
Proprietors' income with IVA and CCAdj	475.6	-4.7	-16.9	44.5	8.6	Uninsured losses to nonfarm residential and business property: <sup>1</sup>					
Farm .....	60.0	-8.7	-22.2	31.6	3.6	Due to Midwest floods .....		0	-1.9	1.9	0
Nonfarm .....	415.6	4.0	5.2	13.0	5.0	Due to Northridge, California earthquake .....		0	0	0	-19.5
Rental income of persons with CCAdj ....	3.5	5.2	1.0	2.7	-12.9	In transfer payments to persons:					
Personal dividend income .....	160.7	.8	1.2	.4	1.3	Social security retroactive payments .....		0	0	1.2	-1.2
Personal interest income .....	700.2	-2.3	2.6	1.0	3.5	Cost-of-living increases in Federal transfer payments .....		0	0	0	8.9
Transfer payments to persons .....	944.6	11.1	13.0	11.3	14.8	Emergency unemployment compensation payments .....		-8	.2	-2.5	-4.7
Less: Personal contributions for social insurance .....	279.1	7.9	2.3	2.4	9.9	Midwest floods .....		0	.3	-1	-2
<b>Personal income</b> .....	<b>5,578.1</b>	<b>118.5</b>	<b>39.5</b>	<b>100.0</b>	<b>65.4</b>	Northridge, California earthquake ...		0	0	0	1.4
Less: Personal tax and nontax payments .....	715.7	23.9	8.0	10.2	16.5	In personal contributions for social insurance:					
<b>Equals: Disposable personal income</b> ..	<b>4,862.4</b>	<b>94.7</b>	<b>31.5</b>	<b>89.8</b>	<b>48.9</b>	Social security rate and base changes and increase in the premium for supplementary medical insurance .....		0	0	0	6.2
Less: Personal outlays .....	4,680.4	63.9	60.4	76.1	60.3						
<b>Equals: Personal saving</b> .....	<b>182.0</b>	<b>30.8</b>	<b>-29.0</b>	<b>13.7</b>	<b>-11.4</b>						
<b>Addenda: Special factors in personal income:</b>											
In wages and salaries:											
Federal Government and Postal Service pay adjustments .....		-2.2	1.6	-1.0	2.6						
Profit sharing and bonus pay (including accelerated bonuses) .....		79.8	0	.4	1.7						

NOTE.—Most dollar levels are found in table 2.1 of the "Selected NIPA Tables."  
IVA Inventory valuation adjustment  
CCAdj Capital consumption adjustment

1. These estimates mainly reflect adjustments to account for uninsured losses to residential and business property; however, some of the estimates include relatively small amounts reflecting other items.

retirement and income support programs; the COLA's, which became effective in January, added \$8.9 billion to transfer payments. Emergency unemployment benefits decreased \$4.7 billion after decreasing \$2.5 billion.

Personal contributions for social insurance, which are subtracted in deriving the personal income total, increased \$9.9 billion after increasing \$2.4 billion. The first-quarter increase was boosted \$6.2 billion by several program changes: An increase in the social security taxable wage base for employees and in the social security taxable earnings base for the self-employed from \$57,600 to \$60,600; the removal of the \$135,000 cap on the medicare taxable wage base; and an increase in the monthly premium for supplementary medical insurance.

Personal tax and nontax payments increased \$16.5 billion after increasing \$10.2 billion. The first-quarter increase in Federal income tax payments reflected the effects of tax rate changes and other provisions of the Omnibus Budget Reconciliation Act of 1993, as well as the growth in wages and salaries. The increase was restrained by the annual revision of the withholding tables to reflect the inflation indexing provisions of earlier tax law.

### Corporate Profits and Property Income in 1993

Profits from current production—profits before tax plus inventory valuation adjustment (IVA) and capital consumption adjustment (CCAdj)—increased \$59.4 billion in 1993, to \$466.6 billion, after increasing \$37.7 billion in 1992 (table 6).<sup>3</sup>

Profits from the domestic operations of nonfinancial corporations increased \$42.2 billion after increasing \$44.4 billion. In both years, real gross product of these corporations increased about 4 percent. Moreover, profits per unit increased substantially in both years, as unit labor costs increased much less than unit prices.

Profits from the domestic operations of financial corporations increased \$20.7 billion after decreasing \$2.0 billion. The upturn was more than accounted for by property and casualty insurance carriers, whose profits had turned negative in 1992 in the wake of Hurricanes Andrew and Iniki.

Profits from the rest of the world decreased \$3.6 billion after decreasing \$4.6 billion. In both years, payments (outflows) increased more than receipts

(inflows), reflecting the stronger growth in the U.S. economy than in many foreign economies.

Cash flow from current production, a profits-related measure of internally generated funds available to corporations for investment, increased \$25.4 billion after increasing \$21.4 billion. Cash flow as a percentage of nonresidential fixed investment was 85.4 percent in 1993, down from 89.7 percent in 1992, but still much higher than its 72.1-percent average in the 1980's.

Current-production measures of profits are not available for individual industries because estimates of the CCAdj by industry do not exist; profits before tax (PBT) with IVA is the best available measure. Most manufacturing industries posted smaller increases in 1993 than in 1992; however, profits from petroleum refining increased much more than in 1992. In contrast to the slowdown in manufacturing profits, profits in trade and in the transportation and utilities group turned up.

*Related measures.*—PBT increased \$54.0 billion after increasing \$33.1 billion. The difference be-

Table 6.—Corporate Profits

	Level	Change from preceding year	
	1993	1992	1993
	Billions of dollars		
<b>Profits from current production</b> .....	<b>466.6</b>	<b>37.7</b>	<b>59.4</b>
Domestic .....	407.9	42.3	63.0
Financial .....	87.4	-2.0	20.7
Nonfinancial .....	320.5	44.4	42.2
Rest of the world .....	58.7	-4.6	-3.6
IVA .....	-7.1	-10.2	-1.8
CCAdj .....	24.3	14.9	7.2
Profits before tax .....	449.4	33.1	54.0
Profits tax liability .....	174.0	16.5	27.7
Profits after tax .....	275.4	16.6	26.3
Cash flow from current production .....	532.4	21.4	25.4
<b>Profits by industry:</b>			
Profits before tax with IVA .....	442.3	22.8	52.2
Domestic .....	383.6	27.4	55.8
Financial .....	99.0	-2.6	20.9
Nonfinancial .....	284.6	30.1	34.8
Manufacturing .....	131.7	25.7	16.2
Trade .....	54.4	-1.1	8.1
Transportation and public utilities .....	57.8	-2.4	5.8
Other .....	40.6	7.8	4.6
Rest of the world .....	58.7	-4.6	-3.6
Receipts (inflows) .....	71.3	1.7	6.1
Payments (outflows) .....	12.6	6.3	9.6
	Dollars		
<b>Unit prices, costs, and profits of domestic nonfinancial corporations:</b>			
Unit price .....	1.164	0.012	0.015
Unit labor cost .....	.768	.004	.006
Unit nonlabor cost .....	.287	-.004	-.002
Unit profits from current production .....	.109	.013	.010

NOTE.—Dollar levels of these and other profits series are found in tables 1.14, 1.16, 6.16C, and 7.15 of the "Selected NIPA Tables."

IVA Inventory valuation adjustment  
CCAdj Capital consumption adjustment

3. According to the revised estimates (released April 28, 1994), profits increased \$39.4 billion in the fourth quarter of 1993; the preliminary estimates, released March 31, had shown a \$42.0 billion increase.



tween the increase in PBT and the increase in profits from current production in 1993 reflected an increase in the CCAdj that more than offset a decrease in the IVA.

The CCAdj is the difference between the predominantly tax-based depreciation measure that underlies PBT and BEA's estimate of the consumption of fixed capital. The CCAdj increased \$7.2 billion in 1993.

The IVA is an estimate, with the sign reversed, of the inventory profits that are included in PBT. Inventory profits increased \$1.8 billion in 1993.

### Property income

Corporate property income includes net interest payments as well as profits from current production. For domestic nonfinancial corporations, net interest payments decreased \$1.6 billion in

1993, to \$133.7 billion, after decreasing \$6.0 billion in 1992.

Chart 4 and table 7 provide a perspective on the recent changes in both types of property income. From 1970 to 1990, both types trended up, but net interest, which increased at an average annual rate of 11.4 percent, generally increased much faster than profits, which increased at an average annual rate of 7.8 percent. As a result, the share of net interest in property income rose from 23.0 percent in 1970 to 36.7 percent in 1990.

Since 1990, however, net interest has decreased each year (at an average rate of 3.4 percent); the downtrend reflects the ebbing of the wave of leveraged buyouts that were so prominent in the 1980's, the efforts by corporations to restructure balance sheets, and falling interest rates. Profits, in contrast, decreased only in 1991; in 1992 and 1993, profits increased at an average rate of 17.1 percent. As a consequence, the share of net interest in property income slid to 29.4 percent in 1993.

Further perspective on recent changes in property income can be gained by examining the relationship of property income to the stock of net reproducible assets and to domestic income. Net reproducible assets consist of fixed capital stock and inventories, both of which are measured at current replacement cost; these assets increased 2.7 percent in 1993 after increasing 1.2 percent in 1992. From 1970 to 1990, in contrast, these assets grew at an average rate of 9.0 percent. Domestic income of corporations is property

**Table 7.—Property Income of Domestic Nonfinancial Corporations and Related Series, 1959–93**

[Billions of dollars]

Year	Property income					Domestic income	Net reproducible assets <sup>1</sup>
	Total	Profits from current production			Net interest		
		Total	Profits tax liability	Profits after tax			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
1959	45.8	42.6	20.7	21.9	3.1	217.2	392.0
1960	43.4	40.0	19.2	20.8	3.5	224.6	406.9
1961	44.7	40.8	19.5	21.3	4.0	230.1	417.7
1962	52.7	48.2	20.6	27.5	4.5	252.8	431.0
1963	58.6	53.8	22.8	31.0	4.8	269.7	448.6
1964	65.4	60.0	24.0	36.1	5.3	292.0	471.0
1965	76.4	70.3	27.2	43.1	6.1	322.8	503.4
1966	82.3	74.9	29.5	45.4	7.4	356.2	551.0
1967	80.5	71.8	27.8	43.9	8.8	372.8	603.9
1968	86.1	76.0	33.6	42.4	10.1	409.3	660.4
1969	84.4	71.3	33.3	37.9	13.2	443.3	729.3
1970	74.2	57.1	27.2	29.9	17.1	452.8	800.2
1971	85.3	67.2	29.9	37.2	18.1	487.3	871.0
1972	96.1	77.0	33.8	43.2	19.2	543.2	955.2
1973	106.0	83.6	40.2	43.4	22.5	612.0	1,076.2
1974	98.9	70.6	42.2	28.4	28.3	655.7	1,273.1
1975	120.2	91.5	41.5	50.0	28.7	700.6	1,468.0
1976	139.0	111.5	53.0	58.5	27.5	795.7	1,612.9
1977	162.6	132.0	59.9	72.1	30.6	904.4	1,779.3
1978	182.4	146.1	67.1	79.0	36.3	1,032.6	2,000.4
1979	183.2	138.1	69.6	68.5	45.1	1,147.4	2,283.1
1980	178.9	120.7	67.0	53.7	58.2	1,232.4	2,606.0
1981	208.9	136.9	63.9	73.0	71.9	1,373.6	2,938.1
1982	194.0	111.5	46.3	65.2	82.5	1,404.0	3,180.3
1983	236.6	159.9	59.4	100.4	76.7	1,508.2	3,300.2
1984	302.2	214.3	73.7	140.7	87.9	1,711.4	3,435.8
1985	312.1	221.4	69.9	151.5	90.7	1,815.3	3,606.7
1986	302.0	203.8	75.6	128.2	98.3	1,883.6	3,744.1
1987	350.0	244.2	93.5	150.8	105.8	2,024.9	3,889.6
1988	396.0	274.4	101.7	172.6	121.6	2,210.2	4,101.4
1989	401.8	255.2	99.5	155.7	146.6	2,322.0	4,327.7
1990	404.9	256.4	93.9	162.5	148.5	2,425.8	4,516.6
1991	375.2	233.9	82.7	151.2	141.3	2,429.0	4,634.0
1992	413.6	278.3	98.2	180.1	135.3	2,563.1	4,698.8
1993	454.2	320.5	117.0	203.5	133.7	2,709.8	4,827.1

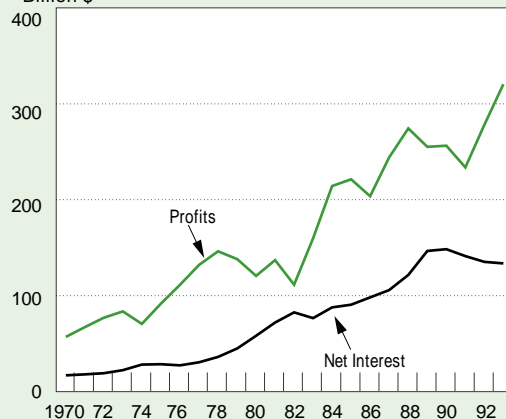
1. Structures, equipment, and inventories, valued at current replacement cost. Data are averages of end-of-year values for adjacent years.

NOTE.—Property income is profits from current production plus net interest. Profits from current production is corporate profits with inventory valuation adjustment and capital consumption adjustment. Profits after tax is also shown with inventory valuation adjustment and capital consumption adjustment. Current data on most series are shown in table 1.16 of the "Selected NIPA Tables." The value of structures and equipment through 1992 are from *Fixed Reproducible Tangible Wealth in the United States, 1925–89*, (Washington DC: U.S. Government Printing Office, 1993) and from SURVEY OF CURRENT BUSINESS 73 (September 1993): 64–65. Data on structures and equipment for 1993 and all data on inventories are unpublished BEA estimates.

**CHART 4**

**Profits From Current Production and Net Interest, Domestic Nonfinancial Corporations, 1970–93**

Billion \$



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


income plus compensation of employees; it increased 5.7 percent in 1993 after increasing 5.5 percent in 1992.

The ratio of property income to the stock of net reproducible assets is the average rate of return on these assets. The use of property income, rather than profits alone, as the numerator of this ratio captures the total return to investment (profits plus interest) regardless of whether the investment was financed by equity or by debt.<sup>4</sup>

The ratio of property income to domestic income is property income's share of domestic income—that is, the fraction of domestic income that is not used to compensate labor. Property

income's share is related to the rate of return by a third ratio—the ratio of domestic income to the value of net reproducible assets, which measures the average annual product per dollar of capital.<sup>5</sup>

The three ratios are plotted for 1970–93 in chart 5 and are reported, along with related ratios, for 1959–93 in table 8. Property income's rate of return (column 1) and its share of domestic income (column 6) appear to have shifted to lower levels around 1970. The rate of return fell from an average of 12.8 percent in 1959–69 to an average of 8.6 percent in 1970–93; the share of domestic income fell from an average of 21.2 percent to an average of 16.6 percent.

In 1993, property income's rate of return and its share of domestic income continued to rebound from cyclical decreases in 1991 that took the ratios to their lowest levels in almost a decade. Higher profits were responsible for the rebounds in both ratios. 

4. Rates of return can be calculated in many other ways; several are discussed in some detail in the box "Rates of Return" in SURVEY OF CURRENT BUSINESS 69 (April 1989): 8.

Table 8.—Rate of Return, Income Share, and Average Product of Capital, Domestic Nonfinancial Corporations, 1959–93

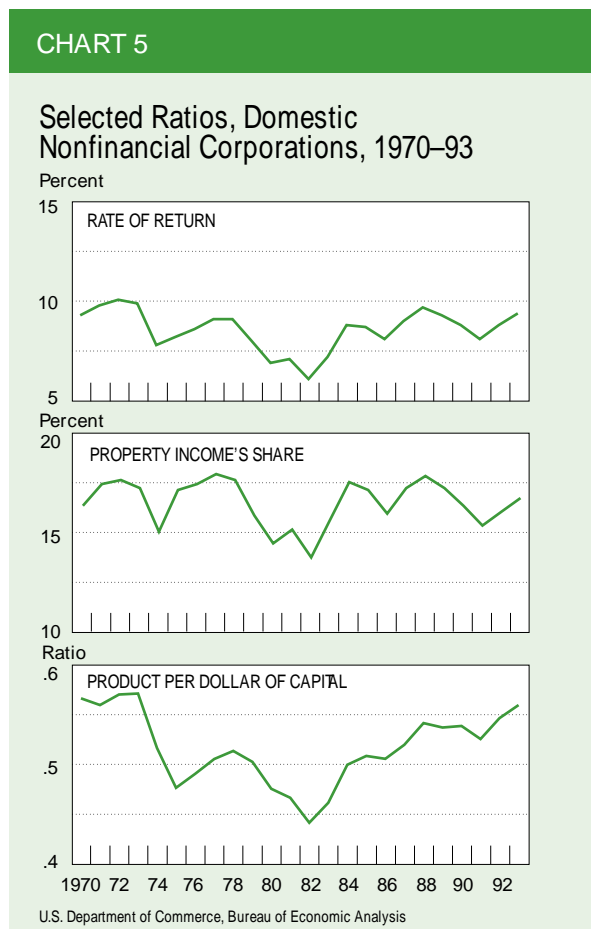
[Percent]

Year	Rate of return					Share of domestic income			
	Property income					Property income			
	Total	Profits from current production			Net interest	Total	Profits from current production	Net interest	Average product of capital
		Total	Profits tax liability	Profits after tax					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1959	11.7	10.9	5.3	5.6	0.8	21.1	19.6	1.4	0.555
1960	10.7	9.8	4.7	5.1	.9	19.3	17.8	1.5	.554
1961	10.7	9.8	4.7	5.1	.9	19.4	17.7	1.7	.552
1962	12.2	11.2	4.8	6.4	1.1	20.8	19.1	1.8	.587
1963	13.1	12.0	5.1	6.9	1.1	21.7	19.9	1.8	.604
1964	13.9	12.7	5.1	7.7	1.1	22.4	20.6	1.8	.621
1965	15.2	14.0	5.4	8.6	1.2	23.7	21.8	1.9	.641
1966	14.9	13.6	5.4	8.2	1.3	23.1	21.0	2.1	.645
1967	13.3	11.9	4.6	7.3	1.5	21.6	19.2	2.4	.616
1968	13.0	11.5	5.1	6.4	1.5	21.0	18.6	2.5	.619
1969	11.6	9.8	4.6	5.2	1.8	19.0	16.1	3.0	.611
1970	9.3	7.1	3.4	3.7	2.1	16.4	12.6	3.8	.567
1971	9.8	7.7	3.4	4.3	2.1	17.5	13.8	3.7	.560
1972	10.1	8.1	3.5	4.5	2.0	17.7	14.2	3.5	.571
1973	9.9	7.8	3.7	4.0	2.1	17.3	13.7	3.7	.572
1974	7.8	5.5	3.3	2.2	2.2	15.1	10.8	4.3	.517
1975	8.2	6.2	2.8	3.4	2.0	17.2	13.1	4.1	.477
1976	8.6	6.9	3.3	3.6	1.7	17.5	14.0	3.5	.491
1977	9.1	7.4	3.4	4.1	1.7	18.0	14.6	3.4	.506
1978	9.1	7.3	3.4	3.9	1.8	17.7	14.1	3.5	.514
1979	8.0	6.0	3.0	3.0	2.0	15.9	12.0	3.9	.503
1980	6.9	4.6	2.6	2.1	2.2	14.5	9.8	4.7	.476
1981	7.1	4.7	2.2	2.5	2.4	15.2	9.9	5.2	.467
1982	6.1	3.5	1.5	2.1	2.6	13.8	7.9	5.9	.442
1983	7.2	4.8	1.8	3.0	2.3	15.6	10.6	5.1	.462
1984	8.8	6.2	2.1	4.1	2.6	17.6	12.5	5.1	.500
1985	8.7	6.1	1.9	4.2	2.5	17.1	12.2	5.0	.509
1986	8.1	5.4	2.0	3.4	2.6	16.0	10.8	5.2	.506
1987	9.0	6.3	2.4	3.9	2.7	17.3	12.1	5.2	.520
1988	9.7	6.7	2.5	4.2	3.0	17.9	12.4	5.5	.542
1989	9.3	5.9	2.3	3.6	3.4	17.3	11.0	6.3	.538
1990	9.0	5.7	2.1	3.6	3.3	16.7	10.6	6.1	.539
1991	8.1	5.0	1.8	3.3	3.0	15.4	9.6	5.8	.526
1992	8.8	5.9	2.1	3.8	2.9	16.1	10.9	5.3	.547
1993	9.4	6.6	2.4	4.2	2.8	16.8	11.8	4.9	.560

Source: Table 7.

NOTE.—Columns 1–5 are percentages of the stock of net reproducible assets (structures, equipment, and inventories) valued at current replacement cost. Columns 6–8 are percentages of domestic income. Column 9 is calculated as the ratio of column 1 to column 6.

5. It should be noted that this ratio is not appropriate for use in productivity analysis; for productivity analysis, the denominator should measure capital services, not capital stock.



# NATIONAL INCOME AND PRODUCT ACCOUNTS

## Selected NIPA Tables

New estimates in this issue: "Advance" estimates for the first quarter of 1994.

The selected set of national income and product accounts (NIPA) tables shown in this section presents quarterly estimates, which are updated monthly. (In most tables, the annual estimates are also shown.) These tables are available on the day of the gross domestic product (GDP) news release on printouts and diskettes on a subscription basis or from the Commerce Department's Economic Bulletin Board. For order information, write to the National Income and Wealth Division (BE-54), Bureau of Economic Analysis, Washington, DC 20230 or call (202) 606-5304.

Tables containing the estimates for 1929-87 are available in the two-volume set *National Income and Product Accounts of the United States*; see inside back cover for order information. For 1988-92, the complete official time series of NIPA estimates can be found as follows:

	1988	1989	1990-92
Most tables .....	NIPA'S, vol. 2	July 1992 SURVEY	Aug. 1993 SURVEY
Tables 1.15, 1.16, and 7.15 .....	"	"	Sept. 1993 SURVEY
Tables 3.15-3.20 and 9.1-9.6 .....	"	Sept. 1992 SURVEY	"
Tables 7.1, 7.2, and 8.1 .....	Sept. 1993 SURVEY	Sept. 1993 SURVEY	"
Tables 7.3-7.12 .....	Apr. 1993 SURVEY	Apr. 1993 SURVEY	"

Summary NIPA series back to 1929 are in the September 1993 SURVEY. Errata to published NIPA tables appear in the September 1992, April 1993, October 1993, and March 1994 issues. NIPA tables are also available, most beginning with 1929, on diskettes or magnetic tape. For more information on the presentation of the estimates, see "A Look at How BEA Presents the NIPA's" in the February 1994 SURVEY.

NOTE.—This section of the SURVEY is prepared by the National Income and Wealth Division and the Government Division.

**Table 1.1.—Gross Domestic Product**

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Gross domestic product</b> .....	<b>6,038.5</b>	<b>6,377.9</b>	<b>6,194.4</b>	<b>6,261.6</b>	<b>6,327.6</b>	<b>6,395.9</b>	<b>6,526.5</b>	<b>6,609.4</b>
<b>Personal consumption expenditures</b> .....	<b>4,139.9</b>	<b>4,391.8</b>	<b>4,256.2</b>	<b>4,296.2</b>	<b>4,359.9</b>	<b>4,419.1</b>	<b>4,492.0</b>	<b>4,549.4</b>
Durable goods .....	497.3	537.9	516.6	515.3	531.6	541.9	562.8	577.4
Nondurable goods .....	1,300.9	1,350.0	1,331.7	1,335.3	1,344.8	1,352.4	1,367.5	1,376.1
Services .....	2,341.6	2,503.9	2,407.9	2,445.5	2,483.4	2,524.8	2,561.8	2,595.9
<b>Gross private domestic investment</b> .....	<b>796.5</b>	<b>891.7</b>	<b>833.3</b>	<b>874.1</b>	<b>874.1</b>	<b>884.0</b>	<b>934.5</b>	<b>978.0</b>
Fixed investment .....	789.1	876.1	821.3	839.5	861.0	876.3	927.6	943.8
Nonresidential .....	565.5	623.7	579.5	594.7	619.1	624.9	656.0	664.7
Structures .....	172.6	178.7	171.1	172.4	177.6	179.1	185.8	178.9
Producers' durable equipment .....	392.9	445.0	408.3	422.2	441.6	445.8	470.2	485.8
Residential .....	223.6	252.4	241.8	244.9	241.9	251.3	271.6	279.1
Change in business inventories .....	7.3	15.6	12.0	34.6	13.1	7.7	6.9	34.2
Nonfarm .....	2.3	21.1	9.5	33.0	16.8	22.6	12.0	33.7
Farm .....	5.0	-5.5	2.4	1.5	-3.7	-14.9	-5.0	5
<b>Net exports of goods and services</b> .....	<b>-29.6</b>	<b>-63.6</b>	<b>-38.8</b>	<b>-48.3</b>	<b>-65.1</b>	<b>-71.9</b>	<b>-69.1</b>	<b>-82.4</b>
Exports .....	640.5	661.7	654.7	651.3	660.0	653.2	682.4	668.8
Imports .....	670.1	725.3	693.5	699.6	725.0	725.1	751.5	751.2
<b>Government purchases</b> .....	<b>1,131.8</b>	<b>1,158.1</b>	<b>1,143.8</b>	<b>1,139.7</b>	<b>1,158.6</b>	<b>1,164.8</b>	<b>1,169.1</b>	<b>1,164.4</b>
Federal .....	448.8	443.4	452.4	442.7	447.5	443.6	440.0	434.0
National defense .....	313.8	303.4	315.7	304.8	307.6	301.9	299.2	292.8
Nondefense .....	135.0	140.1	136.7	137.9	140.0	141.7	140.7	141.2
State and local .....	683.0	714.6	691.4	697.0	711.1	721.2	729.2	730.3

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 1.2.—Gross Domestic Product in Constant Dollars**

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Gross domestic product</b> .....	<b>4,986.3</b>	<b>5,136.0</b>	<b>5,068.3</b>	<b>5,078.2</b>	<b>5,102.1</b>	<b>5,138.3</b>	<b>5,225.6</b>	<b>5,259.0</b>
<b>Personal consumption expenditures</b> .....	<b>3,341.8</b>	<b>3,453.2</b>	<b>3,397.2</b>	<b>3,403.8</b>	<b>3,432.7</b>	<b>3,469.6</b>	<b>3,506.9</b>	<b>3,539.8</b>
Durable goods .....	456.6	490.0	473.4	471.9	484.2	493.1	510.9	522.9
Nondurable goods .....	1,062.9	1,088.1	1,081.8	1,076.0	1,083.1	1,093.0	1,100.2	1,106.7
Services .....	1,822.3	1,875.2	1,842.0	1,855.9	1,865.4	1,883.5	1,895.8	1,910.2
<b>Gross private domestic investment</b> .....	<b>732.9</b>	<b>820.3</b>	<b>763.0</b>	<b>803.0</b>	<b>803.6</b>	<b>813.4</b>	<b>861.4</b>	<b>896.7</b>
Fixed investment .....	726.4	806.0	754.3	773.7	790.6	806.9	852.9	866.2
Nonresidential .....	529.2	591.8	543.7	562.3	584.3	594.8	625.7	634.1
Structures .....	150.6	151.5	148.0	148.2	151.1	151.2	155.6	148.9
Producers' durable equipment .....	378.6	440.2	395.7	414.1	433.2	443.6	470.0	485.1
Residential .....	197.1	214.2	210.6	211.4	206.2	212.1	227.2	232.2
Change in business inventories .....	6.5	14.3	8.7	29.3	13.0	6.5	8.5	30.5
Nonfarm .....	2.7	19.7	7.5	29.3	17.1	19.4	12.9	30.7
Farm .....	3.8	-5.3	1.2	0	-4.1	-12.9	-4.4	-2
<b>Net exports of goods and services</b> .....	<b>-33.6</b>	<b>-76.5</b>	<b>-38.8</b>	<b>-59.9</b>	<b>-75.2</b>	<b>-86.3</b>	<b>-84.5</b>	<b>-104.2</b>
Exports .....	578.0	598.3	591.6	588.0	593.2	591.9	620.0	605.0
Imports .....	611.6	674.8	630.3	647.9	668.4	678.2	704.5	709.3
<b>Government purchases</b> .....	<b>945.2</b>	<b>938.9</b>	<b>946.9</b>	<b>931.3</b>	<b>941.1</b>	<b>941.7</b>	<b>941.7</b>	<b>926.8</b>
Federal .....	373.0	354.9	373.7	357.6	359.4	353.7	349.0	338.0
National defense .....	261.2	242.4	261.3	246.0	246.4	240.1	237.1	228.4
Nondefense .....	111.8	112.5	112.4	111.5	113.0	113.7	111.8	109.6
State and local .....	572.2	584.0	573.2	573.7	581.6	588.0	592.8	588.9

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 1.3.—Gross Domestic Product by Major Type of Product**

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Gross domestic product</b> .....	<b>6,038.5</b>	<b>6,377.9</b>	<b>6,194.4</b>	<b>6,261.6</b>	<b>6,327.6</b>	<b>6,395.9</b>	<b>6,526.5</b>	<b>6,609.4</b>
Final sales of domestic product .....	6,031.2	6,362.3	6,182.5	6,227.1	6,314.5	6,388.2	6,519.6	6,575.2
Change in business inventories .....	7.3	15.6	12.0	34.6	13.1	7.7	6.9	34.2
<b>Goods</b> <sup>1</sup> .....	<b>2,312.8</b>	<b>2,421.9</b>	<b>2,377.6</b>	<b>2,397.4</b>	<b>2,408.1</b>	<b>2,409.4</b>	<b>2,472.7</b>	<b>2,519.7</b>
Final sales .....	2,305.5	2,406.3	2,365.6	2,362.9	2,395.0	2,401.7	2,465.8	2,485.5
Change in business inventories .....	7.3	15.6	12.0	34.6	13.1	7.7	6.9	34.2
Durable goods .....	977.9	1,047.9	1,007.1	1,018.6	1,040.5	1,047.7	1,084.7	1,118.0
Final sales .....	975.8	1,037.0	1,008.3	1,003.5	1,037.8	1,032.9	1,073.7	1,087.9
Change in business inventories .....	2.0	10.9	-1.2	15.0	2.7	14.8	11.0	30.1
Nondurable goods .....	1,334.9	1,374.0	1,370.5	1,378.9	1,367.5	1,361.6	1,388.0	1,401.7
Final sales .....	1,329.6	1,369.3	1,357.3	1,359.3	1,357.1	1,368.8	1,392.1	1,397.6
Change in business inventories .....	5.3	4.7	13.2	19.5	10.4	-7.2	-4.1	4.1
<b>Services</b> <sup>1</sup> .....	<b>3,221.1</b>	<b>3,410.5</b>	<b>3,296.1</b>	<b>3,341.8</b>	<b>3,388.1</b>	<b>3,437.8</b>	<b>3,474.3</b>	<b>3,516.5</b>
<b>Structures</b> .....	<b>504.6</b>	<b>545.5</b>	<b>520.8</b>	<b>522.4</b>	<b>531.5</b>	<b>548.7</b>	<b>579.5</b>	<b>573.1</b>

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 1.4.—Gross Domestic Product by Major Type of Product in Constant Dollars**

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Gross domestic product</b> .....	<b>4,986.3</b>	<b>5,136.0</b>	<b>5,068.3</b>	<b>5,078.2</b>	<b>5,102.1</b>	<b>5,138.3</b>	<b>5,225.6</b>	<b>5,259.0</b>
Final sales of domestic product .....	4,979.8	5,121.7	5,059.6	5,048.9	5,089.1	5,131.8	5,217.1	5,228.6
Change in business inventories .....	6.5	14.3	8.7	29.3	13.0	6.5	8.5	30.5
<b>Goods</b> <sup>1</sup> .....	<b>2,005.7</b>	<b>2,083.8</b>	<b>2,057.7</b>	<b>2,060.2</b>	<b>2,069.1</b>	<b>2,074.9</b>	<b>2,130.9</b>	<b>2,161.0</b>
Final sales .....	1,999.2	2,069.5	2,049.0	2,030.9	2,056.1	2,068.5	2,122.5	2,130.6
Change in business inventories .....	6.5	14.3	8.7	29.3	13.0	6.5	8.5	30.5
Durable goods .....	914.0	981.2	941.8	951.2	968.9	982.5	1,022.2	1,047.8
Final sales .....	911.7	970.6	942.6	938.2	964.9	968.7	1,010.5	1,020.9
Change in business inventories .....	2.4	10.6	-8	13.0	3.9	13.9	11.7	26.9
Nondurable goods .....	1,091.7	1,102.6	1,116.0	1,109.0	1,100.2	1,092.4	1,108.7	1,113.3
Final sales .....	1,087.6	1,098.9	1,106.4	1,092.7	1,091.1	1,099.8	1,111.9	1,109.7
Change in business inventories .....	4.1	3.7	9.6	16.3	9.1	-7.4	-3.2	3.6
<b>Services</b> <sup>1</sup> .....	<b>2,534.7</b>	<b>2,586.4</b>	<b>2,556.5</b>	<b>2,565.3</b>	<b>2,577.5</b>	<b>2,596.7</b>	<b>2,606.0</b>	<b>2,617.7</b>
<b>Structures</b> .....	<b>445.8</b>	<b>465.9</b>	<b>454.2</b>	<b>452.7</b>	<b>455.5</b>	<b>466.6</b>	<b>488.7</b>	<b>480.3</b>

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 1.5.—Relation of Gross Domestic Product, Gross Domestic Purchases, and Final Sales to Domestic Purchasers**

[Billions of dollars]

<b>Gross domestic product</b> .....	<b>6,038.5</b>	<b>6,377.9</b>	<b>6,194.4</b>	<b>6,261.6</b>	<b>6,327.6</b>	<b>6,395.9</b>	<b>6,526.5</b>	<b>6,609.4</b>
Less: Exports of goods and services .....	640.5	661.7	654.7	651.3	660.0	653.2	682.4	668.8
Plus: Imports of goods and services .....	670.1	725.3	693.5	699.6	725.0	725.1	751.5	751.2
<b>Equals: Gross domestic purchases</b> <sup>1</sup> .....	<b>6,068.2</b>	<b>6,441.5</b>	<b>6,233.2</b>	<b>6,309.9</b>	<b>6,392.7</b>	<b>6,467.8</b>	<b>6,595.6</b>	<b>6,691.8</b>
Less: Change in business inventories .....	7.3	15.6	12.0	34.6	13.1	7.7	6.9	34.2
<b>Equals: Final sales to domestic purchasers</b> <sup>2</sup> .....	<b>6,060.8</b>	<b>6,425.9</b>	<b>6,221.2</b>	<b>6,275.4</b>	<b>6,379.5</b>	<b>6,460.1</b>	<b>6,588.7</b>	<b>6,657.6</b>

1. Purchases by U.S. residents of goods and services wherever produced.

2. Final sales to U.S. residents of goods and services wherever produced.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 1.6.—Relation of Gross Domestic Product, Gross Domestic Purchases, and Final Sales to Domestic Purchasers in Constant Dollars**

[Billions of 1987 dollars]

<b>Gross domestic product</b> .....	<b>4,986.3</b>	<b>5,136.0</b>	<b>5,068.3</b>	<b>5,078.2</b>	<b>5,102.1</b>	<b>5,138.3</b>	<b>5,225.6</b>	<b>5,259.0</b>
Less: Exports of goods and services .....	578.0	598.3	591.6	588.0	593.2	591.9	620.0	605.0
Plus: Imports of goods and services .....	611.6	674.8	630.3	647.9	668.4	678.2	704.5	709.3
<b>Equals: Gross domestic purchases</b> <sup>1</sup> .....	<b>5,019.9</b>	<b>5,212.5</b>	<b>5,107.1</b>	<b>5,138.1</b>	<b>5,177.4</b>	<b>5,224.6</b>	<b>5,310.0</b>	<b>5,363.3</b>
Less: Change in business inventories .....	6.5	14.3	8.7	29.3	13.0	6.5	8.5	30.5
<b>Equals: Final sales to domestic purchasers</b> <sup>2</sup> .....	<b>5,013.4</b>	<b>5,198.2</b>	<b>5,098.4</b>	<b>5,108.8</b>	<b>5,164.3</b>	<b>5,218.1</b>	<b>5,301.6</b>	<b>5,332.8</b>

1. Purchases by U.S. residents of goods and services wherever produced.

2. Final sales to U.S. residents of goods and services wherever produced.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 1.7.—Gross Domestic Product by Sector**

[Billions of dollars]

<b>Gross domestic product</b> .....	<b>6,038.5</b>	<b>6,377.9</b>	<b>6,194.4</b>	<b>6,261.6</b>	<b>6,327.6</b>	<b>6,395.9</b>	<b>6,526.5</b>	<b>6,609.4</b>
<b>Business</b> .....	<b>5,114.4</b>	<b>5,404.5</b>	<b>5,254.4</b>	<b>5,303.0</b>	<b>5,359.0</b>	<b>5,416.6</b>	<b>5,539.5</b>	<b>5,607.9</b>
Nonfarm .....	5,006.4	5,306.9	5,138.7	5,184.7	5,263.7	5,330.1	5,449.1	5,508.7
Nonfarm less housing .....	4,505.4	4,791.0	4,639.6	4,674.0	4,751.0	4,812.8	4,926.4	4,967.7
Housing .....	501.0	515.9	499.1	510.8	512.7	517.4	522.8	541.0
Farm .....	84.4	82.4	83.6	83.8	83.3	73.2	89.2	98.1
Statistical discrepancy .....	23.6	15.2	32.1	34.4	12.0	13.3	1.2	1.2
<b>Households and institutions</b> .....	<b>267.0</b>	<b>286.3</b>	<b>275.7</b>	<b>280.3</b>	<b>284.7</b>	<b>288.1</b>	<b>292.3</b>	<b>297.8</b>
Private households .....	10.1	11.1	10.6	10.8	11.0	11.3	11.5	11.7
Nonprofit institutions .....	256.9	275.2	265.2	269.5	273.7	276.8	280.8	286.1
<b>General government</b> .....	<b>657.1</b>	<b>687.1</b>	<b>664.3</b>	<b>678.4</b>	<b>683.9</b>	<b>691.2</b>	<b>694.7</b>	<b>703.7</b>
Federal .....	199.8	207.0	198.7	206.2	206.2	208.3	207.1	210.8
State and local .....	457.3	480.1	465.6	472.1	477.7	483.0	487.6	492.9
<b>Addendum:</b>								
Gross domestic business product less housing .....	4,608.9							

**Table 1.8.—Gross Domestic Product by Sector in Constant Dollars**

[Billions of 1987 dollars]

<b>Gross domestic product</b> .....	<b>4,986.3</b>	<b>5,136.0</b>	<b>5,068.3</b>	<b>5,078.2</b>	<b>5,102.1</b>	<b>5,138.3</b>	<b>5,225.6</b>	<b>5,259.0</b>
<b>Business</b> .....	<b>4,267.6</b>	<b>4,408.0</b>	<b>4,346.2</b>	<b>4,353.9</b>	<b>4,374.1</b>	<b>4,408.4</b>	<b>4,495.4</b>	<b>4,527.3</b>
Nonfarm .....	4,168.4	4,321.1	4,240.0	4,247.4	4,288.1	4,330.1	4,418.7	4,446.6
Nonfarm less housing .....	3,769.3	3,915.8	3,839.3	3,844.8	3,883.7	3,924.0	4,010.6	4,036.6
Housing .....	399.1	405.3	400.7	402.6	404.4	406.1	408.1	410.0
Farm .....	79.6	74.4	79.7	78.2	76.2	67.5	75.7	79.7
Statistical discrepancy .....	19.7	12.5	26.5	28.3	9.8	10.8	1.0	1.0
<b>Households and institutions</b> .....	<b>209.1</b>	<b>217.0</b>	<b>212.4</b>	<b>213.5</b>	<b>216.8</b>	<b>218.4</b>	<b>219.4</b>	<b>221.1</b>
Private households .....	8.8	9.3	9.0	9.2	9.3	9.4	9.5	9.6
Nonprofit institutions .....	200.4	207.7	203.4	204.3	207.5	209.0	209.9	211.5
<b>General government</b> .....	<b>509.5</b>	<b>511.1</b>	<b>509.8</b>	<b>510.8</b>	<b>511.3</b>	<b>511.5</b>	<b>510.8</b>	<b>510.6</b>
Federal .....	150.5	147.2	148.8	148.8	147.8	146.9	145.1	143.9
State and local .....	359.0	363.9	361.0	362.0	363.4	364.5	365.7	366.7
<b>Addendum:</b>								
Gross domestic business product less housing .....	3,864.9							

**Table 1.9.—Relation of Gross Domestic Product, Gross National Product, Net National Product, National Income, and Personal Income**

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Gross domestic product</b> .....	<b>6,038.5</b>	<b>6,377.9</b>	<b>6,194.4</b>	<b>6,261.6</b>	<b>6,327.6</b>	<b>6,395.9</b>	<b>6,526.5</b>	<b>6,609.4</b>
Plus: Receipts of factor income from the rest of the world <sup>1</sup> .....	129.2	131.7	122.3	122.8	131.9	135.1	137.2	.....
Less: Payments of factor income to the rest of the world <sup>2</sup> .....	121.9	131.6	124.8	122.4	132.3	128.7	142.8	.....
<b>Equals: Gross national product</b> .....	<b>6,045.8</b>	<b>6,378.1</b>	<b>6,191.9</b>	<b>6,262.1</b>	<b>6,327.1</b>	<b>6,402.3</b>	<b>6,520.9</b>	.....
Less: Consumption of fixed capital .....	657.9	671.3	648.0	663.2	663.3	679.7	679.0	734.5
Capital consumption allowances .....	605.7	630.0	612.1	622.3	624.8	636.3	636.4	664.9
Less: Capital consumption adjustment .....	-52.1	-41.3	-36.0	-40.9	-38.4	-43.4	-42.6	-69.5
<b>Equals: Net national product</b> .....	<b>5,387.9</b>	<b>5,706.8</b>	<b>5,543.9</b>	<b>5,598.8</b>	<b>5,663.9</b>	<b>5,722.6</b>	<b>5,841.9</b>	.....
Less: Indirect business tax and nontax liability .....	502.8	530.5	515.7	515.6	526.2	532.4	547.7	549.7
Business transfer payments .....	27.6	27.9	28.1	27.0	27.8	28.4	28.3	28.3
Statistical discrepancy .....	23.6	15.2	32.1	34.4	12.0	13.3	1.2	.....
Plus: Subsidies less current surplus of government enterprises .....	2.7	7.0	7.7	17.1	6.1	-5.3	10.3	7.2
<b>Equals: National income</b> .....	<b>4,836.6</b>	<b>5,140.3</b>	<b>4,975.8</b>	<b>5,038.9</b>	<b>5,104.0</b>	<b>5,143.2</b>	<b>5,275.0</b>	.....
Less: Corporate profits with inventory valuation and capital consumption adjustments .....	407.2	466.6	439.5	432.1	458.1	468.5	507.9	.....
Net interest .....	442.0	445.6	447.7	450.1	443.2	444.6	444.5	.....
Contributions for social insurance .....	555.6	585.3	564.6	568.9	585.9	590.5	595.9	613.7
Wage accruals less disbursements .....	-20.0	20.0	-80.0	80.0	0	0	0	0
Plus: Personal interest income .....	694.3	695.2	694.5	695.4	693.1	695.7	696.7	700.2
Personal dividend income .....	140.4	158.3	152.3	157.0	157.8	159.0	159.4	160.7
Government transfer payments to persons .....	836.8	890.2	855.4	873.0	883.7	896.4	907.5	922.6
Business transfer payments to persons .....	21.6	21.9	22.0	21.4	21.8	22.1	22.3	22.0
<b>Equals: Personal income</b> .....	<b>5,144.9</b>	<b>5,388.3</b>	<b>5,328.3</b>	<b>5,254.7</b>	<b>5,373.2</b>	<b>5,412.7</b>	<b>5,512.7</b>	<b>5,578.1</b>
<b>Addenda:</b>								
Net domestic product .....	5,380.7	5,706.6	5,546.4	5,598.4	5,664.3	5,716.2	5,847.5	5,874.9
Domestic income .....	4,829.4	5,140.1	4,978.3	5,038.4	5,104.5	5,136.8	5,280.6	.....
Gross national income .....	6,022.2	6,362.9	6,159.9	6,227.6	6,315.2	6,389.0	6,519.7	.....

1. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. corporations.

2. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.

**Table 1.10.—Relation of Gross Domestic Product, Gross National Product, Net National Product, and National Income in Constant Dollars**

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Gross domestic product</b> .....	<b>4,986.3</b>	<b>5,136.0</b>	<b>5,068.3</b>	<b>5,078.2</b>	<b>5,102.1</b>	<b>5,138.3</b>	<b>5,225.6</b>	<b>5,259.0</b>
Plus: Receipts of factor income from the rest of the world <sup>1</sup> .....	105.5	104.7	98.9	98.3	105.0	107.1	108.5	.....
Less: Payments of factor income to the rest of the world <sup>2</sup> .....	97.7	102.2	98.8	95.8	103.0	99.6	110.4	.....
<b>Equals: Gross national product</b> .....	<b>4,994.0</b>	<b>5,138.6</b>	<b>5,068.4</b>	<b>5,080.7</b>	<b>5,104.1</b>	<b>5,145.8</b>	<b>5,223.7</b>	.....
Less: Consumption of fixed capital .....	595.0	598.6	584.0	595.0	592.5	604.4	602.4	648.9
<b>Equals: Net national product</b> .....	<b>4,399.0</b>	<b>4,540.0</b>	<b>4,484.4</b>	<b>4,485.8</b>	<b>4,511.6</b>	<b>4,541.4</b>	<b>4,621.3</b>	.....
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises .....	402.0	417.5	409.3	411.6	414.9	419.1	424.4	428.0
Statistical discrepancy .....	19.7	12.5	26.5	28.3	9.8	10.8	1.0	.....
<b>Equals: National income</b> .....	<b>3,977.3</b>	<b>4,110.1</b>	<b>4,048.6</b>	<b>4,045.9</b>	<b>4,087.0</b>	<b>4,111.4</b>	<b>4,196.0</b>	.....
<b>Addenda:</b>								
Net domestic product .....	4,391.2	4,537.5	4,484.4	4,483.3	4,509.6	4,533.8	4,623.2	4,610.1
Domestic income .....	3,969.5	4,107.5	4,048.5	4,043.4	4,085.0	4,103.9	4,197.8	.....
Gross national income .....	4,974.3	5,126.1	5,041.9	5,052.5	5,094.3	5,135.0	5,222.7	.....

1. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. corporations.

2. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.

**Table 1.11.—Command-Basis Gross National Product in Constant Dollars**

[Billions of 1987 dollars]

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Gross national product</b> .....	<b>4,994.0</b>	<b>5,138.6</b>	<b>5,068.4</b>	<b>5,080.7</b>	<b>5,104.1</b>	<b>5,145.8</b>	<b>5,223.7</b>	.....
Less: Exports of goods and services and receipts of factor income from the rest of the world .....	683.5	703.0	690.4	686.4	698.1	699.0	728.5	.....
Plus: Command-basis exports of goods and services and receipts of factor income <sup>1</sup> .....	689.3	719.5	692.4	700.4	712.5	718.1	746.8	.....
<b>Equals: Command-basis gross national product</b> .....	<b>4,999.8</b>	<b>5,155.0</b>	<b>5,070.3</b>	<b>5,094.8</b>	<b>5,118.4</b>	<b>5,164.9</b>	<b>5,241.9</b>	.....
<b>Addendum:</b>								
Terms of trade <sup>2</sup> .....	100.9	102.3	100.3	102.0	102.1	102.7	102.5	.....

1. Exports of goods and services and receipts of factor income deflated by the implicit price deflator for imports of goods and services and payments of factor income.

2. Ratio of the implicit price deflator for exports of goods and services and receipts of factor income to the corresponding implicit price deflator for imports with the decimal point shifted two places to the right.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

Table 1.14.—National Income by Type of Income

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1992		1993			
			IV	I	II	III	IV	
<b>National income</b> .....	<b>4,836.6</b>	<b>5,140.3</b>	<b>4,975.8</b>	<b>5,038.9</b>	<b>5,104.0</b>	<b>5,143.2</b>	<b>5,275.0</b>	.....
<b>Compensation of employees</b> .....	<b>3,582.0</b>	<b>3,772.2</b>	<b>3,658.6</b>	<b>3,705.1</b>	<b>3,750.6</b>	<b>3,793.9</b>	<b>3,839.2</b>	<b>3,907.2</b>
Wages and salaries .....	2,953.1	3,100.5	3,015.8	3,054.3	3,082.7	3,115.4	3,149.6	3,200.7
Government .....	567.5	589.7	574.2	584.1	586.3	592.8	595.4	602.0
Other .....	2,385.6	2,510.8	2,441.6	2,470.2	2,496.3	2,522.6	2,554.2	2,598.8
Supplements to wages and salaries .....	629.0	671.7	642.8	650.7	668.0	678.5	689.6	706.5
Employer contributions for social insurance ..	306.3	321.0	311.3	312.2	321.4	323.8	326.7	334.5
Other labor income .....	322.7	350.7	331.5	338.5	346.6	354.7	362.9	371.9
<b>Proprietors' income with IVA and CCAdj</b> .....	<b>414.3</b>	<b>443.2</b>	<b>431.2</b>	<b>444.1</b>	<b>439.4</b>	<b>422.5</b>	<b>467.0</b>	<b>475.6</b>
Farm .....	43.7	46.0	47.6	55.7	47.0	24.8	56.4	60.0
Proprietors' income with IVA .....	51.2	53.1	54.8	62.8	54.1	32.1	63.5	67.0
CCAdj .....	-7.5	-7.1	-7.2	-7.1	-7.1	-7.3	-7.0	-7.0
Nonfarm .....	370.6	397.3	383.6	388.4	392.4	397.6	410.6	415.6
Proprietors' income .....	358.0	385.3	362.2	376.4	380.3	385.4	399.2	405.2
IVA .....	-5	-1.0	7.8	-1.6	-1.2	-4	-9	-1.0
CCAdj .....	13.1	13.0	13.7	13.7	13.3	12.7	12.3	11.5
<b>Rental income of persons with CCAdj</b> .....	<b>-8.9</b>	<b>12.6</b>	<b>-1.2</b>	<b>7.5</b>	<b>12.7</b>	<b>13.7</b>	<b>16.4</b>	<b>3.5</b>
Rental income of persons ..	57.4	75.2	57.4	71.3	73.2	77.2	79.0	89.1
CCAdj .....	-66.3	-62.6	-58.6	-63.8	-60.4	-63.5	-62.6	-85.6
<b>Corporate profits with IVA and CCAdj</b> .....	<b>407.2</b>	<b>466.6</b>	<b>439.5</b>	<b>432.1</b>	<b>458.1</b>	<b>468.5</b>	<b>507.9</b>	.....
Corporate profits with IVA ..	390.1	442.3	414.8	407.0	433.4	444.8	484.0	.....
Profits before tax .....	395.4	449.4	409.9	419.8	445.6	443.8	488.4	.....
Profits tax liability .....	146.3	174.0	155.0	160.9	173.3	169.5	192.5	.....
Profits after tax .....	249.1	275.4	254.9	258.9	272.3	274.3	295.9	.....
Dividends .....	150.5	169.0	162.9	167.5	168.5	169.7	170.3	171.7
Undistributed profits .....	98.6	106.4	92.0	91.4	103.9	104.6	125.6	.....
IVA .....	-5.3	-7.1	4.9	-12.7	-12.2	1.0	-4.3	-17.7
CCAdj .....	17.1	24.3	24.7	25.1	24.7	23.8	23.9	20.6
<b>Net interest</b> .....	<b>442.0</b>	<b>445.6</b>	<b>447.7</b>	<b>450.1</b>	<b>443.2</b>	<b>444.6</b>	<b>444.5</b>	.....
<b>Addenda:</b>								
Corporate profits after tax with IVA and CCAdj .....	260.9	292.6	284.5	271.2	284.8	299.1	315.4	.....
Net cash flow with IVA and CAdj .....	507.0	532.4	518.2	505.9	521.5	543.3	559.0	.....
Undistributed profits with IVA and CCAdj ..	110.4	123.6	121.7	103.7	116.3	129.3	145.1	.....
Consumption of fixed capital .....	396.6	408.8	396.5	402.2	405.2	414.0	413.9	432.8
Less: IVA .....	-5.3	-7.1	4.9	-12.7	-12.2	1.0	-4.3	-17.7
Equals: Net cash flow ....	512.3	539.5	513.2	518.7	533.7	542.3	563.3	.....

Table 1.16.—Gross Domestic Product of Corporate Business in Current Dollars and Gross Domestic Product of Nonfinancial Corporate Business in Current and Constant Dollars

	1992	1993	Seasonally adjusted at annual rates					1994
			1992		1993			
			IV	I	II	III	IV	
			Billions of dollars					
<b>Gross domestic product of corporate business</b> .....	<b>3,571.7</b>	<b>3,784.1</b>	<b>3,668.8</b>	<b>3,678.4</b>	<b>3,759.2</b>	<b>3,803.8</b>	<b>3,895.2</b>	.....
Consumption of fixed capital ..	396.6	408.8	396.5	402.2	405.2	414.0	413.9	432.8
Net domestic product .....	3,175.1	3,375.3	3,272.3	3,276.2	3,354.0	3,389.8	3,481.3	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies ..	359.6	378.4	368.3	365.1	377.2	380.4	391.2	392.6
Domestic income .....	2,815.5	2,996.9	2,904.0	2,911.1	2,976.8	3,009.4	3,090.1	.....
Compensation of employees .....	2,337.4	2,460.2	2,390.3	2,408.2	2,448.7	2,475.7	2,508.3	2,556.5
Wages and salaries ..	1,940.9	2,038.4	1,983.9	2,002.8	2,029.0	2,048.7	2,073.3	2,109.8
Supplements to wages and salaries .....	396.5	421.8	406.3	405.3	419.7	427.0	435.0	446.7
Corporate profits with IVA and CCAdj .....	344.9	407.9	384.8	373.0	400.0	405.8	452.8	.....
Profits before tax .....	332.2	390.7	355.2	360.7	387.5	381.1	433.3	.....
Profits tax liability ..	146.3	174.0	155.0	160.9	173.3	169.5	192.5	.....
Profits after tax .....	186.9	216.6	200.2	199.8	214.3	211.6	240.8	.....
Dividends .....	127.3	155.0	147.4	156.7	152.9	152.5	157.9	.....
Undistributed profits .....	59.6	61.6	52.8	43.2	61.4	59.1	82.9	.....
IVA .....	-5.3	-7.1	4.9	-12.7	-12.2	1.0	-4.3	-17.7
CCAdj .....	17.1	24.3	24.7	25.1	24.7	23.8	23.9	20.6
Net interest .....	133.2	128.7	128.9	129.9	128.1	127.9	129.0	.....
<b>Gross domestic product of financial corporate business</b> ..	<b>328.3</b>	<b>366.8</b>	<b>337.2</b>	<b>346.7</b>	<b>363.3</b>	<b>371.6</b>	<b>385.8</b>	.....
<b>Gross domestic product of nonfinancial corporate business</b> ..	<b>3,243.4</b>	<b>3,417.3</b>	<b>3,331.6</b>	<b>3,331.7</b>	<b>3,395.9</b>	<b>3,432.2</b>	<b>3,509.4</b>	.....
Consumption of fixed capital ..	352.7	362.2	351.7	356.8	359.0	367.0	366.0	383.8
Net domestic product .....	2,890.7	3,055.1	2,979.9	2,975.0	3,036.8	3,065.1	3,143.3	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies ..	327.7	345.2	336.0	333.0	344.0	347.0	356.9	358.3
Domestic income .....	2,563.1	2,709.8	2,643.9	2,642.0	2,692.8	2,718.1	2,786.4	.....
Compensation of employees .....	2,149.5	2,255.6	2,195.9	2,215.0	2,244.7	2,267.1	2,295.7	2,336.6
Wages and salaries ..	1,782.4	1,866.4	1,820.0	1,840.3	1,857.3	1,873.3	1,894.8	1,925.5
Supplements to wages and salaries .....	367.0	389.2	375.9	374.7	387.4	393.8	400.9	411.2
Corporate profits with IVA and CCAdj .....	278.3	320.5	314.1	292.1	315.0	318.2	356.7	.....
Profits before tax .....	255.1	291.6	273.2	268.4	291.2	281.8	325.2	.....
Profits tax liability ..	98.2	117.0	105.8	106.4	117.6	112.5	131.4	.....
Profits after tax .....	156.9	174.7	167.4	162.0	173.6	169.3	193.7	.....
Dividends .....	105.2	126.3	120.7	127.4	125.4	124.0	128.4	.....
Undistributed profits .....	51.7	48.4	46.7	34.6	48.2	45.3	65.3	.....
IVA .....	-5.3	-7.1	4.9	-12.7	-12.2	1.0	-4.3	-17.7
CCAdj .....	28.5	35.9	36.0	36.4	36.0	35.4	35.9	33.5
Net interest .....	135.3	133.7	133.9	134.9	133.1	132.8	134.0	.....
			Billions of 1987 dollars					
<b>Gross domestic product of nonfinancial corporate business</b> ..	<b>2,822.3</b>	<b>2,936.3</b>	<b>2,887.4</b>	<b>2,867.5</b>	<b>2,916.6</b>	<b>2,948.9</b>	<b>3,012.1</b>	.....
Consumption of fixed capital ..	318.4	324.2	317.2	321.0	321.4	327.9	326.5	342.3
Net domestic product .....	2,503.9	2,612.1	2,570.1	2,546.5	2,595.2	2,620.9	2,685.6	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies ..	258.7	270.2	264.5	265.7	268.4	271.6	275.1	277.8
Domestic income .....	2,245.2	2,341.9	2,305.7	2,280.8	2,326.8	2,349.3	2,410.5	.....



Table 2.1.—Personal Income and Its Disposition

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Personal income</b> .....	<b>5,144.9</b>	<b>5,388.3</b>	<b>5,328.3</b>	<b>5,254.7</b>	<b>5,373.2</b>	<b>5,412.7</b>	<b>5,512.7</b>	<b>5,578.1</b>
<b>Wage and salary disbursements</b> .....	<b>2,973.1</b>	<b>3,080.5</b>	<b>3,095.8</b>	<b>2,974.3</b>	<b>3,082.7</b>	<b>3,115.4</b>	<b>3,149.6</b>	<b>3,200.7</b>
Commodity-producing industries .....	756.5	763.6	783.3	740.7	765.1	769.4	779.3	789.5
Manufacturing .....	577.6	577.3	602.0	559.7	580.3	581.5	587.8	595.8
Distributive industries .....	682.0	706.6	709.9	682.9	709.1	714.4	720.1	733.5
Service industries .....	967.0	1,020.6	1,028.4	966.6	1,022.2	1,038.8	1,054.7	1,075.8
Government .....	567.5	589.7	574.2	584.1	586.3	592.8	595.4	602.0
<b>Other labor income</b> .....	<b>322.7</b>	<b>350.7</b>	<b>331.5</b>	<b>338.5</b>	<b>346.6</b>	<b>354.7</b>	<b>362.9</b>	<b>371.9</b>
<b>Proprietors' income with inventory valuation and capital consumption adjustments</b> .....	<b>414.3</b>	<b>443.2</b>	<b>431.2</b>	<b>444.1</b>	<b>439.4</b>	<b>422.5</b>	<b>467.0</b>	<b>475.6</b>
Farm .....	43.7	46.0	47.6	55.7	47.0	24.8	56.4	60.0
Nonfarm .....	370.6	397.3	383.6	388.4	392.4	397.6	410.6	415.6
<b>Rental income of persons with capital consumption adjustment</b> .....	<b>-8.9</b>	<b>12.6</b>	<b>-1.2</b>	<b>7.5</b>	<b>12.7</b>	<b>13.7</b>	<b>16.4</b>	<b>3.5</b>
<b>Personal dividend income</b> .....	<b>140.4</b>	<b>158.3</b>	<b>152.3</b>	<b>157.0</b>	<b>157.8</b>	<b>159.0</b>	<b>159.4</b>	<b>160.7</b>
<b>Personal interest income</b> .....	<b>694.3</b>	<b>695.2</b>	<b>694.5</b>	<b>695.4</b>	<b>693.1</b>	<b>695.7</b>	<b>696.7</b>	<b>700.2</b>
<b>Transfer payments to persons</b> .....	<b>858.4</b>	<b>912.1</b>	<b>877.4</b>	<b>894.4</b>	<b>905.5</b>	<b>918.5</b>	<b>929.8</b>	<b>944.6</b>
Old-age, survivors, disability, and health insurance benefits .....	413.9	438.4	420.8	433.1	435.0	439.4	446.1	457.6
Government unemployment insurance benefits .....	39.2	34.1	37.8	34.5	34.4	35.1	32.3	26.9
Veterans benefits .....	19.3	20.0	19.0	20.0	20.2	20.1	19.6	19.9
Government employees retirement benefits .....	108.3	115.5	110.2	112.8	114.6	116.4	118.3	119.0
Other transfer payments .....	277.7	304.1	289.7	294.0	301.3	307.5	313.5	321.2
Aid to families with dependent children .....	23.3	23.9	23.5	23.6	24.1	24.0	24.1	23.9
Other .....	254.4	280.2	266.2	270.4	277.2	283.5	289.4	297.3
<b>Less: Personal contributions for social insurance</b> .....	<b>249.3</b>	<b>264.3</b>	<b>253.3</b>	<b>256.6</b>	<b>264.5</b>	<b>266.8</b>	<b>269.2</b>	<b>279.1</b>
<b>Less: Personal tax and nontax payments</b> .....	<b>644.8</b>	<b>681.6</b>	<b>670.7</b>	<b>657.1</b>	<b>681.0</b>	<b>689.0</b>	<b>699.2</b>	<b>715.7</b>
<b>Equals: Disposable personal income</b> .....	<b>4,500.2</b>	<b>4,706.7</b>	<b>4,657.6</b>	<b>4,597.5</b>	<b>4,692.2</b>	<b>4,723.7</b>	<b>4,813.5</b>	<b>4,862.4</b>
<b>Less: Personal outlays</b> .....	<b>4,261.5</b>	<b>4,516.8</b>	<b>4,377.9</b>	<b>4,419.7</b>	<b>4,483.6</b>	<b>4,544.0</b>	<b>4,620.1</b>	<b>4,680.4</b>
Personal consumption expenditures .....	4,139.9	4,391.8	4,256.2	4,296.2	4,359.9	4,419.1	4,492.0	4,549.4
Interest paid by persons .....	111.1	114.0	111.3	112.5	112.7	114.1	116.8	119.3
Personal transfer payments to rest of the world (net) .....	10.4	11.0	10.5	11.0	11.0	10.8	11.2	11.7
<b>Equals: Personal saving</b> .....	<b>238.7</b>	<b>189.9</b>	<b>279.7</b>	<b>177.9</b>	<b>208.7</b>	<b>179.7</b>	<b>193.4</b>	<b>182.0</b>
<b>Addenda:</b>								
Disposable personal income:								
Total, billions of 1987 dollars .....	3,632.5	3,700.9	3,717.6	3,642.6	3,694.4	3,708.7	3,757.9	3,783.3
Per capita:								
Current dollars .....	17,615	18,225	18,153	17,876	18,196	18,265	18,561	18,705
1987 dollars .....	14,219	14,330	14,490	14,163	14,326	14,341	14,491	14,554
Population (mid-period, millions) .....	255.5	258.3	256.6	257.2	257.9	258.6	259.3	259.9
Personal saving as percentage of disposable personal income .....	5.3	4.0	6.0	3.9	4.4	3.8	4.0	3.7

Table 2.2.—Personal Consumption Expenditures by Major Type of Product

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Personal consumption expenditures</b> .....	<b>4,139.9</b>	<b>4,391.8</b>	<b>4,256.2</b>	<b>4,296.2</b>	<b>4,359.9</b>	<b>4,419.1</b>	<b>4,492.0</b>	<b>4,549.4</b>
<b>Durable goods</b> .....	<b>497.3</b>	<b>537.9</b>	<b>516.6</b>	<b>515.3</b>	<b>531.6</b>	<b>541.9</b>	<b>562.8</b>	<b>577.4</b>
Motor vehicles and parts .....	204.3	222.3	213.7	211.7	220.8	221.7	235.1	250.0
Furniture and household equipment .....	194.5	211.7	202.7	203.3	208.6	214.0	220.8	219.8
Other .....	98.5	103.9	100.2	100.3	102.2	106.2	106.9	107.6
<b>Nondurable goods</b> .....	<b>1,300.9</b>	<b>1,350.0</b>	<b>1,331.7</b>	<b>1,335.3</b>	<b>1,344.8</b>	<b>1,352.4</b>	<b>1,367.5</b>	<b>1,376.1</b>
Food .....	633.7	657.8	647.6	648.2	654.1	660.0	669.1	671.7
Clothing and shoes .....	228.2	237.3	236.1	233.1	235.2	238.2	242.7	243.2
Gasoline and oil .....	103.4	103.7	105.2	106.0	103.6	102.4	102.9	101.4
Fuel oil and coal .....	13.8	15.1	13.9	15.1	14.9	15.4	15.0	16.9
Other .....	321.8	336.0	328.9	332.9	337.2	336.4	337.7	342.8
<b>Services</b> .....	<b>2,341.6</b>	<b>2,503.9</b>	<b>2,407.9</b>	<b>2,445.5</b>	<b>2,483.4</b>	<b>2,524.8</b>	<b>2,561.8</b>	<b>2,595.9</b>
Housing .....	600.0	627.9	609.2	617.6	625.1	631.1	637.8	647.5
Household operation .....	234.4	251.2	245.0	245.7	246.7	255.2	257.3	256.5
Electricity and gas .....	105.8	113.4	111.0	111.1	109.8	116.4	116.2	116.8
Other household operation .....	128.7	137.8	134.0	134.5	136.9	138.7	141.1	139.6
Transportation .....	155.4	170.0	162.4	166.3	169.1	170.9	173.8	176.7
Medical care .....	628.4	680.9	646.9	662.2	675.4	686.9	699.2	710.0
Other .....	723.5	773.8	744.3	753.8	767.1	780.7	793.7	805.2

Table 2.3.—Personal Consumption Expenditures by Major Type of Product in Constant Dollars

(Billions of 1987 dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Personal consumption expenditures</b> .....	<b>3,341.8</b>	<b>3,453.2</b>	<b>3,397.2</b>	<b>3,403.8</b>	<b>3,432.7</b>	<b>3,469.6</b>	<b>3,506.9</b>	<b>3,539.8</b>
<b>Durable goods</b> .....	<b>456.6</b>	<b>490.0</b>	<b>473.4</b>	<b>471.9</b>	<b>484.2</b>	<b>493.1</b>	<b>510.9</b>	<b>522.9</b>
Motor vehicles and parts .....	182.3	191.7	188.6	185.7	191.3	189.9	199.7	211.7
Furniture and household equipment .....	194.8	216.3	204.2	206.5	212.4	219.4	227.1	227.2
Other .....	79.5	82.0	80.6	79.7	80.6	83.7	84.1	84.0
<b>Nondurable goods</b> .....	<b>1,062.9</b>	<b>1,088.1</b>	<b>1,081.8</b>	<b>1,076.0</b>	<b>1,083.1</b>	<b>1,093.0</b>	<b>1,100.2</b>	<b>1,106.7</b>
Food .....	520.5	531.0	529.3	526.7	528.6	532.6	536.0	536.4
Clothing and shoes .....	193.7	199.5	200.0	194.8	197.8	200.6	204.6	205.5
Gasoline and oil .....	83.9	84.9	84.4	83.9	84.1	86.2	85.4	84.6
Fuel oil and coal .....	11.9	13.0	11.9	12.9	12.6	13.2	13.1	14.5
Other .....	252.9	259.8	256.2	257.7	259.9	260.4	261.1	265.6
<b>Services</b> .....	<b>1,822.3</b>	<b>1,875.2</b>	<b>1,842.0</b>	<b>1,855.9</b>	<b>1,865.4</b>	<b>1,885.5</b>	<b>1,895.8</b>	<b>1,910.2</b>
Housing .....	484.2	492.0	486.7	488.8	490.7	493.3	495.3	497.8
Household operation .....	211.7	218.9	216.6	217.9	215.6	220.8	221.3	222.8
Electricity and gas .....	95.3	99.0	98.5	99.1	96.2	100.6	100.3	101.2
Other household operation .....	116.4	119.9	118.1	118.8	119.4	120.2	121.1	121.5
Transportation .....	122.7	126.3	123.7	124.5	126.1	126.5	128.0	128.7
Medical care .....	449.2	463.4	453.2	458.0	461.1	465.1	469.3	472.7
Other .....	554.4	574.6	561.7	566.8	571.8	577.9	581.9	588.2

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 3.2.—Federal Government Receipts and Expenditures**

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1992		1993			
			IV	I	II	III	IV	
<b>Receipts</b> .....	<b>1,183.0</b>	<b>1,269.5</b>	<b>1,221.1</b>	<b>1,218.4</b>	<b>1,268.0</b>	<b>1,275.9</b>	<b>1,315.7</b>	.....
Personal tax and nontax receipts .....	490.8	521.3	511.8	502.1	520.7	527.1	535.1	549.0
Income taxes .....	478.0	506.7	498.3	489.1	506.0	512.7	519.0	532.5
Estate and gift taxes .....	11.3	13.0	12.1	11.6	13.2	12.8	14.4	14.6
Nontaxes .....	1.4	1.6	1.4	1.5	1.5	1.5	1.7	1.9
Corporate profits tax accruals .....	120.2	143.1	127.1	132.4	142.4	139.3	158.1	.....
Federal Reserve banks .....	16.8	15.3	15.8	15.7	15.3	15.1	15.3	.....
Other .....	103.5	127.7	111.3	116.7	127.2	124.2	142.8	.....
Indirect business tax and nontax accruals .....	81.3	87.3	83.5	81.5	86.2	86.7	95.0	92.9
Excise taxes .....	46.8	50.3	46.5	47.4	48.5	48.8	56.6	54.4
Customs duties .....	18.3	19.8	19.1	18.8	20.4	20.0	20.1	19.6
Nontaxes .....	16.2	17.2	18.0	15.3	17.3	17.8	18.3	18.9
Contributions for social insurance .....	490.7	517.8	498.7	502.3	518.7	522.8	527.5	544.6
<b>Expenditures</b> .....	<b>1,459.3</b>	<b>1,495.9</b>	<b>1,485.3</b>	<b>1,481.9</b>	<b>1,490.6</b>	<b>1,488.5</b>	<b>1,522.6</b>	<b>1,497.1</b>
Purchases .....	448.8	443.4	452.4	442.7	447.5	443.6	440.0	434.0
National defense .....	313.8	303.4	315.7	304.8	307.6	301.9	299.2	292.8
Nondefense .....	135.0	140.1	136.7	137.9	140.0	141.7	140.7	141.2
Transfer payments (net) .....	624.5	651.9	641.7	642.0	645.6	652.8	667.2	665.2
To persons .....	608.2	636.1	617.1	628.9	632.7	639.1	643.7	652.3
To rest of the world (net) ...	16.3	15.8	24.6	13.1	12.9	13.7	23.5	12.8
Grants-in-aid to State and local governments .....	171.4	186.2	176.7	176.1	182.8	188.6	197.4	187.9
Net interest paid .....	187.1	180.8	181.3	178.3	182.5	182.2	180.4	174.8
Interest paid .....	219.9	217.5	216.4	214.1	219.0	219.9	217.2	212.4
To persons and business .....	178.7	175.0	175.0	172.4	176.9	176.7	174.0	169.1
To rest of the world (net) ..	41.2	42.5	41.4	41.6	42.1	43.2	43.2	43.2
Less: Interest received by government .....	32.8	36.7	35.1	35.7	36.5	37.7	36.7	37.5
Subsidies less current surplus of government enterprises ..	27.5	33.6	33.2	42.9	32.3	21.4	37.7	35.1
Subsidies .....	31.7	36.2	36.1	43.7	35.9	24.8	40.5	37.7
Less: Current surplus of government enterprises ..	4.1	2.7	2.9	.8	3.6	3.4	2.8	2.5
Less: Wage accruals less disbursements .....	0	0	0	0	0	0	0	0
<b>Surplus or deficit (-), national income and product accounts</b> .....	<b>-276.3</b>	<b>-226.4</b>	<b>-264.2</b>	<b>-263.5</b>	<b>-222.6</b>	<b>-212.7</b>	<b>-207.0</b>	.....
Social insurance funds .....	32.2	41.3	36.4	30.2	45.2	44.7	45.3	57.2
Other .....	-308.5	-267.8	-300.6	-293.7	-267.8	-257.4	-252.3	.....

**Table 3.3.—State and Local Government Receipts and Expenditures**

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1992		1993			
			IV	I	II	III	IV	
<b>Receipts</b> .....	<b>837.8</b>	<b>888.1</b>	<b>861.6</b>	<b>860.2</b>	<b>881.0</b>	<b>894.2</b>	<b>917.0</b>	.....
Personal tax and nontax receipts .....	154.0	160.3	158.8	155.0	160.3	162.0	164.1	166.6
Income taxes .....	116.7	120.8	120.8	116.4	121.0	122.1	123.6	125.5
Nontaxes .....	18.3	19.7	18.8	19.2	19.5	19.8	20.2	20.5
Other .....	19.0	19.9	19.2	19.5	19.8	20.0	20.3	20.6
Corporate profits tax accruals .....	26.0	31.0	27.9	28.5	30.8	30.1	34.4	.....
Indirect business tax and nontax accruals .....	421.5	443.1	432.2	434.1	440.0	445.7	452.7	456.7
Sales taxes .....	200.8	211.7	205.7	206.5	209.3	212.8	218.2	220.2
Property taxes .....	177.7	186.9	181.4	183.9	186.5	187.9	189.3	190.8
Other .....	43.0	44.5	45.1	43.6	44.3	45.0	45.2	45.7
Contributions for social insurance .....	64.9	67.4	65.9	66.5	67.2	67.7	68.3	69.0
Federal grants-in-aid .....	171.4	186.2	176.7	176.1	182.8	188.6	197.4	187.9
<b>Expenditures</b> .....	<b>830.6</b>	<b>886.2</b>	<b>848.0</b>	<b>859.4</b>	<b>880.0</b>	<b>895.9</b>	<b>909.7</b>	<b>916.7</b>
Purchases .....	683.0	714.6	691.4	697.0	711.1	721.2	729.2	730.3
Compensation of employees .....	457.3	480.1	465.6	472.1	477.7	483.0	487.6	492.9
Other .....	225.7	234.5	224.9	224.9	233.4	238.3	241.6	237.4
Transfer payments to persons .....	228.6	254.1	238.4	244.1	251.0	257.2	263.9	270.2
Net interest paid .....	-46.0	-45.3	-45.7	-45.5	-45.3	-45.2	-45.0	-44.9
Interest paid .....	66.1	68.7	67.1	67.7	68.4	69.0	69.6	70.2
Less: Interest received by government .....	112.1	113.9	112.8	113.2	113.7	114.2	114.6	115.1
Less: Dividends received by government .....	10.2	10.7	10.5	10.5	10.7	10.8	10.9	11.0
Subsidies less current surplus of government enterprises ..	-24.8	-26.5	-25.5	-25.8	-26.2	-26.7	-27.4	-27.9
Subsidies .....	.4	.5	.4	.4	.5	.5	.5	.5
Less: Current surplus of government enterprises ..	25.2	27.0	25.9	26.2	26.6	27.1	27.9	28.4
Less: Wage accruals less disbursements .....	0	0	0	0	0	0	0	0
<b>Surplus or deficit (-), national income and product accounts</b> .....	<b>7.2</b>	<b>1.8</b>	<b>13.5</b>	<b>.8</b>	<b>1.1</b>	<b>-1.7</b>	<b>7.2</b>	.....
Social insurance funds .....	59.4	58.6	59.6	59.0	58.9	58.5	57.9	57.2
Other .....	-52.2	-56.7	-46.0	-58.2	-57.8	-60.2	-50.7	.....

Table 3.7B.—Government Purchases by Type

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Government purchases</b>	<b>1,131.8</b>	<b>1,158.1</b>	<b>1,143.8</b>	<b>1,139.7</b>	<b>1,158.6</b>	<b>1,164.8</b>	<b>1,169.1</b>	<b>1,164.4</b>
<b>Federal</b>	<b>448.8</b>	<b>443.4</b>	<b>452.4</b>	<b>442.7</b>	<b>447.5</b>	<b>443.6</b>	<b>440.0</b>	<b>434.0</b>
<b>National defense</b>	<b>313.8</b>	<b>303.4</b>	<b>315.7</b>	<b>304.8</b>	<b>307.6</b>	<b>301.9</b>	<b>299.2</b>	<b>292.8</b>
Durable goods	79.0	70.6	78.9	74.4	75.3	67.4	65.1	62.2
Nondurable goods	10.3	9.4	9.8	9.0	10.2	9.3	9.1	8.0
Services	218.9	218.1	221.0	216.4	217.0	219.4	219.8	217.5
Compensation of employees	135.7	137.0	133.7	137.2	136.4	137.9	136.3	138.1
Military	90.7	91.0	89.2	91.5	91.2	90.7	90.5	91.6
Civilian	45.0	46.0	44.5	45.7	45.2	47.2	45.8	46.5
Other services	83.2	81.2	87.3	79.1	80.6	81.5	83.5	79.4
Structures	5.6	5.3	6.0	5.0	5.0	5.8	5.2	5.2
<b>Nondefense</b>	<b>135.0</b>	<b>140.1</b>	<b>136.7</b>	<b>137.9</b>	<b>140.0</b>	<b>141.7</b>	<b>140.7</b>	<b>141.2</b>
Durable goods	7.1	7.5	7.4	7.3	7.9	7.3	7.3	7.0
Nondurable goods	8.6	7.2	9.3	7.8	7.6	7.3	6.3	6.4
Commodity Credit Corporation inventory change	-7	-3	0	-4	-3	-2	-2	-2
Other nondurables	9.2	7.5	9.3	8.1	7.9	7.5	6.5	6.6
Services	109.0	114.6	109.7	112.2	114.3	116.1	115.6	116.9
Compensation of employees	64.1	70.0	65.0	69.0	69.8	70.4	70.8	72.6
Other services	44.9	44.6	44.7	43.2	44.6	45.7	44.8	44.3
Structures	10.3	10.8	10.3	10.5	10.1	11.0	11.5	10.9
<b>State and local</b>	<b>683.0</b>	<b>714.6</b>	<b>691.4</b>	<b>697.0</b>	<b>711.1</b>	<b>721.2</b>	<b>729.2</b>	<b>730.3</b>
Durable goods	37.6	39.3	38.2	38.7	39.2	39.7	39.8	40.4
Nondurable goods	60.2	62.2	60.7	61.7	63.0	62.3	61.9	63.0
Services	485.3	506.9	493.5	499.6	504.4	509.9	513.9	519.9
Compensation of employees	457.3	480.1	465.6	472.1	477.7	483.0	487.6	492.9
Other services	28.0	26.8	27.9	27.5	26.6	26.9	26.3	27.0
Structures	99.8	106.2	99.0	97.1	104.5	109.4	113.6	107.0

Table 3.10.—National Defense Purchases

[Billions of dollars]

<b>National defense purchases</b>	<b>313.8</b>	<b>303.4</b>	<b>315.7</b>	<b>304.8</b>	<b>307.6</b>	<b>301.9</b>	<b>299.2</b>	<b>292.8</b>
<b>Durable goods</b>	<b>79.0</b>	<b>70.6</b>	<b>78.9</b>	<b>74.4</b>	<b>75.3</b>	<b>67.4</b>	<b>65.1</b>	<b>62.2</b>
Military equipment	73.2	66.3	72.6	70.5	70.5	63.1	60.9	58.2
Aircraft	22.7	20.9	21.9	20.8	22.5	20.1	20.1	19.3
Missiles	14.3	12.1	14.2	13.5	12.9	11.6	10.4	10.4
Ships	12.1	10.7	11.6	11.1	11.3	10.0	10.1	9.1
Vehicles	3.8	3.0	3.9	4.2	3.2	2.3	2.1	2.2
Electronic equipment	6.6	6.3	7.1	6.6	6.8	6.4	5.6	5.5
Other	13.6	13.3	14.0	14.2	13.9	12.6	12.5	11.8
Other durable goods	5.8	4.3	6.3	3.9	4.8	4.3	4.2	4.0
<b>Nondurable goods</b>	<b>10.3</b>	<b>9.4</b>	<b>9.8</b>	<b>9.0</b>	<b>10.2</b>	<b>9.3</b>	<b>9.1</b>	<b>8.0</b>
Petroleum products	3.5	3.2	3.0	3.0	3.4	3.3	2.9	2.5
Ammunition	3.4	3.6	3.6	3.5	4.0	3.1	3.8	3.1
Other nondurable goods	3.4	2.7	3.2	2.5	2.7	2.9	2.5	2.4
<b>Services</b>	<b>218.9</b>	<b>218.1</b>	<b>221.0</b>	<b>216.4</b>	<b>217.0</b>	<b>219.4</b>	<b>219.8</b>	<b>217.5</b>
Compensation of employees	135.7	137.0	133.7	137.2	136.4	137.9	136.3	138.1
Military	90.7	91.0	89.2	91.5	91.2	90.7	90.5	91.6
Civilian	45.0	46.0	44.5	45.7	45.2	47.2	45.8	46.5
Other services	83.2	81.2	87.3	79.1	80.6	81.5	83.5	79.4
Contractual research and development	26.5	26.6	27.5	27.2	26.6	25.5	27.1	24.5
Installation support <sup>1</sup>	23.4	23.2	24.3	22.1	21.9	24.9	24.0	24.5
Weapons support <sup>2</sup>	10.0	9.1	10.0	9.1	9.6	9.1	8.6	8.1
Personnel support <sup>3</sup>	13.3	12.8	13.4	11.6	12.2	13.3	14.1	14.2
Transportation of material	5.8	5.2	6.1	5.0	5.3	5.6	5.0	4.5
Travel of persons	6.2	6.3	7.2	6.3	6.4	6.5	6.0	4.8
Other	-2.0	-2.1	-1.1	-2.2	-1.5	-3.3	-1.3	-1.3
<b>Structures</b>	<b>5.6</b>	<b>5.3</b>	<b>6.0</b>	<b>5.0</b>	<b>5.0</b>	<b>5.8</b>	<b>5.2</b>	<b>5.2</b>
Military facilities	3.5	3.2	3.8	3.0	3.0	3.6	3.0	3.0
Other	2.1	2.1	2.2	2.0	2.1	2.2	2.2	2.2

1. Includes utilities, communications, rental payments, maintenance and repair, and payments to contractors to operate installations.

2. Includes depot maintenance and contractual services for weapons systems, other than research and development.

3. Includes compensation of foreign personnel, consulting, training, and education.

Table 3.8B.—Government Purchases by Type in Constant Dollars

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Government purchases</b>	<b>945.2</b>	<b>938.9</b>	<b>946.9</b>	<b>931.3</b>	<b>941.1</b>	<b>941.7</b>	<b>941.7</b>	<b>926.8</b>
<b>Federal</b>	<b>373.0</b>	<b>354.9</b>	<b>373.7</b>	<b>357.6</b>	<b>359.4</b>	<b>353.7</b>	<b>349.0</b>	<b>338.0</b>
<b>National defense</b>	<b>261.2</b>	<b>242.4</b>	<b>261.3</b>	<b>246.0</b>	<b>246.4</b>	<b>240.1</b>	<b>237.1</b>	<b>228.4</b>
Durable goods	73.2	63.6	72.6	67.2	67.4	60.9	58.9	55.8
Nondurable goods	9.4	8.7	8.6	8.3	9.2	8.7	8.5	7.6
Services	173.6	165.6	174.7	166.1	165.5	165.4	165.3	160.6
Compensation of employees	100.9	95.8	99.0	97.7	96.4	95.3	93.8	93.1
Military	66.4	63.4	65.4	64.4	63.8	63.1	62.2	61.8
Civilian	34.5	32.4	33.7	33.3	32.7	32.2	31.6	31.3
Other services	72.7	69.8	75.7	68.4	69.0	70.1	71.5	67.6
Structures	5.0	4.5	5.3	4.4	4.4	5.0	4.4	4.3
<b>Nondefense</b>	<b>111.8</b>	<b>112.5</b>	<b>112.4</b>	<b>111.5</b>	<b>113.0</b>	<b>113.7</b>	<b>111.8</b>	<b>109.6</b>
Durable goods	7.5	8.1	7.9	7.8	8.4	8.1	8.2	7.3
Nondurable goods	7.9	6.5	8.4	7.2	6.9	6.4	5.4	5.6
Commodity Credit Corporation inventory change	-4	-3	0	-2	-2	-3	-3	-2
Other nondurables	8.3	6.8	8.4	7.4	7.1	6.7	5.8	5.8
Services	87.4	88.6	87.2	87.3	88.9	89.8	88.4	87.4
Compensation of employees	49.6	51.3	49.8	51.0	51.4	51.6	51.3	50.8
Other services	37.8	37.3	37.4	36.3	37.4	38.2	37.2	36.7
Structures	9.0	9.2	8.9	9.1	8.7	9.4	9.8	9.6
<b>State and local</b>	<b>572.2</b>	<b>584.0</b>	<b>573.2</b>	<b>573.7</b>	<b>581.6</b>	<b>588.0</b>	<b>592.8</b>	<b>588.9</b>
Durable goods	33.3	34.1	33.6	33.8	34.0	34.3	34.5	34.7
Nondurable goods	52.1	53.5	52.7	53.0	53.4	53.8	54.0	54.4
Services	395.8	402.6	398.2	400.1	401.9	403.4	405.0	406.4
Compensation of employees	359.0	363.9	361.0	362.0	363.4	364.5	365.7	366.7
Other services	36.7	38.7	37.3	38.1	38.4	38.9	39.3	39.7
Structures	91.1	93.8	88.6	86.9	92.4	96.5	99.3	93.3

Table 3.11.—National Defense Purchases in Constant Dollars

[Billions of 1987 dollars]

<b>National defense purchases</b>	<b>261.2</b>	<b>242.4</b>	<b>261.3</b>	<b>246.0</b>	<b>246.4</b>	<b>240.1</b>	<b>237.1</b>	<b>228.4</b>
<b>Durable goods</b>	<b>73.2</b>	<b>63.6</b>	<b>72.6</b>	<b>67.2</b>	<b>67.4</b>	<b>60.9</b>	<b>58.9</b>	<b>55.8</b>
Military equipment	67.1	58.7	66.3	62.9	62.1	55.9	53.9	51.6
Aircraft	20.2	17.5	19.0	17.7	18.8	16.6	16.7	15.7
Missiles	15.3	12.7	15.7	14.1	13.2	12.4	11.2	11.6
Ships	10.3	8.9	9.8	9.3	9.5	8.3	8.4	7.5
Vehicles	3.4	2.5	3.4	3.6	2.6	2.0	1.8	1.9
Electronic equipment	6.1	5.8	6.5	6.0	6.2	5.9	5.1	5.0
Other	11.8	11.4	11.9	12.1	11.8	10.8	10.7	10.0
Other durable goods	6.1	4.9	6.4	4.4	5.3	5.0	5.0	4.2
<b>Nondurable goods</b>	<b>9.4</b>	<b>8.7</b>	<b>8.6</b>	<b>8.3</b>	<b>9.2</b>	<b>8.7</b>	<b>8.5</b>	<b>7.6</b>
Petroleum products	2.9	2.8	2.4	2.7	2.9	2.9	2.6	2.5
Ammunition	3.5	3.6	3.3	3.4	3.9	3.1	3.8	2.8
Other nondurable goods	3.0	2.4	2.9	2.2	2.4	2.7	2.2	2.2
<b>Services</b>	<b>173.6</b>	<b>165.6</b>	<b>174.7</b>	<b>166.1</b>	<b>165.5</b>	<b>165.4</b>	<b>165.3</b>	<b>160.6</b>
Compensation of employees	100.9	95.8	99.0	97.7	96.4	95.3	93.8	93.1
Military	66.4	63.4	65.4	64.4	63.8	63.1	62.2	61.8
Civilian	34.5	32.4	33.7	33.3	32.7	32.2	31.6	31.3
Other services	72.7	69.8	75.7	68.4	69.0	70.1	71.5	67.6
Contractual research and development	23.6	23.4	24.1	23.8	23.4	22.4	24.2	21.7
Installation support <sup>1</sup>	20.6	20.1	21.2	19.4	19.1	21.4	20.5	21.0
Weapons support <sup>2</sup>	8.4	7.4	8.2	7.4	7.8	7.4	6.9	6.4
Personnel support <sup>3</sup>	10.0	9.6	9.9	8.7	9.1	10.0	10.6	10.6
Transportation of material	6.1	5.4	6.6	5.3	5.4	5.8	5.3	4.6
Travel of persons	5.6	5.4	6.4	5.4	5.5	5.6	5.1	4.1
Other	-1.6	-1.6	-8	-1.6	-1.1	-2.5	-1.0	-9
<b>Structures</b>	<b>5.0</b>	<b>4.5</b>	<b>5.3</b>	<b>4.4</b>	<b>4.4</b>	<b>5.0</b>	<b>4.4</b>	<b>4.3</b>
Military facilities	3.3	2.9	3.5	2.8	2.8	3.3	2.8	2.7
Other	1.7	1.6	1.8	1.6	1.6	1.7	1.7	1.6

**Table 4.1.—Foreign Transactions in the National Income and Product Accounts**

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	
<b>Receipts from rest of the world</b>	<b>769.7</b>	<b>793.4</b>	<b>777.0</b>	<b>774.1</b>	<b>791.8</b>	<b>788.3</b>	<b>819.6</b>	.....
Exports of goods and services	640.5	661.7	654.7	651.3	660.0	653.2	682.4	668.8
Merchandise <sup>1</sup>	448.7	461.5	462.0	453.2	458.6	452.2	482.0	465.8
Durable	300.8	314.6	311.1	306.9	314.0	307.4	330.2	321.7
Nondurable	147.9	146.9	150.9	146.3	144.6	144.8	151.8	144.1
Services <sup>1</sup>	191.7	200.2	192.8	198.0	201.3	200.9	200.4	203.0
Receipts of factor income <sup>2</sup>	129.2	131.7	122.3	122.8	131.9	135.1	137.2	.....
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0
<b>Payments to rest of the world</b>	<b>769.7</b>	<b>793.4</b>	<b>777.0</b>	<b>774.1</b>	<b>791.8</b>	<b>788.3</b>	<b>819.6</b>	.....
Imports of goods and services	670.1	725.3	693.5	699.6	725.0	725.1	751.5	751.2
Merchandise <sup>1</sup>	544.5	592.1	564.7	569.6	592.6	591.9	614.2	614.6
Durable	346.3	385.7	359.7	368.8	379.5	384.5	409.8	414.6
Nondurable	198.2	206.4	205.1	200.7	213.1	207.3	204.4	200.0
Services <sup>1</sup>	125.6	133.2	128.7	130.0	132.4	133.3	137.2	136.6
Payments of factor income <sup>3</sup>	121.9	131.6	124.8	122.4	132.3	128.7	142.8	.....
Transfer payments (net)	32.7	32.8	41.2	29.7	29.9	30.9	40.8	30.8
From persons (net)	10.4	11.0	10.5	11.0	11.0	10.8	11.2	11.7
From government (net)	16.3	15.8	24.6	13.1	12.9	13.7	23.5	12.8
From business	6.0	6.0	6.1	5.6	6.0	6.3	6.0	6.3
Net foreign investment	-55.1	-96.2	-82.4	-77.6	-95.4	-96.4	-115.5	.....

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

2. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. corporations.

3. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.

**Table 4.3.—Exports and Imports of Merchandise by End-Use Category**

(Billions of dollars)

	1992	1993	1994	1995	1996	1997	1998
<b>Exports of merchandise</b>	<b>448.7</b>	<b>461.5</b>	<b>462.0</b>	<b>453.2</b>	<b>458.6</b>	<b>452.2</b>	<b>482.0</b>
Foods, feeds, and beverages	40.3	40.5	41.9	40.8	39.6	38.9	42.6
Industrial supplies and materials	105.2	103.2	104.9	103.0	103.0	102.4	104.3
Durable goods	36.9	37.6	37.2	37.2	37.6	38.1	37.6
Nondurable goods	68.4	65.5	67.7	65.8	65.4	64.2	66.7
Capital goods, except automotive	176.9	183.4	182.0	177.8	183.3	178.5	193.8
Civilian aircraft, engines, and parts	37.7	32.8	37.1	33.1	36.4	27.1	34.5
Computers, peripherals, and parts	28.8	29.3	30.0	28.8	28.0	29.6	30.7
Other	110.4	121.3	114.9	115.9	118.8	121.9	128.6
Automotive vehicles, engines, and parts	47.1	51.6	50.9	51.2	51.3	48.4	55.6
Consumer goods, except automotive	50.4	53.6	53.3	51.5	52.2	54.2	56.6
Durable goods	25.6	27.4	26.5	26.3	27.2	27.5	28.7
Nondurable goods	24.8	26.2	26.8	25.2	25.1	26.7	27.9
Other	28.9	29.3	28.9	28.8	29.3	29.1	28.9
Durable goods	14.5	14.6	14.5	14.4	14.6	14.9	14.6
Nondurable goods	14.5	14.6	14.5	14.4	14.6	14.9	14.6
<b>Imports of merchandise</b>	<b>544.5</b>	<b>592.1</b>	<b>564.7</b>	<b>569.6</b>	<b>592.6</b>	<b>591.9</b>	<b>614.2</b>
Foods, feeds, and beverages	27.9	28.1	27.6	27.4	27.5	28.3	29.0
Industrial supplies and materials, except petroleum and products	82.3	89.1	84.2	86.4	87.3	89.0	93.6
Durable goods	39.5	43.6	40.3	41.7	41.1	43.3	48.2
Nondurable goods	42.8	45.5	43.9	44.8	46.2	45.7	45.3
Petroleum and products	51.6	51.5	54.9	51.0	57.3	50.2	47.5
Capital goods, except automotive	134.2	152.3	141.8	142.6	150.7	152.6	163.1
Civilian aircraft, engines, and parts	12.6	11.3	13.0	10.5	11.8	10.5	12.4
Computers, peripherals, and parts	31.8	38.2	34.6	35.9	37.2	39.0	40.5
Other	89.8	102.8	94.2	96.2	101.7	103.1	110.2
Automotive vehicles, engines, and parts	91.8	102.4	95.1	100.5	102.1	100.1	106.9
Consumer goods, except automotive	123.0	134.3	126.5	128.9	132.9	137.6	137.7
Durable goods	63.9	70.2	65.2	67.7	68.2	71.5	73.3
Nondurable goods	59.1	64.1	61.3	61.2	64.7	66.4	64.1
Other	33.8	34.5	34.8	32.7	34.8	33.9	36.6
Durable goods	16.9	17.3	17.4	16.4	17.4	17.0	18.3
Nondurable goods	16.9	17.3	17.4	16.4	17.4	17.0	18.3
<b>Addenda:</b>							
Exports of agricultural products <sup>1</sup>	44.0	43.6	45.5	43.4	43.1	42.4	45.4
Exports of nonagricultural products	404.7	418.0	416.4	409.9	415.5	409.8	436.6
Imports of nonpetroleum products	492.9	540.6	509.9	518.5	535.3	541.7	566.8

1. Includes parts of: exports of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable consumer goods, except automotive.

**Table 4.2.—Exports and Imports of Goods and Services and Receipts and Payments of Factor Income in Constant Dollars**

(Billions of 1987 dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	
<b>Exports of goods and services</b>	<b>578.0</b>	<b>598.3</b>	<b>591.6</b>	<b>588.0</b>	<b>593.2</b>	<b>591.9</b>	<b>620.0</b>	<b>605.0</b>
Merchandise <sup>1</sup>	422.7	440.5	437.3	430.2	434.5	434.1	463.0	446.7
Durable	288.0	306.5	300.0	296.5	302.4	302.2	324.9	318.0
Nondurable	134.7	134.0	137.3	133.7	132.1	131.9	138.1	128.8
Services <sup>1</sup>	155.4	157.8	154.3	157.8	158.6	157.8	157.0	158.3
<b>Receipts of factor income<sup>2</sup></b>	<b>105.5</b>	<b>104.7</b>	<b>98.9</b>	<b>98.3</b>	<b>105.0</b>	<b>107.1</b>	<b>108.5</b>	.....
<b>Imports of goods and services</b>	<b>611.6</b>	<b>674.8</b>	<b>630.3</b>	<b>647.9</b>	<b>668.4</b>	<b>678.2</b>	<b>704.5</b>	<b>709.3</b>
Merchandise <sup>1</sup>	511.9	571.4	530.3	545.9	565.7	574.9	598.9	604.0
Durable	332.5	379.5	348.0	360.5	372.1	381.0	404.5	410.6
Nondurable	179.4	191.8	182.4	185.5	193.6	193.9	194.4	193.4
Services <sup>1</sup>	99.7	103.4	100.0	102.0	102.7	103.3	105.6	105.3
<b>Payments of factor income<sup>3</sup></b>	<b>97.7</b>	<b>102.2</b>	<b>98.8</b>	<b>95.8</b>	<b>103.0</b>	<b>99.6</b>	<b>110.4</b>	.....

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

2. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. corporations.

3. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.

**Table 4.4.—Exports and Imports of Merchandise by End-Use Category in Constant Dollars**

(Billions of 1987 dollars)

	1992	1993	1994	1995	1996	1997	1998
<b>Exports of merchandise</b>	<b>422.7</b>	<b>440.5</b>	<b>437.3</b>	<b>430.2</b>	<b>434.5</b>	<b>434.1</b>	<b>463.0</b>
Foods, feeds, and beverages	35.7	35.4	37.7	36.4	35.2	33.7	36.4
Industrial supplies and materials	97.5	95.1	96.6	94.7	94.0	94.3	97.4
Durable goods	32.1	31.1	31.9	31.1	30.6	31.4	31.2
Nondurable goods	65.4	64.0	64.7	63.6	63.4	63.0	66.2
Capital goods, except automotive	178.4	192.7	186.8	184.3	189.5	190.5	203.5
Civilian aircraft, engines, and parts	30.9	26.1	30.0	26.6	29.0	21.6	27.2
Computers, peripherals, and parts	51.0	60.8	56.4	55.9	57.0	62.5	67.6
Other	96.6	105.8	100.5	101.8	103.4	106.3	111.7
Automotive vehicles, engines, and parts	41.9	45.6	45.1	45.3	45.3	42.8	49.1
Consumer goods, except automotive	43.5	45.9	45.5	44.1	44.9	46.5	48.2
Durable goods	22.7	24.3	23.4	23.2	24.1	24.4	25.4
Nondurable goods	20.8	21.7	22.2	21.0	20.8	22.1	22.8
Other	25.6	25.7	25.5	25.4	25.7	26.3	25.5
Durable goods	12.8	12.9	12.8	12.7	12.8	13.1	12.8
Nondurable goods	12.8	12.9	12.8	12.7	12.8	13.1	12.8
<b>Imports of merchandise</b>	<b>511.9</b>	<b>571.4</b>	<b>530.3</b>	<b>545.9</b>	<b>565.7</b>	<b>574.9</b>	<b>598.9</b>
Foods, feeds, and beverages	26.0	25.8	25.6	26.1	25.6	25.7	25.8
Industrial supplies and materials, except petroleum and products	72.0	78.0	73.3	75.3	76.0	78.8	81.9
Durable goods	34.1	37.2	34.8	35.3	34.9	37.6	41.1
Nondurable goods	37.9	40.8	38.5	40.0	41.1	41.1	40.8
Petroleum and products	51.2	56.5	52.8	53.4	57.8	56.7	58.1
Capital goods, except automotive	148.4	179.3	160.0	165.3	175.8	181.4	194.5
Civilian aircraft, engines, and parts	10.3	9.0	10.5	8.5	9.4	8.4	9.8
Computers, peripherals, and parts	59.7	82.5	68.2	73.1	79.0	85.8	92.0
Other	78.3	87.8	81.3	83.8	87.4	87.2	92.7
Automotive vehicles, engines, and parts	79.7	87.4	81.9	87.0	87.4	85.3	89.8
Consumer goods, except automotive	105.2	114.7	106.7	110.2	113.0	117.8	117.5
Durable goods	55.6	60.8	56.2	58.6	58.9	62.0	63.6
Nondurable goods	49.6	53.9	50.5	51.6	54.1	55.8	54.0
Other	29.5	29.7	30.1	28.5	30.0	29.3	31.2
Durable goods	14.7	14.9	15.0	14.2	15.0	14.6	15.3
Nondurable goods	14.7	14.9	15.0	14.2	15.0	14.6	15.3
<b>Addenda:</b>							
Exports of agricultural products <sup>1</sup>	39.7	38.5	41.1	38.7	38.8	37.3	39.1
Exports of nonagricultural products	382.9	402.0	396.1	391.5	395.7	396.8	423.9
Imports of nonpetroleum products	460.8	514.8	477.6	492.5	507.9	518.2	540.7

1. Includes parts of: exports of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable consumer goods, except automotive.

Table 5.1.—Gross Saving and Investment

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1992	1993				
			IV	I	II	III	IV	
<b>Gross saving</b> .....	<b>717.8</b>	<b>780.2</b>	<b>718.8</b>	<b>762.0</b>	<b>766.7</b>	<b>774.3</b>	<b>817.8</b>	.....
<b>Gross private saving</b> .....	<b>986.9</b>	<b>1,004.8</b>	<b>969.4</b>	<b>1,024.8</b>	<b>988.3</b>	<b>988.7</b>	<b>1,017.5</b>	.....
Personal saving .....	238.7	189.9	279.7	177.9	208.7	179.7	193.4	182.0
Undistributed corporate profits with inventory valuation and capital consumption adjustments .....	110.4	123.6	121.7	103.7	116.3	129.3	145.1	.....
Undistributed profits .....	98.6	106.4	92.0	91.4	103.9	104.6	125.6	.....
Inventory valuation adjustment .....	-5.3	-7.1	4.9	-12.7	-12.2	1.0	-4.3	-17.7
Capital consumption adjustment .....	17.1	24.3	24.7	25.1	24.7	23.8	23.9	20.6
Corporate consumption of fixed capital .....	396.6	408.8	396.5	402.2	405.2	414.0	413.9	432.8
Noncorporate consumption of fixed capital .....	261.3	262.5	251.5	261.0	258.1	265.7	265.1	301.7
Wage accruals less disbursements .....	-20.0	20.0	-80.0	80.0	0	0	0	0
<b>Government surplus or deficit (-), national income and product accounts</b> .....	<b>-269.1</b>	<b>-224.6</b>	<b>-250.6</b>	<b>-262.8</b>	<b>-221.5</b>	<b>-214.4</b>	<b>-199.7</b>	.....
Federal .....	-276.3	-226.4	-264.2	-263.5	-222.6	-212.7	-207.0	.....
State and local .....	7.2	1.8	13.5	.8	1.1	-1.7	7.2	.....
<b>Capital grants received by the United States (net)</b> .....	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Gross investment</b> .....	<b>741.4</b>	<b>795.4</b>	<b>750.9</b>	<b>796.5</b>	<b>778.7</b>	<b>787.6</b>	<b>819.0</b>	.....
Gross private domestic investment .....	796.5	891.7	833.3	874.1	874.1	884.0	934.5	978.0
Net foreign investment .....	-55.1	-96.2	-82.4	-77.6	-95.4	-96.4	-115.5	.....
<b>Statistical discrepancy</b> .....	<b>23.6</b>	<b>15.2</b>	<b>32.1</b>	<b>34.4</b>	<b>12.0</b>	<b>13.3</b>	<b>1.2</b>	.....

Table 5.4.—Fixed Investment by Type

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1992	1993				
			IV	I	II	III	IV	
<b>Fixed investment</b> .....	<b>789.1</b>	<b>876.1</b>	<b>821.3</b>	<b>839.5</b>	<b>861.0</b>	<b>876.3</b>	<b>927.6</b>	<b>943.8</b>
<b>Nonresidential</b> .....	<b>565.5</b>	<b>623.7</b>	<b>579.5</b>	<b>594.7</b>	<b>619.1</b>	<b>624.9</b>	<b>656.0</b>	<b>664.7</b>
<b>Structures</b> .....	<b>172.6</b>	<b>178.7</b>	<b>171.1</b>	<b>172.4</b>	<b>177.6</b>	<b>179.1</b>	<b>185.8</b>	<b>178.9</b>
Nonresidential buildings, including farm .....	114.6	119.4	111.9	114.8	117.1	119.6	125.9	122.5
Utilities .....	35.8	36.5	36.9	35.1	36.6	36.6	37.8	35.4
Mining exploration, shafts, and wells .....	12.4	13.7	12.6	12.8	14.0	14.4	13.5	13.3
Other structures .....	9.8	9.2	9.7	9.7	9.8	8.6	8.6	7.8
<b>Producers' durable equipment</b> .....	<b>392.9</b>	<b>445.0</b>	<b>408.3</b>	<b>422.2</b>	<b>441.6</b>	<b>445.8</b>	<b>470.2</b>	<b>485.8</b>
Information processing and related equipment .....	135.5	151.9	139.7	142.7	147.0	154.6	163.4	168.1
Computers and peripheral equipment <sup>1</sup> .....	39.8	48.1	40.7	45.8	46.1	49.5	50.9	52.3
Other .....	95.7	103.9	98.9	96.9	100.9	105.1	112.5	115.8
Industrial equipment .....	87.2	97.8	91.2	92.4	95.9	98.7	104.0	108.0
Transportation and related equipment .....	90.7	105.4	96.1	101.3	110.1	101.9	108.3	113.7
Other .....	79.5	89.9	81.3	85.8	88.5	90.6	94.5	95.9
<b>Residential</b> .....	<b>223.6</b>	<b>252.4</b>	<b>241.8</b>	<b>244.9</b>	<b>241.9</b>	<b>251.3</b>	<b>271.6</b>	<b>279.1</b>
<b>Structures</b> .....	<b>216.3</b>	<b>244.6</b>	<b>234.3</b>	<b>237.3</b>	<b>234.2</b>	<b>243.4</b>	<b>263.5</b>	<b>271.1</b>
Single family .....	116.5	133.8	124.3	132.4	127.5	131.1	144.0	151.7
Multifamily .....	13.1	10.8	11.7	10.3	10.3	11.4	11.1	10.9
Other structures .....	86.7	100.1	98.3	94.6	96.4	100.9	108.4	108.5
<b>Producers' durable equipment</b> .....	<b>7.3</b>	<b>7.8</b>	<b>7.5</b>	<b>7.5</b>	<b>7.6</b>	<b>7.9</b>	<b>8.1</b>	<b>8.0</b>

1. Includes new computers and peripheral equipment only.

Table 5.5.—Fixed Investment by Type in Constant Dollars

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1992	1993				
			IV	I	II	III	IV	
<b>Fixed investment</b> .....	<b>726.4</b>	<b>806.0</b>	<b>754.3</b>	<b>773.7</b>	<b>790.6</b>	<b>806.9</b>	<b>852.9</b>	<b>866.2</b>
<b>Nonresidential</b> .....	<b>529.2</b>	<b>591.8</b>	<b>543.7</b>	<b>562.3</b>	<b>584.3</b>	<b>594.8</b>	<b>625.7</b>	<b>634.1</b>
<b>Structures</b> .....	<b>150.6</b>	<b>151.5</b>	<b>148.0</b>	<b>148.2</b>	<b>151.1</b>	<b>151.2</b>	<b>155.6</b>	<b>148.9</b>
Nonresidential buildings, including farm .....	100.8	101.8	97.5	99.3	100.5	101.5	106.0	102.6
Utilities .....	30.9	30.6	31.6	29.9	30.6	30.5	31.2	29.0
Mining exploration, shafts, and wells .....	10.0	11.1	10.3	10.4	11.4	11.7	10.9	10.6
Other structures .....	8.9	8.1	8.6	8.6	8.7	7.5	7.5	6.8
<b>Producers' durable equipment</b> .....	<b>378.6</b>	<b>440.2</b>	<b>395.7</b>	<b>414.1</b>	<b>433.2</b>	<b>443.6</b>	<b>470.0</b>	<b>485.1</b>
Information processing and related equipment .....	159.9	195.2	168.5	178.6	186.8	200.9	214.6	222.4
Computers and peripheral equipment <sup>1</sup> .....	71.2	100.4	77.2	89.5	94.5	105.1	112.4	117.2
Other .....	88.7	94.8	91.3	89.0	92.3	95.9	102.2	105.2
Industrial equipment .....	72.7	80.2	75.7	76.7	78.8	80.5	84.7	87.9
Transportation and related equipment .....	77.7	88.8	82.1	85.7	92.8	85.7	91.0	94.1
Other .....	68.3	76.1	69.4	73.2	74.9	76.5	79.7	80.7
<b>Residential</b> .....	<b>197.1</b>	<b>214.2</b>	<b>210.6</b>	<b>211.4</b>	<b>206.2</b>	<b>212.1</b>	<b>227.2</b>	<b>232.2</b>
<b>Structures</b> .....	<b>190.1</b>	<b>206.8</b>	<b>203.3</b>	<b>204.1</b>	<b>198.9</b>	<b>204.6</b>	<b>219.6</b>	<b>224.6</b>
Single family .....	102.7	113.1	107.9	113.9	108.7	110.0	119.6	125.6
Multifamily .....	11.8	9.3	10.4	9.1	9.0	9.8	9.4	9.3
Other structures .....	75.6	84.4	85.0	81.1	81.2	84.8	90.5	89.7
<b>Producers' durable equipment</b> .....	<b>7.0</b>	<b>7.4</b>	<b>7.2</b>	<b>7.3</b>	<b>7.3</b>	<b>7.5</b>	<b>7.7</b>	<b>7.6</b>

1. Includes new computers and peripheral equipment only.

Table 5.10.—Change in Business Inventories by Industry

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Change in business inventories</b>	<b>7.3</b>	<b>15.6</b>	<b>12.0</b>	<b>34.6</b>	<b>13.1</b>	<b>7.7</b>	<b>6.9</b>	<b>34.2</b>
Farm .....	5.0	-5.5	2.4	1.5	-3.7	-14.9	-5.0	.5
Nonfarm .....	2.3	21.1	9.5	33.0	16.8	22.6	12.0	33.7
Change in book value .....	8.8	31.2	3.3	51.7	34.8	21.9	16.2	57.4
Inventory valuation adjustment .....	-6.4	-10.1	6.2	-18.7	-18.0	.7	-4.3	-23.7
Manufacturing .....	-6.0	-8	-14.2	-1.8	4.2	2.9	-8.7	7.2
Durable goods .....	-10.6	-1.7	-17.0	-5.5	.4	2.6	-4.3	5.3
Nondurable goods .....	4.6	.9	2.8	3.7	3.9	.2	-4.4	1.8
Wholesale trade .....	6.1	4.2	13.5	.7	6.8	7.7	1.4	4.6
Durable goods .....	3.9	1.3	3.8	-3.2	.6	7.0	1.0	7.2
Nondurable goods .....	2.2	2.8	9.7	3.9	6.3	.7	.4	-2.6
Merchant wholesalers .....	6.3	3.9	15.0	-.3	6.1	10.0	0	2.3
Durable goods .....	4.4	1.0	5.5	-3.7	1.8	6.2	-.2	5.4
Nondurable goods .....	1.8	2.9	9.5	3.5	4.2	3.7	-.2	-3.1
Nonmerchant wholesalers .....	-.2	.2	-1.5	.9	.8	-2.2	1.4	2.3
Durable goods .....	-.5	.3	-1.7	.5	-1.3	.8	1.2	1.8
Nondurable goods .....	.3	-.1	.2	.4	2.0	-3.0	.2	.5
Retail trade .....	6.5	12.2	10.5	27.6	3.0	5.3	12.8	13.8
Durable goods .....	4.8	8.7	6.5	21.9	.4	-.4	12.9	12.3
Automotive .....	-.7	3.2	-1.9	19.0	-.6	-8.4	2.9	7.5
Other .....	5.5	5.5	8.4	2.9	1.0	8.0	10.0	4.8
Nondurable goods .....	1.6	3.5	4.0	5.8	2.6	5.7	-.1	1.6
Other .....	-4.3	5.6	-.2	6.5	2.8	6.7	6.5	8.1
Durable goods .....	3.8	2.6	5.5	1.9	1.4	5.6	1.4	5.3
Nondurable goods .....	-8.1	3.0	-5.8	4.6	1.4	1.1	5.1	2.8

Table 5.11.—Change in Business Inventories by Industry in Constant Dollars

(Billions of 1987 dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Change in business inventories</b>	<b>6.5</b>	<b>14.3</b>	<b>8.7</b>	<b>29.3</b>	<b>13.0</b>	<b>6.5</b>	<b>8.5</b>	<b>30.5</b>
Farm .....	3.8	-5.3	1.2	0	-4.1	-12.9	-4.4	-.2
Nonfarm .....	2.7	19.7	7.5	29.3	17.1	19.4	12.9	30.7
Manufacturing .....	-4.7	5	-12.5	-.8	5.0	3.1	-5.3	7.8
Durable goods .....	-8.9	-.5	-15.1	-4.6	1.4	2.8	-1.7	5.5
Nondurable goods .....	4.2	1.0	2.6	3.8	3.6	.3	-3.6	2.3
Wholesale trade .....	5.4	3.7	10.7	.7	6.6	6.4	1.2	4.8
Durable goods .....	3.6	1.3	3.4	-2.8	.6	6.3	1.1	6.6
Nondurable goods .....	1.8	2.4	7.3	3.6	6.1	.1	0	-1.9
Merchant wholesalers .....	5.6	3.5	12.8	-.1	5.9	8.5	-.4	2.6
Durable goods .....	4.0	.9	5.0	-3.3	1.7	5.6	-.3	4.8
Nondurable goods .....	1.6	2.5	7.7	3.2	4.2	2.9	-.1	-2.3
Nonmerchant wholesalers .....	-.2	.3	-2.1	.8	.7	-2.1	1.6	2.2
Durable goods .....	-.4	.4	-1.6	.4	-1.2	.8	1.4	1.8
Nondurable goods .....	.3	-.1	-.4	.4	1.8	-2.8	.2	.4
Retail trade .....	5.9	10.7	9.7	24.0	3.0	4.8	11.1	11.5
Durable goods .....	4.3	7.6	5.9	18.9	.8	-.1	11.0	10.3
Automotive .....	-.6	2.9	-1.7	16.6	-.5	-7.1	2.4	6.2
Other .....	4.9	4.8	7.6	2.3	1.2	7.0	8.6	4.1
Nondurable goods .....	1.6	3.1	3.8	5.1	2.3	4.9	.1	1.2
Other .....	-3.9	4.7	-.4	5.4	2.4	5.0	5.9	6.5
Durable goods .....	3.4	2.2	4.9	1.6	1.2	4.8	1.2	4.4
Nondurable goods .....	-7.3	2.5	-5.3	3.8	1.2	.2	4.7	2.2

Table 5.12.—Inventories and Final Sales of Domestic Business by Industry

(Billions of dollars)

	Seasonally adjusted quarterly totals					
	1992	1993				1994
	IV	I	II	III	IV	I
<b>Inventories<sup>1</sup></b> .....	<b>1,099.0</b>	<b>1,119.5</b>	<b>1,119.6</b>	<b>1,130.9</b>	<b>1,134.8</b>	<b>1,149.9</b>
Farm .....	95.1	99.1	95.4	95.1	92.7	95.6
Nonfarm .....	1,003.9	1,020.4	1,024.2	1,035.8	1,042.1	1,054.3
Durable goods .....	580.9	590.7	592.1	600.3	607.5	618.0
Nondurable goods .....	423.0	429.7	432.2	435.5	434.6	436.3
Manufacturing .....	400.9	402.0	402.4	407.0	405.0	407.7
Durable goods .....	251.0	250.8	250.7	254.2	253.8	256.6
Nondurable goods .....	149.9	151.2	151.7	152.8	151.2	151.1
Wholesale trade .....	247.9	249.6	251.3	254.6	256.7	258.9
Durable goods .....	155.4	155.9	156.6	159.1	160.3	163.1
Nondurable goods .....	92.5	93.7	94.7	95.5	96.4	95.8
Merchant wholesalers .....	221.4	222.6	224.1	227.6	229.4	230.6
Durable goods .....	139.4	139.5	140.5	142.5	143.3	145.3
Nondurable goods .....	82.0	83.1	83.7	85.0	86.0	85.3
Nonmerchant wholesalers .....	26.5	27.0	27.2	27.0	27.3	28.3
Durable goods .....	16.0	16.4	16.1	16.6	17.0	17.8
Nondurable goods .....	10.4	10.6	11.1	10.4	10.4	10.5
Retail trade .....	269.5	280.1	281.2	282.7	286.6	291.4
Durable goods .....	129.4	137.0	138.0	138.2	143.0	146.4
Automotive .....	62.5	68.2	69.3	66.9	68.5	70.7
Other .....	67.0	68.7	68.7	71.3	74.5	75.8
Nondurable goods .....	140.1	143.1	143.3	144.5	143.6	145.0
Other .....	85.6	88.7	89.3	91.5	93.8	96.3
<b>Final sales of domestic business<sup>2</sup></b> .....	<b>436.9</b>	<b>439.0</b>	<b>445.5</b>	<b>450.7</b>	<b>461.1</b>	<b>464.5</b>
<b>Final sales of goods and structures of domestic business<sup>2</sup></b> .....	<b>240.5</b>	<b>240.4</b>	<b>243.9</b>	<b>245.9</b>	<b>253.8</b>	<b>254.9</b>
<b>Ratio of inventories to final sales of domestic business</b>						
Inventories to final sales .....	2.52	2.55	2.51	2.51	2.46	2.48
Nonfarm inventories to final sales .....	2.30	2.32	2.30	2.30	2.26	2.27
Nonfarm inventories to final sales of goods and structures .....	4.17	4.24	4.20	4.21	4.11	4.14

Table 5.13.—Inventories and Final Sales of Domestic Business by Industry in Constant Dollars

(Billions of 1987 dollars)

	Seasonally adjusted quarterly totals					
	1992	1993				1994
	IV	I	II	III	IV	I
<b>Inventories<sup>1</sup></b> .....	<b>985.3</b>	<b>992.6</b>	<b>995.9</b>	<b>997.5</b>	<b>999.6</b>	<b>1,007.2</b>
Farm .....	88.1	88.1	87.1	83.9	82.8	82.7
Nonfarm .....	897.2	904.5	908.8	913.6	916.8	924.5
Durable goods .....	525.3	528.6	529.6	533.0	535.9	542.7
Nondurable goods .....	371.8	375.9	379.2	380.6	380.9	381.8
Manufacturing .....	365.9	365.7	366.9	367.7	366.4	368.4
Durable goods .....	231.9	230.7	231.1	231.8	231.4	232.8
Nondurable goods .....	134.0	135.0	135.8	135.9	135.0	135.6
Wholesale trade .....	217.7	217.9	219.6	221.2	221.5	222.7
Durable goods .....	138.5	137.8	138.0	139.5	139.8	141.5
Nondurable goods .....	79.2	80.1	81.6	81.6	81.7	81.2
Merchant wholesalers .....	193.8	193.8	195.3	197.4	197.3	197.9
Durable goods .....	124.0	123.1	123.6	125.0	124.9	126.1
Nondurable goods .....	69.8	70.6	71.7	72.4	72.4	71.8
Nonmerchant wholesalers .....	23.9	24.2	24.3	23.8	24.2	24.7
Durable goods .....	14.6	14.7	14.4	14.6	14.9	15.4
Nondurable goods .....	9.4	9.5	9.9	9.2	9.3	9.4
Retail trade .....	236.4	242.4	243.2	244.4	247.1	250.0
Durable goods .....	115.2	119.9	120.1	120.1	122.9	125.4
Automotive .....	56.5	60.6	60.5	58.7	59.4	60.9
Other .....	58.7	59.3	59.6	61.4	63.5	64.5
Nondurable goods .....	121.2	122.5	123.0	124.2	124.3	124.6
Other .....	77.1	78.5	79.1	80.3	81.8	83.5
<b>Final sales of domestic business<sup>2</sup></b> .....	<b>361.5</b>	<b>360.4</b>	<b>363.4</b>	<b>366.8</b>	<b>373.9</b>	<b>374.7</b>
<b>Final sales of goods and structures of domestic business<sup>2</sup></b> .....	<b>208.6</b>	<b>207.0</b>	<b>209.3</b>	<b>211.3</b>	<b>217.6</b>	<b>217.6</b>
<b>Ratio of inventories to final sales of domestic business</b>						
Inventories to final sales .....	2.73	2.75	2.74	2.72	2.67	2.69
Nonfarm inventories to final sales .....	2.48	2.51	2.50	2.49	2.45	2.47
Nonfarm inventories to final sales of goods and structures .....	4.30	4.37	4.34	4.32	4.21	4.25

1. Inventories are as of the end of the quarter.  
 2. Quarterly totals at monthly rates. Final sales of domestic business equals final sales of domestic product less gross product of households and institutions and general government and includes a small amount of final sales by farm.

1. Inventories are as of the end of the quarter. Quarter-to-quarter changes calculated from this table are at quarterly rates, whereas the constant-dollar change in business inventories component of GDP is stated at annual rates.

2. Quarterly totals at monthly rates. Final sales of domestic business equals final sales of domestic product less gross product of households and institutions and general government and includes a small amount of final sales by farm.



Table 6.1C.—National Income Without Capital Consumption Adjustment by Industry

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1993					
			IV	I	II	III	IV	
<b>National income without capital consumption adjustment</b> .....	<b>4,880.3</b>	<b>5,172.7</b>	<b>5,003.2</b>	<b>5,071.1</b>	<b>5,133.6</b>	<b>5,177.6</b>	<b>5,308.6</b>	
<b>Domestic industries</b> .....	<b>4,873.0</b>	<b>5,172.5</b>	<b>5,005.7</b>	<b>5,070.7</b>	<b>5,134.1</b>	<b>5,171.2</b>	<b>5,314.2</b>	
<b>Private industries</b> .....	<b>4,138.5</b>	<b>4,407.2</b>	<b>4,262.0</b>	<b>4,313.3</b>	<b>4,372.8</b>	<b>4,401.9</b>	<b>4,540.7</b>	
Agriculture, forestry, and fisheries .....	100.9	105.3	104.3	112.5	106.7	84.2	117.6	
Mining .....	38.5	40.1	40.1	40.2	39.3	39.6	41.1	
Construction .....	212.8	228.0	218.1	219.3	224.7	231.6	236.4	
Manufacturing .....	895.3	928.2	919.0	909.6	925.8	922.5	954.8	
Durable goods .....	501.7	522.6	518.8	507.6	518.0	520.8	543.9	
Nondurable goods .....	393.6	405.6	400.2	401.9	407.7	401.8	411.0	
Transportation and public utilities .....	356.1	376.1	361.4	369.0	370.7	378.4	386.1	
Transportation .....	151.0	161.8	154.4	157.4	158.9	164.4	166.7	
Communications .....	103.7	107.4	106.4	105.4	108.2	108.5	107.3	
Electric, gas, and sanitary services .....	101.5	106.9	100.6	106.2	103.6	105.6	112.1	
Wholesale trade .....	283.6	297.7	297.8	288.2	299.8	297.4	305.2	
Retail trade .....	416.7	444.9	428.7	432.2	441.1	449.1	457.3	
Finance, insurance, and real estate .....	748.9	816.0	768.3	801.2	805.9	818.2	838.8	
Services .....	1,085.8	1,171.0	1,124.4	1,141.1	1,158.9	1,180.7	1,203.4	
<b>Government</b> .....	<b>734.5</b>	<b>765.3</b>	<b>743.8</b>	<b>757.4</b>	<b>761.3</b>	<b>769.2</b>	<b>773.5</b>	
<b>Rest of the world</b> .....	<b>7.3</b>	<b>.2</b>	<b>-2.5</b>	<b>.4</b>	<b>-5</b>	<b>6.4</b>	<b>-5.6</b>	

Table 6.16C.—Corporate Profits by Industry

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					1994
			1993					
			IV	I	II	III	IV	
<b>Corporate profits with inventory valuation and capital consumption adjustments</b> .....	<b>407.2</b>	<b>466.6</b>	<b>439.5</b>	<b>432.1</b>	<b>458.1</b>	<b>468.5</b>	<b>507.9</b>	
<b>Domestic industries</b> .....	<b>344.9</b>	<b>407.9</b>	<b>384.8</b>	<b>373.0</b>	<b>400.0</b>	<b>405.8</b>	<b>452.8</b>	
Financial .....	66.7	87.4	70.7	81.0	85.0	87.6	96.1	
Nonfinancial .....	278.3	320.5	314.1	292.1	315.0	318.2	356.7	
<b>Rest of the world</b> .....	<b>62.3</b>	<b>58.7</b>	<b>54.7</b>	<b>59.0</b>	<b>58.1</b>	<b>62.7</b>	<b>55.1</b>	
Receipts from the rest of the world .....	65.2	71.3	60.5	66.7	71.4	74.0	73.2	
Less: Payments to the rest of the world .....	3.0	12.6	5.8	7.7	13.3	11.3	18.1	
<b>Corporate profits with inventory valuation adjustment</b> .....	<b>390.1</b>	<b>442.3</b>	<b>414.8</b>	<b>407.0</b>	<b>433.4</b>	<b>444.8</b>	<b>484.0</b>	
<b>Domestic industries</b> .....	<b>327.8</b>	<b>383.6</b>	<b>360.1</b>	<b>348.0</b>	<b>375.3</b>	<b>382.1</b>	<b>428.9</b>	
Financial .....	78.1	99.0	82.0	92.3	96.4	99.3	108.1	
Federal Reserve banks .....	17.8	16.2	16.7	16.6	16.2	16.0	16.2	
Other .....	60.3	82.8	65.3	75.7	80.2	83.3	91.9	
Nonfinancial .....	249.8	284.6	278.1	255.7	278.9	282.8	320.8	
Manufacturing .....	115.5	131.7	128.0	118.9	132.5	126.7	148.9	
Durable goods .....	48.3	60.2	58.0	48.0	58.4	59.9	74.4	
Primary metal industries .....	.6	1.4	0	-5	2.5	1.1	2.6	
Fabricated metal products .....	7.4	6.5	6.6	5.5	6.9	6.3	7.6	
Industrial machinery and equipment .....	6.6	7.2	7.8	5.7	6.2	8.8	8.0	
Electronic and other electric equipment .....	12.1	14.6	17.6	14.9	12.1	14.4	17.2	
Motor vehicles and equipment .....	3.5	9.0	4.9	3.1	10.0	8.1	15.0	
Other .....	18.1	21.4	21.0	19.4	20.7	21.3	24.1	
Nondurable goods .....	67.2	71.6	70.0	70.9	74.2	66.8	74.5	
Food and kindred products .....	17.0	15.1	15.2	18.0	14.8	14.6	13.0	
Chemicals and allied products .....	15.7	16.8	17.7	18.4	16.3	14.6	17.9	
Petroleum and coal products .....	6.1	11.9	5.0	7.2	13.5	12.0	14.9	
Other .....	28.5	27.7	32.1	27.3	29.5	25.6	28.6	
Transportation and public utilities .....	52.0	57.8	50.4	53.3	53.9	59.0	64.9	
Wholesale and retail trade .....	46.3	54.4	57.7	46.0	55.4	55.1	61.4	
Other .....	36.0	40.6	42.0	37.5	37.2	42.1	45.8	
<b>Rest of the world</b> .....	<b>62.3</b>	<b>58.7</b>	<b>54.7</b>	<b>59.0</b>	<b>58.1</b>	<b>62.7</b>	<b>55.1</b>	



Table 7.1.—Fixed-Weighted and Alternative Quantity and Price Indexes for Gross Domestic Product—Continued

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted						
			1992	1993				1994	
				IV	I	II	III		IV
<b>Government purchases:</b>									
Current dollars .....	128.4	131.4	129.8	129.3	131.4	132.1	132.6	132.1	
Quantity indexes:									
Fixed 1987 weights .....	107.2	106.5	107.4	105.6	106.8	106.8	106.8	105.1	
Chain-type annual weights .....	107.0	106.4	107.2	105.6	106.6	106.6	106.6		
Benchmark-years weights .....	106.9	106.2	107.1	105.4	106.5	106.5	106.5		
Price indexes:									
Fixed 1987 weights .....	120.6	124.3	121.7	123.2	124.0	124.8	125.1	126.2	
Chain-type annual weights .....	120.0	123.5	121.0	122.4	123.2	123.9	124.4		
Benchmark-years weights .....	120.2	123.7	121.3	122.6	123.5	124.2	124.6		
Implicit price deflator .....	119.7	123.3	120.8	122.4	123.1	123.7	124.1	125.6	
<b>Federal:</b>									
Current dollars .....	116.6	115.2	117.5	115.0	116.3	115.2	114.3	112.8	
Quantity indexes:									
Fixed 1987 weights .....	96.9	92.2	97.1	92.9	93.4	91.9	90.7	87.8	
Chain-type annual weights .....	96.6	92.2	96.8	92.9	93.4	91.9	90.8		
Benchmark-years weights .....	96.3	92.0	96.5	92.7	93.2	91.6	90.5		
Price indexes:									
Fixed 1987 weights .....	121.8	126.2	122.8	125.1	125.8	126.8	127.0	128.4	
Chain-type annual weights .....	120.7	124.8	121.5	123.6	124.3	125.4	125.9		
Benchmark-years weights .....	121.0	125.3	122.0	124.1	124.8	125.9	126.4		
Implicit price deflator .....	120.3	124.9	121.1	123.8	124.5	125.4	126.1	128.4	
<b>National defense:</b>									
Current dollars .....	107.4	103.9	108.1	104.4	105.3	103.4	102.5	100.3	
Quantity indexes:									
Fixed 1987 weights .....	89.4	83.0	89.5	84.2	84.4	82.2	81.2	78.2	
Chain-type annual weights .....	88.6	82.5	88.5	83.8	84.0	81.6	80.8		
Benchmark-years weights .....	88.7	82.7	88.6	83.9	84.1	81.8	80.9		
Price indexes:									
Fixed 1987 weights .....	122.3	127.2	123.5	125.9	126.8	127.9	128.1	129.2	
Chain-type annual weights .....	121.2	125.8	122.2	124.4	125.3	126.6	126.9		
Benchmark-years weights .....	121.2	125.9	122.2	124.5	125.4	126.6	127.0		
Implicit price deflator .....	120.1	125.1	120.8	123.9	124.8	125.7	126.2	128.2	
<b>Nondefense:</b>									
Current dollars .....	145.4	150.8	147.2	148.4	150.7	152.5	151.5	152.1	
Quantity indexes:									
Fixed 1987 weights .....	120.4	121.1	121.1	120.1	121.7	122.4	120.4	118.0	
Chain-type annual weights .....	122.1	123.0	122.9	121.8	123.5	124.4	122.5		
Benchmark-years weights .....	120.7	121.6	121.5	120.4	122.0	122.9	121.1		
Price indexes:									
Fixed 1987 weights .....	120.2	123.0	120.9	122.5	122.5	123.4	123.6	125.8	
Chain-type annual weights .....	119.1	122.3	119.7	121.6	121.8	122.5	123.3		
Benchmark-years weights .....	120.5	123.8	121.2	123.0	123.3	124.0	124.8		
Implicit price deflator .....	120.8	124.5	121.6	123.6	123.9	124.6	125.9	128.8	
<b>State and local:</b>									
Current dollars .....	137.5	143.9	139.2	140.4	143.2	145.2	146.8	147.1	
Quantity indexes:									
Fixed 1987 weights .....	115.2	117.6	115.4	115.5	117.1	118.4	119.4	118.6	
Chain-type annual weights .....	115.0	117.3	115.3	115.4	116.8	118.0	118.9		
Benchmark-years weights .....	115.1	117.4	115.3	115.4	116.9	118.1	119.0		
Price indexes:									
Fixed 1987 weights .....	119.6	122.8	120.9	121.8	122.7	123.2	123.6	124.6	
Chain-type annual weights .....	119.6	122.7	120.8	121.7	122.6	123.1	123.5		
Benchmark-years weights .....	119.5	122.6	120.7	121.6	122.5	123.0	123.4		
Implicit price deflator .....	119.4	122.4	120.6	121.5	122.3	122.7	123.0	124.0	

NOTE.—The quantity and price indexes in this table are calculated from weighted averages of the detailed output and prices used to prepare each aggregate and component. The fixed-weighted measures use as weights the composition of output in 1987. For the alternative indexes, the chain-type indexes with annual weights use weights for the preceding and current years, and the indexes with benchmark-years weights use weights of 1959, 1963, 1967, 1972, 1977, 1982, and 1987 and the most recent year. Percent changes from preceding period for selected items in this table are shown in table 8.1.

Table 7.2.—Fixed-Weighted and Alternative Quantity and Price Indexes for Gross Domestic Product, Final Sales, and Purchases

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted						
			1992	1993				1994	
				IV	I	II	III		IV
<b>Gross domestic product:</b>									
Current dollars .....	133.0	140.5	136.4	137.9	139.4	140.9	143.8	145.6	
Quantity indexes:									
Fixed 1987 weights .....	109.8	113.1	111.6	111.9	112.4	113.2	115.1	115.8	
Chain-type annual weights .....	109.5	112.5	111.3	111.4	111.9	112.5	114.2		
Benchmark-years weights .....	109.4	112.3	111.1	111.2	111.7	112.3	114.0		
Price indexes:									
Fixed 1987 weights .....	122.1	125.9	123.5	124.8	125.6	126.3	127.0	127.9	
Chain-type annual weights .....	121.5	125.0	122.6	123.8	124.7	125.3	126.0		
Benchmark-years weights .....	121.7	125.2	122.9	124.1	124.9	125.6	126.3		
Implicit price deflator .....	121.1	124.2	122.2	123.3	124.0	124.5	124.9	125.7	
<b>Final sales of domestic product<sup>1</sup>:</b>									
Current dollars .....	133.6	141.0	137.0	138.0	139.9	141.5	144.4	145.7	
Quantity indexes:									
Fixed 1987 weights .....	110.3	113.5	112.1	111.9	112.7	113.7	115.6	115.8	
Chain-type annual weights .....	109.9	112.8	111.6	111.3	112.2	112.9	114.6		
Benchmark-years weights .....	109.9	112.7	111.5	111.2	112.1	112.8	114.5		
Price indexes:									
Fixed 1987 weights .....	122.2	126.0	123.6	124.9	125.7	126.4	127.1	128.0	
Chain-type annual weights .....	121.6	125.0	122.7	123.9	124.7	125.4	126.1		
Benchmark-years weights .....	121.7	125.3	122.9	124.2	125.0	125.6	126.4		
Implicit price deflator .....	121.1	124.2	122.2	123.3	124.1	124.5	125.0	125.8	
<b>Gross domestic purchases<sup>2</sup>:</b>									
Current dollars .....	129.6	137.6	133.1	134.7	136.5	138.1	140.8	142.9	
Quantity indexes:									
Fixed 1987 weights .....	107.2	111.3	109.1	109.7	110.6	111.6	113.4	114.5	
Chain-type annual weights .....	106.7	110.2	108.4	108.9	109.6	110.4	112.0		
Benchmark-years weights .....	106.7	110.3	108.5	108.9	109.7	110.5	112.1		
Price indexes:									
Fixed 1987 weights .....	122.0	125.6	123.4	124.4	125.3	125.9	126.6	127.3	
Chain-type annual weights .....	121.5	124.9	122.8	123.8	124.6	125.2	125.9		
Benchmark-years weights .....	121.5	124.9	122.8	123.8	124.6	125.2	125.9		
Implicit price deflator .....	120.9	123.6	122.1	122.8	123.5	123.8	124.2	124.8	
<b>Final sales to domestic purchasers<sup>3</sup>:</b>									
Current dollars .....	130.2	138.0	133.6	134.8	137.0	138.7	141.5	143.0	
Quantity indexes:									
Fixed 1987 weights .....	107.7	111.6	109.5	109.7	110.9	112.1	113.8	114.5	
Chain-type annual weights .....	107.1	110.5	108.7	108.8	109.9	110.8	112.4		
Benchmark-years weights .....	107.2	110.6	108.9	108.9	110.0	111.0	112.5		
Price indexes:									
Fixed 1987 weights .....	122.1	125.7	123.4	124.5	125.4	126.0	126.7	127.4	
Chain-type annual weights .....	121.6	124.9	122.8	123.8	124.7	125.2	126.0		
Benchmark-years weights .....	121.5	124.9	122.8	123.8	124.7	125.2	126.0		
Implicit price deflator .....	120.9	123.6	122.0	122.8	123.5	123.8	124.3	124.8	

1. Equals GDP less change in business inventories.

2. Equals GDP less net exports of goods and services or equals the sum of personal consumption expenditures, gross private domestic investment, and government purchases.

3. Equals gross domestic purchases less change in business inventories or equals the sum of personal consumption expenditures, gross private domestic fixed investment, and government purchases.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 7.3.—Fixed-Weighted and Alternative Quantity and Price Indexes for Gross National Product and Command-Basis Gross National Product**

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			1994
			IV	I	II	III	IV	
<b>Gross national product:</b>								
Current dollars .....	133.0	140.3	136.3	137.8	139.2	140.9	143.5	.....
Quantity indexes:								
Fixed 1987 weights .....	109.9	113.1	111.5	111.8	112.3	113.2	114.9	.....
Chain-type annual weights .....	109.6	112.4	111.2	111.3	111.8	112.5	114.0	.....
Benchmark-years weights .....	109.5	112.3	111.0	111.2	111.7	112.4	113.9	.....
Price indexes:								
Fixed 1987 weights .....	122.1	125.9	123.4	124.7	125.6	126.2	126.9	.....
Chain-type annual weights .....	121.4	124.9	122.5	123.8	124.6	125.2	126.0	.....
Benchmark-years weights .....	121.6	125.2	122.8	124.0	124.9	125.5	126.3	.....
Implicit price deflator .....	121.1	124.1	122.2	123.3	124.0	124.4	124.8	.....
<b>Less: Exports of goods and services and receipts of factor income:</b>								
Current dollars .....	164.1	169.2	165.7	165.0	168.8	168.1	174.8	.....
Quantity index, fixed 1987 weights ...	145.7	149.9	147.2	146.3	148.9	149.0	155.3	.....
<b>Plus: Command-basis exports of goods and services and receipts of factor income:</b>								
Current dollars .....	176.0	181.8	179.9	178.9	181.3	179.5	187.5	.....
Quantity index, fixed 1987 weights ...	147.0	153.4	147.6	149.3	151.9	153.1	159.2	.....
<b>Equals: Command-basis gross national product:</b>								
Current dollars .....	133.0	140.3	136.3	137.8	139.2	140.9	143.5	.....
Quantity index, fixed 1987 weights ...	110.0	113.4	111.6	112.1	112.6	113.7	115.3	.....

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 7.4.—Price Indexes for Personal Consumption Expenditures by Major Type of Product, Fixed 1987 Weights**

[Index numbers, 1987=100]

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Personal consumption expenditures</b> .....	124.9	128.7	126.5	127.5	128.4	128.9	129.8	130.4
<b>Durable goods</b> .....	111.5	113.8	112.1	112.6	113.5	114.1	114.9	115.4
Motor vehicles and parts .....	112.2	115.8	113.3	113.9	115.3	116.6	117.5	117.9
Furniture and household equipment ..	104.0	104.3	104.2	103.9	104.2	104.3	105.0	105.3
Other .....	124.2	126.8	124.3	126.1	127.2	126.8	127.1	128.3
<b>Nondurable goods</b> .....	123.0	124.9	123.8	124.9	125.0	124.5	125.1	125.2
Food .....	122.0	124.3	122.7	123.5	124.2	124.3	125.3	125.7
Clothing and shoes .....	117.9	119.1	118.2	119.8	119.0	118.9	118.8	118.6
Gasoline and oil .....	123.3	122.2	124.7	126.3	123.1	118.8	120.4	119.8
Fuel oil and coal .....	116.5	116.1	117.3	116.2	117.4	116.5	114.3	115.9
Other .....	128.8	131.6	130.3	131.4	132.2	131.5	131.4	131.4
<b>Services</b> .....	129.5	134.7	131.6	132.8	134.2	135.2	136.3	137.4
Housing .....	124.1	127.8	125.4	126.5	127.6	128.1	129.0	130.3
Household operation .....	112.5	115.6	113.9	113.5	115.3	116.4	117.1	117.4
Electricity and gas .....	111.0	114.6	112.7	112.2	114.2	115.8	116.0	115.5
Other household operation .....	113.8	116.4	114.9	114.6	116.2	116.9	118.0	119.2
Transportation .....	128.3	135.5	131.9	134.4	134.9	136.0	136.7	138.2
Medical care .....	140.9	148.5	144.0	145.9	147.9	149.3	150.7	152.0
Other .....	132.2	137.2	134.4	135.4	136.6	137.6	139.1	140.0
<b>Addenda:</b>								
Price indexes for personal consumption expenditures:								
Chain-type annual weights .....	124.4	128.0	125.8	126.8	127.7	128.2	129.1	.....
Benchmark-years weights .....	124.5	128.1	125.9	127.0	127.9	128.3	129.2	.....

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 7.6.—Price Indexes for Fixed Investment by Type, Fixed 1987 Weights**

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			1994
			IV	I	II	III	IV	
<b>Fixed investment</b> .....	112.0	114.7	112.8	113.5	114.4	115.2	115.7	116.2
<b>Nonresidential</b> .....	111.4	113.3	112.0	112.4	113.1	113.6	114.0	114.5
<b>Structures</b> .....	114.6	117.8	115.6	116.3	117.4	118.4	119.3	120.1
Nonresidential buildings, including								
farm .....	113.7	117.2	114.8	115.6	116.5	117.8	118.8	119.4
Utilities .....	115.6	119.3	116.4	117.3	119.4	119.8	120.8	122.2
Mining exploration, shafts, and wells .....	123.5	123.3	123.1	122.9	123.6	123.3	123.3	125.1
Other structures .....	110.7	113.6	112.6	112.3	113.7	113.6	114.7	115.1
<b>Producers' durable equipment</b> .....	109.7	110.9	110.1	110.4	110.9	111.2	111.2	111.6
Information processing and related equipment .....	93.1	92.3	92.8	92.7	92.3	92.1	91.9	91.8
Computers and peripheral equipment <sup>1</sup> .....	59.6	53.0	57.0	55.7	53.6	52.2	50.5	49.5
Other .....	107.9	109.6	108.5	109.0	109.5	109.7	110.2	110.5
Industrial equipment .....	120.2	122.5	120.9	121.1	122.3	123.2	123.4	123.2
Transportation and related equipment .....	116.8	119.2	117.3	118.4	119.1	119.6	119.6	121.4
Other .....	117.1	119.1	118.0	118.2	119.1	119.4	119.6	119.8
<b>Residential</b> .....	113.4	117.7	114.8	115.8	117.2	118.5	119.5	120.1
<b>Structures</b> .....	113.6	118.1	115.0	116.1	117.5	118.8	119.8	120.5
Single family .....	113.4	118.3	115.2	116.2	117.3	119.2	120.4	120.7
Multifamily .....	111.3	115.6	112.5	113.5	114.6	116.4	117.6	117.8
Other structures .....	114.7	118.6	115.7	116.7	118.7	119.1	119.7	121.0
<b>Producers' durable equipment</b> .....	104.9	105.5	104.9	104.5	105.4	105.9	106.3	106.8
<b>Addenda:</b>								
Price indexes for fixed investment:								
Chain-type annual weights .....	111.0	112.9	111.5	111.0	112.7	113.3	113.7	.....
Benchmark-years weights .....	110.3	112.3	110.9	111.4	112.1	112.7	113.1	.....

1. Includes new computers and peripheral equipment only.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

**Table 7.9.—Price Indexes for Exports and Imports of Goods and Services and for Receipts and Payments of Factor Income, Fixed 1987 Weights**

[Index numbers, 1987=100]

	1992	1993	1994	1995	1996	1997	1998	1999
<b>Exports of goods and services</b> .....	113.7	115.4	114.3	114.7	115.5	115.7	115.9	116.9
Merchandise <sup>1</sup> .....	109.6	110.4	109.7	110.0	110.5	110.5	110.7	111.8
Durable .....	109.3	110.7	109.8	110.3	111.1	110.8	110.8	111.4
Nondurable .....	110.2	109.8	109.5	109.4	109.3	110.0	110.4	112.7
Services <sup>1</sup> .....	123.7	127.6	125.5	126.2	127.7	128.2	128.5	129.2
<b>Receipts of factor income</b> <sup>2</sup> .....	122.5	125.7	123.7	124.9	125.6	126.1	126.5	.....
<b>Imports of goods and services</b> .....	115.1	115.0	115.9	114.5	115.6	114.8	115.1	114.6
Merchandise <sup>1</sup> .....	112.1	112.0	113.1	111.6	112.7	111.8	111.9	111.4
Durable .....	112.8	114.3	113.5	113.3	114.1	114.3	115.4	115.9
Nondurable .....	110.7	108.0	112.4	108.6	110.3	107.3	105.7	103.5
Services <sup>1</sup> .....	128.9	128.4	128.3	127.5	128.2	128.3	129.6	129.2
<b>Payments of factor income</b> <sup>3</sup> .....	125.0	129.1	126.6	127.9	128.9	129.6	130.1	.....
<b>Addenda:</b>								
Price indexes for exports of goods and services:								
Chain-type annual weights .....	112.9	113.9	113.2	113.4	114.1	114.1	114.2	.....
Benchmark-years weights .....	112.3	113.4	112.6	112.9	113.5	113.5	113.6	.....
Price indexes for imports of goods and services:								
Chain-type annual weights .....	113.4	112.8	114.1	112.5	113.4	112.5	112.6	.....
Benchmark-years weights .....	112.3	111.7	113.0	111.5	112.4	111.5	111.5	.....

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.

2. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. corporations.

3. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.

NOTE.—Percent changes from preceding period for selected items in this table are shown in table 8.1.

Table 7.10.—Price Indexes for Exports and Imports of Merchandise by End-Use Category, Fixed 1987 Weights

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992	1993				1994
				IV	I	II	III	
<b>Exports of merchandise</b> .....	<b>109.6</b>	<b>110.4</b>	<b>109.7</b>	<b>110.0</b>	<b>110.5</b>	<b>110.5</b>	<b>110.7</b>	<b>111.8</b>
Foods, feeds, and beverages .....	114.5	116.1	111.7	113.1	113.1	118.2	120.1	124.8
Industrial supplies and materials .....	108.3	109.2	108.8	109.1	110.4	109.1	108.3	110.5
Durable goods .....	116.5	125.2	118.7	122.3	127.5	126.2	124.9	128.0
Nondurable goods .....	104.6	101.9	104.4	103.1	102.6	101.3	100.8	102.5
Capital goods, except automotive .....	105.8	105.9	105.8	105.8	106.0	105.7	106.0	106.0
Civilian aircraft, engines, and parts ...	122.1	125.6	123.5	124.6	125.4	125.1	126.8	127.2
Computers, peripherals, and parts ....	58.9	52.1	56.3	54.9	52.7	51.2	49.7	48.9
Other .....	116.5	117.9	117.0	117.1	117.9	118.1	118.6	118.6
Automotive vehicles, engines, and parts	112.3	113.2	113.0	113.3	113.3	113.1	113.3	113.8
Consumer goods, except automotive ....	118.0	119.8	118.8	119.6	119.7	119.7	120.1	120.4
Durable goods .....	114.5	115.0	115.0	115.4	114.9	114.8	114.8	115.2
Nondurable goods .....	120.9	124.0	122.1	123.3	123.9	124.1	124.8	124.9
Other .....	113.0	113.9	113.4	113.4	114.1	113.8	114.1	115.3
Durable goods .....	113.0	113.9	113.4	113.4	114.1	113.8	114.1	115.3
Nondurable goods .....	113.0	113.9	113.4	113.4	114.1	113.8	114.1	115.3
<b>Imports of merchandise</b> .....	<b>112.1</b>	<b>112.0</b>	<b>113.1</b>	<b>111.6</b>	<b>112.7</b>	<b>111.8</b>	<b>111.9</b>	<b>111.4</b>
Foods, feeds, and beverages .....	108.1	107.9	107.2	105.7	106.6	108.8	110.7	110.9
Industrial supplies and materials, except petroleum and products .....	114.2	114.3	114.4	114.8	115.0	113.4	114.0	115.4
Durable goods .....	115.3	117.0	114.7	117.6	117.4	115.5	117.3	120.0
Nondurable goods .....	113.1	111.5	114.0	111.9	112.4	111.1	110.4	110.6
Petroleum and products .....	100.8	91.4	104.0	95.5	99.1	88.5	81.6	74.1
Capital goods, except automotive .....	107.3	108.0	108.0	106.9	107.7	108.6	109.0	108.8
Civilian aircraft, engines, and parts ...	122.2	125.6	123.5	124.6	125.4	125.2	126.9	127.2
Computers, peripherals, and parts ....	61.4	55.6	59.0	57.8	56.3	55.0	53.4	52.4
Other .....	116.5	118.4	117.8	116.5	117.8	119.3	120.1	120.1
Automotive vehicles, engines, and parts	114.8	116.9	115.9	115.1	116.5	117.0	118.9	119.5
Consumer goods, except automotive ....	118.3	119.4	119.8	118.8	119.7	119.5	119.7	119.5
Durable goods .....	116.9	118.4	117.9	117.9	118.7	118.4	118.6	118.5
Nondurable goods .....	120.1	120.7	122.3	119.8	120.9	120.8	121.1	120.7
Other .....	114.7	116.0	115.8	114.8	115.8	116.0	117.3	117.4
Durable goods .....	114.7	115.9	115.8	114.8	115.8	116.0	117.3	117.4
Nondurable goods .....	114.7	115.9	115.8	114.8	115.8	116.0	117.3	117.4
<b>Addenda:</b>								
Exports of agricultural products <sup>1</sup> .....	111.5	113.3	109.8	111.1	110.5	115.0	116.6	121.8
Exports of nonagricultural products ...	109.4	110.0	109.7	109.8	110.5	109.9	109.9	110.5
Imports of nonpetroleum products .....	113.4	114.3	114.2	113.4	114.3	114.4	115.3	115.6

1. Includes parts of: exports of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable consumer goods, except automotive.

Table 7.11.—Price Indexes for Government Purchases by Type, Fixed 1987 Weights

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992	1993				1994
				IV	I	II	III	
<b>Government purchases</b> .....	<b>120.6</b>	<b>124.3</b>	<b>121.7</b>	<b>123.2</b>	<b>124.0</b>	<b>124.8</b>	<b>125.1</b>	<b>126.2</b>
<b>Federal</b> .....	<b>121.8</b>	<b>126.2</b>	<b>122.8</b>	<b>125.1</b>	<b>125.8</b>	<b>126.8</b>	<b>127.0</b>	<b>128.4</b>
<b>National defense</b> .....	<b>122.3</b>	<b>127.2</b>	<b>123.5</b>	<b>125.9</b>	<b>126.8</b>	<b>127.9</b>	<b>128.1</b>	<b>129.2</b>
Durable goods .....	113.7	117.6	115.3	117.1	117.9	117.9	117.6	117.8
Nondurable goods .....	115.6	113.1	117.8	113.0	115.9	112.6	110.8	106.1
Services .....	127.1	132.9	128.0	131.2	132.1	134.0	134.4	136.5
Compensation of employees .....	134.6	143.1	135.1	140.6	141.7	144.7	145.4	148.6
Military .....	136.6	143.8	136.6	142.3	143.3	143.9	145.7	148.6
Civilian .....	130.6	141.7	132.0	137.1	138.3	146.5	144.9	148.5
Other services .....	116.4	118.5	117.8	117.8	118.5	118.8	118.8	119.3
Structures .....	114.0	117.7	116.2	117.2	117.4	117.3	118.8	119.7
<b>Nondefense</b> .....	<b>120.2</b>	<b>123.0</b>	<b>120.9</b>	<b>122.5</b>	<b>122.5</b>	<b>123.4</b>	<b>123.6</b>	<b>125.8</b>
Durable goods .....	101.2	93.1	96.9	94.0	94.0	94.1	90.3	92.1
Nondurable goods .....	.....	.....	.....	.....	.....	.....	.....	.....
Commodity Credit Corporation inventory change .....	.....	.....	.....	.....	.....	.....	.....	.....
Other nondurables .....	107.9	105.9	106.0	106.0	106.3	106.0	105.2	106.7
Services .....	124.5	129.0	125.5	128.0	128.3	129.3	130.4	133.3
Compensation of employees .....	129.3	136.4	130.6	135.2	135.7	136.4	138.2	143.0
Other services .....	117.9	118.7	118.4	118.1	118.1	119.3	119.5	119.8
Structures .....	113.7	116.5	114.8	115.1	116.2	116.8	117.7	118.3
<b>State and local</b> .....	<b>119.6</b>	<b>122.8</b>	<b>120.9</b>	<b>121.8</b>	<b>122.7</b>	<b>123.2</b>	<b>123.6</b>	<b>124.6</b>
Durable goods .....	113.2	115.3	113.6	114.5	115.4	115.8	115.6	116.6
Nondurable goods .....	115.4	116.0	114.9	116.2	117.9	115.6	114.2	115.5
Services .....	122.6	126.1	124.0	125.0	125.7	126.6	127.2	128.1
Compensation of employees .....	127.5	132.1	129.2	130.6	131.6	132.7	133.5	134.6
Other services .....	69.3	60.5	67.0	63.9	60.3	60.1	57.8	57.7
Structures .....	109.5	113.1	111.6	111.5	113.0	113.3	114.4	114.8
<b>Addenda:</b>								
Price indexes for government purchases:								
Chain-type annual weights .....	120.0	123.5	121.0	122.4	123.2	123.9	124.4	.....
Benchmark-years weights .....	120.2	123.7	121.3	122.6	123.5	124.2	124.6	.....
Price indexes for Federal national defense purchases:								
Chain-type annual weights .....	121.2	125.8	122.2	124.4	125.3	126.6	126.9	.....
Benchmark-years weights .....	121.2	125.9	122.2	124.5	125.4	126.6	127.0	.....
Price indexes for Federal nondefense purchases:								
Chain-type annual weights .....	119.1	122.3	119.7	121.6	121.8	122.5	123.3	.....
Benchmark-years weights .....	120.5	123.8	121.2	123.0	123.3	124.0	124.8	.....
Price indexes for State and local purchases:								
Chain-type annual weights .....	119.6	122.7	120.8	121.7	122.6	123.1	123.5	.....
Benchmark-years weights .....	119.5	122.6	120.7	121.6	122.5	123.0	123.4	.....

**Table 7.12.—Price Indexes for National Defense Purchases, Fixed 1987 Weights**

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992	1993				1994
				IV	I	II	III	
<b>National defense purchases ...</b>	<b>122.3</b>	<b>127.2</b>	<b>123.5</b>	<b>125.9</b>	<b>126.8</b>	<b>127.9</b>	<b>128.1</b>	<b>129.2</b>
<b>Durable goods .....</b>	<b>113.7</b>	<b>117.6</b>	<b>115.3</b>	<b>117.1</b>	<b>117.9</b>	<b>117.9</b>	<b>117.6</b>	<b>117.8</b>
Military equipment .....	114.4	118.8	116.2	118.2	119.1	119.0	118.8	118.9
Aircraft .....	118.4	125.7	121.8	124.8	125.3	127.0	125.8	127.5
Missiles .....	98.6	98.3	97.4	99.1	99.9	96.8	97.5	91.0
Ships .....	118.4	121.7	119.2	120.7	121.4	122.7	122.1	123.3
Vehicles .....	120.9	128.0	124.1	126.0	130.8	126.9	128.3	131.0
Electronic equipment .....	109.2	109.8	109.6	109.7	109.6	109.6	110.0	110.3
Other .....	116.6	118.2	117.9	118.2	118.2	117.9	118.3	118.8
Other durable goods .....	106.5	106.1	106.3	106.3	106.2	105.8	106.0	106.3
<b>Nondurable goods .....</b>	<b>115.6</b>	<b>113.1</b>	<b>117.8</b>	<b>113.0</b>	<b>115.9</b>	<b>112.6</b>	<b>110.8</b>	<b>106.1</b>
Petroleum products .....	119.7	112.5	124.2	111.1	119.7	110.8	108.3	94.0
Ammunition .....	108.5	111.4	111.5	111.3	111.1	112.6	110.5	111.0
Other nondurable goods .....	117.9	115.3	116.8	116.7	116.2	114.3	113.8	114.7
<b>Services .....</b>	<b>127.1</b>	<b>132.9</b>	<b>128.0</b>	<b>131.2</b>	<b>132.1</b>	<b>134.0</b>	<b>134.4</b>	<b>136.5</b>
Compensation of employees .....	134.6	143.1	135.1	140.6	141.7	144.7	145.4	148.6
Military .....	136.6	143.8	136.6	142.3	143.3	143.9	145.7	148.6
Civilian .....	130.6	141.7	132.0	137.1	138.3	146.5	144.9	148.5
Other services .....	116.4	118.5	117.8	117.8	118.5	118.8	118.8	119.3
Contractual research and development .....	111.9	113.1	113.5	113.8	113.6	113.2	111.7	112.5
Installation support <sup>1</sup> .....	113.5	115.7	114.5	113.8	115.4	116.8	116.9	117.0
Weapons support <sup>2</sup> .....	120.5	124.4	122.1	123.1	124.0	124.4	126.1	127.7
Personnel support <sup>3</sup> .....	134.7	136.0	136.8	134.9	136.4	136.0	136.9	136.7
Transportation of material .....	104.6	105.2	104.5	104.9	104.8	105.8	105.3	105.3
Travel of persons .....	110.6	116.4	111.3	115.6	115.6	116.2	118.2	119.2
Other .....								
<b>Structures .....</b>	<b>114.0</b>	<b>117.7</b>	<b>116.2</b>	<b>117.2</b>	<b>117.4</b>	<b>117.3</b>	<b>118.8</b>	<b>119.7</b>
Military facilities .....	106.1	108.3	107.5	108.1	108.0	107.7	109.4	110.7
Other .....	128.6	135.0	132.2	133.9	134.8	135.0	136.0	136.2
<b>Addenda:</b>								
Price indexes for national defense purchases:								
Chain-type annual weights .....	121.2	125.8	122.2	124.4	125.3	126.6	126.9	
Benchmark-years weights .....	121.2	125.9	122.2	124.5	125.4	126.6	127.0	

1. Includes utilities, communications, rental payments, maintenance and repair, and payments to contractors to operate installations.  
 2. Includes depot maintenance and contractual services for weapons systems, other than research and development.  
 3. Includes compensation of foreign personnel, consulting, training, and education.

**Table 7.13.—Implicit Price Deflators for the Relation of Gross Domestic Product, Gross National Product, Net National Product, and National Income**

[Index numbers, 1987=100]

<b>Gross domestic product .....</b>	<b>121.1</b>	<b>124.2</b>	<b>122.2</b>	<b>123.3</b>	<b>124.0</b>	<b>124.5</b>	<b>124.9</b>	<b>125.7</b>
Plus: Receipts of factor income from the rest of the world <sup>1</sup> .....	122.5	125.8	123.7	124.9	125.6	126.1	126.5	
Less: Payments of factor income to the rest of the world <sup>2</sup> .....	124.8	128.7	126.3	127.7	128.4	129.2	129.4	
<b>Equals: Gross national product .....</b>	<b>121.1</b>	<b>124.1</b>	<b>122.2</b>	<b>123.3</b>	<b>124.0</b>	<b>124.4</b>	<b>124.8</b>	
Less: Consumption of fixed capital .....	110.6	112.2	111.0	111.5	111.9	112.5	112.7	113.2
<b>Equals: Net national product .....</b>	<b>122.5</b>	<b>125.7</b>	<b>123.6</b>	<b>124.8</b>	<b>125.5</b>	<b>126.0</b>	<b>126.4</b>	
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises ....	131.3	132.1	131.0	127.7	132.1	135.1	133.3	133.4
Statistical discrepancy .....	119.8	122.6	120.9	121.8	122.5	122.9	123.2	
<b>Equals: National income .....</b>	<b>121.6</b>	<b>125.1</b>	<b>122.9</b>	<b>124.5</b>	<b>124.9</b>	<b>125.1</b>	<b>125.7</b>	
<b>Addenda:</b>								
Net domestic product .....	122.5	125.8	123.7	124.9	125.6	126.1	126.5	127.4
Domestic income .....	121.7	125.1	123.0	124.6	125.0	125.2	125.8	

1. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. corporations.  
 2. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.

**Table 7.14.—Implicit Price Deflators for Gross Domestic Product by Sector**

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992	1993				1994
				IV	I	II	III	
<b>Gross domestic product .....</b>	<b>121.1</b>	<b>124.2</b>	<b>122.2</b>	<b>123.3</b>	<b>124.0</b>	<b>124.5</b>	<b>124.9</b>	<b>125.7</b>
<b>Business .....</b>	<b>119.8</b>	<b>122.6</b>	<b>120.9</b>	<b>121.8</b>	<b>122.5</b>	<b>122.9</b>	<b>123.2</b>	<b>123.9</b>
Nonfarm .....	120.1	122.8	121.2	122.1	122.8	123.1	123.3	123.9
Nonfarm less housing .....	119.5	122.4	120.8	121.6	122.3	122.7	122.8	123.1
Housing .....	125.5	127.3	124.5	126.9	126.8	127.4	128.1	131.9
Farm .....	106.1	110.7	104.9	107.1	109.3	108.3	117.8	123.0
Statistical discrepancy .....	119.8	122.6	120.9	121.8	122.5	122.9	123.2	123.9
<b>Households and institutions .....</b>	<b>127.7</b>	<b>131.9</b>	<b>129.8</b>	<b>131.3</b>	<b>131.3</b>	<b>131.9</b>	<b>133.2</b>	<b>134.7</b>
Private households .....	115.7	119.4	117.4	117.9	118.7	120.0	121.1	121.7
Nonprofit institutions .....	128.2	132.5	130.4	131.9	131.9	132.4	133.8	135.3
<b>General government .....</b>	<b>129.0</b>	<b>134.4</b>	<b>130.3</b>	<b>132.8</b>	<b>133.8</b>	<b>135.1</b>	<b>136.0</b>	<b>137.8</b>
Federal .....	132.8	140.6	133.5	138.6	139.5	141.8	142.8	146.5
State and local .....	127.4	131.9	129.0	130.4	131.4	132.5	133.3	134.4
<b>Addendum:</b>								
Gross domestic business product less housing .....	119.3							

**Table 7.15.—Current-Dollar Cost and Profit Per Unit of Constant-Dollar Gross Domestic Product of Nonfinancial Corporate Business**

[Dollars]

<b>Current-dollar cost and profit per unit of constant-dollar gross domestic product<sup>1</sup> ..</b>	<b>1.149</b>	<b>1.164</b>	<b>1.154</b>	<b>1.162</b>	<b>1.164</b>	<b>1.164</b>	<b>1.165</b>	
<b>Consumption of fixed capital .....</b>	<b>.125</b>	<b>.123</b>	<b>.122</b>	<b>.124</b>	<b>.123</b>	<b>.124</b>	<b>.122</b>	
<b>Net domestic product .....</b>	<b>1.024</b>	<b>1.040</b>	<b>1.032</b>	<b>1.037</b>	<b>1.041</b>	<b>1.039</b>	<b>1.044</b>	
Indirect business tax and nontax liability plus business transfer payments less subsidies .....	.116	.118	.116	.116	.118	.118	.118	
Domestic income .....	.908	.923	.916	.921	.923	.922	.925	
Compensation of employees .....	.762	.768	.761	.772	.770	.769	.762	
Corporate profits with inventory valuation and capital consumption adjustments .....	.099	.109	.109	.102	.108	.108	.118	
Profits tax liability .....	.035	.040	.037	.037	.040	.038	.044	
Profits after tax with inventory valuation and capital consumption adjustments .....	.064	.069	.072	.065	.068	.070	.075	
Net interest .....	.048	.046	.046	.047	.046	.045	.044	

1. Equals the deflator for gross domestic product of nonfinancial corporate business with the decimal point shifted two places to the left.





Table 8.1.—Percent Change From Preceding Period in Selected Series—Continued

[Percent]

	1992	1993	Seasonally adjusted at annual rates						
			1992		1993				1994
			IV	I	II	III	IV	I	
<b>Nondefense:</b>									
Current dollars .....	9.4	3.8	1.8	3.6	6.2	4.9	-2.8	1.4	
Quantity indexes:									
Fixed 1987 weights .....	6.2	.6	-4	-3.2	5.5	2.5	-6.5	-7.6	
Chain-type annual weights .....	6.2	.8	-1	-3.5	5.5	2.9	-5.9	.....	
Benchmark-years weights .....	6.2	.8	-1	-3.5	5.5	2.9	-5.9	.....	
Price indexes:									
Fixed 1987 weights .....	3.1	2.4	1.9	5.7	0	2.9	.6	7.3	
Chain-type annual weights .....	3.1	2.7	1.9	6.3	.8	2.3	2.6	.....	
Benchmark-years weights .....	3.1	2.7	1.9	6.3	.8	2.3	2.6	.....	
<b>State and local:</b>									
Current dollars .....	4.5	4.6	3.1	3.3	8.3	5.8	4.5	.6	
Quantity indexes:									
Fixed 1987 weights .....	2.2	2.1	0	.3	5.6	4.5	3.3	-2.6	
Chain-type annual weights .....	2.1	2.0	.1	.4	5.2	4.2	3.1	.....	
Benchmark-years weights .....	2.1	2.0	.1	.4	5.2	4.2	3.1	.....	
Price indexes:									
Fixed 1987 weights .....	2.5	2.6	2.9	3.0	2.9	1.8	1.5	3.0	
Chain-type annual weights .....	2.4	2.6	2.9	2.9	3.0	1.6	1.4	.....	
Benchmark-years weights .....	2.4	2.6	2.9	2.9	3.0	1.6	1.4	.....	
<b>Addenda:</b>									
<b>Final sales of domestic product:</b>									
Current dollars .....	5.2	5.5	9.1	2.9	5.7	4.8	8.5	3.5	
Quantity indexes:									
Fixed 1987 weights .....	2.3	2.8	5.8	-8	3.2	3.4	6.8	.9	
Chain-type annual weights .....	2.0	2.6	5.6	-1.1	3.0	2.7	6.1	.....	
Benchmark-years weights .....	2.1	2.5	5.5	-1.1	3.0	2.7	6.1	.....	
Price indexes:									
Fixed 1987 weights .....	3.3	3.1	3.2	4.3	2.8	2.1	2.3	2.9	
Chain-type annual weights .....	3.1	2.9	2.7	4.1	2.7	2.1	2.4	.....	
Benchmark-years weights .....	3.2	3.0	2.8	4.1	2.7	2.1	2.4	.....	
<b>Gross domestic purchases:</b>									
Current dollars .....	5.7	6.2	9.1	5.0	5.4	4.8	8.1	6.0	
Quantity indexes:									
Fixed 1987 weights .....	2.9	3.8	5.4	2.5	3.1	3.7	6.7	4.1	
Chain-type annual weights .....	2.5	3.3	5.1	1.7	2.7	3.0	6.0	.....	
Benchmark-years weights .....	2.7	3.3	5.1	1.7	2.7	3.0	6.0	.....	
Price indexes:									
Fixed 1987 weights .....	3.3	2.9	2.8	3.5	2.9	1.8	2.3	2.3	
Chain-type annual weights .....	3.1	2.8	2.7	3.4	2.8	1.7	2.4	.....	
Benchmark-years weights .....	3.2	2.8	2.7	3.4	2.8	1.7	2.4	.....	
<b>Final sales to domestic purchasers:</b>									
Current dollars .....	5.4	6.0	9.0	3.5	6.8	5.2	8.2	4.2	
Quantity indexes:									
Fixed 1987 weights .....	2.5	3.7	5.5	.8	4.4	4.2	6.6	2.4	
Chain-type annual weights .....	2.2	3.2	5.2	.3	4.0	3.5	5.8	.....	
Benchmark-years weights .....	2.4	3.2	5.2	.3	4.0	3.5	5.8	.....	
Price indexes:									
Fixed 1987 weights .....	3.3	2.9	2.8	3.5	2.9	1.8	2.3	2.4	
Chain-type annual weights .....	3.1	2.8	2.7	3.3	2.8	1.7	2.4	.....	
Benchmark-years weights .....	3.2	2.8	2.7	3.3	2.8	1.7	2.4	.....	
<b>Gross national product:</b>									
Current dollars .....	5.4	5.5	8.5	4.6	4.2	4.8	7.6	.....	
Quantity indexes:									
Fixed 1987 weights .....	2.5	2.9	5.0	1.0	1.9	3.3	6.2	.....	
Chain-type annual weights .....	2.2	2.6	4.9	.6	1.7	2.7	5.4	.....	
Benchmark-years weights .....	2.3	2.6	4.8	.6	1.7	2.7	5.4	.....	
Price indexes:									
Fixed 1987 weights .....	3.3	3.1	3.1	4.3	2.8	2.1	2.3	.....	
Chain-type annual weights .....	3.1	2.9	2.7	4.1	2.7	2.1	2.4	.....	
Benchmark-years weights .....	3.2	2.9	2.8	4.1	2.7	2.1	2.4	.....	
<b>Command-basis gross national product:</b>									
Quantity index, fixed 1987 weights ..	2.5	3.1	4.7	1.9	1.9	3.7	6.1	.....	
<b>Disposable personal income:</b>									
Current dollars .....	6.4	4.6	15.1	-5.1	8.5	2.7	7.8	4.1	
1987 dollars .....	2.9	1.9	10.6	-7.8	5.8	1.6	5.4	2.7	

Table 8.2.—Selected Per Capita Product and Income Series in Current and Constant Dollars and Population of the United States

[Dollars]

	1992	1993	Seasonally adjusted at annual rates						
			1992		1993				1994
			IV	I	II	III	IV	I	
<b>Current dollars:</b>									
Gross domestic product .....	23,637	24,696	24,143	24,346	24,538	24,732	25,166	25,426	
Gross national product .....	23,665	24,697	24,134	24,347	24,536	24,756	25,145	.....	
Personal income ..	20,139	20,864	20,767	20,430	20,837	20,930	21,257	21,458	
Disposable personal income .....	17,615	18,225	18,153	17,876	18,196	18,265	18,561	18,705	
Personal consumption expenditures ...	16,205	17,006	16,589	16,704	16,907	17,088	17,321	17,501	
Durable goods	1,947	2,083	2,013	2,004	2,062	2,095	2,170	2,221	
Nondurable goods .....	5,092	5,227	5,190	5,192	5,215	5,229	5,273	5,294	
Services .....	9,166	9,695	9,385	9,508	9,631	9,763	9,878	9,986	
<b>Constant (1987) dollars:</b>									
Gross domestic product .....	19,518	19,888	19,754	19,744	19,786	19,869	20,150	20,231	
Gross national product .....	19,548	19,897	19,755	19,754	19,793	19,898	20,143	.....	
Disposable personal income .....	14,219	14,330	14,490	14,163	14,326	14,341	14,491	14,554	
Personal consumption expenditures ...	13,081	13,372	13,241	13,234	13,312	13,416	13,523	13,617	
Durable goods	1,787	1,897	1,845	1,835	1,878	1,907	1,970	2,012	
Nondurable goods .....	4,161	4,213	4,216	4,184	4,200	4,226	4,242	4,257	
Services .....	7,133	7,261	7,179	7,216	7,234	7,283	7,310	7,348	
Population (mid-period, thousands) .....	255,472	258,254	256,569	257,197	257,872	258,612	259,334	259,949	

NOTE.—Except for disposable personal income, the quantity and price indexes in this table are calculated from weighted averages of the detailed output and prices used to prepare each aggregate and component. The fixed-weighted measures use as weights the composition of output in 1987. For the alternative indexes, the chain-type indexes with annual weights use weights for the preceding and current years, and the indexes with benchmark-years weights use weights of 1959, 1963, 1967, 1972, 1977, 1982, and 1987 and the most recent year.

Table 8.3.—Auto Output

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Auto output</b> .....	<b>133.2</b>	<b>142.5</b>	<b>136.4</b>	<b>142.8</b>	<b>145.9</b>	<b>134.6</b>	<b>146.7</b>	<b>166.3</b>
<b>Final sales</b> .....	<b>133.5</b>	<b>137.6</b>	<b>137.2</b>	<b>131.4</b>	<b>140.8</b>	<b>137.0</b>	<b>141.2</b>	<b>161.2</b>
Personal consumption expenditures ..	126.7	134.3	130.9	127.7	133.6	135.4	140.7	150.8
Producers' durable equipment .....	37.6	39.1	37.1	36.9	42.2	38.9	38.2	40.7
Net purchases of used autos .....	39.5	43.0	40.6	40.9	43.3	45.2	42.6	47.5
New autos .....	87.3	91.3	90.3	86.8	90.3	90.2	98.1	103.3
Net purchases of used autos .....	24.6	28.0	25.6	24.9	30.4	28.5	28.2	30.8
Net exports .....	-32.8	-37.7	-32.6	-35.3	-37.0	-39.3	-39.2	-32.0
Exports .....	14.3	14.5	15.9	14.5	14.9	13.2	15.4	16.6
Imports .....	47.0	52.2	48.4	49.8	51.8	52.5	54.7	48.6
Government purchases .....	2.0	1.9	1.8	2.1	2.0	2.0	1.5	1.7
<b>Change in business inventories of new and used autos</b> .....	<b>-3</b>	<b>4.9</b>	<b>-8</b>	<b>11.4</b>	<b>5.0</b>	<b>-2.4</b>	<b>5.5</b>	<b>5.1</b>
New .....	.3	3.4	-7	12.0	1.6	-3.4	3.5	6.1
Used .....	-6	1.4	-1	-7	3.5	1.0	2.0	-1.0
<b>Addenda:</b>								
Domestic output of new autos <sup>1</sup> .....	104.1	110.7	108.0	114.6	111.9	99.3	117.2	132.2
Sales of imported new autos <sup>2</sup> .....	60.1	64.1	60.5	59.6	65.5	69.6	61.8	64.8

1. Consists of final sales and change in business inventories of new autos assembled in the United States.

2. Consists of personal consumption expenditures, producers' durable equipment, and government purchases.

Table 8.4.—Auto Output in Constant Dollars

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			1994
			IV	I	II	III	IV	I
<b>Auto output</b> .....	<b>117.4</b>	<b>121.1</b>	<b>120.1</b>	<b>122.5</b>	<b>123.4</b>	<b>113.5</b>	<b>125.0</b>	<b>138.0</b>
<b>Final sales</b> .....	<b>117.8</b>	<b>117.7</b>	<b>119.6</b>	<b>114.0</b>	<b>121.2</b>	<b>116.3</b>	<b>119.2</b>	<b>136.4</b>
Personal consumption expenditures ..	113.9	115.5	115.8	112.2	115.5	115.4	118.8	127.2
Producers' durable equipment .....	32.8	34.7	32.7	32.6	37.5	34.6	34.0	35.5
Net purchases of used autos .....	36.0	36.0	35.9	35.7	36.6	37.2	34.4	38.9
New autos .....	77.9	79.5	79.9	76.5	78.9	78.2	84.4	88.4
Net purchases of used autos .....	22.7	23.7	22.8	21.9	26.0	23.9	23.2	25.7
Net exports .....	-30.5	-34.1	-30.4	-32.6	-33.5	-35.4	-34.9	-27.7
Exports .....	12.7	12.7	14.1	12.8	13.1	11.6	13.6	14.5
Imports .....	43.3	46.9	44.5	45.5	46.6	47.0	48.4	42.2
Government purchases .....	1.7	1.6	1.5	1.8	1.7	1.7	1.2	1.4
<b>Change in business inventories of new and used autos</b> .....	<b>-4</b>	<b>3.4</b>	<b>.5</b>	<b>8.5</b>	<b>2.2</b>	<b>-2.9</b>	<b>5.8</b>	<b>1.6</b>
New .....	.1	2.2	.6	9.1	-7	-3.7	4.2	2.5
Used .....	-6	1.2	-1	-6	3.0	.8	1.6	-8
<b>Addenda:</b>								
Domestic output of new autos <sup>1</sup> .....	92.8	96.3	96.8	99.9	96.5	85.8	102.9	111.2
Sales of imported new autos <sup>2</sup> .....	53.6	55.8	53.6	52.5	57.3	60.4	53.2	55.5

1. Consists of final sales and change in business inventories of new autos assembled in the United States.

2. Consists of personal consumption expenditures, producers' durable equipment, and government purchases.

Table 8.5.—Truck Output

[Billions of dollars]

	1992	1993	1993	1993	1993	1993	1993	1993
<b>Truck output</b> <sup>1</sup> .....	<b>83.3</b>	<b>101.3</b>	<b>93.7</b>	<b>100.0</b>	<b>97.0</b>	<b>98.0</b>	<b>110.3</b>	<b>127.2</b>
<b>Final sales</b> .....	<b>82.2</b>	<b>101.8</b>	<b>92.0</b>	<b>92.4</b>	<b>102.0</b>	<b>99.9</b>	<b>113.1</b>	<b>123.1</b>
Personal consumption expenditures ..	43.3	52.3	47.8	49.7	52.0	50.0	57.7	61.2
Producers' durable equipment .....	37.1	49.2	41.1	45.3	48.2	48.6	54.8	60.2
Net exports .....	-5.1	-5.4	-4.6	-6.7	-6.4	-4.8	-3.6	-3.5
Exports .....	5.6	5.8	6.0	5.2	5.7	5.4	6.9	6.6
Imports .....	10.7	11.2	10.7	11.9	12.1	10.2	10.5	10.1
Government purchases .....	6.9	5.6	7.7	4.1	8.2	6.0	4.2	5.2
<b>Change in business inventories</b> .....	<b>1.2</b>	<b>-5</b>	<b>1.7</b>	<b>7.7</b>	<b>-5.0</b>	<b>-1.9</b>	<b>-2.8</b>	<b>4.2</b>

1. Includes new trucks only.

Table 8.6.—Truck Output in Constant Dollars

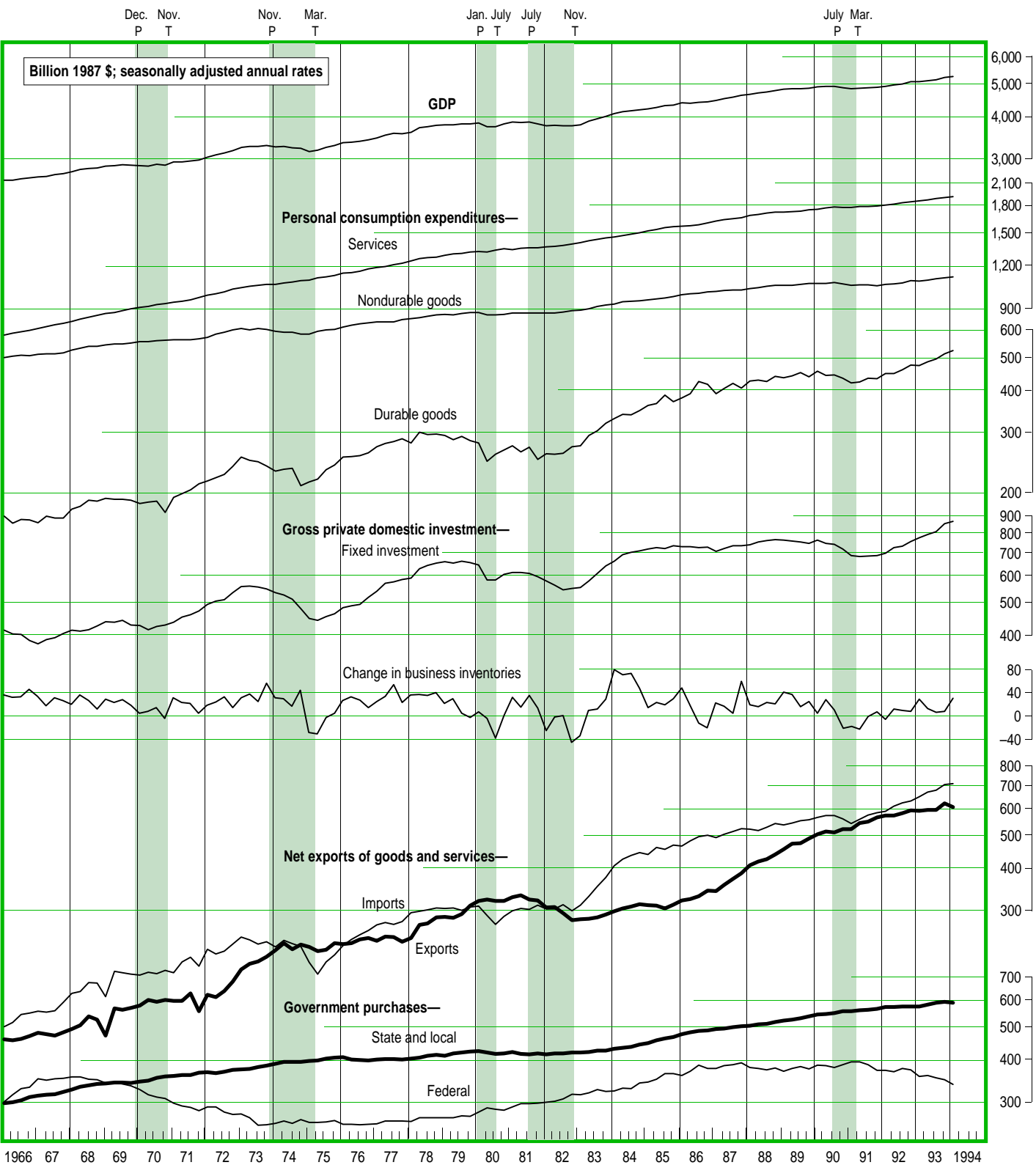
[Billions of 1987 dollars]

	1992	1993	1993	1993	1993	1993	1993	1993
<b>Truck output</b> <sup>1</sup> .....	<b>71.4</b>	<b>83.5</b>	<b>79.5</b>	<b>83.7</b>	<b>80.2</b>	<b>79.9</b>	<b>90.1</b>	<b>102.5</b>
<b>Final sales</b> .....	<b>70.4</b>	<b>83.8</b>	<b>78.1</b>	<b>77.3</b>	<b>84.2</b>	<b>81.4</b>	<b>92.3</b>	<b>99.2</b>
Personal consumption expenditures ..	37.1	43.3	40.7	42.0	43.3	40.9	46.9	49.5
Producers' durable equipment .....	31.8	40.4	34.8	37.6	39.6	39.5	44.8	48.4
Net exports .....	-4.4	-4.5	-3.9	-5.7	-5.4	-4.0	-2.9	-2.9
Exports .....	4.8	4.8	5.1	4.4	4.6	4.4	5.7	5.3
Imports .....	9.1	9.2	9.1	10.1	10.0	8.4	8.6	8.1
Government purchases .....	5.9	4.6	6.6	3.4	6.7	4.9	3.5	4.2
<b>Change in business inventories</b> .....	<b>1.0</b>	<b>-4</b>	<b>1.4</b>	<b>6.3</b>	<b>-4.1</b>	<b>-1.5</b>	<b>-2.3</b>	<b>3.3</b>

1. Includes new trucks only.

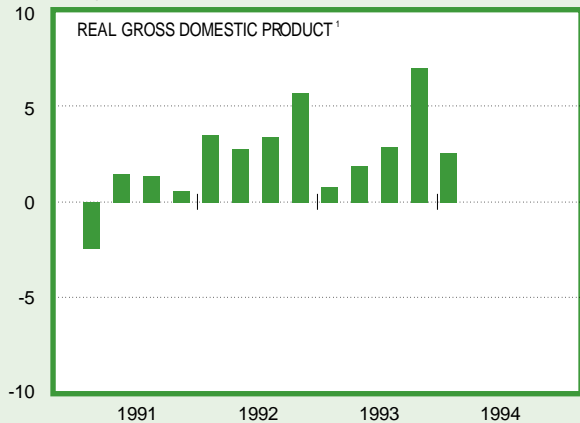
NIPA Charts

REAL GDP AND ITS COMPONENTS: TRENDS AND CYCLES

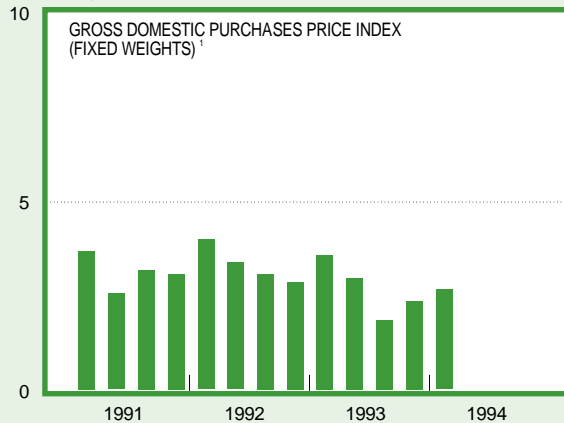


# SELECTED SERIES: RECENT QUARTERS

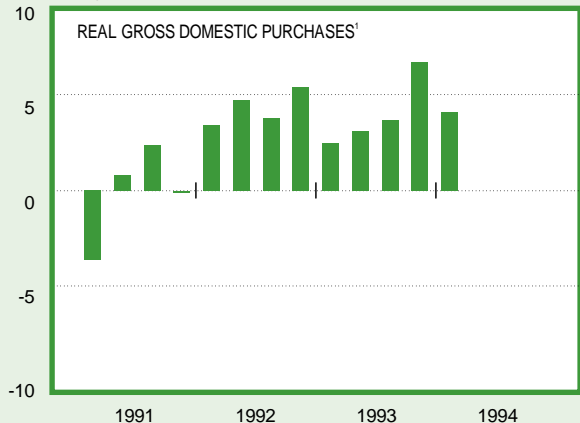
Percent change



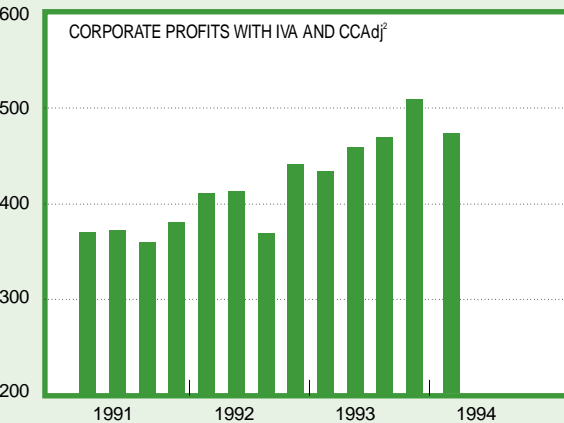
Percent change



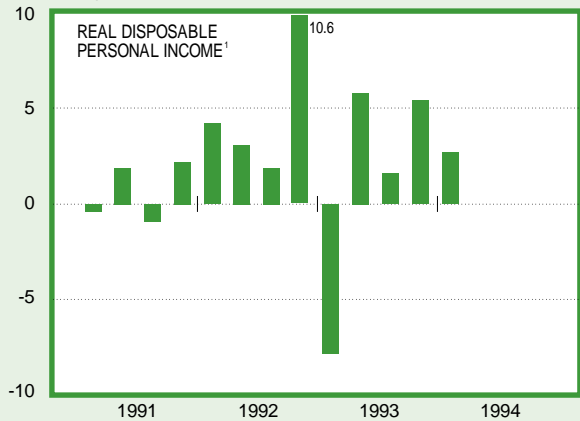
Percent change



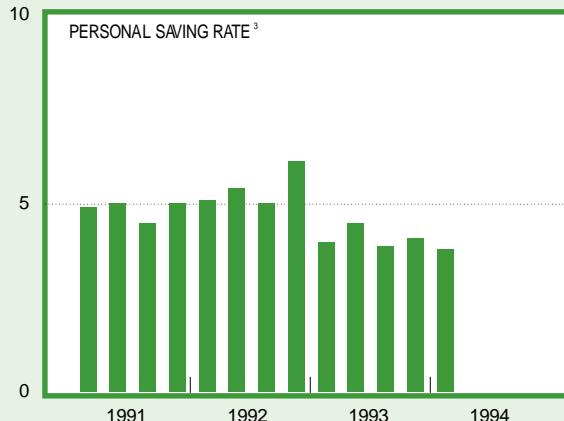
Billion \$



Percent change



Percent



1. Percent change at annual rate from preceding quarter; based on seasonally adjusted estimates.  
 2. Seasonally adjusted annual rate; IVA is inventory valuation adjustment, and CCAj is capital consumption adjustment.  
 3. Personal saving as percentage of disposable personal income; based on seasonally adjusted estimates.

# Selected Monthly Estimates

**Table 1.—Personal Income**

(Billions of dollars; monthly estimates seasonally adjusted at annual rates)

	1992	1993	1993										1994			
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>p</sup>
<b>Personal income</b> .....	<b>5,144.9</b>	<b>5,388.3</b>	<b>5,249.1</b>	<b>5,289.2</b>	<b>5,365.6</b>	<b>5,380.4</b>	<b>5,373.6</b>	<b>5,365.1</b>	<b>5,432.3</b>	<b>5,440.6</b>	<b>5,478.7</b>	<b>5,511.2</b>	<b>5,548.1</b>	<b>5,501.1</b>	<b>5,600.0</b>	<b>5,633.1</b>
Wage and salary disbursements .....	2,973.1	3,080.5	2,976.3	2,975.8	3,068.3	3,093.8	3,086.0	3,101.6	3,124.3	3,120.4	3,137.7	3,147.1	3,164.0	3,191.5	3,197.8	3,212.9
Private industries .....	2,405.6	2,490.8	2,393.9	2,392.9	2,483.8	2,507.3	2,497.9	2,511.3	2,531.8	2,524.9	2,543.3	2,552.0	2,567.2	2,590.6	2,595.6	2,610.1
Commodity-producing industries .....	756.5	763.6	742.7	740.8	765.2	766.7	763.3	766.8	769.4	772.1	774.6	779.4	783.9	785.6	790.3	792.6
Manufacturing .....	577.6	577.3	561.0	559.6	582.1	580.3	578.4	579.5	581.2	583.7	584.0	587.5	591.8	592.1	597.2	598.1
Distributive industries .....	682.0	706.6	684.3	683.0	704.9	713.1	709.2	713.2	717.3	712.8	719.0	718.4	722.9	731.4	731.4	737.6
Service industries .....	967.0	1,020.6	967.0	969.0	1,013.6	1,027.5	1,025.4	1,031.3	1,045.1	1,040.0	1,049.7	1,054.1	1,060.4	1,073.6	1,073.8	1,079.8
Government .....	567.5	589.7	582.3	583.0	584.5	586.4	588.1	590.3	592.6	595.5	594.4	595.1	596.8	600.9	602.2	602.8
Other labor income .....	322.7	350.7	338.5	341.2	343.9	346.6	349.3	352.0	354.7	357.4	360.1	362.9	365.8	368.8	371.9	375.1
Proprietors' income with IVA and CCA <sup>dj</sup> .....	414.3	443.2	436.9	470.2	449.4	437.9	430.8	403.8	430.5	433.2	449.8	470.4	480.8	464.7	478.0	484.1
Farm .....	43.7	46.0	48.2	82.0	59.7	45.2	36.0	10.6	31.1	32.7	43.9	60.0	65.3	54.1	62.2	63.6
Nonfarm .....	370.6	397.3	388.7	388.2	389.7	392.7	394.8	393.1	399.4	400.4	406.0	410.4	415.4	410.6	415.8	420.5
Rental income of persons with CCA <sup>dj</sup> .....	-8.9	12.6	9.5	8.1	14.3	12.0	11.9	7.1	16.1	17.9	16.8	16.4	15.9	-43.7	24.6	29.5
Personal dividend income .....	140.4	158.3	157.1	157.2	157.5	157.8	158.2	158.6	159.0	159.3	159.4	159.4	159.5	159.7	160.4	162.0
Personal interest income .....	694.3	695.2	695.3	695.2	694.1	693.1	692.0	693.6	695.7	697.8	697.3	696.7	696.2	697.9	700.1	702.5
Transfer payments to persons .....	858.4	912.1	892.6	898.3	901.7	904.5	910.2	914.3	919.4	921.8	925.9	927.5	936.2	940.7	946.2	947.0
Old-age, survivors, disability, and health insurance benefits .....	413.9	438.4	432.5	432.5	434.7	435.1	435.3	438.9	438.4	441.0	444.1	444.3	450.0	455.0	458.4	459.3
Government unemployment insurance benefits .....	39.2	34.1	32.9	36.0	34.0	32.8	36.4	34.3	36.2	34.7	32.0	31.8	32.9	28.6	27.0	25.1
Other .....	405.2	439.6	427.2	429.7	433.0	436.7	438.4	441.1	444.7	446.2	449.8	451.4	453.2	457.1	460.7	462.6
Less: Personal contributions for social insurance .....	249.3	264.3	256.9	256.9	263.5	265.3	264.9	265.9	267.4	267.0	268.3	269.1	270.2	278.4	278.9	280.0
<b>Addenda:</b>																
Total nonfarm income .....	5,080.1	5,320.0	5,179.0	5,185.1	5,283.7	5,312.8	5,315.0	5,332.2	5,378.7	5,385.4	5,412.1	5,428.4	5,459.9	5,423.9	5,514.6	5,546.1
Total farm income <sup>1</sup> .....	64.8	68.3	70.1	104.0	81.9	67.6	58.6	33.0	53.6	55.3	66.6	82.8	88.3	77.2	85.4	87.0

<sup>r</sup> Preliminary.

<sup>p</sup> Revised.

1. Equals farm proprietors' income, farm wages, farm other labor income, and agricultural net interest.

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

 CCA<sup>dj</sup> Capital consumption adjustment

IVA Inventory valuation adjustment

**Table 2.—The Disposition of Personal Income**

(Monthly estimates seasonally adjusted at annual rates)

	1992	1993	1993										1994			
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>p</sup>
Billions of dollars, unless otherwise indicated																
<b>Personal income</b> .....	<b>5,144.9</b>	<b>5,388.3</b>	<b>5,249.1</b>	<b>5,289.2</b>	<b>5,365.6</b>	<b>5,380.4</b>	<b>5,373.6</b>	<b>5,365.1</b>	<b>5,432.3</b>	<b>5,440.6</b>	<b>5,478.7</b>	<b>5,511.2</b>	<b>5,548.1</b>	<b>5,501.1</b>	<b>5,600.0</b>	<b>5,633.1</b>
Less: Personal tax and nontax payments .....	644.8	681.6	657.3	659.0	677.8	683.1	682.0	685.5	690.7	690.9	694.8	698.7	704.1	712.9	715.3	718.9
<b>Equals: Disposable personal income</b> .....	<b>4,500.2</b>	<b>4,706.7</b>	<b>4,591.9</b>	<b>4,630.1</b>	<b>4,687.8</b>	<b>4,697.3</b>	<b>4,691.6</b>	<b>4,679.6</b>	<b>4,741.6</b>	<b>4,749.7</b>	<b>4,783.9</b>	<b>4,812.5</b>	<b>4,844.0</b>	<b>4,788.3</b>	<b>4,884.7</b>	<b>4,914.2</b>
Less: Personal outlays .....	4,261.5	4,516.8	4,435.1	4,409.8	4,459.4	4,481.9	4,509.4	4,527.6	4,544.0	4,560.4	4,604.7	4,618.7	4,636.9	4,635.1	4,693.5	4,712.6
Personal consumption expenditures .....	4,139.9	4,391.8	4,311.6	4,286.1	4,335.8	4,358.7	4,385.3	4,403.3	4,419.2	4,434.8	4,477.9	4,490.8	4,507.4	4,504.3	4,562.5	4,581.4
Durable goods .....	497.3	537.9	508.2	506.7	526.6	532.7	535.6	540.0	544.1	541.6	559.4	562.1	566.8	567.7	577.3	587.3
Nondurable goods .....	1,300.9	1,350.0	1,345.0	1,327.2	1,342.3	1,344.1	1,348.1	1,349.6	1,350.5	1,357.1	1,366.3	1,366.0	1,370.0	1,359.9	1,383.9	1,384.3
Services .....	2,341.6	2,503.9	2,458.4	2,452.2	2,466.9	2,481.8	2,501.6	2,513.7	2,524.6	2,536.1	2,552.1	2,562.7	2,570.5	2,576.7	2,601.2	2,609.8
Interest paid by persons .....	111.1	114.0	112.4	112.7	112.7	112.2	113.1	113.5	114.0	114.8	115.6	116.6	118.3	119.2	119.3	119.5
Personal transfer payments to rest of the world (net) .....	10.4	11.0	11.0	11.0	11.0	11.0	11.0	10.8	10.8	10.8	11.2	11.2	11.2	11.7	11.7	11.7
<b>Equals: Personal saving</b> .....	<b>238.7</b>	<b>189.9</b>	<b>156.8</b>	<b>220.4</b>	<b>228.4</b>	<b>215.4</b>	<b>182.3</b>	<b>152.0</b>	<b>197.7</b>	<b>189.3</b>	<b>179.2</b>	<b>193.9</b>	<b>207.2</b>	<b>153.2</b>	<b>191.2</b>	<b>201.6</b>
<b>Addenda:</b>																
Disposable personal income:																
Total, billions of 1987 dollars <sup>1</sup> .....	3,632.5	3,700.9	3,636.5	3,660.4	3,694.2	3,697.7	3,691.2	3,678.5	3,721.3	3,726.3	3,740.2	3,755.5	3,778.1	3,741.1	3,798.2	3,810.5
Per capita:																
Current dollars .....	17,615	18,225	17,854	17,988	18,196	18,216	18,176	18,113	18,335	18,348	18,463	18,557	18,663	18,434	18,791	18,890
1987 dollars .....	14,219	14,330	14,139	14,220	14,339	14,339	14,301	14,238	14,389	14,395	14,435	14,481	14,556	14,402	14,612	14,648
Population (thousands) .....	255,472	258,254	257,190	257,400	257,631	257,870	258,115	258,356	258,612	258,869	259,106	259,336	259,566	259,757	259,947	260,143
Personal consumption expenditures:																
Total, billions of 1987 dollars .....	3,341.8	3,453.2	3,414.5	3,388.4	3,416.7	3,431.2	3,450.2	3,461.2	3,468.2	3,479.2	3,500.9	3,504.4	3,515.5	3,519.2	3,547.7	3,552.4
Durable goods .....	456.6	490.0	465.5	464.4	479.5	485.2	487.9	491.8	494.9	492.5	506.6	509.9	516.3	515.8	523.0	530.0
Nondurable goods .....	1,062.9	1,088.1	1,082.2	1,067.4	1,079.0	1,081.7	1,088.8	1,089.8	1,090.0	1,099.1	1,100.4	1,098.3	1,101.8	1,094.1	1,113.6	1,112.3
Services .....	1,823.3	1,875.2	1,866.9	1,856.6	1,858.3	1,864.3	1,873.6	1,879.6	1,883.3	1,887.7	1,894.0	1,896.1	1,897.3	1,909.3	1,911.1	1,910.2
Implicit price deflator, 1987=100 .....	123.9	127.2	126.3	126.5	126.9	127.0	127.1	127.2	127.4	127.5	127.9	128.1	128.2	128.0	128.6	129.0
Personal saving as percentage of disposable personal income <sup>2</sup> .....	5.3	4.0	3.9	4.4	4.7	4.4	3.9	3.8	3.8	4.0	3.9	4.0	3.8	3.8	3.7	.....
Percent change from preceding period																
<b>Personal income, current dollars</b> .....	<b>6.1</b>	<b>4.7</b>	<b>0.4</b>	<b>0.8</b>	<b>1.4</b>	<b>0.3</b>	<b>-0.1</b>	<b>-0.2</b>	<b>1.3</b>	<b>0.2</b>	<b>0.7</b>	<b>0.6</b>	<b>0.7</b>	<b>-0.8</b>	<b>1.8</b>	<b>0.6</b>
Disposable personal income:																
Current dollars .....	6.4	4.6	.5	.8	1.2	.2	-.1	-.3	1.3	.2	.7	.6	.7	-1.1	2.0	.6
1987 dollars .....	2.9	1.9	.2	.7	.9	.1	-.2	-.3	1.2	.1	.4	.4	.6	-1.0	1.5	.3
Personal consumption expenditures:																
Current dollars .....	6.0	6.1	.5	-.6	1.2	.5	.6	.4	.4	.4	1.0	.3	.4	-.1	1.3	.4
1987 dollars .....	2.6	3.3	.2	-.8	.8	.4	.6	.3	.2	.3	.6	.1	.3	.1	.8	.1

<sup>r</sup> Preliminary.

<sup>p</sup> Revised.

1. Disposable personal income in 1987 dollars equals the current-dollar figure divided by the implicit price deflator for personal consumption expenditures.

2. Monthly estimates equal the centered 3-month moving average of personal saving as a percentage of the centered 3-month moving average of disposable personal income.

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



Table 3.—U.S. International Transactions in Goods and Services

[Millions of dollars; monthly estimates seasonally adjusted]

	1992	1993	1993										1994			
			Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar.
<b>Exports of goods and services</b> .....	<b>619,848</b>	<b>643,563</b>	<b>51,829</b>	<b>54,090</b>	<b>53,568</b>	<b>53,746</b>	<b>52,563</b>	<b>52,399</b>	<b>52,731</b>	<b>53,660</b>	<b>54,957</b>	<b>54,735</b>	<b>57,250</b>	<b>54,296</b>	<b>52,902</b>	.....
<b>Goods</b> .....	<b>440,138</b>	<b>456,771</b>	<b>36,253</b>	<b>38,382</b>	<b>37,841</b>	<b>38,249</b>	<b>36,977</b>	<b>36,577</b>	<b>37,224</b>	<b>38,134</b>	<b>39,371</b>	<b>39,451</b>	<b>41,469</b>	<b>38,528</b>	<b>37,165</b>	.....
Foods, feeds, and beverages .....	40,209	40,391	3,447	3,468	3,411	3,310	3,151	3,223	3,053	3,432	3,499	3,472	3,666	3,314	3,174	.....
Industrial supplies and materials .....	109,307	111,953	8,683	9,238	9,109	9,676	8,833	9,327	8,967	9,581	9,893	9,681	9,792	8,977	8,605	.....
Capital goods, except automotive .....	176,709	183,037	14,251	15,579	15,226	15,278	15,255	14,336	15,296	14,999	15,579	15,565	17,186	16,097	15,242	.....
Automotive vehicles, engines, and parts .....	47,080	51,691	4,380	4,307	4,424	4,298	4,115	3,792	4,170	4,125	4,521	4,740	4,635	4,425	4,497	.....
Consumer goods (nonfood), except automotive .....	50,382	53,413	4,237	4,351	4,242	4,501	4,291	4,442	4,491	4,597	4,559	4,791	4,666	4,515	4,425	.....
Other goods .....	24,476	24,288	1,931	1,951	2,067	1,866	1,994	1,989	2,073	2,151	2,041	1,987	2,288	1,979	1,956	.....
Adjustments <sup>1</sup> .....	-8,026	-8,002	-675	-513	-638	-681	-662	-532	-826	-751	-721	-785	-765	-778	-734	.....
<b>Services</b> .....	<b>179,710</b>	<b>186,792</b>	<b>15,576</b>	<b>15,708</b>	<b>15,727</b>	<b>15,497</b>	<b>15,586</b>	<b>15,822</b>	<b>15,507</b>	<b>15,526</b>	<b>15,586</b>	<b>15,284</b>	<b>15,781</b>	<b>15,767</b>	<b>15,737</b>	.....
Travel .....	53,861	56,501	4,722	4,668	4,796	4,690	4,700	4,911	4,705	4,669	4,726	4,531	4,874	4,898	4,857	.....
Passenger fares .....	17,353	17,849	1,519	1,491	1,522	1,491	1,517	1,542	1,475	1,459	1,476	1,416	1,507	1,539	1,509	.....
Other transportation .....	22,773	23,508	1,891	2,026	2,000	1,942	1,951	1,916	1,893	1,951	2,052	1,938	2,009	2,005	1,983	.....
Royalties and license fees .....	20,238	20,414	1,628	1,646	1,725	1,746	1,752	1,732	1,725	1,718	1,709	1,705	1,705	1,719	1,721	.....
Other private services .....	53,601	56,434	4,735	4,774	4,588	4,543	4,606	4,683	4,703	4,761	4,728	4,829	4,836	4,703	4,764	.....
Transfers under U.S. military agency sales contracts <sup>2</sup> .....	11,015	11,259	1,027	1,039	1,002	985	963	971	947	912	832	802	787	838	835	.....
U.S. Government miscellaneous services .....	869	827	54	63	94	99	97	68	60	56	63	63	63	66	69	.....
<b>Imports of goods and services</b> .....	<b>659,575</b>	<b>720,324</b>	<b>55,464</b>	<b>61,038</b>	<b>60,252</b>	<b>58,647</b>	<b>60,886</b>	<b>59,290</b>	<b>59,775</b>	<b>61,843</b>	<b>63,417</b>	<b>62,190</b>	<b>61,398</b>	<b>60,938</b>	<b>62,608</b>	.....
<b>Goods</b> .....	<b>536,276</b>	<b>589,210</b>	<b>44,992</b>	<b>50,168</b>	<b>49,331</b>	<b>48,059</b>	<b>50,076</b>	<b>48,334</b>	<b>48,871</b>	<b>50,702</b>	<b>52,015</b>	<b>50,802</b>	<b>50,217</b>	<b>49,878</b>	<b>51,051</b>	.....
Foods, feeds, and beverages .....	27,857	28,050	2,174	2,389	2,240	2,304	2,341	2,316	2,331	2,437	2,563	2,348	2,343	2,457	2,379	.....
Industrial supplies and materials .....	138,273	145,021	11,052	12,643	12,643	12,265	12,753	12,096	11,734	12,193	12,493	12,283	11,561	11,566	12,092	.....
Capital goods, except automotive .....	134,193	152,788	11,718	12,379	12,426	12,302	13,094	12,822	12,456	13,004	13,653	13,283	13,966	14,181	13,965	.....
Automotive vehicles, engines, and parts .....	91,779	102,447	8,347	8,850	8,777	8,159	8,589	7,769	8,523	8,742	8,995	8,811	8,912	8,466	8,823	.....
Consumer goods (nonfood), except automotive .....	122,973	133,852	10,264	11,489	11,094	10,671	11,307	11,001	11,680	11,612	11,740	11,504	11,080	11,266	11,431	.....
Other goods .....	17,590	18,354	1,278	1,598	1,481	1,605	1,614	1,529	1,373	1,518	1,547	1,687	1,740	1,538	1,572	.....
Adjustments <sup>1</sup> .....	3,611	8,699	160	821	671	753	378	800	774	1,196	1,025	887	616	403	789	.....
<b>Services</b> .....	<b>123,299</b>	<b>131,114</b>	<b>10,472</b>	<b>10,869</b>	<b>10,921</b>	<b>10,588</b>	<b>10,811</b>	<b>10,956</b>	<b>10,904</b>	<b>11,141</b>	<b>11,402</b>	<b>11,388</b>	<b>11,181</b>	<b>11,061</b>	<b>11,556</b>	.....
Travel .....	39,872	42,329	3,447	3,494	3,521	3,366	3,376	3,503	3,457	3,634	3,715	3,698	3,613	3,555	3,708	.....
Passenger fares .....	10,943	11,256	911	933	944	894	905	911	918	960	1,008	1,004	951	948	994	.....
Other transportation .....	23,454	24,511	1,870	2,149	2,088	2,003	2,093	2,080	2,020	2,044	2,133	2,085	2,036	1,987	1,989	.....
Royalties and license fees .....	4,986	4,748	361	369	393	401	407	410	411	412	409	409	409	414	683	.....
Other private services .....	27,988	33,595	2,618	2,668	2,718	2,674	2,791	2,843	2,901	2,905	2,954	3,013	2,995	2,989	3,026	.....
Direct defense expenditures <sup>2</sup> .....	13,766	12,286	1,066	1,058	1,067	1,060	1,050	1,000	983	975	984	983	983	972	961	.....
U.S. Government miscellaneous services .....	2,290	2,388	199	198	191	190	190	210	213	212	199	196	194	196	195	.....
<b>Memoranda:</b>																
Balance on goods .....	-96,138	-132,439	-8,739	-11,787	-11,491	-9,810	-13,098	-11,757	-11,647	-12,568	-12,643	-11,351	-8,748	-11,350	-13,886	.....
Balance on services .....	56,411	55,678	5,104	4,839	4,806	4,909	4,775	4,866	4,603	4,385	4,184	3,896	4,600	4,707	4,181	.....
Balance on goods and services .....	-39,727	-76,761	-3,635	-6,948	-6,684	-4,901	-8,323	-6,891	-7,044	-8,183	-8,460	-7,455	-4,148	-6,643	-9,706	.....

<sup>r</sup> Preliminary.<sup>r</sup> Revised.

1. Reflects adjustments necessary to bring the Census Bureau's component data in line with the concepts and

definitions used to prepare BEA's international and national accounts.

2. Contains goods that cannot be separately identified.

Source: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census.

# Integrated Economic and Environmental Satellite Accounts

*The existing systems of national economic accounts—including national income and product accounts, input-output accounts, and balance sheets—are without question premier tools for analysis and decisionmaking. Since their origins over 50 years ago, they have been refined, extended, and updated to reflect changes in the economy and to respond to changing analytical and policy concerns. Continuing this evolution, this article and its companion “Accounting for Mineral Resources: Issues and BEA’s Initial Estimates,” beginning on page 50, present new work by BEA on an accounting framework that covers the interactions of the economy and the environment. To do so, this framework provides new breakdowns that are relevant to the analysis of these interactions and extends the existing accounts’ definition of capital to cover natural and environmental resources. The framework takes the form of a satellite account—an account that supplements, rather than replaces, the existing accounts.*

*This article presents the analytical and economic accounting background for the new work, an overview of the satellite accounting framework, and a long-term plan to implement the framework. Because it introduces a topic that has both economic and environmental dimensions, some parts of the article may appear elementary—perhaps even oversimplified—to readers familiar with the economic (and economic accounting) dimensions, while other parts may appear elementary to those familiar with the environmental dimensions.*

*The second article discusses the conceptual and methodological issues in mineral resource accounting and presents estimates of mineral stocks and changes in those stocks for the past several decades. It is a technically oriented article that describes in some detail the alternative valuation methods and the source data and estimating procedures used to prepare the new estimates.*

*Over the years, the national economic accounts have benefited from discussion and critique of concepts, source data, and estimating methods. The same is to be expected for the IEESA’s, as BEA’s new integrated economic and environmental satellite accounts are being called. I invite your comments.*

*Carol S. Carson  
Director, Bureau of Economic Analysis*

**T**HE ECONOMY and the natural environment interact at many points, and these interactions raise analytical questions.

- The Nation’s wealth includes natural resources, such as oil and gas reserves and timber, that are used in production. At what rate are these resources being used?
- The income of producers in the mineral industries includes a return to the drilling rigs, mining equipment, and other structures and equipment engaged in them and a return to the mineral. What share is attributable to the mineral?
- Economic activity adds to the proved stock of natural resources by exploration and technological innovation. How much of the use

of natural resources in production has been offset by these additions?

- Households, governments, and business all make expenditures to maintain or restore the environment. What share of their spending is for the environment?
- The economy disposes of wastes into the air and water, and the resulting degradation of the environment imposes costs, such as lower timber yields and fish harvests and higher cleaning costs. What are these costs? Which sectors bear them?

The answers to questions such as these about the interaction of the economy and the environment are often based on partial and sometimes even inconsistent information, suggesting the

need to identify and quantify the interactions within a systematic framework as a basis for more informed analysis and decisionmaking. This article introduces the integrated economic and environmental satellite accounts (IEESA's), which are meant to help fill that need. The IEESA's are a supplementary set of accounts structured to show the interactions of the economy and the environment more fully than the existing economic accounts. While the IEESA's build on the existing economic accounts, they do not replace them; likewise, IEESA measures do not replace measures, such as gross domestic product (GDP), from the existing accounts.

The Bureau of Economic Analysis (BEA) began work leading to this article—and to the companion article about mineral resources, which begins on page 50—in 1992. At that time, as part of a long-term program to modernize its economic accounts, BEA began research on two sets of accounts to supplement the existing national accounts. One of these sets of supplementary accounts, called satellite accounts, focused on the stock, and changes in the stock, of natural resources.<sup>1</sup> (The roles that satellite accounts can serve and their general structure are introduced

1. The other set, on research and development, will be introduced in an upcoming issue of the SURVEY OF CURRENT BUSINESS.

in the accompanying box.) Work on the natural resources satellite accounts was given added impetus and extended in scope in 1993 when President Clinton, as part of his April 21 Earth Day address, gave high priority to the development of “Green GDP measures [that] would incorporate changes in the natural environment into the calculations of national income and wealth.” At that time, BEA committed to producing initial estimates of natural resource depletion within a year.

The first section of this article discusses the analytical and economic accounting background of the IEESA's and concludes with a summary of a United Nations system of satellite accounts for the environment, after which BEA's accounts are fashioned. The second section introduces the main features of the IEESA's, presents an inventory of available data sources, and considers uses of the new accounts. The final section describes BEA's long-term work plan for developing the satellite accounts, the first phase of which is completed with the presentation of the two articles in this issue of the SURVEY OF CURRENT BUSINESS. Bibliographic references for both articles begin on page 62.

### Satellite Accounts: What Are They?

Satellite accounts are frameworks designed to expand the analytical capacity of the national accounts without overburdening them or interfering with their general-purpose orientation. In this role, satellite accounts organize information in an internally consistent way that suits the particular analytical focus at hand, yet they maintain links to the existing national accounts. Further, because they supplement, rather than replace, the existing accounts, they can be a laboratory for economic accounting in that they provide room for conceptual development and methodological refinement.

In their most flexible applications, satellite accounts may use definitions and concepts that differ from the existing accounts. For example, a satellite account may be built around a broader concept of capital formation than the existing accounts. This flexibility is being used in BEA's work on integrated economic and environmental accounts and on research and development accounts. Satellite accounts such as these use different concepts and definitions by design; in other respects, they retain consistency with the existing accounts.

Satellite accounts can add detail or other information about a particular aspect of the economy to that in the existing accounts; for instance, they can integrate monetary and physical data. They can ar-

range information differently, perhaps by cutting across sectors to assemble information on both intermediate and final consumption. For example, a satellite account can assemble business expenditures on training—treated as intermediate consumption in the existing accounts—and education-related expenditures by households and government to analyze the role of education in the economy. They can use a classification other than the primary one. For example, they can identify expenditures on “research in education” as part of research expenditures even though they are included in education expenditures in the existing accounts.

The terminology and concepts associated with satellite accounts reflect the experiences of several countries that have constructed them, largely on an ad hoc basis, for fields such as health, education, agriculture, research and development, and the environment. The *System of National Accounts 1993*, the newly revised international guidelines, includes a chapter that provides a general framework for satellite accounts and demonstrates how that framework can be used for some of the fields in which such accounts would be most useful. This chapter represents, in a real sense, the coming of age of satellite accounts as an analytical tool.

## The Background for Integrated Economic and Environmental Accounting

### *The analytical background*

It is, of course, a simplification to speak of the economy and the environment as two distinct realms. It can be argued, for example, that the economy is part of nature because the economic activity of human beings in producing food and shelter parallels the similar activity of animals. In this simplification, the economy is defined as the human activities relating to income, production, consumption, accumulation, and wealth (although there is a continuing discussion about the scope to be given, for example, to the term "production"). The term "environment" refers to the environment of human beings, which is made up of the biological resources, subsoil resources, land and related ecosystem resources, water, and air. From the standpoint of the economy, the environment can be thought of as consisting of a range of natural resource and environmental assets that provide an identifiable and significant flow of goods and services to the economy.

The economy uses these productive natural assets in a wide range of ways. Crude oil pumped from proved reserves, for example, is used in the production of petroleum products, while clean water in lakes and oceans is used in the production of fish, paper products, and electric power. The economy's uses of the goods and services provided by these environmental assets can be grouped into two general classes. When use of the natural asset permanently or temporarily reduces its quantity, the use is viewed as involving a flow of a good or service, and the quantitative reduction in the asset is called depletion. In that class of uses, biological resources, for example, are used as food, as raw materials for clothing, and as building materials and fuel. Water is used for drinking, cooling, processing, and irrigation.

When use of the natural asset reduces its quality, the qualitative reduction in the asset is called degradation. These qualitative uses include the conversion of land from one use to another, such as the partial development of forestland. The development of forestland results in a reduction in the economic value of the land as forestland because of the reduction in the flow of recreational services associated with its degradation as a wildlife area and tourist destination. In another kind of qualitative use, natural assets are used as a sink for the disposal of residual pollutants that are byproducts of production.

The use of natural assets describes only part of the interaction between the economy and the environment. There are also feedback effects. Materials balance and energy accounting highlight both the use of the natural assets and the feedback effects from the use; thus, they capture the full interaction between the economy and the environment.<sup>2</sup> In the case of natural resources, oil pumped from reserves today reduces the quantities that can be extracted from existing fields in the future; similarly, overharvesting of fish stocks today reduces yields in the future.

In the case of environmental assets, the feedback is more complicated, with effects that often fall on other industries and consumers. For example, when businesses use environmental goods and services along with labor and capital in production, residuals—such as lead and cadmium, or carbon monoxide and sulfur oxides—are also produced and are then disposed of into the environment. Up to a point, the environment is able to assimilate these residuals; beyond that point, however, significant environmental degradation affects the ability of the environment to provide

2. Materials balance and energy accounting, developed in the late 1960's, is based on the first law of thermodynamics—that matter can neither be created nor destroyed. The accounts therefore describe a circular flow process: A raw material input is transformed by the processes of the economy, this transformation results in a new product and in residuals, and those residuals are transformed in the natural environment into raw materials.

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raw materials to the economy (and to assimilate residuals). Degradation of air and water quality, for example, may lead to economic feedback—for example, lower timber yields and fish harvests, higher rates of depreciation in plant and equipment, additional cleaning costs, and increased health expenditures. In addition, either because of governmental regulations or the need to dispose of residuals that the environment can no longer handle, businesses and others may need to make expenditures for pollution abatement and control.

Integrated economic and environmental accounting aims to provide a picture of these interactions between the economy and the environment. Although this picture, as already noted, has numerous elements and is complex, by definition it does not cover many of the transformations and interactions within the environment itself—for example, the disposal of waste products from wild fish and mammals or the conversion of natural carbon dioxide into oxygen by plant matter on land and in the oceans. The accounts highlight the fact that economic sustainability depends on environmental sustainability, and they provide data to help analyze the costs and benefits for the careful stewardship of our economic and environmental assets. Consistent and detailed accounting of the interactions between the economy and the environment provides a common framework for integrating the work of environmental specialists, economists, and other analysts from a wide range of disciplines.

### *The economic accounting background*

Economic accountants have long been aware of the issues that arise with respect to natural resources and the environment. One of the issues, which is also reviewed in the companion article, is whether the economic accounts should reflect the parallelism that is apparent in business accounting between depreciation, a charge for the using up of plant and equipment in production, and depletion, a charge for the using up of natural resources in production. In particular, because depletion of mineral resources has long been chargeable against profits in the U.S. tax code and because tax return tabulations have been used as source data for profits and other property income components of the national income and product accounts (NIPA's), explicit decisions were required on the treatment of depletion in the accounts. Initially, depletion was treated symmetrically with depreciation, but

no entry was made for additions to the stock of mineral resources parallel to the treatment of investments in structures and equipment. As a result of dissatisfaction with this asymmetric treatment, the entry for depletion was removed beginning in 1947.

In the late 1960's and early 1970's, environmental accounting issues came up as part of a broader interest in social accounting. Work by James Tobin and William Nordhaus, among others, on adjusting traditional economic accounts for changes in leisure time, disamenities of urbanization, exhaustion of natural resources, population growth, and other aspects of welfare produced indicators of economic well-being. However, the seemingly limitless scope, the range of uncertainty, and the degree of subjectivity involved in such measures of nonmarket activities limited the usefulness of, and interest in, these social indicators. It was felt that inclusion of such measures would sharply diminish the usefulness of traditional economic accounts for analyzing market activities. Attention subsequently focused on more readily identifiable and directly relevant market issues, such as the extent to which expenditures that relate to the protection and restoration of the environment (and other so-called defensive expenditures) are identifiable in the economic accounts.

In response to this interest in environmental protection, in the mid-1970's, BEA was a pioneer in the development of estimates of pollution abatement and control (PAC) expenditures in a national accounting framework. Further, presaging what was to come, the framework for these estimates can be viewed as an early form of a satellite account. The PAC estimates focus on an area of interest and provide detail that would have burdened presentation of the more general NIPA estimates.

The steps in the evolution of natural resource and environmental accounting since the early 1980's can be summarized in terms of international efforts, in which there was active U.S. participation, and the literature related to these effects. For this purpose, 1982 is a reasonable place to start. In that year, the United Nations Environment Program (UNEP) was given the mandate to develop methodological guidelines on environmental accounting. In its earlier work, UNEP had tried to clarify the linkages between economic development and the environment to help integrate issues of environmental and resource management into the framework of economic decisionmaking. To follow up on

the mandate, UNEP and the World Bank sponsored a series of workshops in 1983–86 to explore the current state of environmental and natural resource accounting. The general thinking was that although economists had long considered the “external effects” of production and consumption, they had not taken into account the effects on the resource system as a whole and the consequence that eventually someone was going to have to bear the “external costs.” A broader view would internalize environmental costs in the production process, for which it would be essential to calculate costs and benefits properly and to distinguish clearly between true income and the drawing down of assets by depletion or degradation. Accordingly, the workshops focused on the shortcomings of traditional economic accounting: GDP does not adequately represent true income because environmental protection costs are treated as generating income and because depletion and degradation of natural resources are not charged against current income. A number of remedies for these shortcomings were proposed, but workable methodologies and good data were lacking, and some of the proposals were conflicting.<sup>3</sup>

Although the empirical foundations for integrating environmental and economic accounting estimates were lacking in the mid-1980's, a growing body of research and information was accumulating.<sup>4</sup> France, Norway, and the Netherlands were working toward physical accounting matrices, which they have integrated into cost-benefit and cost-effectiveness work in the environmental policy field. Subsequently, Canada, the United Kingdom, Japan, and Australia all did preliminary work toward supplementing their traditional accounts. The United Nations and the World Bank jointly sponsored pilot studies with statisticians in Mexico and Papua New Guinea. In addition to these country efforts, researchers—such as Henry Peskin, working with the Environmental Protection Agency in a study of the Chesapeake Bay region, and Robert Repetto and his associates at the World Resources Institute, in their studies of China, Costa Rica, and the Philippines—have added significantly to the growing literature on environmental accounting.

In the meantime, a revision of the System of National Accounts (SNA), the international guidelines followed by most countries in preparing their economic accounts, was undertaken. A ma-

major issue was the extent to which the revised SNA would remedy the perceived shortcomings of traditional national accounts.

The discussion stimulated by the 1987 report of the World Commission on Environment and Development, *Our Common Future*, gave added reason to explore statistical measures that would provide appropriate tools to guide policy and decisionmaking.<sup>[34]</sup> This report focused on sustainable development—that is, development that meets the needs of the present without compromising the ability to meet the needs of the future. According to the report, the Commission had been established by the United Nations General Assembly because of the growing realization that it is impossible to separate economic development issues from environmental issues—the realization, in other words, that many forms of development erode the environmental resources upon which they are based, and that such environmental degradation can undermine economic development.

By 1989, it became clear that, given the divergent views on a number of conceptual and practical issues in natural resource and environmental accounting, international consensus in time for a fundamental change in the SNA as part of the ongoing revision was not possible. Therefore, it was agreed that the revised SNA would address links to environmental concerns, such as the definition and boundary for assets, and that a satellite account for integrated economic and environmental accounting would be pursued. The United Nations undertook the preparation of a handbook to provide guidance on the construction of the satellite account.

Subsequently, this approach found support in several forums. In May 1991, a Special Conference of the International Association for Research in Income and Wealth brought together economic accountants and environmental specialists to discuss a preliminary version of the United Nations handbook. In June 1992, the United Nations Conference on Environment and Development (the “Earth Summit”) in Rio de Janeiro included a program for establishing systems of integrated accounts as a complement to the existing system in its Agenda 21.<sup>[29]</sup> Agenda 21 urged national offices that prepare economic accounts to undertake the work and urged the United Nations to distribute widely, and then refine, its handbook. In October 1992, economic accountants, in a seminar held to review the revised SNA, generally welcomed the features that link to the environment and the section of the revised SNA's chapter

3. See Salah El Serafy and Ernst Lutz [7].

4. See, for example, Henry M. Peskin and Ernst Lutz [17].



on satellite accounts that discusses integrated economic and environmental accounts based on the United Nations handbook. In February 1993, the Statistical Commission of the United Nations endorsed the revised SNA.<sup>5</sup> The Commission, in highlighting the important features of the revised SNA, noted that it laid the groundwork for dealing with the interaction between the economy and the environment.

### *The United Nations System of Environmental and Economic Accounting*

The United Nations System of Environmental and Economic Accounting (SEEA), as described in the handbook, is a flexible, expandable satellite system.<sup>[30]</sup> It draws on the materials balance approach to present the full range of interactions between the economy and the environment. The SEEA builds on, and is designed to be used with, the *System of National Accounts 1993* (hereafter SNA 1993) [31]. Like the SNA, the SEEA is primarily concerned with the implications of the environment for production, income, consumption, and wealth.

The SEEA has four stages, each successively providing a more comprehensive accounting for the interaction between the economy and the environment. The four-stage presentation recognizes the need to develop concepts, to inventory and augment source data, and to adapt the implementation to differing analytical needs. The starting point is the SNA 1993, which incorporated several features that anticipated the needs of environmental accounting.<sup>6</sup> Stage A disaggregates, or provides additional detail on, environmentally related economic activities and assets. This stage, for example, focuses on actual expenditures intended to prevent or repair the degradation of the environment. It includes a detailed breakdown of the stocks of natural resource assets and changes in these stocks. Finally, it includes sector links to show the supply and uses of natural re-

sources. The use of natural resources—depletion and degradation—can be broken down into intermediate inputs by industry, investment, final consumption by households and government, and imports and exports.

Stage B begins with the physical counterpart of stage A. It maps, in physical terms, the interaction between the environment and the economy. It provides the physical quantities to which prices are applied to derive the economic values included in the economic accounts. These physical accounts also provide a bridge to natural resource accounting and to materials and energy balances accounting. Stage B then links the physical quantities to monetary values.

Stage C provides far more comprehensive and explicit measures of the interaction between the economy and the environment. It does so, first, by the use of alternative valuation techniques—that is, alternatives to the use of values tied to the market, the valuation used in the SNA 1993 and in traditional accounting systems. The alternative valuation techniques include estimates based on maintenance costs, or the costs necessary to maintain at least the present level of environmental assets, and estimates based on contingent valuation, or the willingness to pay for reductions in depletion or degradation of natural assets. Second, it does so by the more explicit introduction of environmental effects on the measures of national production, investment, income, and wealth. Stages A and B of the SEEA (as well as the SNA 1993) record environmental effects either as changes in the value of assets or as changes in the distribution of income among the factors of production; these changes do not explicitly affect gross domestic product, final demand, or net domestic product.

Stage D consists of further extensions of the SEEA. These extensions are provided for the purpose of “opening a window on further analytical applications,” and they will require further research. They include household production and the use of recreational and other unpriced environmental services in household production.

### **Framework for the IEESA's**

BEA's IEESA's build on the accumulating experience represented in the SEEA. This experience is consistent with two lessons from social accounting in the 1970's. First, such accounts should be focused on a specific set of issues. Second, given the kind of uses to which the estimates would be put, the early stage of conceptual develop-

5. For a summary of the SNA, the revision process, and the new features, see [30].

6. The two main features that anticipated the needs of environmental accounting dealt with the coverage of assets and the recording of changes in them. First, the SNA 1993 includes within the boundary of economic assets all assets over which ownership rights can be established and enforced and that provide economic benefits to their owners. This boundary explicitly includes natural assets, both those whose growth is the result of human cultivation (for example, vineyards and livestock) and those that, although not cultivated, are under control of an owner (for example, land, subsoil assets, and water resources). Second, it records all changes in the value of assets from one balance sheet to another. As part of doing this, there is an account to record certain changes in assets not recorded as production or as costs of production; this account records, for example, the additions to, and depletion of, subsoil assets and the natural growth of uncultivated forests. Another account records changes in the value of assets due to price change. Further, the SNA 1993 describes how to use these and other features as a point of departure for an environmental satellite account.

ment, and the statistical uncertainties (even if the estimates are limited to the effect on market activities), such estimates should be developed in a supplemental, or satellite, framework.

**Structural features**

The IEESA's are structured to focus on the interaction of the economy and the environment. The interactions covered are those that can be tied to market activities and thus valued in market prices or proxies thereof. They are shown as effects on production, income, consumption and wealth.

The accounts have two main structural features. First, natural resources and environmental resources are treated like productive assets. These resources, along with structures and equipment, are treated as part of the Nation's wealth, and the flow of goods and services from them are identified and their contribution to production measured. Second, the accounts provide substantial detail on expenditures and assets that are relevant to understanding and analyzing the interaction. Fully implemented IEESA'S would permit identification of the economic contribution of natural and environmental resources by industry, by type of income, and by product. Ultimately, accounts by region would add an important analytical dimension.

*Natural and environmental resources as productive assets.*—An example helps to explain the reasoning behind treating natural and environmental resources like productive assets in the economic accounts. This example is much simplified, notably in that it shows only one side of an account, focuses on aggregates, and uses descriptive rather than technically precise terminology. In this example, all income from production goes to either "wages" or "profits." Wages are recorded as earned; however, profits—that is, total revenues less labor and other operating expenditures—are reduced by an entry for "depreciation," where depreciation is the amount that must be set aside to cover the using up of capital in production. Thus, for an industry and for all industries combined, wages plus profits and depreciation equals gross domestic product (GDP).

In the traditional accounts, the economy would be pictured as follows:

Because depreciation is included in GDP, GDP is not a measure of sustainable income; that is, if a nation consumed all of its GDP, it would reduce the productive capacity available to future generations because it had consumed the amount it should have set aside to cover the using up of capital. In fact, the "gross" in the name, gross domestic product, refers to that feature. As a better measure of sustainable income, the traditional accounts provide net domestic product (NDP), which is calculated as GDP less depreciation.

Gross domestic product .....	10,000
Less: Depreciation .....	1,000
Net domestic product .....	9,000

Capital in the traditional accounts is limited to structures and equipment. In the IEESA's, natural and environmental resources are viewed as having characteristics similar to structures and equipment: Labor and materials are devoted to producing them, and they then yield a flow of services over time. For that reason, the IEESA's include these resources, along with structures and equipment, as part of the Nation's wealth and give them the same treatment as structures and equipment in the traditional accounts. The IEESA's deal with three points of asymmetry between the treatment of natural resources—for example, mineral reserves—and of structures and equipment encountered in traditional accounts. In traditional accounts: (1) depreciation is subtracted from profits to determine true, or sustainable, profits, but depletion is not; (2) depreciation is subtracted from GDP to estimate NDP, but depletion is not; and (3) additions to the stock of plant and equipment are added to GDP as capital formation, but additions to mineral reserves are not.

The depletion of mineral reserves is like the depreciation of plant and equipment: It is the amount that must be set aside to cover the cost of using up mineral resources in production. If an oil company earns \$3,000 in profits but depletes its mineral reserves by \$100, then its true economic profits are only \$2,900, the amount over and above its depletion of assets. In the IEESA's, therefore, an estimate is made of the amount of profits that should be recognized as depletion. This amount is subtracted from profits and entered, like depreciation, as a separate component, thereby dealing with the first point of asymmetry. Further, depletion, like depreciation, must

Wages .....	6,000
Plus: Profits .....	3,000
Depreciation .....	1,000
Gross domestic product .....	10,000



be subtracted from GDP to arrive at NDP. Doing so deals with the second point of asymmetry.

Wages .....	6,000
Plus: Profits (IEESA) .....	2,900
Depreciation .....	1,000
Depletion .....	100
Gross domestic product (IEESA) .....	10,000
Less: Depreciation .....	1,000
Depletion .....	100
Net domestic product (IEESA) .....	8,900

Note that recognizing depletion lowers profits and changes the composition of GDP, but the level of GDP itself is not reduced; recognizing depletion reduces NDP in comparison with the traditional accounts' NDP.

In the IEESA's, additions to mineral reserves (for example, extensions as a result of investments in improved technology or additions as a result of exploration) are treated like additions to the stock of structures and equipment—that is, as capital formation. Additions to reserves do not appear in the traditional accounts; therefore, to treat them as capital formation, they are added to GDP. In the IEESA's, additions to reserves raise capital formation, profits, GDP, and NDP. Recognizing the additions to reserves thus deals with the third point of asymmetry. If the additions amounted to 150, the economy would be pictured as follows:

Wages .....	6,000
Plus: Profits (IEESA) .....	3,050
Of which: Capital formation in mineral reserves .....	150
Depreciation .....	1,000
Depletion .....	100
Gross domestic product (IEESA) .....	10,150
Less: Depreciation .....	1,000
Depletion .....	100
Net domestic product (IEESA) .....	9,050

Compared with the traditional accounts, both the composition and level of GDP differ. Thus, the IEESA's give a view of an industry's production that reflects changes in its resource base. The IEESA's measure of NDP, therefore, is a better measure of sustainable income than the traditional accounts' measure because it incorporates changes in mineral wealth as well as structures and equipment. Whether the IEESA's measure of NDP is higher or lower than in the traditional accounts depends on whether depletion or additions is larger, and this will vary from resource to resource and from period to period. Estimates of this kind for all natural and environmental resources would help gauge whether the current level of GDP can be maintained by the Nation's natural resource base.

*Detail that highlights the interaction.*—In the IEESA's, the standard economic accounting categories are disaggregated to show detail that highlights the interaction of the economy and the environment. For example, the expenditures detail shows spending by households, government, and business to maintain or restore the environment. The asset detail shows environmental management (conservation and development, and water supply) and waste-management projects (sanitary services, air and water pollution abatement and control) within the standard category of nonresidential fixed capital.

The estimating requirements underlying these two main structural features of the IEESA's are apparent in the IEESA tables, even when, as shown in this article, they are in skeleton form. Table 1, an asset account, and table 2, a production account, use modified forms of tables presented in the SEEA.

### Asset accounts

Integrated economic and environmental accounting requires the measurement of stocks and flows related to assets, which are presented in an asset account. An asset account is like a balance sheet in that it presents stocks, or holdings, at a point in time. (Because an asset account is limited to nonfinancial assets, it does not include liabilities and net worth, as would a balance sheet.) However, an asset account also presents flows related to the assets during a period of time.

The IEESA's provide a complete accounting for the relevant assets—that is, they show both stocks and flows associated with changes in those stocks. Column 1 in table 1 provides for estimates of opening stocks. Columns 2–5 provide for estimates of the flows that represent different kinds of changes in the stock: First, a net total and then three flows: The decrease in stocks due to depreciation (or more formally, in economic accounting terms, consumption of fixed capital), depletion, or degradation; the increase in stocks due to capital formation in the form of new structures and equipment, additions to inventories, additions to the stock of natural and environmental assets; and changes in value due to price changes and to changes in the volume of assets other than those due to economic activity (for example, natural disasters). Column 6 provides for estimates of closing stocks.

Table 1 presents the nonfinancial assets that BEA would try to include in IEESA asset accounts. The table's rows generally follow the subcategories of the SNA 1993 and the SEEA, but some of

the subcategories are regrouped to broaden both the production boundary and the definition of assets. Nonfinancial assets are divided into made assets, developed natural assets, and environmen-

tal assets. Made assets, which largely replicate the scope of nonfinancial assets in traditional income and wealth accounts, are subdivided into fixed assets and inventories. Developed natural assets are

**Table 1.—IEESA Asset Account, 1987**

[Billions of dollars]

This table can serve as an inventory of the estimates currently available for the IEESA's. In decreasing order of quality, the estimates that have been filled in are as follows: For made assets, estimates of fixed reproducible tangible stock and inventories, from BEA's national income and product accounts or based on them, and pollution abatement stock, from BEA estimates (rows 1-21); for subsoil assets, the highs and lows of the range based on alternative valuation methods, from the companion article (rows 36-41); and best-available, or rough-order-of-magnitude, estimates for some other developed natural assets (selected rows 23-35 and 42-47) and some environmental assets (selected rows 48-55) prepared by BEA based on a wide range of source data described in this article. The "n.a."—not available—entries represent a research agenda.

	Row	Opening stocks	Change				Closing stocks (1+2)
			Total, net (3+4+5)	Depreciation, depletion, degradation	Capital formation	Revaluation and other changes	
			(2)	(3)	(4)	(5)	
<b>PRODUCED ASSETS</b>							
<b>Made assets</b> .....	<b>1</b>	<b>11,565.9</b>	<b>667.4</b>	<b>-607.9</b>	<b>905.8</b>	<b>369.4</b>	<b>12,233.3</b>
Fixed assets .....	2	10,535.2	608.2	-607.9	875.8	340.2	11,143.4
Residential structures and equipment, private and government .....	3	4,001.6	318.1	-109.8	230.5	197.4	4,319.7
Fixed nonresidential structures and equipment, private and government .....	4	6,533.6	290.1	-498.1	645.3	142.9	6,823.7
Natural resource related .....	5	503.7	23.1	-19.2	30.3	12.0	526.8
Environmental management .....	6	241.3	8.4	-7.0	10.6	4.7	249.6
Conservation and development .....	7	152.7	3.6	-4.4	5.3	2.7	156.4
Water supply facilities .....	8	88.5	4.8	-2.5	5.3	2.0	93.3
Pollution abatement and control .....	9	262.4	14.7	-12.2	19.7	7.3	277.1
Sanitary services .....	10	172.9	12.8	-5.6	13.7	4.8	185.8
Air pollution abatement and control .....	11	45.3	.6	-4.1	3.5	1.3	45.9
Water pollution abatement and control .....	12	44.2	1.3	-2.5	2.6	1.2	45.5
Other .....	13	6,029.9	267.0	-478.9	615.0	130.9	6,296.9
Inventories <sup>1</sup> .....	14	1,030.7	59.3	.....	30.1	29.2	1,090.0
Government .....	15	184.9	6.8	.....	2.9	3.8	191.7
Nonfarm .....	16	797.3	62.4	.....	32.7	29.7	859.7
Farm (harvested crops, and livestock other than cattle and calves) .....	17	48.5	-9.9	.....	-5.5	-4.4	38.6
Corn .....	18	10.2	.3	.....	-1.1	1.4	10.5
Soybeans .....	19	5.0	-.1	.....	-1.0	.9	4.9
All wheat .....	20	2.6	0	.....	-.2	.2	2.6
Other .....	21	30.7	-10.1	.....	-3.2	-6.9	20.6
<b>Developed natural assets</b> .....	<b>22</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>	<b>n.a.</b>
Cultivated biological resources .....	23	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cultivated fixed natural growth assets .....	24	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Livestock for breeding, dairy, draught, etc .....	25	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Cattle .....	26	12.9	2.0	n.a.	-3	2.3	14.9
Fish stock .....	27	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Vineyards, orchards .....	28	2.0	.2	n.a.	0	.2	2.2
Trees on timberland .....	29	288.8	47.0	-6.9	9.0	44.9	335.7
Work-in-progress on natural growth products .....	30	n.a.	n.a.	.....	n.a.	n.a.	n.a.
Livestock raised for slaughter .....	31	n.a.	n.a.	.....	n.a.	n.a.	n.a.
Cattle .....	32	24.1	7.5	.....	0	7.5	31.6
Fish stock .....	33	n.a.	n.a.	.....	n.a.	n.a.	n.a.
Calves .....	34	5.0	.9	.....	-.5	1.4	5.9
Crops and other produced plants, not yet harvested .....	35	1.8	.3	.....	.1	.2	2.1
Proved subsoil assets <sup>2</sup> .....	36	270.0 ↔ 1066.9	57.8 ↔ -116.6	-16.7 ↔ -61.6	16.6 ↔ 64.6	58 ↔ -119.6	299.4 ↔ 950.3
Oil (including natural gas liquids) .....	37	58.2 ↔ 325.9	-22.5 ↔ -84.7	-5.1 ↔ -30.6	5.8 ↔ 34.2	-23.1 ↔ -88.3	35.7 ↔ 241.2
Gas (including natural gas liquids) .....	38	42.7 ↔ 259.3	6.6 ↔ -57.2	-5.6 ↔ -20.3	4.1 ↔ 14.9	8.1 ↔ -51.8	49.4 ↔ 202.2
Coal .....	39	140.7 ↔ 207.7	2.2 ↔ -3.4	-5.4 ↔ -7.6	4.4 ↔ 6.3	3.2 ↔ -2.1	143.0 ↔ 204.2
Metals .....	40	(*) ↔ 215.3	67.2 ↔ 29.5	-.2 ↔ -2.2	2.2 ↔ 9.2	65.2 ↔ 22.5	38.5 ↔ 244.8
Other minerals .....	41	28.4 ↔ 58.7	4.3 ↔ -.8	-4 ↔ -.9	.1 ↔ 0	4.6 ↔ .1	32.8 ↔ 57.9
Developed land .....	42	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Land underlying structures (private) .....	43	4,053.3	253.0	n.a.	n.a.	n.a.	4,306.3
Agricultural land (excluding vineyards, orchards) .....	44	441.3	42.4	n.a.	-2.8	45.2	483.7
Soil .....	45	n.a.	n.a.	-.5	n.a.	n.a.	n.a.
Recreational land and water (public) .....	46	n.a.	n.a.	-.9	.9	n.a.	n.a.
Forests and other wooded land .....	47	285.8	28.8	n.a.	-6	29.4	314.6
<b>NONPRODUCED/ENVIRONMENTAL ASSETS</b>							
Uncultivated biological resources .....	48	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Wild fish .....	49	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Timber and other plants of uncultivated forests .....	50	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Other uncultivated biological resources .....	51	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Unproved subsoil assets .....	52	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Undeveloped land .....	53	n.a.	n.a.	-19.9	19.9	n.a.	n.a.
Water (economic effects of changes in the stock) .....	54	.....	n.a.	-38.7	38.7	n.a.	.....
Air (economic effects of changes in the stock) .....	55	.....	n.a.	-27.1	27.1	n.a.	.....

n.a. Not available.

\* The calculated value of the entry was negative.

1. The estimate for inventories differs from the NIPA estimate by the amount of government inventories added and cattle and calves shown separately. In full implementation of the IEESA account, farm inventories would include

only harvested crops.

2. The estimates in all columns result from the valuation method (see text for further discussion of the alternative methods) that produces the low and high estimates of opening stocks.

NOTE.—Leaders indicate an entry is not applicable.

subdivided into cultivated biological resources, proved subsoil assets, and developed land. Environmental assets are subdivided into uncultivated biological resources, unproved subsoil assets, undeveloped land, water, and air (the last two in terms of the economic effects of changes in the stock).

*Made and developed natural assets.*—To better highlight the interaction of the economy and the environment, table 1 provides more detail on natural resource and environmentally related produced assets than the traditional income and wealth accounts. Within made assets, nonresidential fixed capital is disaggregated into environmental management (conservation and development, and water supply) and waste-management projects (sanitary services, air and water pollution abatement and control). Detail is also provided on farm inventories of finished goods.

Within cultivated biological resources, table 1 provides detail beyond that contained in the traditional accounts, such as cultivated fixed natural growth assets (for example, livestock), and categories not included in the traditional accounts (for example, trees on timberland).

The treatment of proved subsoil assets and cultivated land in table 1 differs from the SEEA treatment. Proved reserves are generally defined as those reserves that are proved to a high degree of certainty—by test wells or other test data—and are recoverable under current economic conditions and with current technology. In the SEEA, they are classified as nonproduced assets. In table 1, these assets, along with cultivated natural growth assets, are included in the category “developed natural assets.” As will be illustrated in the production accounts, capital formation that adds to the stock of these assets—both by bringing undeveloped or uncultivated assets into the category of developed natural assets and by adding to their value within that category—is treated in a manner similar to capital formation that adds to the stock of structures and equipment.

This treatment was adopted because it is difficult to rationalize describing proved reserves and cultivated land as “nonproduced” natural assets when expenditures are required to prove or develop them. Agricultural land, for example, must be “produced” in that expenditures must be undertaken to convert uncultivated land areas into commercially valuable farmland, which yields a return over a number of years. Wetland areas, if they are to become farmland, must be drained and graded and vegetation cleared.

Unproved mineral reserves also require expenditures for test wells, engineering studies, and other exploration and development investments before they are recorded as proved reserves.

Similar treatments of these developed natural assets and made assets facilitate consistent treatment of capital formation of natural assets and more conventional capital formation, such as investment in structures and equipment. Under this treatment, as mineral reserves, for example, are proved, the total value of the produced assets—structures and equipment as well as the proved reserve’s value—is included as capital formation. Similarly, as oilfield machinery is depreciated, proved reserves associated with the machinery are depleted.

The other major difference between developed assets in table 1 and in the comparable SEEA presentation is in the treatment of soil. In the SEEA, soil—that is, productive soil on agricultural land—is treated as separate from agricultural land. In table 1, soil is a subcategory of agricultural land because the value of agricultural land is inseparable from the value of the soil. Available estimates suggest that the effect of soil erosion, or depletion, on agricultural productivity and land values in the United States is quite small. Nevertheless, though soil is not treated separately, it is shown separately because its erosion has a significant effect on environmental quality through its effect on water quality.

*Environmental assets.*—This grouping includes natural assets with significant economic value that differ from developed natural assets in that they are generally used as raw inputs into production in their natural state, either as intermediate products or as investments. For example, uncultivated biological resources, such as tuna harvested from the ocean, are included as environmental assets, whereas cultivated biological resources, such as rockfish raised on a fish farm, are included in developed assets. Other categories in environmental assets are uncultivated land, unproved subsoil assets, water, and air.

The inclusion of unproved subsoil assets broadens the definition of subsoil assets to include reserves that, though unproved, have an economic value over and above that of other undeveloped land because of their location or geologic characteristics. As capital expenditures are made to “prove” these properties, they move from nonproduced to produced assets. This broader definition of subsoil resources will facilitate longer term planning and analysis of the use of mineral resources. The stock of proved reserves—like the

stock of drill presses—can be expanded by additional investment; hence, firms will keep on hand the stock of reserves dictated by current market prices, finding costs, and interest rates. Thus, complete analysis of mineral resources requires consideration of unproved, as well as of proved, reserves.

In a distinction similar to that between proved and unproved subsoil assets, cultivated land—such as agricultural land, parkland, and land underlying buildings—is included in developed natural assets, whereas uncultivated land—such as wetlands and forestland (not included as timberland)—is included in environmental assets. The agricultural land must be developed before it can be used as farmland, whereas wetlands are used—for example, for their disposal services—in their natural state by the economy. Water, which is subdivided by type, and air also provide services to the economy in the form of recreational and waste disposal services.

Although these environmental assets differ from made and developed natural assets, investments that add to the stock of these assets, as noted below in the production accounts, are treated symmetrically with investments that add to the stock of structures and equipment and of developed assets. These investments, for example, include pollution abatement and control to improve the quality and waste disposal capacity of the air and water, or at least to offset the degradation/depletion (which is also recorded in the production account) occurring in the current period. These investments represent a decision by the economy to devote its resources to investments that improve air and water quality, rather than investments in structures and equipment, and investments that add to the stock of clean air and water should be counted just as investments that add to the stock of made and developed assets are counted.

*Estimates: Coverage, sources, and methods.*—The estimates recorded for 1987 in table 1 should be regarded as rough-order-of-magnitude, or best-available, estimates. (The estimates are for 1987 because that is the last year for which data from the quinquennial economic census—used in a number of cases as a benchmark from which to estimate forward and backward—are available.) In most cases, only one estimate, rather than a range, is available. Many of the table's cells do not contain estimates, and the quality of the estimates varies greatly. In general, the quality and availability of the estimates declines as one moves down the rows from produced to nonpro-

duced assets, reflecting the increasing conceptual and empirical difficulties in producing such estimates. The estimates may be best regarded as a measure of the work to be undertaken; they are presented here to serve as a road map for areas in which source data and estimating methods must be developed or improved.

Within made assets, the estimates of non-residential stocks of pollution abatement (PA) structures and equipment are constructed using the same perpetual inventory techniques used to produce BEA's exiting capital stock estimates (see the box on page 44). These stock estimates capture nonresidential investments for PA that are readily identifiable. When companies and plants change their production processes (or equipment) to embody PA features, the PA portions of these investments are included to the extent they can be identified; however, identification is difficult, and understatement of PA stocks can occur. Estimates of government inventories are from unpublished NIPA data. For inventories owned by the Federal Government, the estimates are based on information on inventories from Federal agencies. For State and local governments, the estimates are based on the level of their purchases of nondurable goods; it is assumed that they hold 1 month of these purchases in inventories. The farm inventories of finished goods for agriculture are extensions of the existing inventory data in the NIPA's (following the IEESA, crops not yet harvested are shown as work-in-progress). Stock estimates for several components that would be of interest in the household sector, such as PA equipment in consumer durables and residential capital (for example, PA equipment installed in cars and septic systems in homes), are not available.

Within developed natural assets, most of the estimates are an extension of the existing national accounts data. The existing accounts include estimates for livestock only, with no split between those raised for breeding, dairy, or draft (cultivated fixed natural growth assets) and those raised for slaughter (work in progress on natural growth products). In table 1, these splits were made using assumptions based on data from the U.S. Department of Agriculture (USDA). The estimates of the value of vineyards and orchards are based on Federal Reserve Board estimates of the value of agricultural land and estimates of the acres of land in vineyards and orchards from the Bureau of the Census. Estimates of the value of fish stocks or of changes in these stocks are not yet available (and are in phase II of BEA's plan).

The values of trees on timberland were estimated based on stumpage value estimates provided by the U.S. Forest Service's Pacific Northwest Research Station. The stumpage value estimates are based on the concept of net rent to the timber stand—as distinct from the land the forest sits upon—and are derived mainly from private market data on payments for logging rights. As such, they should correspond to the present discounted value of the timber sales from the tract less the costs of logging, access, transportation, and processing. All timber on timberland in the

United States—public and private—is included in this category. Timber on other forestland is included in nonproduced/environmental assets. This somewhat arbitrary distinction is made partly on conceptual grounds and partly on the availability of source data. All timber in the national forests is in a sense managed, although depending on the forest, management ranges from active, such as planting, to relatively passive, such as self-seeding, fire control, and rotational harvests. Practically, no data are available for the exact definition of "cultivated timber tracts."

### Stock of Plant and Equipment for Air and Water Pollution Abatement in the United States, 1980–91

This box presents estimates of the gross and net stocks of plant and equipment (P&E) for air and water pollution abatement (PA) in the United States during 1980–91. Gross and net stocks of PA P&E help to protect air and water from degradation by stationary and point industrial sources of pollutant emissions.<sup>1</sup>

In 1991, the gross stock of air and water PA P&E was about \$183.5 billion (table A).<sup>2</sup> In constant (1987) dollars, the gross stock was \$165.0 billion in 1991, about 2.0 percent of the real gross stock of all fixed nonresidential nonfarm business capital. Between 1980 and 1991, the real gross stock of air and water PA P&E grew at an annual rate of 2.6 percent. Growth in nonmanufacturing stocks outpaced that in manufacturing stocks, mainly reflecting PA P&E spending by electric utilities. The real net stock of air and water PA P&E—that is, after subtracting depreciation—was \$91.3 billion in 1991, up from \$85.8 billion in 1980.

The PA P&E stock estimates are useful when studying market production and economic well-being. They are helpful in determining how pollution abatement spending affects prices, total capital costs, and the profitability of capital. They are also helpful in constructing rough measures of the value of the degradation in air and water quality that has been avoided through pollution abatement.<sup>3</sup>

The 1980–91 PA P&E estimates were prepared by the perpetual inventory method: Past PA P&E flows (capital spending) were cumulated and discards deducted, in accordance with lifespans of capital goods, to arrive at gross stocks of PA P&E. Net stocks were calculated by subtracting accumulated depreciation from gross stocks. Gross and net stock estimates for 1980–91 are valued at constant and at current cost—that is, using 1987 prices (for constant cost) and replacement or current-year prices (for current cost).

Data on an establishment basis for manufacturing PA P&E spending are mainly from the Pollution Abatement Costs and Expenditures (PACE) Survey by the Bureau of the Census. Data for electric util-

ities are mainly from the Pollution Abatement (PA) Supplement to the Census Bureau's P&E survey; the PA Supplement reports PA P&E spending for three industries—electric utilities, petroleum, and mining. The PA Supplement reports PA P&E on a company basis, but for electric utilities (unlike for petroleum and mining), such data approximate an establishment basis. The PA P&E spending estimates for mining and for nonmanufacturing except mining and electric utilities are prepared by indirect methods; a variety of data sources are used, including the PA Supplement, an environmental protection expenditures survey by the American Petroleum Institute, and the *Census of Mineral Industries*.

**Table A.—Gross and Net Stocks of Air and Water Pollution Abatement Plant and Equipment in Nonfarm Business, by Major Industry Group, Current-Cost and Constant-Cost Valuations, 1980–91**

	Gross stocks					Net stocks				
	All non-farm industries	Manufacturing			Non-manufacturing	All non-farm industries	Manufacturing			Non-manufacturing
		Total	Durables	Non-durables			Total	Durables	Non-durables	
Billions of current dollars										
1980 .....	103.43	58.78	24.55	34.24	44.65	71.14	37.65	15.94	21.71	33.49
1981 .....	118.66	66.31	28.04	38.27	52.35	79.54	40.94	17.56	23.39	38.60
1982 .....	129.00	70.16	29.72	40.43	58.84	84.46	41.76	17.80	23.95	42.70
1983 .....	135.72	71.37	30.25	41.12	64.35	86.43	40.67	17.20	23.48	45.75
1984 .....	142.68	72.85	31.05	41.80	69.83	88.47	39.81	16.86	22.95	48.66
1985 .....	147.25	73.83	31.70	42.14	73.41	89.05	39.07	16.60	22.47	49.97
1986 .....	151.04	74.05	31.96	42.08	77.00	89.49	38.24	16.26	21.99	51.24
1987 .....	157.59	75.59	32.56	43.03	82.00	91.38	38.15	16.07	22.08	53.23
1988 .....	165.04	77.73	33.26	44.48	87.30	93.86	38.65	15.97	22.68	55.21
1989 .....	170.82	79.69	33.83	45.86	91.13	95.67	39.54	16.07	23.47	56.13
1990 .....	176.91	82.83	34.28	48.55	94.07	98.19	41.75	16.25	25.49	56.44
1991 .....	183.50	87.02	34.84	52.18	96.48	101.58	45.17	16.71	28.46	56.40
Billions of constant (1987) dollars										
1980 .....	124.67	71.13	29.55	41.57	53.54	85.79	45.64	19.22	26.42	40.16
1981 .....	132.26	73.56	30.91	42.66	58.70	88.84	45.54	19.38	26.15	43.31
1982 .....	138.61	74.96	31.59	43.36	63.66	90.92	44.71	18.95	25.76	46.22
1983 .....	142.56	74.97	31.67	43.30	67.58	90.85	42.79	18.03	24.76	48.06
1984 .....	146.66	74.94	31.86	43.08	71.72	90.98	41.00	17.32	23.68	49.98
1985 .....	149.58	74.81	32.07	42.74	74.77	90.52	39.62	16.81	22.81	50.91
1986 .....	152.08	74.53	32.16	42.37	77.55	90.12	38.50	16.36	22.14	51.61
1987 .....	154.47	74.36	32.04	42.32	80.11	89.52	37.53	15.81	21.71	52.00
1988 .....	155.86	73.93	31.62	42.31	81.93	88.55	36.76	15.19	21.57	51.80
1989 .....	157.52	74.05	31.42	42.63	83.48	88.16	36.75	14.93	21.82	51.40
1990 .....	161.03	75.76	31.31	44.45	85.27	89.36	38.20	14.86	23.35	51.15
1991 .....	164.97	78.36	31.37	47.00	86.60	91.31	40.69	15.05	25.64	50.63

1. For air PA, the Clean Air Act classifies the sources of pollutants as mobile (for example, automobiles) or stationary (for example, factories). For water PA, the Federal Water Pollution Control Act classifies sources of pollutants as point (for example, factories) or nonpoint (for example, highway construction projects).

2. The stock estimates in table A are part of a new establishment-based series for 1960 forward. BEA is planning a SURVEY OF CURRENT BUSINESS article for later this year to present such PA P&E stock estimates for selected industries and to present their related capital flows through 1992. The new stock series replaces a series prepared on a company (or enterprise) basis.

3. Stocks other than for PA P&E also protect air and water. Examples include stocks of PA devices and systems on mobile (for example, motor vehicles) and nonindustrial pollutant sources (for example, public sewer systems and septic systems), as well as PA features of solid waste management systems. Estimates for these kinds of stocks are not available.

For proved subsoil assets, the estimates shown are the highs and lows of ranges presented, along with a description of the sources and methods used to prepare them, in the companion article beginning on page 50. The estimates represent the range of differences associated with common methods for valuing nonrenewable natural resources.

The estimates within the category "developed land" are of uneven quality. The estimates of the value of agricultural land are relatively good and are based on USDA estimates of farm real estate values less BEA estimates of the value of farm structures. Soil estimates, from the USDA, reflect the annual effect of soil depletion in terms of extra fertilizer costs and reduced productivity. The estimates of residential land, included in table 1 as part of land underlying structures, also are of reasonable quality. The estimates of the other private land underlying structures are of more uncertain quality. The Federal Reserve Board produces these estimates of land values by taking estimates of real estate values from a variety of sources and subtracting BEA's estimates of the value of nonresidential structures. The Federal Reserve's estimates of real estate values are based, in part, on less than comprehensive price indexes; they do not, for example, appear to cover adequately the value of mineral tracts, timberland, or industrial buildings and land. BEA's estimates of nonresidential structures are based on perpetual inventory methods—with assumed depreciation schedules and replacement-cost indexes—and may therefore differ from the current market value of the structures included in the real estate estimates. Although over longer periods of time the perpetual inventory estimates are of good quality, during periods of declining or rapidly increasing real estate values, they may produce unreasonable results. Also, to the extent that the value of natural resource assets are not included in the real estate price indexes, the overall value of developed land will be over- or under-stated according to the path of natural resource prices relative to commercial and other land values.

The SEEA recommends that national parks be classified as uncultivated land because their protection, and not their use, is the main function of governmental regulation. However, because these parks are extensively maintained, improved upon, and used by consumers for recreation, they are included in recreational land in table 1. The estimate of capital formation in recreational land is based on Federal Government mainte-

nance and repair expenditures for parks; State and local expenditures are not available. It is assumed that these expenditures exactly offset the degradation/depletion of recreational land; in the case of recreational land, the only estimates available were of maintenance and repair expenditures. This assumption is made only so that both investment and degradation/depletion estimates are illustrated by the table and not to imply any judgment about the true value of degradation/depletion. (Phase II and III of BEA's work plan, described in the next section, includes work to build on the damage assessment and recreational valuation literature to construct estimates of the market value of recreational and environmental amenities.)

For environmental assets, the estimates are more uncertain than even the most uncertain estimates for developed land and proved reserves of subsoil assets. Indeed, most of this section of the table, especially that for renewable natural resources, is shown with "n.a." for "not available." No value is available for the stock of undeveloped land and its associated ecosystems, for unproved subsoil assets, and for uncultivated biological resources (wild animals and fish, plants, and forests).

Compared with the accounting for proved reserves of nonrenewable resources, where the economic literature extends back over 50 years, valuation methods and concepts for many of the renewable resources are less well developed. Renewable natural resources are inherently more difficult to value than nonrenewable natural resources for several reasons: Renewable resources, such as stocks or schools of wild fish, often have a commercial or production value as well as an amenity or a recreational value; often, ownership rights cannot be established, and they cannot be sold; and they *are* able to regenerate, so their use does not necessarily result in a net reduction in either their yield or the value of their stock.

These difficulties notwithstanding, there has been rapid progress in environmental-benefit valuation for renewable natural resources in recent years as economists have tried to keep pace with regulatory, legal, and policy needs for environmental damage and impact measures. Further work by BEA to translate these new concepts and measures into a consistent national framework would need to rely heavily on the expertise of other units within the U.S. Government—for example, the National Oceanic and Atmospheric Administration, the Environmental Protection Agency, USDA, and the Department of Interior.



The SEEA does not recommend that the stock of air—which is truly a global common—or water be valued; instead, it recommends that valuation be limited to changes in these assets—their degradation and investments in their restoration. For these assets, table 1 includes only aggregate values for the degradation of air and water and for expenditures to restore them or to prevent their degradation.

The estimates in table 1 for degradation of air and water quality—as well as for undeveloped land—are simply place markers that assume that maintenance exactly offsets degradation: They are aggregate estimates of the total costs of pollution of these media. The estimates for air, water, and undeveloped land pollution are estimates, from the Environmental Protection Agency, of the direct costs of public and private pollution control activities in the United States. Estimates of air pollution include the annualized costs of air pollution and radiation. Water pollution estimates are the annualized costs of maintaining water quality, including drinking water. Estimates of undeveloped land pollution are the annualized costs associated with Superfund, toxic chemicals, and pesticides. The estimates of costs to restore or prevent the degradation of the environment (which, as noted earlier, are treated as capital formation in that they offset degradation and depletion of air, water, and undeveloped land) are based on current PAC expenditures and the flow of services from the stock of PA equipment and structures (the estimated return on the net stock plus depreciation). (Note that these direct PAC costs differ from the environment cleanup and waste disposal service costs discussed later in the article. These costs are indirect costs imposed by pollution in the form of health costs, higher maintenance and repair expenditures, or longer trips to reach clean recreational sites.)

### *Production accounts*

The next step in integrating economic and environmental accounting is to combine the appropriate flows from the asset account with the flows in a production account. With this integration, the production account explicitly includes the use of natural resources and environmental services in production through entries for depletion and degradation, and it explicitly includes the additions to the stock of natural and environmental assets through entries for investments that add to stocks of developed natural resources or that restore stocks of environmental assets.

Table 2 combines features of the supply and use tables in the SNA 1993. The table has four quadrants (one empty, except for a total), which are separated by double lines; a total column at the far right; and a total row at the bottom. The left and right upper quadrants show the use of goods and services (commodities) named at the beginning of the rows, summing to total uses as measured by total commodity output. The left-hand upper and lower quadrants show the use of intermediate inputs and factors of production by the industries named at the top of each column, summing to total supply as measured by total output.

A more typical supply and use table would show substantial industry and commodity detail—often a hundred of more industries and commodities. For the purposes at hand, this detail has been collapsed into an “other industries” column (column 3) and “Other” rows (rows 6 and 13). Detail is provided where it is especially relevant to the analysis of the environment. Such a table provides a bird’s-eye view of production, income, and consumption, as highlighted in the paragraphs that follow.

Columns 1–4 in the upper left quadrant record the use of commodities by domestic industries in the *production* of other commodities—that is, intermediate use. Columns 5–9 record the use of commodities across the final demand categories that make up gross domestic product, including final *consumption* by households and government. Column 7 records the estimates in the “capital formation” column from table 1. (The made assets are recorded in rows 1–13, the developed natural and environmental assets in rows 14–24.)

In the left quadrants, rows 11–13 show the use of other commodities (that is, other than assets) as intermediate inputs. These commodities consist of expenditures for environmental cleanup and waste disposal services (row 12) and “other” (row 13). Total intermediate inputs used by industries are in row 25. Rows 26–41 record value added, or *income*. Rows 26–28 record the value added in the form of compensation of employees, indirect business taxes, and corporate profits and other property income. Rows 29–32 record, from table 1, the use of made fixed assets, including the depreciation of structures and equipment used in environmental management (row 30) and in PAC (row 31). Rows 33–41 record the use of fixed natural and environmental assets, with depletion and degradation of each of the eight categories of assets shown separately.

The estimates presented in table 2 are taken from table 1. As is indicated by the "n.a."—not available—in the table, many valuation and measurement issues remain before an IEESA production account can be completed. Further, work toward filling in the estimates would proceed in tandem with work on modernizing BEA's national accounts in line with the SNA (see the next section). For example, treating expenditures on government structures, equipment, and

inventories as capital formation implements a feature of the SNA. In the table, a "Z" indicates the estimates that would reflect both work toward the IEESA's and SNA-related changes.

In addition to a production account such as table 2, the SEEA calls for parallel quantity tables. Further, because many environmental issues have their primary impact on specific regions or industries, the extension of the integrated national accounts aggregates within BEA's regional

Table 2.—IEESA Production Account, 1987

[Billions of dollars]

	Row	Industries				Final uses (GDP)					Total commodity output (4+10)	
		Agriculture, forestry, and fisheries	Mining, utilities, water, and sanitary services	Other industries	Total	Final consumption		Gross domestic capital formation	Exports	Imports		GDP (5+6+7+8-9)
						Household	Government					
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
<b>COMMODITIES</b>												
<b>Made</b> .....	1							905.8			(#)	(#)
<b>Assets</b> .....	2							905.8			(#)	(#)
<b>Fixed assets</b> .....	3							875.8			(#)	(#)
Environmental management.....	4							10.6			(#)	(#)
Pollution abatement and control.....	5							19.7			(#)	(#)
Other.....	6							845.5			(#)	(#)
<b>Inventories</b> .....	7							30.1			(#)	(#)
Government.....	8							2.9			(#)	(#)
Nonfarm.....	9							32.7			(#)	(#)
Farm.....	10							-5.5			(#)	(#)
Other.....	11	(#)	(#)	(#)	(#)	(#)	(#)		(#)	(#)	(#)	(#)
Environmental cleanup and waste disposal services.....	12	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		n.a.	n.a.	(#)	(#)
Other.....	13	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.		n.a.	n.a.	(#)	(#)
<b>Natural and environmental assets</b> .....	14							n.a.			(#)	(#)
<b>Fixed</b> .....	15							n.a.			(#)	(#)
Cultivated biological resources: Natural growth.....	16							n.a.			(#)	(#)
Proved subsoil assets.....	17							16.6 ↔ 64.6			(#)	(#)
Developed land.....	18							n.a.			(#)	(#)
Uncultivated biological resources: Natural growth.....	19							n.a.			(#)	(#)
Unproved subsoil assets.....	20							n.a.			(#)	(#)
Undeveloped land.....	21							19.9			(#)	(#)
Water.....	22							38.7			(#)	(#)
Air.....	23							27.1			(#)	(#)
Work-in-progress inventories (natural growth products).....	24							n.a.			(#)	(#)
<b>Total intermediate inputs</b> .....	25	(#)	(#)	(#)	(#)							
<b>VALUE ADDED</b>												
Compensation of employees.....	26	(#)	(#)	(#)	(#)							(#)
Indirect business taxes, etc.....	27	(#)	(#)	(#)	(#)							(#)
Corporate profits and other property income.....	28	(#)	(#)	(#)	(#)							(#)
<b>Depreciation of fixed made assets: Structures and equipment</b> .....	29	n.a.	n.a.	n.a.	-607.9							(#)
Environmental management.....	30	n.a.	n.a.	n.a.	-7.0							(#)
Pollution abatement and control.....	31	n.a.	n.a.	n.a.	-12.2							(#)
Other.....	32	n.a.	n.a.	n.a.	-588.7							(#)
<b>Depletion and degradation of fixed natural and environmental assets</b> .....	33	n.a.	n.a.	n.a.	n.a.							(#)
Growth products: Fixed.....	34	n.a.	n.a.	n.a.	n.a.							(#)
Proved subsoil assets.....	35	n.a.	n.a.	n.a.	-16.7 ↔ -61.6							(#)
Developed land.....	36	n.a.	n.a.	n.a.	n.a.							(#)
Uncultivated biological resources.....	37	n.a.	n.a.	n.a.	n.a.							(#)
Unproved subsoil assets.....	38	n.a.	n.a.	n.a.	n.a.							(#)
Undeveloped land.....	39	n.a.	n.a.	n.a.	-19.9							(#)
Water.....	40	n.a.	n.a.	n.a.	-38.7							(#)
Air.....	41	n.a.	n.a.	n.a.	-27.1							(#)
Gross value added (GDP) (rows 26+27+28+29+33).....	42	n.a.	n.a.	n.a.	n.a.						(#)	(#)
Depreciation, depletion, and degradation (rows 29+33).....	43	n.a.	n.a.	n.a.	n.a.							(#)
Net value added (NDP) (rows 42-43).....	44	n.a.	n.a.	n.a.	n.a.							(#)
<b>TOTAL INDUSTRY OUTPUT</b> .....	45	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)	(#)

n.a. Not available.

# These estimates will depend on the integration of the System of National Accounts and the System of Environmental and Economic Accounting as part of the overall modernization of BEA's economic accounts.

NOTE.—Leaders indicate that an entry is not applicable.

GDP Gross domestic product  
NDP Net domestic product



and input-output programs is an important extension.

### *Uses of the new accounts*

Integrated economic and environmental accounts are the subject of intense interest, and expectations may differ from actual results. Among some observers, especially those extrapolating from studies conducted in resource-dependent developing economies, there is an expectation that such accounts will show that U.S. economic growth as currently measured is not sustainable, because the stocks of natural and environmental resources that ultimately determine economic growth are being run down. This expectation may well stem from focusing on depletion and degradation to the exclusion of additions.

The IEESA's will help to identify the use of the various natural and environmental resources. A priori, however, it is difficult to say whether there will be a net reduction or increase in their value overall. For example, while it is almost certainly true that the economic value of the stocks of some assets, such as bluefin tuna, are declining, the stocks of other environmental assets, such as timber stocks, have been increasing as planting and growth have more than offset harvests, fire, and land conversions. Similarly, while losses of wetlands from development continue to outnumber gains from wetland restorations, increasing rates of investments in cleaner air and water since the mid-1970's appear to have resulted in net improvements in air and water quality; many of the measures of air and water quality, such as the ambient concentrations of air and water pollutants, have shown improvement.

Because of these offsetting changes, it is conceivable that when all entries in table 2—or if not all, at least enough more than at present to avoid risks of conclusions based on partial results—have been filled in, the table will show that IEESA NDP differs little from traditional NDP.<sup>7</sup> Nevertheless, the information about specific natural resources and specific industries, products, or regions will provide valuable insight about

sustainability and the implications of different regulations, taxes, and consumption patterns. In the United States, such information should prove useful in a wide range of policy issues.

Economic accounts do not provide normative data. They either report market values or proxies for market values. If a problem with property rights leads to the undervaluation and overexploitation of a resource, a set of integrated economic accounts will not reveal the “right” price or the “correct” level of stocks. They will, however, provide the data—for example, about changes in the value of the stocks and the share of income to be attributed to the resource—needed for objective analysis of the problem.

### **BEA's Plan for Natural Resource and Environmental Accounting**

BEA's plan calls for work on the IEESA's to be undertaken in conjunction with modernizing its economic accounts. BEA's national accounts are now undergoing the first major redesign since the 1950's. The redesign, which will be along the lines of the SNA 1993, will feature an integrated set of current and capital accounts, sector by sector. Fully developed capital accounts, along with balance sheets, are essential for a comprehensive set of economic accounts. The conceptual work on these accounts and the more specialized work on natural resources and the environment will be mutually supporting. Further, to make reasoned policy choices involving trade-offs among kinds of capital, one would want a view of the total capital stock—natural and made—consistently covered and appropriately valued.

BEA has developed a three-phase plan for the IEESA's. With this issue of the SURVEY, BEA has completed the first phase of work.

*Phase I: Overall framework and prototype estimates.*—The overall IEESA framework is designed to build upon the existing national accounts and is in line with the guidance embodied in the new international SNA about a satellite system and the companion SESA.

In its initial work, BEA has focused on mineral resources, consisting of oil and gas, coal, metals, and other minerals with a scarcity value. As described in the companion article, the focus, in accordance with SNA recommendations, is on proved reserves, the basis for valuation is market values, and the treatment given mineral resources—which require expenditures to prove and which provide “services” over a long

7. There are also conceptual limitations to using NDP as the indicator of sustainable growth. NDP shows only the level of product, which cannot reflect much information about sustainability. The rate of change of NDP over time is more useful, but even this is not a clear indicator, because changes in NDP reflect changes in the rates of consumption, government expenditure, and net exports as well as net capital formation.


A measure that may be more useful as an indicator of sustainable growth is the net savings rate, which is affected only by changes in the rate of investment in, and the consumption of, fixed capital. If the savings rate—adjusted to reflect additions to, and subtractions from, natural as well as produced assets—is positive, then growth can be considered sustainable. (Because this assumes a high degree of substitutability between produced and natural assets, some refer to this concept as “weak sustainability.”)

timespan—is similar to the treatment of fixed capital in the existing accounts.

The prototype estimates include stocks and flows in accounts that supplement BEA's national wealth accounts and NIPA's. These prototype estimates provide a comprehensive picture of the stocks of natural assets and the changes in them. They also allow an examination of the practical consequences of several alternative methods of valuing the stock of resources, additions, and depletion. The alternative methods represent the Bureau's technical assessment of the best estimates and framework that are feasible with existing sources and methods.

*Phase II: Renewable natural resources.*—The plan calls for work to extend the accounts to renewable natural resource assets, such as trees

on timberland, fish stocks, and water resources. Development of these estimates will be more difficult than for mineral resources because they must be based on less refined concepts and less data.

*Phase III: Environmental assets.*—Building on this work, the plan calls for moving on to issues associated with a broader range of environmental assets, including the economic value of the degradation of clean air and water or the value of recreational assets such as lakes and national forests. Clearly, significant advances will be required in the underlying environmental and economic data, as well as in concepts and methods, and cooperative effort with the scientific, statistical, and economic communities will be needed to produce such estimates. 

## Accounting for Mineral Resources: Issues and BEA's Initial Estimates

AMONG NATURAL assets, the characteristics of minerals—oil, gas, coal, and nonfuel minerals—are the most similar to the characteristics of assets included in traditional economic accounting systems. Not surprisingly then, minerals have long been considered as candidates for a treatment that is symmetrical with the treatment given other assets. Such a treatment is at the heart of the integrated economic and environmental satellite accounts (IEESA's), which are the subject of a companion article, beginning on page 33. Failure to account symmetrically for mineral resources as a form of capital has been blamed both for their over- or under-exploitation and for incomplete analysis and policy decisions in areas relating to productivity and budgeting.

The companion article noted three points of asymmetry between the treatment given assets such as structures and equipment in the traditional economic accounts and the treatment given natural assets. First, in traditional economic accounts, there is no entry for additions to the stock of natural resources parallel to the entry for additions to the stock of structures and equipment. Second, there is no explicit entry for the contribution of natural resources to current production, as measured by gross domestic product (GDP), parallel to the entries that capture the value added of structures and equipment. Finally, there is no entry for the using up of the stock of natural resources parallel to the entry for the depreciation of structures and equipment used to arrive at net domestic product (NDP)—which is used by some as a shorthand measure of sustainable product.

This treatment given mineral resources in the traditional economic accounts is anomalous in several respects. First, firms spend large amounts of time and other resources in "proving" mineral reserves, and these reserves, like structures and equipment, yield a flow of services over many years. As firms prove these reserves, they are entered, along with investments in new structures and equipment, in the firms' balance sheets. Additions to these reserves are also recognized by investors and reflected in firms' equity prices. Second, the value added of a resource like coal or

oil is included in GDP even though no explicit entry for its contribution is made: Its value added is in a sense "appropriated" by the other factors of production and is included in the rents, royalties, and profits of the owners of invested capital. Finally, although the traditional economic accounts do not include an entry for depletion of natural resources, firms and investors recognize depletion in assessing the value of firms and the sustainability of their current profit levels.

The treatment of natural resources in the mining industry has long been debated in economics literature.<sup>1</sup> While there is a conceptual case for symmetrical treatment of mineral resources and invested capital, the absence of good market prices to value additions, depletion, and stocks has been a stumbling block. Property rights issues, incomplete information, asymmetry in bargaining, and the structure of payments for mineral rights create a situation in which either there are no observable prices or prices are seriously incomplete or unrepresentative. Partly as a result of this situation, traditional economic accounts have treated the value added of mineral resources as free gifts of nature, making entries neither to the flow accounts for additions to, or depletion of, the stock of these resources nor to the wealth accounts.

The omission of explicit entries for mineral resources has import beyond the economic accounts. The absence of an entry, or market price, for depletion may—in combination with common property rights—mean that the accounts do not identify overexploitation. This possibility is particularly important because a large share of the Nation's mineral resources are on public lands. (However, as the current problems in the New England fisheries suggest, the issue clearly has import for a wide range of other resources.) Such omissions have also been cited as the source of problems in productivity analysis. Despite the inclusion of land, labor, and capital in the most elementary production function used in studying

1. Business accounting has also long debated issues in accounting for minerals; further, there was a resurgence in interest after the "energy crisis" in the mid-1970's. Since then, the Financial Accounting Standards Board has issued five new standards to improve accounting for mineral resources.

productivity, measures of natural resources have generally not been available. Finally, the absence of measures of natural resource stocks and stock changes on Federal lands has been cited as contributing to less-than-optimal Federal budgeting decisions.<sup>2</sup>

As previously mentioned, this article is the second of two articles reporting on the IEESA's. It provides initial estimates of the value of additions, depletion, revaluations, and stocks of mineral resources and on the impact such estimates would have on the estimates of the Nation's production, income, and wealth. This article begins with a summary of the major conceptual and methodological issues in accounting for mineral resources. Next, the article describes alternative methods of valuation that can be used to develop IEESA estimates for minerals, and it then presents estimates for oil, gas, coal, metals, and other minerals using these methods. An appendix provides information on data sources and methods. Tables 1–5 appear at the end of the article: Table 1.1–1.6 present estimates of oil—opening stocks, additions, depletion, and the revaluation adjustment—for 1947–91; tables 2.1–2.6 present estimates of gas for 1947–91; tables 3.1–3.4 present estimates of coal for 1958–91; tables 4.1–4.4 present estimates of metals for 1958–91; and tables 5.1–5.4 present estimates of other minerals for 1958–91.

### Conceptual and Methodological Issues

In addressing conceptual and methodological issues for mineral resources, as for natural resources and the environment more broadly, BEA has attempted to follow two principles. First, the treatment in the satellite accounts should be consistent with the principles of economic theory. Second, the satellite accounts should embody some concepts and definitions that differ from those of the existing accounts in order to achieve their purpose of showing the interaction of the economy and the environment, but in other respects they should be consistent with the existing accounts. Satellite accounts provide the flexibility to make changes that are useful in analyzing natural resources and long-term economic growth, but consistency with the existing accounts will allow the satellite accounts covering mineral resources to link to, and build upon, the existing economic accounts, including the input-output and regional accounts.

The conceptual and methodological issues discussed in this section can be divided into two main groups. The first group deals with the accounting treatment for mineral resources. The second group deals with valuation.

#### *Accounting issues*

*Treatment of additions to reserves.*—Symmetrical treatment of proved mineral resources with structures and equipment requires treatment of additions to the stock as capital formation and of deductions as depletion. Capital formation records the initial production of the capital, as well as its addition to the capital stock; depreciation records the reduction in the capital stock associated with its use, as reflected in NDP. Over the life of the asset, depreciation sums to the value of the original investment.

In economic accounting, as in business accounting, what comes off the books must have gone on the books. This business accounting requirement was one of the reasons why estimates of depletion of natural resources have not been included in official estimates of NDP. Beginning in 1942, depletion allowances for minerals and timber were deducted from GDP in the estimates of net national product made by the U.S. Department of Commerce. Discoveries of minerals, however, were not included in capital formation and net product. The depletion allowances were eliminated in 1947 because of this absence of an entry for capital formation.

Despite this accounting requirement for symmetrical treatment of additions and reductions, a number of economists have called for a return to the 1942 treatment—that is, an entry for depletion but not for additions. This position seems to have been based on at least three considerations, each of which is evaluated in the paragraphs that follow.

First, an entry for depletion will respond to at least part of the concern about the treatment of mineral resources in the traditional accounts. If the goal is to produce a measure of NDP that reflects the depletion of mineral resources in GDP, deduction of depletion to arrive at an alternative NDP will provide such a measure. Although it cannot be explicitly identified, as noted previously, the contribution of mineral resources is already included in GDP. Deduction of an estimate of depletion will give a partial measure of sustainability, one that indicates the using up of the existing stock of mineral resources.

What such a partial measure will not do is allow the detailed identification of the contribution

2. See, for example, Gavin Wright [35] and Michael J. Boskin, Marc S. Robinson, Terrance O'Reilly, and Praveen Kumar [4].

of the mineral resource to income, production, consumption, or wealth, either in the aggregate or by sector. Nor will it provide a complete measure of sustainability. Without an entry for additions, deduction of depletion alone to calculate an alternative NDP may produce misleading signals regarding the sustainability of a nation's production and wealth. For example, with only depletion accounted for, a nation adding to its stock of reserves—through exploration and development and through improved recovery techniques—at a rate that more than offsets depletion would nonetheless have an alternative NDP lower than the traditional NDP. The lower NDP would suggest that the country was running down its resources and that the current level of production was at the expense of future production, despite the fact that reserves were actually increasing.

Second, estimates of the value of additions to the resource stocks are quite volatile, uncertain, and, at times, large. Volatility in resource prices, changes in mining technology, and uncertainty about the ultimate recoverability from existing reserves all affect the value of mineral reserves. It is not clear, however, that the volatility introduced by such estimates would be any larger than that already observed in investment, particularly inventory investment, the most volatile component of traditional accounts.

Third, probably the most important reason for the lack of enthusiasm for including additions to reserves as capital formation in GDP is that additions to reserves are so different from additions to capital stock. This difference, in combination with the volatility of additions to reserves, would limit the usefulness of accounts for conventional macroeconomic analysis. The inclusion of large additions to mineral resources in GDP, such as those associated with the North Slope in Alaska and the North Sea in Europe, are important additions to a nation's wealth and have a significant impact on economic activity, but the effect differs from that associated with investment in a new factory. Both add to wealth, but for the factors of production involved in building the factory, payments have been made, and the resources are available for current consumption. In contrast, much of the increase in wealth associated with adding proved reserves accrues to mining companies and landowners in the form of increases in land values and equity prices. To make these resources available for current consumption would require the "producers" of the mine or well to sell their product.

Many of the concerns about volatility and the different nature of additions to mineral reserves can be diffused by placing these values in a satellite account that allows integrated analysis of mineral resources outside the main accounts. This inclusion of natural resources in a satellite account allows researchers the flexibility to experiment without impairing the usefulness of the traditional accounts. In addition, within the IEESA's, the effect of volatility in mineral prices is largely confined to the revaluation account and has a limited effect on the estimates of current income, production, and consumption.

*Fixed capital or inventory treatment.*—Even when economic theorists have thought of natural resources as a type of capital, they have disagreed about whether the resources should be treated as fixed capital or as inventories.<sup>3</sup> This disagreement may seem a bit strange because proved mineral reserves seem to fit the classic characteristics of fixed capital: Expenditures of materials and labor are needed to produce a productive asset ("roundabout" production), which yields a stream of product over long periods of time. The rent to owners of fixed assets comprises the reduction in the value of the asset due to its use in the current period (depreciation) and a return equal to what the current value of the asset could earn if invested elsewhere. Inventories, on the other hand, are buffer stocks of inputs and final products that help to smooth production and avoid lost sales. As a rule, inventories are sold within a year or one accounting cycle. Although interest or holding costs are a consideration in determining inventory levels, they are much less important than for fixed capital.

Part of the rationale for treating mineral reserves as inventories may arise from the perception that they differ from fixed capital in that they are a set number of units waiting to be used up in production. However, like the output from a new machine, the number of units extracted from a new field or mine is quite uncertain and varies over time with the path of future demand, changes in technology, prices, costs, and returns on alternative investments. In addition, although a piece of machinery may not appear from the

3. Part of the debate over the treatment of minerals as inventories or as fixed capital may reflect the view that depletion should be counted as a reduction in the highly visible GDP measure, rather than in the less well known NDP. If natural resources are treated like fixed capital, the depletion of the resources in the production process would be treated like depreciation. Because NDP is defined as GDP less depreciation, with this treatment any depletion charge would affect NDP but not GDP (as noted earlier, conventional GDP implicitly includes depletion). On the other hand, the change in business inventories is a component of both GDP and NDP. Consequently, some have argued that if depletion were viewed as a net decline in inventories, it would result in a subtraction from both GDP and NDP.



exterior to be used up in production, its parts or service life are most certainly “used up” in production; this “using up” is reflected in the decline in its value, or the depreciation on the equipment.

To emphasize the replaceability of proved reserves, some analysts have chosen to describe these reserves as inventories. This motive notwithstanding, treatment of mineral reserves symmetrically with fixed investment in structures and equipment would serve equally well as a reminder of the “reproducibility” of proved reserves in the IEESA’S.

*Proved reserves or total resources.*—The amount of mineral resources that can be recovered, given current economic conditions, is not certain. Reserves are generally classified by the degree of certainty attached to the estimates. For example, proved petroleum reserves are estimated physical quantities that have been demonstrated by geologic and engineering data to be recoverable under current economic conditions and technology. Reserves whose recovery under current economic conditions is less certain are classified as either “probable” or “possible.” Estimates are also available on the total amount of reserves that remain to be discovered—that is, of “undiscovered” reserves. There are a variety of perspectives on which of these measures of reserves should be used in accounting for minerals. Should the accounts be concerned only with “proved” reserves, or should they also account for “probable,” “possible,” or even “undiscovered” reserves?

Authors who have focused on proved reserves have tended to do so because of the large uncertainty associated with the other measures. As noted in the companion article, BEA ultimately intends to include unproved reserves as part of “nonproduced/environmental” assets, but the mineral reserve estimates presented here are restricted to proved reserves.

One means of dealing with the uncertainty in valuing unproved reserves may be the use of “option” values. Unproved reserves are clearly bought and sold, and the values or options that could be used in these transactions might be used to develop average option values to be used in valuing the entire stock of a nation’s reserves. An operational methodology for making such estimates has not yet been identified.

### *Valuation issues*

The absence of complete data on mineral resource prices has meant that the value and contribution of mineral resources to income, production, consumption, and wealth have usually had to be based on methodologies that produce proxy estimates of their market price. There are two elements to making such estimates. The first is separating the contribution of the resource in the ground—which is implicitly included in the price of a marketed mineral product—from that of other factors of production. The second is determining the appropriate per-unit value for estimating the value of the stock of the resource and the value of changes in the stock, including additions, depletion, and revaluations.

In addition, it is useful to identify several terms at the outset. First, “rent” refers to the concept of the return to factors of production after deduction of variable costs. More empirically, “gross rent” is simply gross revenues less expenditures on intermediate goods and employee compensation. (Rent in these situations is not to be confused with “rental income of persons” found in the national income and product accounts.) Second, “invested capital” refers to the structures and equipment in which the firm or industry has invested.

*Identifying the return to the resource.*—The price of a unit of the resource—for example, a barrel of oil—reflects, in addition to the cost of goods and services used in its production, a return to labor, a return to invested capital, and a return to the resource. The first step in identifying the value of a barrel in the ground is to determine the rent, in this case the rent to the resource and the capitalized value of investments in mining. In industries such as petroleum mining, good data are generally available on the variable costs, so arriving at gross rent is, at least conceptually, relatively simple. The next step is to determine the share of gross rent that accrues to the invested capital and the share that accrues to the resource.

In theory, the rent to owners of both the invested capital and the oil in the ground should equal the reduction in the value of each asset due to its use in the current period (depreciation and depletion, respectively) plus a return equal to what the current value of the well (the invested capital and the oil in the ground) could earn if invested elsewhere. The desirable way to measure the rent would be to observe market prices for these transactions; however, often there is no transaction, and the observable transactions that

take place are often not representative of the full value of the oil. As a result, the various methods described in the next section use indirect techniques to estimate the market value of the return to invested capital, and they derive the return to the oil in the ground as a residual.

*Valuing the resource stock and depletion.*—Valuing the stock of a resource and valuing the decline in the stock's value associated with extraction are complicated because the extraction takes place over a long period of time. Unless the price, or value, of that resource rises enough to offset the income that could have been earned on alternative investments (including an inflation premium), resources extracted in the future will be worth less, in real terms, than those extracted today. In theory, the market value of the stock should be equal to the present discounted value of the future stream of rent from the stock, whereas depletion is the decline in the value of the stock associated with extraction in the current period. Translating the current per-unit rent of a resource into a per-unit value appropriate for valuing the stock and depletion requires information about the future path of extraction, prices, and interest rates. Unfortunately, such information is generally not available. In the absence of market prices, estimation of the current value of the resource requires either resort to economic theory, use of a set of explicit assumptions, or empirical estimation.

Empirical estimation of the factors required for computing the present discounted value of the resource is fraught with difficulties, in part because of the volatility of mineral markets. Simplistic assumptions do at least as well as econometric forecasts in tests of their predictive accuracy, and the assumptions are relatively easy to understand.

### Alternative Methods of Valuing Mineral Resources

BEA has prepared estimates using four methods of valuing resource stocks and changes—depletion, additions, and revaluations—in the stocks.<sup>4</sup> These methods rely on estimates of three

4. Among the methods that have not been used is one suggested by Salah El Serafy. The approach essentially calculates the amount that must be invested in a "sinking fund" to create an income stream sufficient to replace that produced by the natural resource. The approach, although frequently mentioned in the resource accounting literature, is not included largely because it is inconsistent with the concepts embodied in traditional national accounts and the IEESA's. In traditional accounts, the value of an asset is determined by its market price, or proxy thereof. El Serafy's approach, a welfare-oriented measure, is not intended to estimate the market value of the mineral resource.

variables: (1) The normal return to invested capital, based on some average rate of return to all investment in the economy; (2) the return to capital based on the market value of the capital stock in the oil industry; and (3) the per-unit capital cost of additions to the stock of proved reserves. The use of these variables as described in the following paragraphs represents BEA's assessment of the best estimates given existing source data and frameworks. The accompanying box provides an algebraic description of the methods.

### Current rent estimates

The simplest assumption that can be used is based on Harold Hotelling's observation that in equilibrium, the price of the marginal unit of a nonrenewable natural resource net of extraction costs (the current per-unit rent to the resource) should increase over time at a rate equal to the nominal rate of interest.<sup>5</sup> At any rate of increase in the per-unit rent above (below) the rate of return on alternative investments, entry (exit) and increases (decreases) in the rate of extraction will combine to reestablish the equilibrium rate of increase in the resource rent. If this observation holds, the value of the stock of the resource is independent of when it is extracted and is equal to the *current* per-unit rent to the resource times the number of units of the resource.<sup>6</sup>

The following two methods assume that over time the rent per unit will increase at the rate of interest; they simply use the current per-unit rent to value the resource and depletion.

The first method, current rent method I, utilizes an estimate of a normal, or average, rate of return to investment to estimate the rent to the associated capital invested in the mining industry and then derives the resource rent as a residual. This method applies this average, economywide rate of return to investment to an estimate of the replacement cost, or market value, of the net stock of associated capital invested in mining and then adds depreciation to estimate a "normal" rent to invested capital. The rate of return used is 6 percent, approximately the 45-year average real rate of return to investment in corporate bonds and equities for the period ending in 1991, which is an estimate of the rate of return available on al-

5. In other words, the real price of the resource should increase at the real rate of interest, and there is no need for discounting.

6. As discussed later, it may be true that over long periods, the rent per unit for mineral resources—like most tangible assets held for investment purposes—will rise at a rate equal to the nominal discount rate; however, periods of disequilibrium may be quite long. Nevertheless, given the problems in forecasting volatile minerals prices, technology, etc., this simple assumption may yield results as good as or better than other methods.

ternative investments. The steps in estimating the rent to and value of the resource are as follows:

1. Gross rent is calculated as total revenue less current operating expenditures. (Current operating expenditures are those associated with bringing the mineral from the deposit to the wellhead or mine gate.)
2. The resource rent is obtained by subtracting the rent to capital (both depreciation and a normal rate of return for capital) from the gross rent.
3. The per-unit rent to the resource equals the resource rent divided by the physical quantity extracted.

4. The value of the resource equals the per-unit rent times the physical quantity of reserves. Additions and depletion are valued at rent per unit times the physical quantities of added and extracted reserves.
5. Revaluations—the effect of price changes—are computed as a residual: The value of the resource at the end of the current year less its value at the end of the preceding year, plus depletion during the year, less additions during the year.

The advantage of this method is that it is relatively straightforward and requires few assumptions. The main disadvantage is that an explicit assumption must be made regarding the

### Algebraic Description of the Alternative Methods of Valuing Mineral Resources

Current rent method I (Based on average return to capital):

$$\begin{aligned}
 GR &= TR - COE \\
 RR &= GR - (rNS + DEP) \\
 \delta r &= RR/QE \\
 VR &= \delta r(QRES) \\
 DEPL &= \delta r(QE) \\
 VA &= \delta r(QADD) \\
 REVAL &= VR(t) - VR(t-1) + DEPL - VA
 \end{aligned}$$

Current rent method II (Based on value of capital stock): \*

$$\begin{aligned}
 \delta GR &= GR/QE \\
 V &= \delta GR(QRES) \\
 VR &= V - NS \\
 \delta r &= VR/QRES
 \end{aligned}$$

Net present discounted value: \*

$$\begin{aligned}
 \Phi &= \sum_{j=1}^T \frac{1/T}{(1+i)^{j-1/2}} \\
 \delta r &= \Phi[(V - NS)/(QRES)]
 \end{aligned}$$

Replacement cost: \*

$$\begin{aligned}
 bf &= [(QE/QRES)/((QE/QRES)+r)] \\
 \delta r &= bf[(TR - COE)/Q] - (\$ADD/Q)
 \end{aligned}$$

Transaction price: \*

$$\begin{aligned}
 \delta GR &= (TV/TQ) \\
 \delta r &= \delta GR - (NS/QRES)
 \end{aligned}$$

\* DEPL, VA, REVAL for all methods are computed using the same formulas as presented for current rent method I.

#### Definitions:

Aggregate value measures:

TR = total revenue  
 CO = other extraction expenses, including compensation of employees, materials consumed, and overhead cost allocated to current production

GR = gross rent  
 RR = resource rent  
 NS = net stock of capital valued at current replacement cost  
 TV = value of purchased reserves during the year  
 V = value of the proved reserves (resource and fixed capital values)  
 VR = value of the resource stock  
 VA = value of the annual additions  
 DEP = depreciation  
 DEPL = value of the annual depletions  
 REVAL = the effect of price changes on the value of the stock  
 \$ADD = the annual exploration and development expenditures for drilling oil and gas wells in fields of proven reserves (including overhead costs allocated to development)  
 Φ = Net discounted present value factor

Quantity measures:

QE = quantity of the resource extracted during the year  
 QRES = stock of reserves  
 QADD = Quantity of resources added to reserves during the year (through new discoveries, extensions of existing sites, or revisions in estimated reserves)  
 TQ = quantity of proved reserves purchased during the year

Per unit measures:

δGR = gross rent per unit (GR/Q)  
 δr = resource rent per unit

Rates and other items:

r = real rate of interest, or discount rate  
 N = Life span of a resource (e.g., well or mine), R/Q  
 j = current year  
 T = life of asset (NIPA convention)  
 a = reserve decline rate, Q/R  
 bf = barrel factor



appropriate rate of return. In addition to the conceptual and empirical problems in identifying an appropriate rate, prespecification of a rate does not allow for relatively low or high rates of return in the mining industry due to conditions specific to the industry.

An alternative method, current rent method II, derives resource rent by removing the market value of capital, both physical and capitalized expenditures, from the value of the resource reserve. The steps to deriving the per-unit rent are as follows:

1. Gross rent per unit is derived by dividing gross rent by the physical quantity of extraction.
2. The total value of the mineral reserve (the resource and the associated invested capital) equals the gross rent per unit times the quantity of reserves.
3. The value of the resource equals the total value of reserves less the current replacement value of the net stock of invested capital.
4. Resource rent per unit equals the value of the resource divided by the quantity of reserves.

The advantage of this method is that it does not require an explicit assumption about the return to invested capital associated with the resource.

### *Present discounted value estimates*

If it is assumed that rent to the resource does not rise enough to compensate the owners of the resource for the nominal interest they could earn on alternative investments, then the stream of future rents must be discounted by the difference between the rate of increase in resource rent and the nominal interest rate. As noted previously, with discounting, identical dollar values during different time periods have different present values, so valuation by present discounted values requires—in addition to an assumed discount rate—a number of assumptions about the stream of future rents.

In BEA's implementation of this method, three simplifying assumptions were made so that each cohort of additions to reserves did not have to be tracked separately throughout its economic life. First, extraction resulting from additions to proved reserves was assumed to be constant in each year of a field's life, and depletions were assumed to result equally from all cohorts still in the stock. Second, new reserves were assumed to be extracted at constant rates over the same time-frame used for depreciating wells and mines in

the NIPA's: 16 years until 1972 and 12 years thereafter. Finally, extractions were assumed to occur at midyear and were valued using the per-unit rents described for current rent method II.

Two real rates of discount—3 percent and 10 percent—were chosen to illustrate the effects of a broad range of rates on the values of additions, depletion, and stocks of reserves. Thus, the relatively high and relatively low rates chosen encompass many of the alternatives that have been used in discounting.<sup>7</sup> The 3-percent discount rate has often been used to approximate the rate of time preference. The 10-percent rate has often been used to approximate the long-term real rate of return to business investment.

The steps for estimating the present discounted value estimate of the resource rent per unit are as follows:

1. A discount factor was derived using an estimate of the real rate of discount—the nominal interest rate less the rate of increase in the resource rent—and the NIPA estimates of the lifespans of mineshafts and wells.
2. The rent per unit equals the discount factor times the gross rent per unit derived from the current rent method that is based on the value of capital stock in the mineral industry.<sup>8</sup>

### *Replacement-cost estimates*

The replacement-cost method subtracts from gross rent the cost per unit of adding new reserves, thereby identifying the resource rent as a residual. It uses the per-unit cost of proving new reserves to represent invested capital's share of the gross rent. The value of a unit of resource in the ground is estimated; the cost to replace it by investment is subtracted from that in-ground value, and the residual is the resource rent. This method uses current rates of extraction to estimate future production and uses an

7. Although these real rates—3 percent and 10 percent—are often used to discount future returns, both are probably high for an appreciating tangible asset for a number of reasons: (1) Mineral prices do rise, at least partly, if not fully offsetting the effect of discounting; (2) as many authors have argued, decisions with intergenerational effects should be valued at lower discount rates than other transactions; and (3) a real rate of 10 percent, which is often cited and has been used by the Office of Management and Budget as an estimate of the real rate of return to private capital, is biased upwards. The 10-percent return is based on estimates of the before-tax return to reproducible capital, which is computed as all property-type income divided by the replacement-cost value of reproducible assets. Some authors have attempted to adjust the return to reflect the fact that property-type income is a return to land and other factors as well as to reproducible capital; nevertheless, to the extent that these other factors are excluded from the denominator, the computed return to capital is too high.

8. Because of the simplifying assumptions used, somewhat different discount-extraction factors are applied to stocks and flows; for most years, the differences are very small.

assumed discount rate of 6 percent.<sup>9</sup> Because of the lack of production cost data, transactions data for the sale of reserves, and techniques to estimate those market values for all other minerals, the replacement-cost method is used only for oil and gas. The steps for deriving the per-unit resource rent are as follows:

1. The barrel factor—which is used to calculate the value of a barrel of oil in the ground—is equal to the depletion rate of the reserves divided by the sum of the real discount rate and the depletion rate.<sup>10</sup>
2. The per-unit resource rent is calculated by multiplying the gross rent per unit by the barrel factor and subtracting the per-unit exploration and development cost.

### *Transactions-price estimates*

When oil and gas firms seek to replace the reserves that have been depleted as a result of their production, they face a “make or buy” decision. They can either make new reserves by financing exploration and development efforts, or they can buy reserves that have already been proved by others. This article refers to the purchase price of proved reserves as a “transactions price” because it represents a price that was paid in an actual transaction. The costs of acquiring new reserves by financing exploration and development efforts are termed “finding costs.” In equilibrium, and ignoring the different tax treatment of purchasing and drilling for oil, the finding costs should be equal to the transactions price.

If available, transactions prices are ideal for valuing reserves. As it turns out, such transactions are relatively infrequent because companies generally develop their own reserves. As a result, the few transactions that occur are not easily generalized for estimating the total value of reserves.

The estimates of resource values for oil and natural gas presented here are derived from transactions prices constructed from publicly available data on the activities of large energy-producing firms. The derivation of per-unit resource rent is as follows:

1. The per-unit gross rent for the resource and its associated invested capital is obtained by

dividing aggregate expenditures for the purchase of the rights to proved reserves by the quantity of purchased reserves.

2. The per-unit resource rent equals the per-unit gross rent less the per-unit net stock of associated capital invested in the oil and gas industry.

### **Estimates for Mineral Resources**

The value of resource reserves and changes in reserves were estimated for the period 1958–91 for major mineral resources using the four valuation methods just discussed.<sup>11</sup> The minerals valued include the fuels (petroleum, natural gas, coal, and uranium), the metals (iron ore, copper, lead, zinc, gold, silver, and molybdenum), and other minerals (phosphate rock, sulfur, boron, diatomite, gypsum, and potash). Petroleum and gas account for the lion’s share of mineral production. The other minerals were selected because, of the minerals that have scarcity value, their value of production was relatively high.

The picture that emerges from the various estimates of the value of U.S. mineral stocks is broadly similar, regardless of which methodology is used:

- The value of additions has tended to exceed depletions; since 1958, the value of the stocks of proved mineral reserves in the aggregate has grown in current dollars, while showing little change in constant (1987) dollars (charts 1 and 2 and table A).
- Changes in the stocks of these productive assets over time have largely reflected changes in their resource rents. Increases in resource rents have been accompanied by greater investment in exploration and enhanced recovery technology, and decreases in rents for some resources have been accompanied by reduced exploration activity and the closing of marginal fields and mines.
- Proved mineral reserves constitute a significant share of the economy’s stock of productive resources. Addition of the value of the stock of these mineral resources to the value of structures, equipment, and inventories for 1991 would raise the total by \$471–\$916 billion, or 3–7 percent, depending on the valuation method used.
- The stocks of proved mineral resources are worth much more than the stocks of invested

9. The method outlined here is based on the approach used by M.A. Adelman, which has been modified to estimate the resource rent and hence the depletion and the value of oil and gas resources.

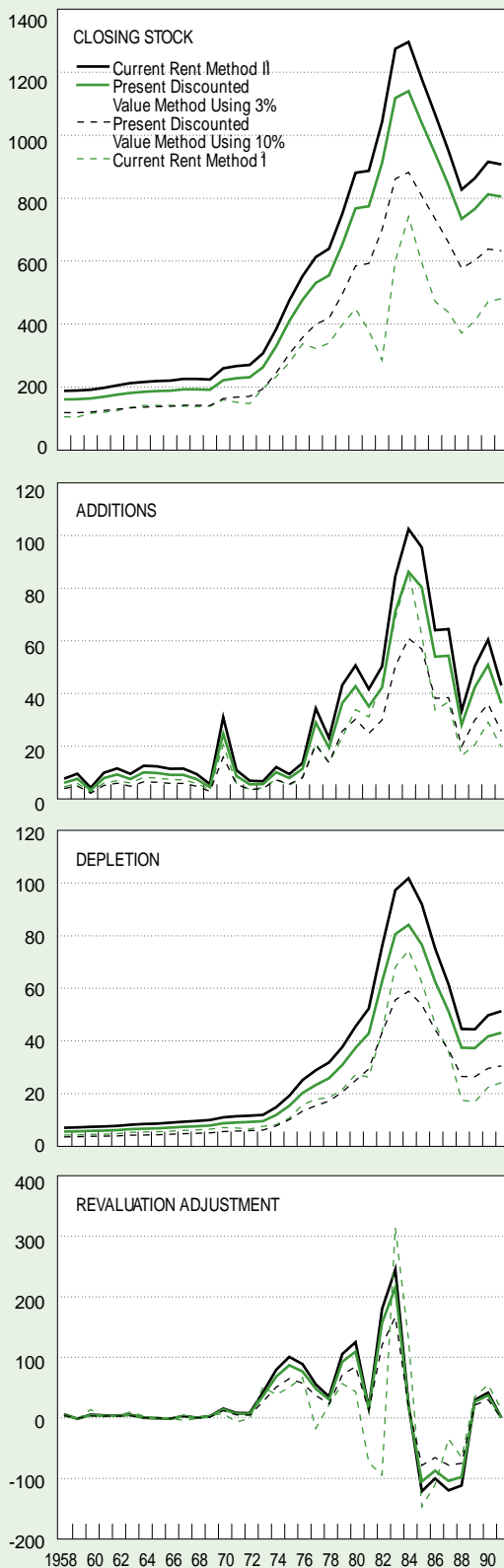
10. Note that if the resource appreciates at a rate equal to the nominal interest rate, the real discount rate (nominal rate less the increase in prices) is zero, and the barrel factor has a value of one; in this case, the current rent is used to value reserves and depletion.

11. The transactions-price and replacement-cost methods are used for the period 1947–91 and only for oil and gas.

CHART 1

## Stocks and Changes in the Stocks of Subsoil Assets, Current Dollars

Billion \$



1958 60 62 64 66 68 70 72 74 76 78 80 82 84 86 88 90  
 1. Based on the value of capital stock.  
 2. Based on the average return to invested capital.

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

structures and equipment associated with the resources. In 1991, the value of the stock of subsoil assets was 2 to 4 times as large as the value of the associated stock of invested structures and equipment and inventories.

- Valuing the effect of depletion and additions, as well as including the value of resource stocks, provides a significantly different picture of returns. Compared with rates of return calculated using income and capital stock as measured in the existing accounts, the IEESA-based average rates of return on capital in the mining industry for 1958–91 are lower—4–5 percent rather than 23 percent (table B). Rates of return for all private capital slip from 16 percent using measures in the existing accounts to 14–15 percent using IEESA measures for the mining industries.
- Although the trends that emerge from the alternative methods are similar, the range of estimates is large. The highest estimates of stocks, depletion, and additions were obtained from the current rent estimates based on capital stock values, and the lowest were from the current rent estimates based on average rates of return to capital.

The stock of proved reserves increased from \$103–\$182 billion in 1958 to \$471–\$916 billion in 1991. In constant dollars, the stock rose somewhat and then fell, but over the period showed little change: From \$544–\$1,077 billion in 1958, the real stock slipped only slightly to \$530–\$1,030 billion in 1991. The patterns vary by type of mineral and reflect the effects of prices and costs of production, the volatility in international minerals prices, increasing environmental regulation, and the effect of strikes and other factors specific to each industry.

For petroleum, despite periodic concerns that the United States was running out of oil, additions have offset depletion throughout the period as oil companies have responded to higher net returns by stepping up exploration and improved recovery techniques to produce stocks of proved reserves sufficient to meet current and intermediate-term needs in light of current prices, costs, and interest rates. The one spike in the constant-dollar oil and gas series was in 1970, the year of the Alaskan oil strike.

For coal, additions have exceeded depletions, resulting in a generally rising constant-dollar value of stocks over time. For other minerals, the stock patterns have varied, with declining stocks in metals reflecting large declines in the returns to metals.

The 1991 stock of mineral reserves would add 3–7 percent to the 1991 value of reproducible tangible wealth of \$13,637 billion, of which private nonresidential structures and equipment were \$5,440 billion. Over time, the mineral reserves share of an expanded estimate of national wealth has fallen; in 1958, mineral reserves would have added 9–17 percent to reproducible tangible wealth. This decline appears to reflect several factors, including the economy's increased reliance on foreign resources and the increased efficiency in the use of fuels and other minerals.

Although industry makes large investments in exploring and developing mineral resources, the value of the invested capital associated with oil-fields and mines is small relative to the value of the mineral reserves themselves. In 1991, the value of subsoil assets was 2–4 times as large as the associated capital invested in mining. Addition of these stocks of productive natural assets provides a more comprehensive picture of both the assets and the returns in the mineral industries.

Treatment of natural resources symmetrically with investments in equipment and structures provides a very different picture of rates of return to mining. Rates of return in the mineral industries calculated using income and capital stock as measured in the existing accounts—specifically, by dividing property-type income by the replacement value of structures, equipment, and inventories—averaged 23.1 percent for 1958–91. The more complete IEESA estimate deducts depletion and adds additions to property-type income, and it adds the value of resource stocks to the value of structures, equipment, and inventories. Depending on the valuation method used, the IEESA rate of return would be 3.5–5.2 percent. The effects of including mining resources are so large that the rate of return to all private capital is reduced from 16.1 percent to 14.1–14.9 percent. These IEESA rates of return provide a significantly different picture of the social rate of return to investments in the mining industries and the sustainability of the industries' output.<sup>12</sup>

As noted, the highest estimates of resource reserves are from the current rent method based on the value of capital stock invested in the industry.<sup>13</sup> The value of subsoil assets using this

method was \$916 billion in 1991. The lowest value in 1991, \$471 billion, was obtained from the current rent method based on a normal return to invested capital. The present discounted value estimates fell somewhere in between—\$638–\$812 billion.

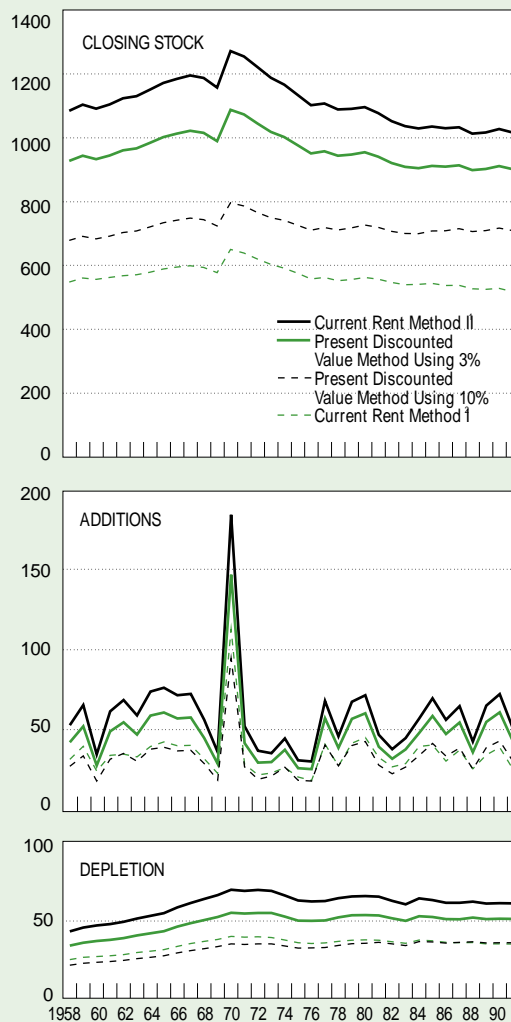
The replacement-cost and transactions-price estimates were computed only for oil and gas. The transactions-price estimates, despite considerable smoothing, were quite volatile and erratic.

preference rate of 3 percent—or a nominal rate of approximately 6 percent—the current rent methods may not be too far off the mark over long periods of time, given the range of uncertainty in the estimates of rates of return. If one chooses a higher discount rate, then some discounting should occur.

CHART 2

Stocks and Changes in the Stocks of Subsoil Assets, Constant Dollars

Billion 1987 \$



1. Based on the value of capital stock.  
 2. Based on the average return to invested capital.  
 U.S. Department of Commerce, Bureau of Economic Analysis

12. Given the effect of tax laws, transfer pricing, and excluded assets, comparison of rates of return across methods is difficult at best. Many of the mining industries have relatively little invested capital (fixed or inventory) associated with the resources, and hence the computed returns to reproducible capital are overstated relative to those that mining companies, which do count the value of property, have on their books.

13. Over the period of this analysis, the current rent per unit for all the resources increased at an annual rate of 4–8 percent. Based on a real time

**Table A.1.—Value of the Resource, Additions, and Depletion of All Subsoil Assets, Current Rent Method I (Rate of Return)**

Year	Billions of current dollars					Billions of 1987 dollars			
	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)	Opening stock	Additions	Depletion	Closing stock (6+7-8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958	102.6	4.6	4.3	2.8	105.6	544.4	31.4	25.9	550.0
1959	105.6	5.9	4.4	-2.0	105.2	550.0	39.5	27.3	562.2
1960	105.2	2.6	4.5	13.9	117.2	562.2	24.1	27.7	558.5
1961	117.2	6.0	4.6	1.5	120.1	558.5	33.9	28.2	564.2
1962	120.1	6.9	4.8	3.2	125.4	564.2	34.6	29.0	569.8
1963	125.4	6.0	5.3	9.6	135.8	569.8	32.9	30.3	572.5
1964	135.8	8.2	5.5	3.2	141.7	572.5	39.4	31.1	580.7
1965	141.7	7.9	5.5	-2.3	141.8	580.7	42.3	32.1	590.9
1966	141.8	7.4	5.8	-6	142.7	590.9	39.9	34.1	596.6
1967	142.7	7.2	6.1	-3.9	140.0	596.6	40.2	36.0	600.9
1968	140.0	5.9	6.2	-1.2	138.4	600.9	31.7	37.3	595.3
1969	138.4	3.4	6.5	4.1	139.5	595.3	22.6	38.5	579.5
1970	139.5	20.5	7.1	6.8	159.7	579.5	112.7	40.4	651.8
1971	159.7	5.9	7.0	-6.5	152.1	651.8	28.4	39.9	640.4
1972	152.1	3.7	6.5	-1.4	147.9	640.4	21.7	40.2	621.8
1973	147.9	4.2	7.6	51.1	195.7	621.8	22.9	39.6	605.1
1974	195.7	7.6	8.3	38.2	233.1	605.1	26.2	38.1	593.2
1975	233.1	5.1	10.7	50.3	277.8	593.2	20.4	36.4	577.2
1976	277.8	8.4	15.7	66.6	337.1	577.2	18.2	36.0	559.5
1977	337.1	21.0	17.9	-17.6	322.6	559.5	40.8	36.3	564.0
1978	322.6	13.8	18.4	21.5	339.5	564.0	27.3	37.3	554.0
1979	339.5	23.5	21.6	56.7	398.1	554.0	41.5	37.9	557.6
1980	398.1	33.9	27.2	43.5	448.3	557.6	45.0	38.3	564.3
1981	448.3	31.1	26.3	-73.7	379.4	564.3	32.6	38.0	558.9
1982	379.4	43.9	43.6	-94.5	285.2	558.9	26.7	37.1	548.6
1983	285.2	68.7	68.1	314.7	600.6	548.6	28.8	36.0	541.3
1984	600.6	86.3	74.5	128.9	741.3	541.3	39.4	38.1	542.7
1985	741.3	62.1	62.3	-146.7	594.4	542.7	40.4	37.6	545.5
1986	594.4	33.8	46.4	-110.2	471.6	545.5	30.3	36.7	539.1
1987	471.6	36.8	36.0	-34.8	437.5	539.1	37.1	36.4	539.8
1988	437.5	16.4	17.5	-65.3	371.1	539.8	25.5	36.6	528.7
1989	371.1	20.6	16.9	35.1	409.9	528.7	34.1	35.7	527.1
1990	409.9	29.1	22.4	54.6	471.2	527.1	38.8	35.7	530.3
1991	471.2	19.6	24.2	14.0	480.6	530.3	25.0	35.6	519.7

**Table A.2.—Value of the Resource, Additions, and Depletion of All Subsoil Assets, Current Rent Method II (Value of Capital)**

Year	Billions of current dollars					Billions of 1987 dollars			
	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)	Opening stock	Additions	Depletion	Closing stock (6+7-8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958	181.9	7.7	7.1	5.9	188.3	1,077.4	52.7	43.6	1,086.5
1959	188.3	9.5	7.2	-1.5	189.3	1,086.5	65.3	45.9	1,105.9
1960	189.3	4.3	7.4	5.5	191.6	1,105.9	34.5	47.3	1,093.1
1961	191.6	9.9	7.5	4.0	198.0	1,093.1	61.4	48.1	1,106.4
1962	198.0	11.6	7.8	3.9	205.7	1,106.4	68.4	49.5	1,125.2
1963	205.7	9.5	8.2	5.3	212.3	1,125.2	58.8	51.7	1,132.3
1964	212.3	12.6	8.5	0	216.4	1,132.3	73.6	53.4	1,152.6
1965	216.4	12.3	8.6	-7	219.4	1,152.6	76.0	55.0	1,173.6
1966	219.4	11.4	9.0	-1.5	220.4	1,173.6	71.4	58.6	1,186.4
1967	220.4	11.5	9.3	3.2	225.8	1,186.4	72.2	61.4	1,197.1
1968	225.8	9.4	9.6	.2	225.8	1,197.1	56.1	63.9	1,189.3
1969	225.8	5.6	10.0	2.8	224.2	1,189.3	35.9	66.4	1,158.8
1970	224.2	31.0	11.0	15.3	259.5	1,158.8	184.1	69.7	1,273.2
1971	259.5	10.9	11.4	8.1	267.1	1,273.2	52.1	69.0	1,256.4
1972	267.1	6.9	11.7	7.9	270.3	1,256.4	36.8	69.6	1,223.6
1973	270.3	6.7	12.0	42.2	307.1	1,223.6	35.3	68.9	1,190.0
1974	307.1	12.1	14.9	79.2	383.7	1,190.0	44.4	66.1	1,168.3
1975	383.7	9.4	19.2	101.1	475.0	1,168.3	30.8	62.9	1,136.1
1976	475.0	13.6	25.2	88.9	552.3	1,136.1	30.1	62.3	1,103.9
1977	552.3	34.4	28.9	55.2	613.1	1,103.9	67.8	62.6	1,109.1
1978	613.1	23.1	31.8	35.0	639.3	1,109.1	45.8	64.4	1,090.5
1979	639.3	43.2	37.7	105.6	750.4	1,090.5	67.3	65.5	1,092.3
1980	750.4	50.7	45.5	125.3	881.0	1,092.3	71.4	65.7	1,097.9
1981	881.0	41.7	52.3	16.7	887.1	1,097.9	46.7	65.4	1,079.3
1982	887.1	50.3	76.0	180.2	1,041.6	1,079.3	37.7	62.8	1,054.2
1983	1,041.6	84.6	97.3	245.2	1,274.2	1,054.2	44.7	60.6	1,038.3
1984	1,274.2	102.5	101.8	21.1	1,296.0	1,038.3	56.8	64.2	1,030.8
1985	1,296.0	95.5	92.0	-121.4	1,178.1	1,030.8	69.5	63.2	1,037.1
1986	1,178.1	64.1	75.3	-100.1	1,066.9	1,037.1	56.0	61.6	1,031.6
1987	1,066.9	64.6	61.5	-119.6	950.3	1,031.6	64.6	61.5	1,034.6
1988	950.3	33.4	44.6	-111.5	827.6	1,034.6	42.5	62.2	1,014.9
1989	827.6	50.4	44.4	29.6	863.2	1,014.9	65.0	61.1	1,018.8
1990	863.2	60.5	49.7	41.5	915.5	1,018.8	72.1	61.3	1,029.6
1991	915.5	43.1	51.3	.4	907.6	1,029.6	50.3	61.2	1,018.7

**Table A.3.—Value of the Resource, Additions, and Depletion of All Subsoil Assets, Present Discounted Value Method Using 3% Discount Rate**

Year	Billions of current dollars					Billions of 1987 dollars			
	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)	Opening stock	Additions	Depletion	Closing stock (6+7-8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958	155.6	6.1	5.6	5.0	161.1	921.6	42.0	34.6	929.4
1959	161.1	7.6	5.7	-1.1	161.9	929.4	52.0	36.5	946.0
1960	161.9	3.4	5.9	4.5	163.9	946.0	27.5	37.5	935.1
1961	163.9	7.9	6.0	3.5	169.3	935.1	48.9	38.2	946.4
1962	169.3	9.2	6.2	3.5	176.0	946.4	54.5	39.3	962.6
1963	176.0	7.5	6.5	4.6	181.6	962.6	46.8	41.0	968.6
1964	181.6	10.0	6.7	-2	185.1	968.6	58.7	42.4	986.0
1965	185.1	9.8	6.8	-4	187.7	986.0	60.6	43.7	1,003.9
1966	187.7	9.1	7.1	-1.2	188.5	1,003.9	56.9	46.5	1,014.8
1967	188.5	9.2	7.4	2.8	193.1	1,014.8	57.5	48.7	1,024.0
1968	193.1	7.5	7.6	.1	193.1	1,024.0	44.7	50.7	1,017.4
1969	193.1	4.5	7.9	2.1	191.8	1,017.4	28.6	52.7	991.3
1970	191.8	24.7	8.7	14.2	222.0	991.3	146.7	55.3	1,089.1
1971	222.0	8.7	9.0	6.9	228.5	1,089.1	41.5	54.8	1,074.7
1972	228.5	5.5	9.3	6.4	231.2	1,074.7	29.3	55.2	1,046.7
1973	231.2	5.6	9.6	36.1	263.4	1,046.7	29.7	55.2	1,020.3
1974	263.4	10.2	11.9	68.2	329.8	1,020.3	37.4	52.9	1,004.0
1975	329.8	7.9	15.4	86.8	409.2	1,004.0	25.9	50.3	978.7
1976	409.2	11.4	20.3	76.6	476.9	978.7	25.3	50.3	953.1
1977	476.9	28.9	23.3	48.0	530.5	953.1	57.1	50.5	959.8
1978	530.5	19.4	25.9	30.5	554.5	959.8	38.6	52.3	945.9
1979	554.5	36.4	30.9	92.4	652.4	945.9	56.6	53.7	949.6
1980	652.4	42.8	37.3	109.8	767.7	949.6	60.1	53.9	956.7
1981	767.7	35.1	42.9	14.9	774.8	956.7	39.3	53.6	942.6
1982	774.8	42.4	62.6	157.3	911.8	942.6	31.7	51.7	922.8
1983	911.8	71.2	80.6	215.5	1,117.9	922.8	37.6	50.2	911.0
1984	1,117.9	86.3	84.1	19.6	1,139.6	911.0	47.8	53.1	906.5
1985	1,139.6	80.4	76.6	-105.0	1,038.4	906.5	58.5	52.6	914.1
1986	1,038.4	54.0	62.7	-87.2	942.4	914.1	47.2	51.3	911.3
1987	942.4	54.3	51.3	-104.2	841.4	911.3	54.3	51.3	916.0
1988	841.4	28.1	37.5	-97.6	734.4	916.0	35.8	52.3	900.6
1989	734.4	42.4	37.3	26.5	766.0	900.6	54.7	51.3	904.1
1990	766.0	50.9	41.8	37.2	812.4	904.1	60.7	51.5	913.6
1991	812.4	36.3	43.1	-1	805.4	913.6	42.3	51.4	903.9

**Table A.4.—Value of the Resource, Additions, and Depletion of All Subsoil Assets, Present Discounted Value Method Using 10% Discount Rate**

Year	Billions of current dollars					Billions of 1987 dollars			
	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)	Opening stock	Additions	Depletion	Closing stock (6+7-8)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1958	114.7	3.9	3.6	3.8	118.8	674.6	27.0	22.3	680.4
1959	118.8	4.9	3.7	-6	119.3	680.4	33.5	23.6	692.7
1960	119.3	2.2	3.8	3.1	120.8	692.7	17.7	24.3	684.7
1961	120.8	5.1	3.9	2.8	124.8	684.7	31.5	24.7	693.3
1962	124.8	6.0	4.0	2.9	129.7	693.3	35.1	25.4	705.4
1963	129.7	4.9	4.2	3.5	133.8	705.4	30.2	26.5	710.0
1964	133.8	6.5	4.3	.5	136.4	710.0	37.8	27.4	722.8
1965	136.4	6.3	4.4	0	136.4	722.8	39.0	28.2	736.0
1966	138.3	5.9	4.6</						

**Table B.—Alternative Rates of Return, Averages for 1958–91**  
[Percent]

	NIPA based	IEESA based			
		Current rent I	Current rent II	PDV 3% rate	PDV 10% rate
Mining industries .....	23.1	5.2	3.5	4.0	5.0
Total private capital .....	16.1	14.9	14.1	14.4	14.8

NOTE.—In general, rates of return are some measure of income divided by some measure of capital stock. For the NIPA-based estimates, income is defined as property-type income (profits, rents, net interest plus indirect business taxes), and capital stock is defined as structures, equipment, and inventories. In the alternative IEESA methods, income is also defined as property-type income, but depletion is subtracted from profits, and the value of additions is added; IEESA capital stock is defined as structures, equipment, and inventories plus the value of mineral resources.

PDV Present discounted value

The replacement-cost estimates produced the lowest values among all the estimates for gas. The transactions-price estimates produced the lowest values for oil.

For some of the subsoil asset estimates, especially those employing the current rent method based on a normal return to invested capital, the resource stock values and stock changes are quite low. In certain industries, especially the metals industries, the estimates were negative (indicated with an asterisk in the tables). These negative values indicate that the gross rents in these industries are so low that any procedure that assumes a normal return to capital in that industry must attribute a negative residual rent to the resource if total factor returns are to add up to market output. One can imagine an alternative procedure that assumes a normal return plus a depletion allowance and derives a negative residual for the invested capital associated with the resource.

## APPENDIX: DATA SOURCES AND METHODS

### Current-Dollar Estimates

#### *Petroleum and natural gas*

*Prices and quantities.*—The basic commodity prices used are the average wellhead prices for oil and gas from the American Petroleum Institute (API). The wellhead price for gas includes rents attributable to natural gas liquids (NGL) that, depending on market conditions, may be separated downstream. Oil production quantities are from API and the Department of Energy (DOE) and include both crude production and lease condensate production, both in millions of barrels. Natural gas production is marketed production from API and DOE. Marketed production has not yet undergone the extraction of NGL. Total rev-

enue for oil and gas production is calculated as price times quantity produced.

Reserve estimates are from API and DOE for crude oil and dry gas. The reserve volumes for oil and gas were augmented for reserves of NGL, which are reported separately. Additions were set equal to additions from DOE and API plus any residual change in stocks not accounted for by reported flows. The residual arises out of discontinuities in the estimates caused by the different reserve estimation methods used over the last 40 years.

The basic commodity price data used are yearly average prices. The large fluctuation in commodity prices, however, makes them unstable and thus unsuitable for estimating the average or expected returns that investors presumably have in mind in determining the appropriate price for long-lived assets such as mineral reserves. In order to smooth the estimates, a 3-year lagged average of the yearly average prices is used as the midyear market price.

*Costs.*—Data on current production expenditures and ad valorem and windfall profits taxes are from API's Survey of Oil and Gas Expenditures (SOGE) and, for 1972–81, the Census Bureau's Annual Survey of Oil and Gas (ASOG). "Finding costs" are obtained as a 3-year moving average of development expenditures per unit of reserve added; the source data are from the SOGE and the ASOG. For years not covered by the SOGE, estimates of costs were interpolated using an indicator series.

*Capital stock.*—The capital stock, depreciation, and investment estimates are from BEA. BEA defines investment and capital for mining industries differently from standard industry practice. BEA investment includes capital equipment, structures, and all exploration and development expenditures, even those expenditures that are treated as current expenses by operators. NIPA capital and investment estimates are available as an aggregate for oil and gas extraction (SIC 13). The portion of capital for four-digit SIC industry 1321, natural gas liquids, was removed from this series, as this capital is not used in the extraction of oil or gas. Rather, natural gas liquids, a small piece of SIC 13, is a downstream process. The capital stock of the other four-digit components of SIC 13 is considered a part of the capital required for the extraction of oil and gas; for example, oil and gas field exploration services, SIC industry 1382, is used as inputs for oil and gas extraction.



The NIPA investment series for oil and gas extraction from 1959–91 was disaggregated into oil extraction and gas extraction using the ratio of expenditures for successful oil wells drilled to expenditures for successful gas wells drilled. For 1947–58, expenditure ratios for oil wells and gas wells were estimated using the number of successful oil wells and gas wells drilled. These two investment series were then used to generate current- and constant-dollar capital stock and depreciation estimates for oil extraction and for gas extraction.

### *Other minerals*

Inconsistencies in data and a paucity of data for nonbenchmark years present substantial difficulties in making estimates for other minerals. The data that do exist are often classified incongruently, or the definitions for series change over time. For example, Census Bureau data—which are the only comprehensive data available on production, costs, and revenues—are on an SIC basis; BEA data on capital stocks are on an SIC basis but at a more aggregate level than the Census data; and Bureau of Mines and DOE data on reserves, production quantities, and prices are on a commodity basis.

*Prices and quantities.*—For most minerals, the basic commodity prices used are 3-year lagged averages of the value of production divided by the quantity produced for metals and other minerals from the Bureau of Mines or DOE. For other minerals, a combination of available data on prices, quantities produced, or value of production is used to derive missing data on prices or value of production. Total revenue from current production is equal to the average price times the quantity produced.

Changing definitions for mineral reserve quantities present significant problems for the construction of consistent time series for mineral reserves. Prior to 1978, reserves were defined by the Bureau of Mines as economic reserves, both demonstrated and inferred; between 1979 and 1986, reserve base was the preferred definition, and this comprised demonstrated (but not inferred) economic reserves, marginal economic reserves, and part of subeconomic reserves; since 1987, only demonstrated economic reserves are included in the definition of reserves. Only the last definition is roughly consistent with proved reserves in oil and gas. The published estimates showed such large year-to-year changes—even within subperiods in which re-

serve definitions were unchanged—that BEA has attempted to develop a consistent, or at least smoothed, time series for these minerals. The BEA series use a weighted average that is based on a constant output-to-reserve ratio and on a judgmentally scaled moving average of published reserves. (Uranium reserves are based on a different method that splices DOE's forward-cost categories to construct a consistent time series.)

*Costs.*—Consistent data on production expenditures—current variable costs of extraction, including purchased services—were derived from the Census Bureau's minerals industries data and from BEA's benchmark input-output data.

*Capital stock.*—For census years between 1958 and 1991, data on investment in plant, equipment, and exploration and development were derived from the Census Bureau's *Census of Mineral Industries*. These investment data were then used to construct industry-specific capital stock estimates for mineral industries at a level of detail greater than that at which BEA normally produces estimates.

### Constant-Dollar Estimates

Constant-dollar estimates for petroleum, natural gas, and other minerals use 1987 as the base year. The base-year estimate for resource rent was used to calculate constant-dollar series for the following methods: Current rent, present discounted value, and, for a shorter period, transactions price. For each method, the 1987 per-unit resource rent for the value of depletion was multiplied by the physical volume of depletion and additions to derive the value of depletion and additions, respectively. The constant-dollar value of the resource stock is the product of the 1987 per-unit resource rent and the end-of-year volume of reserves.


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Tables 1.1 through 5.4 follow. 

**Table 1.1.—Value of the Resource, Additions, and Depletion of Oil, Current Rent Method I (Rate of Return)**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947		2.4	1.8		26.1
1948	26.1	5.7	3.0	6.1	34.9
1949	34.9	4.5	2.5	.5	37.4
1950	37.4	4.1	3.0	.3	38.8
1951	38.8	6.4	3.2	-2.5	39.6
1952	39.6	3.5	2.8	-3.9	36.3
1953	36.3	4.3	3.0	1.2	38.9
1954	38.9	4.0	3.2	3.6	43.2
1955	43.2	4.6	3.9	4.2	48.2
1956	48.2	4.6	3.9	-1.3	47.6
1957	47.6	3.5	3.8	-1.0	46.3
1958	46.3	4.1	3.6	.4	47.2
1959	47.2	5.2	3.5	-5.6	43.3
1960	43.3	3.3	3.3	-1.1	42.1
1961	42.1	3.5	3.3	-.6	41.8
1962	41.8	2.9	3.3	-.5	40.8
1963	40.8	3.1	3.6	1.6	42.0
1964	42.0	3.6	3.6	-.7	41.3
1965	41.3	4.0	3.5	-1.4	40.4
1966	40.4	3.9	3.7	-.6	40.0
1967	40.0	4.1	4.1	2.5	42.5
1968	42.5	3.3	4.2	-.1	41.6
1969	41.6	2.8	4.3	.4	40.5
1970	40.5	16.7	4.6	3.1	55.7
1971	55.7	3.3	4.7	1.0	55.3
1972	55.3	2.1	4.4	-1.8	51.2
1973	51.2	3.6	5.4	28.5	77.9
1974	77.9	3.8	5.8	10.9	86.8
1975	86.8	3.5	7.3	21.7	104.7
1976	104.7	4.2	10.0	19.8	118.7
1977	118.7	13.4	10.7	2.7	124.1
1978	124.1	9.8	11.3	15.4	137.9
1979	137.9	7.1	12.9	60.4	192.5
1980	192.5	19.0	18.9	102.8	295.4
1981	295.4	20.6	22.8	5.2	298.3
1982	298.3	19.8	38.6	102.9	382.4
1983	382.4	54.9	54.7	99.0	481.6
1984	481.6	62.1	51.6	-38.0	454.1
1985	454.1	43.9	43.5	-122.4	332.1
1986	332.1	16.1	30.2	-91.9	226.1
1987	226.1	23.1	20.7	-83.9	144.7
1988	144.7	6.1	7.1	-63.4	80.2
1989	80.2	6.0	7.0	12.8	91.9
1990	91.9	9.2	10.3	32.5	123.3
1991	123.3	5.3	13.0	11.1	126.8

**Table 1.2.—Value of the Resource, Additions, and Depletion of Oil, Current Rent Method II (Value of Capital)**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947		3.0	2.2		31.3
1948	31.3	6.7	3.5	6.4	40.9
1949	40.9	5.5	3.1	2.3	45.6
1950	45.6	4.9	3.6	-.2	46.8
1951	46.8	7.8	3.9	-2.3	48.5
1952	48.5	4.5	3.6	-3.2	46.1
1953	46.1	5.5	3.8	1.8	49.7
1954	49.7	5.2	4.1	4.8	55.5
1955	55.5	5.8	4.8	3.8	60.3
1956	60.3	6.0	5.0	-.2	61.0
1957	61.0	4.7	5.0	.7	61.4
1958	61.4	5.7	5.0	3.3	65.4
1959	65.4	7.4	5.0	-5.3	62.6
1960	62.6	4.8	4.9	-.3	62.2
1961	62.2	5.2	4.9	-1.0	61.5
1962	61.5	4.3	4.9	-.6	60.4
1963	60.4	4.5	5.1	.5	60.2
1964	60.2	5.2	5.1	-.7	59.5
1965	59.5	5.9	5.1	-1.3	58.9
1966	58.9	5.6	5.3	-1.5	57.7
1967	57.7	5.7	5.7	1.1	58.8
1968	58.8	4.6	5.8	-.8	56.8
1969	56.8	3.8	5.9	0	54.8
1970	54.8	23.7	6.5	8.7	80.7
1971	80.7	4.9	6.9	2.0	80.6
1972	80.6	3.3	7.0	1.5	78.4
1973	78.4	4.7	7.0	18.7	94.9
1974	94.9	6.0	9.0	30.1	121.9
1975	121.9	5.5	11.5	33.0	149.0
1976	149.0	6.1	14.4	24.1	164.8
1977	164.8	19.6	15.6	9.3	178.1
1978	178.1	14.7	17.1	19.2	194.9
1979	194.9	10.8	19.7	71.2	257.2
1980	257.2	26.2	26.1	105.2	362.5
1981	362.5	30.2	33.5	37.0	396.2
1982	396.2	26.3	51.4	125.7	496.9
1983	496.9	65.4	65.1	82.1	579.3
1984	579.3	74.2	61.7	-44.1	547.7
1985	547.7	55.4	54.8	-112.6	435.6
1986	435.6	21.9	41.3	-90.4	325.9
1987	325.9	34.2	30.6	-88.3	241.2
1988	241.2	15.9	18.5	-51.1	187.5
1989	187.5	16.4	19.3	30.8	215.4
1990	215.4	20.2	22.6	37.6	250.6
1991	250.6	10.3	25.0	5.8	241.7

Table 1.3.—Value of the Resource, Additions, and Depletion of Oil, Present Discounted Value Method Using 3% Discount Rate

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947			1.8		26.8
1948	26.8	5.3	2.8	5.7	35.0
1949	35.0	4.4	2.5	2.1	39.0
1950	39.0	3.9	2.8	-1	40.0
1951	40.0	6.2	3.1	-1.7	41.4
1952	41.4	3.6	2.9	-2.7	39.5
1953	39.5	4.4	3.0	1.7	42.5
1954	42.5	4.1	3.3	4.2	47.5
1955	47.5	4.6	3.8	3.3	51.6
1956	51.6	4.8	4.0	-1	52.2
1957	52.2	3.7	4.0	.6	52.5
1958	52.5	4.5	4.0	2.9	56.0
1959	56.0	5.9	4.0	-4.4	53.5
1960	53.5	3.8	3.9	-3	53.2
1961	53.2	4.2	3.9	-9	52.6
1962	52.6	3.5	3.9	-5	51.6
1963	51.6	3.5	4.0	.3	51.5
1964	51.5	4.1	4.1	-6	50.9
1965	50.9	4.7	4.1	-1.1	50.4
1966	50.4	4.4	4.2	-1.3	49.3
1967	49.3	4.5	4.5	.9	50.3
1968	50.3	3.7	4.6	-8	48.6
1969	48.6	3.1	4.7	-1	46.9
1970	46.9	18.9	5.2	8.4	69.0
1971	69.0	3.9	5.5	1.5	68.9
1972	68.9	2.6	5.5	1.1	67.1
1973	67.1	4.0	5.6	15.9	81.3
1974	81.3	5.1	7.2	25.6	104.8
1975	104.8	4.7	9.2	28.1	128.3
1976	128.3	5.2	11.6	20.4	142.3
1977	142.3	16.5	12.6	7.9	154.1
1978	154.1	12.4	13.9	16.4	169.0
1979	169.0	9.1	16.1	61.6	223.6
1980	223.6	22.1	21.4	91.6	315.9
1981	315.9	25.4	27.5	32.2	346.0
1982	346.0	22.2	42.3	109.1	435.0
1983	435.0	55.0	54.0	72.2	508.3
1984	508.3	62.5	51.0	-38.1	481.7
1985	481.7	46.6	45.7	-98.6	383.9
1986	383.9	18.5	34.4	-80.2	287.9
1987	287.9	28.8	25.5	-77.7	213.6
1988	213.6	13.4	15.6	-45.0	166.4
1989	166.4	13.8	16.2	27.2	191.1
1990	191.1	17.0	19.0	33.2	222.4
1991	222.4	8.7	21.0	4.4	214.5

Table 1.4.—Value of the Resource, Additions, and Depletion of Oil, Present Discounted Value Method Using 10% Discount Rate

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947				1.1	19.8
1948	19.8	3.4	1.8	4.4	25.8
1949	25.8	2.8	1.6	1.7	28.8
1950	28.8	2.5	1.8	.1	29.5
1951	29.5	4.0	2.0	-1.0	30.6
1952	30.6	2.3	1.8	-1.9	29.1
1953	29.1	2.8	2.0	1.4	31.3
1954	31.3	2.6	2.1	3.1	35.0
1955	35.0	3.0	2.5	2.5	38.0
1956	38.0	3.1	2.6	0	38.5
1957	38.5	2.4	2.6	.4	38.7
1958	38.7	2.9	2.6	2.2	41.3
1959	41.3	3.8	2.6	-3.0	39.5
1960	39.5	2.5	2.5	-2	39.2
1961	39.2	2.7	2.5	-6	38.8
1962	38.8	2.2	2.5	-4	38.1
1963	38.1	2.3	2.6	.2	37.9
1964	37.9	2.7	2.6	-5	37.5
1965	37.5	3.0	2.6	-8	37.1
1966	37.1	2.9	2.7	-9	36.4
1967	36.4	2.9	2.9	.7	37.1
1968	37.1	2.4	3.0	-6	35.8
1969	35.8	2.0	3.0	-2	34.5
1970	34.5	12.2	3.3	7.5	50.9
1971	50.9	2.5	3.6	1.0	50.8
1972	50.8	1.7	3.6	.5	49.4
1973	49.4	2.8	3.6	11.6	60.2
1974	60.2	3.6	4.7	18.8	77.9
1975	77.9	3.3	6.0	20.7	95.8
1976	95.8	3.6	7.7	14.9	106.7
1977	106.7	11.7	8.4	6.0	116.0
1978	116.0	8.8	9.2	12.2	127.7
1979	127.7	6.4	10.8	46.2	169.7
1980	169.7	15.6	14.3	69.7	240.7
1981	240.7	18.0	18.8	24.9	264.7
1982	264.7	15.7	29.2	82.9	334.1
1983	334.1	38.9	37.2	56.1	391.9
1984	391.9	44.2	35.7	-27.6	372.8
1985	372.8	33.0	32.1	-75.4	298.3
1986	298.3	13.1	24.3	-62.6	224.6
1987	224.6	20.4	18.2	-59.5	167.2
1988	167.2	9.5	11.0	-34.9	130.8
1989	130.8	9.7	11.5	21.2	150.2
1990	150.2	12.1	13.5	26.0	174.8
1991	174.8	6.1	14.9	2.5	168.5

**Table 1.5.—Value of the Resource, Additions, and Depletion of Oil, Replacement Cost Method**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947		1.3	1.0		14.2
1948	14.2	3.1	1.6	3.5	19.2
1949	19.2	2.1	1.2	-2.4	17.7
1950	17.7	1.9	1.4	.1	18.3
1951	18.3	2.7	1.4	-2.5	17.2
1952	17.2	1.6	1.3	-.8	16.7
1953	16.7	1.8	1.2	-.8	16.4
1954	16.4	1.8	1.4	3.1	19.8
1955	19.8	2.2	1.9	3.4	23.6
1956	23.6	2.2	1.9	-.4	23.6
1957	23.6	1.8	2.0	.9	24.4
1958	24.4	2.3	2.0	1.6	26.3
1959	26.3	3.2	2.1	-.5	26.7
1960	26.7	2.1	2.1	.2	26.9
1961	26.9	2.1	1.9	-2.7	24.3
1962	24.3	1.7	1.9	-.2	23.9
1963	23.9	1.8	2.1	.6	24.2
1964	24.2	2.3	2.3	2.4	26.6
1965	26.6	2.8	2.4	1.3	28.2
1966	28.2	2.8	2.7	1.0	29.4
1967	29.4	2.8	2.8	-.1	29.2
1968	29.2	2.1	2.7	-1.7	26.9
1969	26.9	2.2	3.4	6.5	32.3
1970	32.3	11.9	3.3	-1.5	39.4
1971	39.4	2.2	3.2	-1.3	37.2
1972	37.2	1.4	2.9	-1.7	34.0
1973	34.0	1.9	2.8	9.2	42.3
1974	42.3	2.0	3.1	7.7	49.0
1975	49.0	1.2	2.6	-4.3	43.4
1976	43.4	2.0	4.8	18.1	58.7
1977	58.7	7.9	6.3	14.1	74.4
1978	74.4	6.7	7.8	21.7	95.1
1979	95.1	4.8	8.7	37.2	128.4
1980	128.4	10.9	10.9	51.1	179.5
1981	179.5	11.9	13.2	4.5	182.6
1982	182.6	12.2	23.8	66.8	237.9
1983	237.9	33.5	33.4	53.8	291.8
1984	291.8	40.0	33.2	-5.4	293.2
1985	293.2	28.9	28.6	-73.9	219.5
1986	219.5	11.7	22.1	-42.4	166.8
1987	166.8	18.2	16.2	-49.0	119.8
1988	119.8	10.0	11.6	.5	118.7
1989	118.7	9.5	11.2	8.4	125.4
1990	125.4	8.7	9.7	-14.2	110.2
1991	110.2	3.3	8.0	-27.6	77.8

**Table 1.6.—Value of the Resource, Additions, and Depletion of Oil, Transaction Price Method**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1977		10.8	8.6		93.7
1978	93.7	7.5	8.7	20.9	113.4
1979	113.4	7.2	13.2	42.7	150.2
1980	150.2	16.6	16.5	3.7	154.0
1981	154.0	12.4	13.8	-.5	152.1
1982	152.1	9.4	18.4	-21.5	121.7
1983	121.7	8.8	8.8	-40.3	81.4
1984	81.4	10.4	8.6	-11.1	72.0
1985	72.0	7.0	7.0	-6.1	66.0
1986	66.0	4.1	7.7	-4.2	58.2
1987	58.2	5.8	5.1	-23.1	35.7
1988	35.7	1.4	1.6	-22.3	13.2
1989	13.2	1.2	1.5	4.3	17.2
1990	17.2	1.6	1.8	20.0	37.1
1991	37.1	2.2	5.3	11.1	45.1

**Table 2.1.—Value of the Resource, Additions, and Depletion of Gas, Current Rent Method I (Rate of Return)**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947		(*)	(*)		(*)
1948	(*)	(*)	(*)	(*)	(*)
1949	(*)	(*)	(*)	(*)	(*)
1950	(*)	(*)	(*)	(*)	(*)
1951	(*)	(*)	(*)	(*)	(*)
1952	(*)	(*)	(*)	(*)	(*)
1953	(*)	(*)	(*)	(*)	(*)
1954	(*)	(*)	(*)	(*)	1.1
1955	1.1	.3	.1	1.8	3.1
1956	3.1	.3	.1	-.5	2.7
1957	2.7	.2	.1	-.3	2.6
1958	2.6	.3	.1	1.5	4.1
1959	4.1	.3	.2	.5	4.8
1960	4.8	.3	.3	2.9	7.7
1961	7.7	.6	.4	1.8	9.7
1962	9.7	.8	.5	1.3	11.2
1963	11.2	.9	.7	2.4	13.9
1964	13.9	1.0	.8	.2	14.3
1965	14.3	1.0	.8	-.7	13.9
1966	13.9	.9	.8	-.7	13.3
1967	13.3	1.0	.8	.8	14.3
1968	14.3	.6	.9	.2	14.2
1969	14.2	.4	1.0	.6	14.2
1970	14.2	1.9	1.1	.8	15.8
1971	15.8	.5	1.1	-.2	15.0
1972	15.0	.3	.8	-2.9	11.6
1973	11.6	.2	.8	3.0	14.0
1974	14.0	.2	.6	2.3	15.8
1975	15.8	.4	.8	5.6	21.1
1976	21.1	.7	2.1	18.4	38.2
1977	38.2	2.3	3.6	14.9	51.7
1978	51.7	2.3	4.1	9.2	59.1
1979	59.1	3.9	5.4	20.3	77.9
1980	77.9	6.3	5.2	7.8	86.7
1981	86.7	.8	.7	-45.6	41.3
1982	41.3	3.0	3.0	20.2	61.5
1983	61.5	10.1	11.0	100.9	161.6
1984	161.6	15.6	18.5	51.1	209.8
1985	209.8	10.6	14.1	-65.4	140.9
1986	140.9	10.0	11.3	-34.6	105.1
1987	105.1	6.9	9.3	-24.0	78.6
1988	78.6	-.4	3.6	-44.3	30.3
1989	30.3	2.1	2.2	-5.5	24.7
1990	24.7	4.1	3.7	10.1	35.3
1991	35.3	2.8	3.2	-3.8	31.1

\* Indicates that the calculated value of the entry was negative, resulting from a negative resource rent. Because a negative resource rent is simply the mechanical result of treating resource rent as a residual after the deduction of other factor payments, the values have been replaced by asterisks. Where the resource rent was negative in the base year (1987) for individual mineral types, the average for the 3 year period, 1987-89, was substituted for the 1987 rent for the purpose of calculating constant-dollar estimates shown in tables B.1 through B.4. Where the 1987-89 average was negative, a base year price of zero was used for the constant-dollar estimates.

Table 2.2.—Value of the Resource, Additions, and Depletion of Gas, Current Rent Method II (Value of Capital)

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947		0.3	0.1		6.1
1948	6.1	.5	.2	.7	7.2
1949	7.2	.4	.2	.1	7.5
1950	7.5	.5	.2	-.1	7.7
1951	7.7	.6	.3	.1	8.1
1952	8.1	.5	.3	.3	8.6
1953	8.6	.9	.4	1.5	10.6
1954	10.6	.5	.5	2.2	12.8
1955	12.8	1.4	.6	2.0	15.7
1956	15.7	1.7	.7	.5	17.1
1957	17.1	1.4	.7	.5	18.2
1958	18.2	1.4	.8	1.8	20.7
1959	20.7	1.6	.9	.1	21.4
1960	21.4	1.2	1.1	2.4	23.9
1961	23.9	1.6	1.2	1.8	26.0
1962	26.0	1.9	1.3	1.5	28.1
1963	28.1	1.9	1.5	1.1	29.7
1964	29.7	2.1	1.6	-.1	30.1
1965	30.1	2.2	1.6	-.5	30.1
1966	30.1	2.0	1.7	-.8	29.6
1967	29.6	2.2	1.8	.7	30.7
1968	30.7	1.3	1.9	-.2	29.9
1969	29.9	.8	2.0	-.4	28.2
1970	28.2	3.8	2.2	1.1	30.9
1971	30.9	1.0	2.3	-.3	29.4
1972	29.4	.9	2.2	-.3	27.8
1973	27.8	.6	2.2	3.0	29.2
1974	29.2	.9	2.4	7.5	35.2
1975	35.2	1.7	3.2	15.1	48.9
1976	48.9	1.8	4.8	22.0	67.8
1977	67.8	4.3	6.9	19.9	85.1
1978	85.1	4.6	8.3	18.5	99.9
1979	99.9	7.7	10.6	29.1	126.1
1980	126.1	13.7	11.3	17.2	145.6
1981	145.6	12.1	10.6	-.8	138.8
1982	138.8	16.7	16.9	78.8	217.3
1983	217.3	22.3	24.2	111.5	326.9
1984	326.9	25.7	30.5	22.0	344.1
1985	344.1	20.6	27.4	-.2	295.3
1986	295.3	21.5	24.1	-.3	259.3
1987	259.3	14.9	20.3	-.1	202.2
1988	202.2	-.1	14.7	-.1	134.2
1989	134.2	12.4	13.1	-.1	129.5
1990	129.5	16.1	14.3	5.7	136.9
1991	136.9	12.2	14.0	-.2	132.8

Table 2.3.—Value of the Resource, Additions, and Depletion of Gas, Present Discounted Value Method Using 3% Discount Rate

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947				0.1	5.2
1948	5.2	.4	.2	.6	6.1
1949	6.1	.3	.2	.1	6.4
1950	6.4	.4	.2	-.1	6.6
1951	6.6	.5	.2	.1	6.9
1952	6.9	.4	.2	.2	7.3
1953	7.3	.7	.3	1.3	9.1
1954	9.1	.4	.4	1.9	11.0
1955	11.0	1.1	.5	1.8	13.4
1956	13.4	1.3	.5	.4	14.6
1957	14.6	1.1	.6	.4	15.6
1958	15.6	1.1	.7	1.6	17.7
1959	17.7	1.3	.7	.1	18.3
1960	18.3	.9	.8	2.1	20.4
1961	20.4	1.3	1.0	1.5	22.3
1962	22.3	1.6	1.1	1.3	24.1
1963	24.1	1.5	1.2	1.0	25.4
1964	25.4	1.7	1.3	-.1	25.7
1965	25.7	1.7	1.3	-.4	25.8
1966	25.8	1.6	1.3	-.7	25.3
1967	25.3	1.7	1.4	.6	26.2
1968	26.2	1.1	1.5	-.2	25.6
1969	25.6	.6	1.6	-.4	24.2
1970	24.2	3.0	1.7	1.0	26.5
1971	26.5	.8	1.8	-.4	25.1
1972	25.1	.7	1.8	-.3	23.8
1973	23.8	.5	1.8	2.5	25.0
1974	25.0	.8	1.9	6.4	30.3
1975	30.3	1.4	2.6	12.9	42.1
1976	42.1	1.5	3.9	18.8	58.5
1977	58.5	3.6	5.5	17.0	73.7
1978	73.7	3.9	6.8	15.9	86.6
1979	86.6	6.5	8.7	25.2	109.6
1980	109.6	11.7	9.4	15.0	126.9
1981	126.9	10.2	8.7	-.2	121.2
1982	121.2	14.1	13.9	68.9	190.2
1983	190.2	18.7	20.0	97.9	286.9
1984	286.9	21.6	25.2	19.3	302.6
1985	302.6	17.3	22.8	-.3	260.3
1986	260.3	18.1	20.1	-.2	229.1
1987	229.1	12.6	16.9	-.4	179.0
1988	179.0	-.1	12.4	-.4	119.1
1989	119.1	10.4	11.0	-.3	114.9
1990	114.9	13.5	12.0	5.1	121.5
1991	121.5	10.3	11.8	-.2	117.8

**Table 2.4.—Value of the Resource, Additions, and Depletion of Gas, Present Discounted Value Method Using 10% Discount Rate**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947			0.1		3.9
1948	3.9	.3	.1	.5	4.5
1949	4.5	.2	.1	.1	4.7
1950	4.7	.2	.1	0	4.8
1951	4.8	.3	.1	.1	5.1
1952	5.1	.3	.2	.2	5.4
1953	5.4	.5	.2	1.0	6.7
1954	6.7	.3	.2	1.4	8.1
1955	8.1	.7	.3	1.4	9.9
1956	9.9	.9	.4	.4	10.8
1957	10.8	.7	.4	.4	11.5
1958	11.5	.7	.4	1.2	13.0
1959	13.0	.8	.5	.1	13.5
1960	13.5	.6	.5	1.5	15.1
1961	15.1	.8	.6	1.2	16.4
1962	16.4	1.0	.7	1.0	17.7
1963	17.7	1.0	.8	.8	18.7
1964	18.7	1.1	.8	0	19.0
1965	19.0	1.1	.8	-3	19.0
1966	19.0	1.0	.9	-5	18.7
1967	18.7	1.1	.9	-5	19.3
1968	19.3	.7	1.0	-2	18.8
1969	18.8	.4	1.0	-4	17.8
1970	17.8	1.9	1.1	.9	19.5
1971	19.5	.5	1.2	-4	18.5
1972	18.5	.5	1.1	-3	17.5
1973	17.5	.3	1.1	1.8	18.5
1974	18.5	.5	1.3	4.7	22.5
1975	22.5	1.0	1.7	9.6	31.4
1976	31.4	1.0	2.6	14.0	43.9
1977	43.9	2.6	3.7	12.7	55.5
1978	55.5	2.7	4.5	11.8	65.5
1979	65.5	4.6	5.8	18.9	83.2
1980	83.2	8.2	6.3	11.6	96.7
1981	96.7	7.2	6.0	-5.2	92.7
1982	92.7	9.9	9.6	53.1	146.1
1983	146.1	13.3	13.8	75.6	221.2
1984	221.2	15.3	17.6	15.4	234.2
1985	234.2	12.3	16.0	-28.2	202.2
1986	202.2	12.8	14.2	-22.2	178.7
1987	178.7	8.9	12.1	-35.4	140.1
1988	140.1	-1.0	8.8	-36.7	93.6
1989	93.6	7.4	7.8	-2.9	90.3
1990	90.3	9.6	8.5	4.1	95.5
1991	95.5	7.3	8.3	-1.8	92.6

**Table 2.5.—Value of the Resource, Additions, and Depletion of Gas, Replacement Cost Method**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1947		(*)	(*)		(*)
1948	(*)	(*)	(*)	(*)	(*)
1949	(*)	(*)	(*)	(*)	(*)
1950	(*)	(*)	(*)	(*)	(*)
1951	(*)	(*)	(*)	(*)	(*)
1952	(*)	(*)	(*)	(*)	(*)
1953	(*)	(*)	(*)	(*)	(*)
1954	(*)	(*)	(*)	(*)	(*)
1955	(*)	(*)	(*)	(*)	(*)
1956	(*)	.2	.1	(*)	1.8
1957	1.8	.1	0	-.5	1.3
1958	1.3	.1	.1	.2	1.6
1959	1.6	0	0	-.9	.7
1960	.7	.1	0	.8	1.5
1961	1.5	.1	.1	.5	2.0
1962	2.0	.3	.2	2.6	4.7
1963	4.7	.4	.3	1.4	6.1
1964	6.1	.5	.4	.9	7.2
1965	7.2	.5	.3	-1.0	6.4
1966	6.4	.4	.4	.2	6.6
1967	6.6	.3	.3	-1.8	4.9
1968	4.9	(*)	(*)	(*)	(*)
1969	(*)	(*)	(*)	(*)	1.0
1970	1.0	(*)	(*)	(*)	(*)
1971	(*)	(*)	(*)	(*)	(*)
1972	(*)	(*)	(*)	(*)	(*)
1973	(*)	(*)	(*)	(*)	(*)
1974	(*)	(*)	(*)	(*)	(*)
1975	(*)	(*)	(*)	(*)	(*)
1976	(*)	(*)	(*)	(*)	(*)
1977	(*)	(*)	(*)	(*)	(*)
1978	(*)	(*)	(*)	(*)	(*)
1979	(*)	(*)	(*)	(*)	27.6
1980	27.6	3.4	2.8	25.7	53.9
1981	53.9	2.3	2.0	-5.8	48.3
1982	48.3	5.5	5.5	33.0	81.2
1983	81.2	7.5	8.2	31.9	112.5
1984	112.5	9.0	10.7	9.7	120.5
1985	120.5	7.1	9.4	-22.8	95.3
1986	95.3	8.0	9.0	-6.9	87.5
1987	87.5	6.8	9.2	.6	85.6
1988	85.6	5.9	6.6	-23.1	61.8
1989	61.8	5.9	6.2	.5	62.0
1990	62.0	7.7	6.8	2.3	65.1
1991	65.1	5.8	6.6	-2.2	62.1

\* Indicates that the calculated value of the entry was negative, resulting from a negative resource rent. Because a negative resource rent is simply the mechanical result of treating resource rent as a residual after the deduction of other factor payments, the values have been replaced by asterisks. Where the resource rent was negative in the base year (1987) for individual mineral types, the average for the 3 year period, 1987-89, was substituted for the 1987 rent for the purpose of calculating constant-dollar estimates shown in tables B.1 through B.4. Where the 1987-89 average was negative, a base year price of zero was used for the constant-dollar estimates.

**Table 2.6.—Value of the Resource, Additions, and Depletion of Gas, Transaction Price Method**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1977		7.7	12.2		129.5
1978	129.5	6.3	11.4	20.3	144.8
1979	144.8	12.2	16.8	46.7	186.8
1980	186.8	24.8	20.5	7.0	198.1
1981	198.1	20.4	17.9	10.0	210.6
1982	210.6	21.4	21.7	-25.7	184.6
1983	184.6	10.1	11.0	-42.7	141.0
1984	141.0	10.1	12.0	-12.3	126.8
1985	126.8	7.4	9.9	-5.6	118.7
1986	118.7	9.6	10.7	-1.7	115.9
1987	115.9	6.5	8.8	-32.3	81.2
1988	81.2	-6	4.9	-33.0	42.7
1989	42.7	4.2	4.4	1.5	44.0
1990	44.0	5.5	4.9	22.5	67.2
1991	67.2	8.1	9.3	16.3	82.3

**Table 3.1.—Value of the Resource, Additions, and Depletion of Coal, Current Rent Method I (Rate of Return)**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1958	9.8	0.2	0.2	-0.1	9.7
1959	9.7	.2	.3	1.8	11.5
1960	11.5	.1	.3	1.2	12.5
1961	12.5	.4	.3	.4	13.0
1962	13.0	.5	.4	1.3	14.4
1963	14.4	.7	.4	1.7	16.3
1964	16.3	.7	.4	-5	16.2
1965	16.2	.7	.4	-4	16.0
1966	16.0	.6	.4	-8	15.3
1967	15.3	.5	.4	-1.3	14.1
1968	14.1	.5	.4	-1.3	13.0
1969	13.0	.4	.3	0	13.1
1970	13.1	.5	.4	2.5	15.6
1971	15.6	.5	.4	-3	15.3
1972	15.3	.5	.5	1.4	16.8
1973	16.8	.6	.5	8.0	24.9
1974	24.9	1.5	1.0	16.5	41.9
1975	41.9	2.3	1.7	18.9	61.5
1976	61.5	3.0	2.4	13.0	75.1
1977	75.1	4.2	2.5	.7	77.5
1978	77.5	.6	2.1	-9.9	66.2
1979	66.2	11.8	2.6	7.9	83.3
1980	83.3	6.9	3.0	4.9	92.2
1981	92.2	2.4	3.0	.4	91.9
1982	91.9	5.9	3.3	5.9	100.4
1983	100.4	.1	3.4	6.1	103.2
1984	103.2	6.1	4.8	22.4	127.0
1985	127.0	7.7	4.9	4.6	134.4
1986	134.4	7.5	5.1	4.0	140.7
1987	140.7	4.4	5.4	3.2	143.0
1988	143.0	5.8	5.3	-5.2	138.3
1989	138.3	4.5	5.3	-2.5	134.9
1990	134.9	7.0	5.6	1.2	137.5
1991	137.5	4.6	5.3	-2.4	134.4

**Table 3.2.—Value of the Resource, Additions, and Depletion of Coal, Current Rent Method II (Value of Capital)**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1958	22.7	0.5	0.5	-0.2	22.4
1959	22.4	.5	.6	.9	23.2
1960	23.2	.3	.6	.7	23.6
1961	23.6	.7	.6	.5	24.2
1962	24.2	.9	.6	.5	25.0
1963	25.0	1.0	.7	.6	26.0
1964	26.0	1.2	.7	-1.1	25.4
1965	25.4	1.1	.7	-9	24.9
1966	24.9	1.0	.7	-9	24.2
1967	24.2	.9	.7	-9	23.6
1968	23.6	.9	.7	-1	23.8
1969	23.8	.7	.7	1.1	24.9
1970	24.9	.9	.8	2.7	27.7
1971	27.7	1.0	.8	3.2	31.1
1972	31.1	1.1	1.0	2.9	34.1
1973	34.1	1.3	1.1	10.9	45.2
1974	45.2	2.6	1.7	20.3	66.4
1975	66.4	3.6	2.6	24.4	91.8
1976	91.8	4.6	3.6	18.6	111.3
1977	111.3	6.8	4.1	10.4	124.5
1978	124.5	1.2	4.0	5.5	127.2
1979	127.2	22.3	5.0	10.1	154.6
1980	154.6	13.3	5.7	11.3	173.5
1981	173.5	4.8	6.0	9.7	181.9
1982	181.9	11.5	6.4	6.1	193.0
1983	193.0	.2	6.3	7.3	194.2
1984	194.2	9.6	7.4	3.0	199.4
1985	199.4	11.5	7.4	.7	204.3
1986	204.3	11.0	7.4	-2	207.7
1987	207.7	6.3	7.6	-2.1	204.2
1988	204.2	8.2	7.5	-7.7	197.2
1989	197.2	6.4	7.5	-4.7	191.3
1990	191.3	9.7	7.8	-2.4	190.8
1991	190.8	6.5	7.5	-1.3	188.6

**Table 3.3.—Value of the Resource, Additions, and Depletion of Coal, Present Discounted Value Method Using 3% Discount Rate**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1958	19.4	0.4	0.4	-0.1	19.2
1959	19.2	.4	.4	.8	19.9
1960	19.9	.2	.5	.6	20.2
1961	20.2	.6	.5	.4	20.7
1962	20.7	.7	.5	.4	21.4
1963	21.4	.8	.5	.6	22.2
1964	22.2	.9	.6	-9	21.7
1965	21.7	.9	.6	-8	21.3
1966	21.3	.8	.6	-7	20.7
1967	20.7	.7	.5	-7	20.2
1968	20.2	.8	.5	-1	20.4
1969	20.4	.6	.6	.9	21.3
1970	21.3	.7	.6	2.3	23.7
1971	23.7	.8	.7	2.7	26.6
1972	26.6	.9	.8	2.5	29.2
1973	29.2	1.1	.9	9.4	38.7
1974	38.7	2.2	1.4	17.5	57.1
1975	57.1	3.0	2.1	21.0	79.1
1976	79.1	3.8	2.9	16.1	96.1
1977	96.1	5.7	3.3	9.2	107.7
1978	107.7	1.0	3.3	4.8	110.3
1979	110.3	18.8	4.1	9.4	134.4
1980	134.4	11.2	4.7	10.2	151.2
1981	151.2	4.0	5.0	8.6	158.9
1982	158.9	9.7	5.3	5.7	169.0
1983	169.0	.2	5.2	6.5	170.4
1984	170.4	8.0	6.1	3.0	175.3
1985	175.3	9.7	6.1	1.1	180.0
1986	180.0	9.2	6.2	.3	183.4
1987	183.4	5.3	6.4	-1.5	180.8
1988	180.8	6.9	6.3	-6.4	174.9
1989	174.9	5.4	6.3	-4.2	169.7
1990	169.7	8.2	6.5	-2.0	169.3
1991	169.3	5.5	6.3	-1.2	167.3

**Table 3.4.—Value of the Resource, Additions, and Depletion of Coal, Present Discounted Value Method Using 10% Discount Rate**

[Billions of current dollars]

Year	Opening stock	Additions	Depletion	Revaluation adjustment	Closing stock (1+2-3+4)
	(1)	(2)	(3)	(4)	(5)
1958	14.3	0.2	0.3	-0.1	14.1
1959	14.1	.2	.3	.5	14.6
1960	14.6	.1	.3	.4	14.9
1961	14.9	.4	.3	.3	15.3
1962	15.3	.5	.3	.3	15.8
1963	15.8	.5	.4	.4	16.4
1964	16.4	.6	.4	-6	16.0
1965	16.0	.6	.4	-5	15.7
1966	15.7	.5	.4	-5	15.3
1967	15.3	.5	.4	-5	14.9
1968	14.9	.5	.3	0	15.0
1969	15.0	.4	.4	.7	15.7
1970	15.7	.5	.4	1.7	17.5
1971	17.5	.5	.4	2.0	19.6
1972	19.6	.6	.5	1.8	21.5
1973	21.5	.8	.6	7.0	28.7
1974	28.7	1.6	.9	13.1	42.4
1975	42.4	2.2	1.4	15.8	59.0
1976	59.0	2.7	1.9	12.2	72.1
1977	72.1	4.0	2.2	7.2	81.1
1978	81.1	.7	2.2	3.7	83.4
1979	83.4	13.3	2.7	8.1	102.0
1980	102.0	7.9	3.1	8.4	115.2
1981	115.2	2.8	3.4	6.9	121.6
1982	121.6	6.8	3.7	5.0	129.8
1983	129.8	.1	3.6	5.1	131.4
1984	131.4	5.7	4.3	2.9	135.7
1985	135.7	6.9	4.3	1.6	139.9
1986	139.9	6.5	4.4	1.0	143.1
1987	143.1	3.7	4.5	-7	141.6
1988	141.6	4.9	4.5	-4.5	137.5
1989	137.5	3.8	4.5	-3.4	133.4
1990	133.4	5.8	4.6	-1.5	133.1
1991	133.1	3.9	4.4	-1.0	131.5

**Table 4.1.—Value of the Resource, Additions, and Depletion of All Metals, Current Rent Method I (Rate of Return)**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	28.9	-0.1	0.2	1.0	29.6
1959	29.6	0	.2	.5	29.8
1960	29.8	-1.3	.4	10.1	38.2
1961	38.2	1.3	.4	-.7	38.4
1962	38.4	2.4	.4	.5	40.9
1963	40.9	1.0	.4	3.3	44.8
1964	44.8	2.3	.5	4.1	50.7
1965	50.7	1.6	.5	.4	52.1
1966	52.1	1.5	.6	1.2	54.3
1967	54.3	1.2	.4	-5.8	49.3
1968	49.3	1.2	.5	1.5	51.6
1969	51.6	-.1	.7	5.3	56.1
1970	56.1	1.3	.8	2.2	58.8
1971	58.8	1.5	.6	-5.3	54.3
1972	54.3	.6	.7	2.7	56.9
1973	56.9	-.3	.7	10.4	66.3
1974	66.3	1.8	.7	4.7	72.1
1975	72.1	-1.4	.2	.2	70.2
1976	70.2	0	.8	10.7	80.2
1977	80.2	.5	.5	-37.6	42.6
1978	42.6	.3	.4	7.2	49.7
1979	49.7	0	.1	-34.4	15.2
1980	15.2	(*)	(*)	(*)	(*)
1981	(*)	(*)	(*)	(*)	(*)
1982	(*)	(*)	(*)	(*)	(*)
1983	(*)	(*)	(*)	(*)	(*)
1984	(*)	(*)	(*)	(*)	(*)
1985	(*)	(*)	(*)	(*)	(*)
1986	(*)	(*)	(*)	(*)	(*)
1987	(*)	2.2	.2	(*)	38.5
1988	38.5	4.8	1.0	47.9	90.1
1989	90.1	7.7	1.8	29.7	125.6
1990	125.6	8.6	2.3	10.1	141.9
1991	141.9	6.6	2.2	8.2	154.5

\* Indicates that the calculated value of the entry was negative, resulting from a negative resource rent. Because a negative resource rent is simply the mechanical result of treating resource rent as a residual after the deduction of other factor payments, the values have been replaced by asterisks. Where the resource rent was negative in the base year (1987) for individual mineral types, the average for the 3 year period, 1987-89, was substituted for the 1987 rent for the purpose of calculating constant-dollar estimates shown in tables B.1 through B.4. Where the 1987-89 average was negative, a base year price of zero was used for the constant-dollar estimates.

**Table 4.2.—Value of the Resource, Additions, and Depletion of All Metals, Current Rent Method II (Value of Capital)**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	60.8	-0.1	0.5	0.8	61.0
1959	61.0	-.1	.5	2.3	62.7
1960	62.7	-2.1	.7	1.9	61.9
1961	61.9	2.1	.7	1.9	65.2
1962	65.2	4.1	.7	1.8	70.4
1963	70.4	1.6	.7	2.7	74.0
1964	74.0	3.5	.8	2.0	78.7
1965	78.7	2.5	.8	1.9	82.2
1966	82.2	2.4	.9	1.4	85.0
1967	85.0	2.3	.8	1.8	88.4
1968	88.4	2.3	.9	2.3	92.1
1969	92.1	.2	1.1	3.6	94.8
1970	94.8	2.4	1.2	4.3	100.3
1971	100.3	3.8	1.1	4.2	107.2
1972	107.2	1.3	1.2	4.2	111.5
1973	111.5	-.1	1.3	7.8	118.0
1974	118.0	2.2	1.4	16.5	135.3
1975	135.3	-1.9	1.5	21.6	153.6
1976	153.6	.7	1.7	18.8	171.3
1977	171.3	2.9	1.6	13.1	185.7
1978	185.7	1.4	1.7	-9.3	176.1
1979	176.1	1.6	1.6	-9.1	167.0
1980	167.0	-2.2	1.4	-15.4	148.0
1981	148.0	-4.8	1.2	-28.2	113.8
1982	113.8	-3.3	.4	-33.9	76.1
1983	76.1	-2.3	.7	42.2	115.2
1984	115.2	-6.2	1.1	39.3	147.2
1985	147.2	7.3	1.4	31.4	184.5
1986	184.5	9.2	1.6	23.2	215.3
1987	215.3	9.2	2.2	22.5	244.8
1988	244.8	10.9	2.9	-.8	251.9
1989	251.9	14.6	3.6	7.2	270.1
1990	270.1	14.1	4.1	0	280.1
1991	280.1	13.6	3.9	-1.8	288.0

**Table 4.3.—Value of the Resource, Additions, and Depletion of All Metals, Present Discounted Value Method Using 3% Discount Rate**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	52.0	-0.1	0.4	0.7	52.2
1959	52.2	-.1	.4	1.9	53.6
1960	53.6	-1.7	.5	1.5	52.9
1961	52.9	1.7	.5	1.7	55.8
1962	55.8	3.3	.5	1.7	60.2
1963	60.2	1.3	.6	2.3	63.3
1964	63.3	2.8	.6	1.9	67.3
1965	67.3	2.0	.7	1.7	70.3
1966	70.3	1.9	.7	1.3	72.7
1967	72.7	1.9	.6	1.6	75.6
1968	75.6	1.8	.7	2.1	78.8
1969	78.8	.2	.9	3.0	81.1
1970	81.1	1.9	1.0	3.7	85.8
1971	85.8	3.1	.9	3.8	91.7
1972	91.7	1.1	1.0	3.6	95.4
1973	95.4	-.1	1.1	6.9	101.2
1974	101.2	1.8	1.1	14.4	116.2
1975	116.2	-1.6	1.2	18.8	132.3
1976	132.3	.6	1.4	16.4	147.9
1977	147.9	2.4	1.3	11.7	160.7
1978	160.7	1.1	1.4	-7.8	152.7
1979	152.7	1.4	1.3	-7.6	145.2
1980	145.2	-1.8	1.1	-13.2	129.0
1981	129.0	-4.1	1.0	-24.6	99.4
1982	99.4	-2.8	.4	-29.6	66.7
1983	66.7	-2.0	.6	37.0	101.1
1984	101.1	-5.2	.9	34.5	129.5
1985	129.5	6.1	1.2	28.2	162.6
1986	162.6	7.8	1.3	21.1	190.2
1987	190.2	7.7	1.8	20.6	216.7
1988	216.7	9.2	2.4	.1	223.6
1989	223.6	12.3	3.1	6.9	239.7
1990	239.7	11.8	3.4	.5	248.6
1991	248.6	11.5	3.3	-1.2	255.6

**Table 4.4.—Value of the Resource, Additions, and Depletion of All Metals, Present Discounted Value Method Using 10% Discount Rate**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	38.3	-0.1	0.3	0.4	38.4
1959	38.4	-.1	.3	1.4	39.5
1960	39.5	-1.1	.3	.9	39.0
1961	39.0	1.1	.3	1.4	41.1
1962	41.1	2.1	.3	1.5	44.4
1963	44.4	.8	.4	1.8	46.6
1964	46.6	1.8	.4	1.6	49.6
1965	49.6	1.3	.4	1.4	51.8
1966	51.8	1.2	.5	1.0	53.6
1967	53.6	1.2	.4	1.3	55.7
1968	55.7	1.2	.4	1.6	58.1
1969	58.1	.1	.6	2.2	59.8
1970	59.8	1.2	.6	2.8	63.2
1971	63.2	2.0	.6	3.0	67.6
1972	67.6	.7	.6	2.7	70.3
1973	70.3	0	.7	5.3	74.9
1974	74.9	1.3	.7	11.0	86.4
1975	86.4	-1.1	.8	14.2	98.7
1976	98.7	.4	.9	12.6	110.9
1977	110.9	1.7	.8	9.2	121.0
1978	121.0	.8	.9	-5.5	115.4
1979	115.4	1.0	.9	-5.3	110.2
1980	110.2	-1.3	.8	-9.8	98.3
1981	98.3	-2.9	.7	-18.7	76.0
1982	76.0	-2.0	.2	-22.6	51.2
1983	51.2	-1.4	.4	-28.6	28.0
1984	28.0	-3.7	.6	26.6	100.2
1985	100.2	4.3	.8	22.6	126.4
1986	126.4	5.5	.9	17.4	148.3
1987	148.3	5.5	1.3	17.2	169.7
1988	169.7	6.5	1.7	1.3	175.7
1989	175.7	8.7	2.2	6.1	188.4
1990	188.4	8.4	2.4	1.0	195.3
1991	195.3	8.1	2.3	-3	200.8



**Table 5.1.—Value of the Resource, Additions, and Depletion of Other Minerals, Current Rent Method I (Rate of Return)**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	15.0	0.2	0.1	0	15.0
1959	15.0	.2	.2	.8	15.8
1960	15.8	.1	.2	.8	16.6
1961	16.6	.3	.2	.7	17.3
1962	17.3	.3	.2	.6	18.1
1963	18.1	.3	.2	.6	18.8
1964	18.8	.5	.2	.1	19.1
1965	19.1	.5	.3	-.1	19.3
1966	19.3	.5	.3	.3	19.8
1967	19.8	.4	.3	-.1	19.7
1968	19.7	.2	.3	-1.6	18.0
1969	18.0	0	.2	-2.1	15.7
1970	15.7	.1	.2	-1.8	13.8
1971	13.8	.2	.2	-1.7	12.1
1972	12.1	.2	.1	-.8	11.4
1973	11.4	.1	.2	1.3	12.6
1974	12.6	.2	.2	3.8	16.5
1975	16.5	.3	.3	4.0	20.4
1976	20.4	.4	.5	4.6	24.9
1977	24.9	.7	.6	1.7	26.8
1978	26.8	.9	.5	-.5	26.6
1979	26.6	.6	.6	2.5	29.2
1980	29.2	-.1	.6	3.0	31.4
1981	31.4	0	.6	.9	31.7
1982	31.7	-.2	.4	-5.2	25.9
1983	25.9	-.1	.5	2.7	28.0
1984	28.0	-.1	.6	4.1	31.4
1985	31.4	.8	.6	-1.4	30.3
1986	30.3	.6	.4	-2.1	28.4
1987	28.4	.1	.4	4.6	32.8
1988	32.8	.2	.5	-.3	32.2
1989	32.2	.4	.5	.7	32.8
1990	32.8	.2	.5	.7	33.2
1991	33.2	.3	.5	.9	33.9

**Table 5.2.—Value of the Resource, Additions, and Depletion of Other Minerals, Current Rent Method II (Value of Capital)**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	18.8	0.2	0.2	0	18.8
1959	18.8	.2	.2	.5	19.3
1960	19.3	.2	.2	.7	20.0
1961	20.0	.3	.2	.9	21.0
1962	21.0	.4	.2	.7	21.8
1963	21.8	.4	.2	.5	22.5
1964	22.5	.6	.3	-.1	22.8
1965	22.8	.6	.3	.2	23.3
1966	23.3	.5	.4	.4	23.9
1967	23.9	.4	.4	.4	24.3
1968	24.3	.2	.4	-1.0	23.2
1969	23.2	0	.3	-1.5	21.4
1970	21.4	.2	.3	-1.4	19.9
1971	19.9	.2	.2	-1.0	18.9
1972	18.9	.3	.2	-.5	18.4
1973	18.4	.1	.3	1.7	19.9
1974	19.9	.3	.3	5.0	24.9
1975	24.9	.4	.5	6.9	31.8
1976	31.8	.5	.6	5.4	37.1
1977	37.1	.9	.8	2.5	39.7
1978	39.7	1.2	.7	1.2	41.3
1979	41.3	.8	.8	4.4	45.6
1980	45.6	-.4	.9	7.1	51.3
1981	51.3	-.5	1.0	6.6	56.4
1982	56.4	-.9	.8	3.5	58.2
1983	58.2	-.9	.9	2.1	58.5
1984	58.5	-.8	1.0	.9	57.5
1985	57.5	.7	1.0	1.1	58.4
1986	58.4	.5	.9	.7	58.7
1987	58.7	0	.9	.1	57.9
1988	57.9	.2	.9	-.4	56.7
1989	56.7	.7	.9	.4	56.9
1990	56.9	.4	.9	.5	57.0
1991	57.0	.4	.9	.1	56.6

**Table 5.3.—Value of the Resource, Additions, and Depletion of Other Minerals, Present Discounted Value Method Using 3% Discount Rate**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	16.1	0.2	0.1	0	16.1
1959	16.1	.2	.2	.4	16.5
1960	16.5	.1	.2	.6	17.1
1961	17.1	.2	.2	.7	18.0
1962	18.0	.3	.2	.6	18.7
1963	18.7	.3	.2	.4	19.2
1964	19.2	.5	.2	0	19.5
1965	19.5	.5	.2	.2	19.9
1966	19.9	.4	.3	.3	20.4
1967	20.4	.3	.3	.4	20.8
1968	20.8	.2	.3	-.9	19.9
1969	19.9	0	.3	-1.3	18.3
1970	18.3	.1	.2	-1.2	17.0
1971	17.0	.2	.2	-.8	16.2
1972	16.2	.2	.2	-.5	15.7
1973	15.7	.1	.2	1.5	17.1
1974	17.1	.3	.3	4.3	21.4
1975	21.4	.3	.4	6.0	27.4
1976	27.4	.4	.5	4.7	32.0
1977	32.0	.7	.6	2.2	34.3
1978	34.3	1.0	.6	1.1	35.8
1979	35.8	.6	.7	3.8	39.7
1980	39.7	-.3	.8	6.2	44.7
1981	44.7	-.4	.8	5.8	49.3
1982	49.3	-.7	.7	3.1	51.0
1983	51.0	-.8	.8	1.9	51.3
1984	51.3	-.7	.9	.9	50.6
1985	50.6	.6	.8	1.1	51.5
1986	51.5	.4	.7	.7	51.9
1987	51.9	0	.7	.2	51.3
1988	51.3	.1	.8	-.3	50.4
1989	50.4	.6	.8	.4	50.5
1990	50.5	.3	.8	.5	50.6
1991	50.6	.4	.8	0	50.2

**Table 5.4.—Value of the Resource, Additions, and Depletion of Other Minerals, Present Discounted Value Method Using 10% Discount Rate**

[Billions of current dollars]

Year	Opening stock (1)	Additions (2)	Depletion (3)	Revaluation adjustment (4)	Closing stock (1+2-3+4) (5)
1958	11.9	0.1	0.1	0	11.9
1959	11.9	.1	.1	.3	12.2
1960	12.2	.1	.1	.5	12.6
1961	12.6	.2	.1	.6	13.2
1962	13.2	.2	.1	.5	13.8
1963	13.8	.2	.1	.3	14.2
1964	14.2	.3	.1	0	14.4
1965	14.4	.3	.2	.2	14.7
1966	14.7	.3	.2	.3	15.1
1967	15.1	.2	.2	.3	15.3
1968	15.3	.1	.2	-.6	14.6
1969	14.6	0	.2	-1.0	13.5
1970	13.5	.1	.1	-.9	12.5
1971	12.5	.1	.1	-.6	11.9
1972	11.9	.1	.1	-.3	11.6
1973	11.6	.1	.1	1.1	12.6
1974	12.6	.2	.2	3.2	15.9
1975	15.9	.2	.2	4.5	20.4
1976	20.4	.3	.3	3.6	24.0
1977	24.0	.5	.4	1.7	25.8
1978	25.8	.7	.4	1.0	27.1
1979	27.1	.5	.5	3.0	30.1
1980	30.1	-.2	.5	4.8	34.1
1981	34.1	-.3	.6	4.5	37.7
1982	37.7	-.5	.5	2.4	39.1
1983	39.1	-.6	.5	1.5	39.6
1984	39.6	-.5	.6	.7	39.2
1985	39.2	.4	.6	1.0	40.0
1986	40.0	.3	.5	.7	40.4
1987	40.4	0	.5	.2	40.1
1988	40.1	.1	.5	-.1	39.6
1989	39.6	.4	.5	.3	39.7
1990	39.7	.2	.5	.3	39.7
1991	39.7	.3	.5	0	39.4

# Benchmark Input-Output Accounts for the U.S. Economy, 1987

**T**HIS ARTICLE presents the 1987 benchmark input-output (I-O) accounts for the U.S. economy.<sup>1</sup> The first part of the article addresses the 1987 benchmark; it discusses the steps taken to speed up the benchmark's completion and then describes some improvements that have been made in the tables. The second part describes the concepts and methods underlying the U.S. I-O accounts and illustrates how the I-O tables are used.

The 1987 I-O estimates presented here are in summary form; that is, they are aggregated to 95 I-O industries from 480-industry detail. The make (production) of commodities by industries is shown in table 1, the use (consumption) of commodities by industries in table 2.1, and the components of value added by industries in table 2.2. The following summary I-O tables will be presented in the May SURVEY OF CURRENT BUSINESS: Commodity-by-industry direct requirements per dollar of industry output; commodity-by-commodity total requirements, direct and indirect, per dollar of delivery to final use; and industry-by-commodity total requirements, direct and indirect, per dollar of delivery to final use. All of the summary tables, as well as the detailed tables, are available on diskette (see the box on page 90).

This article includes supplementary tables that relate the I-O accounts to the national income and product accounts (NIPA's); these tables permit more extensive analyses of the I-O estimates. The article also contains two appendixes: Appendix A provides a list of selected SURVEY articles about the I-O accounts; appendix B provides a concordance between the industry codes used in the I-O accounts and the 1987 Standard Industrial Classification (SIC) codes.

The 1987 benchmark I-O estimates will be incorporated into the NIPA's during the next comprehensive NIPA revision, which is tentatively scheduled for release in late 1995.

1. Earlier benchmarks covered 1947, 1958, 1963, 1967, 1972, 1977, and 1982. BEA also has produced annual I-O accounts based on less comprehensive source data. The most recent annual accounts, for 1987, were presented in the April 1992 SURVEY OF CURRENT BUSINESS.

## The 1987 Benchmark Accounts

In recognition of user needs—expressed, for example, by the interagency Working Group on the Quality of Economic Statistics—the Bureau of Economic Analysis (BEA) has developed a program to speed up the availability of I-O accounts.<sup>2</sup> For I-O benchmarks, which are prepared primarily from the Census Bureau's quinquennial economic censuses, the long-term goal is to make the I-O tables available within 5 years of a census year and within 1 year after release of all economic census data.

For the 1987 benchmark, BEA devised a set of procedures that captured the most important parts of the 1987 economic census data, but that abbreviated the normal time-consuming process of assembling a wide variety of other data for constructing components not based on economic census data. These procedures enabled BEA to complete the 1987 tables faster than otherwise would have been the case and to turn its re-

2. See "Improving the Quality of Economic Statistics: The 1992 Economic Statistics Initiative," SURVEY 71 (March 1991): 4-5.

Ann M. Lawson, Chief of the Interindustry Economics Division, directed the preparation of the 1987 benchmark input-output study and coauthored the article with D.A. Teske. Mark A. Planting, Acting Assistant Division Chief, planned and coordinated division efforts to produce the estimates. Belinda L. Bonds, Chief of the Goods Branch, and Karen Horowitz, Chief of the Services Branch, assisted in the planning and implementation of the study and in the estimation, review, and finalization of the data. Brian D. Kajutti designed the data processing system and coordinated the computer programming and processing efforts.

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sources toward the 1992 benchmark at the earliest possible time.

### *Procedures for the 1987 benchmark*

In preparing benchmark I-O accounts, BEA relies heavily on economic census data covering mining, construction, manufacturing, wholesale trade, retail trade, transportation, and selected services. The data are released by the Census Bureau as they are completed, over a period of

time that usually begins about 1 year after the end of the census year and continues for about 30 months. (For example, the planned release dates for the 1992 census year extend from early 1994 through late 1996.) To estimate outputs and inputs and to allocate commodities across industries and final users, BEA must augment the economic census data with data from hundreds of other sources, such as the U.S. Department of Agriculture, U.S. Department of Transportation,

**Table A.—Principal Data Sources for Industry or Commodity Outputs, 1987 Benchmark**

Industry or Commodity	Source
Agriculture, forestry, and fisheries .....	U.S. Department of Agriculture farm statistics
Mining .....	Census Bureau <i>1987 Census of Mineral Industries</i>
Construction .....	Census Bureau <i>1987 Census of Construction Industries, Census of Service Industries</i> , and value of construction put-in-place series
Manufacturing .....	Census Bureau <i>1987 Census of Manufactures</i>
Transportation .....	Interstate Commerce Commission <i>Transportation Statistics</i> Association of American Railroads <i>Freight Commodity Statistics</i> Census Bureau <i>1987 Census of Transportation, Motor Freight Transportation and Warehousing Survey</i> , and <i>Services Annual Survey</i> U.S. Army Corps of Engineers <i>1987 Waterborne Commerce of the U.S.</i> Department of Transportation <i>Air Carrier Financial Statistics</i> and <i>National Transportation Statistics</i>
Communications .....	Trade sources annual reports Federal Communications Commission <i>Statistics of Communication Common Carriers</i>
Utilities .....	Department of Energy—Energy Information Administration <i>Natural Gas Annual, Electric Sales and Revenue, and Financial Statistics of Selected Electric Utilities</i> American Gas Association <i>Gas Facts</i> Census Bureau <i>1987 Census of Mineral Industries</i> Trade sources financial statements
Wholesale and retail trade .....	Census Bureau <i>1987 Census of Retail Trade</i> and <i>1987 Census of Wholesale Trade</i>
Finance .....	Federal Deposit Insurance Corporation <i>Statistics on Banking</i> Federal Reserve Board <i>Annual Report</i> Federal Home Loan Bank Board financial reports Office of Thrift Supervision <i>Saving and Home Financing Source Book</i> National Credit Union Administration <i>Yearend Statistics for Federally Insured Credit Unions</i> HSN Consultants, Inc. <i>The Nilson Report</i> Federally sponsored credit agencies annual reports State and Federal regulatory agencies annual reports
Insurance .....	Trade sources financial statements Health Care Financing Administration private health insurance data A. M. Best and Company <i>Best's Aggregates and Averages</i> Mortgage Insurance Companies of America <i>Factbook</i>
Real estate .....	National Association of Realtors <i>1987 Home Sales Yearbook</i> Census Bureau <i>1987 Census of Housing, 1987 Census of Construction Industries, 1987 Census of Agriculture</i> , and <i>1987 Enterprise Statistics</i> Internal Revenue Service tabulations of tax returns
Services .....	Census Bureau <i>1987 Census of Service Industries</i> Internal Revenue Service tabulations of tax returns Bureau of Labor Statistics tabulations of wages and salaries covered by State unemployment insurance U.S. Department of Education <i>Digest of Educational Statistics</i>
Government enterprises .....	Federal and State and local government agency reports Office of Management and Budget Federal budget data Census Bureau <i>1987 Census of Governments</i>
Noncomparable imports .....	Census Bureau general imports and imports for consumption data Estimated as part of the balance of payments accounts
Scrap .....	Census Bureau <i>1987 Census of Manufactures</i>
General government .....	Estimated as part of the national income and product accounts
Household .....	Estimated as part of the national income and product accounts
Inventory valuation adjustment .....	Estimated as part of the national income and product accounts

U.S. Department of Treasury, Office of Management and Budget, and other government agencies and private organizations.

In preparing the 1987 benchmark I-O accounts, BEA used standard I-O procedures for the estimates of industry and commodity output, except for new construction (see table A). For previous benchmarks, approximately 50 construction industries were analyzed and estimated separately. For the 1987 benchmark, the economic census total for construction output was distributed among only five industries—four related to mining and one “all other” category, which covers the remaining industries within new construction and maintenance and repair construction.

BEA also used standard I-O procedures for the estimates of industry intermediate inputs where hard data were readily available—primarily for material inputs from the economic censuses. In previous benchmarks, the standard procedure has been to supplement these economic census data with estimates of other intermediate inputs from hundreds of other information sources. For the 1987 benchmark, BEA estimated these intermediate inputs by first extrapolating 1982 benchmark estimates to 1987 based on the change in industry output, and then by adjusting the extrapolated estimates to be consistent with—or to balance—commodity and industry outputs (see table B).

Value added components were prepared using the same procedures as in the past.<sup>3</sup> Data

3. Value added equals gross output (sales or receipts and other operating income, plus inventory change) minus intermediate inputs (consumption of goods and services purchased from other industries or imported). It includes compensation of employees, indirect business tax and nontax liability, and other value added.

for compensation of employees and for indirect business tax and nontax liability are from the U.S. Department of Treasury, Office of Management and Budget, Bureau of Labor Statistics, and Census Bureau; NIPA estimates are also used.

For most final use components—personal consumption expenditures, gross private fixed investment, change in business inventories, exports of goods and services, and imports of goods and services—BEA used the same data and procedures as in the past.<sup>4</sup> Most estimates of personal consumption expenditures and gross private fixed investment were prepared with the commodity-flow method.<sup>5</sup> Inventories held by industries were based on economic census and Internal Revenue Service data. Exports and imports of goods and services were based on data from the Census Bureau and the U.S. balance of payments accounts.

For Federal Government and State and local government final use components, a combination of new and old procedures was used. Total expenditures by type of purchase, for Federal Government and for State and local governments, were obtained from the NIPA's, as in the past. Government purchases by I-O commodity were

4. In the I-O accounts, change in business inventories covers commodities wherever held; capital purchases—producers' durable equipment and structures—are included in gross private fixed investment; and imported commodities are included with domestically produced commodities in both final use and intermediate use.

5. The commodity-flow method generally begins with an estimate of the total supply of a commodity available for domestic uses; it then either attributes a fixed percentage of supply to final users, or it adjusts for intermediate purchases and attributes the residual to final users. For more information, see U.S. Department of Commerce, Bureau of Economic Analysis, *Personal Consumption Expenditures*, Methodology Paper Series MP-6 (Washington, DC: U.S. Government Printing Office, June 1990): 31-34.

**Table B.—Principal Data Sources and Methods for Estimating Intermediate Inputs and Components of Value Added, 1987 Benchmark**

Component	Source or method
Intermediate inputs .....	For census-covered industries, selected purchased services; in addition, for manufacturing and mining, materials consumed from 1987 economic censuses. For gas and electric utility industries, selected inputs from trade sources; for agriculture industries, inputs from U.S. Department of Agriculture. For most remaining industries, 1982 estimate extrapolated by change in industry output and adjusted to balance commodity and industry outputs.
Compensation of employees .....	For census-covered industries, payroll and benefits from Census Bureau 1987 economic censuses. For noncensus-covered industries, Bureau of Labor Statistics tabulations of wages and salaries covered by State unemployment insurance; other labor income estimated as part of the national income and product accounts.
Indirect business tax and nontax liability.	For Federal excise taxes, collections from Internal Revenue Service; for customs duties, receipts from <i>Monthly Treasury Statement</i> ; and for nontaxes (such as fines), receipts from the <i>Budget of the United States</i> , prepared by the Office of Management and Budget. For State and local governments, receipts from Census Bureau 1987 economic census and annual and quarterly surveys.
Other value added .....	For most industries, residual method: Total industry output less total intermediate inputs, compensation of employees, and indirect business tax and nontax liability.

estimated using 1982 benchmark I-O estimates as weights, a new procedure for the 1987 estimates.

Some procedures used to prepare the 1987 benchmark I-O accounts suggest certain caveats. First, the technology represented by the relationships of commodity inputs to industry outputs in the use table (as well as in the commodity-by-commodity and industry-by-commodity total requirements tables) is a hybrid of that in 1987 and that represented in the 1982 benchmark I-O accounts. Second, other value added was derived as a residual for most industries after subtracting total intermediate inputs, compensation of employees, and indirect business tax and nontax liability from total industry output.<sup>6</sup> (For a few industries, estimates of other value added were available from other data sources; for example, other value added estimates for agriculture are from the U.S. Department of Agriculture.) As a result, the other value added component includes estimating errors from other parts of the I-O accounts. For studies requiring comparisons of value added components, users may find BEA's estimates of gross product originating by industry more useful.<sup>7</sup>

### *Improvements and other changes*

The 1987 benchmark I-O tables differ from previous tables in several respects. The summary 1987 benchmark tables, which begin on page 98, cover 95 I-O industries instead of the 85 I-O industries used previously. For the new summary tables, 14 I-O industries were aggregated into 7, and 12 I-O industries were disaggregated into 30.<sup>8</sup> With one exception, the aggregations involved small, declining industries; new construction and repair and maintenance construction were aggregated because of the abbreviated procedures used for the 1987 benchmark. The disaggregations involved large, growing industries. Appendix B shows the new aggregations and disaggregations of I-O industries. (The disaggregated industries

are designated with an alphabetical suffix to the 1982 benchmark I-O industry number.)

The industry classification of the I-O accounts is now based on the 1987 SIC; the 1982 benchmark tables and subsequent annual tables were based on the 1972 SIC. In addition, the 1987 benchmark tables incorporate all of the 1991 comprehensive NIPA revisions, including the change from gross national product to gross domestic product (GDP).<sup>9</sup>

### **Introduction to the U.S. I-O Accounts**

The I-O accounts for the U.S. economy show the production of commodities by each of nearly 500 industries, in the "make" table, and the consumption of commodities by these industries, in the "use" table. **Chart 1** illustrates the make and use tables in matrix form in, respectively, the upper and lower panels. The commodity composition of GDP and the industry distribution of value added are also shown in the use table.

BEA prepares benchmark I-O accounts primarily from data that the Census Bureau collects every 5 years in its economic censuses for mining, construction, manufacturing, wholesale trade, retail trade, transportation, and selected services, as well as in its census of governments. Data from the U.S. Department of Agriculture, U.S. Department of Transportation, U.S. Department of Treasury, and other government agencies and private sources are also used.

The I-O accounts show compactly the relationships between all industries in the economy and all the commodities they produce and use. Estimates for commodities are typically shown at producers' prices.<sup>10</sup> When producers' prices are used, transportation costs and wholesale and retail trade margins are treated as commodities that are separately produced and used by industries (see the section "**Definitions and conventions for valuation**").

The I-O accounts consist of five basic sets of tables: (1) Make, (2) use, (3) commodity-by-industry direct requirements, (4) commodity-by-commodity total requirements, and (5) industry-

6. For most I-O industries, other value added includes consumption of fixed capital, proprietors' income, corporate profits, and business transfer payments. For banking and for credit agencies other than banks, other value added also includes net interest. For owner-occupied dwellings and for real estate agents, managers, operators, and lessors, it also includes rental income. For the six industries covering the Federal Government and State and local government enterprises, it also includes current surplus less government subsidy payments.

7. See Robert P. Parker, "Gross Product by Industry, 1977-90," *SURVEY* 73 (May 1993): 33-54; and Robert E. Yuskavage, "Gross Product by Industry, 1988-91," *SURVEY* 73 (November 1993): 33-44.

8. The net addition of industries resulting from the aggregations and disaggregations of 1982 I-O industries is 11. In addition, the rest of the world is no longer technically considered to be an industry because of the change from GNP to GDP as the primary measure of final demand. Thus, there is a net increase of 10 industries in the 1987 benchmark.

9. The 1991 NIPA revision was described in the following *SURVEY* articles: "A Preview of the Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes," September 1991; "A Preview of the Comprehensive Revision of the National Income and Product Accounts: New and Redesignated Tables," October 1991; and "The Comprehensive Revision of the U.S. National Income and Product Accounts: A Review of Revisions and Major Statistical Changes," December 1991.

10. Estimates for commodities in purchasers' prices can be derived by adjusting for transportation costs and for wholesale and retail trade margins; these costs and margins are included on the diskettes that can be ordered for the 1987 benchmark I-O (see the **the box** on page 90).

CHART 1

The U.S. Input-Output Accounts

MAKE TABLE: INDUSTRIES PRODUCING COMMODITIES

		COMMODITIES									TOTAL INDUSTRY OUTPUT
		Agricultural products	Minerals	Construction	Manufactured products	Transportation	Trade	Finance	Services	Other*	
INDUSTRIES	Agriculture	■									■
	Mining		■								■
	Construction			■							■
	Manufacturing				■						■
	Transportation					■					■
	Trade						■				■
	Finance							■			■
	Services								■		■
	Other*									■	■
TOTAL COMMODITY OUTPUT											

USE TABLE: COMMODITIES USED BY INDUSTRIES AND FINAL USES

		INDUSTRIES										FINAL USES (GDP)							TOTAL COMMODITY OUTPUT				
		Agriculture	Mining	Construction	Manufacturing	Transportation	Trade	Finance	Services	Other*	Total intermediate use	Personal consumption expenditures	Gross private fixed investment	Change in business inventories	Exports of goods and services	Imports of goods and services	Government purchases	GDP					
COMMODITIES	Agricultural products																						
	Minerals																						
	Construction																						
	Manufactured products																						
	Transportation																						
	Trade																						
	Finance																						
	Services																						
	Other*																						
	Noncomparable imports																						
Total intermediate inputs																							
VALUE ADDED	Compensation of employees																						
	Indirect business tax and nontax liability																						
	Other value added**																						
	Total																						
TOTAL INDUSTRY OUTPUT		■	■	■	■	■	■	■	■	■	■												■

TOTAL COMMODITY OUTPUT  
 PRIMARY PRODUCT OF THE INDUSTRY  
 TOTAL INDUSTRY OUTPUT

\* The I-O accounts use two classification systems for industries and another for commodities; both generally use the same I-O numbers and titles. "Other" includes government enterprises and I-O special industries; for more information, see "Appendix B—Classification of the 1987 Benchmark Input-Output Accounts."

\*\* For most industries, this item includes consumption of capital, proprietors' income, corporate profits and business transfer payments. For banking and credit agencies other than banks, it also includes net interest of owner-occupied dwellings and for real estate agents, managers, operators and lessors, it also includes rental income for the six industries covering the Federal Government and State and local government enterprises, it also includes current sales less government subsidies.



by-commodity total requirements.<sup>11</sup> For the 1987 benchmark, details for the value added components of the use table and of the commodity-by-industry direct requirements table are contained in separate tables. Only the make and use tables are presented in this article. The remaining three tables and their descriptions will be published in the May SURVEY.

### *The make table*

The make table (table 1), in the upper panel of chart 1, shows the dollar value, in producers' prices, of each commodity produced by each industry. In each row, there is one "diagonal" cell that shows the value of production of the commodity for which the corresponding industry has been designated the "primary" producer. Entries in the other cells in the row show the value of production of commodities for which the industry is a "secondary" producer.<sup>12</sup> For example, the newspapers and periodicals industry (row 26A) is the primary producer of the newspapers and periodicals commodity (column 26A). It is also a secondary producer of the following commodities: Paper and allied products, except containers (column 24); other printing and publishing (column 26B); rubber and miscellaneous plastics products (column 32); miscellaneous manufacturing products (column 64); and advertising (column 73D). The sum of all entries in a row is the total output by the industry.

The entries in each column of the make table represent the production by both primary and secondary producers of the commodity named at the head of the column. For example, computer and data processing services (column 73A) includes the output by the primary producer—the computer and data processing services industry (row 73A)—and by the following secondary producers: Computer and office equipment (row 51); audio, video, and communication equipment (row 56); scientific and controlling instruments (row 62); finance (row 70A); and other business and professional services, except medical (row 73C). The sum of all entries in a column is the total output of the commodity.

An industry's share of the production of a commodity can be calculated from the values in

the make table by expressing the entries in a given column as a percentage of the column total. From the 1987 benchmark, for example, column 62 in table 1 shows that the production of scientific and controlling instruments (commodity 1-0 62) totaled \$86 billion, of which the scientific and controlling instruments industry (industry 1-0 62) produced \$80 billion, or about 93 percent of the total.

The industry and commodity output totals for this table are estimated primarily from the quinquennial economic censuses, conducted by the Census Bureau (see table A). The economic census data, which are on an SIC basis, cover most establishments with payrolls. Information from other government and private sources is used for 1-0 industries not covered by the economic census data, such as finance, insurance, real estate, utilities, and schools and religious organizations. Data from other government agencies are also used to supplement the economic census data for some industries.

BEA makes two adjustments to the economic census data. First, it adds estimates of the output for establishments without payrolls that are not covered by the economic census data. Second, BEA adjusts for misreported tax return information; this adjustment is necessary because in some cases, the Census Bureau data for expenses and receipts reflect tax return records rather than information collected directly from survey reports.<sup>13</sup>

BEA also adjusts the economic census data based on the SIC to the 1-0 industry classification system to attain greater homogeneity in the input structures for commodities produced by an 1-0 industry. This type of adjustment is discussed in the section "Definitions and conventions for classification."

### *The use table*

The use table (table 2) is presented in two parts: Table 2.1 shows the dollar value, in producers' prices, of each commodity used by each industry and by each final user; table 2.2 shows detail, in producers' prices, on the value added components used by each industry in table 2.1 to produce its output. In table 2.1, entries in a row show the use of the commodity named at the beginning of the row by each industry or final user named at the head of the column. For example, the commodity radio and TV broadcasting services

11. In the designation of 1-0 tables, the row is referred to first and the column second. Thus, tables in which commodities appear in the rows and industries in the columns are designated "commodity-by-industry" tables, and tables in which industries appear in the rows and commodities in the columns are designated "industry-by-commodity" tables.

12. Primary and secondary products and the classification of industries are discussed further in the section "Definitions and conventions for classification."

13. See Robert P. Parker, "Improved Adjustments for Misreporting of Tax Return Information Used to Estimate the National Income and Product Accounts, 1977," SURVEY 64 (June 1984): 17-25.

(row 67) is used by the *industries* radio and TV broadcasting (column 67) and advertising (column 73D), as well as by persons—that is, as part of personal consumption expenditures (column 91).

In table 2.2, industries are shown in the rows, and total output, total intermediate inputs, and the components of value added are shown in the columns. For example, the total output for the radio and TV broadcasting industry (row 67) was \$29 billion, of which \$10 billion was labor compensation, \$1 billion was indirect business tax and nontax liability, \$3 billion was other value added, and \$16 billion was intermediate inputs. The column totals for industries in table 2.1 equal the right-hand row totals in table 2.2. For example, the *column total* for the radio and TV broadcasting industry in table 2.1 equals *the row total* for that industry in table 2.2, or \$29 billion. (The relationship between value added and other parts of the use table is depicted in the bottom panel of [chart 1](#).)

In table 2.1, industry uses sum to total intermediate use, shown in the right-hand column of the industries portion, and the final uses sum to GDP, shown in the right-hand column of the final uses portion. The total output of each commodity is the sum of all intermediate uses of the commodity by industries and all sales to final users. The total output of each industry is the sum of all intermediate inputs consumed by the industry—that is, the raw materials, semifinished products, and services that the industry purchases—and of the value added by the industry. For the economy as a whole, the total of all final uses of commodities equals the total value added by all industries, or GDP.

The rows in table 2.1 show the wide variation in the proportion of commodity output that is sold directly to final users. For example, the 1987 use table shows that some commodities, such as apparel (the primary product of industry I-O 18), were sold almost entirely to final users; therefore, the demand for these commodities is affected primarily by changes in the buying patterns of final users. Other commodities, such as industrial and other chemicals (I-O 27A), were used almost entirely as intermediate inputs. For these commodities, the connection between production and final uses is primarily indirect and can be traced mainly through industrial users' sales of commodities to final users.

The rows also show the wide variation in the direct usage of commodities by industries. For example, the 1987 use table shows that paper and

allied products, except containers (I-O 24), with \$81 billion of commodity output, were used by nearly all industries. The largest user was other printing and publishing (I-O 26B), which used \$15 billion, or 18 percent of total commodity output. In contrast, metal containers (I-O 39), with \$12 billion of commodity output, were used by only 20 industries. The largest user was food and kindred products (I-O 14), which used \$9 billion, or 74 percent of total commodity output.

The rows in table 2.2 show the wide variation in the use of value added inputs by industries to produce their outputs. For example, the real estate and royalties industry (I-O 71B) required \$280 billion of value added inputs, or 74 percent of its total output; of this, \$27 billion was for labor compensation, \$53 billion was for indirect business tax and nontax liability, and \$200 billion was for other value added. In contrast, the livestock and livestock products industry (I-O 1) required \$15 billion of value added inputs, or 17 percent of its total output; of this, \$3 billion was for labor compensation, \$1 billion was for indirect business tax and nontax liability, and \$11 billion was for other value added.

BEA estimates intermediate inputs in the use table through a number of processes. The economic censuses are the primary source for data on intermediate inputs; however, BEA must supplement these data to cover establishments without payrolls and industries not covered by the economic censuses. BEA also separates information for some broader categories of purchases into I-O commodities; for example, BEA separates data on purchases of office supplies into purchases of postal service, paper, envelopes, etc., using commodity-shipment proportions and other available information. BEA also uses related information that is available to make I-O estimates of inputs for which there is little hard data. For example, fees paid by industries for accounting services are estimated on the basis of industry employment. ([Table B](#) shows the principal methods and sources used for the 1987 benchmark.)

BEA estimates the final uses of commodities either by incorporating data into the I-O accounts directly from other sources after minor adjustment, or—for personal consumption expenditures and producers' durable equipment—by employing the commodity-flow method. An example of source data incorporated directly with only minor adjustments is exports of goods, which is obtained from the balance of payments accounts.



In the commodity-flow method, an estimate is first developed for the total supply of a commodity for domestic use. Then either a fixed percentage of total supply is attributed to final users, or the total supply is adjusted for intermediate purchases and the residual is attributed to final users.<sup>14</sup>

An example of commodity flow using the fixed percentage method can be illustrated by examining its use in estimating personal consumption expenditures for polishes and sanitation goods; in this case, approximately 40 percent of total output is allocated to personal consumption expenditures. An example of commodity flow using the residual method can be illustrated by examining its use in estimating personal consumption expenditures for wheat flour. First, an estimate is made for the total domestic supply of wheat flour: Total wheat flour sales by domestic firms, minus wheat flour exports, plus wheat flour imports. Next, an estimate is made for total consumption of wheat flour by intermediate users, including food manufacturers—of bread, cookies, crackers, and frozen bakery products—and restaurants. The wheat flour consumed by all intermediate users is then subtracted from domestic supply; government purchases of wheat flour are also subtracted. The residual is then assumed to be the wheat flour purchased by persons and is included in personal consumption expenditures.

The components of value added (see footnotes 3 and 6) are estimated using different methods. Compensation of employees by industry is estimated directly from source data. Indirect business tax and nontax liability by industry is either estimated directly from source data or is extrapolated based on the 1982 benchmark. For most industries, other value added is derived as a residual after subtracting total intermediate inputs, compensation of employees, and indirect business tax and nontax liability from total industry output (that is, industry sales receipts). For a few industries, estimates of other value added were available from other data sources; for example, other value added estimates for agriculture are from the U.S. Department of Agriculture.

### *Uses of the I-O accounts*

The I-O accounts have a variety of statistical and analytical uses. For example, they can provide an economic framework to assess data quality and completeness, and they can be used as an

analytical economic tool to study industry production. This section describes some uses of the I-O accounts in preparing economic statistics and in studying interindustry relationships within the economy, as well as some of the assumptions analysts must make when they use I-O accounts as an economic tool.

The use of I-O accounts requires certain simplifying assumptions. Among these is the assumption that interindustry relationships established in the I-O accounts for a benchmark year will remain stable over time and through a range of output levels. Users of I-O tables generally must make the assumption that changes in interindustry relationships occur only gradually—for example, that the interindustry relationships represented in the 1987 benchmark are applicable for a band of years surrounding 1987. Also, I-O accounts implicitly assume that all adjustments to a change in final demand are achieved instantly and without price changes. For analyses that require different assumptions, other economic tools may be more appropriate.

*Statistical uses.*—The I-O accounts are used in several ways to prepare economic statistics. For NIPA comprehensive revisions, they are the single most important regular source for estimating the expenditure components of GDP and for parts of several income components. Because the I-O accounts have an internally consistent framework that tracks the input and output flows in the economy, any estimating weaknesses in the national economic accounts become readily apparent when they are compared with the I-O accounts. For the NIPA revision, the NIPA estimates of personal consumption expenditures and producers' durable equipment are based on the final use components of the I-O benchmark accounts, with additional adjustments to reflect the definitional, classificational, and statistical changes incorporated into the NIPA's since completion of the I-O accounts.<sup>15</sup>

The I-O benchmark accounts are also used as a framework to weight and calculate index numbers for price, volume, and value. For example, BEA uses the I-O-based detailed estimates of producers' durable equipment to weight producer price indexes for calculating the constant-dollar NIPA estimates of producers' durable equipment.

*Analytical uses.*—The I-O accounts are an important analytical tool because they show the interdependence among various producers and

14. See *Personal Consumption Expenditures*, pages 31–34.

15. For more information on the I-O accounts and their relationship to the NIPAs, see *Personal Consumption Expenditures*, pages 17 and 31–34.

consumers in the economy. Because of their industry detail, the I-O accounts can be used for analyzing a wide range of related empirical issues.

The main contribution of the I-O accounts to economic analysis is that they permit analysts to measure the repercussions that changes in final uses have on industries and commodities, both directly and indirectly. For example, an increase in consumer demand for motor vehicles will initially have a direct effect that will increase the production of cars, which in turn will have indirect effects, including increased steel production. Increased steel production will in turn require more chemicals, more iron ore, more limestone, and more coal. Increased car production will also require more upholstery fabrics, and the increased production of these fabrics will require more natural fibers, more synthetic fibers, and more plastics. Further, increased production of synthetic fibers will require more electricity and containers, and so on.

These repercussions are only a few in the continuing chain resulting from the initial increase in consumer demand for motor vehicles. Through I-O analysis, it is possible to trace this chain throughout the economy, measuring the direct and indirect effects on the output of each industry and commodity. Within the I-O accounts, these effects are quantified in coefficient tables. These tables can be used, for example, to determine the impact of a disaster on the economy or, when supplemented with additional information, to compute the effect on employment of an increased demand for U.S. exports. The Federal Emergency Management Agency, the U.S. Department of Defense, and the Census Bureau, among others, have found the I-O accounts to be useful for such studies.

When the U.S. I-O accounts are augmented with regional data, they can show economic impacts by region. For example, a State Government agency has used regional I-O accounts to estimate the economic effects of a high-speed intercity rail project on the State's economy, and a private consulting group has used regional I-O accounts to analyze the impact of a sports stadium on the local economy. BEA's Regional Economic Analysis Division helps planners and analysts estimate the regional impacts of project and program expenditures by industries.<sup>16</sup>

### *Definitions and conventions for classification*

The I-O accounts use two classification systems, one for industries and another for commodities, but both classification systems generally use the same I-O numbers and titles. In the I-O industry classification system, output typically represents the total output of all establishments in each industry, regardless of whether the commodities produced are primary to the industry (that is, make up the largest proportion of the establishment's output) or are secondary (that is, primary to another industry). In the I-O commodity classification system, output represents the total output of the product or service, regardless of the classification of the establishments that produce it. This section discusses first the I-O industry classification system and then the I-O commodity classification system.

The I-O *industry classification system* is based on the SIC system, which classifies establishments into industries based on their primary products or services.<sup>17</sup> Establishments are defined as economic units that are generally at a single physical location where business is conducted or where services or industrial operations are performed. Establishments are classified into an SIC industry on the basis of their primary products or services.<sup>18</sup>

The I-O industry classification system adjusts the SIC system primarily to attain a greater degree of homogeneity in the structure of inputs to the commodities produced by an I-O industry. The adjustments, which affect I-O-defined primary and secondary production, are called, in I-O terminology, redefinitions and reclassifications.<sup>19</sup> The I-O system also provides for other industries and "special" industries that the SIC does not; these are discussed later in this section.

In a redefinition, the input purchases and the output sales receipts for a particular secondary product or service are moved from the SIC-defined industry to the I-O-defined industry. The input structure of the redefined product or service is assumed to be the same as that for the I-O industry in which the product or serv-

17. The I-O two-digit and six-digit industry categories and their composition in terms of the 1987 SIC codes are given in appendix B.

18. For a discussion of the SIC system, see Office of Management and Budget, Executive Office of the President, *Standard Industrial Classification Manual: 1987*. (Springfield, Virginia: National Technical Information Service, 1987): 11-18.

19. Fewer I-O adjustments to SIC-defined industries may be necessary for the 1997 and subsequent benchmark I-O accounts when the North American Industry Classification System (NAICS) is completed. The proposed NAICS is expected to be a common international system—covering the United States, Canada, and Mexico—for grouping establishments by similarity of production process. For a discussion, see Jack E. Triplett, "Economic Concepts for Economic Classifications," *SURVEY* 73 (November 1993): 45-56.

16. A typical I-O table in the Regional Input-Output Modeling System is derived mainly from two data sources: (1) The U.S. benchmark I-O accounts and (2) BEA's four-digit SIC county wage-and-salary data. For more information, see U.S. Department of Commerce, Bureau of Economic Analysis, *Regional Multipliers: A User Handbook for the Regional Input-Output Modeling System (RIMS 11)*, Second Edition (Washington, DC: U.S. Government Printing Office, 1992).

ice is primary; this assumption is called, in I-O terminology, the commodity-based technology assumption.<sup>20</sup>

An example of a redefinition involves restaurants located in hotels. Both inputs and outputs of these restaurants are moved from the hotels and lodging places industry (the industry of the establishment where the product or service occurs) to the eating and drinking places industry (the industry where the product or service is primary). The input structure related to the output of restaurants located in hotels is assumed to be similar to that for the eating and drinking places industry.

Redefinitions are used in the following cases:

- Construction work (both new construction and maintenance and repair) performed by all industries is redefined to the construction industries. Construction work performed by and for nonconstruction industries is referred to as “force-account construction.”
- Manufacturing in trade and service industries is redefined to the appropriate manufacturing industries.
- Retail trade in service industries is redefined to the retail trade industry. Services in the trade industries are redefined to service industries. Some services are also redefined within service industries.
- Manufacturers’ wholesale sales of purchased goods (resales) are redefined to the wholesale trade industry.
- Rental activities of all industries are redefined to the real estate and rental industries.
- The preparation of meals and beverages in most industries is redefined to the eating and drinking industry.

Redefinitions affect a number of industries; however, for most industries, the total output involved is small. Examples of industries with large dollar amounts of redefinitions of secondary products or services out of or into the industry are automobile and repair services (I-O 75), with \$131 billion of total industry output, of which \$40 billion has been redefined out to a number of other industries and \$1 billion has been redefined

in from a number of other industries; eating and drinking places (I-O 74), with \$209 billion of total industry output, \$34 billion out and \$½ billion in; wholesale trade (I-O 69A), with \$424 billion of total output, \$7 billion out and \$69 billion in; and retail trade (I-O 69B), with \$421 billion of total output, \$25 billion out and \$46 billion in.

In a reclassification, the I-O system creates a secondary product or service from an SIC-defined primary product or service. For these reclassified products and services and for all other SIC-defined secondary products and services that are not redefinitions, the I-O system moves the output receipts from the SIC-defined product or service class to the I-O-defined primary product or service class within the same I-O industry. In this case, total output for the affected industry remains unchanged; however, output for each affected commodity group changes.

An example of a reclassification involves the newspaper industry. The SIC defines the primary product or service classes of this industry as newspaper subscriptions and sales and newspaper advertising. The I-O system considers the primary product or service of the newspaper industry to consist of newspaper subscriptions and sales. It considers the advertising component to be secondary and, therefore, moves advertising receipts or output to the advertising commodity group. Total output for the I-O newspaper industry remains unchanged, but output for the newspaper commodity is reduced, and output for the advertising commodity is increased.

Reclassifications affect about 70 commodities; however, for the most part, the dollar values involved are not very large. Examples of industries with large dollar amounts of reclassified sales receipts are the newspapers and periodicals industry (I-O 26A), for which \$20 billion of its \$36 billion total commodity output is moved to the advertising commodity (I-O 73D); and the crude petroleum and natural gas industry (I-O 8), for which \$12 billion of its \$80 billion total commodity output is moved to the gas production and distribution (utilities) commodity (I-O 68B).

When the total requirements tables are calculated, inputs and outputs of each I-O-defined secondary product or service are moved to their particular I-O-defined commodity groups. The input structures of secondary products or services are assumed to be similar to those for the industries in which the products or services are primary; this assumption, in I-O terminology, is called the industry-based technology assumption (see footnote 20).

20. The I-O commodity-based and I-O industry-based technology assumptions are important when estimating the total-requirements tables. The significance of the assumptions is discussed elsewhere in the economic I-O literature. See, for example, United Nations, *System of National Accounts, 1993*, prepared under the auspices of the Inter-Secretariat Working Group on National Accounts (New York: United Nations, 1993): chapter 15, in particular pages 367-70; and Ronald E. Miller and Peter D. Blair, *Input-Output Analysis: Foundations and Extensions* (Englewood Cliffs, New Jersey: Prentice-Hall, Inc., 1985): 149-99.

As mentioned earlier, the I-O system also provides for other industries and “special” industries that the SIC does not. The I-O system replaces the SIC-defined government-owned establishments with two industries to cover government enterprises as defined in the NIPA’S—Federal Government enterprises (I-O 78) and State and local government enterprises (I-O 79). The I-O system also provides “special” industries, such as general government (I-O 82), in which output and value added are defined as general government compensation of employees, and the inventory valuation adjustment (I-O 85), which is a NIPA adjustment to derive GDP (see [appendix B](#) for a complete listing of I-O special industries).

The I-O commodity classification system is closely related to that for industries. Each commodity receives the code of the industry in which the commodity is the primary product. This code is then used to group production of the commodity in the industry in which it is the primary product with its production in other industries in which it is a secondary product.

In several cases, the I-O commodity classification differs from that specified by the industry classification. If the same commodity is the primary product of more than one SIC industry, all of the I-O commodity is assigned the I-O commodity number that corresponds to the I-O industry that is the largest producer of the commodity. This results in there being no commodity output for the following I-O commodity groups: Forest products (commodity 2.0701); knit outerwear mills (commodity 18.0201); knit underwear and nightwear mills (commodity 18.0202); knitting mills, not elsewhere classified (commodity 18.0203); fertilizers, mixing only (commodity 27.0202); cold-rolled steel sheet, strip, and bars (commodity 37.0104); steel pipe and tubes (commodity 37.0105); secondary nonferrous metals (commodity 38.0600); Federal electric utilities (78.0200); State and local government passenger transit (commodity 79.0100); and State and local government electric utilities (commodity 79.0200).

### **Definitions and conventions for valuation**

*Transactions in commodities* are typically valued in I-O accounts at producers’ prices, which exclude distribution costs (transportation costs and wholesale and retail trade margins), but include excise taxes collected and paid by producers. Transportation costs and trade margins are shown as separate purchases by the users of the commodities. The sum of the producers’ value,

transportation costs, and trade margins equals the purchasers’ value.

The I-O tables do not trace actual flows of commodities to and from wholesale trade and retail trade. If trade were shown as buying and reselling commodities, industrial and final users would make most of their purchases from a single source—trade. To show the relationship between the production of commodities and their purchase by intermediate and final users, commodities are shown as if they move directly to users, bypassing trade. The margin associated with a commodity is shown as a separate purchase of the commodity from wholesale trade and retail trade by users. Transportation costs are the freight charges paid to bring the commodity from the producer to the user, either intermediate or final. All transportation costs are included in the transportation rows (rows 65A–E) of the use table.

*Wholesale trade* has one primary product—distributive services for the sale of goods to final users other than for personal consumption expenditures. Examples of distributive services provided by wholesalers include merchandise handling, stocking, selling, and billing.

Wholesale trade output is measured one way for merchant wholesalers, agents, and brokers and another way for manufacturers’ sales branches. For merchant wholesalers, agents, and brokers (on own account), wholesale margin is measured as wholesale sales receipts less the cost of goods sold plus taxes collected by the distributor. For manufacturers’ sales branches, it is measured as expenses plus taxes collected by the sales branches.

Nonmargin output occurs when the wholesale trade service is purchased separately from the commodity. Nonmargin output includes, for example, a sales commission paid to a wholesaler acting as a broker. Nonmargin output is measured as the sum of expenses on goods sold by manufacturers’ sales offices, commissions on goods sold by agents and brokers, and customs duties. Wholesale trade output—both margin and nonmargin—is included in the wholesale trade row (row 69A) of the use table.

*Retail trade* has one primary product—distributive services for the sale of goods to persons. Retail output is defined as the retail margin, which is measured as retail sales less the



Table C.—Input-Output Commodity Composition of Final Demand, in Producers'

(Millions of dollars)

Commodity number	Personal consumption expenditures				Gross private fixed investment				Change in business inventories				Exports of goods and services				Imports of goods and services			
	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices
1	3,090	96	1,034	4,219	0	0	0	0	-719	4	3	-711	485	17	14	515	-808	0	0	-808
2	15,682	3,215	13,806	32,703	0	0	0	0	-4,261	119	246	-3,896	12,747	1,129	2,069	15,946	-2,353	0	0	-2,353
3	3,763	52	1,652	5,466	0	0	0	0	101	1	10	113	544	6	37	587	-3,747	0	0	-3,747
4	647	0	0	647	0	0	0	0	0	0	0	0	122	0	0	122	-16	0	0	-16
5+6	0	0	0	0	446	23	21	489	19	-1	(*)	18	559	63	14	636	-1,349	0	0	-1,349
7	138	41	62	241	0	0	0	0	1,100	342	27	1,468	2,663	780	61	3,503	-65	0	0	-65
8	0	0	0	0	84	0	0	84	-1,758	15	8	-1,735	1,494	8	56	1,558	-28,965	0	0	-28,965
9+10	36	33	21	89	0	0	0	0	-8	17	1	9	633	237	10	880	-734	0	0	-734
11	0	0	0	0	358,627	0	0	358,627	0	0	0	0	15	0	15	0	0	0	0	0
12	0	0	0	0	17,300	0	0	17,300	0	0	0	0	81	0	81	0	0	0	0	0
13	1,099	5	1,078	2,182	198	0	0	198	457	(*)	11	468	2,725	27	32	2,784	-467	0	0	-467
14	201,153	5,019	100,843	307,016	0	0	0	0	1,771	43	239	2,053	12,111	585	1,388	14,084	-18,538	0	0	-18,538
15	20,774	121	13,651	34,546	0	0	0	0	242	2	108	351	2,591	12	587	3,190	-880	0	0	-880
16	1,047	13	1,024	2,084	0	0	0	0	599	5	29	633	1,407	15	99	1,521	-3,601	0	0	-3,601
17	4,992	113	4,173	9,278	2,369	53	963	3,385	412	6	25	443	782	24	58	863	-919	0	0	-919
18	71,153	360	60,712	132,225	0	0	0	0	1,446	6	123	1,575	1,197	3	117	1,318	-25,395	0	0	-25,395
19	10,088	49	9,245	19,381	0	0	0	0	333	1	33	367	362	2	69	433	-1,772	0	0	-1,772
20+21	1,820	43	1,646	3,508	3,920	11	2,478	6,409	1,157	48	147	1,352	3,645	236	430	4,311	-6,399	0	0	-6,399
22+23	19,469	132	17,015	36,616	15,467	128	2,672	18,266	596	2	46	644	684	8	93	785	-5,287	0	0	-5,287
24	11,902	357	7,712	19,972	0	0	0	0	916	39	66	1,021	5,922	313	313	6,548	-9,914	0	0	-9,914
25	292	7	148	447	0	0	0	0	127	1	3	132	262	6	18	286	-126	0	0	-126
26A	11,741	400	4,808	16,949	0	0	0	0	449	16	14	480	555	25	22	601	-226	0	0	-226
26B	10,923	267	9,177	20,366	0	0	0	0	1,188	22	132	1,342	1,062	14	137	1,213	-1,335	0	0	-1,335
27A	978	134	929	2,040	795	0	0	795	515	50	56	622	14,630	910	1,027	16,567	-10,727	0	0	-10,727
27B	784	31	691	1,506	0	0	0	0	138	10	124	272	542	20	255	816	-990	0	0	-990
28	0	0	0	0	0	0	0	0	502	37	14	553	5,364	525	205	6,094	-2,009	0	0	-2,009
29A	23,958	164	16,617	40,738	0	0	0	0	1,199	6	186	1,392	2,959	16	564	3,539	-7,590	0	0	-7,590
29B	25,019	886	16,865	42,770	0	0	0	0	558	12	67	636	983	30	126	1,139	-1,281	0	0	-1,281
30	194	10	89	294	0	0	0	0	197	8	22	228	342	17	43	402	-214	0	0	-214
31	60,189	2,468	33,098	95,755	0	0	0	0	3,001	86	501	3,588	6,128	278	1,258	7,664	-13,332	0	0	-13,332
32	11,669	2,072	12,647	26,388	155	4	36	196	1,292	73	136	1,500	3,233	209	434	3,876	-9,702	0	0	-9,702
33+34	13,619	63	13,745	27,427	0	0	0	0	467	2	62	530	666	7	46	719	-9,700	0	0	-9,700
35	1,518	39	1,922	3,479	0	0	0	0	179	5	31	214	777	22	142	941	-1,837	0	0	-1,837
36	2,705	104	3,017	5,826	0	0	0	0	606	34	74	715	1,019	64	122	1,205	-4,513	0	0	-4,513
37	11	2	11	25	13	0	0	13	1,204	56	150	1,410	1,407	77	178	1,663	-10,824	0	0	-10,824
38	72	2	57	131	36	1	5	42	864	13	43	921	3,303	63	298	3,665	-6,992	0	0	-6,992
39	0	0	0	0	21	1	1	23	24	1	1	25	166	3	6	174	-155	0	0	-155
40	525	14	404	942	2,811	20	296	3,127	557	4	53	614	869	10	113	992	-961	0	0	-961
41	1,464	15	1,551	3,030	0	0	0	0	237	2	8	247	2,123	26	56	2,206	-2,261	0	0	-2,261
42	3,600	102	3,626	7,327	1,945	106	389	2,440	604	10	161	775	2,634	112	597	3,343	-6,573	0	0	-6,573
43	461	5	228	693	2,302	27	171	2,500	208	1	18	227	2,899	29	471	3,398	-2,102	0	0	-2,102
44+45	248	2	247	497	16,909	513	6,700	24,122	333	17	133	483	6,063	270	1,205	7,538	-5,402	0	0	-5,402
46	0	0	0	0	5,032	97	1,033	6,162	42	1	13	56	540	10	122	671	-1,321	0	0	-1,321
47	583	3	523	1,108	13,439	181	2,100	15,720	50	1	14	65	2,335	28	290	2,653	-4,911	0	0	-4,911
48	176	91	113	291	15,053	185	2,551	17,789	198	(*)	6	204	2,696	30	430	3,156	-4,993	0	0	-4,993
49	0	0	0	0	11,072	96	714	11,882	153	1	15	169	4,182	38	369	4,589	-6,947	0	0	-6,947
50	117	4	98	220	747	8	123	878	101	4	8	113	1,660	58	123	1,840	-604	0	0	-604
51	3,290	46	2,221	5,557	33,476	122	7,525	41,122	331	3	20	354	13,167	174	2,418	15,759	-17,329	0	0	-17,329
52	823	8	822	1,713	883	75	2,543	9,804	306	1	34	340	1,217	10	364	1,591	-1,504	0	0	-1,504
53	161	3	113	277	5,878	106	820	6,803	110	2	19	131	1,847	24	148	2,019	-3,346	0	0	-3,346
54	11,997	319	7,770	20,086	2,657	72	1,448	4,177	3	-2	-4	943	24	107	1,074	-2,950	0	0	-2,950	
55	2,278	46	2,233	4,556	435	4	110	549	608	7	106	721	1,358	14	268	1,641	-3,341	0	0	-3,341
56	18,387	164	16,605	35,156	21,728	132	1,338	23,198	446	4	58	508	4,137	41	394	4,572	-20,190	0	0	-20,190
57	263	2	144	409	0	0	0	0	787	4	47	838	12,596	130	1,518	14,244	-13,704	0	0	-13,704
58	5,277	140	3,993	9,410	2,755	27	153	2,936	361	5	38	403	2,404	38	334	2,776	-4,511	0	0	-4,511
59A	101,875	2,626	24,316	128,816	62,933	1,622	4,878	69,433	8,115	202	319	8,636	12,918	325	515	13,758	-61,157	0	0	-61,157
59B	3,133	108	2,107	5,348	6,591	55	323	6,969	1,745	55	145	1,945	10,874	362	938	12,174	-16,950	0	0	-16,950
60	316	1	88	405	8,843	7	135	8,985	2,132	-2	-2	2,127	22,891	177	338	23,405	-6,875	0	0	-6,875
61	11,043	82	5,067	16,191	3,183	72	376	3,632	1,070	6	92	1,167	1,278	17	63	1,358	-2,937	0	0	-2,937
62	4,456	16	4,396	8,868	33,814	131	3,692	37,637	1,285	1	42	1,327	10,311	48	1,082	11,441	-9,990	0	0	-9,990
63	4,625	21	7,956	12,602	5,653	24	2,093	7,770	398	2	171	570	2,224	9	782	2,981	-5,696	0	0	-5,696
64	27,179	400	30,458	58,036	3,876	255	1,052	5,183	2,181	27	506	2,714	2,831	79	690	3,599	-15,769	0	0	-15,769
65A	9,990	0	0	9,990	0	0	0	0	0	0	0	0	731	0	0	731	-135	0	0	-135
65B	6,151	0	0	6,151	0	0	0	0	0	0	0	0	300	0	0	300	0	0	0	0
65C	3,472	0	0	3,472	0	0	0	0	0	0	0	0	7,209	0	0	7,209	3,264	0	0	3,264
65D	29,349	0	0	29,349	0	0	0	0	0	0	0	0	10,186	0	0	10,186	-5,711	0	0	-5,711
65E	1,596	0	0	1,596	0	0	0	0	0	0	0	0	1,958	0	0	1,958	0	0	0	0
66	61,963	0	0	61,963	4,389	0	0	4,389	0	0	0	0	2,496	0	0	2,496	0	0	0	0
67	1,326	0	0	1,326	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
68A	63,318	0	0	63,318	0	0	0	0	0	0	0	0	134	0	0	134	-986	0	0	-986
68B																				

and Purchasers' Prices, 1987 Benchmark <sup>1</sup>

Federal Government purchases, national defense				Federal Government purchases, nondefense				State and local government purchases, education				State and local government purchases, other				Commodity number
Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	Producers' prices	Transportation costs	Wholesale and retail trade margins	Purchasers' prices	
2	(*)	(*)	2	10	(*)	(*)	11	30	(*)	2	32	54	1	3	57	1
0	0	0	0	750	0	0	750	220	55	65	340	368	61	99	528	2
0	0	0	0	-1,112	0	0	-1,112	6	(*)	1	8	-419	(*)	3	-416	3
38	0	0	38	84	0	0	84	284	0	0	284	756	0	0	756	4
-142	-5	-1	-148	1	(*)	0	1	0	0	0	0	0	0	0	0	5+6
56	17	1	74	29	9	1	38	21	4	(*)	26	11	2	(*)	13	7
5	0	0	5	-177	34	20	-124	0	0	0	0	0	0	0	0	8
-2	-2	0	-3	4	4	0	9	0	0	0	0	-19	102	6	89	9+10
7,495	0	0	7,495	8,055	0	0	8,055	10,091	0	0	10,091	61,020	0	0	61,020	11
4,358	0	0	4,358	1,900	0	0	1,900	5,912	0	0	5,912	19,816	0	0	19,816	12
20,365	42	39	20,446	2,380	0	1	2,381	1	0	0	1	116	1	11	128	13
189	3	18	210	1,836	1	7	1,844	3,739	81	450	4,271	2,114	60	260	2,435	14
0	0	0	0	0	0	0	0	-1	0	-1	-1	-10	(*)	-7	-17	15
105	(*)	2	107	10	0	0	10	58	1	4	63	84	1	6	91	16
3	0	0	3	27	(*)	2	30	8	(*)	1	9	43	1	5	49	17
566	5	54	625	1	0	(*)	1	15	0	-1	14	838	10	83	931	18
140	1	34	175	45	(*)	11	57	95	(*)	17	112	347	2	58	406	19
32	1	2	34	13	(*)	1	14	59	4	11	74	55	2	6	63	20+21
39	(*)	5	45	90	1	12	103	992	7	159	1,158	784	2	151	937	22+23
124	3	14	141	243	6	26	275	1,183	48	77	1,308	1,057	33	87	1,178	24
42	(*)	(*)	43	31	0	(*)	31	32	1	2	35	125	3	9	137	25
15	1	(*)	16	138	1	1	139	302	12	11	325	154	5	5	164	26A
428	2	20	450	669	16	48	733	3,403	86	278	3,768	1,466	15	62	1,543	26B
1,793	66	79	1,938	100	-13	12	99	567	37	39	642	1,635	104	124	1,863	27A
9	3	12	15	1	3	11	20	111	4	46	161	213	12	61	286	27B
13	1	(*)	14	1	(*)	0	1	1	(*)	0	1	1	(*)	0	1	28
472	3	96	570	324	2	66	392	86	1	18	105	2,778	19	566	3,363	29A
160	4	24	189	42	2	10	54	119	5	24	147	321	12	50	383	29B
1	0	0	1	5	1	1	6	228	12	30	271	66	3	9	78	30
2,649	109	651	3,408	545	21	127	692	3,789	131	897	4,816	4,142	141	1,018	5,301	31
480	71	87	637	157	12	27	195	88	9	26	123	1,260	52	236	1,549	32
47	1	6	54	4	0	0	4	(*)	0	0	(*)	105	1	9	115	33+34
22	(*)	1	23	37	1	6	44	66	2	13	80	207	5	40	252	35
51	2	12	65	57	2	9	67	66	1	8	75	104	5	12	121	36
78	8	5	91	72	4	1	76	6	1	(*)	7	51	6	5	61	37
395	6	25	426	250	5	20	274	4	(*)	(*)	5	54	2	3	58	38
57	1	3	60	0	0	0	0	4	0	4	3	0	(*)	(*)	3	39
491	12	59	562	168	2	15	185	0	0	0	0	1	0	(*)	1	40
110	1	8	119	28	(*)	1	29	216	2	3	221	61	(*)	4	66	41
407	22	120	549	75	3	39	117	177	7	84	269	373	10	273	656	42
1,879	18	378	2,275	167	2	3	172	0	0	0	0	265	3	11	279	43
303	10	49	362	18	1	3	22	84	2	30	116	1,274	45	263	1,581	44+45
312	6	95	413	9	(*)	1	10	4	0	1	5	9	(*)	3	12	46
180	1	13	194	40	0	2	42	134	2	20	156	102	2	12	116	47
76	1	18	95	6	(*)	1	7	69	1	6	75	5	0	(*)	5	48
542	6	91	639	18	0	2	20	(*)	0	0	(*)	162	1	12	176	49
2,573	95	175	2,843	84	2	4	90	116	5	9	129	135	4	11	150	50
3,493	49	645	4,187	675	7	97	779	1,196	15	347	1,558	786	8	230	1,024	51
101	1	20	122	21	0	7	28	476	5	178	658	179	2	77	257	52
467	8	94	570	168	2	36	206	140	1	14	155	132	1	12	146	53
38	1	4	43	4	(*)	5	101	2	8	112	134	3	13	150	54	
41	(*)	6	47	21	(*)	5	26	284	2	72	358	189	1	45	235	55
4,964	21	227	5,211	301	1	12	314	335	2	39	377	368	2	44	414	56
5,884	62	718	6,663	28	0	2	30	81	1	9	90	94	1	10	105	57
1,577	14	102	1,693	95	1	6	101	71	1	11	83	120	2	22	144	58
609	15	25	649	131	3	5	140	1,288	33	52	1,373	4,426	114	180	4,721	59A
1,050	27	97	1,174	43	1	4	47	294	10	96	400	422	14	172	608	59B
33,306	97	360	33,763	1,206	5	0	1,211	0	0	0	0	20	0	(*)	20	60
6,754	5	20	6,780	405	1	4	410	103	5	15	124	411	8	23	443	61
23,710	91	341	24,141	1,540	5	144	1,688	517	2	38	557	2,732	12	648	3,392	62
704	3	253	959	425	2	150	577	1,015	4	365	1,384	1,589	7	572	2,168	63
123	6	33	162	-547	2	-112	-657	1,184	38	319	1,541	747	13	200	960	64
234	0	0	234	469	0	0	469	2,169	0	0	2,169	229	0	0	229	65A
2,309	0	0	2,309	2,368	0	0	2,368	483	0	0	483	486	0	0	486	65B
677	0	0	677	130	0	0	130	0	0	0	0	89	0	0	89	65C
1,817	0	0	1,817	648	0	0	648	876	0	0	876	990	0	0	990	65D
0	0	0	0	0	0	0	0	3	0	0	3	65	0	0	65	65E
1,954	0	0	1,954	1,899	0	0	1,899	2,519	0	0	2,519	3,021	0	0	3,021	66
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67
1,734	0	0	1,734	937	0	0	937	4,541	0	0	4,541	7,180	0	0	7,180	68A
465	0	0	465	114	0	0	114	685	0	0	685	987	0	0	987	68B
184	0	0	184	53	0	0	53	1,018	0	0	1,018	-35	0	0	-35	68C
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69A
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	69B
36	0	0	36	1,710	0	0	1,710	666	0	0	666	161	0	0	161	70A
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70B
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	71A
547	0	0	547	696	0	0	696	713	0	0	713	5,850	0	0	5,850	71B
692	0	0	692	254	0	0	254	-1,237	0	0	-1,237	2,073	0	0	2,073	72A
65	0	0	65	60	0	0	60	301	0	0	301	597	0	0	597	72B
2,833	0	0	2,833	1,300	0	0	1,300	1,402	0	0	1,402	3,845	0	0	3,845	73A
7,561	0	0	7,561	538	0	0	538	1,729	0	0	1,729	-73	0	0	-73	73B
15,944	0	0	15,944	4,963	0	0	4,963	4,136	0	0	4,136	7,298	0	0	7,298	73C
79	0	0	79	5	0	0	5	416	0	0	416	181	0	0	181	73D
371	0	0	371	768	0	0	768	-5,546	0	0	-5,546	2,138	0	0	2,138	74
94	0	0	94	92	0	0	92	823	0	0	823	1,400	0	0	1,400	75
823	0	0	823	179	0	0	179	189	0	0	189	-1,641	0	0	-1,641	76
-352	0	0	-352	965	0	0	965	-10	0	0	-10	-32,747	0	0	-32,747	77A
1,127	0	0	1,127	6,199	0	0	6,199	-15,934	0	0	-15,934	-318	0	0	-318	77B
312	0	0	312	97	0	0	97	128	0	0	128	1,354	0	0	1,354	78
80	0	0	80	31	0	0	31	171	0	0	171	187	0	0	187	79
8,673	0	0	8,673	1,443	1	1	1,444	43	10	4	57	6	1	1	8	80
-104	0	0	-104	778	0	0	778	683	0	4	687	1,589	0	2	1,591	81
108,244	0	0	108,244	42,383	0	0	42,383	173,286	0	0	173,286	142,873	0	0	142,873	82
-161	0	0	-161	-356	0	0	-356	0	0	0	0	0				

Table D.—Input-Output Commodity Composition of Personal Consumption Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark

(Millions of dollars)

NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices
<b>3. Food purchased for off-premise consumption (n.d.)</b>					<b>17. Cleaning, storage, and repair of clothing and shoes (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>211,016</b>	<b>7,811</b>	<b>111,975</b>	<b>330,802</b>	<b>Total .....</b>	<b>8,328</b>	<b>0</b>	<b>0</b>	<b>8,328</b>	<b>41 .....</b>	<b>1,350</b>	<b>12</b>	<b>1,431</b>	<b>2,793</b>
1 .....	1,722	19	644	2,385	42 .....	600	28	791	1,419	64 .....	415	1	498	914
2 .....	11,383	2,585	9,323	23,291	69B .....	27	0	0	27	81 .....	8	0	114	122
3 .....	2,584	48	1,346	3,978	<b>18. Jewelry and watches (d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
9+10 .....	2	1	0	4	<b>Total .....</b>	<b>12,698</b>	<b>27</b>	<b>13,505</b>	<b>26,230</b>	<b>Total .....</b>	<b>17,946</b>	<b>566</b>	<b>17,748</b>	<b>36,260</b>
14 .....	194,576	4,863	100,017	299,456	62 .....	1,599	4	1,463	3,065	17 .....	4,776	108	4,006	8,891
27A .....	60	9	43	112	64 .....	11,624	23	11,926	23,573	19 .....	1,371	6	1,095	2,472
69B .....	5	0	0	5	81 .....	-525	0	116	-409	20+21 .....	1,357	32	1,107	2,495
80 .....	1,201	285	603	2,089	<b>19. Other misc. personal, clothing and jewelry services (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
81 .....	-516	0	0	-516	<b>Total .....</b>	<b>9,443</b>	<b>0</b>	<b>0</b>	<b>9,443</b>	22+23 .....	1,569	23	995	2,587
<b>4. Purchased meals and beverages (n.d.)</b>					<b>21. Toilet articles and preparations (n.d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>172,236</b>	<b>0</b>	<b>0</b>	<b>172,236</b>	<b>Total .....</b>	<b>17,370</b>	<b>405</b>	<b>12,203</b>	<b>29,979</b>	26B .....	72	0	48	119
65A .....	36	0	0	36	19 .....	69	1	66	135	32 .....	203	5	202	410
65D .....	93	0	0	93	29B .....	15,497	309	10,795	26,601	33+34 .....	127	3	109	239
74 .....	169,638	0	0	169,638	32 .....	20	1	17	37	35 .....	358	12	375	745
76 .....	2,434	0	0	2,434	42 .....	589	25	347	960	36 .....	1,146	17	917	2,080
77B .....	35	0	0	35	54 .....	427	12	256	695	40 .....	80	(*)	53	133
<b>5. Food furnished to employees (including military) (n.d.)</b>					<b>22. Barbershops, beauty parlors, and health clubs (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>6,464</b>	<b>200</b>	<b>899</b>	<b>7,563</b>	<b>Total .....</b>	<b>16,078</b>	<b>0</b>	<b>0</b>	<b>16,078</b>	42 .....	1,495	32	1,827	3,354
1 .....	158	2	8	167	72A .....	311	0	0	311	44+45 .....	248	2	247	497
2 .....	174	42	61	276	72B .....	13,513	0	0	13,513	47 .....	583	3	523	1,108
3 .....	25	(*)	4	30	76 .....	2,254	0	0	2,254	48 .....	176	2	113	291
14 .....	6,107	156	827	7,090	<b>24. Owner-occupied nonfarm dwellings-space rent (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>6. Food produced and consumed on farms (n.d.)</b>					<b>25. Tenant-occupied nonfarm dwellings-rent (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>714</b>	<b>0</b>	<b>0</b>	<b>714</b>	<b>Total .....</b>	<b>120,032</b>	<b>0</b>	<b>0</b>	<b>120,032</b>	50 .....	88	1	80	170
1 .....	107	0	0	107	71A .....	321,380	0	0	321,380	51 .....	237	3	311	551
2 .....	138	0	0	138	71B .....	1,124	0	0	1,124	52 .....	16	(*)	17	32
14 .....	470	0	0	470	<b>26. Rental value of farm dwellings (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>7. Tobacco products (n.d.)</b>					<b>27. Other housing (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>20,774</b>	<b>121</b>	<b>13,651</b>	<b>34,546</b>	<b>Total .....</b>	<b>16,808</b>	<b>0</b>	<b>0</b>	<b>16,808</b>	53 .....	81	1	56	138
15 .....	20,774	121	13,651	34,546	<b>29. Furniture, including mattresses and bedsprings (d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>12. Shoes and other footwear (n.d.)</b>					<b>30. Kitchen and other household appliances (d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>12,264</b>	<b>60</b>	<b>13,703</b>	<b>26,027</b>	<b>Total .....</b>	<b>12,837</b>	<b>324</b>	<b>8,620</b>	<b>21,781</b>	54 .....	11,380	301	7,408	19,089
32 .....	2,801	34	3,465	6,299	22+23 .....	17,882	108	16,011	34,001	55 .....	712	7	651	1,370
33+34 .....	9,463	26	10,213	19,703	81 .....	208	0	259	468	58 .....	222	2	120	344
81 .....	(*)	0	25	25	<b>31. China, glassware, tableware, and utensils (d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>14. Women's and children's clothing and accessories, except shoes (n.d.)</b>					<b>32. Other housing (s.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>50,938</b>	<b>358</b>	<b>47,121</b>	<b>98,416</b>	<b>Total .....</b>	<b>16,808</b>	<b>0</b>	<b>0</b>	<b>16,808</b>	59B .....	3	0	0	3
16 .....	660	7	666	1,333	71A .....	3,764	0	0	3,764	80 .....	161	38	170	369
18 .....	43,726	200	40,297	84,223	71B .....	1,124	0	0	1,124	81 .....	(*)	0	21	20
19 .....	98	1	121	220	<b>34. Cleaning and polishing preparations, and miscellaneous household supplies and paper products (n.d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
24 .....	3,141	92	2,651	5,883	<b>Total .....</b>	<b>20,022</b>	<b>950</b>	<b>12,123</b>	<b>33,095</b>	<b>Total .....</b>	<b>20,022</b>	<b>950</b>	<b>12,123</b>	<b>33,095</b>
26B .....	166	20	184	369	72A .....	16,808	0	0	16,808	3 .....	56	2	18	76
32 .....	84	3	97	184	<b>29. Furniture, including mattresses and bedsprings (d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
33+34 .....	2,997	21	2,642	5,661	<b>Total .....</b>	<b>18,091</b>	<b>108</b>	<b>16,270</b>	<b>34,469</b>	9+10 .....	35	32	20	86
64 .....	222	14	261	496	22+23 .....	17,882	108	16,011	34,001	17 .....	94	1	40	135
69B .....	2	0	0	2	81 .....	208	0	259	468	19 .....	84	1	39	124
81 .....	-158	0	203	45	<b>30. Kitchen and other household appliances (d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>15. Men's and boys' clothing and accessories, except shoes (n.d.)</b>					<b>31. China, glassware, tableware, and utensils (d.)</b>					<b>32. Other durable house furnishings (d.)</b>				
<b>Total .....</b>	<b>28,267</b>	<b>177</b>	<b>21,310</b>	<b>49,754</b>	<b>Total .....</b>	<b>6,520</b>	<b>121</b>	<b>8,090</b>	<b>14,732</b>	24 .....	1,086	36	1,378	2,500
16 .....	95	1	92	188	20+21 .....	381	9	506	896	26 .....	2,220	55	3,658	5,932
18 .....	27,345	159	20,404	47,908	32 .....	1,956	34	2,484	4,473	27A .....	240	39	309	588
19 .....	69	1	73	142	35 .....	1,000	24	1,382	2,406	32 .....	6	(*)	10	16
32 .....	34	1	33	68	36 .....	765	14	864	1,643	64 .....	331	4	650	985
33+34 .....	750	8	514	1,271	38 .....	18	1	21	40	<b>35. Stationery and writing supplies (n.d.)</b>				
64 .....	101	7	105	212	<b>16. Standard clothing issued to military personnel (n.d.)</b>					<b>35. Stationery and writing supplies (n.d.)</b>				
81 .....	-126	0	90	-36	<b>Total .....</b>	<b>133</b>	<b>1</b>	<b>13</b>	<b>146</b>	<b>Total .....</b>	<b>3,882</b>	<b>135</b>	<b>6,005</b>	<b>10,022</b>
<b>16. Standard clothing issued to military personnel (n.d.)</b>					<b>31. China, glassware, tableware, and utensils (d.)</b>					<b>35. Stationery and writing supplies (n.d.)</b>				
<b>Total .....</b>	<b>133</b>	<b>1</b>	<b>13</b>	<b>146</b>	<b>Total .....</b>	<b>6,520</b>	<b>121</b>	<b>8,090</b>	<b>14,732</b>	24 .....	1,086	36	1,378	2,500
16 .....	25	(*)	2	27	20+21 .....	381	9	506	896	26 .....	2,220	55	3,658	5,932
18 .....	80	(*)	9	89	32 .....	1,956	34	2,484	4,473	27A .....	240	39	309	588
33+34 .....	28	(*)	2	30	35 .....	1,000	24	1,382	2,406	32 .....	6	(*)	10	16



**Table D.—Input-Output Commodity Composition of Personal Consumption Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark—**  
Continued

(Millions of dollars)

NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices
<b>37. Electricity (s.)</b>					<b>49. Other professional medical services (s.)</b>					<b>71. Net purchases of used autos (d.)</b>				
Total .....	63,318	0	0	63,318	Total .....	38,652	0	0	38,652	Total .....	14,070	0	14,209	28,280
68A .....	63,318	0	0	63,318	73C .....	495	0	0	495	81 .....	14,070	0	14,209	28,280
68B .....	0	0	0	0	77A .....	38,158	0	0	38,158	<b>72. Other motor vehicles (d.)</b>				
<b>38. Gas (s.)</b>					<b>51. Hospitals (s.)</b>					Total .....	33,839	747	10,453	45,039
Total .....	25,544	0	0	25,544	Total .....	165,479	0	0	165,479	59A .....	28,232	728	6,382	35,342
68B .....	25,544	0	0	25,544	77A .....	165,479	0	0	165,479	61 .....	3,982	19	1,315	5,317
<b>39. Water and other sanitary services (s.)</b>					<b>55. Nursing homes (s.)</b>					81 .....	1,625	0	2,756	4,381
Total .....	20,800	0	0	20,800	Total .....	29,510	0	0	29,510	<b>73. Tires, tubes, accessories, and other parts (d.)</b>				
68C .....	14,672	0	0	14,672	77A .....	29,510	0	0	29,510	Total .....	12,029	2,174	11,036	25,238
79 .....	6,128	0	0	6,128	<b>56. Health insurance (s.)</b>					19 .....	120	1	117	238
<b>40. Fuel oil and coal (n.d.)</b>					<b>61. Brokerage charges and investment counseling (s.)</b>					29B .....	164	16	166	346
Total .....	6,102	305	4,794	11,201	Total .....	21,305	0	0	21,305	32 .....	5,419	1,936	5,364	12,719
7 .....	138	41	62	241	70B .....	21,305	0	0	21,305	35 .....	11	(*)	10	21
20+21 .....	83	2	33	118	<b>62. Bank service charges, trust services, and safe deposit box rental (s.)</b>					42 .....	279	5	279	563
27A .....	192	23	79	294	Total .....	18,349	0	0	18,349	50 .....	29	3	18	50
31 .....	5,498	239	4,620	10,356	70A .....	18,349	0	0	18,349	52 .....	155	1	154	310
68C .....	192	0	0	192	<b>63. Services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans (s.)</b>					55 .....	330	3	290	622
<b>41. Telephone and telegraph (s.)</b>					<b>64. Expense of handling life insurance (s.)</b>					56 .....	646	4	625	1,275
Total .....	51,879	0	0	51,879	Total .....	41,459	0	0	41,459	57 .....	38	(*)	26	65
66 .....	51,049	0	0	51,049	<b>65. Legal services (s.)</b>					58 .....	2,186	97	1,857	4,139
72A .....	830	0	0	830	Total .....	31,069	0	0	31,069	59B .....	3,133	108	2,107	5,348
<b>42. Domestic service (s.)</b>					<b>66. Funeral and burial expenses (s.)</b>					81 .....	-479	0	22	-457
Total .....	8,242	0	0	8,242	Total .....	6,259	23	1,105	7,387	<b>74. Repair, greasing, washing, parking, storage, rental, and leasing (s.)</b>				
73C .....	533	0	0	533	36 .....	466	21	1,081	1,569	Total .....	67,759	0	202	67,961
84 .....	7,709	0	0	7,709	42 .....	11	2	24	36	75 .....	67,684	0	202	67,886
<b>43. Other household operation (s.)</b>					<b>67. Other personal business (s.)</b>					65D .....	90	0	0	90
Total .....	24,691	2	20	24,714	Total .....	12,087	0	0	12,087	76 .....	57	0	0	57
54 .....	44	2	16	63	66 .....	203	0	0	203	77B .....	18	0	0	18
65B .....	5,996	0	0	5,996	70A .....	568	0	0	568	<b>75. Gasoline and oil (n.d.)</b>				
65C .....	114	0	0	114	70B .....	37	0	0	37	Total .....	54,666	2,229	28,460	85,355
65D .....	36	0	0	36	72B .....	1,230	0	0	1,230	31 .....	54,666	2,229	28,460	85,355
69B .....	12	0	0	12	73B .....	295	0	0	295	<b>76. Bridge, tunnel, ferry, and road tolls (s.)</b>				
70B .....	3,275	0	0	3,275	73C .....	1,331	0	0	1,331	Total .....	2,016	0	0	2,016
72B .....	4,131	0	0	4,131	73D .....	661	0	0	661	79 .....	2,016	0	0	2,016
73B .....	92	0	0	92	77B .....	7,541	0	0	7,541	<b>77. Motor vehicle insurance (s.)</b>				
73C .....	4,712	0	0	4,712	78 .....	161	0	0	161	Total .....	15,522	0	0	15,522
78 .....	6,269	0	0	6,269	80 .....	62	0	0	62	70B .....	15,522	0	0	15,522
81 .....	10	0	4	14	<b>68. Other household operation (s.)</b>					<b>79. Mass transit systems (s.)</b>				
<b>44. Other household operation (s.)</b>					<b>69. Other personal business (s.)</b>					<b>80. Taxicab (s.)</b>				
Total .....	24,691	2	20	24,714	Total .....	12,087	0	0	12,087	Total .....	4,583	0	0	4,583
54 .....	44	2	16	63	66 .....	6,259	23	1,105	7,387	65A .....	4,583	0	0	4,583
65B .....	5,996	0	0	5,996	36 .....	466	21	1,081	1,569	<b>81. Railway (s.)</b>				
65C .....	114	0	0	114	42 .....	11	2	24	36	Total .....	576	0	0	576
65D .....	36	0	0	36	65D .....	90	0	0	90	65A .....	576	0	0	576
69B .....	12	0	0	12	71B .....	1,022	0	0	1,022	<b>82. Bus (s.)</b>				
70B .....	3,275	0	0	3,275	72B .....	4,670	0	0	4,670	Total .....	1,364	0	0	1,364
72B .....	4,131	0	0	4,131	<b>70. New autos (d.)</b>					<b>83. Airline (s.)</b>				
73B .....	92	0	0	92	Total .....	73,642	1,898	17,934	93,474	Total .....	1,364	0	0	1,364
73C .....	4,712	0	0	4,712	59A .....	73,642	1,898	17,934	93,474	65A .....	1,364	0	0	1,364
78 .....	6,269	0	0	6,269	<b>71. Net purchases of used autos (d.)</b>					<b>84. Other intercity transportation (s.)</b>				
81 .....	10	0	4	14	Total .....	14,070	0	14,209	28,280	Total .....	19,935	0	0	19,935
<b>45. Drug preparations and sundries (n.d.)</b>					<b>72. Other motor vehicles (d.)</b>					81 .....	1,625	0	2,756	4,381
Total .....	27,762	232	19,012	47,006	<b>73. Tires, tubes, accessories, and other parts (d.)</b>					Total .....	33,839	747	10,453	45,039
24 .....	1,620	43	682	2,345	<b>74. Repair, greasing, washing, parking, storage, rental, and leasing (s.)</b>					59A .....	28,232	728	6,382	35,342
27A .....	74	4	35	112	<b>75. Gasoline and oil (n.d.)</b>					61 .....	3,982	19	1,315	5,317
29A .....	23,958	164	16,617	40,738	<b>76. Bridge, tunnel, ferry, and road tolls (s.)</b>					81 .....	1,625	0	2,756	4,381
31 .....	24	1	17	41	<b>77. Motor vehicle insurance (s.)</b>					Total .....	12,029	2,174	11,036	25,238
32 .....	323	12	227	561	<b>78. Motor vehicle insurance (s.)</b>					19 .....	120	1	117	238
54 .....	41	1	18	60	<b>79. Mass transit systems (s.)</b>					29B .....	164	16	166	346
55 .....	7	0	5	12	<b>80. Taxicab (s.)</b>					32 .....	5,419	1,936	5,364	12,719
62 .....	1,718	7	1,413	3,137	<b>81. Railway (s.)</b>					35 .....	11	(*)	10	21
<b>46. Ophthalmic products and orthopedic appliances (d.)</b>					<b>82. Bus (s.)</b>					42 .....	279	5	279	563
Total .....	2,688	13	5,337	8,038	<b>83. Airline (s.)</b>					50 .....	29	3	18	50
58 .....	194	3	284	480	<b>84. Other intercity transportation (s.)</b>					52 .....	155	1	154	310
62 .....	548	2	1,014	1,564	<b>85. Other intercity transportation (s.)</b>					55 .....	330	3	290	622
63 .....	1,940	8	4,040	5,988	<b>86. Other intercity transportation (s.)</b>					56 .....	646	4	625	1,275
81 .....	6	0	0	6	<b>87. Other intercity transportation (s.)</b>					57 .....	38	(*)	26	65
<b>47. Physicians (s.)</b>					<b>88. Other intercity transportation (s.)</b>					58 .....	2,186	97	1,857	4,139
Total .....	99,923	0	0	99,923	<b>89. Other intercity transportation (s.)</b>					59B .....	3,133	108	2,107	5,348
77A .....	99,923	0	0	99,923	<b>90. New autos (d.)</b>					81 .....	-479	0	22	-457
<b>48. Dentists (s.)</b>					<b>91. New autos (d.)</b>					<b>92. New autos (d.)</b>				
Total .....	26,416	0	0	26,416	Total .....	73,642	1,898	17,934	93,474	Total .....	2,061	0	0	2,061
77A .....	26,416	0	0	26,416	59A .....	73,642	1,898	17,934	93,474	<b>93. New autos (d.)</b>				
<b>49. Other professional medical services (s.)</b>					<b>94. New autos (d.)</b>					<b>94. New autos (d.)</b>				
Total .....	38,652	0	0	38,652	<b>95. New autos (d.)</b>					<b>95. New autos (d.)</b>				
73C .....	495	0	0	495	<b>96. New autos (d.)</b>					<b>96. New autos (d.)</b>				
77A .....	38,158	0	0	38,158	<b>97. New autos (d.)</b>					<b>97. New autos (d.)</b>				
<b>50. Hospitals (s.)</b>					<b>98. New autos (d.)</b>					<b>98. New autos (d.)</b>				
Total .....	165,479	0	0	165,479	<b>99. New autos (d.)</b>					<b>99. New autos (d.)</b>				
77A .....	165,479	0	0	165,479	<b>100. New autos (d.)</b>					<b>100. New autos (d.)</b>				

**Table D.—Input-Output Commodity Composition of Personal Consumption Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark—**  
Continued

[Millions of dollars]

NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchasers' prices
65A .....	177	0	0	177	<b>92. Radio and television repair (s.)</b>					79 .....	6,007	0	0	6,007
65B .....	155	0	0	155	Total .....					80 .....	(*)	2	1	3
65C .....	133	0	0	133	57 .....					81 .....	214	0	401	615
65E .....	1,596	0	0	1,596	Total .....					<b>103. Higher education (s.)</b>				
<b>87. Books and maps (d.)</b>					72B .....					Total .....				
Total .....					73C .....					77B .....				
26B .....					Total .....					Total .....				
69B .....					93. Flowers, seeds, and potted plants (n.d.)					77B .....				
81 .....					Total .....					Total .....				
88. Magazines, newspapers, and sheet music (n.d.)					73C .....					104. Nursery, elementary, and secondary schools (s.)				
Total .....					80 .....					Total .....				
26A .....					Total .....					77B .....				
26B .....					95. Motion picture theaters (s.)					Total .....				
81 .....					65D .....					77B .....				
89. Nondurable toys and sport supplies (n.d.)					76 .....					105. Other private education and research (s.)				
Total .....					77B .....					Total .....				
1 .....					96. Legitimate theaters and opera, and entertainments of nonprofit institutions (except athletics) (s.)					76 .....				
3 .....					Total .....					77B .....				
13 .....					76 .....					106. Religious and welfare activities (s.)				
17 .....					77B .....					Total .....				
24 .....					97. Spectator sports (s.)					77B .....				
26B .....					Total .....					Total .....				
27A .....					76 .....					65C .....				
32 .....					77B .....					65D .....				
53 .....					98. Clubs and fraternal organizations (s.)					80 .....				
55 .....					Total .....					Total .....				
58 .....					76 .....					109. Expenditures abroad by U.S. residents (n.d.)				
63 .....					77B .....					Total .....				
64 .....					99. Commercial participant amusements (s.)					65C .....				
72B .....					Total .....					65D .....				
81 .....					65C .....					80 .....				
90. Wheel goods, sports and photographic equipment, boats, and pleasure aircraft (d.)					76 .....					109. Expenditures abroad by U.S. residents (n.d.)				
Total .....					77B .....					Total .....				
13 .....					99. Commercial participant amusements (s.)					65C .....				
19 .....					Total .....					65D .....				
32 .....					65C .....					80 .....				
33+34 .....					76 .....					109. Expenditures abroad by U.S. residents (n.d.)				
42 .....					Total .....					Total .....				
43 .....					76 .....					83 .....				
58 .....					100. Pari-mutuel net receipts (s.)					Total .....				
60 .....					Total .....					83 .....				
61 .....					76 .....					Personal consumption expenditures				
62 .....					99. Commercial participant amusements (s.)					Total .....				
63 .....					Total .....					2,566,099				
64 .....					65C .....					20,949				
73C .....					76 .....					485,204				
81 .....					77B .....					3,072,252				
91. Video and audio products, computing equipment, and musical instruments (d.)					101. Other recreational expenditures (s.)					Durable commodities (d.)				
Total .....					Total .....					Total .....				
33+34 .....					1 .....					Total .....				
51 .....					3 .....					Total .....				
56 .....					4 .....					Total .....				
57 .....					65A .....					Total .....				
58 .....					65C .....					Total .....				
64 .....					65D .....					Total .....				
73A .....					66 .....					Total .....				
80 .....					67 .....					Total .....				
81 .....					70B .....					Total .....				
					72A .....					Total .....				
					72B .....					Total .....				
					73C .....					Total .....				
					76 .....					Total .....				
					77A .....					Total .....				
					77B .....					Total .....				

\*Less than \$500,000.

NOTE.—The identifying numbers for the personal consumption categories are those used in table 2.4 in the *National Income and Product Accounts of the United States, Volume 2, 1959-88*.

Personal consumption expenditures of scrap, used and secondhand goods (I-O 81) from other final demand components are shown net of corresponding sales. (Sales among persons cancel.) However, the trade margin has been measured on all sales of used goods—both among persons

and between personal consumption expenditures and other final demand categories—to the extent that such sales pass through trade channels. The trade margin is usually the largest part of the value of used goods in purchasers' prices.

**Table E.—Input-Output Commodity Composition of Producers' Durable Equipment Expenditures, in Producers' and Purchasers' Prices, 1987 Benchmark**  
[Millions of dollars]

NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchas- ers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchas- ers' prices	NIPA code/ I-O number	Producers' prices	Transporta- tion costs	Wholesale and retail trade margins	Purchas- ers' prices
<b>5. Computers and peripheral equipment</b>					52 .....	2	0	0	2	<b>26. Agricultural machinery, except tractors</b>				
Total .....	29,802	74	6,652	36,528	58 .....	10	(*)	1	11	Total .....	3,281	92	1,739	5,112
51 .....	29,809	74	5,878	35,761	73B .....	640	0	0	640	44+45 .....	3,134	92	1,169	4,395
81 .....	-7	0	774	767	81 .....	2	0	160	162	58 .....	11	(*)	1	12
<b>6. Office equipment except computers</b>					<b>15. General industrial, including materials handling, equipment</b>					<b>27. Construction machinery, except tractors</b>				
Total .....	4,259	52	1,820	6,131	Total .....	16,167	189	1,855	18,211	Total .....	7,116	261	1,430	8,807
50 .....	517	7	105	628	44+45 .....	36	1	7	44	44+45 .....	6,847	261	1,247	8,354
51 .....	3,455	45	1,605	5,106	46 .....	5,029	97	1,033	6,159	73B .....	313	0	0	313
73A .....	10	0	0	10	48 .....	2	0	(*)	2	81 .....	-43	0	183	140
73B .....	232	0	0	232	49 .....	10,238	90	683	11,011	<b>28. Mining and oilfield machinery</b>				
81 .....	46	0	109	155	50 .....	197	1	17	214	Total .....	924	29	279	1,232
<b>7. Communication equipment</b>					<b>16. Electrical transmission, distribution, and industrial apparatus</b>					<b>29. Service industry machinery</b>				
Total .....	40,319	168	1,562	42,050	Total .....	11,794	147	1,263	13,203	Total .....	7,581	76	2,544	10,201
13 .....	198	0	0	198	47 .....	788	16	123	927	50 .....	34	1	1	35
38 .....	36	1	5	42	53 .....	5,878	106	820	6,803	52 .....	7,184	75	2,543	9,802
51 .....	213	2	41	256	62 .....	4,719	25	320	5,064	73B .....	346	0	0	346
56 .....	21,663	132	1,319	23,113	73B .....	410	0	0	410	81 .....	18	0	0	18
58 .....	2,643	22	137	2,801	<b>18. Trucks, buses, and truck trailers</b>					<b>30. Electrical equipment, n.e.c.</b>				
62 .....	9,546	12	61	9,619	Total .....	26,585	614	2,696	29,895	Total .....	6,294	51	958	7,302
66 .....	4,389	0	0	4,389	59A .....	21,685	559	2,104	24,347	48 .....	208	3	42	252
73B .....	1,585	0	0	1,585	59B .....	6,591	55	323	6,969	54 .....	391	11	40	441
81 .....	47	0	0	47	81 .....	-1,690	0	270	-1,421	55 .....	435	4	110	549
<b>8. Instruments</b>					<b>19. Autos</b>					<b>31. Other nonresidential equipment</b>				
Total .....	11,669	58	2,129	13,856	Total .....	24,652	1,063	3,121	28,836	Total .....	8,163	353	3,529	12,044
62 .....	11,137	58	2,129	13,324	59A .....	41,248	1,063	2,775	45,086	17 .....	1,087	24	442	1,554
73B .....	502	0	0	502	81 .....	-16,596	0	346	-16,250	20+21 .....	5	(*)	1	6
81 .....	30	0	0	30	<b>20. Aircraft</b>					<b>32. Sale of equipment scrap, excluding autos</b>				
<b>9. Photocopy and related equipment</b>					<b>21. Ships and boats</b>					<b>33. Residential (landlord durables)</b>				
Total .....	8,635	30	2,520	11,185	Total .....	1,657	2	165	1,824	Total .....	3,807	92	1,966	5,864
62 .....	2,635	6	427	3,067	61 .....	1,301	2	153	1,456	17 .....	1,282	29	521	1,832
63 .....	5,653	24	2,093	7,770	81 .....	356	0	13	369	22+23 .....	179	1	9	189
73B .....	304	0	0	304	<b>22. Railroad equipment</b>					<b>Producers' durable equipment</b>				
81 .....	44	0	0	44	Total .....	1,311	31	20	1,361	Total .....	278,028	4,144	47,598	329,771
<b>11. Fabricated metal products</b>					<b>23. Furniture and fixtures</b>									
Total .....	6,285	148	696	7,129	Total .....	15,756	125	2,701	18,582					
5+6 .....	446	23	21	489	22+23 .....	15,109	125	2,631	17,865					
27A .....	795	0	0	795	73B .....	664	0	0	664					
37 .....	13	0	0	13	81 .....	-16	0	69	53					
39 .....	21	1	1	23	<b>25. Tractors</b>									
40 .....	2,811	20	296	3,127	Total .....	3,913	99	2,400	6,411					
42 .....	1,931	106	378	2,414	44+45 .....	3,925	99	2,347	6,371					
46 .....	4	0	0	4	81 .....	-12	0	52	41					
73B .....	264	0	0	264										
<b>12. Engines and turbines</b>														
Total .....	1,811	27	171	2,009										
43 .....	2,302	27	171	2,500										
73B .....	64	0	0	64										
81 .....	-556	0	0	-556										
<b>13. Metalworking machinery</b>														
Total .....	13,442	168	2,137	15,747										
47 .....	12,651	165	1,977	14,793										
48 .....	228	3	46	278										
73B .....	558	0	0	558										
81 .....	4	0	114	118										
<b>14. Special industry machinery, n.e.c.</b>														
Total .....	16,182	187	2,683	19,052										
32 .....	78	3	18	99										
42 .....	14	(*)	11	26										
48 .....	14,615	179	2,463	17,257										
49 .....	821	6	30	856										

\*Less than \$500,000.

NOTE.—The identifying numbers for the producers' durable equipment

categories are those used in table 5.8 in the *National Income and Product Accounts of the United States, Volume 2, 1959-88*.

*Text continues from page 83.*

cost of goods sold plus the taxes collected—by any—by retail trade establishments.

Retail trade margins also apply to some purchases of goods by other final users; for example, retail trade margins apply to some purchases of personal computers by business and are included in gross private fixed investment. All retail trade margins are included in the retail trade row (row 69B) of the use table.

*Imports of goods and services*, a component of final uses, are treated in one of two ways, depending on whether or not they are comparable to U.S. commercially produced goods and services. Those that are comparable are included in the use table along with the distribution of the output of their domestic counterparts. The U.S. domestic port values of imported commodities are shown as negative entries in the imports of goods and services column of final use (column 95), so that the row total for a commodity equals the domestic output of that commodity. Other imported goods and services—those not comparable to U.S. commercially produced goods and services, and those purchased and used abroad by U.S. residents—are shown in the use table row for noncomparable imports (row 80).

Examples of noncomparable imports are coffee beans and parakeets; an example of goods purchased and used abroad by U.S. residents is food purchased by U.S. military personnel stationed abroad. The total value of all noncomparable imports is shown as a single negative entry in the imports of goods and services column (column 95).

Imports of goods *by commodity* (the entries in column 95) are valued at U.S. domestic port values plus duties. Imports of services are valued at producers' values. The entries for transportation imports and for trade imports include adjustments that convert the *total of all commodity imports* of goods and services to a foreign port value equivalent. This adjustment is made for conceptual consistency between the I-O accounts and the NIPA's and the balance of payments accounts.

*Exports of goods and services*—both by commodity and as a total—are valued in U.S. producers' prices, which are considered to be equivalent to U.S. domestic port values. Exports are also a component of final uses.

*Inventory change*, another component of final uses, represents the change in inventory of each commodity, wherever held, over the benchmark year. It is stated at book value—that is, at its

### Data Availability

The estimates from the 1987 benchmark I-O accounts are available on diskette at two-digit (95 I-O industries) and six-digit (480 I-O industries) levels. They can be ordered for "transactions," for "total requirements," or for "all." "Transactions" includes the six-digit make table, use table, direct requirements coefficients table, and estimates by commodity of transportation costs and of wholesale and retail trade margins. "Total requirements" includes six-digit industry-by-commodity or commodity-by-commodity coefficients. Products specifying "all" contain all above data, but for the two-digit I-O industry level only. Each product includes information on the mathematical derivation of the coefficients tables. The BEA accession numbers and the prices for these products are listed below.

For further information about I-O products or when ordering by MasterCard or Visa, call the Interindustry Economics Division at (202) 606-5585. To order by mail, write to the Public Information Office, Order Desk, BE-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230. Specify the item, accession number, and price of the product(s) being ordered. For foreign shipment, add 25 percent to the total amount of the order. A check or money order payable to "Bureau of Economic Analysis" must accompany all written orders. Be sure to include a return address.

Item	BEA accession number	Price
<i>Diskettes (3 1/2 inch HD)</i>		
1987 benchmark six-digit, transactions (two diskettes).....	51-94-40-001	\$40
1987 benchmark six-digit, industry-by-commodity total requirements (two diskettes) .....	51-94-40-002	40
1987 benchmark six-digit, commodity-by-commodity total requirements (two diskettes) .....	51-94-40-003	40
1987 benchmark two-digit, all.....	51-94-40-004	20
1987 benchmark commodity composition of NIPA final demand ...	51-94-40-005	20
1987 benchmark personal consumption expenditures and producers' durable equipment by NIPA category.....	51-94-40-006	20

BEA's 1987 benchmark I-O accounts, at both the two-digit and six-digit levels, will also be available on CD-ROM through the Commerce Department's National Economic, Social, and Environmental Data Bank (NESE-DB) CD-ROM. The NESE-DB is produced quarterly in February, May, August, and November. Call the Office of Business Analysis at (202) 482-1986 for more information or to place an order. The NESE-DB is also available for public use at over 900 Federal Depository Libraries.

original cost—in the use table. The inventory valuation adjustment, which converts inventory change from book value to replacement cost, is shown as a single entry for the total of all commodities (row 85, column 93).

**Supplementary tables**

Four supplementary tables, which can be used with the five basic sets of I-O tables, are provided with this article. Three tables (tables C–E) cover the I-O commodity composition of NIPA final demand, of NIPA personal consumption expenditures, and of NIPA producers’ durable equipment; a fourth table (table F) reconciles I-O exports of goods and services and imports of goods and services with NIPA estimates.

The commodity composition tables are necessary as bridges between the I-O accounts and the NIPA’s because the two sets of accounts are based on different valuations and definitions. In the I-O accounts, final use categories are expressed in producers’ prices; in the NIPA’s, final demand categories are expressed in purchasers’ prices. Also, the definitions of I-O final use categories differ from those of the NIPA final demand categories. Before the I-O total requirements tables can be used to measure and analyze the changes in commodity or industry output requirements arising from changes in the level or composition of NIPA final demand, NIPA final demand categories must be converted to equivalent I-O final use categories. That is to say, the analysis should be consistent with I-O final use commodities that are valued at producers’ prices for the I-O year, with separate entries for transportation costs and trade margins.


Table C shows the I-O commodity composition in 1987 of each NIPA category of final demand

in producers’ and purchasers’ prices. It provides a bridge between I-O commodities in producers’ prices and NIPA final demand categories in purchasers’ prices. For each I-O commodity within a category of NIPA final demand, the table shows the transportation costs and trade margins included in the purchasers’ prices.

Table D shows the I-O commodity composition in 1987 of each NIPA category of personal consumption expenditures (NIPA table 2.4) in producers’ and purchasers’ prices. It provides a bridge between I-O commodities in producers’ prices and NIPA personal consumption categories in purchasers’ prices. For each I-O commodity within a NIPA category, the table shows the transportation costs and trade margins included in the purchasers’ prices.

Table E shows the I-O commodity composition in 1987 of each NIPA category of producers’ durable equipment purchases (NIPA table 5.8) in producers’ and purchasers’ prices. It provides a bridge between I-O commodities in producers’ prices and NIPA producers’ durable equipment categories in purchasers’ prices. For each commodity, the table shows the transportation costs and trade margins included in the purchasers’ prices. This table is useful for analyses relating the effects of changes in investment on industry and commodity output.

Table F reconciles the I-O estimates of exports and imports of goods and services with those in the NIPA’s. The same adjustments are made for both exports and imports; therefore, there is no net effect on total GDP. The adjustments are necessary because the NIPA’s—unlike the I-O accounts—include in imports the U.S. merchandise that is returned to the United States from other countries and in exports the foreign merchandise that is reexported from the United States to other countries.<sup>21</sup> The NIPA’s also exclude definitional and statistical revisions to the balance of payments accounts between NIPA comprehensive revisions.

*Appendixes A and B and tables 1 and 2 follow.* 

**Table F.—Relation of Exports and Imports in the Input-Output Accounts to the National Income and Product Accounts, 1987 Benchmark**

[Millions of dollars]

	1987
Exports of goods and services, NIPA .....	363,952
Less: U.S. merchandise returned .....	6,781
Reexports .....	8,875
Plus: Statistical revisions, BPA .....	276
Equals: Exports of goods and services, I-O .....	348,572
Imports of goods and services, NIPA .....	507,050
Less: U.S. merchandise returned .....	6,781
Reexports .....	8,875
Plus: Statistical revisions, BPA .....	-952
Equals: Imports of goods and services, I-O .....	490,442

NIPA National income and product accounts  
 BPA Balance of payments accounts  
 I-O Input-output accounts

21. U.S. merchandise returned consists of domestically produced goods that were previously exported to other countries for processing or assembly, or both, and then returned to the United States. An example would be articles of metal that are manufactured in the United States, then exported for further processing abroad, and then returned to the United States for more processing. Reexports consists of commodities of foreign origin that were previously imported into the United States and then exported from the United States in substantially the same condition as when imported. An example would be imported foreign-made monitors that are purchased by U.S. personal computer manufacturers, joined with U.S.-made consoles, and then exported to a third foreign country.

### Appendix A.—Chronological List of Selected SURVEY OF CURRENT BUSINESS Input-Output Articles

1. Morris R. Goldman, Martin L. Marimont, and Beatrice N. Vaccara, "The Interindustry Structure of the United States: A Report on the 1958 Input-Output Study," November 1964.
2. "Industrial Impact of the 1966 Housing and Commercial Building Decline," November 1966.
3. "Input-Output Structure of the U.S. Economy: 1963," November 1969.
4. Allan H. Young and Claiborne M. Ball, "Industrial Impacts of Residential Construction and Mobile Home Production," October 1970.
5. Beatrice N. Vaccara, "An Input-Output Method for Long-Range Economic Projections," July 1971, Part I.
6. Philip M. Ritz and Eugene P. Roberts, "Industry Inventory Requirements: An Input-Output Analysis," November 1973.
7. "The Input-Output Structure of the U.S. Economy: 1967," February 1974.
8. Irving Stern, "Industry Effects of Government Expenditures: An Input-Output Analysis," May 1975.
9. Philip M. Ritz, "The Input-Output Structure of the U.S. Economy, 1972," February 1979.
10. Philip M. Ritz, Eugene P. Roberts, and Paula C. Young, "Dollar-Value Tables for the 1972 Input-Output Study," April 1979.
11. "The Input-Output Structure of the U.S. Economy, 1977," May 1984.
12. "Benchmark Input-Output Accounts for the U.S. Economy, 1982," July 1991.
13. "Annual Input-Output Accounts of the U.S. Economy, 1987," April 1992.

**Appendix B.—Industry Classification of the 1987 Benchmark Input-Output Accounts**

[The titles in boldface represent the industries used for the summary version of the 1987 tables. An asterisk preceding an SIC code indicates that the SIC industry is included in more than one I-O industry. For a description of the systems used in the I-O accounts, see the section "Definitions and conventions for classification."]

I-O industry number and title	Related 1987 SIC codes	I-O industry number and title	Related 1987 SIC codes
<b>AGRICULTURE, FORESTRY, AND FISHERIES</b>		<b>14 Food and kindred products:</b>	
<b>1 Livestock and livestock products:</b>		14.0101 Meat packing plants	2011
1.0100 Dairy farm products	024,*019,*0259,*029	14.0102 Sausages and other prepared meat products	2013
1.0200 Poultry and eggs	0251-3,*0259,*019,*0219,*029	14.0105 Poultry slaughtering and processing	2015
1.0301 Meat animals	0211-4,*0219,*019,*0259,*029	14.0200 Creamery butter	2021
1.0302 Miscellaneous livestock	0271-3,*0279,*019,*0219,*0259,*029	14.0300 Natural, processed, and imitation cheese	2022
<b>2 Other agricultural products:</b>		14.0400 Dry, condensed, and evaporated dairy products	2023
2.0100 Cotton	0131,*019,*0219,*0259,*029	14.0500 Ice cream and frozen desserts	2024
2.0201 Food grains	*011,*019,*0219,*0259,*029	14.0600 Fluid milk	2026
2.0202 Feed grains	*011,*0139,*019,*0219,*0259,*029	14.0700 Canned and cured fish and seafoods	2091
2.0203 Grass seeds	*0139,*019,*0219,*0259,*029	14.0800 Canned specialties	2032
2.0300 Tobacco	0132,*019,*0219,*0259,*029	14.0900 Canned fruits, vegetables, preserves, jams, and jellies	2033
2.0401 Fruits	0171-2,0174-5,*0179,*019,*0219,*0259,*029	14.1000 Dehydrated fruits, vegetables, and soups	2034
2.0402 Tree nuts	0173,*0179,*019,*0219,*0259,*029	14.1100 Pickles, sauces, and salad dressings	2035
2.0501 Vegetables	0134,*0139,016,*019,*0219,*0259,*029,*0119	14.1200 Prepared fresh or frozen fish and seafoods	2092
2.0502 Sugar crops	0133,*019,*0219,*0259,*029	14.1301 Frozen fruits, fruit juices, and vegetables	2037
2.0503 Miscellaneous crops	*0119,*0139,*019,*0219,*0259,*029	14.1302 Frozen specialties, n.e.c.	2038
2.0600 Oil bearing crops	0116,*0119,*0139,*0219,*0259,*029	14.1401 Flour and other grain mill products	2041
2.0701 Forest products	*018,*019,*0219,*0259,*029	14.1402 Cereal breakfast foods	2043
2.0702 Greenhouse and nursery products	*018,*019,*0219,*0259,*029	14.1403 Prepared flour mixes and doughs	2045
<b>3 Forestry and fishery products:</b>		14.1501 Dog and cat food	2047
3.0001 Forestry products	081,083,097	14.1502 Prepared feeds, n.e.c.	2048
3.0002 Commercial fishing	091	14.1600 Rice milling	2044
<b>4 Agricultural, forestry, and fishery services:</b>		14.1700 Wet corn milling	2046
4.0001 Agricultural, forestry, and fishery services	0254,*0279,071-2,*075-6,085,092	14.1801 Bread, cake, and related products	2051,*546
4.0002 Landscape and horticultural services	078	14.1802 Cookies and crackers	2052
<b>MINING</b>		14.1803 Frozen bakery products, except bread	2053
<b>5+6 Metallic ores mining:</b>		14.1900 Sugar	2061-3
5.0000 Iron and ferroalloy ores	101,106	14.2001 Candy and other confectionery products	2064
6.0100 Copper ore	102	14.2002 Chocolate and cocoa products	2066
6.0200 Nonferrous metal ores, except copper	103-4,109,*108	14.2003 Chewing gum	2067
<b>7 Coal mining:</b>		14.2004 Salted and roasted nuts and seeds	2068
7.0000 Coal	122-3,*124	14.2101 Malt beverages	2082
<b>8 Crude petroleum and natural gas:</b>		14.2102 Malt	2083
8.0000 Crude petroleum and natural gas	131-2,*138	14.2103 Wines, brandy, and brandy spirits	2084
<b>9+10 Nonmetallic minerals mining:</b>		14.2104 Distilled and blended liquors	2085
9.0001 Dimension, crushed and broken stone	141-2	14.2200 Bottled and canned soft drinks	2086
9.0002 Sand and gravel	144	14.2300 Flavoring extracts and flavoring syrups, n.e.c.	2087
9.0003 Clay, ceramic, and refractory minerals	145	14.2400 Cottonseed oil mills	2074
9.0004 Nonmetallic mineral services and miscellaneous minerals	*148,149	14.2500 Soybean oil mills	2075
10.0000 Chemical and fertilizer minerals	147	14.2600 Vegetable oil mills, n.e.c.	2076
<b>CONSTRUCTION</b>		14.2700 Animal and marine fats and oils	2077
<b>11+12 Construction:</b>		14.2800 Roasted coffee	2095
11.0000 New and maintenance and repair	15-17,6552	14.2900 Edible fats and oils, n.e.c.	2079
11.0601 Petroleum and natural gas well drilling	*138	14.3000 Manufactured ice	2097
11.0602 Petroleum, natural gas, and solid mineral exploration	*138,*108,*124,*148	14.3100 Macaroni, spaghetti, vermicelli, and noodles	2098
11.0603 Access structures for solid mineral development	*108,*124,*148	14.3201 Potato chips and similar snacks	2096
12.0215 Maintenance and repair of petroleum and natural gas wells	*138	14.3202 Food preparations, n.e.c.	2099
<b>MANUFACTURING</b>		<b>15 Tobacco products:</b>	
<b>13 Ordnance and accessories:</b>		15.0101 Cigarettes	211
13.0100 Guided missiles and space vehicles	3761	15.0102 Cigars	212
13.0200 Ammunition, except for small arms, n.e.c.	3483	15.0103 Chewing and smoking tobacco and snuff	213
13.0300 Tanks and tank components	3795	15.0200 Tobacco stemming and redrying	214
13.0500 Small arms	3484	<b>16 Broad and narrow fabrics, yarn and thread mills:</b>	
13.0600 Small arms ammunition	3482	16.0100 Broadwoven fabric mills and fabric finishing plants	221-3,2261-2
13.0700 Ordnance and accessories, n.e.c.	3489	16.0200 Narrow fabric mills	224
		16.0300 Yarn mills and finishing of textiles, n.e.c.	2269,2281-2
		16.0400 Thread mills	2284
		<b>17 Miscellaneous textile goods and floor coverings:</b>	
		17.0100 Carpets and rugs	227
		17.0600 Coated fabrics, not rubberized	2295
		17.0700 Tire cord and fabrics	2296
		17.0900 Cordage and twine	2298
		17.1001 Nonwoven fabrics	2297
		17.1100 Textile goods, n.e.c.	2299
		<b>18 Apparel:</b>	
		18.0101 Women's hosiery, except socks	2251
		18.0102 Hosiery, n.e.c.	2252
		18.0201 Knit outerwear mills	2253
		18.0202 Knit underwear and nightwear mills	2254
		18.0203 Knitting mills, n.e.c.	2259
		18.0300 Knit fabric mills	2257-8
		18.0400 Apparel made from purchased materials	231-8,*3999
		<b>19 Miscellaneous fabricated textile products:</b>	
		19.0100 Curtains and draperies	2391
		19.0200 Housefurnishings, n.e.c.	2392
		19.0301 Textile bags	2393
		19.0302 Canvas and related products	2394
		19.0303 Pleating and stitching	2395
		19.0304 Automotive and apparel trimmings	2396
		19.0305 Schiffli machine embroideries	2397
		19.0306 Fabricated textile products, n.e.c.	2399



## Appendix B.—Industry Classification of the 1987 Benchmark Input-Output Accounts—Continued

I-O industry number and title		Related 1987 SIC codes	I-O industry number and title		Related 1987 SIC codes
<b>20+21</b>	<b>Lumber and wood products:</b>		<b>31</b>	<b>Petroleum refining and related products:</b>	
20.0100	Logging .....	241	31.0101	Petroleum refining .....	291
20.0200	Sawmills and planing mills, general .....	2421	31.0102	Lubricating oils and greases .....	2992
20.0300	Hardwood dimension and flooring mills .....	2426	31.0103	Products of petroleum and coal, n.e.c. ....	2999
20.0400	Special product sawmills, n.e.c. ....	2429	31.0200	Asphalt paving mixtures and blocks .....	2951
20.0501	Millwork .....	2431	31.0300	Asphalt felts and coatings .....	2952
20.0502	Wood kitchen cabinets .....	2434			
20.0600	Veneer and plywood .....	2435-6	<b>32</b>	<b>Rubber and miscellaneous plastics products:</b>	
20.0701	Structural wood members, n.e.c. ....	2439	32.0100	Tires and inner tubes .....	301
20.0702	Prefabricated wood buildings and components .....	2452	32.0200	Rubber and plastics footwear .....	302
20.0703	Mobile homes .....	2451	32.0300	Fabricated rubber products, n.e.c. ....	306
20.0800	Wood preserving .....	2491	32.0400	Miscellaneous plastics products, n.e.c. ....	308
20.0901	Wood pallets and skids .....	2448	32.0500	Rubber and plastics hose and belting .....	3052
20.0903	Wood products, n.e.c. ....	2499	32.0600	Gaskets, packing, and sealing devices .....	3053
20.0904	Reconstituted wood products .....	2493			
21.0000	Wood containers, n.e.c. ....	2441, 2449	<b>33+34</b>	<b>Footwear, leather, and leather products:</b>	
<b>22+23</b>	<b>Furniture and fixtures:</b>		33.0001	Leather tanning and finishing .....	311
22.0101	Wood household furniture, except upholstered .....	2511	34.0100	Boot and shoe cut stock and findings .....	313
22.0102	Household furniture, n.e.c. ....	2519	34.0201	Shoes, except rubber .....	3143-4, 3149
22.0103	Wood television and radio cabinets .....	2517	34.0202	House slippers .....	3142
22.0200	Upholstered household furniture .....	2512	34.0301	Leather gloves and mittens .....	315
22.0300	Metal household furniture .....	2514	34.0302	Luggage .....	316
22.0400	Mattresses and bedsprings .....	2515	34.0303	Women's handbags and purses .....	3171
23.0100	Wood office furniture .....	2521	34.0304	Personal leather goods, n.e.c. ....	3172
23.0200	Office furniture, except wood .....	2522	34.0305	Leather goods, n.e.c. ....	319
23.0300	Public building and related furniture .....	253			
23.0400	Wood partitions and fixtures .....	2541	<b>35</b>	<b>Glass and glass products:</b>	
23.0500	Partitions and fixtures, except wood .....	2542	35.0100	Glass and glass products, except containers .....	321, 3229, 323
23.0600	Drapery hardware and window blinds and shades .....	2591	35.0200	Glass containers .....	3221
23.0700	Furniture and fixtures, n.e.c. ....	2599			
<b>24</b>	<b>Paper and allied products, except containers:</b>		<b>36</b>	<b>Stone and clay products:</b>	
24.0100	Pulp mills .....	261	36.0100	Cement, hydraulic .....	324
24.0400	Envelopes .....	2677	36.0200	Brick and structural clay tile .....	3251
24.0500	Sanitary paper products .....	2676	36.0300	Ceramic wall and floor tile .....	3253
24.0701	Paper coating and glazing .....	2671-2	36.0400	Clay refractories .....	3255
24.0702	Bags, except textile .....	2673-4	36.0500	Structural clay products, n.e.c. ....	3259
24.0703	Die-cut paper and paperboard and cardboard .....	2675	36.0600	Vitreous china plumbing fixtures .....	3261
24.0705	Stationery, tablets, and related products .....	2678	36.0701	Vitreous china table and kitchenware .....	3262
24.0706	Converted paper products, n.e.c. ....	2679	36.0702	Fine earthenware table and kitchenware .....	3263
24.0800	Paper and paperboard mills .....	262-3	36.0800	Porcelain electrical supplies .....	3264
			36.0900	Pottery products, n.e.c. ....	3269
<b>25</b>	<b>Paperboard containers and boxes:</b>		36.1000	Concrete block and brick .....	3271
25.0000	Paperboard containers and boxes .....	265	36.1100	Concrete products, except block and brick .....	3272
			36.1200	Ready-mixed concrete .....	3273
<b>26A</b>	<b>Newspapers and periodicals:</b>		36.1300	Lime .....	3274
26.0100	Newspapers .....	271	36.1400	Gypsum products .....	3275
26.0200	Periodicals .....	272	36.1500	Cut stone and stone products .....	328
			36.1600	Abrasive products .....	3291
<b>26B</b>	<b>Other printing and publishing:</b>		36.1700	Asbestos products .....	3292
26.0301	Book publishing .....	2731	36.1900	Minerals, ground or treated .....	3295
26.0302	Book printing .....	2732	36.2000	Mineral wool .....	3296
26.0400	Miscellaneous publishing .....	274	36.2100	Nonmetallic refractories .....	3297
26.0501	Commercial printing .....	275	36.2200	Nonmetallic mineral products, n.e.c. ....	3299
26.0601	Manifold business forms .....	276			
26.0602	Blankbooks, looseleaf binders and devices .....	2782	<b>37</b>	<b>Primary iron and steel manufacturing:</b>	
26.0700	Greeting cards .....	277	37.0101	Blast furnaces and steel mills .....	3312
26.0802	Bookbinding and related work .....	2789	37.0102	Electrometallurgical products, except steel .....	3313
26.0803	Typesetting .....	2791	37.0103	Steel wiredrawing and steel nails and spikes .....	3315
26.0806	Platemaking and related services .....	2796	37.0104	Cold-rolled steel sheet, strip, and bars .....	3316
			37.0105	Steel pipe and tubes .....	3317
<b>27A</b>	<b>Industrial and other chemicals:</b>		37.0200	Iron and steel foundries .....	332
27.0100	Industrial inorganic and organic chemicals .....	281 (excl. *2819), 2865, 2869	37.0300	Iron and steel forgings .....	3462
27.0401	Gum and wood chemicals .....	2861	37.0401	Metal heat treating .....	3398
27.0402	Adhesives and sealants .....	2891	37.0402	Primary metal products, n.e.c. ....	3399
27.0403	Explosives .....	2892			
27.0404	Printing ink .....	2893	<b>38</b>	<b>Primary nonferrous metals manufacturing:</b>	
27.0405	Carbon black .....	2895	38.0100	Primary smelting and refining of copper .....	3331
27.0406	Chemicals and chemical preparations, n.e.c. ....	2899	38.0400	Primary aluminum .....	3334, *2819
			38.0501	Primary nonferrous metals, n.e.c. ....	3339
<b>27B</b>	<b>Agricultural fertilizers and chemicals:</b>		38.0600	Secondary nonferrous metals .....	334
27.0201	Nitrogenous and phosphatic fertilizers .....	2873-4	38.0700	Rolling, drawing, and extruding of copper .....	3351
27.0202	Fertilizers, mixing only .....	2875	38.0800	Aluminum rolling and drawing .....	3353-5
27.0300	Pesticides and agricultural chemicals, n.e.c. ....	2879	38.0900	Nonferrous rolling and drawing, n.e.c. ....	3356
			38.1000	Nonferrous wiredrawing and insulating .....	3357
<b>28</b>	<b>Plastics and synthetic materials:</b>		38.1100	Aluminum castings .....	3363, 3365
28.0100	Plastics materials and resins .....	2821	38.1200	Copper foundries .....	3366
28.0200	Synthetic rubber .....	2822	38.1300	Nonferrous castings, n.e.c. ....	3364, 3369
28.0300	Cellulosic manmade fibers .....	2823	38.1400	Nonferrous forgings .....	3463
28.0400	Manmade organic fibers, except cellulosic .....	2824			
<b>29A</b>	<b>Drugs:</b>		<b>39</b>	<b>Metal containers:</b>	
29.0100	Drugs .....	283	39.0100	Metal cans .....	3411
			39.0200	Metal shipping barrels, drums, kegs, and pails .....	3412
<b>29B</b>	<b>Cleaning and toilet preparations:</b>		<b>40</b>	<b>Heating, plumbing, and fabricated structural metal products:</b>	
29.0201	Soap and other detergents .....	2841	40.0100	Enameled iron and metal sanitary ware .....	3431
29.0202	Polishes and sanitation goods .....	2842	40.0200	Plumbing fixture fittings and trim .....	3432
29.0203	Surface active agents .....	2843	40.0300	Heating equipment, except electric and warm air furnaces.	3433
29.0300	Toilet preparations .....	2844	40.0400	Fabricated structural metal .....	3441
			40.0500	Metal doors, sash, frames, molding, and trim .....	3442
<b>30</b>	<b>Paints and allied products:</b>		40.0600	Fabricated plate work (boiler shops) .....	3443
30.0000	Paints and allied products .....	285	40.0700	Sheet metal work .....	3444
			40.0800	Architectural and ornamental metal work .....	3446
			40.0901	Prefabricated metal buildings and components .....	3448
			40.0902	Miscellaneous structural metal work .....	3449

Appendix B.—Industry Classification of the 1987 Benchmark Input-Output Accounts—Continued

I-O industry number and title	Related 1987 SIC codes	I-O industry number and title	Related 1987 SIC codes
<b>41 Screw machine products and stampings:</b>		54.0400 Electric housewares and fans .....	3634
41.0100 Screw machine products, bolts, etc. ....	3451-2	54.0500 Household vacuum cleaners .....	3635
41.0201 Automotive stampings .....	3465	54.0700 Household appliances, n.e.c. ....	3639
41.0202 Crowns and closures .....	3466	<b>55 Electric lighting and wiring equipment:</b>	
41.0203 Metal stampings, n.e.c. ....	3469	55.0100 Electric lamp bulbs and tubes .....	3641
<b>42 Other fabricated metal products:</b>		55.0200 Lighting fixtures and equipment .....	3645-8
42.0100 Cutlery .....	3421	55.0300 Wiring devices .....	3643-4
42.0201 Hand and edge tools, except machine tools and handsaws. ....	3423	<b>56 Audio, video, and communication equipment:</b>	
42.0202 Saw blades and handsaws .....	3425	56.0100 Household audio and video equipment .....	3651
42.0300 Hardware, n.e.c. ....	3429	56.0200 Prerecorded records and tapes .....	3652
42.0401 Plating and polishing .....	3471	56.0300 Telephone and telegraph apparatus .....	3661
42.0402 Coating, engraving, and allied services, n.e.c. ....	3479	56.0500 Communication equipment .....	3663, 3669
42.0500 Miscellaneous fabricated wire products .....	3495-6	<b>57 Electronic components and accessories:</b>	
42.0700 Steel springs, except wire .....	3493	57.0100 Electron tubes .....	3671
42.0800 Pipe, valves, and pipe fittings .....	3491-2, 3494, 3498	57.0200 Semiconductors and related devices .....	3674
42.1000 Metal foil and leaf .....	3497	57.0300 Other electronic components .....	3672, 3675-9
42.1100 Fabricated metal products, n.e.c. ....	3499	<b>58 Miscellaneous electrical machinery and supplies:</b>	
<b>43 Engines and turbines:</b>		58.0100 Storage batteries .....	3691
43.0100 Turbines and turbine generator sets .....	3511	58.0200 Primary batteries, dry and wet .....	3692
43.0200 Internal combustion engines, n.e.c. ....	3519	58.0400 Electrical equipment for internal combustion engines .....	3694
<b>44+45 Farm, construction, and mining machinery:</b>		58.0600 Magnetic and optical recording media .....	3695
44.0001 Farm machinery and equipment .....	3523	58.0700 Electrical machinery, equipment, and supplies, n.e.c. ....	3699
44.0002 Lawn and garden equipment .....	3524	<b>59A Motor vehicles (passenger cars and trucks):</b>	
45.0100 Construction machinery and equipment .....	3531	59.0301 Motor vehicles and passenger car bodies .....	3711
45.0200 Mining machinery, except oil field .....	3532	<b>59B Truck and bus bodies, trailers, and motor vehicles parts:</b>	
45.0300 Oil and gas field machinery and equipment .....	3533	59.0100 Truck and bus bodies .....	3713
<b>46 Materials handling machinery and equipment:</b>		59.0200 Truck trailers .....	3715
46.0100 Elevators and moving stairways .....	3534	59.0302 Motor vehicle parts and accessories .....	3714
46.0200 Conveyors and conveying equipment .....	3535	<b>60 Aircraft and parts:</b>	
46.0300 Hoists, cranes, and monorails .....	3536	60.0100 Aircraft .....	3721
46.0400 Industrial trucks and tractors .....	3537	60.0200 Aircraft and missile engines and engine parts .....	3724, 3764
<b>47 Metalworking machinery and equipment:</b>		60.0400 Aircraft and missile equipment, n.e.c. ....	3728, 3769
47.0100 Machine tools, metal cutting types .....	3541	<b>61 Other transportation equipment:</b>	
47.0200 Machine tools, metal forming types .....	3542	61.0100 Ship building and repairing .....	3731
47.0300 Special dies and tools and machine tool accessories .....	3544-5	61.0200 Boat building and repairing .....	3732
47.0401 Power-driven handtools .....	3546	61.0300 Railroad equipment .....	374
47.0402 Rolling mill machinery and equipment .....	3547	61.0500 Motorcycles, bicycles, and parts .....	375
47.0404 Electric and gas welding and soldering equipment .....	3548	61.0601 Travel trailers and campers .....	3792
47.0405 Industrial patterns .....	3543	61.0603 Motor homes .....	3716
47.0500 Metalworking machinery, n.e.c. ....	3549	61.0700 Transportation equipment, n.e.c. ....	3799
<b>48 Special industry machinery and equipment:</b>		<b>62 Scientific and controlling instruments:</b>	
48.0100 Food products machinery .....	3556	62.0101 Search and navigation equipment .....	381
48.0200 Textile machinery .....	3552	62.0102 Laboratory apparatus and furniture .....	3821
48.0300 Woodworking machinery .....	3553	62.0200 Mechanical measuring devices .....	3823-4, 3829
48.0400 Paper industries machinery .....	3554	62.0300 Environmental controls .....	3822
48.0500 Printing trades machinery and equipment .....	3555	62.0400 Surgical and medical instruments and apparatus .....	3841
48.0600 Special industry machinery, n.e.c. ....	3559	62.0500 Surgical appliances and supplies .....	3842
<b>49 General industrial machinery and equipment:</b>		62.0600 Dental equipment and supplies .....	3843
49.0100 Pumps and compressors .....	3561, 3563	62.0700 Watches, clocks, watchcases, and parts .....	387
49.0200 Ball and roller bearings .....	3562	62.0800 X-ray apparatus and tubes .....	3844
49.0300 Blowers and fans .....	3564	62.0900 Electromedical and electrotherapeutic apparatus .....	3845
49.0500 Mechanical power transmission equipment .....	3566, 3568	62.1000 Laboratory and optical instruments .....	3826-7
49.0600 Industrial process furnaces and ovens .....	3567	62.1100 Instruments to measure electricity .....	3825
49.0700 General industrial machinery and equipment, n.e.c. ....	3569	<b>63 Ophthalmic and photographic equipment:</b>	
49.0800 Packaging machinery .....	3565	63.0200 Ophthalmic goods .....	385
<b>50 Miscellaneous machinery, except electrical:</b>		63.0300 Photographic equipment and supplies .....	386
50.0100 Carburetors, pistons, rings, and valves .....	3592	<b>64 Miscellaneous manufacturing:</b>	
50.0200 Fluid power equipment .....	3593-4	64.0101 Jewelry, precious metal .....	3911
50.0300 Scales and balances, except laboratory .....	3596	64.0102 Jewelers' materials and lapidary work .....	3915
50.0400 Industrial and commercial machinery and equipment, n.e.c. ....	3599	64.0104 Silverware and plated ware .....	3914
<b>51 Computer and office equipment:</b>		64.0105 Costume jewelry .....	3961
51.0102 Calculating and accounting machines .....	3578	64.0200 Musical instruments .....	393
51.0103 Electronic computers .....	3571	64.0301 Games, toys, and children's vehicles .....	3944
51.0104 Computer peripheral equipment .....	3572, 3575, 3577	64.0302 Dolls and stuffed toys .....	3942
51.0400 Office machines, n.e.c. ....	3579	64.0400 Sporting and athletic goods, n.e.c. ....	3949
<b>52 Service industry machinery:</b>		64.0501 Pens, mechanical pencils, and parts .....	3951
52.0100 Automatic vending machines .....	3581	64.0502 Lead pencils and art goods .....	3952
52.0200 Commercial laundry equipment .....	3582	64.0503 Marking devices .....	3953
52.0300 Refrigeration and heating equipment .....	3585	64.0504 Carbon paper and inked ribbons .....	3955
52.0400 Measuring and dispensing pumps .....	3586	64.0700 Fasteners, buttons, needles, and pins .....	3965
52.0500 Service industry machinery, n.e.c. ....	3589	64.0800 Brooms and brushes .....	3991
<b>53 Electrical industrial equipment and apparatus:</b>		64.0900 Hard surface floor coverings, n.e.c. ....	3996
53.0200 Power, distribution, and specialty transformers .....	3612	64.1000 Burial caskets .....	3995
53.0300 Switchgear and switchboard apparatus .....	3613	64.1100 Signs and advertising specialties .....	3993
53.0400 Motors and generators .....	3621	64.1200 Manufacturing industries, n.e.c. ....	*3999
53.0500 Relays and industrial controls .....	3625	<b>TRANSPORTATION, COMMUNICATIONS, AND UTILITIES</b>	
53.0700 Carbon and graphite products .....	3624	<b>65A Railroads and related services; passenger ground transportation:</b>	
53.0800 Electrical industrial apparatus, n.e.c. ....	3629	65.0100 Railroads and related services .....	40, 474, *4789
<b>54 Household appliances:</b>		65.0200 Local and suburban transit and interurban highway passenger transportation. ....	41
54.0100 Household cooking equipment .....	3631	<b>65B Motor freight transportation and warehousing:</b>	
54.0200 Household refrigerators and freezers .....	3632	65.0300 Motor freight transportation and warehousing .....	42, *4789
54.0300 Household laundry equipment .....	3633		

## Appendix B.—Industry Classification of the 1987 Benchmark Input-Output Accounts—Continued

I-O industry number and title	Related 1987 SIC codes	I-O industry number and title	Related 1987 SIC codes
<b>65C Water transportation:</b> 65.0400 Water transportation .....	44	<b>75 Automotive repair and services:</b> 75.0001 Automotive rental and leasing, without drivers .....	751
<b>65D Air transportation:</b> 65.0500 Air transportation .....	45	75.0002 Automotive repair shops and services .....	753, 7549
<b>65E Pipelines, freight forwarders, and related services:</b> 65.0600 Pipelines, except natural gas .....	46	75.0003 Automobile parking and car washes .....	752, 7542
65.0701 Freight forwarders and other transportation services .....	473, 4783, 4785, *4789	<b>76 Amusements:</b> 76.0101 Motion picture services and theaters .....	781-3
65.0702 Arrangement of passenger transportation .....	472	76.0102 Video tape rental .....	784
<b>66 Communications, except radio and TV:</b> 66.0000 Communications, except radio and TV .....	481-2, 484, 489	76.0201 Theatrical producers (except motion picture), bands, orchestras and entertainers .....	792
<b>67 Radio and TV broadcasting:</b> 67.0000 Radio and TV broadcasting .....	483	76.0202 Bowling centers .....	793
<b>68A Electric services (utilities):</b> 68.0100 Electric services (utilities) .....	491, *493	76.0203 Professional sports clubs and promoters .....	7941
<b>68B Gas production and distribution (utilities):</b> 68.0200 Gas production and distribution (utilities) .....	492, *493	76.0204 Racing, including track operation .....	7948
<b>68C Water and sanitary services:</b> 68.0301 Water supply and sewerage systems .....	494, 4952	76.0205 Physical fitness facilities and membership sports and recreation clubs .....	7991, 7997
68.0302 Sanitary services, steam supply, and irrigation systems .....	4953, 4959, 496-7, *493	76.0206 Other amusement and recreation services .....	791, 7992-3, 7996, 7999
<b>WHOLESALE AND RETAIL TRADE</b>			
<b>69A Wholesale trade:</b> 69.0100 Wholesale trade .....	50, 51	<b>77A Health services:</b> 77.0100 Doctors and dentists .....	801-3, 8041
<b>69B Retail trade:</b> 69.0200 Retail trade, except eating and drinking .....	52-7 (excl. *546), 59, *7389, 8042	77.0200 Hospitals .....	806
<b>FINANCE, INSURANCE, AND REAL ESTATE</b>			
<b>70A Finance:</b> 70.0100 Banking .....	60	77.0301 Nursing and personal care facilities .....	805
70.0200 Credit agencies other than banks .....	61, 67 (excl. 6732)	77.0302 Other medical and health services, including veterinarians .....	074, 8043, 8049, 807-9
70.0300 Security and commodity brokers .....	62	<b>77B Educational and social services, and membership organizations:</b> 77.0401 Elementary and secondary schools .....	821
<b>70B Insurance:</b> 70.0400 Insurance carriers .....	63	77.0402 Colleges, universities, and professional schools .....	822
70.0500 Insurance agents, brokers, and services .....	64	77.0403 Private libraries, vocational schools, and educational services, n.e.c. ....	823-4, 829
<b>71A Owner-occupied dwellings:</b> 71.0100 Owner-occupied dwellings .....		77.0501 Business associations and professional membership organizations .....	861-2
<b>71B Real estate and royalties:</b> 71.0201 Real estate agents, managers, operators, and lessors ..	65 (excl. 6552)	77.0502 Labor organizations, civic, social, and fraternal associations .....	863-4
71.0202 Royalties .....		77.0503 Religious organizations .....	866
<b>SERVICES</b>			
<b>72A Hotels and lodging places:</b> 72.0100 Hotels and lodging places .....	70	77.0504 Other membership organizations .....	84, 865, 869, 8733, 6732
<b>72B Personal and repair services (except auto):</b> 72.0201 Laundry, cleaning, garment services, and shoe repair ...	721, 725	77.0600 Job training and related services .....	833
72.0202 Funeral service and crematories .....	726	77.0700 Child day care services .....	835
72.0203 Portrait photographic studios, and other miscellaneous personal services .....	722, 729	77.0800 Residential care .....	836
72.0204 Electrical repair shops .....	762	77.0900 Social services, n.e.c. ....	832, 839
72.0205 Watch, clock, jewelry, and furniture repair .....	763-4	<b>GOVERNMENT ENTERPRISES</b>	
72.0300 Beauty and barber shops .....	723-4	<b>78 Federal Government enterprises:</b> 78.0100 U.S. Postal Service .....	43
<b>73A Computer and data processing services:</b> 73.0104 Computer and data processing services .....	737	78.0200 Federal electric utilities .....	(1)
<b>73B Legal, engineering, accounting, and related services:</b> 73.0301 Legal services .....	81	78.0500 Other Federal Government enterprises .....	(1)
73.0302 Engineering, architectural, and surveying services .....	871	<b>79 State and local government enterprises:</b> 79.0100 State and local government passenger transit .....	(1)
73.0303 Accounting, auditing and bookkeeping, and miscellaneous services, n.e.c. ....	872, 89	79.0200 State and local government electric utilities .....	(1)
73.0101 Miscellaneous repair shops .....	769	79.0300 Other State and local government enterprises .....	(1)
73.0102 Services to dwellings and other buildings .....	734	<b>SPECIAL INDUSTRIES</b>	
73.0103 Personnel supply services .....	736	<b>80 Noncomparable imports:</b> 80.0000 Noncomparable imports .....	(2)
73.0105 Management and consulting services, testing and research labs .....	874, 8731-2, 8734	<b>81 Scrap, used and secondhand goods:</b> 81.0001 Scrap .....	(3)
73.0106 Detective and protective services .....	7381-2	81.0002 Used and secondhand goods .....	(3)
73.0107 Miscellaneous equipment rental and leasing .....	735	<b>82 General government industry:</b> 82.0000 General government industry .....	(4)
73.0108 Photofinishing labs and commercial photography .....	7384, 7335-6	<b>83 Rest of the world adjustment to final uses:</b> 83.0001 Rest of the world adjustment to final uses .....	(5)
73.0109 Other business services .....	732, 7383, *7389, 7331, 7334, 7338	<b>84 Household industry:</b> 84.0000 Household industry .....	(6)
<b>73D Advertising:</b> 73.0200 Advertising .....	731	<b>85 Inventory valuation adjustment:</b> 85.0000 Inventory valuation adjustment .....	(7)
<b>74 Eating and drinking places:</b> 74.0000 Eating and drinking places .....	58	<b>VALUE ADDED</b>	
		88.0000 Compensation of employees .....	(8)
		89.0000 Indirect business tax and nontax liability .....	(8)
		90.0000 Other value added .....	(8)
		<b>FINAL USES</b>	
		91.0000 Personal consumption expenditures .....	(9)
		92.0000 Gross private fixed investment .....	(9)
		93.0000 Change in business inventories .....	(9)
		94.0000 Exports of goods and services .....	(9)
		95.0000 Imports of goods and services .....	(9)
		96.0000 Federal Government purchases, national defense .....	(9)
		97.0000 Federal Government purchases, nondefense .....	(9)
		98.0001 State and local government purchases, elementary and secondary public school systems .....	(9)
		98.0002 State and local government purchases, public educational facilities beyond high school .....	(9)

Appendix B.—Industry Classification of the 1987 Benchmark Input-Output Accounts—Continued

I-O industry number and title	Related 1987 SIC codes	I-O industry number and title	Related 1987 SIC codes
98.0003 State and local government purchases, other education and libraries.	(9)	11.0204 Garages and service stations .....	.....
99.1001 State and local government purchases, hospitals and categorical health programs.	(9)	11.0205 Stores and restaurants .....	.....
99.1002 State and local government purchases, public welfare institutions and activities.	(9)	11.0206 Religious buildings .....	.....
99.1003 State and local government purchases, public sewerage systems, capital account only.	(9)	11.0207 Educational buildings .....	.....
99.1004 State and local government purchases, sanitation .....	(9)	11.0231 Hospitals .....	.....
99.2001 State and local government purchases, police .....	(9)	11.0232 Residential institutions and other health-related facilities	.....
99.2002 State and local government purchases, fire fighting organizations and auxiliary services.	(9)	11.0241 Amusement and recreation buildings .....	.....
99.2003 State and local government purchases, correctional institutions.	(9)	11.0250 Other nonfarm buildings .....	.....
99.3001 State and local government purchases, public highways (excluding non-capital expenditures of toll roads).	(9)	11.0301 Telephone and telegraph facilities .....	.....
99.3002 State and local government purchases, waterports and airports, capital account only.	(9)	11.0302 Railroads .....	.....
99.3003 State and local government purchases, government-operated transit systems, capital account only.	(9)	11.0303 Electric utility facilities .....	.....
99.3004 State and local government purchases, other commerce activities n.e.c., capital account only.	(9)	11.0304 Gas utility facilities .....	.....
99.3005 State and local government purchases, gas and electric utilities, capital account only.	(9)	11.0305 Petroleum pipelines .....	.....
99.3006 State and local government purchases, government-operated water supply facilities, capital account only.	(9)	11.0306 Water supply facilities .....	.....
99.3007 State and local government purchases, redevelopment projects, capital account only.	(9)	11.0307 Sewer system facilities .....	.....
99.3008 State and local government purchases, natural and agricultural resources and recreation facilities.	(9)	11.0308 Local transit facilities .....	.....
99.3009 State and local government purchases, other general government activities, n.e.c.	(9)	11.0400 Highways and streets .....	.....
<b>ADDENDUM: Special commodity groupings</b>		11.0501 Farm housing units and additions and alterations .....	.....
<b>11 New construction:</b>		11.0502 Farm service facilities .....	.....
11.0101 Residential 1-unit structures, nonfarm .....	.....	11.0601 Petroleum and natural gas well drilling .....	.....
11.0102 Residential 2-4 unit structures, nonfarm .....	.....	11.0602 Petroleum, natural gas, and solid mineral exploration .....	.....
11.0103 Residential garden apartments .....	.....	11.0603 Access structures for solid mineral development .....	.....
11.0104 Residential high-rise apartments .....	.....	11.0701 Military facilities .....	.....
11.0105 Residential additions and alterations, nonfarm .....	.....	11.0702 Dams and reservoirs .....	.....
11.0106 Hotels and motels .....	.....	11.0703 Other conservation and development facilities .....	.....
11.0107 Dormitories and other group housing .....	.....	11.0704 Other nonbuilding facilities .....	.....
11.0201 Industrial buildings .....	.....	<b>12 Maintenance and repair construction:</b>	
11.0202 Office buildings .....	.....	12.0100 Nonfarm residential structures .....	.....
11.0203 Warehouses .....	.....	12.0201 Other nonfarm buildings .....	.....
		12.0202 Farm residential buildings .....	.....
		12.0203 Farm service facilities .....	.....
		12.0204 Telephone and telegraph facilities .....	.....
		12.0205 Railroads .....	.....
		12.0206 Electric utility facilities .....	.....
		12.0207 Gas utility facilities .....	.....
		12.0208 Petroleum pipelines .....	.....
		12.0209 Water supply facilities .....	.....
		12.0210 Sewer facilities .....	.....
		12.0211 Local transit facilities .....	.....
		12.0212 Military facilities .....	.....
		12.0213 Conservation and development facilities .....	.....
		12.0214 Highways and streets .....	.....
		12.0215 Petroleum and natural gas wells .....	.....
		12.0216 Other nonbuilding facilities .....	.....

1. Although the SIC assigns the same codes to activities of both private firms and government agencies, SIC codes in the I-O accounts are used only for classifying private activities.  
 2. Noncomparable imports include imported goods and services that are not commercially produced in the United States, and goods and services that are produced abroad and used abroad by U.S. residents—for example, defense spending abroad.  
 3. Industry output is zero because there is no primary producing industry. Scrap is a secondary product of many industries, and used goods are sales and purchases typically between final uses. The sales are shown as negative values in the use table.  
 4. Industry output is defined as the compensation of general government employees except for those engaged

in construction work; their compensation is included in the construction industry. It also excludes the compensation of employees of government enterprises.  
 5. The commodity entries include adjustments to personal consumption expenditures and government purchases that eliminate items that are actually exports.  
 6. Industry output is defined as the compensation of domestic household workers.  
 7. The inventory valuation adjustment converts the inventory changes based on withdrawals valued primarily at historical cost as reported by most businesses to replacement cost, the valuation used in the I-O accounts.  
 8. There are no related SIC codes since these categories are not industries, but are categories of income.  
 9. There are no related SIC codes since these categories are not industries, but are categories of final uses.

Table 1.—The Make of Commodities

[Millions of dollars]

Industry number	For the distribution of industries producing a commodity, read the column for that commodity For the distribution of commodities produced by an industry, read the row for that industry	Livestock and livestock products	Other agricultural products	Forestry and fishery products	Agricultural, forestry, and fishery services	Metallic ores mining	Coal mining	Crude petroleum and natural gas	Non-metallic minerals mining	New construction	Maintenance and repair construction
		1	2	3	4	5+6	7	8	9+10	11	12
1	Livestock and livestock products .....	83,609		243	494						
2	Other agricultural products .....		82,183	1,788	974						
3	Forestry and fishery products .....			7,456							
4	Agricultural, forestry, and fishery services .....				22,201						
5+6	Metallic ores mining .....					6,800					
7	Coal mining .....						25,447				
8	Crude petroleum and natural gas .....							67,947			
9+10	Nonmetallic minerals mining .....						3				
11+12	Construction .....								11,321	445,347	173,466
13	Ordnance and accessories .....										
14	Food and kindred products .....										
15	Tobacco products .....										
16	Broad and narrow fabrics, yarn and thread mills .....										
17	Miscellaneous textile goods and floor coverings .....										
18	Apparel .....										
19	Miscellaneous fabricated textile products .....										
20+21	Lumber and wood products .....										
22+23	Furniture and fixtures .....										
24	Paper and allied products, except containers .....										
25	Paperboard containers and boxes .....										
26A	Newspapers and periodicals .....										
26B	Other printing and publishing .....										
27A	Industrial and other chemicals .....							2	8		
27B	Agricultural fertilizers and chemicals .....								1		
28	Plastics and synthetic materials .....										
29A	Drugs .....										
29B	Cleaning and toilet preparations .....										
30	Paints and allied products .....										
31	Petroleum refining and related products .....							1	140		
32	Rubber and miscellaneous plastics products .....										
33+34	Footwear, leather, and leather products .....										
35	Glass and glass products .....										
36	Stone and clay products .....								402		
37	Primary iron and steel manufacturing .....								1		
38	Primary nonferrous metals manufacturing .....										
39	Metal containers .....										
40	Heating, plumbing, and fabricated structural metal products .....										
41	Screw machine products and stampings .....										
42	Other fabricated metal products .....										
43	Engines and turbines .....										
44+45	Farm, construction, and mining machinery .....										
46	Materials handling machinery and equipment .....										
47	Metalworking machinery and equipment .....										
48	Special industry machinery and equipment .....										
49	General industrial machinery and equipment .....										
50	Miscellaneous machinery, except electrical .....										
51	Computer and office equipment .....										
52	Service industry machinery .....										
53	Electrical industrial equipment and apparatus .....										
54	Household appliances .....										
55	Electric lighting and wiring equipment .....										
56	Audio, video, and communication equipment .....										
57	Electronic components and accessories .....										
58	Miscellaneous electrical machinery and supplies .....										
59A	Motor vehicles (passenger cars and trucks) .....										
59B	Truck and bus bodies, trailers, and motor vehicles parts .....										
60	Aircraft and parts .....										
61	Other transportation equipment .....										
62	Scientific and controlling instruments .....										
63	Ophthalmic and photographic equipment .....										
64	Miscellaneous manufacturing .....										
65A	Railroads and related services; passenger ground transportation .....										
65B	Motor freight transportation and warehousing .....										
65C	Water transportation .....										
65D	Air transportation .....										
65E	Pipelines, freight forwarders, and related services .....										
66	Communications, except radio and TV .....										
67	Radio and TV broadcasting .....										
68A	Electric services (utilities) .....										
68B	Gas production and distribution (utilities) .....							59			
68C	Water and sanitary services .....										
69A	Wholesale trade .....										
69B	Retail trade .....										
70A	Finance .....										
70B	Insurance .....										
71A	Owner-occupied dwellings .....										
71B	Real estate and royalties .....										
72A	Hotels and lodging places .....										
72B	Personal and repair services (except auto) .....										
73A	Computer and data processing services .....										
73B	Legal, engineering, accounting, and related services .....										
73C	Other business and professional services, except medical .....										
73D	Advertising .....										
74	Eating and drinking places .....										
75	Automotive repair and services .....										
76	Amusements .....										
77A	Health services .....										
77B	Educational and social services, and membership organizations .....										
78	Federal Government enterprises .....										
79	State and local government enterprises .....										
82	General government industry .....										
84	Household industry .....										
85	Inventory valuation adjustment .....										
T	<b>Total commodity output .....</b>	<b>83,609</b>	<b>82,183</b>	<b>9,488</b>	<b>23,668</b>	<b>6,802</b>	<b>25,451</b>	<b>68,008</b>	<b>11,884</b>	<b>445,347</b>	<b>173,466</b>

\*Less than \$500,000.

**by Industries, 1987 Benchmark**  
at producers' prices]

Ordnance and accessories	Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscellaneous textile goods and floor coverings	Apparel	Miscellaneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers	Paperboard containers and boxes	Newspapers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	Industry number
13	14	15	16	17	18	19	20+21	22+23	24	25	26A	26B	27A	27B	
	3,075						131								1
	771														2
															3
															4
													(*)		5+6
													143		7
													1,259		8
															9+10
															11+12
26,047															13
	325,129						2		15	5			497	11	14
		26,361							18				2		15
			34,225	298	183	1,838		1	2			1			16
			317	15,177	4	75		1	53	1			17	1	17
			140	3	63,762	183		1							18
			68	35	55	16,647		10	13	2					19
1	1			2	(*)	8		20	14	7			1		20+21
2			1	2		35		72,281	160	1			2		22+23
	5		19	175	3	32		136	36,040	10			181		24
	3					1		49	16	79,160	86		232		25
								4		87	24,848		25		26A
										1		14,993	1,781		26B
24	119		1	43	1	17	3	3	587	38		64,778	28		27A
	13					3			42				75,354	843	26B
	7			343		1	4						1,132	11,877	27A
													3,170	177	27B
	250			3	3	27			1	2			210	59	28
	107			4				1					1,294	342	29A
	1												28		29B
													62		30
4								2					5,357	23	31
5	26		24	80	18	25	71	40	407	153			185	2	32
			2	2	43	18	1	4	1						33+34
						3		4							35
	(*)		4	33		1	71	(*)	100				71	15	36
3	124							1	1	1			31	10	37
													125		38
										42					39
2				1		1	75	59					1		40
5							6	10					18	2	41
10			15	1		1	1	6					2		42
4			3	15		4	30	89	162	56			3		43
13													47		44
1	3							1					7		45
5								2							46
								1					(*)	56	47
4								2					8		48
8								4	18				7		49
2								1	7	2			12		50
								1							51
								1	4				7		52
								1							53
								3	48	3			3		54
								4	4	2			1		55
								1	15				4		56
								1	1	11			4		57
								14	14						58
													2		59A
															59B
															60
															61
															62
															63
															64
															65A
															65B
															65C
															65D
															65E
															66
															67
															68A
															68B
															68C
															69A
															69B
															70A
															70B
															71A
															71B
															72A
															72B
															73A
															73B
															73C
															73D
															74
															75
															76
															77A
															77B
															78
															79
															82
															84
															85
28,177	329,636	26,381	34,832	16,266	64,259	19,006	72,936	36,700	80,961	25,288	15,674	67,126	89,852	13,365	T

Table 1.—The Make of Commodities

(Millions of dollars)

Industry number	For the distribution of industries producing a commodity, read the column for that commodity For the distribution of commodities produced by an industry, read the row for that industry  Commodity number	Plastics and synthetic materials	Drugs	Cleaning and toilet preparations	Paints and allied products	Petroleum refining and related products	Rubber and miscellaneous plastics products	Footwear, leather, and leather products	Glass and glass products	Stone and clay products	Primary iron and steel manufacturing
		28	29A	29B	30	31	32	33+34	35	36	37
1	Livestock and livestock products .....										
2	Other agricultural products .....										
3	Forestry and fishery products .....										
4	Agricultural, forestry, and fishery services .....										
5+6	Metallic ores mining .....									1	
7	Coal mining .....										
8	Crude petroleum and natural gas .....					4,162					
9+10	Nonmetallic minerals mining .....					72				299	4
11+12	Construction .....										
13	Ordnance and accessories .....										1
14	Food and kindred products .....		136	39	2	4	37	84			
15	Tobacco products .....										
16	Broad and narrow fabrics, yarn and thread mills .....	1,663					15			3	
17	Miscellaneous textile goods and floor coverings .....	110					132	(*)		1	
18	Apparel .....			1			17	42			
19	Miscellaneous fabricated textile products .....			2			17	10	(*)	1	
20+21	Lumber and wood products .....						76	1	43	29	2
22+23	Furniture and fixtures .....						76	3	87	2	14
24	Paper and allied products, except containers .....	4		123	9		850	1		5	
25	Paperboard containers and boxes .....					1	275				
26A	Newspapers and periodicals .....						1				
26B	Other printing and publishing .....			1			31	24	1	4	
27A	Industrial and other chemicals .....	4,851	489	769	143	922	297		11	135	26
27B	Agricultural fertilizers and chemicals .....	213	181	80		3	1			1	
28	Plastics and synthetic materials .....	36,104	71	72	31	3	686			1	
29A	Drugs .....	16	34,447	719			21			1	
29B	Cleaning and toilet preparations .....	39	286	30,826	37	44	60	6		10	
30	Paints and allied products .....	115		21	11,832	7	7			12	
31	Petroleum refining and related products .....	1		18	4	132,214	1			100	
32	Rubber and miscellaneous plastics products .....	232	7	11	21	1	82,604	23	39	43	5
33+34	Footwear, leather, and leather products .....			1			8	8,563			
35	Glass and glass products .....						18		15,893	38	
36	Stone and clay products .....	4	11	50	2	115	99	49	42,323	10	
37	Primary iron and steel manufacturing .....				1	1	7		1	15	65,015
38	Primary nonferrous metals manufacturing .....				1	1	48	65	38	494	
39	Metal containers .....						45				
40	Heating, plumbing, and fabricated structural metal products .....	7					229	18	37	81	
41	Screw machine products and stampings .....				1		97	3	18	2	10
42	Other fabricated metal products .....	3	1	3	1	2	237	12	7	42	109
43	Engines and turbines .....										14
44+45	Farm, construction, and mining machinery .....					1	11		1	4	104
46	Materials handling machinery and equipment .....						4			1	3
47	Metalworking machinery and equipment .....	1		1	1		53			42	28
48	Special industry machinery and equipment .....	1		3	2		34		1	6	16
49	General industrial machinery and equipment .....	1	1	1	3	1	56			12	27
50	Miscellaneous machinery, except electrical .....					1	33			4	49
51	Computer and office equipment .....				1		2			2	17
52	Service industry machinery .....			13			68		1	4	7
53	Electrical industrial equipment and apparatus .....	9				8	14			19	
54	Household appliances .....						8		1		
55	Electric lighting and wiring equipment .....	6					72	25	8	9	133
56	Audio, video, and communication equipment .....						4			8	
57	Electronic components and accessories .....				27	3	4			1	
58	Miscellaneous electrical machinery and supplies .....	21		3			66		1	5	2
59A	Motor vehicles (passenger cars and trucks) .....						8			1	
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	1			6	13	90		1	11	20
60	Aircraft and parts .....	4				1	15			1	2
61	Other transportation equipment .....						3				1
62	Scientific and controlling instruments .....	3	204	84			78	2	41	13	1
63	Ophthalmic and photographic equipment .....		28	3	59	2	132		1	2	
64	Miscellaneous manufacturing .....			31	2	1	111	14	29	22	7
65A	Railroads and related services; passenger ground transportation .....										
65B	Motor freight transportation and warehousing .....										
65C	Water transportation .....										
65D	Air transportation .....										
65E	Pipelines, freight forwarders, and related services .....										
66	Communications, except radio and TV .....										
67	Radio and TV broadcasting .....										
68A	Electric services (utilities) .....										
68B	Gas production and distribution (utilities) .....					20					
68C	Water and sanitary services .....										
69A	Wholesale trade .....										
69B	Retail trade .....										
70A	Finance .....										
70B	Insurance .....										
71A	Owner-occupied dwellings .....										
71B	Real estate and royalties .....										
72A	Hotels and lodging places .....										
72B	Personal and repair services (except auto) .....										
73A	Computer and data processing services .....										
73B	Legal, engineering, accounting, and related services .....										
73C	Other business and professional services, except medical .....										
73D	Advertising .....										
74	Eating and drinking places .....										
75	Automotive repair and services .....										
76	Amusements .....										
77A	Health services .....										
77B	Educational and social services, and membership organizations .....										
78	Federal Government enterprises .....										
79	State and local government enterprises .....									33	
82	General government industry .....										
84	Household industry .....										
85	Inventory valuation adjustment .....										
T	<b>Total commodity output .....</b>	<b>43,407</b>	<b>35,862</b>	<b>32,872</b>	<b>12,183</b>	<b>137,599</b>	<b>86,851</b>	<b>8,787</b>	<b>16,335</b>	<b>43,340</b>	<b>66,201</b>

\*Less than \$500,000.

by Industries, 1987 Benchmark—Continued  
at producers' prices]

Primary nonferrous metals manufacturing	Metal containers	Heating, plumbing, and fabricated structural metal products	Screw machine products and stampings	Other fabricated metal products	Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellaneous machinery, except electrical	Computer and office equipment	Service industry machinery	Industry number
38	39	40	41	42	43	44+45	46	47	48	49	50	51	52	
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5+6
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	8
7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	9+10
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	11+12
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13
10	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	14
3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	15
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	16
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	17
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	18
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	19
(*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20+21
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	22+23
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	24
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	25
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	26B
78	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	27B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	28
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	29B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	30
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	31
62	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	32
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	33+34
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	35
(*)	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36
384	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	37
54,561	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	38
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	39
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	40
19	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	42
94	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	43
31	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	44+45
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	46
1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	47
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	48
4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	49
17	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	50
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	51
18	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	52
2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	53
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	54
21	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	55
15	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	56
54	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	57
253	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	58
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59A
44	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	59B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	61
9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	62
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	63
5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	64
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65D
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	65E
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	66
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	68C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	69B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	70B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	71B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	72B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73C
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	73D
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	74
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	75
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	76
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77A
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	77B
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	78
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	79
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	82
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	84
.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	85
55,746	11,739	43,686	31,826	47,022	14,394	26,005	7,376	22,051	16,411	23,221	19,855	54,431	21,746	T



Table 1.—The Make of Commodities

[Millions of dollars]

Industry number	For the distribution of industries producing a commodity, read the column for that commodity For the distribution of commodities produced by an industry, read the row for that industry	Electrical industrial equipment and apparatus	Household appliances	Electric lighting and wiring equipment	Audio, video, and communication equipment	Electronic components and accessories	Miscellaneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Other transportation equipment
		53	54	55	56	57	58	59A	59B	60	61
1	Livestock and livestock products .....										
2	Other agricultural products .....										
3	Forestry and fishery products .....										
4	Agricultural, forestry, and fishery services .....										
5+6	Metallic ores mining .....										
7	Coal mining .....										
8	Crude petroleum and natural gas .....										
9+10	Nonmetallic minerals mining .....										
11+12	Construction .....										
13	Ordnance and accessories .....		1		140	9	69		16	3,802	2
14	Food and kindred products .....		1								
15	Tobacco products .....										
16	Broad and narrow fabrics, yarn and thread mills .....	1									
17	Miscellaneous textile goods and floor coverings .....			1							
18	Apparel .....										
19	Miscellaneous fabricated textile products .....	(*)		(*)		1			1		
20+21	Lumber and wood products .....		(*)	5	3		(*)		1	1	6
22+23	Furniture and fixtures .....	7	42	14	2	21	1		1	2	3
24	Paper and allied products, except containers .....						331				
25	Paperboard containers and boxes .....										
26A	Newspapers and periodicals .....										
26B	Other printing and publishing .....	1			3			1			1
27A	Industrial and other chemicals .....	2		1		1	14			1	(*)
27B	Agricultural fertilizers and chemicals .....										
28	Plastics and synthetic materials .....				3		1				
29A	Drugs .....										
29B	Cleaning and toilet preparations .....		1		13						
30	Paints and allied products .....										
31	Petroleum refining and related products .....				5						
32	Rubber and miscellaneous plastics products .....	29	50	63	2	19	16		285	1	5
33+34	Footwear, leather, and leather products .....										
35	Glass and glass products .....			8			2		2		1
36	Stone and clay products .....	6		5	7	28	14		7	16	
37	Primary iron and steel manufacturing .....	3		83		42			44		1
38	Primary nonferrous metals manufacturing .....	1		36	76	62	18		14	9	1
39	Metal containers .....										
40	Heating, plumbing, and fabricated structural metal products .....	7	54	4	2	9	17	6	17	11	24
41	Screw machine products and stampings .....	4	63	10	1	8	2	(*)	13	1	7
42	Other fabricated metal products .....	63	8	68	3	8	8		79	45	23
43	Engines and turbines .....	227					23		187	489	17
44+45	Farm, construction, and mining machinery .....	20	35	35			1		53	4	210
46	Materials handling machinery and equipment .....	21			2	1	(*)		15	(*)	8
47	Metalworking machinery and equipment .....	69	115	1	7	1	28		27	11	4
48	Special industry machinery and equipment .....	3	7		2	31	3	(*)	5	23	1
49	General industrial machinery and equipment .....	64	12	6	2	22	9		46	14	4
50	Miscellaneous machinery, except electrical .....	141	1	3	1	7	163	1	188	39	23
51	Computer and office equipment .....	43			339	1,162	188			12	
52	Service industry machinery .....	9	85	36	1	2	10	1	609	1	1
53	Electrical industrial equipment and apparatus .....	21,698	2	151	11	123	55		36	46	1
54	Household appliances .....	5	14,863	10	11	1	9				
55	Electric lighting and wiring equipment .....	185	5	16,384	60	43	98		192		
56	Audio, video, and communication equipment .....	58	273	49	38,346	433	122				
57	Electronic components and accessories .....	197		129	335	45,340	164				
58	Miscellaneous electrical machinery and supplies .....	62	5	159	223	397	18,539		690	4	3
59A	Motor vehicles (passenger cars and trucks) .....							130,195	3,346		
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	28	6	47	191		358	3,304	62,377	55	52
60	Aircraft and parts .....	96		4	33	37	81		12	79,455	51
61	Other transportation equipment .....	124		4		1	1	2	55	24	23,564
62	Scientific and controlling instruments .....	99	12	81	1,171	393	514	(*)	2	342	18
63	Ophthalmic and photographic equipment .....	3		6	31	2	126			1	
64	Miscellaneous manufacturing .....	2	30	21	10	1	4		8		44
65A	Railroads and related services; passenger ground transportation .....										
65B	Motor freight transportation and warehousing .....										
65C	Water transportation .....										
65D	Air transportation .....										
65E	Pipelines, freight forwarders, and related services .....										
66	Communications, except radio and TV .....										
67	Radio and TV broadcasting .....										
68A	Electric services (utilities) .....										
68B	Gas production and distribution (utilities) .....										
68C	Water and sanitary services .....										
69A	Wholesale trade .....										
69B	Retail trade .....										
70A	Finance .....										
70B	Insurance .....										
71A	Owner-occupied dwellings .....										
71B	Real estate and royalties .....										
72A	Hotels and lodging places .....										
72B	Personal and repair services (except auto) .....										
73A	Computer and data processing services .....										
73B	Legal, engineering, accounting, and related services .....										
73C	Other business and professional services, except medical .....										
73D	Advertising .....										
74	Eating and drinking places .....										
75	Automotive repair and services .....										
76	Amusements .....										
77A	Health services .....										
77B	Educational and social services, and membership organizations .....										
78	Federal Government enterprises .....										
79	State and local government enterprises .....										
82	General government industry .....										
84	Household industry .....										
85	Inventory valuation adjustment .....										
T	<b>Total commodity output .....</b>	<b>23,277</b>	<b>15,670</b>	<b>17,421</b>	<b>41,037</b>	<b>48,203</b>	<b>20,987</b>	<b>133,509</b>	<b>68,327</b>	<b>84,421</b>	<b>24,074</b>

\*Less than \$500,000.

by Industries, 1987 Benchmark—Continued  
at producers' prices]

Scientific and controlling instruments	Ophthalmic and photographic equipment	Miscellaneous manufacturing	Railroads and related services; passenger ground transportation	Motor freight transportation and warehousing	Water transportation	Air transportation	Pipelines, freight forwarders, and related services	Communications, except radio and TV	Radio and TV broadcasting	Electric services (utilities)	Gas production and distribution (utilities)	Water and sanitary services	Wholesale trade	Industry number
62	63	64	65A	65B	65C	65D	65E	66	67	68A	68B	68C	69A	
				807										1
														2
														3
														4
														5+6
														7
											11,968			8
														9+10
1,254		2												11+12
		2												13
		2												14
1		9												15
74		5												16
6		24												17
5		40												18
6		13												19
55	1	28												20+21
221	71	103												22+23
1		26												24
		6												25
1	21	146												26A
7	14	8												26B
		5												27A
														27B
1														28
281		2												29A
53		36												29B
		10												30
		(*)												31
72	11	126												32
9		6												33+34
15		5												35
44	65	20												36
79		1									26			37
16		1												38
														39
93	3	8												40
28		13												41
168		42												42
2	1													43
3		2												44+45
2		1												46
45	3	10												47
24	1	6												48
57		7												49
16	1	4												50
58	2	11												51
24		7												52
152		2												53
12	1	35												54
33	32	10												55
1,140		19												56
343	9	16												57
307		13												58
1		8												59A
141		2												59B
671	2	13												60
3		14												61
80,003	53	23												62
239	18,402	13												63
96	16													64
		30,178												65A
			43,271	162										65B
				113,492								2,603		65C
					24,053									65D
			302	733	108	76,253								65E
						1,465	23,301							66
								160,164						67
									2,250					68A
										132,335				68B
											67,248			68C
												36		69A
												10,971		69B
													423,751	70A
														70B
														71A
														71B
														72A
														72B
														73A
														73B
														73C
														73D
														74
														75
														76
														77A
														77B
										7,216				78
			4,822		37	1,342				16,902	2,938	14,859		79
														82
														84
														85
85,858	18,707	31,083	48,394	115,194	24,198	79,060	23,301	160,164	2,250	156,453	82,180	28,469	423,751	T

Table 1.—The Make of Commodities

[Millions of dollars]

Industry number	For the distribution of industries producing a commodity, read the column for that commodity For the distribution of commodities produced by an industry, read the row for that industry	Retail trade	Finance	Insurance	Owner-occupied dwellings	Real estate and royalties	Hotels and lodging places	Personal and repair services (except auto)	Computer and data processing services	Legal, engineering, accounting, and related services
		69B	70A	70B	71A	71B	72A	72B	73A	73B
		Commodity number								
1	Livestock and livestock products .....									
2	Other agricultural products .....									
3	Forestry and fishery products .....									
4	Agricultural, forestry, and fishery services .....									
5+6	Metallic ores mining .....									
7	Coal mining .....									
8	Crude petroleum and natural gas .....									
9+10	Nonmetallic minerals mining .....									
11+12	Construction .....									
13	Ordinance and accessories .....									
14	Food and kindred products .....									
15	Tobacco products .....									
16	Broad and narrow fabrics, yarn and thread mills .....									
17	Miscellaneous textile goods and floor coverings .....									
18	Apparel .....									
19	Miscellaneous fabricated textile products .....									
20+21	Lumber and wood products .....									
22+23	Furniture and fixtures .....									
24	Paper and allied products, except containers .....									
25	Paperboard containers and boxes .....									
26A	Newspapers and periodicals .....									
26B	Other printing and publishing .....									
27A	Industrial and other chemicals .....									
27B	Agricultural fertilizers and chemicals .....									
28	Plastics and synthetic materials .....									
29A	Drugs .....									
29B	Cleaning and toilet preparations .....									
30	Paints and allied products .....									
31	Petroleum refining and related products .....									
32	Rubber and miscellaneous plastics products .....									
33+34	Footwear, leather, and leather products .....									
35	Glass and glass products .....									
36	Stone and clay products .....									
37	Primary iron and steel manufacturing .....									
38	Primary nonferrous metals manufacturing .....									
39	Metal containers .....									
40	Heating, plumbing, and fabricated structural metal products .....									
41	Screw machine products and stampings .....									
42	Other fabricated metal products .....									
43	Engines and turbines .....									
44+45	Farm, construction, and mining machinery .....									
46	Materials handling machinery and equipment .....									
47	Metalworking machinery and equipment .....									
48	Special industry machinery and equipment .....									
49	General industrial machinery and equipment .....									
50	Miscellaneous machinery, except electrical .....									
51	Computer and office equipment .....								2,083	
52	Service industry machinery .....									
53	Electrical industrial equipment and apparatus .....									
54	Household appliances .....									
55	Electric lighting and wiring equipment .....									
56	Audio, video, and communication equipment .....								13	
57	Electronic components and accessories .....									
58	Miscellaneous electrical machinery and supplies .....									
59A	Motor vehicles (passenger cars and trucks) .....									
59B	Truck and bus bodies, trailers, and motor vehicles parts .....									
60	Aircraft and parts .....									
61	Other transportation equipment .....									
62	Scientific and controlling instruments .....									
63	Ophthalmic and photographic equipment .....									
64	Miscellaneous manufacturing .....								51	51
65A	Railroads and related services; passenger ground transportation .....									
65B	Motor freight transportation and warehousing .....									
65C	Water transportation .....									
65D	Air transportation .....									
65E	Pipelines, freight forwarders, and related services .....									
66	Communications, except radio and TV .....									
67	Radio and TV broadcasting .....									
68A	Electric services (utilities) .....									
68B	Gas production and distribution (utilities) .....					380,275				
68C	Water and sanitary services .....					934	40,064	66,233		
69A	Wholesale trade .....								60,821	
69B	Retail trade .....	420,693								
70A	Finance .....		280,874			79			1,640	
70B	Insurance .....			172,850						
71A	Owner-occupied dwellings .....				325,144					
71B	Real estate and royalties .....					380,275				
72A	Hotels and lodging places .....					934	40,064			
72B	Personal and repair services (except auto) .....							66,233		
73A	Computer and data processing services .....								60,821	
73B	Legal, engineering, accounting, and related services .....									177,931
73C	Other business and professional services, except medical .....							35	79	
73D	Advertising .....									
74	Eating and drinking places .....									
75	Automotive repair and services .....									
76	Amusements .....									
77A	Health services .....									
77B	Educational and social services, and membership organizations .....									
78	Federal Government enterprises .....	1,301		751		737		3		
79	State and local government enterprises .....	966	76			7,596				
82	General government industry .....									
84	Household industry .....									
85	Inventory valuation adjustment .....									
T	<b>Total commodity output .....</b>	<b>422,960</b>	<b>280,950</b>	<b>177,621</b>	<b>325,144</b>	<b>389,620</b>	<b>40,064</b>	<b>66,271</b>	<b>64,687</b>	<b>177,982</b>

\*Less than \$500,000.

by Industries, 1987 Benchmark—Continued  
at producers' prices]

Other business and professional services, except medical	Advertising	Eating and drinking places	Automotive repair and services	Amusements	Health services	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	Scrap, used and secondhand goods	General government industry	Household industry	Inventory valuation adjustment	Total industry output	Industry number
73C	73D	74	75	76	77A	77B	78	79	81	82	84	85	99	
				64									87,484	1
				88									86,742	2
													7,456	3
													22,201	4
													6,807	5+6
													25,452	7
													84,228	8
													12,964	9+10
													618,813	11+12
									3				31,438	13
													325,972	14
													26,383	15
													38,244	16
													15,982	17
													64,184	18
													16,987	19
									108				72,875	20+21
									1				36,777	22+23
									80				81,982	24
									191				25,511	25
													49,727	26A
													87,378	26B
													84,375	27A
									121				13,512	27B
													40,672	28
													36,012	29A
													33,229	29B
													12,072	30
													137,871	31
													85,572	32
													8,700	33+34
									6				16,085	35
													43,732	36
									116				68,091	37
									166				56,376	38
									256				11,904	39
									83				43,930	40
									309				31,973	41
									37				44,424	42
									52				14,096	43
									15				26,753	44+45
									5				7,194	46
									9				21,227	47
									2				16,254	48
									36				23,236	49
									15				20,003	50
									12				55,819	51
									38				22,409	52
									25				22,665	53
									27				15,361	54
									8				17,615	55
				27									40,700	56
													48,654	57
													20,823	58
									26				134,115	59A
									146				68,991	59B
									155				82,128	60
									11				24,082	61
									8				85,463	62
									14				19,725	63
													33,089	64
									26				43,458	65A
													116,095	65B
													24,053	65C
													76,253	65D
													25,908	65E
													161,127	66
													29,396	67
													132,371	68A
													67,549	68B
									291				11,262	68C
													423,751	69A
													420,694	69B
													286,613	70A
													172,850	70B
													325,144	71A
													380,275	71B
													40,997	72A
													66,302	72B
													60,821	73A
													177,931	73B
													220,728	73C
													15,884	73D
													209,394	74
													130,704	75
													78,192	76
													338,511	77A
													152,678	77B
													45,396	78
													69,484	79
													466,785	82
													7,709	84
													-17,817	85
													-17,817	T
211,165	9,333		92	22									87,516	
	15,884													
313		209,177												
	45		130,391											
118				78,148										
	408				338,393									
		1,844		75		152,270								
			744	416			33,469							
								18,754						
										466,785				
											7,709			
211,758	109,406	211,021	131,228	78,841	338,393	152,270	33,469	19,045	2,321	466,785	7,709	-17,817	8,175,016	

Table 2.1.—The Use of Commodities

[Millions of dollars]

Commodity number	For the distribution of output of a commodity, read the row for that commodity For the composition of inputs to an industry, read the column for that industry	Livestock and livestock products	Other agricultural products	Forestry and fishery products	Agri-cultural, forestry, and fishery services	Metallic ores mining	Coal mining	Crude petroleum and natural gas	Non-metallic minerals mining	Con-struction	Ordnance and accessories
		1	2	3	4	5+6	7	8	9+10	11+12	13
		Industry number									
1	Livestock and livestock products .....	16,818	1,584	27	1,251						
2	Other agricultural products .....	23,778	3,855		2,089					241	
3	Forestry and fishery products .....			168	32						
4	Agricultural, forestry, and fishery services .....	4,003	6,542	1,288	8					3,250	2
5+6	Metallic ores mining .....					519					
7	Coal mining .....					11	2,730			1	4
8	Crude petroleum and natural gas .....							3,149			
9+10	Nonmetallic minerals mining .....	6	254		2	7	32		452	4,834	
11	New construction .....									44	
12	Maintenance and repair construction .....	458	710	83	288	88	195	1,844	116	338	208
13	Ordnance and accessories .....			29						13	899
14	Food and kindred products .....	11,566		305	33	1		(*)	3	(*)	(*)
15	Tobacco products .....		44								
16	Broad and narrow fabrics, yarn and thread mills .....		26	72	114		1	18		4	4
17	Miscellaneous textile goods and floor coverings .....	25								1,760	1
18	Apparel .....		88	31	79		(*)	8	4	120	12
19	Miscellaneous fabricated textile products .....								(*)	223	(*)
20+21	Lumber and wood products .....	36	295			38	62	(*)	3	33,521	27
22+23	Furniture and fixtures .....									1,271	
24	Paper and allied products, except containers .....	110	139	1	10	1	8	8	38	1,184	7
25	Paperboard containers and boxes .....	5	333	1	185	(*)		2	4	45	22
26A	Newspapers and periodicals .....	9	10	1	3	(*)				24	52
26B	Other printing and publishing .....	9	10	40	24	3	12	32	8	204	22
27A	Industrial and other chemicals .....	102	64	14	7	204	138	837	220	1,310	127
27B	Agricultural fertilizers and chemicals .....	142	4,607	40	2,972	1	2		(*)	8	6
28	Plastics and synthetic materials .....										31
29A	Drugs .....	198			1						
29B	Cleaning and toilet preparations .....	54							7	2	10
30	Paints and allied products .....			4				6		4,688	4
31	Petroleum refining and related products .....	335	1,175	294	215	127	390	289	194	11,220	31
32	Rubber and miscellaneous plastics products .....	162	357	2	36	82	247	26	122	6,677	198
33+34	Footwear, leather, and leather products .....	25	(*)		3		(*)	1		29	1
35	Glass and glass products .....	6		2	10	1	(*)	8	4	993	3
36	Stone and clay products .....		100		12	23	80	265	2	31,054	50
37	Primary iron and steel manufacturing .....	14	15			134	19	260	43	10,023	473
38	Primary nonferrous metals manufacturing .....					15	13			6,194	562
39	Metal containers .....			18							
40	Heating, plumbing, and fabricated structural metal products .....	17	19			43	66	46	61	31,335	
41	Screw machine products and stampings .....	27				35	146		33	280	189
42	Other fabricated metal products .....	68	153	53	26	9	82	383	37	8,090	462
43	Engines and turbines .....			14	44	37	111	22	57		28
44+45	Farm, construction, and mining machinery .....	249	663	21	78	129	1,084	239	253	1,419	
46	Materials handling machinery and equipment .....					35	95		142	1,416	
47	Metalworking machinery and equipment .....	83	92	(*)	2	8	8	77	8	200	87
48	Special industry machinery and equipment .....										
49	General industrial machinery and equipment .....	27	50	8	4	78	428	157	164	1,513	235
50	Miscellaneous machinery, except electrical .....	47	123	3	4	12	78	36	19	126	119
51	Computer and office equipment .....				2						
52	Service industry machinery .....									6,638	
53	Electrical industrial equipment and apparatus .....	10	27			27	90	166	64	2,743	25
54	Household appliances .....									1,505	
55	Electric lighting and wiring equipment .....	19	43	1	8	4	28	19	8	9,894	2
56	Audio, video, and communication equipment .....				(*)		(*)	1		2,011	874
57	Electronic components and accessories .....										870
58	Miscellaneous electrical machinery and supplies .....	152	404	1	10	6	2	2	5	845	19
59A	Motor vehicles (passenger cars and trucks) .....										
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	90	217	5	40	13	9	7	3	414	1
60	Aircraft and parts .....				1						3,195
61	Other transportation equipment .....			156	12	5				2	
62	Scientific and controlling instruments .....			15	1	5	3	3	1	1,421	398
63	Ophthalmic and photographic equipment .....			(*)	8	1	3	10	2	116	19
64	Miscellaneous manufacturing .....	15	16	1	14	2	4	5	6	878	7
65A	Railroads and related services; passenger ground transportation .....	824	249	7	92	20	652	45	36	1,557	18
65B	Motor freight transportation and warehousing .....	1,914	1,290	24	208	52	159	154	182	8,274	153
65C	Water transportation .....	107	46	24	33	7	54	103	12	302	2
65D	Air transportation .....	20	100	7	418	25	19	86	48	853	145
65E	Pipelines, freight forwarders, and related services .....	4	15	2	3	2	6	4	3	37	1
66	Communications, except radio and TV .....	222	246	4	1	9	21	120	22	2,315	145
67	Radio and TV broadcasting .....										
68A	Electric services (utilities) .....	972	515	3	59	647	611	1,292	651	1,047	260
68B	Gas production and distribution (utilities) .....		164	1	2	74	11	556	218	322	89
68C	Water and sanitary services .....	111	368	6		15	60	131	135	252	31
69A	Wholesale trade .....	3,861	3,567	186	1,452	133	720	523	260	26,466	585
69B	Retail trade .....	75	228	8	67	8	9	6	3	24,114	4
70A	Finance .....	796	849	77	103	69	169	223	231	7,098	58
70B	Insurance .....	438	1,797	102	80	23	31	18	6	1,966	32
71A	Owner-occupied dwellings .....										
71B	Real estate and royalties .....	3,000	7,097		179	85	622	14,641	154	2,711	264
72A	Hotels and lodging places .....	49	54	14	24	12	5	27	106	707	27
72B	Personal and repair services (except auto) .....	26	70	7	182	2	4	10	20	139	12
73A	Computer and data processing services .....			16	90	33	3	5	115	6	15
73B	Legal, engineering, accounting, and related services .....	108	121	252	243	113	207	801	96	36,297	325
73C	Other business and professional services, except medical .....	362	954	132	206	38	82	144	112	14,948	346
73D	Advertising .....	19	21	3	92	5	46	853	19	244	615
74	Eating and drinking places .....	16	17	11	80	8	19	69	23	1,440	88
75	Automotive repair and services .....	50	179	131	588	187	197	191	17	6,117	28
76	Amusements .....				282		1	2	3	42	2
77A	Health services .....	744									
77B	Educational and social services, and membership organizations .....			21	40	14	42	29	15	25	9
78	Federal Government enterprises .....	12	13	6	50	10	3	2	17	243	7
79	State and local government enterprises .....	15	32	5	17	6	4	3	3	121	6
80	Noncomparable imports .....		17		37	31	18	792	9	5	18
81	Scrap, used and secondhand goods .....									14	
82	General government industry .....										
83	Rest of the world adjustment to final uses .....										
84	Household industry .....										
85	Inventory valuation adjustment .....										
I	Total intermediate inputs .....	72,410	40,021	3,748	12,253	3,331	9,964	28,744	4,751	327,813	12,510
VA	Value added .....	15,074	46,721	3,708	9,948	3,476	15,488	55,484	8,213	291,000	18,928
T	Total industry output .....	87,484	86,742	7,456	22,201	6,807	25,452	84,228	12,964	618,813	31,438

\*Less than \$500,000.

by Industries, 1987 Benchmark  
at producers' prices]

Food and kindred products	Tobacco products	Broad and narrow fabrics, yarn and thread mills	Miscellaneous textile goods and floor coverings	Apparel	Miscellaneous fabricated textile products	Lumber and wood products	Furniture and fixtures	Paper and allied products, except containers	Paperboard containers and boxes	Newspapers and periodicals	Other printing and publishing	Industrial and other chemicals	Agricultural fertilizers and chemicals	Plastics and synthetic materials	Commodity number
14	15	16	17	18	19	20+21	22+23	24	25	26A	26B	27A	27B	28	
60,821		262		13											1
22,262	1,707	3,192	34	31								86			2
2,033				295		5,874		108				68			3
8	(*)	3	1			22	1	6	(*)	1	2	2	1	1	4
105	15	28	10	4	4	21	7	15				636		6	5+6
8								428	2	1	13	273	5	132	7
								303				576	552	4	8
													926		9+10
810	39	179	48	129	42	423	289	397	88	187	238	575	55	158	11
		(*)		(*)		1		1							12
54,695	1	1	22	1	4	7	15	344	3	3	9	348	92	53	13
	3,664														14
		9,897	3,621	13,040	3,875	5	1,236	677			94				15
13		346	683	19	1,264	136	973	356		5	54				16
11	2	2	11	12,117	161	12	13	11	1	1	5	(*)	(*)	5	17
72			17	1,506	552	17	58	1		1	1	23	1	(*)	18
61	(*)	3	1		52	20,956	3,229	4,804		2		48			19
						71	146	1							20+21
3,142	131	24	94	111	39	64	51	13,139	11,548	6,485	14,631	721	48	463	22+23
5,856	952	131	99	200	200	279	555	1,088	53	12	336	409	55	269	24
10	2	2	1	4	2	7	4	4		443	206	7	1	2	25
1,880	377	11	7	54	30	38	33	110	13	3,358	7,054	52	190	15	26A
1,505	51	852	594	78	103	848	215	3,444	491	379	2,389	18,226	1,371	13,509	26B
187						186		205				366	2,533	95	27A
121		5,251	3,825	1,526	509	329	114	2,005	557		129	757		1,470	27B
890												136			28
154	18	88	78	294		1		386				104	25	230	29A
		1	1	(*)		386	376	66			39	408		89	29B
369	35	104	31	112	13	446	84	565	182	81	238	1,012	69	103	30
5,261	71	198	117	302	496	690	1,197	1,999	73	33	1,616	994	115	1,685	31
1		2		313	230	9	104	1	3	2	13	2		(*)	32
3,923	1	207	6			211	137	5	(*)		1	133	39	26	33+34
19	1	4	2	1	1	409	131	90		1	9	68	26	14	35
5		2	4	(*)	1	31	1,528	2	68	(*)	7	177	(*)	37	36
						53	469	47	54		178	59		2	38
8,683	2											462	55	3	39
						479									40
662						1,007	372					1	10	1	41
1,020	185	2	1	7	1	1,505	1,378	502	123	1	53	650	40	13	42
															43
(*)	1	12		1		39		1							44+45
38	6	14	5	9	6	147	79	44	18	7	23	35	2	21	46
90		109	224	160	18	83	13	368	100	77	359	410		9	47
220	7			7		113	71	55		2	2	21	16	83	48
90	14	31	10	20	8	190	38	95	27	13	40	77	5	48	49
										7	47				50
7						22						21			51
						44	59				(*)	41			52
(*)		(*)		1	(*)	147									53
7	(*)	1	(*)	1	1	114	6	5	1	1	3	3	(*)	1	54
1	(*)	(*)	(*)	(*)	(*)	1	1	1	(*)	1	3	1		(*)	55
4	1	2													56
				(*)		12	1	4		38	29	(*)	(*)		57
19	4	4	(*)	5		191	9	30	8	13	35	4	1	1	58
															59A
															59B
															60
31	5	4	1	4	3	12	14	38	7	43	172	84	6	5	61
19	2	5	2	6	2	14	10	12	3	121	527	20	1	5	62
18	1	3	2	305	105	43	62	9	3	13	141	5	(*)	3	63
1,842	10	75	43	18	15	663	160	828	287	174	430	908	281	475	64
5,132	110	277	238	280	123	1,026	369	1,627	570	327	1,005	1,494	781	570	65A
498	3	9	27	7	7	111	15	107	17	5	30	156	49	131	65B
484	29	29	9	114	21	81	83	387	48	940	368	232	15	59	65C
3	(*)	1	1	1	1	5	1	9	2	4	42	1	1	12	65D
447	28	48	28	95	29	125	89	152	72	206	241	207	39	91	65E
															66
2,750	87	1,088	216	519	105	1,044	344	2,292	277	246	725	2,850	304	964	67
1,336	20	152	112	96	40	344	82	994	80	21	95	2,389	466	771	68A
442	9	114	26	34	52	182	66	1,074	29	21	77	318	113	149	68B
16,850	536	1,807	433	2,171	951	3,806	2,039	3,637	999	782	3,080	3,141	747	1,743	68C
53	8	11	2	19	1	73	16	80	16	27	69	37	3	10	69A
937	131	106	60	281	129	446	379	303	41	256	449	274	226	104	69B
355	37	41	24	76	26	196	58	216	47	70	191	159	26	77	69C
															70A
866	78	71	57	385	102	305	257	221	118	722	973	441	37	118	70B
209	8	3	2	16	16	22	19	261	19	86	347	41	3	30	71A
192	7	191	52	144	69	32	27	127	11	53	48	38	4	81	71B
123	11	30	10	13	4	22	16	184	29	451	266	66	6	17	72A
866	61	91	36	175	46	230	421	205	69	897	616	1,701	83	1,038	72B
1,802	97	466	99	342	136	546	749	450	184	1,945	1,064	1,164	335	358	73A
8,657	783	227	343	992	202	987	730	857	40	869	1,061	1,135	194	479	73B
358	19	76	32	191	51	218	160	132	53	201	533	220	17	57	73C
477	101	20	292	4	502	178	732	184	327	327	879	116	30	91	73D
5	2	1	1	2	(*)	5	15	3	1	5	16	5	(*)	1	74
															75
80	12	22	3	25	97	175	63	62	4	78	124	25	10	53	76
235	54	38	24	149	38	71	63	72	22	586	594	85	5	19	77A
288	8	18	7	12		25	14	153	8	8	21	67	7	19	77B
5,056	47	25	166	59	88	13	32	84	2	55	234	636	101	147	78
			5					828					33		79
															80
															81
															82
															83
															84
															85
225,473	9,588	26,104	11,628	37,181	10,072	46,952	19,518	47,704	16,705	20,689	42,232	47,098	10,148	26,308	I
100,498	16,795	12,140	4,354	27,003	6,915	25,923	17,259	34,278	8,806	29,037	45,145	37,277	3,364	14,365	VA
325,972	26,383	38,244	15,982	64,184	16,987	72,875	36,777	81,982	25,511	49,727	87,378	84,375	13,512	40,672	T

Table 2.1.—The Use of Commodities

[Millions of dollars]

Commodity number	For the distribution of output of a commodity, read the row for that commodity For the composition of inputs to an industry, read the column for that industry	Drugs	Cleaning and toilet preparations	Paints and allied products	Petroleum refining and related products	Rubber and miscellaneous plastics products	Footwear, leather, and leather products	Glass and glass products	Stone and clay products	Primary iron and steel manufacturing	Primary nonferrous metals manufacturing
		29A	29B	30	31	32	33+34	35	36	37	38
		Industry number									
1	Livestock and livestock products .....	86	15								
2	Other agricultural products .....	27									
3	Forestry and fishery products .....	6		15							
4	Agricultural, forestry, and fishery services .....	1	(*)		2	3		1	2	2	2
5+6	Metallic ores mining .....			43					33	1,969	3,933
7	Coal mining .....	9	5		21	25	1	2	399	1,449	34
8	Crude petroleum and natural gas .....			13	75,971	75				10	
9+10	Nonmetallic minerals mining .....		9	17	490	35	2	184	3,513	231	18
11	New construction .....										
12	Maintenance and repair construction .....	131	75	46	952	392	28	130	328	1,294	273
13	Ordnance and accessories .....					1			57	20	
14	Food and kindred products .....	61	558	160	42	17	893	1	25	6	6
15	Tobacco products .....										
16	Broad and narrow fabrics, yarn and thread mills .....					812	239		126		43
17	Miscellaneous textile goods and floor coverings .....		18		39	894	197		2		1
18	Apparel .....	(*)	1	(*)	1	12	4	3	6	8	4
19	Miscellaneous fabricated textile products .....	(*)	2		(*)	24		(*)	2	1	(*)
20+21	Lumber and wood products .....		6		59	189	24	237	95	136	151
22+23	Furniture and fixtures .....									28	
24	Paper and allied products, except containers .....	161	61	2	9	789	6	15	551	15	17
25	Paperboard containers and boxes .....	314	1,146		191	987	66	707	142	79	103
26A	Newspapers and periodicals .....	1	2	(*)	2	9	1	1	5	3	3
26B	Other printing and publishing .....	182	345	26	17	99	5	25	25	35	25
27A	Industrial and other chemicals .....	697	2,971	2,334	1,758	3,905	271	982	1,269	1,723	715
27B	Agricultural fertilizers and chemicals .....	54									
28	Plastics and synthetic materials .....		468	1,441	60	15,955	109		189		784
29A	Drugs .....	3,758									
29B	Cleaning and toilet preparations .....	21	1,535	5	417	29	33		98	1	1
30	Paints and allied products .....		63	252	6	65		20	70	23	31
31	Petroleum refining and related products .....	39	329	80	9,933	235	10	45	238	332	364
32	Rubber and miscellaneous plastics products .....	749	1,713	1	620	4,074	250	173	125	139	647
33+34	Footwear, leather, and leather products .....	(*)			3	5	1,601	2	1	2	
35	Glass and glass products .....	233	231	8	277	450		1,309	71	5	48
36	Stone and clay products .....	1	3	132	51	247	7	320	5,111	996	263
37	Primary iron and steel manufacturing .....		2	16	42	300	1	6	277	10,233	515
38	Primary nonferrous metals manufacturing .....	1		7		115		1	23	1,470	17,261
39	Metal containers .....	138	433	534	167				(*)	1	(*)
40	Heating, plumbing, and fabricated structural metal products .....	12	16			44			7		
41	Screw machine products and stampings .....	64	196	6		439	9	35	100	275	90
42	Other fabricated metal products .....	65	390	21	397	860	43	2	219	772	528
43	Engines and turbines .....					15			2	11	
44+45	Farm, construction, and mining machinery .....								13		
46	Materials handling machinery and equipment .....					5	(*)		2	17	10
47	Metalworking machinery and equipment .....	3	6	1	19	161	4	87	25	524	488
48	Special industry machinery and equipment .....					233	1	11			
49	General industrial machinery and equipment .....	17	59	(*)	1	29	(*)	4	32	868	556
50	Miscellaneous machinery, except electrical .....	10	25	2	41	255	9	49	48	207	114
51	Computer and office equipment .....	8								4	
52	Service industry machinery .....									4	
53	Electrical industrial equipment and apparatus .....					13		34	12	434	329
54	Household appliances .....					(*)	1	5		(*)	
55	Electric lighting and wiring equipment .....	1	(*)	(*)	13	120	(*)	3	32	10	2
56	Audio, video, and communication equipment .....	(*)	(*)	(*)	(*)	1		(*)	(*)	(*)	(*)
57	Electronic components and accessories .....					55			1		
58	Miscellaneous electrical machinery and supplies .....	1	(*)		1	23		1	1	4	1
59A	Motor vehicles (passenger cars and trucks) .....										
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	5	3	(*)	54	13	(*)	4	9	7	12
60	Aircraft and parts .....										
61	Other transportation equipment .....									4	
62	Scientific and controlling instruments .....	28	6	2	24	43	1	16	16	21	14
63	Ophthalmic and photographic equipment .....	5	5	1	6	19	1	3	10	11	8
64	Miscellaneous manufacturing .....	3	45	1	3	19	83	2	40	11	5
65A	Railroads and related services; passenger ground transportation .....	27	112	158	153	603	18	185	644	1,149	336
65B	Motor freight transportation and warehousing .....	119	369	280	563	2,331	88	222	2,527	916	1,707
65C	Water transportation .....	12	38	19	889	115	3	12	154	319	57
65D	Air transportation .....	56	80	11	67	127	24	67	61	78	102
65E	Pipelines, freight forwarders, and related services .....	1	2	2	5,485	6	(*)	2	3	5	2
66	Communications, except radio and TV .....	126	79	40	187	249	22	122	295	150	111
67	Radio and TV broadcasting .....										
68A	Electric services (utilities) .....	288	189	74	1,653	1,829	68	478	1,159	2,813	2,501
68B	Gas production and distribution (utilities) .....	167	167	43	1,260	511	19	580	789	1,898	807
68C	Water and sanitary services .....	34	48	8	209	202	10	34	120	489	95
69A	Wholesale trade .....	1,439	1,583	343	6,367	4,238	369	682	1,269	4,274	3,417
69B	Retail trade .....	9	5	(*)	19	32	(*)	6	28	23	27
70A	Finance .....	186	88	16	1,232	386	50	69	286	247	267
70B	Insurance .....	32	52	6	361	181	10	26	91	138	112
71A	Owner-occupied dwellings .....										
71B	Real estate and royalties .....	211	150	58	614	538	45	86	218	157	184
72A	Hotels and lodging places .....	13	25	7	27	23	43	15	17	10	36
72B	Personal and repair services (except auto) .....	48	21	1	54	118	12	12	55	76	85
73A	Computer and data processing services .....	5	7	1	126	265	5	23	89	108	35
73B	Legal, engineering, accounting, and related services .....	1,568	169	54	376	580	30	53	168	191	140
73C	Other business and professional services, except medical .....	1,071	395	62	1,156	685	90	93	408	1,246	561
73D	Advertising .....	366	853	55	321	704	130	375	864	2,010	537
74	Eating and drinking places .....	66	61	18	51	246	28	37	122	119	91
75	Automotive repair and services .....	111	55	7	128	318	11	88	223	103	285
76	Amusements .....	2	2	(*)	3	7	(*)	1	2	2	2
77A	Health services .....										
77B	Educational and social services, and membership organizations .....	172	38	4	145	297	2	8	39	13	37
78	Federal Government enterprises .....	26	51	8	72	86	31	19	49	87	46
79	State and local government enterprises .....	17	19	1	16	31	8	7	11	43	25
80	Noncomparable imports .....	777	187	65	392	1,155	2	87	130	84	789
81	Scrap, used and secondhand goods .....							72		2,583	2,376
82	General government industry .....										
83	Rest of the world adjustment to final uses .....										
84	Household industry .....										
85	Inventory valuation adjustment .....										
I	Total intermediate inputs .....	13,840	15,583	6,504	113,613	47,948	5,018	7,875	23,169	42,721	42,163
VA	Value added .....	22,172	17,646	5,568	24,258	37,624	3,681	8,210	20,563	25,370	14,213
T	Total industry output .....	36,012	33,229	12,072	137,871	85,572	8,700	16,085	43,732	68,091	56,376

\*Less than \$500,000.

by Industries, 1987 Benchmark—Continued  
at producers' prices]

Metal containers	Heating, plumbing, and fabricated structural metal products	Screw machine products and stampings	Other fabricated metal products	Engines and turbines	Farm, construction, and mining machinery	Materials handling machinery and equipment	Metalworking machinery and equipment	Special industry machinery and equipment	General industrial machinery and equipment	Miscellaneous machinery, except electrical	Computer and office equipment	Service industry machinery	Electrical industrial equipment and apparatus	Household appliances	Commodity number
39	40	41	42	43	44+45	46	47	48	49	50	51	52	53	54	
															1
															2
(*)	1	(*)	1	1	2	(*)	1	(*)	1	1	1	(*)	1	(*)	3
1	13	12	21	4	12	(*)	6	(*)	1	1		2	6	4	4
	5		8									18			5+6
															7
33	518	324	552	92	223	74	127	123	156	192	434	136	185	73	8
(*)	6	2	4	1	3	2	4	3	2	1	1	2	3	2	9+10
			1						136	17			4		11
1	2	2	10	2	1	(*)	2	1	3	1	2	2	2	2	12
	(*)	103					(*)	(*)	(*)	(*)		(*)			13
11	138	32	177		46	11	26	27	25	5	1	107	29	98	14
					(*)	1			(*)	(*)					15
4	33	31	10	7	7	2	6	4	26	7	78	11	120	35	16
28	231	132	329	24	64	5	83	29	83	64	90	130	132	308	17
(*)	5	2	4	1	1	1	3	2	2	2	2	2	2	2	18
220	27	15	29	7	18	34	20	12	17	15	7	12	19	12	19
61	119	242	742	4	35	10	168	193	18	19	13	86	43	96	20
															21
17	33	49	169						41	36	56	96	89	366	22
															23
6	15	15	17							1					24
196	243	79	342	5	73	7	23		4	3	21	66	69	112	25
17	104	40	118	13	43	18	66	33	44	34	57	24	147	15	26
19	425	97	859	139	727	101	151	257	325	85	1,045	435	468	642	27
					3		(*)			(*)	2	(*)	(*)		28
(*)	325	55	114	(*)	(*)			42	1	1	3	20	1	166	29
13	125	76	171	48	57	13	235	46	99	147	13	98	222	70	30
2,571	8,294	7,905	5,190	1,938	2,988	607	1,467	1,017	2,135	1,338	335	1,229	1,117	1,144	31
3,008	3,194	980	2,049	652	225	95	427	365	639	910	709	1,140	1,214	312	32
199		4	8												33
	996		4	175	997	193	307	247	157	214	174	192	110	40	34
15	1,209	476	729	233	394	134	179	103	189	189	174	486	400	243	35
159	1,475	585	2,453	213	440	260	170	216	215	253	302	389	220	567	36
	1		33	1,306	971	66		60	83	12		30	104	43	37
					22	383		6							38
17	401	952	256	91	122	37	847	150	146	283	35	122	61	37	39
								372							40
3	202	63	30	188	709	225	130	380	1,559	210	27	398	89	101	41
20	115	370	187	451	682	165	612	427	382	1,076	42	242	127	23	42
								3	8	1	11,591		3		43
1	110	50	216	476	117	287	601	979	976	80	1,398	1,456	843	592	44
(*)	4	13	3	3	7	1	6	1	1	17	206	142	64	190	45
(*)	1	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	913	(*)	(*)	(*)	46
			11	155	129	48	10	11	16	9	4,063	6	584	137	47
(*)	1		16		9						63		20	2	48
2	11	21	11	22	72	1	9	2	4	2	9	1	4		49
											22		27		50
1	96	5	13	2	5	1	4	3	11	3		396	40	303	51
1	11	5	10	7	7	2	7	5	7	7	17	4	6	3	52
1	22	4	15	1	11	4	7	2	4	2	24	32	17	108	53
41	137	107	107	8	38	7	27	21	22	22	26	30	61	31	54
190	680	433	551	105	306	58	151	84	132	100	109	156	156	166	55
3	13	13	21	3	15	2	5	3	6	4	6	8	5	3	56
50	128	27	156	30	120	20	91	91	123	64	740	120	220	78	57
(*)	2	(*)			1	(*)	1	1	1	(*)	2	(*)	1		58
11	117	85	173	39	80	29	86	76	101	72	192	76	126	36	59
															60
139	378	423	685	139	267	54	269	154	290	253	338	186	289	135	61
70	159	165	262	44	116	20	57	40	81	43	30	51	81	69	62
26	34	79	54	14	29	11	16	16	18	8	45	37	20	18	63
796	2,479	1,639	2,302	707	1,742	460	784	929	1,153	565	4,147	1,526	1,407	1,114	64
3	30	3	21	2	8	3	15	6	8	7	18	4	8	1	65
38	186	205	306	50	104	32	108	106	110	166	361	59	246	110	66
20	84	57	85	22	58	14	46	28	40	28	76	31	41	23	67
															68
54	285	139	221	41	79	38	177	127	130	188	521	84	120	41	69
10	207	11	30	1	25	5	40	29	38	20	337	36	128	33	70
5	20	40	49	21	34	9	22	15	29	22	22	14	25	17	71
10	23	81	104	52	80	13	41	22	58	56	52	27	42	20	72
23	179	717	231	45	171	44	135	112	142	150	414	110	128	42	73
47	409	225	481	90	198	64	205	150	222	485	473	132	221	118	74
241	278	265	821	104	612	149	355	272	291	318	151	346	775	318	75
14	139	69	134	22	74	24	91	57	76	84	199	56	77	35	76
37	246	93	227	26	35	12	184	63	78	114	229	26	101	16	77
(*)	5	1	2	2	1	2	1	1	5	2	5	1	1	(*)	78
															79
9	38	97	40	5	6	2	19	6	19	20	29	20	9	25	80
4	46	36	52	11	43	12	22	29	33	16	22	8	26	50	81
6	14	11	29	5	7	(*)	7	2	6	4	9	5	7	8	82
7	20	20	65	26	168	12	76	67	58	43	1,066	8	142	52	83
41			34		12		11		11	7					84
															85
															86
															87
															88
															89
															90
															91
															92
															93
															94
															95
															96
															97
															98
															99
															100
8,483	24,930	17,787	22,155	7,870	14,902	3,884	8,756	7,659	10,836	8,164	31,625	11,987	11,056	8,767	I
3,421	19,001	14,187	22,269	6,226	11,852	3,309	12,470	8,595	12,400	11,839	24,195	10,422	11,609	6,594	VA
11,904	43,930	31,973	44,424	14,096	26,753	7,194	21,227	16,254	23,236	20,003	55,819	22,409	22,665	15,361	T



Table 2.1.—The Use of Commodities

[Millions of dollars]

Commodity number	For the distribution of output of a commodity, read the row for that commodity For the composition of inputs to an industry, read the column for that industry	Electric lighting and wiring equipment	Audio, video, and communication equipment	Electronic components and accessories	Miscellaneous electrical machinery and supplies	Motor vehicles (passenger cars and trucks)	Truck and bus bodies, trailers, and motor vehicles parts	Aircraft and parts	Other transportation equipment	Scientific and controlling instruments	Ophthalmic and photographic equipment
		55	56	57	58	59A	59B	60	61	62	63
1	Livestock and livestock products .....										
2	Other agricultural products .....										
3	Forestry and fishery products .....										
4	Agricultural, forestry, and fishery services .....	1	2	2	1	4	3	3	(*)	4	1
5+6	Metallic ores mining .....				89					13	
7	Coal mining .....	2	3	1	2	63	18	8	3	6	20
8	Crude petroleum and natural gas .....										
9+10	Nonmetallic minerals mining .....							1		(*)	
11	New construction .....										
12	Maintenance and repair construction .....	107	153	493	111	431	469	495	471	407	91
13	Ordnance and accessories .....					1	1	38	(*)	(*)	
14	Food and kindred products .....	2	1	5	1	(*)	2	5	2	77	1
15	Tobacco products .....										
16	Broad and narrow fabrics, yarn and thread mills .....	11				117	2	84	11	312	
17	Miscellaneous textile goods and floor coverings .....				8	328	112	96	122	394	18
18	Apparel .....	1	10	12	3	14	3	6	3	32	1
19	Miscellaneous fabricated textile products .....		(*)	(*)	(*)	3,520	48	163	182	13	(*)
20+21	Lumber and wood products .....	29	27	1	1	4	199	31	471	173	
22+23	Furniture and fixtures .....		446	11	2	1,678	4	25	60	62	
24	Paper and allied products, except containers .....	5	101	34	13	99	28	13	9	262	1,197
25	Paperboard containers and boxes .....	239	137	80	140	57	115	7	7	343	158
26A	Newspapers and periodicals .....	2	3	4	4	5	3	4	1	11	2
26B	Other printing and publishing .....	15	102	32	25	43	32	53	9	145	18
27A	Industrial and other chemicals .....	99	107	789	390	606	216	36	55	298	470
27B	Agricultural fertilizers and chemicals .....										
28	Plastics and synthetic materials .....	409	105	169	111	55	365	96	184	574	123
29A	Drugs .....										
29B	Cleaning and toilet preparations .....						8			3	
30	Paints and allied products .....	30	26	1	1	1,615	222	140	144	45	1
31	Petroleum refining and related products .....	30	24	42	47	236	145	114	47	126	31
32	Rubber and miscellaneous plastics products .....	372	1,418	2,539	898	8,393	2,158	703	289	1,444	402
33+34	Footwear, leather, and leather products .....		1	1	(*)	5	1	1	(*)	4	(*)
35	Glass and glass products .....	641	23	403	1	1,291	85	15	236	194	99
36	Stone and clay products .....	24	14	53	19	247	366	203	58	117	9
37	Primary iron and steel manufacturing .....	747	117	130	244	717	4,421	1,349	934	1,291	29
38	Primary nonferrous metals manufacturing .....	806	420	1,956	1,205	85	3,046	3,539	437	1,357	125
39	Metal containers .....									20	
40	Heating, plumbing, and fabricated structural metal products .....		81	187	86	2	1,278	183	853	439	
41	Screw machine products and stampings .....	558	324	443	213	9,934	2,280	957	181	1,032	72
42	Other fabricated metal products .....	278	411	1,743	475	1,645	1,384	928	478	1,312	235
43	Engines and turbines .....					2,371	58		1,057		
44+45	Farm, construction, and mining machinery .....									110	
46	Materials handling machinery and equipment .....					13	8			1	
47	Metalworking machinery and equipment .....	53	38	88	48	1,105	209	1,145	50	178	23
48	Special industry machinery and equipment .....			126							
49	General industrial machinery and equipment .....	(*)	38	12	47	68	1,411	164	503	155	19
50	Miscellaneous machinery, except electrical .....	42	42	108	59	863	2,658	772	71	191	37
51	Computer and office equipment .....		108	170	21			41		757	10
52	Service industry machinery .....		5			2,773	176			80	
53	Electrical industrial equipment and apparatus .....	413	237	155	203	212	90	93	402	1,295	66
54	Household appliances .....					(*)	(*)			148	
55	Electric lighting and wiring equipment .....	485	272	78	163	495	28	1	90	206	32
56	Audio, video, and communication equipment .....	(*)	1,472	36	13	1,347	14	962	13	20	(*)
57	Electronic components and accessories .....	98	8,193	4,625	1,304	856	381	1,211	7	7,877	1,573
58	Miscellaneous electrical machinery and supplies .....	16	156	26	1,025	3,740	871	77	129	217	28
59A	Motor vehicles (passenger cars and trucks) .....					1,548	184			602	
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	3	2	3	6	40,005	6,259	5	313	16	2
60	Aircraft and parts .....					51		15,912	40		
61	Other transportation equipment .....					21	14		626		
62	Scientific and controlling instruments .....	3	54	195	9	1,234	27	2,217	70	2,295	186
63	Ophthalmic and photographic equipment .....	6	10	13	9	17	14	18	3	29	269
64	Miscellaneous manufacturing .....	37	13	11	4	59	11	15	5	46	5
65A	Railroads and related services; passenger ground transportation .....	31	21	46	36	572	173	39	50	85	37
65B	Motor freight transportation and warehousing .....	146	138	214	151	2,168	936	220	202	362	115
65C	Water transportation .....	2	3	10	7	43	26	12	8	16	16
65D	Air transportation .....	148	220	297	241	685	194	1,182	62	338	101
65E	Pipelines, freight forwarders, and related services .....	1	(*)	2	1	3	2	3	(*)	2	1
66	Communications, except radio and TV .....	65	159	187	82	159	310	359	92	432	42
67	Radio and TV broadcasting .....										
68A	Electric services (utilities) .....	185	247	789	231	491	731	660	191	758	122
68B	Gas production and distribution (utilities) .....	54	52	99	51	342	261	144	26	132	40
68C	Water and sanitary services .....	18	21	34	41	113	59	47	28	98	35
69A	Wholesale trade .....	1,138	1,970	2,125	1,379	10,545	3,688	1,552	1,328	3,212	720
69B	Retail trade .....	5	5	7	11	124	43	27	10	30	6
70A	Finance .....	163	163	450	222	493	159	883	50	452	208
70B	Insurance .....	27	59	70	45	345	142	113	29	158	50
71A	Owner-occupied dwellings .....										
71B	Real estate and royalties .....	105	326	389	144	117	159	459	346	774	87
72A	Hotels and lodging places .....	87	30	150	134	79	24	766	9	72	38
72B	Personal and repair services (except auto) .....	18	178	39	20	103	80	46	14	90	9
73A	Computer and data processing services .....	30	96	86	37	106	92	103	14	100	19
73B	Legal, engineering, accounting, and related services .....	109	235	317	189	220	212	508	90	803	117
73C	Other business and professional services, except medical .....	166	449	586	244	543	484	1,016	194	1,030	273
73D	Advertising .....	268	782	464	602	2,434	1,807	1,929	183	2,115	489
74	Eating and drinking places .....	66	93	157	118	193	150	148	37	308	59
75	Automotive repair and services .....	69	50	71	137	482	2,196	101	100	487	72
76	Amusements .....	2	4	23	24	23	4	21	12	28	12
77A	Health services .....										
77B	Educational and social services, and membership organizations .....	8	49	123	16	254	81	122	8	155	111
78	Federal Government enterprises .....	21	79	34	20	148	172	120	15	175	18
79	State and local government enterprises .....	6	8	19	10	64	42	17	4	24	4
80	Noncomparable imports .....	32	233	195	74	291	918	99	16	340	306
81	Scrap, used and secondhand goods .....	2			108		155				
82	General government industry .....										
83	Rest of the world adjustment to final uses .....										
84	Household industry .....										
85	Inventory valuation adjustment .....										
I	Total intermediate inputs .....	8,532	20,363	21,758	11,371	109,111	42,721	42,620	12,687	36,349	8,462
VA	Value added .....	9,083	20,337	26,895	9,452	25,004	26,270	39,508	11,396	49,114	11,264
T	Total industry output .....	17,615	40,700	48,654	20,823	134,115	68,991	82,128	24,082	85,463	19,725

\*Less than \$500,000.

by Industries, 1987 Benchmark—Continued  
at producers' prices]

Miscellaneous manufacturing	Railroads and related services; passenger ground transportation	Motor freight transportation and warehousing	Water transportation	Air transportation	Pipelines, freight forwarders, and related services	Communications, except radio and TV	Radio and TV broadcasting	Electric services (utilities)	Gas production and distribution (utilities)	Water and sanitary services	Wholesale trade	Retail trade	Finance	Commodity number
64	65A	65B	65C	65D	65E	66	67	68A	68B	68C	69A	69B	70A	
2			1											1
20			3											2
3	3	5	3	6	2	4	4	20	2	6	145	82	28	3
3	(*)		9					13,284		5	24	9		4
17									16,417					5+6
189	4,213	438	128	470	441	6,678	285	8,764	650	878	2,816	5,741	1,966	7
65	(*)	(*)	(*)	1	4	1		(*)			15	1	1	8
	9	1	65	279	8	2	10	(*)	(*)	4	69	949	3	9+10
324				4							1			11
43	1	5	63								58	26		12
18	15	7	95	14	(*)	73	(*)	4	(*)	1	63	23		13
126	(*)	13	74	9	116	1	(*)	(*)	(*)		163	48	128	14
724		15			35					142	1,335	56		15
9											5	4		16
289	19	52	7	56	35	80	14	36	5	68	1,746	2,948	832	17
434	7	67	13	1	29	43	1	12			4,237	526	3	18
7	7	25	3	14	8	18	6	6	2	2	92	86	304	19
88	115	268	48	149	154	689	53	122	17	20	3,792	181	3,667	20+21
337	86	80	18	17	8	93	30	423	4	509	70	27	11	22+23
	33		21							2				24
692												39		25
1	1	3		4		52								26A
143	2	17	42	4		109			5		36	29	29	26B
90	2,132	5,794	731	8,583	89	117	9	3,078	338	260	2,759	2,112	418	27A
947	144	1,117	76	19	66	394	1	118	6	253	1,174	421	80	27B
101	1	7	1	2	6	5	2	1	1	(*)	61	22	20	28
28	37	5	(*)	8	8	15	(*)	11	1	35	164	8	43	29
144	8	9	8	3	2	1		9	(*)	12	109	18	10	30
548	83	1	(*)	2		1		2	1		32	7	1	31
1,839	7		195			44		110						32
								15			631			33
1											39			34
131	9		2	48		329		98						35
288	267	263	499	55	36	181	1	20	2	312	236	596	14	36
3	44	42	163	24	242	242		625						37
		3									27			38
76	72	16	178	20	1	4	1	81	2	2	262	2		39
											98	33	3	40
25	291	76	573	4	116	301		73	5	5	4	9	12	41
124	155	26	157	43	18	7	2	47	5	5	217	71	6	42
5	1	8	1	2	12	58	20	4	47		49	38	48	43
26	1	20	1	2						3	121	87		44+45
90	148	98	12	10	27	264	22	198	(*)		1	(*)	9	46
		(*)	13	(*)		(*)					1	8	1	47
22	22	48	36	9	1	55	(*)	130	9	24	36	37	41	48
4	1	4	(*)	7	7	2,179	51	1	(*)	(*)	21	33	37	49
397	11	6		90	8	1,683	778		3	1	22	4	211	50
12	55	69	33	25	45	206	46	213	100	18	214	130	368	51
		19												52
10	132	397	1	13	12	14	2	13	5	726	348	238	50	53
				3,336										54
4	856	5	364	11	14	14	2	8	2					55
8	2	4	32	30	1	9	22	93	17	398	66	23	8	56
14	10	45	5	14	16	68	191	26	6	5	190	116	1,047	57
1,218	14	31	49	37	24	94	11	22	6	10	387	413	410	58
83	2,322	260	15	65	78	72	34	3,550	10	36	498	724	561	59
494	122	18,968	74	174	96	142	62	408	16	73	967	1,150	5,272	60
23	38	91	2,472	155	31	15	2	415	25	14	110	56	23	61
77	82	242	69	4,158	579	234	210	336	108	28	4,336	777	2,087	62
1	720	3,543	1,425	4,821	1,086	2	1	15	290	4	396	33	10	63
71	47	1,425	113	926	477	33,184	190	191	25	74	5,573	4,574	5,192	64
							471							65
293	99	964	570	244	973	480	24	27	165	37	3,277	9,939	1,702	66
64	2	43	4	14	37	22	3	5,812	20,956	498	1,831	1,011	104	67
109	33	42	100	36	130	1,136	33	202	24	610	311	687	293	68
1,731	788	1,789	565	2,266	131	883	154	1,342	291	360	9,954	1,696	1,246	69
19	200	3,230	4	67	26	41	4	48	20	58	764	902	135	70
260	336	489	1,303	2,110	1,026	1,898	293	1,545	445	159	5,778	3,679	48,309	71
71	189	957	8	371	531	65	4	952	51	1,068	494	532	3,280	72
														73
242	301	2,165	794	1,005	936	2,806	1,568	507	140	80	9,905	24,309	9,486	74
24	69	166	14	38	86	81	33	42	8	38	2,978	599	804	75
31	36	91	23	421	50	403	346	268	37	142	1,761	1,982	427	76
14	349	342	270	717	452	1,647	123	909	239	89	399	1,961	12,499	77
332	172	547	73	351	440	710	401	508	98	137	4,900	14,163	7,237	78
362	617	1,353	1,501	1,073	329	1,058	470	519	171	134	20,686	7,477	13,020	79
1,683	34	238	246	1,741	644	1,176	82	79	20	18	8,482	20,898	3,548	80
236	179	555	56	2,288	476	503	231	135	36	54	5,786	5,504	3,357	81
240	589	4,401	34	286	271	523	39	474	218	4	9,026	6,870	1,554	82
11	4	15	1	43	11	699	9,383	5	1	1	1,033	199	119	83
														84
124	133	56	62	7	115	231	130	346	23	10	658	424	774	85
91	58	147	7	7	58	251	22	325	129	43	871	1,455	7,115	86
8	62	135	(*)	22	7	34	26	19	8	1	379	427	42	87
968	180	10	2,880	4,262	61	3,758	35	7	14	1	2,710	134	3,898	88
														89
														90
														91
														92
														93
														94
														95
														96
														97
														98
														99
														100
17,347	16,774	51,373	16,406	41,048	10,599	66,178	15,936	46,665	41,224	7,477	125,804	127,371	142,016	VA
15,742	26,684	64,722	7,647	35,205	15,309	94,949	13,460	85,706	26,325	3,786	297,947	293,322	144,596	T
33,089	43,458	116,095	24,053	76,253	25,908	161,127	29,396	132,371	67,549	11,262	423,751	420,694	286,613	

Table 2.1.—The Use of Commodities

[Millions of dollars]

Commodity number	For the distribution of output of a commodity, read the row for that commodity For the composition of inputs to an industry, read the column for that industry	Insurance	Owner-occupied dwellings	Real estate and royalties	Hotels and lodging places	Personal and repair services (except auto)	Computer and data processing services	Legal, engineering, accounting, and related services	Other business and professional services, except medical	Advertising
		70B	71A	71B	72A	72B	73A	73B	73C	73D
		Industry number								
1	Livestock and livestock products .....				2				27	
2	Other agricultural products .....			19	3					
3	Forestry and fishery products .....			1	1					
4	Agricultural, forestry, and fishery services .....	6	2,584	2,002	217	10	4	11	57	1
5+6	Metallic ores mining .....									
7	Coal mining .....			1	7	4			4	
8	Crude petroleum and natural gas .....									
9+10	Nonmetallic minerals mining .....									
11	New construction .....									
12	Maintenance and repair construction .....	517	15,921	21,677	1,483	646	165	313	1,466	89
13	Ordnance and accessories .....	(*)		(*)	(*)			7	205	
14	Food and kindred products .....	2		9	104	20	1	9	140	(*)
15	Tobacco products .....									
16	Broad and narrow fabrics, yarn and thread mills .....				48	189			1	
17	Miscellaneous textile goods and floor coverings .....			(*)	8	15	(*)	1		
18	Apparel .....			1	97	339			77	(*)
19	Miscellaneous fabricated textile products .....	11		5	531	359	1	1	10	18
20+21	Lumber and wood products .....			34	5	25	9	31	28	1
22+23	Furniture and fixtures .....			2	(*)	1	1	3	3	(*)
24	Paper and allied products, except containers .....	143		452	295	304	365	639	898	52
25	Paperboard containers and boxes .....	1		22	6	22	11	36	34	9
26A	Newspapers and periodicals .....	24		16	34	22	17	31	78	3
26B	Other printing and publishing .....	1,389		1,284	332	689	2,067	1,518	2,955	688
27A	Industrial and other chemicals .....	5	1	24	5	234	3	14	774	3
27B	Agricultural fertilizers and chemicals .....		269	111	212				291	
28	Plastics and synthetic materials .....					34				
29A	Drugs .....								47	
29B	Cleaning and toilet preparations .....			36	242	898	9	37	717	1
30	Paints and allied products .....					1			137	1
31	Petroleum refining and related products .....	98		389	242	310	121	458	690	46
32	Rubber and miscellaneous plastics products .....	21	73	540	772	1,107	991	282	1,753	19
33+34	Footwear, leather, and leather products .....	16		10	9	691	4	37	20	1
35	Glass and glass products .....	1		9	479		3	34	181	
36	Stone and clay products .....	1		31	30	246	1	1	60	(*)
37	Primary iron and steel manufacturing .....			2	1	4	1	4	18	1
38	Primary nonferrous metals manufacturing .....					29				
39	Metal containers .....								246	
40	Heating, plumbing, and fabricated structural metal products .....		100	61						
41	Screw machine products and stampings .....					61			152	
42	Other fabricated metal products .....	2		71	26	184	26	106	214	4
43	Engines and turbines .....								101	
44+45	Farm, construction, and mining machinery .....		195	4					510	
46	Materials handling machinery and equipment .....								258	
47	Metalworking machinery and equipment .....	1		1	2	13	2	7	584	1
48	Special industry machinery and equipment .....			2	(*)	1	1	3	274	(*)
49	General industrial machinery and equipment .....			24					724	
50	Miscellaneous machinery, except electrical .....	1		3	3	53	5	44	262	1
51	Computer and office equipment .....	10		21	6	464	972	259	354	9
52	Service industry machinery .....					157			253	
53	Electrical industrial equipment and apparatus .....	(*)				39	88	1	559	
54	Household appliances .....	(*)		59	7	658			29	
55	Electric lighting and wiring equipment .....	6		64	123	27	6	66	180	1
56	Audio, video, and communication equipment .....	24		22	4	24	11	17	95	1
57	Electronic components and accessories .....	8				1,608	1,746	15	3,335	
58	Miscellaneous electrical machinery and supplies .....	170		138	3	28	441	339	636	17
59A	Motor vehicles (passenger cars and trucks) .....									
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	42		48	16	31	15	178	113	10
60	Aircraft and parts .....									
61	Other transportation equipment .....	2			6				264	
62	Scientific and controlling instruments .....	5		3	34	26	37	6	136	2
63	Ophthalmic and photographic equipment .....	254		91	18	600	29	718	1,397	10
64	Miscellaneous manufacturing .....	141		134	116	1,412	25	378	353	20
65A	Railroads and related services; passenger ground transportation .....	325	8	445	106	78	62	130	366	28
65B	Motor freight transportation and warehousing .....	406	12	595	173	303	113	224	683	37
65C	Water transportation .....	7	3	14	10	21	4	22	126	2
65D	Air transportation .....	502	1	424	46	187	551	1,673	3,276	43
65E	Pipelines, freight forwarders, and related services .....	69		115	49	4	3	10	15	1
66	Communications, except radio and TV .....	2,405		1,539	587	981	1,571	2,204	3,403	210
67	Radio and TV broadcasting .....									453
68A	Electric services (utilities) .....	98		308	1,278	1,192	295	467	1,274	43
68B	Gas production and distribution (utilities) .....	4		60	604	476	39	85	418	10
68C	Water and sanitary services .....	298		75	372	144	14	169	84	3
69A	Wholesale trade .....	277	144	493	558	1,517	904	1,199	3,037	70
69B	Retail trade .....	46	256	229	50	83	41	223	258	18
70A	Finance .....	5,832	1,619	6,294	1,931	844	543	1,412	2,512	154
70B	Insurance .....	54,111	9,705	6,322	47	72	36	316	748	19
71A	Owner-occupied dwellings .....									
71B	Real estate and royalties .....	4,830	12,218	32,320	1,523	3,767	2,051	8,826	6,374	1,069
72A	Hotels and lodging places .....	1,047		910	28	84	87	3,128	1,050	191
72B	Personal and repair services (except auto) .....	192		763	684	1,436	56	557	277	46
73A	Computer and data processing services .....	1,153		74	18	356	7,058	8,284	6,035	21
73B	Legal, engineering, accounting, and related services .....	2,823	1,657	2,190	630	2,765	491	15,381	5,285	200
73C	Other business and professional services, except medical .....	1,963	1,347	7,363	2,690	2,246	1,674	16,011	14,020	437
73D	Advertising .....	2,025		6,263	658	1,492	533	493	2,320	92
74	Eating and drinking places .....	2,856		3,338	50	462	473	1,142	2,537	199
75	Automotive repair and services .....	799		1,381	541	870	464	2,717	2,412	318
76	Amusements .....	66		72	17	19	11	121	152	123
77A	Health services .....									
77B	Educational and social services, and membership organizations .....	63		194	130	898	344	921	1,339	37
78	Federal Government enterprises .....	688		467	189	305	259	1,357	1,559	63
79	State and local government enterprises .....	25		112	233	122	20	114	118	23
80	Noncomparable imports .....	618		56	60	10	179	465	928	24
81	Scrap, used and secondhand goods .....									
82	General government industry .....									
83	Rest of the world adjustment to final uses .....									
84	Household industry .....									
85	Inventory valuation adjustment .....									
I	Total intermediate inputs .....	86,428	46,111	99,839	18,787	32,319	25,051	73,250	82,309	4,941
VA	Value added .....	86,422	279,033	280,436	22,211	33,983	35,770	104,682	138,418	10,942
T	Total industry output .....	172,850	325,144	380,275	40,997	66,302	60,821	177,931	220,728	15,884

\*Less than \$500,000.

by Industries, 1987 Benchmark—Continued  
at producers' prices]

Eating and drinking places	Automotive repair and services	Amusements	Health services	Educational and social services, and membership organizations	Federal Government enterprises	State and local government enterprises	General government industry	Household industry	Inventory valuation adjustment	Total intermediate use	Personal consumption expenditures	Gross private fixed investment	Change in business inventories	Commodity number
74	75	76	77A	77B	78	79	82	84	85		91	92	93	
391		20	62	83	4					81,465	3,090		-719	1
1,446		8	121	95	14					59,031	15,682		-4,261	2
1,673		4	26	31	16					10,351	3,763		101	3
9	16	571	158	485	3	125				21,754	647			4
										7,268		446	19	5+6
5	6	2	6	8	1,061	1,062				21,498	138		1,100	7
										97,326		84	-1,758	8
				3		25				11,974	36		-8	9+10
										44		358,627		11
1,836	654	1,017	2,742	7,154	571	16,093				124,100		17,300		12
		(*)	2	5	(*)	1				1,304	1,099	198	457	13
47,037	7	655	3,035	2,970	393	4				125,260	201,153		1,771	14
										3,664	20,774		242	15
		69		46	14					35,123	1,047		599	16
25	16	9	16	10	4	10				8,549	4,992	2,369	412	17
		169	138	374	243	1	30			14,438	71,153		1,446	18
17	(*)	91	776	69	78	6				9,369	10,088		333	19
27	9	209	46	200						68,635	1,820	3,920	1,157	20+21
(*)	1	10	4	1						3,867	19,469	15,467	596	22+23
735	189	152	1,542	1,529	32	50				69,529	11,902		916	24
869	16	6	124	120	15	(*)				24,501	292		127	25
6	43	28	180	578	3	6				2,547	11,741		449	26A
294	80	387	2,619	9,745	383	162				49,322	10,923		1,188	26B
62	58	167	6,516	226	8	1,137				79,565	978	795	515	27A
		9	11	62		119				12,543	784		138	27B
										39,534			502	28
			6,464	127	(*)	3				11,676	23,958		1,199	29A
117	10	11	839	189	29	52				6,952	25,019		558	29B
				39		1				11,365	194		197	30
128	3,663	104	922	984	641	4,249				70,488	60,189		3,001	31
1,461	1,331	386	7,834	1,035	49	115				78,219	11,669	155	1,292	32
66	5	53	12	36	14	2				3,578	13,619		467	33+34
339	847	3	789	252	3	9				15,366	1,518		179	35
37	37	2	289	5		142				43,245	2,705		606	36
1	(*)	1	5	18		(*)				74,182	11	13	1,204	37
21		28		(*)	1					57,761	72	36	864	38
										11,619		21	24	39
				4	1	2				39,226	525	2,811	557	40
9	3,331	30	244	167	90	3				29,847	1,464		237	41
52	4,815	59	176	289	8	31				43,780	3,600	1,945	604	42
	245					61				8,316	461	2,302	208	43
		1		(*)		211				6,177	248	16,909	333	44+45
					4					2,749		5,032	42	46
1	18	18	8	11	6	15				10,100	583	13,439	50	47
53	13	1	3	1						3,126	176	15,053	198	48
92	53	1	1			17				14,038		11,072	153	49
115	1,252	14	19	32	14	429				14,927	117	747	101	50
3	11	7	43	107	3	2				15,346	3,290	33,476	331	51
15	675	55	9	11	22	19				12,881	883	7,186	306	52
	173	(*)	1	8	2	504				17,719	161	5,878	110	53
1		1	8	13	3	50				2,743	11,997	2,657	3	54
87	955	66	308	202	26	105				15,549	2,278	435	608	55
7	181	4	7	122	6	1				10,561	18,387	21,728	446	56
		7	22	190	6	39				42,174	263		787	57
4	532	36	310	167	38	113				12,838	5,277	2,755	361	58
										2,370	101,875	62,933	8,115	59A
23	9,976	10	108	119	267	194				61,127	3,133	6,591	1,745	59B
										22,583	316	8,843	2,132	60
	34	103	5	10	33	129				2,763	11,043	3,183	1,070	61
	36	13	6,698	124	4	17				17,485	4,456	33,814	1,285	62
7	41	186	683	498	13	15				7,770	4,625	5,653	398	63
293	47	183	261	767	53	43				9,277	27,179	3,876	2,181	64
385	294	93	337	237	724	440				27,231	13,080	827	553	65A
1,541	802	188	842	791	1,616	309				80,137	20,258	2,343	755	65B
62	112	41	84	41	77	200				8,029	4,177	167	49	65C
171	486	234	955	2,603	926	98				36,314	31,439	819	97	65D
2	92	2	20	22	10	75				18,525	2,553		39	65E
804	1,021	658	2,774	1,762	146	234				81,923	61,963	4,389		66
										924	1,326			67
4,445	1,006	1,100	3,172	2,038	281	4,483				79,596	63,318			68A
364	520	220	1,499	964	83	3,082				55,987	25,544			68B
329	82	125	289	255	83	303				12,350	14,864			68C
9,302	4,700	498	6,618	2,462	376	1,566				210,780	111,741	39,161	4,929	69A
27	4,855	45	288	131	10	23				37,597	373,725	11,178		69B
2,236	4,201	718	1,449	2,085	45	403				121,959	135,789			70A
33	2,263	77	1,223	715	43	492				81,638	81,638			70B
											325,144			71A
8,898	4,643	4,145	21,791	16,283	529	686				225,105	122,178	23,701		71B
28	153	230	466	1,052	26	51				18,052	20,180			72A
569	1,790	412	986	409	9	17				17,186	48,030			72B
216	18	327	4,764	1,402	30	260				53,578	855	10	39	73A
2,226	764	2,138	2,169	2,319	79	2,202				127,255	31,456	7,509		73B
4,140	4,027	3,869	9,636	5,121	451	856				165,951	12,602		59	73C
4,629	1,517	2,605	912	3,256	3	104				107,841	661			73D
790	865	578	1,939	1,163	77	113				43,381	169,638			74
404	2,503	476	3,374	1,300	520	180				61,098	67,684		7	75
965	18	15,940	87	969	38	4				30,722	47,411			76
			6,761							7,505	363,015			77A
299	168	379	718	355	13	81				12,086	148,974			77B
118	528	365	1,866	2,088	381	70				24,980	6,430			78
187	374	85	226	227	25	5				4,424	14,152			79
73	12	154	45	855	1,085					39,151	29,295		85	80
	169									6,460	13,705	-24,960	1,969	81
												-31,136		82
												7,709		83
													-17,817	84
100,603	68,309	40,640	119,710	80,088	11,636	41,734				3,602,186				85
108,791	62,395	37,552	218,801	72,590	33,760	27,750	466,785	7,709						VA
209,394	130,704	78,192	338,511	152,678	45,396	69,484	466,785	7,709					28,037	T

Table 2.1.—The Use of Commodities by Industries, 1987 Benchmark—Continued

[Millions of dollars at producers' prices]

Commodity number	For the distribution of output of a commodity, read the row for that commodity For the composition of inputs to an industry, read the column for that industry	Exports of goods and services	Imports of goods and services	Federal Government purchases			State and local government purchases			GDP	Total commodity output
				Total	National defense	Non-defense	Total	Education	Other		
				94	95	96	97	98	99		
1	Livestock and livestock products .....	485	-808	12	2	10	84	30	54	2,144	83,609
2	Other agricultural products .....	12,747	-2,353	750	.....	750	587	220	368	23,152	82,183
3	Forestry and fishery products .....	544	-3,747	-1,112	.....	-1,112	-413	6	-419	-864	9,488
4	Agricultural, forestry, and fishery services .....	122	-16	121	38	84	1,040	284	756	1,914	23,668
5+6	Metallic ores mining .....	559	-1,349	-141	-142	1	.....	.....	.....	-466	6,802
7	Coal mining .....	2,663	-65	86	56	29	32	21	11	3,953	25,451
8	Crude petroleum and natural gas .....	1,494	-28,965	-173	5	-177	.....	.....	.....	-29,318	68,008
9+10	Nonmetallic minerals mining .....	633	-734	2	-2	4	-19	.....	-19	-90	11,884
11	New construction .....	15	.....	15,550	7,495	8,055	71,111	10,091	61,020	445,303	445,347
12	Maintenance and repair construction .....	81	.....	6,258	4,358	1,900	25,728	5,912	19,816	49,367	173,466
13	Ordinance and accessories .....	2,725	-467	22,745	20,365	2,380	117	1	116	26,873	28,177
14	Food and kindred products .....	12,111	-18,538	2,025	189	1,836	5,854	3,739	2,114	204,376	329,636
15	Tobacco products .....	2,591	-879	.....	.....	.....	-11	-1	-879	10	26,381
16	Broad and narrow fabrics, yarn and thread mills .....	1,407	-3,601	115	105	10	142	58	84	-291	34,832
17	Miscellaneous textile goods and floor coverings .....	782	-919	30	3	27	51	8	43	7,717	16,266
18	Apparel .....	1,197	-25,395	567	566	1	853	15	838	49,821	64,599
19	Miscellaneous fabricated textile products .....	362	-1,772	185	140	45	441	95	347	9,637	19,006
20+21	Lumber and wood products .....	3,645	-6,399	45	32	13	113	59	55	4,301	72,936
22+23	Furniture and fixtures .....	684	-5,287	129	39	90	1,775	992	784	32,833	36,700
24	Paper and allied products, except containers .....	5,922	-9,914	366	124	243	2,240	1,183	1,057	11,432	80,961
25	Paperboard containers and boxes .....	762	-126	74	42	31	158	32	125	786	25,288
26A	Newspapers and periodicals .....	555	-226	153	15	138	456	302	154	13,128	15,674
26B	Other printing and publishing .....	1,062	-1,335	1,097	428	669	4,870	3,403	1,466	17,804	67,126
27A	Industrial and other chemicals .....	14,630	-10,727	1,893	1,793	100	2,203	567	1,635	10,286	89,852
27B	Agricultural fertilizers and chemicals .....	542	-990	25	9	15	324	111	213	823	13,365
28	Plastics and synthetic materials .....	5,364	-2,009	13	13	1	2	1	1	3,872	43,407
29A	Drugs .....	2,959	-7,590	795	472	324	2,865	86	2,778	24,186	35,862
29B	Cleaning and toilet preparations .....	983	-1,281	202	160	42	439	119	321	25,920	32,872
30	Paints and allied products .....	342	-214	6	1	5	294	228	66	818	12,183
31	Petroleum refining and related products .....	6,128	-13,332	3,193	2,649	545	7,931	3,789	4,142	67,111	137,599
32	Rubber and miscellaneous plastics products .....	3,233	-9,702	636	480	157	1,348	88	1,262	8,631	86,851
33+34	Footwear, leather, and leather products .....	666	-9,700	50	47	4	106	(*)	105	5,209	8,787
35	Glass and glass products .....	777	-1,837	59	22	37	273	66	207	968	16,335
36	Stone and clay products .....	1,019	-4,513	108	51	57	170	66	104	95	43,340
37	Primary iron and steel manufacturing .....	1,407	-10,824	151	78	72	57	6	5	-7,982	66,201
38	Primary nonferrous metals manufacturing .....	3,303	-6,992	644	395	250	58	4	54	-2,014	55,746
39	Metal containers .....	166	-155	57	57	.....	7	4	3	120	11,739
40	Heating, plumbing, and fabricated structural metal products .....	869	-961	658	491	168	1	.....	1	4,460	43,686
41	Screw machine products and stampings .....	2,123	-2,261	138	110	28	277	216	61	1,978	31,826
42	Other fabricated metal products .....	2,634	-6,573	481	407	75	550	177	373	3,241	47,022
43	Engines and turbines .....	2,899	-2,102	2,045	1,879	167	265	.....	265	6,078	14,394
44+45	Farm, construction, and mining machinery .....	6,063	-5,402	321	303	18	1,358	84	1,274	19,829	26,005
46	Materials handling machinery and equipment .....	540	-1,321	321	312	9	13	4	9	4,627	7,376
47	Metalworking machinery and equipment .....	2,335	-4,911	220	180	40	236	134	102	11,951	22,051
48	Special industry machinery and equipment .....	2,696	-4,993	82	76	6	74	69	5	13,285	16,411
49	General industrial machinery and equipment .....	4,182	-6,947	560	542	18	162	(*)	162	9,183	23,221
50	Miscellaneous machinery, except electrical .....	1,660	-604	2,657	2,573	84	251	116	135	4,929	19,855
51	Computer and office equipment .....	13,167	-17,329	4,168	3,493	675	1,982	1,196	786	39,085	54,431
52	Service industry machinery .....	1,217	-1,504	123	101	21	655	476	179	8,865	21,746
53	Electrical industrial equipment and apparatus .....	1,847	-3,346	636	467	168	273	140	132	5,557	23,277
54	Household appliances .....	943	-2,950	42	38	4	235	101	134	12,927	15,670
55	Electric lighting and wiring equipment .....	1,358	-3,341	62	41	21	472	284	189	1,871	17,421
56	Audio, video, and communication equipment .....	4,137	-20,190	5,265	4,964	301	703	335	368	30,476	41,037
57	Electronic components and accessories .....	12,596	-13,704	5,912	5,884	28	174	81	94	6,029	48,203
58	Miscellaneous electrical machinery and supplies .....	2,404	-4,511	1,671	1,577	95	191	71	120	8,149	20,987
59A	Motor vehicles (passenger cars and trucks) .....	12,918	-61,157	740	609	131	5,714	1,288	4,426	131,139	133,509
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	10,874	-16,950	1,093	1,050	43	716	294	422	7,200	68,327
60	Aircraft and parts .....	22,891	-6,875	34,512	33,306	1,206	20	.....	20	61,838	84,421
61	Other transportation equipment .....	1,278	-2,937	7,160	6,754	405	515	103	411	21,311	24,074
62	Scientific and controlling instruments .....	10,311	-9,990	25,249	23,710	1,540	3,249	517	2,732	68,373	85,858
63	Ophthalmic and photographic equipment .....	2,224	-5,696	1,129	704	425	2,604	1,015	1,589	10,127	18,707
64	Miscellaneous manufacturing .....	2,831	-15,769	-424	123	-547	1,932	1,184	747	21,805	31,083
65A	Railroads and related services; passenger ground transportation .....	3,377	-135	810	320	490	2,653	2,256	397	21,164	48,394
65B	Motor freight transportation and warehousing .....	4,606	.....	5,150	2,729	2,421	1,944	897	1,048	35,056	115,194
65C	Water transportation .....	7,512	3,264	834	697	137	167	35	133	16,169	24,198
65D	Air transportation .....	11,216	-5,711	2,837	2,159	678	2,048	956	1,093	42,745	79,060
65E	Pipelines, freight forwarders, and related services .....	1,958	.....	80	42	38	146	40	106	4,776	23,301
66	Communications, except radio and TV .....	2,496	.....	3,853	1,954	1,899	5,540	2,519	3,021	78,241	160,164
67	Radio and TV broadcasting .....	.....	.....	.....	.....	.....	.....	.....	.....	1,326	2,250
68A	Electric services (utilities) .....	134	-986	2,671	1,734	937	11,720	4,541	7,180	76,857	156,453
68B	Gas production and distribution (utilities) .....	161	-1,763	579	465	114	1,672	685	987	26,192	82,180
68C	Water and sanitary services .....	37	.....	236	184	53	983	1,018	-35	16,120	28,469
69A	Wholesale trade .....	26,294	15,533	5,860	5,039	821	9,454	3,940	5,514	212,971	423,571
69B	Retail trade .....	85	.....	114	92	22	263	-41	304	385,364	422,960
70A	Finance .....	12,598	-161	1,400	.....	1,400	9,366	.....	9,366	158,991	280,950
70B	Insurance .....	2,906	-3,078	1,746	36	1,710	827	666	161	84,039	177,621
71A	Owner-occupied dwellings .....	.....	.....	.....	.....	.....	.....	.....	.....	325,144	325,144
71B	Real estate and royalties .....	10,830	.....	1,243	547	696	6,563	713	5,850	164,515	389,620
72A	Hotels and lodging places .....	49	.....	947	692	254	836	-1,237	2,073	22,012	40,064
72B	Personal and repair services (except auto) .....	31	.....	125	65	60	898	301	597	49,085	66,271
73A	Computer and data processing services .....	928	-104	4,133	2,833	1,300	5,248	1,402	3,845	11,110	64,687
73B	Legal, engineering, accounting, and related services .....	2,398	-391	8,099	7,561	538	1,656	1,729	-73	50,727	177,982
73C	Other business and professional services, except medical .....	1,546	-740	20,907	15,944	4,963	11,433	4,136	7,298	45,807	211,758
73D	Advertising .....	475	-253	85	79	5	597	416	181	1,564	109,406
74	Eating and drinking places .....	271	.....	1,139	371	768	-3,409	-5,546	2,138	167,639	211,021
75	Automotive repair and services .....	31	.....	185	94	92	2,223	823	1,400	70,129	131,228
76	Amusements .....	1,222	-64	1,001	823	189	-1,452	179	-1,641	48,119	78,841
77A	Health services .....	16	.....	613	-352	965	-32,757	-10	-32,747	330,888	338,393
77B	Educational and social services, and membership organizations .....	144	-9	7,326	1,127	6,199	-16,252	-15,934	-318	140,184	152,270
78	Federal Government enterprises .....	169	.....	409	312	97	1,482	128	1,354	8,490	33,469
79	State and local government enterprises .....	111	.....	80	31	359	171	187	187	14,621	19,045
80	Noncomparable imports .....	.....	-78,696	10,116	8,673	1,443	49	43	6	-39,151	.....
81	Scrap, used and secondhand goods .....	4,267	-2,068	675	-104	778	2,272	683	1,589	-4,139	2,321
82	General government industry .....	.....	.....	150,627	108,244	42,383	316,158	173,286	142,873	466,785	466,785
83	Rest of the world adjustment to final uses .....	31,653	.....	-517	-161	-356	.....	.....	.....	.....	.....
84	Household industry .....	.....	.....	.....	.....	.....	.....	.....	.....	7,709	7,709
85	Inventory valuation adjustment .....	.....	.....	.....	.....	.....	.....	.....	.....	-17,817	-17,817
I	Total intermediate inputs .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
VA	Value added .....	.....	.....	.....	.....	.....	.....	.....	.....	4,572,829	.....
T	Total industry output .....	348,572	-490,442	384,927	292,052	92,875	496,592	218,272	278,320	.....	8,175,016

Table 2.2.—Input Components of Total Industry Output, 1987 Benchmark

[Millions of dollars at producers' prices]

Industry number		Value added				Total intermediate inputs	Total industry output	Industry number
		Total	Compensation of employees	Indirect business tax and nontax liability	Other value added			
1	Livestock and livestock products .....	15,074	3,284	1,091	10,700	72,410	87,484	1
2	Other agricultural products .....	46,721	5,619	2,536	38,566	40,021	86,742	2
3	Forestry and fishery products .....	3,708	779	158	2,771	7	7,456	3
4	Agricultural, forestry, and fishery services .....	9,948	9,941	.....	.....	12,253	22,201	4
5+6	Metallic ores mining .....	3,476	1,836	501	1,139	3,331	6,807	5+6
7	Coal mining .....	15,488	8,383	2,033	5,072	9,964	25,452	7
8	Crude petroleum and natural gas .....	55,484	11,699	3,939	39,847	28,744	84,228	8
9+10	Nonmetallic minerals mining .....	8,213	4,008	688	3,518	4,751	12,964	9+10
11+12	Construction .....	291,000	189,998	4,487	96,515	327,813	618,813	11+12
13	Ordinance and accessories .....	18,928	12,370	235	6,323	12,510	31,438	13
14	Food and kindred products .....	100,498	43,805	7,225	49,468	225,473	325,972	14
15	Tobacco products .....	16,795	2,853	4,701	9,242	9,588	26,383	15
16	Broad and narrow fabrics, yarn and thread mills .....	12,140	8,413	235	3,491	26,104	38,244	16
17	Miscellaneous textile goods and floor coverings .....	4,354	2,729	102	1,523	11,628	15,982	17
18	Apparel .....	27,003	17,503	239	9,262	37,181	64,184	18
19	Miscellaneous fabricated textile products .....	6,915	4,048	83	2,784	10,072	16,987	19
20+21	Lumber and wood products .....	25,923	16,168	1,251	8,503	46,952	72,875	20+21
22+23	Furniture and fixtures .....	17,259	11,412	230	5,617	19,518	36,777	22+23
24	Paper and allied products, except containers .....	34,278	16,521	1,345	16,412	47,704	81,982	24
25	Paperboard containers and boxes .....	8,806	6,370	205	2,231	16,705	25,511	25
26A	Newspapers and periodicals .....	29,037	15,391	255	13,392	20,689	49,727	26A
26B	Other printing and publishing .....	45,145	27,499	957	16,689	42,232	87,378	26B
27A	Industrial and other chemicals .....	37,277	15,582	1,824	19,871	47,098	84,375	27A
27B	Agricultural fertilizers and chemicals .....	3,364	1,950	226	1,188	10,148	13,512	27B
28	Plastics and synthetic materials .....	14,365	6,560	766	7,040	26,308	40,672	28
29A	Drugs .....	22,172	8,292	152	13,728	13,840	36,012	29A
29B	Cleaning and toilet preparations .....	17,646	5,308	184	12,155	15,583	33,229	29B
30	Paints and allied products .....	5,568	2,505	32	3,031	6,504	12,072	30
31	Petroleum refining and related products .....	24,258	6,857	10,590	6,812	113,613	137,871	31
32	Rubber and miscellaneous plastics products .....	37,624	23,433	1,672	12,519	47,948	85,572	32
33+34	Footwear, leather, and leather products .....	3,681	2,362	28	1,292	5,018	8,700	33+34
35	Glass and glass products .....	8,210	4,875	218	3,117	7,875	16,085	35
36	Stone and clay products .....	20,563	11,952	803	7,807	23,169	43,732	36
37	Primary iron and steel manufacturing .....	25,370	17,894	1,183	6,293	42,721	68,091	37
38	Primary nonferrous metals manufacturing .....	14,213	10,442	590	3,182	42,163	56,376	38
39	Metal containers .....	3,421	2,019	85	1,318	8,483	11,904	39
40	Heating, plumbing, and fabricated structural metal products .....	19,001	12,772	492	5,737	24,930	43,930	40
41	Screw machine products and stampings .....	14,187	11,245	512	2,430	17,787	31,973	41
42	Other fabricated metal products .....	22,269	14,716	501	7,053	22,155	44,424	42
43	Engines and turbines .....	6,226	3,973	175	2,077	7,870	14,096	43
44+45	Farm, construction, and mining machinery .....	11,852	7,478	449	3,925	14,902	26,753	44+45
46	Materials handling machinery and equipment .....	3,309	2,409	66	835	3,884	7,194	46
47	Metalworking machinery and equipment .....	12,470	9,843	275	2,353	8,756	21,227	47
48	Special industry machinery and equipment .....	8,595	6,147	163	2,285	7,659	16,254	48
49	General industrial machinery and equipment .....	12,400	8,544	262	3,595	10,836	23,236	49
50	Miscellaneous machinery, except electrical .....	11,839	9,391	250	2,198	8,164	20,003	50
51	Computer and office equipment .....	24,195	13,585	440	10,170	31,625	55,819	51
52	Service industry machinery .....	10,422	6,580	151	3,691	11,987	22,409	52
53	Electrical industrial equipment and apparatus .....	11,609	7,919	243	3,447	11,056	22,665	53
54	Household appliances .....	6,594	3,660	127	2,807	8,767	15,361	54
55	Electric lighting and wiring equipment .....	9,083	5,249	158	3,675	8,532	17,615	55
56	Audio, video, and communication equipment .....	20,337	11,383	358	8,596	20,363	40,700	56
57	Electronic components and accessories .....	26,895	18,527	852	7,517	21,758	48,654	57
58	Miscellaneous electrical machinery and supplies .....	9,452	6,579	235	2,639	11,371	20,823	58
59A	Motor vehicles (passenger cars and trucks) .....	25,004	15,227	2,108	7,669	109,111	134,115	59A
59B	Truck and bus bodies, trailers, and motor vehicles parts .....	26,270	19,067	1,597	5,607	42,721	68,991	59B
60	Aircraft and parts .....	39,508	30,002	614	8,892	42,620	82,128	60
61	Other transportation equipment .....	11,396	8,713	117	2,566	12,687	24,082	61
62	Scientific and controlling instruments .....	49,114	33,494	955	14,665	36,349	85,463	62
63	Ophthalmic and photographic equipment .....	11,264	4,276	220	6,768	8,462	19,725	63
64	Miscellaneous manufacturing .....	15,742	8,637	309	6,796	17,347	33,089	64
65A	Railroads and related services, passenger ground transportation .....	26,684	18,648	1,581	6,456	16,774	43,458	65A
65B	Motor freight transportation and warehousing .....	64,722	40,701	3,083	20,938	51,373	116,095	65B
65C	Water transportation .....	7,647	5,732	687	1,229	16,406	24,053	65C
65D	Air transportation .....	35,205	23,231	5,749	6,225	41,048	76,253	65D
65E	Pipelines, freight forwarders, and related services .....	15,309	7,945	642	6,722	10,599	25,908	65E
66	Communications, except radio and TV .....	94,949	36,761	11,910	46,278	66,178	161,127	66
67	Radio and TV broadcasting .....	13,460	9,886	600	2,975	15,936	29,396	67
68A	Electric services (utilities) .....	85,706	19,453	9,242	57,012	46,665	132,371	68A
68B	Gas production and distribution (utilities) .....	26,325	8,626	3,151	14,548	41,224	67,549	68B
68C	Water and sanitary services .....	3,786	3,510	584	-309	7,477	11,262	68C
69A	Wholesale trade .....	297,947	174,697	57,724	65,525	125,804	423,751	69A
69B	Retail trade .....	293,322	187,889	53,073	52,360	127,371	420,694	69B
70A	Finance .....	144,596	109,452	8,317	26,827	142,016	286,613	70A
70B	Insurance .....	86,422	62,328	12,429	11,666	86,428	172,850	70B
71A	Owner-occupied dwellings .....	279,033	.....	50,971	228,062	46,111	325,144	71A
71B	Real estate and royalties .....	280,436	27,230	53,227	199,979	99,839	380,275	71B
72A	Hotels and lodging places .....	22,211	10,663	3,698	7,850	18,787	40,997	72A
72B	Personal and repair services (except auto) .....	33,983	21,130	1,187	11,666	32,319	66,302	72B
73A	Computer and data processing services .....	35,770	25,443	655	9,673	25,051	60,821	73A
73B	Legal, engineering, accounting, and related services .....	104,682	79,014	818	24,850	73,250	177,931	73B
73C	Other business and professional services, except medical .....	138,418	92,121	3,952	42,345	82,309	220,728	73C
73D	Advertising .....	10,942	7,404	126	3,412	4,941	15,884	73D
74	Eating and drinking places .....	108,791	81,909	9,606	17,276	100,603	209,394	74
75	Automotive repair and services .....	62,395	28,995	4,301	29,099	68,309	130,704	75
76	Amusements .....	37,552	24,710	2,857	9,986	40,640	78,192	76
77A	Health services .....	218,801	178,143	1,901	38,757	119,710	338,511	77A
77B	Educational and social services, and membership organizations .....	72,590	68,100	418	4,072	80,088	152,678	77B
78	Federal Government enterprises .....	33,760	31,077	.....	2,683	11,636	45,396	78
79	State and local government enterprises .....	27,750	19,296	26	8,428	41,734	69,484	79
82	General government industry .....	466,785	466,785	.....	.....	.....	466,785	82
84	Household industry .....	7,709	7,709	.....	.....	.....	7,709	84
85	Inventory valuation adjustment .....	-17,817	.....	.....	-17,817	.....	-17,817	85
T	<b>Total</b> .....	<b>4,572,829</b>	<b>2,698,657</b>	<b>364,986</b>	<b>1,509,186</b>	<b>3,602,186</b>	<b>8,175,016</b>	<b>T</b>

\* Less than \$500,000.

# Total and Per Capita Personal Income by State and Region

This article was written by Howard L. Friedenberg and Duke D. Tran. The estimates of State personal income, as well as the section on the revisions, were prepared by the Regional Economic Measurement Division.

**T**HIS ARTICLE presents preliminary fourth-quarter and year 1993 estimates of total personal income for States, regions, and the United States and preliminary 1993 estimates of per capita personal income. In addition, the article includes revised annual State estimates for 1988–92 and revised quarterly estimates for 1990:1–1993:III.

The first section of this article looks at the preliminary estimates of total State personal income, and the second section discusses the preliminary estimates of per capita State personal income. The last section contains information about the revised estimates. **Tables 1–4**, at the end of the article, present the preliminary and revised estimates: **Tables 1 and 2** contain the quarterly estimates of total and nonfarm State personal income for 1990–93, and **tables 3 and 4** contain the annual estimates of total and per capita State personal income for 1988–93. **Table 5** presents percent changes in earnings for selected industries for 1993.

## Total Personal Income

Total personal income in the Nation increased 1.8 percent in the fourth quarter of 1993 after increasing 0.8 percent in the third quarter.<sup>1</sup> The

1. In this article, these percent changes are not at annual rates.

pickup was mainly in farm income, which increased substantially in the fourth quarter after having declined in the third quarter as a result of the floods in the Midwest, lower farm subsidy payments, and the drought in the Southeast.

In the fourth quarter, the five States with the fastest growth in personal income were North Dakota, Iowa, South Dakota, Nebraska, and Minnesota. In these States, personal income rebounded sharply after having declined in the third quarter as a result of the crop damage and uninsured losses to property due to the floods and of lower farm subsidy payments.

In 1993 as a whole, personal income in the Nation increased 4.7 percent after increasing 6.1 percent in 1992. The slowdown mainly reflected the effect on personal income of payments of bonuses in a number of industries in late 1992 that typically would have been paid in early 1993. If the timing of the bonus payments had been typical, personal income in the Nation would have increased 5.5 percent in 1993 and 5.7 percent in 1992.

## Per Capita Personal Income

Per capita personal income in the Nation increased 3.5 percent in 1993 after increasing 4.9 percent in 1992. The slowdown mainly reflected the effect on personal income of the change in the

### BEA Estimates of Wages and Salaries for 1993

The annual change from 1992 to 1993 in the national totals of the preliminary State estimates of wages and salaries is the same as the change in the national income and product accounts (NIPA) estimates of wage and salary disbursements that appear in this issue. This year, the national totals for both the NIPA and the State estimates are based primarily on monthly national data on employment, hours, and earnings from the Bureau of Labor Statistics (BLS) establishment survey; in some years, such as last year, the national totals for the preliminary State estimates presented in April have instead been based primarily on BLS tabulations of wages and salaries of employees covered by unemployment insurance for the first three quarters and on a BEA

estimate for the fourth quarter.<sup>1</sup> The unemployment insurance data are used instead of the monthly establishment data when there are significant differences between the two series. In July, both the NIPA and the State estimates for 1993 will be revised to incorporate the unemployment insurance tabulations for all four quarters of 1993.

1. The monthly establishment survey covers total employment and the average weekly hours and average hourly earnings of production and nonsupervisory workers. The unemployment insurance tabulations are compiled from reports that are filed quarterly by all employers covered by State unemployment insurance laws and by the unemployment compensation program for Federal employees. (For a more detailed discussion of these two data series and their use by BEA, see "State Estimates of Wages and Salaries: A Methodological Update" in the October 1989 SURVEY OF CURRENT BUSINESS.)



timing of bonus payments. If the timing had not changed, per capita income would have increased 4.3 percent in 1993 and 4.5 percent in 1992.

The increases in per capita personal income for the Nation have exceeded the increases in U.S. prices (as measured by the fixed-weighted price index for personal consumption expenditures) for 2 consecutive years. In 1993, prices increased 3.0 percent, and in 1992, they had increased 3.7 percent. By State, increases in per capita income in 1993 exceeded 3.0 percent in all except eight States.

**Fastest growing States**

In 1993, increases in per capita personal income in the 12 fastest growing States ranged from 6.7 percent in Montana to 4.5 percent in Oregon (table A and chart 1). All of these States had above-average growth in personal income, and all except Louisiana and Indiana had average

or above-average growth in population. All of these States except Florida, Hawaii, and Nevada had per capita income below the U.S. average of \$20,817 in 1993.

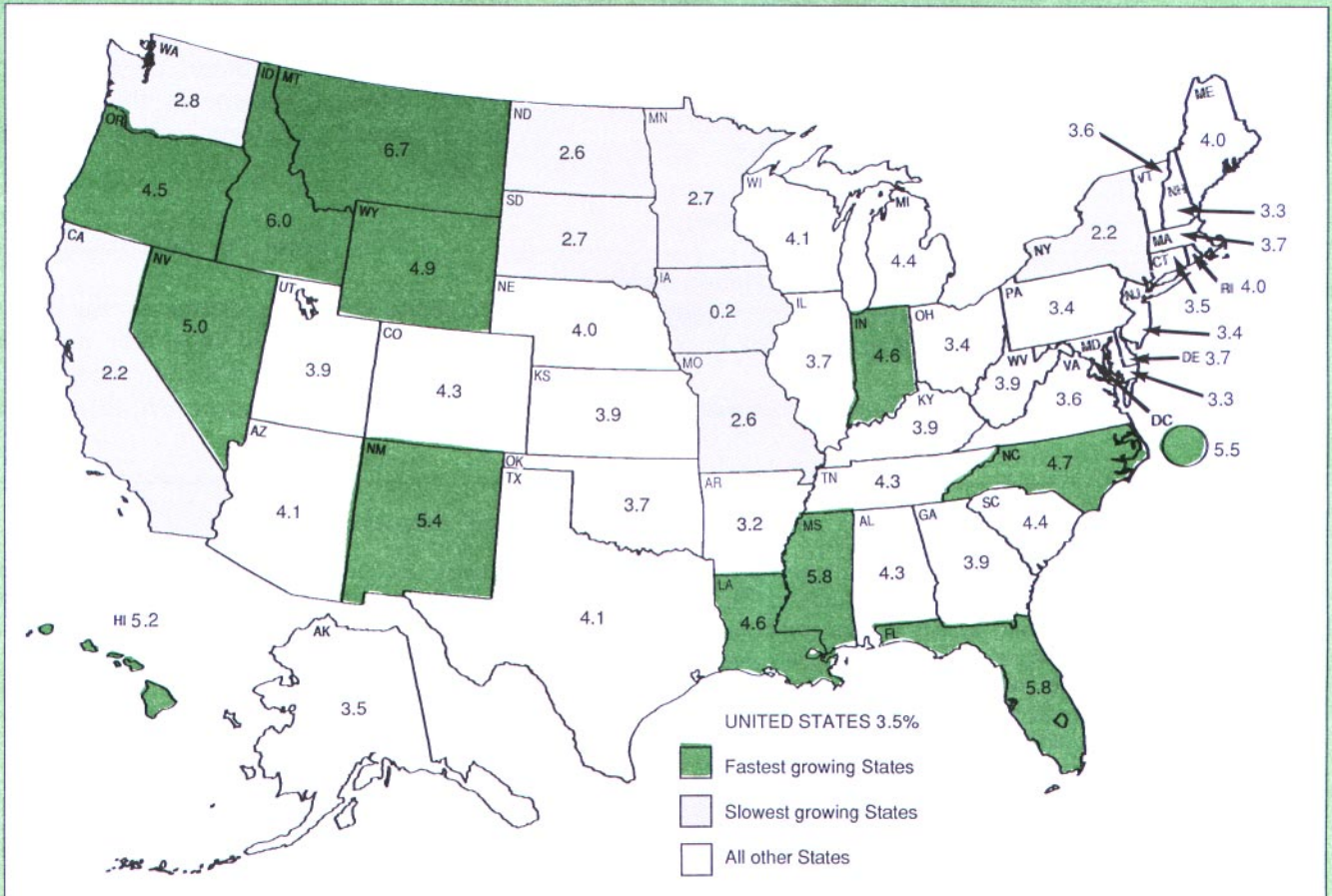
In Montana, Idaho, Mississippi, New Mexico, Nevada, Wyoming, North Carolina, and Oregon, personal income growth was boosted by above-average increases in earnings in nondurables manufacturing, in retail trade, in the finance-insurance-real estate group, and in government (table B).<sup>2</sup>

In addition, most of these States had above-average increases in earnings in the other major nonfarm industries. In Mississippi, large increases in earnings in construction and in services reflected the growth of gaming establishments. In Montana and Idaho, personal income growth was

2. Earnings is the sum of wage and salary disbursements, other labor income, and proprietors' income.

CHART 1

Per Capita Personal Income: Percent Change, 1992-93



boosted substantially by large increases in farm income.

In Florida and Hawaii, personal income growth rebounded from the effects in 1992 of Hurricanes Andrew in Florida and Iniki in Hawaii. Construction earnings rebounded substantially in Florida and moderately in Hawaii.

In Louisiana and Indiana, increases in earnings were above average in trade, in the finance-insurance-real estate group, and in government. In addition, Louisiana had above-average in-

creases in earnings in nondurables manufacturing and in mining, and Indiana had above-average increases in earnings in durables manufacturing, in construction, and in services.

**Slowest growing States**

In 1993, increases in per capita personal income in the eight slowest growing States ranged from 0.2 percent in Iowa to 2.8 percent in Washington. All of these States except Washington had below-average growth in personal income and average or below-average growth in population. California's population growth was below average for the first time since 1948.

In Iowa, North Dakota, Missouri, South Dakota, and Minnesota, personal income growth was slowed by large declines in farm income as a result of the Midwest floods in the third quarter. The slowdown occurred despite rebounds in the fourth quarter.

In New York, California, and Washington, earnings in durables manufacturing declined, and earnings in construction either increased at below-average rates or declined. The declines in earnings in durables manufacturing in California and Washington, which were larger than those in any of the other States, reflected job cutbacks in the aircraft industry. In addition, California and New York had either declines or increases in earnings in most of the other major nonfarm industries. In New York, a large decline in earnings in the finance-insurance-real estate group reflected the atypical timing of bonus payments in the securities industry.

**Table A.—Per Capita Personal Income for Selected States and the United States, 1992–93**

Rank		Percent change				
		Per capita personal income	Personal income			Population
			Total	Farm	Non-farm	
<b>Fastest growing States:</b>						
1	Montana .....	6.7	9.0	91.5	6.3	2.1
2	Idaho .....	6.0	9.3	40.9	7.6	3.1
3	Florida .....	5.8	7.4	-2	7.4	1.5
4	Mississippi .....	5.8	6.9	3.9	6.9	1.1
5	New Mexico .....	5.4	7.7	25.4	7.4	2.2
6	Hawaii .....	5.2	6.6	13.9	6.6	1.4
7	Nevada .....	5.0	9.1	79.5	8.9	3.9
8	Wyoming .....	4.9	6.1	16.8	5.8	1.2
9	North Carolina .....	4.7	6.4	6.6	6.4	1.6
10	Louisiana .....	4.6	5.0	-18.0	5.2	.4
11	Indiana .....	4.6	5.6	18.0	5.5	1.0
12	Oregon .....	4.5	6.6	31.8	6.3	2.0
	<b>United States .....</b>	<b>3.5</b>	<b>4.7</b>	<b>-2.5</b>	<b>4.8</b>	<b>1.1</b>
<b>Slowest growing States:</b>						
43	Washington .....	2.8	5.1	31.1	4.7	2.2
44	Minnesota .....	2.7	3.9	-80.0	5.2	1.1
45	South Dakota .....	2.7	3.7	-22.0	6.7	1.0
46	Missouri .....	2.6	3.5	-61.0	4.0	.8
47	North Dakota .....	2.6	2.7	-25.2	5.5	.1
48	California .....	2.2	3.3	13.1	3.2	1.0
49	New York .....	2.2	2.7	-14.1	2.7	.5
50	Iowa .....	.2	.6	-86.2	4.7	.4

**Table B.—Percent Change in Earnings for Selected States and the United States, 1992–93**

Rank		Durables manufacturing	Nondurables manufacturing	Construction	Mining	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government
<b>Fastest growing States:</b>											
1	Montana .....	2.4	5.6	4.7	2.1	4.8	7.4	5.6	6.5	9.8	7.5
2	Idaho .....	10.1	3.8	12.8	-2.3	6.7	6.3	11.1	8.4	9.6	6.7
3	Florida .....	-1.1	.2	12.5	-7	6.2	6.6	6.4	4.3	9.5	7.7
4	Mississippi .....	4.2	1.9	18.6	4.8	3.8	6.7	7.1	4.1	15.3	6.9
5	New Mexico .....	5.4	6.4	20.5	9.9	4.9	6.5	9.2	8.4	9.6	5.6
6	Hawaii .....	1.6	-5.1	6.9	2.4	-8	4.0	5.3	8.7	5.2	4.1
7	Nevada .....	0	8.4	27.4	4.5	8.2	2.7	6.8	11.5	10.2	7.3
8	Wyoming .....	-1	6.1	7.1	7.3	4.3	1.0	5.9	12.8	7.1	4.9
9	North Carolina .....	5.2	1.9	13.7	7.9	4.6	6.0	5.8	6.0	10.0	6.8
10	Louisiana .....	-1	1.8	4.1	3.8	2.8	4.5	4.8	3.9	7.2	5.3
11	Indiana .....	4.9	1.0	8.1	-5.3	4.3	7.3	5.5	4.2	7.8	4.9
12	Oregon .....	2.2	1.9	11.0	12.4	4.8	5.7	7.1	9.7	8.7	6.5
	<b>United States .....</b>	<b>.7</b>	<b>1.0</b>	<b>7.4</b>	<b>1.4</b>	<b>4.4</b>	<b>4.0</b>	<b>4.6</b>	<b>1.6</b>	<b>7.3</b>	<b>4.7</b>
<b>Slowest growing States:</b>											
43	Washington .....	-5.8	3.2	2.6	-1.0	3.9	5.0	5.5	4.6	6.9	5.8
44	Minnesota .....	2.8	1.5	6.2	3.3	1.5	5.5	7.4	6.7	7.7	6.4
45	South Dakota .....	11.1	.7	8.9	-5.7	5.2	5.1	7.6	5.6	11.8	7.0
46	Missouri .....	-1.8	1.2	7.8	8.5	4.3	2.5	3.6	3.8	7.9	5.0
47	North Dakota .....	7.6	4.7	12.7	5.6	4.1	4.2	6.5	5.3	6.7	4.3
48	California .....	-5.0	-9	-9	5.5	2.2	-7	3.1	2.0	5.3	2.2
49	New York .....	-3.3	-2.6	4.1	7.4	1.6	2.9	1.8	-5.8	6.3	3.4
50	Iowa .....	3.2	3.3	4.5	3.5	6.1	3.6	3.9	6.0	6.8	5.7

## Revisions to the State Estimates

The State estimates of personal income for 1990–92 have been revised to reflect the routine incorporation of more current State and county source data (see [table C](#)). In addition, the annual State estimates for 1981–92 have been revised to reflect the incorporation of new source data that were not available in time to be used in the last comprehensive revision, and the quarterly State estimates for these years have been adjusted to reflect the changes in the annual estimates. The incorporation of the new source data caused changes to the estimates of both farm and nonfarm proprietors' income and of the residence adjustment, which is the net inflow of the earnings of interstate commuters.

The newly available source data were also incorporated into the estimates of personal income for local areas. For a detailed description of the revisions for both States and local areas, see

### Availability of the State Estimates

Quarterly State estimates for 1969–93 are available, including tables presenting income by type of payment—for example, wages and salaries—and earnings by Standard Industrial Classification (SIC) division. Annual State estimates of personal income and per capita personal income for 1929–93 are also available. The detailed tables of the State annual series have not yet been updated to reflect the revisions to the estimates for 1981–92; however, much of the information presented in that series, including earnings by SIC two-digit industry, is available in the local area series. For more information, see the [“Data Availability”](#) box on page 129.

[the article](#) “Local Area Personal Income: Estimates for 1990–92 and Revisions to the Estimates for 1981–91” beginning on page 127.

*Tables C and 1 through 5 follow.* 

Table C.—Revisions in Total Personal Income for States and Regions, 1990–93

[Millions of dollars, quarters seasonally adjusted at annual rates]

State and region	1990	1991	1992	1992				1993		
				I	II	III	IV	I	II	III
<b>United States</b> .....	<b>-1,700</b>	<b>-1,851</b>	<b>-2,244</b>	<b>-1,669</b>	<b>-2,089</b>	<b>-2,479</b>	<b>-2,738</b>	<b>-6,572</b>	<b>-5,374</b>	<b>-4,284</b>
<b>New England</b> .....	<b>-1,387</b>	<b>-1,193</b>	<b>-1,185</b>	<b>-1,007</b>	<b>-1,106</b>	<b>-1,141</b>	<b>-1,486</b>	<b>-1,525</b>	<b>-1,623</b>	<b>1,665</b>
Connecticut .....	9	-14	-7	-20	66	20	-93	-292	-76	897
Maine .....	65	85	96	157	126	100	1	150	78	198
Massachusetts .....	-1,161	-909	-944	-841	-996	-932	-1,006	-1,052	-1,257	150
New Hampshire .....	-628	-621	-643	-560	-618	-651	-742	-672	-725	-406
Rhode Island .....	340	263	308	236	317	319	360	383	452	661
Vermont .....	-13	3	5	22	-1	3	-4	-42	-95	165
<b>Mideast</b> .....	<b>-374</b>	<b>1,712</b>	<b>1,188</b>	<b>1,541</b>	<b>2,258</b>	<b>1,154</b>	<b>-201</b>	<b>-378</b>	<b>-297</b>	<b>-112</b>
Delaware .....	-971	-949	-983	-952	-1,001	-982	-997	-940	-1,015	-1,159
District of Columbia .....	414	586	743	566	667	812	927	742	769	771
Maryland .....	486	354	299	339	274	380	205	384	77	-21
New Jersey .....	-6,526	-5,576	-6,021	-5,793	-5,872	-5,922	-6,498	-5,822	-6,332	-6,652
New York .....	4,037	4,722	4,352	4,014	5,217	4,382	3,796	2,755	4,146	4,252
Pennsylvania .....	2,186	2,575	2,797	3,367	2,973	2,484	2,365	2,502	2,056	2,697
<b>Great Lakes</b> .....	<b>-2,282</b>	<b>-2,723</b>	<b>-2,830</b>	<b>-2,509</b>	<b>-2,401</b>	<b>-3,099</b>	<b>-3,312</b>	<b>-7,254</b>	<b>-4,825</b>	<b>-2,721</b>
Illinois .....	-2,230	-2,490	-2,793	-2,703	-2,649	-2,876	-2,945	-5,133	-3,280	-2,363
Indiana .....	-77	-265	-283	-111	-272	-356	-393	-564	-622	-851
Michigan .....	-746	-959	-949	-1,074	-838	-929	-953	-1,374	-1,266	-1,064
Ohio .....	1,340	1,881	2,082	2,318	2,255	1,914	1,841	1,042	1,638	2,115
Wisconsin .....	-569	-890	-887	-937	-897	-851	-863	-1,226	-1,294	-557
<b>Plains</b> .....	<b>-1,135</b>	<b>-1,429</b>	<b>-1,474</b>	<b>-1,056</b>	<b>-1,291</b>	<b>-1,684</b>	<b>-1,867</b>	<b>-5,948</b>	<b>-3,767</b>	<b>-5,454</b>
Iowa .....	-623	-902	-878	-867	-875	-926	-845	-3,500	-2,404	-2,808
Kansas .....	-358	27	-44	-92	-30	-27	-24	37	671	86
Minnesota .....	64	48	99	236	227	31	-100	-835	-551	-881
Missouri .....	-306	-486	-493	-294	-454	-501	-724	-594	-711	-878
Nebraska .....	27	-24	-70	-10	-77	-125	-68	-732	-614	-252
North Dakota .....	7	-133	-125	-94	-117	-144	-143	-60	-6	-402
South Dakota .....	54	42	36	65	35	8	36	-264	-152	-318
<b>Southeast</b> .....	<b>365</b>	<b>422</b>	<b>500</b>	<b>248</b>	<b>-314</b>	<b>819</b>	<b>1,246</b>	<b>-787</b>	<b>-3,202</b>	<b>-1,654</b>
Alabama .....	145	88	137	101	173	113	163	66	343	198
Arkansas .....	-241	-320	-383	-378	-396	-417	-340	-314	-1,009	-572
Florida .....	1,567	2,592	2,835	2,575	2,241	3,220	3,304	2,554	1,729	2,217
Georgia .....	628	700	840	850	760	784	966	676	705	59
Kentucky .....	-968	-1,068	-1,218	-1,231	-1,228	-1,178	-1,234	-1,524	-1,494	-1,403
Louisiana .....	147	124	111	-55	-7	393	115	-104	-280	-602
Mississippi .....	-60	-79	-108	-148	-74	-90	-121	-118	-316	122
North Carolina .....	-602	-827	-956	-939	-941	-996	-949	-890	-1,244	-164
South Carolina .....	110	20	47	73	-38	7	147	171	93	190
Tennessee .....	293	112	233	299	211	97	323	-89	-214	105
Virginia .....	-1,048	-1,315	-1,469	-1,389	-1,417	-1,516	-1,554	-1,609	-1,822	-1,975
West Virginia .....	395	393	430	491	403	402	425	396	307	171
<b>Southwest</b> .....	<b>1,442</b>	<b>2,098</b>	<b>2,257</b>	<b>1,924</b>	<b>2,219</b>	<b>2,331</b>	<b>2,554</b>	<b>3,844</b>	<b>3,142</b>	<b>2,959</b>
Arizona .....	362	337	301	251	298	307	348	214	281	794
New Mexico .....	2	-132	-157	-164	-176	-161	-126	-117	-216	-91
Oklahoma .....	-146	-175	-217	-265	-272	-219	-111	24	-100	-359
Texas .....	1,224	2,067	2,330	2,102	2,370	2,403	2,444	3,722	3,176	2,615
<b>Rocky Mountain</b> .....	<b>313</b>	<b>221</b>	<b>-3</b>	<b>99</b>	<b>-24</b>	<b>-22</b>	<b>-64</b>	<b>1,472</b>	<b>1,512</b>	<b>469</b>
Colorado .....	-25	48	-54	103	-36	-94	-188	526	364	69
Idaho .....	227	151	112	87	115	101	144	478	667	588
Montana .....	-9	-37	-53	-46	-85	-26	-55	464	516	160
Utah .....	-24	-94	-122	-153	-129	-109	-94	-142	-157	-484
Wyoming .....	144	153	113	107	111	105	130	146	122	136
<b>Far West</b> .....	<b>1,357</b>	<b>-959</b>	<b>-696</b>	<b>-912</b>	<b>-1,430</b>	<b>-834</b>	<b>390</b>	<b>4,004</b>	<b>3,687</b>	<b>563</b>
Alaska .....	-173	-166	-187	-195	-185	-201	-167	-183	-159	-346
California .....	-1,767	-3,233	-3,220	-3,127	-3,986	-3,391	-2,376	452	-292	-1,694
Hawaii .....	509	423	403	344	358	383	525	495	496	215
Nevada .....	594	603	677	626	643	702	738	762	766	928
Oregon .....	454	414	446	367	470	437	510	749	802	594
Washington .....	1,739	1,000	1,184	1,072	1,271	1,235	1,159	1,728	2,074	866
<b>Census Divisions:</b>										
New England .....	-1,387	-1,193	-1,185	-1,007	-1,106	-1,141	-1,486	-1,525	-1,623	1,665
Middle Atlantic .....	-304	1,722	1,128	1,588	2,318	944	-337	-565	-130	296
East North Central .....	-2,282	-2,723	-2,830	-2,509	-2,401	-3,099	-3,312	-7,254	-4,825	-2,721
West North Central .....	-1,135	-1,429	-1,474	-1,056	-1,291	-1,684	-1,867	-5,948	-3,767	-5,454
South Atlantic .....	980	1,555	1,478	1,614	948	2,109	2,475	1,483	-400	88
East South Central .....	-591	-947	-956	-980	-917	-1,058	-869	-1,666	-1,680	-978
West South Central .....	984	1,696	1,842	1,403	1,695	2,161	2,108	3,328	1,787	1,084
Mountain .....	1,272	1,030	819	813	739	826	896	2,332	2,345	2,098
Pacific .....	763	-1,562	-1,374	-1,538	-2,073	-1,536	-347	3,242	2,921	-364

Table 1.—Total Personal Income, States and Regions

[Millions of dollars, seasonally adjusted at annual rates]

State and region	1990				1991				1992				1993				Percent change	
	I <sup>r</sup>	II <sup>r</sup>	III <sup>r</sup>	IV <sup>r</sup>	I <sup>r</sup>	II <sup>r</sup>	III <sup>r</sup>	IV <sup>r</sup>	I <sup>r</sup>	II <sup>r</sup>	III <sup>r</sup>	IV <sup>r</sup>	I <sup>r</sup>	II <sup>r</sup>	III <sup>r,3</sup>	IV <sup>r</sup>	1993:III-1993:IV	1992:IV-1993:IV
<b>United States<sup>1</sup></b>	<b>4,571,269</b>	<b>4,630,734</b>	<b>4,680,939</b>	<b>4,738,738</b>	<b>4,761,845</b>	<b>4,812,922</b>	<b>4,840,899</b>	<b>4,911,121</b>	<b>5,001,184</b>	<b>5,077,402</b>	<b>5,122,205</b>	<b>5,312,702</b>	<b>5,234,736</b>	<b>5,354,604</b>	<b>5,395,210</b>	<b>5,491,299</b>	<b>1.8</b>	<b>3.4</b>
<b>New England</b>	<b>287,057</b>	<b>289,375</b>	<b>291,659</b>	<b>291,752</b>	<b>292,486</b>	<b>294,301</b>	<b>294,553</b>	<b>298,215</b>	<b>301,610</b>	<b>305,648</b>	<b>309,081</b>	<b>319,128</b>	<b>311,115</b>	<b>318,979</b>	<b>325,280</b>	<b>328,724</b>	<b>1.1</b>	<b>3.0</b>
Connecticut	82,250	83,306	84,242	84,734	83,874	84,598	84,376	85,477	86,284	87,864	89,385	92,582	89,461	91,612	93,286	94,139	.9	1.7
Maine	20,820	21,025	21,112	20,966	21,262	21,244	21,397	21,607	22,001	22,330	22,588	22,906	22,883	23,267	23,603	23,927	1.4	4.5
Massachusetts	132,825	133,603	134,653	134,480	135,189	135,988	135,986	137,679	139,136	140,532	141,523	146,346	142,774	146,716	149,689	151,536	1.2	3.5
New Hampshire	22,319	22,472	22,616	22,555	22,900	23,126	23,282	23,618	23,929	24,152	24,429	25,319	24,619	25,276	25,960	26,138	.7	3.2
Rhode Island	19,019	19,117	19,180	19,166	19,318	19,322	19,393	19,610	19,808	20,121	20,357	20,929	20,464	20,995	21,383	21,542	.7	2.9
Vermont	9,825	9,853	9,856	9,851	9,943	10,023	10,118	10,225	10,452	10,648	10,799	11,047	10,914	11,113	11,359	11,442	.7	3.6
<b>Mideast</b>	<b>929,692</b>	<b>944,206</b>	<b>955,881</b>	<b>960,957</b>	<b>963,886</b>	<b>975,020</b>	<b>977,639</b>	<b>989,606</b>	<b>1,006,251</b>	<b>1,020,286</b>	<b>1,033,597</b>	<b>1,072,138</b>	<b>1,036,695</b>	<b>1,068,888</b>	<b>1,079,438</b>	<b>1,091,975</b>	<b>1.2</b>	<b>1.9</b>
Delaware	12,838	13,090	13,382	13,462	13,711	13,673	13,717	13,893	13,949	14,205	14,352	14,766	14,573	15,031	15,113	15,452	2.2	4.6
District of Columbia	14,029	14,573	15,279	15,631	15,656	15,593	15,319	15,397	15,867	16,151	16,491	16,822	16,768	16,944	17,158	17,244	.5	2.5
Maryland	104,095	105,468	106,939	107,439	108,234	109,262	109,497	110,606	111,755	113,353	114,821	117,727	116,442	119,217	120,301	121,541	1.0	3.2
New Jersey	183,775	186,556	188,648	189,687	189,085	191,132	191,917	194,104	198,315	201,323	204,206	212,308	206,153	212,472	214,361	216,927	1.2	2.2
New York	394,875	400,956	405,101	406,402	406,790	412,825	413,058	417,367	424,568	430,058	435,585	455,203	432,357	448,817	453,070	458,062	1.1	.6
Pennsylvania	220,080	223,563	226,532	228,336	230,412	232,535	234,130	237,626	241,797	245,196	248,142	255,311	250,401	256,400	259,435	262,749	1.3	2.9
<b>Great Lakes</b>	<b>756,918</b>	<b>766,622</b>	<b>774,135</b>	<b>781,966</b>	<b>783,428</b>	<b>790,451</b>	<b>798,054</b>	<b>809,610</b>	<b>824,641</b>	<b>839,120</b>	<b>846,395</b>	<b>875,621</b>	<b>863,688</b>	<b>881,855</b>	<b>889,384</b>	<b>908,582</b>	<b>2.2</b>	<b>3.8</b>
Illinois	227,240	229,465	231,358	235,996	234,170	236,731	238,031	240,774	245,951	250,142	253,213	262,126	256,993	263,209	265,089	271,317	2.3	3.5
Indiana	92,213	92,636	93,986	94,826	95,262	95,994	96,941	98,685	101,068	102,858	104,252	107,509	107,351	109,031	110,097	112,326	2.0	4.5
Michigan	167,022	169,239	171,375	171,597	171,817	174,139	175,682	178,367	180,046	183,900	184,155	190,957	188,425	192,893	194,368	199,708	2.7	4.6
Ohio	186,751	190,500	191,670	193,511	194,829	195,339	198,276	201,257	205,214	208,260	209,545	216,387	213,437	217,514	219,638	222,895	1.5	3.0
Wisconsin	83,692	84,782	85,746	86,934	87,349	88,249	89,124	90,527	92,364	93,960	95,231	98,642	97,482	99,208	100,192	102,337	2.1	3.7
<b>Plains</b>	<b>307,021</b>	<b>307,732</b>	<b>306,956</b>	<b>317,863</b>	<b>317,139</b>	<b>321,173</b>	<b>320,555</b>	<b>329,304</b>	<b>336,833</b>	<b>339,392</b>	<b>341,194</b>	<b>356,298</b>	<b>351,768</b>	<b>356,820</b>	<b>346,800</b>	<b>364,499</b>	<b>5.1</b>	<b>2.3</b>
Iowa	47,027	45,823	45,537	47,112	47,601	47,570	47,196	48,415	50,803	50,542	50,727	52,826	52,281	51,833	49,108	52,941	7.8	.2
Kansas	42,922	43,337	43,512	45,480	44,543	45,479	45,122	47,070	47,409	48,342	48,268	51,038	49,932	51,671	50,032	52,231	4.4	2.3
Minnesota	81,331	82,180	82,271	83,771	84,029	84,873	85,403	86,951	89,502	90,085	91,531	95,325	94,046	95,202	93,551	97,810	4.6	2.6
Missouri	87,658	88,714	89,546	91,064	92,067	92,820	93,584	95,299	96,743	97,692	98,229	101,215	100,239	102,348	100,648	104,235	3.6	3.0
Nebraska	27,799	27,368	26,837	27,875	28,312	29,021	28,645	28,902	30,066	30,099	29,933	31,374	31,452	31,498	30,965	32,897	6.2	4.9
North Dakota	9,459	9,516	9,492	11,143	9,456	9,838	9,411	10,858	10,357	10,616	10,498	11,767	11,209	11,550	10,328	11,327	9.7	-3.7
South Dakota	10,827	10,794	10,512	11,418	11,131	11,572	11,195	11,810	11,954	12,017	12,009	12,752	12,609	12,718	12,168	13,059	7.3	2.4
<b>Southeast</b>	<b>963,653</b>	<b>975,579</b>	<b>988,281</b>	<b>997,618</b>	<b>1,012,758</b>	<b>1,023,089</b>	<b>1,032,560</b>	<b>1,046,586</b>	<b>1,069,513</b>	<b>1,086,481</b>	<b>1,088,119</b>	<b>1,137,196</b>	<b>1,131,363</b>	<b>1,154,972</b>	<b>1,169,388</b>	<b>1,189,918</b>	<b>1.8</b>	<b>4.6</b>
Alabama	58,999	60,131	60,595	61,603	62,896	63,416	64,110	65,027	66,604	67,562	68,601	70,665	70,534	71,896	72,498	73,690	1.6	4.3
Arkansas	32,300	32,325	32,334	32,842	33,924	34,184	34,242	35,114	36,597	37,271	37,157	38,711	39,013	38,657	38,853	40,030	3.0	3.4
Florida <sup>2</sup>	240,335	243,366	246,508	248,209	252,243	253,922	255,016	257,158	261,365	264,855	266,888	279,946	277,008	283,608	287,921	292,665	1.6	4.5
Georgia	109,132	110,585	112,529	113,379	114,792	116,478	117,694	119,412	122,194	124,237	125,862	130,277	128,836	133,212	134,306	137,027	2.0	5.2
Kentucky	53,349	53,940	54,720	55,806	55,970	56,982	58,028	59,099	60,460	61,411	62,177	64,125	63,229	64,676	65,625	66,727	1.7	4.1
Louisiana <sup>2</sup>	59,113	59,748	60,541	61,510	62,902	63,640	64,318	65,472	66,842	68,004	67,894	69,927	70,224	71,143	71,869	73,137	1.8	4.6
Mississippi	31,881	32,204	32,473	33,033	33,672	34,065	34,277	35,044	36,060	36,589	37,862	38,649	38,814	39,494	40,492	41,259	2.5	6.9
North Carolina	106,209	108,085	109,587	109,475	110,727	112,388	114,656	115,796	118,507	120,771	122,842	126,350	126,020	128,828	130,910	133,798	2.2	5.9
South Carolina	51,644	52,665	53,315	53,794	54,542	54,808	55,220	55,952	57,000	57,821	58,615	60,202	60,161	61,447	62,128	62,845	1.2	4.4
Tennessee	76,498	77,123	78,366	79,156	80,309	81,179	82,005	83,833	86,104	87,812	88,783	92,566	91,520	93,369	94,814	96,270	1.5	4.0
Virginia	119,565	120,580	122,160	123,280	124,727	125,791	126,497	127,807	130,152	132,205	134,176	137,603	137,206	139,882	141,459	143,139	1.2	4.0
West Virginia	24,626	24,826	25,153	25,531	26,055	26,238	26,498	26,971	27,627	27,944	28,236	28,961	28,964	29,440	29,511	30,095	2.0	3.9
<b>Southwest</b>	<b>404,847</b>	<b>411,506</b>	<b>417,688</b>	<b>424,008</b>	<b>429,463</b>	<b>435,704</b>	<b>438,307</b>	<b>446,818</b>	<b>456,002</b>	<b>464,806</b>	<b>470,378</b>	<b>487,957</b>	<b>486,248</b>	<b>496,681</b>	<b>501,525</b>	<b>510,223</b>	<b>1.7</b>	<b>4.6</b>
Arizona	58,800	59,545	60,277	60,802	61,796	62,389	62,544	63,442	64,772	65,964	66,900	69,112	68,903	70,835	72,385	73,181	1.1	5.9
New Mexico	21,089	21,305	21,734	22,280	22,503	22,794	22,913	23,280	23,844	24,248	24,601	25,116	25,587	26,020	26,632	27,135	1.9	8.0
Oklahoma	46,507	47,064	47,654	49,093	48,695	49,403	49,318	50,707	51,458	52,264	52,575	54,225	54,056	54,972	55,080	55,884	1.5	3.1
Texas	278,451	283,683	288,023	291,832	296,469	301,117	303,533	309,389	315,928	322,330	326,302	339,505	337,702	344,854	347,428	354,024	1.9	4.3
<b>Rocky Mountain</b>	<b>118,230</b>	<b>120,338</b>	<b>121,447</b>	<b>125,658</b>	<b>126,285</b>	<b>129,160</b>	<b>130,028</b>	<b>133,986</b>	<b>135,296</b>	<b>137,958</b>	<b>139,777</b>	<b>145,188</b>	<b>146,439</b>	<b>149,768</b>	<b>150,354</b>	<b>153,870</b>	<b>2.3</b>	<b>6.0</b>
Colorado	60,569	61,658	62,407	64,016	64,													

Table 2.—Nonfarm Personal Income, States and Regions

[Millions of dollars, seasonally adjusted at annual rates]

State and region	1990				1991				1992				1993				Percent change	
	I <sup>r</sup>	II <sup>r</sup>	III <sup>r</sup>	IV <sup>r</sup>	I <sup>r</sup>	II <sup>r</sup>	III <sup>r</sup>	IV <sup>r</sup>	I <sup>r</sup>	II <sup>r</sup>	III <sup>r</sup>	IV <sup>r</sup>	I <sup>r</sup>	II <sup>r</sup>	III <sup>r,2</sup>	IV <sup>r</sup>	1993:III-1993:IV	1992:IV-1993:IV
<b>United States ...</b>	<b>4,513,093</b>	<b>4,582,157</b>	<b>4,645,216</b>	<b>4,688,369</b>	<b>4,717,370</b>	<b>4,762,695</b>	<b>4,803,437</b>	<b>4,865,346</b>	<b>4,947,979</b>	<b>5,025,609</b>	<b>5,080,725</b>	<b>5,259,114</b>	<b>5,176,936</b>	<b>5,304,190</b>	<b>5,365,738</b>	<b>5,433,995</b>	<b>1.3</b>	<b>3.3</b>
<b>New England ...</b>	<b>286,235</b>	<b>288,611</b>	<b>290,967</b>	<b>291,075</b>	<b>291,722</b>	<b>293,491</b>	<b>293,786</b>	<b>297,475</b>	<b>300,761</b>	<b>304,753</b>	<b>308,250</b>	<b>318,295</b>	<b>310,308</b>	<b>318,225</b>	<b>324,545</b>	<b>327,822</b>	<b>1.0</b>	<b>3.0</b>
Connecticut .....	82,011	83,087	84,041	84,542	83,650	84,364	84,159	85,270	86,059	87,631	89,162	92,361	89,228	91,382	93,052	93,837	.8	1.6
Maine .....	20,624	20,849	20,951	20,802	21,108	21,081	21,242	21,452	21,842	22,157	22,427	22,735	22,665	23,073	23,419	23,698	1.2	4.2
Massachusetts .....	132,631	133,418	134,484	134,316	134,973	135,756	135,763	137,460	138,911	140,291	141,300	146,120	142,562	146,508	149,493	151,301	1.2	3.5
New Hampshire .....	22,276	22,429	22,578	22,516	22,855	23,078	23,237	23,576	23,877	24,099	24,379	25,270	24,584	25,248	25,932	26,107	.7	3.3
Rhode Island .....	18,980	19,081	19,149	19,134	19,280	19,282	19,574	19,768	20,081	20,320	20,892	20,428	20,959	21,346	21,500	21,500	.7	2.9
Vermont .....	9,713	9,746	9,764	9,765	9,856	9,931	10,029	10,143	10,304	10,494	10,662	10,917	10,841	11,055	11,304	11,379	.7	4.2
<b>Mideast ...</b>	<b>926,970</b>	<b>941,638</b>	<b>953,644</b>	<b>958,790</b>	<b>961,816</b>	<b>972,793</b>	<b>975,629</b>	<b>987,592</b>	<b>1,003,630</b>	<b>1,017,620</b>	<b>1,031,203</b>	<b>1,069,733</b>	<b>1,034,382</b>	<b>1,066,876</b>	<b>1,077,478</b>	<b>1,089,625</b>	<b>1.1</b>	<b>1.9</b>
Delaware .....	12,667	12,937	13,246	13,339	13,573	13,519	13,579	13,753	13,801	14,062	14,226	14,630	14,413	14,865	14,944	15,245	2.0	4.2
District of Columbia .....	14,029	14,573	15,279	15,631	15,656	15,593	15,319	15,397	15,867	16,151	16,491	16,822	16,768	16,944	17,158	17,244	.5	2.5
Maryland .....	103,665	105,074	106,591	107,110	107,885	108,874	109,146	110,258	111,336	112,941	114,430	117,329	116,059	118,871	119,968	121,144	1.0	3.3
New Jersey .....	183,521	186,301	188,433	189,471	188,847	190,872	191,673	193,872	198,064	201,042	203,963	212,063	205,920	212,254	214,157	216,680	1.2	2.2
New York .....	393,982	400,120	404,393	405,721	406,073	412,072	412,384	417,721	423,766	429,263	434,871	454,481	431,637	448,217	452,492	457,352	1.1	.6
Pennsylvania .....	219,107	222,632	225,700	227,518	229,782	231,863	233,529	237,005	240,797	244,160	247,222	254,408	249,584	255,724	258,759	261,960	1.2	3.0
<b>Great Lakes ...</b>	<b>748,661</b>	<b>761,041</b>	<b>770,724</b>	<b>777,211</b>	<b>779,730</b>	<b>786,420</b>	<b>795,780</b>	<b>806,838</b>	<b>818,577</b>	<b>833,845</b>	<b>842,066</b>	<b>870,634</b>	<b>857,990</b>	<b>877,344</b>	<b>887,089</b>	<b>902,216</b>	<b>1.7</b>	<b>3.6</b>
Illinois .....	224,534	228,076	230,901	233,961	233,331	235,641	237,784	240,392	243,935	248,490	251,982	260,580	255,772	261,625	264,889	268,938	1.5	3.2
Indiana .....	90,963	91,910	93,615	94,210	94,990	95,728	96,912	98,627	100,164	102,171	103,718	106,912	106,141	108,445	109,583	111,424	1.7	4.2
Michigan .....	166,024	168,495	170,828	170,901	171,095	173,364	175,116	177,721	179,246	183,092	183,521	190,233	187,078	191,849	193,366	198,177	2.5	4.2
Ohio .....	185,206	189,280	190,759	192,417	193,961	194,434	197,650	200,525	203,919	207,080	208,446	215,297	212,603	217,037	219,263	222,198	1.3	3.2
Wisconsin .....	81,933	83,280	84,621	85,723	86,353	87,253	88,317	89,573	91,313	93,012	94,399	97,612	96,395	98,387	99,989	101,479	1.5	4.0
<b>Plains ...</b>	<b>292,650</b>	<b>297,528</b>	<b>301,514</b>	<b>304,986</b>	<b>308,267</b>	<b>311,169</b>	<b>314,866</b>	<b>318,932</b>	<b>324,908</b>	<b>329,197</b>	<b>333,395</b>	<b>343,222</b>	<b>340,368</b>	<b>347,279</b>	<b>349,681</b>	<b>356,225</b>	<b>1.9</b>	<b>3.8</b>
Iowa .....	43,090	43,718	44,518	45,169	45,448	45,897	46,283	46,994	47,755	48,498	49,404	50,482	50,119	51,133	51,172	52,481	2.6	4.0
Kansas .....	41,389	42,111	42,761	43,028	43,674	44,018	44,638	45,223	46,112	46,846	47,303	48,837	48,225	49,284	49,786	50,343	1.1	3.1
Minnesota .....	78,634	80,172	81,098	81,845	82,583	83,483	84,489	85,516	87,725	88,781	90,458	93,588	92,563	94,341	95,313	97,213	2.0	3.9
Missouri .....	86,875	88,174	89,209	90,183	91,489	92,280	93,284	94,528	95,920	96,850	97,699	100,175	99,237	101,378	101,769	103,825	2.0	3.6
Nebraska .....	24,507	24,985	25,261	25,811	25,984	26,207	26,609	26,849	27,165	27,686	28,020	28,799	28,609	29,222	29,568	29,894	1.1	3.8
North Dakota .....	8,833	8,914	9,025	9,160	9,134	9,204	9,300	9,411	9,608	9,727	9,898	10,115	10,221	10,356	10,367	10,560	1.9	4.4
South Dakota .....	9,322	9,455	9,643	9,790	9,954	10,080	10,262	10,410	10,622	10,809	10,978	11,226	11,394	11,565	11,705	11,910	1.7	6.1
<b>Southeast ...</b>	<b>950,493</b>	<b>964,239</b>	<b>978,915</b>	<b>987,304</b>	<b>999,315</b>	<b>1,008,735</b>	<b>1,020,078</b>	<b>1,034,221</b>	<b>1,054,843</b>	<b>1,071,877</b>	<b>1,076,539</b>	<b>1,124,353</b>	<b>1,116,914</b>	<b>1,143,246</b>	<b>1,159,361</b>	<b>1,174,643</b>	<b>1.3</b>	<b>4.5</b>
Alabama .....	58,048	59,595	59,802	60,637	61,548	62,118	62,881	63,676	65,419	66,446	67,656	69,625	69,387	70,692	71,521	72,453	1.3	4.2
Arkansas .....	30,918	31,237	31,741	32,072	32,564	32,912	33,492	34,201	34,978	35,600	36,041	37,502	36,943	37,599	37,953	38,359	1.1	2.3
Florida <sup>1</sup> .....	237,568	241,251	244,117	245,785	249,286	250,539	251,850	254,199	258,114	261,888	264,984	277,345	274,283	281,097	285,399	289,334	1.4	4.3
Georgia .....	107,719	109,305	111,528	112,280	113,305	114,788	116,153	117,854	120,516	122,454	124,377	128,616	127,175	131,555	132,914	135,077	1.6	5.0
Kentucky .....	52,173	52,907	53,874	54,810	54,911	55,881	57,057	58,040	59,172	60,182	60,970	62,830	62,155	63,642	64,692	65,474	1.2	4.2
Louisiana <sup>1</sup> .....	58,497	59,269	60,285	61,217	62,262	63,078	63,991	65,119	66,228	67,241	67,616	69,498	69,531	70,895	71,787	72,452	.9	4.3
Mississippi .....	31,284	31,753	32,235	32,633	33,050	33,445	33,926	34,550	35,306	35,840	36,389	37,246	37,590	38,296	39,182	39,756	1.5	6.7
North Carolina .....	103,584	105,675	107,519	107,505	108,323	109,632	111,943	113,365	115,922	118,176	120,398	124,093	123,350	126,459	128,611	130,603	1.5	5.2
South Carolina .....	51,307	52,376	53,108	53,501	54,141	54,367	54,861	55,569	56,336	57,454	58,343	59,841	59,805	61,115	62,009	62,529	.8	4.5
Tennessee .....	76,024	76,707	78,055	78,709	79,835	80,714	81,617	83,353	85,496	87,183	88,323	91,954	91,045	93,021	94,592	95,855	1.3	4.2
Virginia .....	118,828	119,916	121,564	122,689	124,096	125,091	125,872	127,186	129,498	131,549	133,571	137,005	136,715	139,449	141,192	142,669	1.0	4.1
West Virginia .....	24,544	24,748	25,088	25,465	25,993	26,170	26,436	26,910	27,556	27,865	28,261	28,897	28,934	29,426	29,509	30,081	1.9	4.1
<b>Southwest ...</b>	<b>399,359</b>	<b>406,465</b>	<b>414,105</b>	<b>418,054</b>	<b>424,540</b>	<b>429,664</b>	<b>434,496</b>	<b>441,732</b>	<b>450,654</b>	<b>458,377</b>	<b>466,258</b>	<b>481,719</b>	<b>478,319</b>	<b>489,876</b>	<b>496,568</b>	<b>502,076</b>	<b>1.1</b>	<b>4.2</b>
Arizona .....	58,010	58,729	59,616	60,151	60,997	61,446	61,807	62,733	64,059	65,262	66,283	68,471	67,925	70,045	71,372	72,134	1.1	5.4
New Mexico .....	20,674	20,962	21,415	21,764	22,077	22,288	22,543	22,863	23,342	23,729	24,195	24,627	25,026	25,483	26,065	26,378	1.1	7.1
Oklahoma .....	45,612	46,242	46,949	47,595	47,997	48,410	48,856	49,650	50,449	51,210	51,869	53,014	52,933	53,802	54,343	54,636	.5	3.1
Texas .....	275,062	280,532	286,125	288,544	293,469	297,519	301,291	306,486	312,804	318,536	323,911	335,607	332,435	340,546	344,768	348,929	1.2	4.0
<b>Rocky Mountain ...</b>	<b>115,486</b>	<b>117,630</b>	<b>119,667</b>	<b>121,762</b>	<b>124,047</b>	<b>126,018</b>	<b>127,935</b>	<b>130,260</b>	<b>132,961</b>	<b>135,349</b>	<b>137,713</b>	<b>141,380</b>	<b>142,686</b>	<b>145,491</b>	<b>147,425</b>	<b>149,492</b>	<b>1.4</b>	<b>5.7</b>
Colorado ..																		

Table 3.—Total and Per Capita Personal Income for States and Regions, 1988–93

Area name	Total							Per capita <sup>3</sup>							
	Millions of Dollars						Percent change <sup>2</sup>	Dollars					Rank in U.S.		
	1988 <sup>r</sup>	1989 <sup>r</sup>	1990 <sup>r</sup>	1991 <sup>r</sup>	1992 <sup>r</sup>	1993 <sup>r</sup>		1988 <sup>r</sup>	1989 <sup>r</sup>	1990 <sup>r</sup>	1991 <sup>r</sup>	1992 <sup>r</sup>	1993 <sup>r</sup>	1988	1993
<b>United States<sup>1</sup></b> .....	<b>4,061,806</b>	<b>4,366,135</b>	<b>4,655,420</b>	<b>4,831,697</b>	<b>5,128,373</b>	<b>5,368,962</b>	<b>4.7</b>	<b>16,610</b>	<b>17,690</b>	<b>18,667</b>	<b>19,163</b>	<b>20,105</b>	<b>20,817</b>	.....	.....
<b>New England</b> .....	<b>265,334</b>	<b>281,095</b>	<b>289,961</b>	<b>294,889</b>	<b>308,867</b>	<b>321,025</b>	<b>3.9</b>	<b>20,276</b>	<b>21,325</b>	<b>21,935</b>	<b>22,338</b>	<b>23,406</b>	<b>24,265</b>	.....	.....
Connecticut .....	75,790	80,601	83,633	84,581	89,029	92,124	3.5	23,160	24,548	25,426	25,705	27,150	28,110	1	1
Maine .....	18,486	20,089	20,981	21,378	22,456	23,420	4.3	15,354	16,467	17,041	17,294	18,163	18,895	27	32
Massachusetts .....	124,327	130,466	133,890	136,210	141,884	147,679	4.1	20,787	21,688	22,248	22,719	23,676	24,563	3	4
New Hampshire .....	20,888	22,065	22,491	23,231	24,457	25,498	4.3	19,292	19,977	20,231	20,973	21,933	22,659	6	9
Rhode Island .....	17,261	18,454	19,121	19,411	20,304	21,096	3.9	17,321	18,441	19,035	19,340	20,276	21,096	14	17
Vermont .....	8,581	9,421	9,846	10,077	10,737	11,207	4.4	15,607	16,891	17,444	17,750	18,792	19,467	23	26
<b>Mideast</b> .....	<b>834,323</b>	<b>894,080</b>	<b>947,684</b>	<b>976,538</b>	<b>1,033,068</b>	<b>1,069,249</b>	<b>3.5</b>	<b>19,206</b>	<b>20,513</b>	<b>21,682</b>	<b>22,241</b>	<b>23,416</b>	<b>24,099</b>	.....	.....
Delaware .....	11,371	12,420	13,193	13,748	14,318	15,042	5.1	17,555	18,867	19,719	20,195	20,724	21,481	12	15
District of Columbia .....	13,420	14,227	14,878	15,491	16,333	17,028	4.3	21,284	22,794	24,643	26,069	27,909	29,348	.....	.....
Maryland .....	91,790	99,769	105,985	109,400	114,414	119,375	4.3	19,703	21,105	22,088	22,494	23,268	24,044	5	5
New Jersey .....	167,602	178,582	187,167	191,559	204,038	212,478	4.1	21,729	23,114	24,182	24,644	26,091	26,967	2	2
New York .....	353,658	377,342	401,833	412,663	436,354	448,076	2.7	19,209	20,983	22,322	22,866	24,095	24,623	4	3
Pennsylvania .....	196,483	211,739	224,628	233,676	247,611	257,248	3.9	16,584	17,844	18,884	19,557	20,642	21,351	17	16
<b>Great Lakes</b> .....	<b>680,125</b>	<b>728,259</b>	<b>769,910</b>	<b>795,386</b>	<b>846,445</b>	<b>885,877</b>	<b>4.7</b>	<b>16,299</b>	<b>17,392</b>	<b>18,297</b>	<b>18,762</b>	<b>19,814</b>	<b>20,594</b>	.....	.....
Illinois .....	201,919	217,594	230,790	237,427	252,858	264,152	4.5	17,725	19,071	20,159	20,602	21,774	22,582	10	10
Indiana .....	81,901	88,227	93,415	96,720	103,922	109,701	5.6	14,911	15,972	16,815	17,251	18,366	19,203	31	30
Michigan .....	152,142	162,359	169,808	175,001	184,765	193,849	4.9	16,502	17,546	18,239	18,667	19,586	20,453	20	20
Ohio .....	169,902	180,248	190,608	197,425	209,851	218,371	4.1	15,732	16,644	17,547	18,047	19,040	19,688	22	24
Wisconsin .....	74,260	79,831	85,288	88,812	95,049	99,805	5.0	15,397	16,438	17,399	17,954	19,038	19,811	26	22
<b>Plains</b> .....	<b>269,192</b>	<b>289,663</b>	<b>309,893</b>	<b>322,043</b>	<b>343,429</b>	<b>354,972</b>	<b>3.4</b>	<b>15,351</b>	<b>16,462</b>	<b>17,519</b>	<b>18,104</b>	<b>19,164</b>	<b>19,662</b>	.....	.....
Iowa .....	39,681	43,352	46,375	47,695	51,225	51,541	6	14,332	15,647	16,683	17,096	18,275	18,315	34	35
Kansas .....	38,778	40,553	43,763	45,553	48,764	50,967	4.5	15,748	16,999	17,639	18,290	19,387	20,139	21	21
Minnesota .....	70,914	77,405	82,388	85,314	91,611	95,152	3.9	16,504	17,843	18,784	19,276	20,503	21,063	19	18
Missouri .....	79,134	84,348	89,245	93,442	98,470	101,867	3.5	15,570	16,552	17,407	18,121	18,970	19,463	24	27
Nebraska .....	23,908	25,276	27,470	28,720	30,368	31,703	4.4	15,211	16,050	17,379	18,059	18,974	19,726	28	23
North Dakota .....	7,816	8,877	9,765	9,891	10,809	11,104	2.7	11,925	13,735	15,320	15,617	17,488	17,488	49	39
South Dakota .....	8,962	9,851	10,888	11,427	12,183	12,638	3.7	12,835	14,139	15,628	16,286	17,198	17,666	41	37
<b>Southeast</b> .....	<b>849,116</b>	<b>916,226</b>	<b>981,283</b>	<b>1,028,748</b>	<b>1,095,327</b>	<b>1,161,410</b>	<b>6.0</b>	<b>14,607</b>	<b>15,600</b>	<b>16,501</b>	<b>17,071</b>	<b>17,926</b>	<b>18,753</b>	.....	.....
Alabama .....	52,521	56,291	60,332	63,863	68,358	72,154	5.6	13,051	13,967	14,899	15,614	16,522	17,234	39	41
Arkansas .....	28,793	30,702	32,450	34,341	37,434	39,138	4.6	12,289	13,085	13,779	14,485	15,635	16,143	47	49
Florida .....	205,127	228,024	244,604	254,585	265,764	285,300	7.4	16,666	18,043	18,785	19,180	19,711	20,857	16	19
Georgia .....	97,819	104,184	111,406	117,094	125,642	133,345	6.1	15,485	16,250	17,121	17,666	18,549	19,278	25	29
Kentucky .....	46,930	50,586	54,454	57,520	62,043	65,064	4.9	12,751	13,756	14,751	15,483	16,528	17,173	43	42
Louisiana .....	53,911	56,369	60,228	64,083	68,167	71,593	5.0	10,268	13,254	14,279	15,100	15,931	16,667	44	45
Mississippi .....	28,854	30,672	32,398	34,265	36,827	39,362	6.9	11,181	11,915	12,578	13,218	14,082	14,894	50	50
North Carolina .....	93,560	100,010	108,339	113,392	122,117	129,889	6.4	14,435	15,233	16,284	16,802	17,863	18,702	33	33
South Carolina .....	45,018	47,995	52,855	55,130	58,410	61,645	5.5	13,192	13,884	15,101	15,484	16,212	16,923	38	44
Tennessee .....	68,379	73,177	77,786	81,831	88,816	93,993	5.8	14,177	15,074	15,903	16,524	17,674	18,434	36	34
Virginia .....	106,011	114,864	121,397	126,206	133,534	140,421	5.2	17,558	18,768	19,543	20,071	20,883	21,634	11	13
West Virginia .....	22,193	23,352	25,034	26,440	28,215	29,503	4.6	12,124	12,926	13,964	14,695	15,598	16,209	48	47
<b>Southwest</b> .....	<b>360,245</b>	<b>385,260</b>	<b>414,512</b>	<b>437,573</b>	<b>469,786</b>	<b>498,669</b>	<b>6.1</b>	<b>14,489</b>	<b>15,359</b>	<b>16,323</b>	<b>16,952</b>	<b>17,861</b>	<b>18,596</b>	.....	.....
Arizona .....	53,251	56,646	59,833	62,543	66,687	71,326	7.0	15,061	15,639	16,262	16,697	17,401	18,121	30	36
New Mexico .....	18,713	20,134	21,602	22,872	24,452	26,343	7.7	12,554	13,388	14,213	14,781	15,458	16,297	45	46
Oklahoma .....	42,158	44,694	47,580	49,531	52,630	54,998	4.5	13,310	14,187	15,117	15,636	16,420	17,020	37	43
Texas .....	246,122	263,785	285,497	302,627	326,016	346,002	6.1	14,765	15,695	16,747	17,440	18,437	19,189	32	31
<b>Rocky Mountain</b> .....	<b>104,451</b>	<b>113,279</b>	<b>121,418</b>	<b>129,865</b>	<b>139,555</b>	<b>150,108</b>	<b>7.6</b>	<b>14,500</b>	<b>15,659</b>	<b>16,639</b>	<b>17,456</b>	<b>18,293</b>	<b>19,160</b>	.....	.....
Colorado .....	53,966	58,202	62,163	66,519	71,600	76,895	7.4	16,540	17,767	18,818	19,748	20,666	21,564	18	14
Idaho .....	12,668	14,241	15,482	16,388	17,746	19,395	9.3	12,850	14,321	15,304	15,773	16,649	17,646	40	38
Montana .....	10,269	11,317	11,790	12,623	13,344	14,541	9.0	12,832	14,152	14,743	15,632	16,227	17,322	42	40
Utah .....	20,915	22,520	24,320	26,076	28,206	30,089	6.7	12,379	13,201	14,063	14,759	15,573	16,180	46	48
Wyoming .....	6,633	6,999	7,664	8,278	8,659	9,188	6.1	14,260	15,270	16,905	18,076	18,671	19,539	35	25
<b>Far West</b> .....	<b>699,019</b>	<b>758,274</b>	<b>820,759</b>	<b>846,656</b>	<b>891,897</b>	<b>927,652</b>	<b>4.0</b>	<b>18,134</b>	<b>19,180</b>	<b>20,242</b>	<b>20,483</b>	<b>21,190</b>	<b>21,747</b>	.....	.....
Alaska .....	9,720	10,741	11,550	12,226	12,970	13,688	5.5	17,931	19,631	20,887	21,498	22,067	22,846	8	7
California .....	532,444	573,255	617,679	630,901	659,567	681,061	3.3	18,703	19,620	20,656	20,748	21,348	21,821	7	12
Hawaii .....	18,924	20,957	23,266	24,488	25,657	27,361	6.6	17,522	19,146	20,905	21,576	22,200	23,354	13	6
Nevada .....	19,253	22,031	24,682	26,582	28,931	31,569	9.1	17,907	19,370	20,248	20,639	21,648	22,729	9	8
Oregon .....	41,327	45,452	49,161	51,701	55,286	58,948	6.6	15,074	16,287	17,201	17,714	18,605	19,443	29	28
Washington .....	77,352	85,838	94,420	100,758	109,485	115,025	5.1	16,669	18,085	19,268	20,087	21,289	21,887	15	11
Census Divisions															
New England .....	265,334	281,095	289,961	294,889	308,867	321,025	3.9	20,276	21,325	21,935	22,338	23,406	24,265		

Table 4.—Total and Per Capita Disposable Personal Income for States and Regions, 1988–93

Area name	Total							Per capita <sup>2</sup>							
	Millions of Dollars						Percent change <sup>1</sup>	Dollars					Rank in U.S.		
	1988 <sup>r</sup>	1989 <sup>r</sup>	1990 <sup>r</sup>	1991 <sup>r</sup>	1992 <sup>r</sup>	1993 <sup>p</sup>		1988 <sup>r</sup>	1989 <sup>r</sup>	1990 <sup>r</sup>	1991 <sup>r</sup>	1992 <sup>r</sup>	1993 <sup>p</sup>	1988	1993
<b>United States</b> .....	<b>3,535,222</b>	<b>3,774,071</b>	<b>4,033,622</b>	<b>4,212,193</b>	<b>4,484,138</b>	<b>4,687,969</b>	<b>4.5</b>	<b>14,457</b>	<b>15,291</b>	<b>16,173</b>	<b>16,706</b>	<b>17,580</b>	<b>18,177</b>	.....	.....
<b>New England</b> .....	<b>228,223</b>	<b>241,080</b>	<b>248,890</b>	<b>254,494</b>	<b>265,943</b>	<b>276,066</b>	<b>3.8</b>	<b>17,440</b>	<b>18,289</b>	<b>18,828</b>	<b>19,278</b>	<b>20,153</b>	<b>20,867</b>	.....	.....
Connecticut .....	64,491	68,494	71,062	72,320	75,393	77,920	3.4	19,707	20,860	21,604	21,979	22,992	23,776	.....	1
Maine .....	16,254	17,678	18,546	19,088	20,098	20,944	4.2	13,500	14,490	15,064	15,442	16,256	16,898	27	29
Massachusetts .....	106,361	111,294	113,899	116,471	121,365	126,168	4.0	17,784	18,501	18,926	19,427	20,252	20,985	3	3
New Hampshire .....	18,643	19,659	20,144	20,835	21,919	22,819	4.1	17,219	17,799	18,120	18,810	19,656	20,278	4	7
Rhode Island .....	14,952	15,751	16,645	16,932	17,729	18,384	3.7	15,004	15,741	16,570	16,870	17,706	18,384	13	17
Vermont .....	7,521	8,204	8,594	8,848	9,439	9,830	4.2	13,678	14,711	15,225	15,584	16,521	17,076	24	28
<b>Mideast</b> .....	<b>709,892</b>	<b>756,872</b>	<b>806,967</b>	<b>837,899</b>	<b>887,968</b>	<b>918,816</b>	<b>3.5</b>	<b>16,341</b>	<b>17,365</b>	<b>18,463</b>	<b>19,083</b>	<b>20,127</b>	<b>20,709</b>	.....	.....
Delaware .....	9,460	10,298	11,069	11,703	12,217	12,867	5.3	14,605	15,643	16,545	17,190	17,682	18,374	15	18
District of Columbia .....	11,268	11,906	12,263	12,920	13,689	14,227	3.9	17,871	19,075	20,312	21,743	23,391	24,595	.....	.....
Maryland .....	78,078	83,823	89,726	92,664	97,734	102,041	4.4	16,760	17,732	18,700	19,053	19,876	20,552	5	5
New Jersey .....	143,517	153,535	161,396	165,718	176,849	184,012	4.1	18,606	19,872	20,852	21,319	22,614	23,354	2	2
New York .....	296,749	313,206	337,229	350,419	371,430	381,186	2.6	16,538	17,417	18,733	19,417	20,510	20,948	6	4
Pennsylvania .....	170,819	184,104	195,284	204,475	216,049	224,484	3.9	14,418	15,515	16,417	17,113	18,011	18,632	18	14
<b>Great Lakes</b> .....	<b>593,024</b>	<b>629,888</b>	<b>667,483</b>	<b>692,397</b>	<b>740,115</b>	<b>772,637</b>	<b>4.4</b>	<b>14,212</b>	<b>15,043</b>	<b>15,863</b>	<b>16,333</b>	<b>17,325</b>	<b>17,961</b>	.....	.....
Illinois .....	175,009	187,719	199,341	206,125	220,325	229,825	4.3	15,363	16,452	17,412	17,886	18,972	19,648	10	10
Indiana .....	71,966	76,887	81,308	84,616	91,256	96,113	5.3	13,102	13,919	14,636	15,092	16,128	16,824	32	31
Michigan .....	132,438	139,905	147,448	152,737	161,837	169,518	4.7	14,385	15,119	15,837	16,292	17,155	17,886	19	20
Ohio .....	148,972	156,510	165,624	172,106	184,038	190,551	3.5	13,794	14,453	15,247	15,732	16,698	17,180	22	25
Wisconsin .....	64,639	68,866	73,762	76,814	82,659	86,630	4.8	13,402	14,180	15,047	15,529	16,556	17,196	28	24
<b>Plains</b> .....	<b>235,716</b>	<b>251,241</b>	<b>269,410</b>	<b>280,868</b>	<b>300,373</b>	<b>309,122</b>	<b>2.9</b>	<b>13,442</b>	<b>14,279</b>	<b>15,231</b>	<b>15,790</b>	<b>16,762</b>	<b>17,122</b>	.....	.....
Iowa .....	34,826	37,583	40,351	41,275	44,510	44,411	-2	12,578	13,565	14,516	14,794	15,880	15,782	36	38
Kansas .....	33,990	34,920	37,855	39,788	42,809	44,629	4.3	13,804	14,121	15,258	15,976	17,019	17,635	21	21
Minnesota .....	60,875	66,033	70,134	72,641	78,267	80,894	3.4	14,168	15,222	15,990	16,413	17,516	17,907	20	19
Missouri .....	69,564	73,393	78,166	82,527	87,074	89,803	3.1	13,687	14,403	15,246	16,004	16,775	17,158	23	26
Nebraska .....	21,281	22,487	24,247	25,365	26,863	27,990	4.2	13,540	14,278	15,340	15,950	16,784	17,416	26	23
North Dakota .....	6,995	7,884	8,819	8,881	9,766	9,961	2.0	10,672	12,198	13,837	14,023	15,403	15,688	49	39
South Dakota .....	8,185	8,941	9,837	10,391	11,085	11,433	3.1	11,721	12,834	14,120	14,809	15,648	15,981	49	35
<b>Southeast</b> .....	<b>749,616</b>	<b>804,746</b>	<b>864,179</b>	<b>910,586</b>	<b>971,933</b>	<b>1,028,593</b>	<b>5.8</b>	<b>12,896</b>	<b>13,702</b>	<b>14,532</b>	<b>15,110</b>	<b>15,906</b>	<b>16,608</b>	.....	.....
Alabama .....	46,931	49,870	53,564	56,677	60,891	64,193	5.4	11,662	12,374	13,227	13,857	14,717	15,332	40	40
Arkansas .....	25,717	27,362	28,816	30,617	33,473	34,971	4.5	10,976	11,662	12,236	12,914	13,981	14,424	48	48
Florida .....	179,594	200,008	215,305	226,123	236,372	253,237	7.1	14,591	15,826	16,535	17,036	17,532	18,513	16	16
Georgia .....	85,735	90,561	96,897	102,747	110,377	116,701	5.7	13,572	14,126	14,891	15,502	16,296	16,871	25	30
Kentucky .....	41,327	44,215	47,621	50,254	54,309	56,871	4.7	11,229	12,024	12,901	13,528	14,468	15,010	44	44
Louisiana .....	48,852	50,815	53,686	57,222	61,226	64,204	4.9	11,389	11,948	12,728	13,483	14,309	14,947	43	45
Mississippi .....	26,475	27,902	29,597	31,418	33,837	36,025	6.5	10,259	10,839	11,491	12,120	12,939	13,631	50	50
North Carolina .....	81,858	87,117	94,761	99,469	107,389	114,049	6.2	12,629	13,269	14,243	14,739	15,709	16,421	35	34
South Carolina .....	40,040	42,084	46,645	48,978	52,124	54,900	5.3	11,733	12,174	13,327	13,756	14,467	15,071	38	42
Tennessee .....	61,866	65,749	70,020	74,190	80,628	85,175	5.6	12,827	13,544	14,315	14,981	16,045	16,705	34	33
Virginia .....	91,031	98,168	104,895	109,201	115,898	121,780	5.1	15,077	16,040	16,886	17,366	18,125	18,762	11	13
West Virginia .....	20,190	20,895	22,372	23,690	25,409	26,487	4.2	11,030	11,566	12,479	13,167	14,047	14,552	46	47
<b>Southwest</b> .....	<b>319,949</b>	<b>341,586</b>	<b>365,875</b>	<b>388,137</b>	<b>418,382</b>	<b>443,546</b>	<b>6.0</b>	<b>12,868</b>	<b>13,618</b>	<b>14,408</b>	<b>15,037</b>	<b>15,907</b>	<b>16,541</b>	.....	.....
Arizona .....	46,885	49,623	52,753	54,855	58,683	62,666	6.8	13,261	13,700	14,338	14,645	15,312	15,921	29	37
New Mexico .....	16,595	18,019	19,238	20,463	21,921	23,580	7.6	11,133	11,982	12,658	13,224	13,858	14,587	45	46
Oklahoma .....	37,582	39,537	41,832	43,615	46,592	48,666	4.5	11,865	12,550	13,291	13,768	14,536	15,060	37	43
Texas .....	218,888	234,406	252,052	269,204	291,186	308,635	6.0	13,131	13,947	14,785	15,514	16,467	17,116	31	27
<b>Rocky Mountain</b> .....	<b>92,747</b>	<b>99,271</b>	<b>105,753</b>	<b>113,357</b>	<b>121,916</b>	<b>131,069</b>	<b>7.5</b>	<b>12,875</b>	<b>13,723</b>	<b>14,492</b>	<b>15,237</b>	<b>15,981</b>	<b>16,730</b>	.....	.....
Colorado .....	47,560	50,573	53,617	57,394	61,875	66,425	7.4	14,577	15,438	16,231	17,032	17,859	18,628	17	15
Idaho .....	11,457	12,804	13,998	14,801	16,048	17,557	9.4	11,622	12,876	13,836	14,262	15,056	15,974	41	36
Montana .....	9,126	9,858	10,263	11,047	11,663	12,699	8.9	11,403	12,329	12,834	13,681	14,183	15,128	42	41
Utah .....	18,625	19,836	21,024	22,692	24,557	26,157	6.5	11,023	11,628	12,158	12,844	13,558	14,066	47	49
Wyoming .....	5,979	6,200	6,852	7,422	7,772	8,231	5.9	12,854	13,526	15,114	16,208	16,724	17,504	33	22
<b>Far West</b> .....	<b>606,054</b>	<b>649,387</b>	<b>705,064</b>	<b>734,456</b>	<b>777,507</b>	<b>808,120</b>	<b>3.9</b>	<b>15,722</b>	<b>16,426</b>	<b>17,389</b>	<b>17,769</b>	<b>18,473</b>	<b>18,944</b>	.....	.....
Alaska .....	8,780	9,467	10,149	10,836	11,545	12,166	5.4	16,198	17,303	18,354	19,054	19,642	20,306	7	6
California .....	459,231	488,570	528,976	546,875	574,751	592,902	3.2	16,131	16,721	17,690	17,985	18,603	18,997	8	12
Hawaii .....	16,239	17,600	19,691	20,847	21,934	23,476	7.0	15,036	16,079	17,693	18,368	18,978	20,038	12	8
Nevada .....	16,701	19,111	21,434	23,132	25,254	27,474	8.8	15,533	16,802	17,584	17,960	18,897	19,781	9	9
Oregon .....	36,064	38,932	42,044	44,448	47,556	50,726	6.7	13,154	13,951	14,711	15,229	16,004	16,731	30	32
Washington .....	69,039	75,707	82,770	88,318	96,467	101,376	5.1	14,877	15,951	16,890	17,607	18,758	19,290	14	11
Census Divisions															
New England .....	228,223	241,080	248,890	254,494	265,943	276,066	3.8	17,440	18,289	18,828	19,278	20,153	20,867	.....	.....





# Local Area Personal Income

- Estimates for 1990–92
- Revisions to the Estimates for 1981–91

**T**HIS ARTICLE presents new estimates of personal income and per capita personal income for local areas—that is, for counties and metropolitan areas—for 1992 and revised estimates for 1990–91. It also discusses the sources of the revisions to the local area estimates for 1981–91, and it describes the changes in the definitions of the county-based metropolitan areas that were issued by the Office of Management and Budget in June 1993.

Table 1 presents estimates for the metropolitan areas. Table 2 presents estimates for counties and county equivalents. For Virginia, estimates are presented for the larger independent cities as well as for most counties; estimates for the smaller independent cities are combined with estimates for adjacent counties.

## *Incorporation of new source data*

The local area estimates for 1981–91 have been revised to incorporate new source data that were not available in time to be used in the comprehensive revision to the estimates that was released in May 1993.<sup>1</sup> These data are available either irregularly or less frequently than biennially and cannot be incorporated into the estimates without revising more than the 2 years of estimates that are normally revised each year. In addition, the 1990–91 estimates reflect the routine incorporation of the revisions to the State estimates that were released in October 1993 and of more current State and county source data.<sup>2</sup>

The introduction of the source data changed both the State and the local area estimates of personal income. The changes to the estimates for 1981–89 resulted from revisions to nonfarm proprietors' income, to some components of farm proprietors' income, and to the estimates of the residence adjustment.

*Nonfarm proprietors' income.*—The State and local area estimates of nonfarm proprietors' income for 1984–92 now reflect the incorporation of tabulations of data from the 1987–89 Federal income tax returns of sole proprietors and partnerships; previously, the most current of these data available to BEA were for 1983. The estimates for 1987–89 are based directly on the data for those years, and the estimates for 1984–86 are based on interpolations between the data for 1983 and 1987. The 1990 estimates are extrapolations of the 1989 estimates for each Standard Industrial Classification two-digit industry by the change in the number of small firms reported in the Census Bureau's *County Business Patterns*. In the absence of pertinent county data after 1990, the 1991–92 State estimates are allocated to counties in proportion to the 1990 estimates.

*Farm proprietors' income.*—The local area estimates of farm proprietors' income for 1983–92 now reflect the full use of data from the 1987 Census of Agriculture; previously, the estimates of important categories of both gross receipts and production expenses were based on data from the 1982 census. The 1987 county estimates of gross receipts from "other" farm-related activities (that is, other than crop and livestock production) and of a miscellaneous category of production expenses that includes interest and property taxes are based on the 1987 census data, and the 1983–86 estimates are based on interpolations between the 1982 and 1987 census data. In the absence of pertinent county data after 1987, the 1988–92 State estimates of these categories are allocated to counties in proportion to the 1987 estimates.

For 1982–92, both the State and the local area estimates of farm proprietors' income now reflect new State estimates of selected farm production expenses prepared by the Department of Agriculture.

*Adjustment for residence.*—The State and local area estimates of this adjustment—the net inflow of the earnings of interstate or intercounty

1. See Wallace K. Bailey, "Comprehensive Revision of Local Area Personal Income Estimates, 1969–90," *SURVEY OF CURRENT BUSINESS* 73 (May 1993): 63–87.

2. The State estimates are presented in "State Personal Income, Revised Estimates for 1990–92," *SURVEY* 73 (September 1993): 70–85.

commuters—for 1981–92 now reflect the incorporation of journey-to-work data from the 1990 Census of Population; previously, the most current journey-to-work data used for the estimates were those from the 1980 Census. The estimates for 1990 reflect the incorporation of the journey-to-work data from the 1990 census, and the estimates for 1981–89 reflect interpolations between the data from the 1980 and 1990 censuses. The 1990 estimates are extrapolated to 1991–92 by (1) the BEA estimates of wages and salaries by place of work, (2) Internal Revenue Service tabulations of wages and salaries by place of residence, which are only available through 1991, and (3) Census Bureau population estimates.

### *Changes in the definitions of metropolitan areas*

The metropolitan area definitions used by BEA for its personal income estimates are the county-based definitions issued by the Office of Management and Budget for Federal statistical purposes. These areas consist of 58 primary metropolitan statistical areas (PMSA's), 240 metropolitan statistical areas (MSA's), and 12 New England county

metropolitan areas (NECMA's).<sup>3</sup> The PMSA's and one NECMA are grouped into 17 consolidated metropolitan statistical areas (CMSA's).

The estimates presented here reflect the changes in the metropolitan area definitions issued in June 1993. The following changes were particularly significant: The division of the former New York-Newark, NY-NJ-PA PMSA into seven PMSA's and Pike County, Pennsylvania; the addition of Pike County to the former Orange County, NY PMSA, which is now called the Newburgh, NY-PA PMSA; the addition of a formerly nonmetropolitan county to each of five MSA's; and the recognition of the Jackson, TN MSA.<sup>4</sup>

*Tables 1 and 2 follow beginning on page 130.* 

3. For the New England region, BEA uses a county-based definition rather than a definition in terms of cities and towns, because the available data for cities and towns are insufficient.

A list of the metropolitan areas and their definitions (Accession Number PB 93-505-824) is available from the National Technical Information Service (NTIS). The list in electronic form (Wordperfect 5.1, Accession Number PB 93-505-816) is also available through NTIS. Write to NTIS, Document Sales, 5205 Port Royal Road, Springfield, VA 22161, or call (703) 487-4650.

4. The PMSA's into which the former New York-Newark PMSA was divided are Bergen-Passaic, NJ; Jersey City, NJ; Middlesex-Somerset-Hunterdon, NJ; Monmouth-Ocean, NJ; Nassau-Suffolk, NY; New York, NY; and Newark, NJ.

The MSA's to which counties were added are Augusta-Aiken, GA-SC; Baton Rouge, LA; Chattanooga, TN-GA; Huntington-Ashland, WV-KY-OH; and Wilmington, NC.

### Acknowledgments

The revised estimates of local area personal income were prepared by the Regional Economic Measurement Division under the direction of Linnea Hazen, Chief. The preparation of the estimates was a divisionwide effort.

Estimates of nonfarm labor earnings (wages and salaries and other labor income) were prepared by the Regional Wage Branch under the supervision of Sharon C. Carnevale, Chief. Major responsibilities were assigned to Elizabeth P. Cologer, Lisa C. Ninomiya, Michael G. Pilot, John A. Rusinko, and James M. Scott. Contributing staff members were E. Frances Bake, Christopher T. Berry, Susan P. Den Herder, Elizabeth A. Freeman, Lela S. Lester, Russell C. Lusher, Richard A. Lutyk, Paul K. Medzerian, Michael Phillips, Adrienne T. Pilot, William E. Reid, Jr., Dolores A. Rynn, Victor A. Sahadachny, Eugene L. Souder, Darleen K. Won, and Jaime Zenzano.

Estimates of farm earnings (wages and salaries, other labor income, and proprietors' income) and the residence adjustments were prepared by the Quarterly Income Branch under the supervision of Robert L. Brown,

Assistant Division Chief. Major responsibilities were assigned to James M. Zavrel. Contributing staff members were Elaine M. Briccetti, Daniel R. Corrin, Richard H. Grayson, Michael S. Wagner, and Daniel Zabronsky.

Estimates of nonfarm proprietors' income, dividends, interest, rent, transfer payments, and personal contributions for social insurance were prepared by the Proprietors' Income Branch under the supervision of Bruce Levine, Chief. Major responsibilities were assigned to Charles A. Jolley. Contributing staff members were Sean P. Collier, Catherine A. Cumberland, Toan A. Ly, Ellen M. Wright, and Marianne A. Ziver.

The assembly of public use tabulations and data files and the preparation of the text and tables for this article were performed by the Regional Economic Information System Branch. Major responsibilities were assigned to Kathy A. Albetski, Wallace K. Bailey, and Gary V. Kennedy. Contributing staff members were H. Steven Dolan, Jeffrey L. Newman, Michael J. Paris, Albert Silverman, Callan S. Swenson, Hilda G. Tolson, Monique B. Tyes, and Mary C. Williams.

## Data Availability

Personal income by type of payment and earnings by Standard Industrial Classification (SIC) division, as shown in table A, are available for metropolitan areas and counties for 1969–92. A version of this table that includes earnings by SIC two-digit industry is also available. In addition, there are supplemental tables for employment by SIC division (the “one-digit” level), for transfer payments by program, and for major categories of farm income and expenses.

The entire set of these tables for all counties and metropolitan areas and for all years will be available on a CD-ROM by the end of May. This CD-ROM will also contain quarterly State estimates of personal income for 1969–93, gross state product estimates for 1977–90, projections of State and metropolitan area personal income and employment to 2040 that have been updated to reflect the June 1993 changes in the metropolitan area definitions, and a description of the sources and methods used to estimate local area personal income. The CD-ROM is designed for use with microcomputers equipped with the MS-DOS operating system and will include a program to help users select, display, print, and copy the tables. The price is \$35.00.

These tables are also available on magnetic tapes, computer printouts, and microcomputer diskettes. Each table for all years of data for all the metropolitan areas or for all the counties is available on a single reel of magnetic tape, but the table that includes earnings by SIC two-digit industry requires two reels at standard blocksize; the price of each reel of magnetic tape is \$100. The tables on computer printouts are priced by the number of pages; the minimum charge is \$10. The tables on diskette are priced at \$20 per diskette.

Materials available without charge include a sample packet of all available tables, a list of the State agencies and university research bureaus from which the BEA State and local area estimates can be obtained, and the description of sources and methods used to prepare the local area estimates.

For information on ordering these products, write to the Regional Economic Information System, BE-55, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230, or call (202) 606-5360. Visa or Mastercard are accepted for telephone orders.

**Table A.—Example of Available Data for Local Areas: Personal Income by Major Source and Earnings by Major Industry, 1987–92<sup>1</sup>**

[Thousands of dollars]

	New London County, Connecticut					
	1987	1988	1989	1990	1991	1992
<b>Income by Place of Residence</b>						
Total personal income .....	4,432,832	4,696,727	5,001,642	5,129,498	5,286,014	5,567,535
Nonfarm personal income .....	4,391,411	4,649,645	4,953,590	5,071,027	5,227,635	5,505,135
Farm income <sup>2</sup> .....	41,421	47,082	48,052	58,471	58,379	62,400
Population (thousands) <sup>3</sup> .....	251.0	254.3	254.9	255.2	254.0	248.2
Per capita personal income (dollars) .....	17,664	18,472	19,625	20,102	20,809	22,427
Derivation of total personal income:						
Total earnings by place of work .....	3,352,266	3,557,432	3,742,284	3,797,899	3,908,352	4,093,050
Less: Personal cont. for social insur. <sup>4</sup> .....	203,584	221,909	238,690	246,894	259,895	269,416
Plus: Adjustment for residence <sup>5</sup> .....	23,813	47,913	41,932	55,888	42,070	37,331
Equals: Net earn. by place of residence .....	3,172,495	3,383,436	3,545,526	3,606,893	3,690,527	3,860,965
Plus: Dividends, interest, and rent <sup>6</sup> .....	728,088	753,194	836,872	821,127	813,831	805,160
Plus: Transfer payments .....	532,249	560,097	619,244	701,478	781,656	901,410
<b>Earnings by Place of Work</b>						
Earnings by type:						
Wages and salaries .....	2,809,178	2,962,737	3,122,063	3,169,878	3,255,450	3,389,483
Other labor income .....	256,365	277,716	306,191	316,737	342,460	367,214
Proprietors' income <sup>7</sup> .....	286,723	316,979	314,030	311,284	310,442	336,353
Farm .....	30,829	35,200	35,595	42,317	42,424	45,747
Nonfarm .....	255,894	281,779	278,435	268,967	268,018	290,606
Earnings by industry:						
Farm .....	41,421	47,082	48,052	58,471	58,379	62,400
Nonfarm .....	3,310,845	3,510,350	3,694,232	3,739,428	3,849,973	4,030,650
Private .....	2,563,059	2,717,472	2,851,514	2,831,824	2,902,963	3,092,469
Ag. serv., for., fish., and other <sup>8</sup> .....	12,368	13,303	11,880	13,437	14,695	14,799
Mining .....	2,333	2,870	3,032	4,236	4,681	7,480
Construction .....	221,444	252,605	249,006	182,679	162,562	203,491
Manufacturing .....	1,080,152	1,041,641	1,092,398	1,108,053	1,145,270	1,099,736
Nondurable goods .....	262,218	270,198	289,288	306,990	329,023	358,943
Durable goods .....	817,934	771,443	803,110	801,063	816,247	740,793
Transportation and public utilities .....	169,799	177,038	194,913	194,389	207,956	205,725
Wholesale trade .....	80,133	87,800	94,770	87,259	88,988	95,278
Retail trade .....	339,406	372,678	377,057	360,025	348,428	358,137
Finance, insurance, and real estate .....	84,716	105,704	104,553	106,697	110,261	117,911
Services .....	572,708	663,833	723,905	775,049	820,122	989,912
Government and government enterprises .....	747,786	792,878	842,718	907,604	947,010	938,181
Federal, civilian .....	132,857	140,846	144,193	158,604	156,766	164,845
Military .....	298,028	296,219	298,470	322,619	325,580	292,876
State and local .....	316,901	355,813	400,055	426,381	464,664	480,460

1. 1987 based on 1972 SIC. 1988–92 based on 1987 SIC.

2. Farm income consists of proprietors' net farm income, the wages of hired labor, the pay-in-kind of hired farm labor, and the salaries of officers of corporate farms.

3. Census Bureau midyear population estimates. Estimates for 1990–92 reflect State and county estimates available as of February 1994.

4. Personal contributions for social insurance are included in earnings by type and industry but excluded from personal income.

5. U.S. adjustment for residence consists of adjustments for border workers: Income of U.S.

residents commuting outside U.S. borders to work less income of foreign residents commuting inside U.S. borders to work plus certain Caribbean seasonal workers.

6. Includes the capital consumption adjustment for rental income of persons.

7. Includes the inventory valuation and capital consumption adjustments.

8. "Other" consists of wages and salaries of U.S. residents employed by international organizations and foreign embassies and consulates in the U.S.

<sup>D</sup> Not shown to avoid disclosure of confidential information. Estimates are included in totals.

<sup>L</sup> Less than \$50,000. Estimates are included in totals.

Table 1.—Total Personal Income and Per Capita Personal Income by Metropolitan Area, 1990–92

Total personal income				Per capita personal income <sup>3</sup>				Total personal income				Per capita personal income <sup>3</sup>					
Area name	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in U.S.	Area name	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in U.S.
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
<b>United States<sup>1</sup></b>	<b>4,655,420</b>	<b>4,831,697</b>	<b>5,128,373</b>	<b>6.1</b>	<b>18,667</b>	<b>19,163</b>	<b>20,105</b>		Columbus, OH	24,664	25,870	27,845	7.6	18,264	18,859	19,974	92
<b>Metropolitan portion</b>	<b>3,928,153</b>	<b>4,073,607</b>	<b>4,318,618</b>	<b>6.0</b>	<b>19,797</b>	<b>20,289</b>	<b>21,247</b>		Corpus Christi, TX	5,137	5,513	5,917	7.3	13,468	15,474	16,371	249
<b>Nonmetropolitan portion</b>	<b>727,267</b>	<b>758,090</b>	<b>809,755</b>	<b>6.8</b>	<b>14,266</b>	<b>14,761</b>	<b>15,628</b>		Cumberland, MD-WV	1,468	1,521	1,580	3.9	14,456	14,963	15,566	284
<b>Consolidated Metropolitan Statistical Areas</b>									Dallas, TX *	55,091	58,370	62,682	7.4	20,481	21,266	22,424	35
Chicago-Gary-Kenosha, IL-IN-WI	178,641	184,540	196,063	6.2	21,635	22,154	23,312		Danville, VA	1,575	1,614	1,717	6.4	14,461	14,775	15,705	282
Cincinnati-Hamilton, OH-KY-IN	33,873	35,189	37,562	6.7	18,588	19,080	20,140		Davenport-Moline-Rock Island, IA-IL	6,334	6,492	6,854	5.6	18,041	18,356	19,243	107
Cleveland-Akron, OH	55,519	57,388	60,580	5.6	19,397	19,955	20,959		Dayton-Springfield, OH	16,900	17,179	18,665	5.3	17,749	18,512	19,411	103
Dallas-Fort Worth, TX	80,619	85,095	91,422	7.4	19,868	20,543	21,692		Daytona Beach, FL	6,313	6,536	6,895	5.5	15,650	15,805	16,348	251
Denver-Boulder-Greeley, CO	40,913	43,822	47,203	7.7	20,600	21,591	22,952		Decatur, AL	2,037	2,183	2,326	6.5	15,419	16,267	17,100	214
Detroit-Ann Arbor-Flint, MI	104,758	106,805	112,702	5.5	20,175	20,460	21,484		Decatur, IL	2,110	2,147	2,252	4.9	18,004	18,254	19,134	115
Houston-Galveston-Brazoria, TX	73,025	78,812	84,663	7.4	19,452	20,419	21,367		Denver, CO *	34,181	36,565	39,331	7.6	20,995	21,605	22,930	31
Los Angeles-Riverside-Orange County, CA	301,614	306,300	318,442	4.0	20,663	20,679	21,162		Des Moines, IA	7,777	8,183	8,798	5.5	19,715	20,457	21,647	48
Miami-Fort Lauderdale, FL	62,388	63,975	64,453	.7	19,458	19,611	19,477		Detroit, MI *	87,449	88,794	93,890	5.7	20,483	20,705	21,796	45
Milwaukee-Racine, WI	31,851	33,058	35,218	6.5	19,787	20,398	21,614		Dothan, AL	1,919	2,033	2,180	7.3	14,624	15,372	16,359	250
New York-No. New Jersey-Long Island, NY-NJ-CT-PA	491,234	502,459	533,759	6.2	25,229	25,760	27,259		Dover, DE	1,626	1,738	1,846	6.2	14,567	15,182	15,909	275
Philadelphia-Philadelphia-Atlantic City, PA-NJ-DE-MD	126,512	130,654	137,832	5.5	21,443	22,056	23,210		Dubuque, IA	1,427	1,471	1,585	7.7	16,509	16,953	18,172	161
Portland-Salem, OR-WA	33,612	35,527	38,081	7.2	18,614	19,148	20,076		Duluth-Superior, MN-WI	3,686	3,873	4,111	6.1	15,342	16,008	17,060	218
Sacramento-Yolo, CA	28,820	30,107	31,777	5.5	19,271	19,950	20,326		Dutchess County, NY *	5,619	5,673	5,894	3.9	21,618	21,739	22,424	35
San Francisco-Oakland-San Jose, CA	155,119	158,704	166,781	5.1	24,755	25,057	26,019		Eau Claire, WI	2,084	2,166	2,322	7.2	15,135	15,591	16,600	243
Seattle-Tacoma-Bremerton, WA	63,334	67,616	73,562	8.8	21,161	22,123	23,492		El Paso, TX	6,863	7,124	7,854	10.2	11,508	11,615	12,497	307
Washington-Baltimore, DC-MD-VA-WV	159,226	165,232	173,591	5.1	23,593	24,173	25,087		Elkhart-Goshen, IN	2,651	2,714	2,955	8.9	16,949	17,237	18,544	140
<b>Metropolitan Statistical Areas<sup>4</sup></b>									Elmira, NY	1,517	1,574	1,640	4.2	15,922	16,545	17,231	205
Ablene, TX	1,871	1,947	2,081	6.9	15,658	16,438	17,263	203	Enid, OK	908	933	981	5.2	16,021	16,880	17,398	195
Akron, OH *	11,658	12,025	12,756	6.1	17,702	18,106	19,056	118	Erie, PA	4,478	4,682	4,983	6.4	16,235	16,560	17,819	175
Albany, GA	1,597	1,709	1,782	4.2	14,190	15,063	15,461	286	Eugene-Springfield, OR	4,519	4,692	5,003	6.6	15,908	16,313	17,202	208
Albany-Schenectady-Troy, NY	16,829	17,378	18,297	5.3	19,501	20,107	20,976	60	Evansville-Henderson, IN-KY	4,900	5,043	5,435	7.8	17,542	17,971	19,215	108
Albuquerque, NM	9,626	10,235	10,945	6.9	16,274	16,990	17,758	177	Fargo-Moorhead, ND-MN	2,487	2,579	2,783	7.9	16,184	16,606	17,656	181
Alexandria, LA	1,838	1,900	1,983	4.4	13,969	14,420	15,186	288	Fayetteville, NC	3,559	3,811	4,451	16.8	12,928	13,725	16,050	270
Allentown-Bethlehem-Easton, PA	11,236	11,669	12,460	6.8	18,839	19,387	20,545	71	Fayetteville-Springdale-Rogers, AR	3,293	3,510	3,914	11.5	15,500	16,101	17,339	200
Altoona, PA	1,925	2,005	2,151	7.3	14,741	15,292	16,384	247	Flint, MI *	7,245	7,698	7,893	2.5	26,809	27,798	28,208	158
Amarillo, TX	3,041	3,212	3,482	8.4	16,222	16,976	18,172	161	Florence, AL	1,915	2,011	2,141	6.5	14,543	15,099	15,949	273
Anchorage, AK	5,489	5,824	6,166	5.9	24,119	24,791	25,077	16	Florence, SC	1,696	1,795	1,920	7.0	10,786	10,552	16,192	262
Ann Arbor, MI *	10,064	10,313	10,919	5.9	20,453	20,656	21,630	49	Fort Collins-Loveland, CO	3,158	3,394	3,643	7.4	16,885	17,682	18,389	148
Annisston, AL	1,577	1,671	1,764	5.6	13,570	14,452	15,158	290	Fort Lauderdale, FL *	28,114	28,737	30,068	4.6	22,276	23,393	23,107	30
Appleton-Oshkosh-Neenah, WI	5,522	6,264	6,604	8.0	17,474	18,158	19,338	106	Fort Myers-Cape Coral, FL	6,563	6,801	7,151	5.1	19,396	19,603	20,312	78
Ashville, NC	3,199	3,351	3,610	7.7	16,622	17,187	18,216	155	Fort Pierce-Port St. Lucie, FL	5,177	5,383	5,635	4.7	20,361	20,649	21,233	54
Athens, GA	1,910	1,992	2,104	5.6	15,063	15,576	16,316	252	Fort Smith, AR-OK	2,471	2,589	2,854	10.2	14,023	14,533	15,806	278
Atlanta, GA	60,882	63,623	68,668	7.9	20,439	20,806	21,849	43	Fort Walton Beach, FL	2,333	2,520	2,709	7.5	16,139	16,987	17,656	181
Atlantic-Cape May, NJ *	7,229	7,265	7,739	6.5	22,556	22,440	23,720	24	Fort Wayne, IN	8,184	8,365	8,969	7.2	17,904	18,175	19,360	105
Augusta-Aiken, GA-SC	6,906	7,256	7,725	6.5	16,528	16,865	17,414	194	Fort Worth-Arlington, TX *	25,527	26,724	28,740	7.5	18,663	19,124	20,250	79
Austin-San Marcos, TX	14,511	15,470	16,913	9.3	17,059	17,696	18,770	131	Fresno, CA	12,146	12,431	13,176	6.0	15,964	16,835	16,376	248
Bakersfield, CA	8,592	8,918	9,306	4.4	16,682	16,561	15,936	277	Gadsden, AL	1,387	1,430	1,547	8.2	13,889	14,320	15,500	285
Baltimore, MD *	50,776	52,325	54,545	4.2	21,253	21,678	22,412	37	Gainesville, FL	2,931	3,102	3,309	6.7	16,678	16,692	17,468	190
Bangor, ME (NECMA)	2,305	2,370	2,498	5.4	15,678	16,100	17,063	215	Galveston-Texas City, TX *	3,787	4,023	4,317	7.3	17,344	18,032	18,928	124
Barnstable-Yarmouth, MA (NECMA)	4,155	4,282	4,459	4.1	22,203	22,834	23,922	25	Gary, IN *	10,373	10,723	11,278	5.2	17,118	17,523	18,285	154
Baton Rouge, LA	8,438	8,986	9,742	8.4	15,938	16,733	17,831	174	Glens Falls, NY	1,898	1,938	2,063	6.4	15,954	16,142	17,056	219
Beaumont-Port Arthur, TX	5,742	6,175	6,543	7.7	15,893	16,888	17,989	170	Goldsboro, NC	1,379	1,446	1,543	6.7	13,146	13,571	14,325	297
Bellingham, WA	2,157	2,335	2,508	7.4	16,724	17,518	18,184	160	Grand Forks, ND-MN	1,525	1,548	1,678	8.3	14,804	15,121	16,257	258
Benton Harbor, MI	2,579	2,670	2,836	6.2	15,985	16,553	17,566	185	Grand Rapids-Muskegon-Holland, MI	16,308	17,166	18,249	6.3	17,320	17,987	18,924	125
Bergen-Passaic, NJ *	36,035	36,291	38,360	5.7	28,181	28,307	29,710	41	Great Falls, MT	1,241	1,305	1,383	6.0	15,974	16,651	17,452	192
Billings, MT	1,907	2,043	2,185	7.0	16,803	17,730	18,506	141	Greeley, CO *	1,956	2,080	2,271	9.2	14,822	15,592	16,718	239
Biloxi-Gulfport-Pascagoula, MS	4,155	4,420	4,776	8.1	13,301	13,965	14,744	294	Green Bay, WI	3,522	3,707	3,996	7.8	18,037	18,684	19,845	96
Birmingham, AL	4,639	4,787	4,946	3.3	17,533	18,051	18,606	138	Greensboro-Winston-Salem-High Point, NC	19,457	20,111	21,503	6.9	18,467	18,865	19,940	94
Birmingham, AL	14,814	15,561	16,679	7.2	17,594	18,303	19,428	102	Greenville, NC	1,671	1,759	1,890	7.4	15,417	15,854	16,809	233
Bismarck, ND	1,337	1,389	1,512	9.9	15,935	16,409	17,575	184	Greenville-Spartanburg-Anderson, SC	13,202	13,673	14,453	5.7	15,836	16,216	16,945	225
Bloomington, IN	1,589	1,678	1,804	7.5	14,541	15,265	16,239	259	Hagerstown, MD *	1,954	2,014	2,114	5.0	16,037	16,281	16,846	232
Bloomington-Normal, IL	2,360	2,450	2,675	9.2	18,211	18,607	20,049	88	Hamilton-Middletown, OH *	4,962	5,174	5,555	7.4	16,937	17,291	18,211	157
Boise City, ID	5,128	5,504	6,067	10.2	17,204	17,801	18,982	123	Harrisburg-Lebanon-Carlisle, PA								

Table 1.—Total Personal Income and Per Capita Personal Income by Metropolitan Area, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in U.S.		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in U.S.
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Lancaster, PA .....	8,035	8,178	8,696	6.3	18,918	19,002	20,018	90	Roanoke, VA .....	4,299	4,394	4,675	6.4	19,117	19,400	20,661	67
Lansing-East Lansing, MI .....	7,321	7,656	8,031	4.9	16,890	17,576	18,401	146	Rochester, MN .....	2,131	2,250	2,386	6.1	19,923	20,617	21,595	50
Laredo, TX .....	1,208	1,356	1,542	13.7	8,972	9,624	10,387	309	Rochester, NY .....	21,245	21,982	22,941	4.4	19,960	20,504	21,217	56
Las Cruces, NM .....	1,676	1,762	1,908	8.3	12,279	12,493	13,016	305	Rockford, IL .....	5,998	6,098	6,473	6.2	18,145	18,169	19,055	119
Las Vegas, NV-AZ .....	16,433	17,775	19,417	9.2	18,928	19,127	19,994	91	Rocky Mount, NC .....	2,018	2,124	2,224	4.7	15,100	15,734	16,262	257
Lawrence, KS .....	1,175	1,238	1,326	7.1	14,302	14,853	15,682	283	Sacramento, CA* .....	26,251	27,436	28,936	5.5	19,394	19,654	20,398	74
Lawton, OK .....	1,468	1,540	1,724	12.0	13,183	13,832	14,310	298	Saginaw-Bay City-Midland, MI .....	6,824	7,075	7,431	5.0	17,068	17,642	18,461	144
Lewiston-Auburn, ME (NECMA) .....	1,729	1,757	1,836	4.5	16,412	16,784	17,677	180	St. Cloud, MN .....	2,156	2,263	2,442	7.9	14,421	14,963	15,991	272
Lexington, KY .....	7,070	7,435	7,937	6.8	17,351	18,008	18,893	127	St. Joseph, MO .....	1,522	1,589	1,651	3.9	15,569	16,273	16,854	231
Lima, OH .....	2,475	2,551	2,732	7.1	16,019	16,442	17,497	188	St. Louis, MO-IL .....	50,212	52,158	54,652	4.8	20,112	20,793	21,700	47
Lincoln, NE .....	3,696	3,927	4,171	6.2	17,237	18,123	18,995	121	Salem, OR* .....	4,320	4,578	4,889	6.8	15,457	16,026	16,749	235
Little Rock-North Little Rock, AR .....	8,475	9,012	9,805	8.8	16,481	17,367	18,650	136	Salinas, CA .....	6,970	7,197	7,485	4.0	19,515	19,847	20,322	77
Longview-Marshall, TX .....	3,012	3,166	3,393	7.2	15,531	16,147	17,178	210	Salt Lake City-Ogden, UT .....	16,429	17,598	19,025	8.1	16,252	16,992	18,655	230
Los Angeles-Long Beach, CA* .....	184,246	187,096	194,054	3.7	20,752	20,907	21,434	52	San Angelo, TX .....	1,513	1,582	1,684	6.5	15,401	15,951	16,993	223
Louisville, KY-IN .....	17,294	18,178	19,556	7.6	18,197	18,959	20,211	82	San Antonio, TX .....	20,691	21,940	23,825	8.6	15,583	16,264	17,282	201
Lubbock, TX .....	3,521	3,626	3,860	6.5	15,801	16,181	17,185	209	San Diego, CA .....	49,587	50,820	53,019	4.3	19,731	19,875	20,384	75
Lynchburg, VA .....	3,178	3,265	3,428	5.0	16,341	16,625	17,276	202	San Francisco, CA* .....	47,572	48,594	50,835	4.6	29,672	30,113	31,262	1
Macon, GA .....	4,721	4,957	5,234	5.6	16,187	16,800	17,528	187	San Jose, CA* .....	36,770	37,830	39,626	4.7	24,550	25,038	25,924	12
Madison, WI .....	7,311	7,756	8,322	7.3	19,837	20,698	21,883	42	San Luis Obispo-Atascadero-Paso Robles, CA .....	3,716	3,814	3,993	4.7	17,036	17,413	18,105	163
Madisonville, KY .....	2,690	2,711	2,827	4.3	15,458	15,500	16,109	266	Santa Barbara-Santa Maria-Lompoc, CA .....	8,259	8,485	8,775	3.4	22,303	22,717	23,368	28
McAllen-Edinburg-Mission, TX .....	3,487	3,771	4,126	9.4	9,008	9,386	9,802	310	Santa Cruz-Watsonville, CA* .....	4,889	5,011	5,263	5.0	21,311	21,883	22,784	33
Medford-Ashdand, OR .....	2,345	2,427	2,655	7.4	15,920	16,410	17,230	206	Santa Fe, NM .....	2,276	2,405	2,577	7.2	19,347	20,059	20,893	62
Melbourne-Titusville-Palm Bay, FL .....	7,104	7,484	7,964	6.4	17,621	18,019	18,755	133	Santa Rosa, CA* .....	8,435	8,775	9,188	4.7	21,624	22,180	22,913	32
Merced, CA .....	18,001	18,800	20,177	7.3	17,821	18,405	19,517	99	Sarasota-Bradenton, FL .....	11,443	11,825	12,372	4.6	23,233	23,726	24,804	18
Miami, FL .....	34,274	35,238	34,384	-2.4	17,629	17,057	17,124	211	Savannah, GA .....	4,404	4,558	4,872	6.9	16,992	17,372	18,222	156
Middlesex-Somerset-Hunterdon, NJ* .....	26,695	27,483	29,396	7.0	26,106	26,617	28,082	6	Scranton-Wilkes-Barre-Hazleton, PA .....	10,633	11,040	11,752	6.5	16,642	17,270	18,400	147
Milwaukee-Waukesha, WI* .....	28,581	29,617	31,604	6.7	19,927	20,521	21,797	44	Seattle-Bellevue-Everett, WA* .....	47,025	50,269	54,743	8.9	22,966	24,129	25,769	13
Minneapolis-St. Paul, MN-WI .....	54,579	56,693	60,958	7.5	21,421	21,955	23,284	29	Sharon, PA .....	1,827	1,911	2,029	6.2	15,087	15,749	16,618	242
Mobile, AL .....	6,759	7,316	7,833	7.1	14,135	15,054	15,806	278	Sheboygan, WI .....	1,806	1,855	1,987	7.2	17,345	17,767	18,921	126
Modesto, CA .....	6,054	6,250	6,615	5.8	16,130	16,179	16,738	236	Sherman-Denison, TX .....	1,527	1,582	1,656	4.7	16,073	16,578	17,418	193
Monmouth-Ocean, NJ .....	22,892	23,522	25,040	6.5	23,154	23,640	24,935	17	Shreveport-Bossier City, LA .....	5,620	5,972	6,385	6.9	14,975	16,002	17,061	217
Monroe, LA .....	1,941	2,055	2,200	7.0	13,655	14,368	15,181	289	Sioux City, IA-NE .....	1,849	1,940	2,118	9.2	16,036	16,687	18,088	164
Montgomery, AL .....	4,829	5,103	5,444	6.7	16,465	17,126	19,391	171	Sioux Falls, SD .....	2,525	2,695	2,919	8.3	18,055	18,960	20,020	89
Muncie, IN .....	1,883	1,974	2,112	7.0	15,741	16,485	17,543	186	South Bend, IN .....	4,166	4,303	4,606	7.1	16,830	17,297	18,387	149
Myrtle Beach, SC .....	2,200	2,316	2,443	5.5	15,182	15,524	16,040	271	Spokane, WA .....	5,922	6,354	6,888	8.4	16,320	17,091	18,069	168
Naples, FL .....	4,209	4,377	4,486	2.5	27,300	27,327	27,332	9	Springfield, IL .....	3,657	3,764	4,016	6.7	19,262	19,689	20,837	63
Nashville, TN .....	18,127	19,219	21,049	9.5	18,333	19,144	20,569	70	Springfield, MO .....	4,186	4,469	4,784	7.0	17,575	16,553	17,357	197
Nassau-Suffolk, NY* .....	69,738	70,774	73,825	4.3	26,736	26,992	27,961	7	Springfield, MA (NECMA) .....	11,137	11,223	11,505	2.5	18,459	18,656	19,187	111
New Haven-Bridgeport-Stamford-Danbury-Waterbury, CT* .....	45,370	45,830	48,531	5.9	27,790	28,070	29,777	3	State College, PA .....	1,893	2,001	2,124	6.2	15,254	15,954	16,780	234
New London-Norwich, CT (NECMA) .....	5,129	5,286	5,568	5.3	20,102	20,809	22,427	34	Steubenville-Weirton, OH-WV .....	2,159	2,202	2,323	5.5	15,175	15,490	16,415	246
New Orleans, LA .....	21,038	22,256	23,562	5.9	16,382	17,227	18,087	165	Stockton-Lodi, CA .....	7,838	8,097	8,541	5.5	16,183	16,374	16,942	227
New York, NY* .....	210,790	216,605	231,232	6.8	24,661	25,362	27,039	10	Sumter, SC .....	1,243	1,309	1,388	6.0	12,081	12,523	13,171	303
Newark, NJ* .....	48,727	50,182	53,526	6.7	25,434	26,188	27,830	8	Syracuse, NY .....	13,187	13,485	14,159	5.0	17,730	18,003	18,818	129
Newburgh, NY-PA* .....	6,174	6,376	6,779	6.3	18,300	18,609	19,463	101	Tacoma, WA* .....	10,038	10,505	11,377	8.3	17,002	17,363	18,361	152
Norfolk-Virginia Beach-Newport News, VA-NC .....	24,258	25,475	27,056	6.2	16,735	17,412	18,077	166	Tallahassee, FL .....	3,719	3,936	4,195	6.6	15,824	16,365	17,103	213
Oakland, CA* .....	48,767	49,501	52,327	5.7	23,333	23,387	24,359	20	Tampa-St. Petersburg-Clearwater, FL .....	37,291	38,570	40,882	6.0	17,964	18,405	19,400	104
Ocala, FL .....	2,855	3,003	3,198	6.5	14,500	14,799	15,375	287	Terre Haute, IN .....	2,162	2,283	2,462	7.8	14,650	15,439	16,551	244
Odessa-Midland, TX .....	3,887	4,178	4,370	4.6	17,235	18,189	18,692	134	Texarkana, TX-Texarkana, AR .....	1,748	1,801	1,909	6.0	14,524	14,945	15,784	280
Oklahoma City, OK .....	15,701	16,333	17,356	6.3	16,355	16,834	17,645	183	Toledo, OH .....	10,802	11,045	11,793	6.8	17,581	17,973	19,166	112
Olympia, WA* .....	2,946	3,207	3,496	9.0	18,076	18,925	19,801	97	Topeka, KS .....	2,995	3,110	3,281	5.5	15,863	16,130	17,076	87
Omaha, NE-IA .....	11,851	12,533	13,288	6.0	18,476	19,297	20,242	80	Trenton, NJ .....	8,440	8,712	9,321	7.0	25,877	26,639	28,443	5
Orange County, CA* .....	58,721	58,993	61,252	3.8	24,292	24,113	24,651	19	Tucson, AZ .....	10,213	10,806	11,493	6.4	15,285	15,992	16,651	240
Orlando, FL .....	21,645	22,628	24,262	7.2	17,465	17,734	18,596	139	Tulsa, OK .....	12,360	12,982	13,667	5.3	17,387	17,989	18,681	135
Owensboro, KY .....	1,318	1,398	1,486	6.4	15,103	15,908	16,736	237	Tuscaloosa, AL .....	2,215	2,323	2,473	6.5	14,666	15,145	16,092	267
Panama City, FL .....	1,909	2,057	2,204	7.1	14,988	15,787	16,446	245	Tyler, TX .....	2,560	2,685	2,880	7.3	16,906	17,532	18,648	137
Parkersburg-Marietta, WV-OH .....	2,245	2,355	2,515	6.8	15,044	15,761	16,736	237	Utica-Rome, NY .....	5,002	5,119	5,370	4.9	15,784	16,076	16,870	229
Pensacola, FL .....	5,174	5,458	5,886	7.8	14,972	15,481	16,287	254	Vallejo-Fairfield-Napa, CA* .....	6,886	6,993	7,542	6.1	19,063	19,212	20,084	85
Peoria-Pekin, IL .....	6,179	6,263	6,574	5.0	18,183	18,317	19,193	110	Ventura, CA .....	14,162	14,451	15,088	4.4	21,131	21,351	21,977	41
Philadelphia, PA-NJ* .....	105,962	109,572	115,670	5.6	21,153	21,288	23,397	27	Victoria, TX .....	1,223	1,327	1,415	6.7	16,399	17,535	18,371	150
Phoenix-Mesa, AZ .....	40,237	41,676	44,319	6.3	17,916	18,244	19,018	120	Vineland-Millville-Bridgeton, NJ* .....	2,378	2,482	2,661	7.2	17,199	17,911	19,213	109
Pine Bluff, AR .....	1,121	1,150	1,227	6.6	13,136	13,476	14,386	296	Visalia-Tulare-Porterville, CA .....	4,519	4,552	4,971	9.2	14,391	14,084	15,015	291
Pittsburgh, PA .....	45,437	47,864	50,956	6.5	18,969	19,946	21,175	57	Waco, TX .....	2,776	2,916	3,117	6.9	14,648	15,289	16,272	255
Pittsfield, MA (NECMA) .....	2,693	2,835	2,904	2.4	19,335	20,567	21,226	55	Washington, DC-MD-VA-WV* .....	106,495	110,893	116,932	5.4	25,129	25,801	26,817</	

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>				
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State	
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992		
<b>United States<sup>1</sup></b>	<b>4,655,420</b>	<b>4,831,697</b>	<b>5,128,373</b>	<b>6.1</b>	<b>18,667</b>	<b>19,163</b>	<b>20,105</b>		Juneau Borough	639	678	720	6.2	23,666	24,304	25,390	5	
<b>Metropolitan portion</b>	<b>3,928,153</b>	<b>4,073,607</b>	<b>4,318,618</b>	<b>6.0</b>	<b>19,797</b>	<b>20,289</b>	<b>21,247</b>		Kenai Peninsula Borough	855	907	938	3.5	20,803	21,271	21,571	13	
<b>Nonmetropolitan portion</b>	<b>727,267</b>	<b>758,090</b>	<b>809,755</b>	<b>6.8</b>	<b>14,266</b>	<b>14,761</b>	<b>15,628</b>		Ketchikan Gateway Borough	366	371	391	5.4	26,236	26,333	27,761	2	
<b>Alabama</b>	<b>60,332</b>	<b>63,863</b>	<b>68,358</b>	<b>7.0</b>	<b>14,899</b>	<b>15,614</b>	<b>16,522</b>		Kodiak Island Borough	269	280	296	5.7	20,087	20,119	20,805	16	
<b>Metropolitan portion</b>	<b>43,416</b>	<b>45,952</b>	<b>49,243</b>	<b>7.2</b>	<b>15,979</b>	<b>16,705</b>	<b>17,660</b>		Lake and Peninsula Borough <sup>4</sup>		28	30	6.7		16,537	17,275	19	
<b>Nonmetropolitan portion</b>	<b>16,916</b>	<b>17,911</b>	<b>19,115</b>	<b>6.7</b>	<b>12,696</b>	<b>13,374</b>	<b>14,169</b>		Matanuska-Susitna Borough	615	656	694	5.8	15,319	15,470	15,441	22	
Autauga	482	519	552	6.4	14,034	14,795	15,291	22	Nome Census Area	114	118	128	8.3	13,788	14,132	14,954	23	
Baldwin	1,498	1,638	1,765	7.8	15,141	16,020	16,595	8	North Slope Borough	140	150	158	5.5	23,255	24,135	24,153	9	
Barbour	332	366	393	7.5	13,049	14,449	15,563	20	Northwest Arctic Borough	89	94	102	9.1	14,524	15,158	16,121	21	
Bibb	200	210	229	9.1	11,982	12,363	13,309	51	Prince of Wales-Outer Ketchikan	113	111	115	3.5	17,994	17,311	17,983	18	
Blount	519	558	599	7.3	13,164	13,975	14,850	25	Sitka Borough	192	200	210	4.9	22,235	22,981	23,977	10	
Bullock	105	115	120	4.8	9,534	10,339	10,961	66	Skagway-Yakutat-Angoon	95	101	107	6.6	21,579	22,267	23,673	7	
Butler	237	251	266	6.1	10,825	11,549	12,269	59	Southeast Fairbanks Census		88	93	97	4.3	15,369	16,543	17,033	20
Calhoun	1,577	1,671	1,764	5.6	13,570	14,452	15,158	23	Valdez-Cordova Census Area	230	248	269	8.8	22,837	23,824	25,826	4	
Chambers	480	483	517	7.0	13,002	13,117	14,021	37	Wade Hampton Census Area	59	59	61	4.1	10,173	9,866	9,993	26	
Cherokee	242	261	279	7.0	12,330	13,237	14,052	36	Wrangell-Petersburg	167	173	190	9.4	23,662	24,459	26,963	3	
Chilton	409	441	469	6.3	12,572	13,343	14,107	34	Yukon-Koyukuk Census Area	119	91	95	4.7	14,188	13,862	14,406	25	
Choctaw	193	207	217	5.0	12,055	12,913	13,446	47	<b>Arizona</b>	<b>59,833</b>	<b>62,543</b>	<b>66,687</b>	<b>6.6</b>	<b>16,262</b>	<b>16,697</b>	<b>17,401</b>		
Clarke	345	364	385	5.6	12,621	13,233	13,869	40	<b>Metropolitan portion</b>	<b>53,084</b>	<b>55,395</b>	<b>58,909</b>	<b>6.3</b>	<b>17,030</b>	<b>17,462</b>	<b>18,159</b>		
Clay	169	180	193	7.4	12,745	13,557	14,486	29	<b>Nonmetropolitan portion</b>	<b>6,749</b>	<b>7,148</b>	<b>7,778</b>	<b>8.8</b>	<b>12,005</b>	<b>12,467</b>	<b>13,222</b>		
Cleburne	171	181	185	2.5	13,448	14,191	14,280	33	Apache	502	542	605	11.6	8,107	8,674	9,623	15	
Coffee	605	655	707	7.9	15,015	16,214	17,168	7	Cochise	1,247	1,320	1,437	8.8	12,738	13,334	14,172	8	
Colbert	735	769	817	6.2	14,194	14,703	15,584	18	Cocino	1,257	1,341	1,470	9.7	12,938	13,440	14,302	7	
Conecuh	157	174	184	5.9	11,157	12,206	13,034	55	Gila	510	542	585	8.1	12,612	13,153	13,795	9	
Coosa	127	133	143	7.3	11,503	11,963	12,904	57	Graham	264	278	303	8.7	9,930	10,268	10,978	13	
Covington	459	487	515	5.8	12,573	13,323	13,996	38	Greenlee	105	119	135	13.3	13,124	14,353	15,671	4	
Crenshaw	159	169	179	6.3	11,657	12,453	13,322	49	La Paz	228	223	233	4.5	16,436	16,253	17,065	2	
Cullman	946	994	1,087	9.4	13,943	14,473	15,583	19	Maricopa	38,868	40,184	42,793	6.5	18,253	18,551	19,367	1	
Dale	638	681	731	7.2	12,862	13,672	14,637	28	Mohave	1,331	1,422	1,529	7.5	13,979	14,098	14,417	6	
Dallas	581	617	649	5.2	12,099	12,868	13,511	46	Navajo	740	774	840	8.5	9,496	9,797	10,367	14	
De Kalb	696	737	808	9.6	12,703	13,328	14,453	30	Pima	10,213	10,806	11,493	6.4	15,285	15,992	16,651	3	
Elmore	679	718	772	7.6	13,708	14,152	14,705	26	Pinal	1,369	1,493	1,526	2.2	11,750	12,261	12,634	11	
Escambia	437	459	479	4.3	12,307	12,892	13,294	52	Santa Cruz	342	362	385	6.2	11,473	11,753	12,104	12	
Etowah	1,387	1,430	1,547	8.2	13,889	14,320	15,500	21	Yavapai	1,554	1,646	1,785	8.5	14,314	11,711	15,376	5	
Fayette	220	226	242	7.1	12,211	12,497	13,422	48	Yuma	1,303	1,490	1,569	5.2	12,092	13,377	13,345	10	
Franklin	354	385	426	10.7	12,749	13,738	14,969	24	<b>Arkansas</b>	<b>32,450</b>	<b>34,341</b>	<b>37,434</b>	<b>9.0</b>	<b>13,779</b>	<b>14,485</b>	<b>15,635</b>		
Geneva	326	349	375	7.5	13,760	14,493	15,619	16	<b>Metropolitan portion</b>	<b>16,084</b>	<b>17,006</b>	<b>18,599</b>	<b>9.4</b>	<b>15,422</b>	<b>16,126</b>	<b>17,367</b>		
Greene	104	110	114	3.9	10,207	10,765	11,187	64	<b>Nonmetropolitan portion</b>	<b>16,367</b>	<b>17,335</b>	<b>18,835</b>	<b>8.7</b>	<b>12,474</b>	<b>13,171</b>	<b>14,233</b>		
Hale	163	175	187	6.8	10,488	11,156	11,783	60	Arkansas	298	306	333	8.8	13,758	14,269	15,628	10	
Henry	187	213	228	7.3	12,128	13,621	14,662	27	Ashley	322	352	374	6.1	13,232	14,397	15,209	17	
Houston	1,281	1,351	1,450	7.3	15,995	16,400	17,389	6	Baxter	448	475	511	7.5	14,333	15,002	15,788	9	
Jackson	666	707	771	9.0	13,903	14,596	15,724	14	Benton	1,557	1,679	1,882	12.1	15,834	16,536	17,827	4	
Jefferson	11,758	12,319	13,194	7.1	18,029	18,797	20,061	3	Boone	386	407	435	7.0	13,623	14,209	15,879	21	
Lamar	199	205	218	6.7	12,652	13,046	13,986	39	Bradley	160	166	181	9.0	13,548	14,151	15,579	11	
Lauderdale	1,180	1,241	1,324	6.6	14,769	15,355	16,182	10	Calhoun	65	68	73	8.1	11,155	11,660	12,744	60	
Lawrence	382	417	445	6.7	12,100	12,996	13,821	41	Carroll	251	266	291	9.2	13,394	13,953	14,910	20	
Lee	1,168	1,203	1,290	7.3	13,344	13,583	14,358	31	Chicot	165	174	201	16.0	10,551	11,201	12,796	57	
Limestone	779	842	942	11.8	14,334	15,180	16,570	9	Clark	258	273	299	9.5	12,075	12,867	14,028	39	
Lowndes	131	143	141	-1.4	10,378	11,301	11,115	65	Clay	205	221	243	10.4	11,347	12,272	13,623	42	
Macon	251	264	279	5.9	10,092	10,828	11,452	62	Cleburne	250	266	288	8.1	12,823	13,368	14,160	35	
Madison	4,583	4,852	5,245	8.1	19,081	19,809	20,876	1	Cleveland	91	94	99	5.2	11,707	12,062	12,592	61	
Marengo	284	305	319	4.6	12,307	13,214	13,732	43	Columbia	336	353	376	6.4	13,091	13,741	14,608	25	
Marion	345	365	395	8.2	11,555	12,343	13,310	50	Conway	243	259	279	8.1	12,698	13,448	14,532	27	
Marshall	1,017	1,076	1,173	9.0	14,318	14,957	15,957	12	Craighead	934	1,001	1,099	9.8	13,479	14,366	15,487	14	
Mobile	5,261	5,678	6,068	6.9	13,873	14,796	15,591	17	Crawford	488	520	571	10.0	11,411	11,914	12,857	54	
Monroe	298	333	338	1.5	12,332	13,932	14,067	35	Crittenden	631	660	716	8.5	12,622	13,270	14,394	29	
Montgomery	3,668	3,866	4,120	6.6	17,517	18,222	19,162	4	Cross	218	239	271	13.4	11,360	12,441	14,071	37	
Morgan	1,655	1,766	1,880	6.5	16,462	17,296	18,119	5	Dallas	123	131	140	7.4	12,822	13,699	14,783	22	
Perry	122	130	137	5.8	9,623	10,422	11,197	63	Desha	184	198	219	10.5	10,986	11,970	13,460	46	
Pickens	237	248	262	5.7	11,462	11,963	12,532	58	Drew	197	215	235	9.4	11,369	12,373	13,635	41	
Pike	359	379	402	6.0	13,000	13,598	14,338	32	Faulkner	830	896	1,001	11.7	13,727	14,346	15,552	12	
Randolph	245	254	263	3.6	12,318	12,708	13,013	56										

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Miller	477	496	530	7.0	12,387	12,846	13,726	40	Ventura	14,162	14,451	15,088	4.4	21,131	21,351	21,977	13
Mississippi	691	750	782	4.2	12,018	13,129	14,209	33	Yolo	2,570	2,671	2,840	6.4	18,101	18,536	19,115	19
Monroe	130	139	154	10.8	11,535	12,576	14,139	36	Yuba	733	790	836	5.8	12,514	13,268	13,730	56
Montgomery	90	93	97	4.9	11,527	11,813	12,218	66	<b>Colorado</b>	<b>62,163</b>	<b>66,519</b>	<b>71,600</b>	<b>7.6</b>	<b>18,818</b>	<b>19,740</b>	<b>20,666</b>	
Nevada	115	121	129	6.8	11,393	12,062	12,949	53	<b>Metropolitan portion</b>	<b>52,444</b>	<b>56,190</b>	<b>60,517</b>	<b>7.7</b>	<b>19,471</b>	<b>20,442</b>	<b>21,366</b>	
Newton	69	74	80	6.8	8,997	9,626	10,406	75	<b>Nonmetropolitan portion</b>	<b>9,719</b>	<b>10,329</b>	<b>11,083</b>	<b>7.3</b>	<b>15,935</b>	<b>16,632</b>	<b>17,529</b>	
Ouachita	385	400	420	5.2	12,653	13,401	14,229	32	Adams	4,024	4,336	4,721	8.9	15,115	15,899	16,761	38
Perry	91	95	107	12.5	11,474	11,750	12,793	59	Alamosa	186	184	193	4.9	13,687	13,337	13,942	55
Phillips	309	322	353	9.6	10,712	11,405	12,575	62	Arapahoe	9,264	9,912	10,642	7.4	23,531	24,381	25,285	3
Pike	129	136	147	6.6	12,814	13,597	14,743	23	Archuleta	69	74	79	7.7	12,767	13,186	13,672	56
Poinsett	274	302	323	7.0	11,127	12,417	13,238	47	Baca	95	94	94	-2	21,005	20,881	21,150	13
Polk	209	217	239	10.1	12,053	12,492	13,613	43	Bent	76	82	83	1.6	15,121	16,373	16,691	40
Pope	635	680	761	11.9	13,758	14,392	15,867	8	Boulder	4,776	5,177	5,601	8.2	21,129	22,659	23,513	7
Prairie	108	112	120	7.1	11,360	11,992	12,997	51	Chaffee	166	181	189	4.5	13,093	14,219	14,630	53
Pulaski	6,218	6,601	7,134	8.1	17,767	18,788	20,188	1	Cheyenne	55	55	57	3.0	23,085	23,364	23,370	9
Randolph	175	184	197	7.1	10,548	11,049	11,616	70	Clear Creek	132	141	150	6.8	17,345	17,936	18,713	23
St. Francis	307	312	347	11.2	10,776	11,000	12,273	65	Conejos	66	70	74	5.9	8,898	9,383	10,043	63
Saline	888	939	1,036	10.3	13,793	14,305	15,447	15	Costilla	41	40	42	4.8	12,828	12,264	13,070	60
Scott	115	123	133	7.7	11,282	12,039	12,806	56	Crowley	43	43	50	16.1	10,972	10,964	12,780	61
Searcy	76	80	84	5.4	9,681	10,505	11,158	72	Custer	31	33	35	8.3	15,699	16,116	16,583	42
Sebastian	1,598	1,659	1,836	10.7	16,052	16,520	18,109	2	Delta	266	291	316	8.4	12,665	13,567	14,395	54
Sevier	184	197	215	8.9	13,414	14,157	15,066	18	Denver	10,390	10,983	11,830	7.7	22,248	23,256	24,449	4
Sharp	161	171	181	5.9	11,392	11,833	12,440	68	Dolores	21	21	25	19.0	13,683	15,123	18,200	28
Stone	105	114	124	8.8	10,722	11,353	12,179	67	Douglas	1,488	1,617	1,748	8.1	24,147	24,216	23,845	5
Union	732	765	829	8.4	15,641	16,448	17,832	3	Eagle	477	518	576	11.3	21,503	22,087	23,419	8
Van Buren	156	164	176	6.9	11,127	11,523	12,336	64	Elbert	169	182	198	8.9	17,376	17,668	18,281	27
Washington	1,736	1,831	2,032	11.0	15,212	15,721	16,911	6	El Paso	6,644	7,130	7,708	8.1	16,724	17,650	18,300	26
White	660	706	770	8.9	12,011	12,637	13,558	44	Fremont	388	408	446	9.3	12,039	12,699	13,634	58
Woodruff	110	117	134	13.8	11,642	12,510	14,506	28	Garfield	506	528	551	4.3	16,671	16,927	17,640	31
Yell	232	247	276	11.8	13,049	13,847	15,291	16	Gilpin	47	53	62	16.9	15,404	16,688	19,400	17
<b>California</b>	<b>617,679</b>	<b>630,901</b>	<b>659,567</b>	<b>4.5</b>	<b>20,656</b>	<b>20,748</b>	<b>21,348</b>		Grand	134	144	153	6.6	16,741	17,667	18,154	29
<b>Metropolitan portion</b>	<b>602,829</b>	<b>615,638</b>	<b>643,475</b>	<b>4.5</b>	<b>20,834</b>	<b>20,933</b>	<b>21,539</b>		Gunnison	137	150	162	8.0	13,259	14,321	14,963	51
<b>Nonmetropolitan portion</b>	<b>14,850</b>	<b>15,263</b>	<b>16,092</b>	<b>5.4</b>	<b>15,336</b>	<b>15,311</b>	<b>15,765</b>		Hinsdale	8	9	9	6.5	17,273	18,701	18,806	20
Alameda	28,164	28,434	30,058	5.7	21,986	21,986	22,988	9	Huerfano	69	75	80	6.4	11,522	12,272	13,635	57
Alpine	21	22	22	1.3	19,066	18,776	19,249	20	Jackson	23	26	27	3.9	14,669	16,240	16,415	43
Amador	473	501	524	4.4	15,619	16,029	16,433	43	Jefferson	9,015	9,716	10,390	6.9	20,511	21,768	22,807	10
Butte	2,757	2,831	3,002	6.0	15,024	15,169	15,935	44	Kiowa	44	42	41	-2.8	26,272	26,118	25,492	2
Calaveras	331	354	387	6.0	16,336	16,254	16,609	39	Kit Carson	135	134	147	10.3	18,892	18,653	20,452	14
Colusa	501	514	520	1.9	18,423	18,928	19,897	21	Lake	85	92	97	5.5	14,156	15,065	15,817	47
Contra Costa	20,603	21,067	22,268	5.7	25,465	25,588	26,491	4	La Plata	508	553	602	8.9	15,638	16,501	17,399	32
Del Norte	302	320	337	5.5	12,610	11,319	11,683	58	Larimer	3,158	3,394	3,643	7.4	16,885	17,682	18,389	25
El Dorado	2,480	2,588	2,726	5.3	19,357	19,340	19,729	18	Las Animas	163	177	185	4.6	11,881	13,069	13,593	59
Fresno	10,864	11,113	11,754	5.8	16,171	16,110	16,658	38	Lincoln	83	93	97	4.8	18,466	20,570	21,298	12
Glenn	354	342	375	9.7	14,224	13,551	14,694	50	Logan	281	288	323	12.3	16,039	16,610	18,774	21
Humboldt	1,890	1,934	2,026	4.7	15,808	16,021	16,605	40	Mesa	1,425	1,536	1,656	7.8	15,202	15,940	16,897	37
Imperial	1,694	1,684	1,783	5.9	15,244	14,208	13,827	55	Mineral	8	9	10	6.5	15,309	16,422	17,208	35
Inyo	316	319	334	4.7	17,266	17,409	18,158	25	Moffat	181	188	203	8.2	15,898	16,310	17,376	33
Kern	8,592	8,918	9,306	4.4	15,682	15,651	15,836	45	Montezuma	252	266	291	9.3	13,490	13,993	14,885	52
Kings	1,286	1,344	1,415	5.2	12,628	12,781	13,174	57	Montrose	352	378	411	8.8	14,367	15,101	16,116	45
Lake	827	880	924	5.0	16,189	16,578	17,179	31	Morgan	386	411	431	4.7	17,616	18,405	18,968	19
Lassen	343	369	400	8.5	12,420	13,128	14,237	53	Otero	272	296	311	5.2	13,515	14,728	15,588	48
Los Angeles	184,246	187,096	194,054	3.7	20,752	20,907	21,434	14	Ourray	38	41	43	6.4	16,347	16,697	17,253	34
Madera	1,282	1,318	1,422	7.9	14,400	13,841	14,361	51	Park	117	127	137	8.6	16,173	16,460	17,004	36
Marin	7,977	8,082	8,430	4.3	34,654	34,805	36,076	1	Phillips	73	78	79	9.7	17,443	18,873	19,226	18
Mariposa	235	236	254	7.9	16,299	15,823	16,587	41	Pitkin	403	426	469	9.9	31,695	33,565	36,356	1
Mendocino	1,308	1,328	1,386	4.4	16,189	16,282	16,972	33	Prowers	202	207	215	3.9	15,178	15,582	16,350	44
Merced	2,566	2,612	2,783	6.5	14,266	14,057	14,717	49	Pueblo	1,728	1,844	1,963	6.5	14,045	14,977	15,863	46
Modoc	138	135	140	3.4	14,306	13,904	14,243	52	Rio Blanco	88	93	102	9.4	14,877	15,401	16,644	41
Mono	178	172	186	8.3	17,675	17,523	18,712	23	Rio Grande	171	162	162	-4	15,933	15,156	15,151	50
Monterey	6,970	7,197	7,485	4.0	19,515	19,847	20,322	16	Routt	300	316	338	7.0	21,100	21,531	22,426	11
Napa	2,526	2,621	2,761	5.3	22,714	23,478	24,387	7	Saguache	57	58	59	-7	12,193	12,277	12,191	62
Nevada	1,427	1,474	1,551	5.3	18,028	18,101	18,653	24	San Juan	12	11	9	-15.8	15,432	14,979	15,176	49
Orange	58,721	58,993	61,252	3.8	24,292	24,113	24,651	6	San Miguel	66	73	80	9.7	17,680	18,166	18,714	22
Placer	3,747	3,945	4,158	5.4	21,364	21,728	22,218	12	Sedgwick	46	48	47	-1.6	17,158	18,013	17,950	30
Plumas	324	337	356	5.6	16,349	16,710	17,170	32	Summit	283	318	347	9.2	21,691	23,198	23,824	6
Riverside	21,348	21,815	22,783	4.4	17,886	17,489	17,682	28	Teller	205	227	259	14.1	16,376	17,586	18,678	24
Sacramento	20,023	20,904	22,052	5.5	19,070	19,345	20,171	17	Washington	96	93	95	1.4	20,194	19,578	20,418	15
San Benito	619	617	643	4.4	16,803	16,483	16,760	35	Weid	1,956	2,080	2,271	9.2	14,822	15,592	16,718	39
San Bernardino	23,137	23,945	25,265	5.5	16,100	16,046	16,466	42	Yuma	180	185	181	-2.1				



Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
New Castle	9,693	10,043	10,418	3.7	21,854	22,336	22,897	1	Bleckley	142	157	164	4.5	13,538	14,834	15,424	49
Sussex	1,874	1,967	2,053	4.4	16,456	16,859	17,137	2	Brantley	123	132	143	8.4	11,071	11,683	12,289	150
<b>District Of Columbia</b>	<b>14,878</b>	<b>15,491</b>	<b>16,333</b>	<b>5.4</b>	<b>24,643</b>	<b>26,069</b>	<b>27,909</b>		Brooks	171	191	205	7.0	11,096	12,391	13,288	124
<b>Florida</b>	<b>244,604</b>	<b>254,585</b>	<b>265,764</b>	<b>4.4</b>	<b>18,785</b>	<b>19,180</b>	<b>19,711</b>		Bryan	204	218	237	8.3	12,999	13,256	13,351	122
<b>Metropolitan portion</b>	<b>230,987</b>	<b>240,170</b>	<b>250,601</b>	<b>4.3</b>	<b>19,087</b>	<b>19,468</b>	<b>19,996</b>		Bulloch	519	559	597	6.9	11,974	12,653	13,179	128
<b>Nonmetropolitan portion</b>	<b>13,617</b>	<b>14,414</b>	<b>15,162</b>	<b>5.2</b>	<b>14,810</b>	<b>15,390</b>	<b>15,956</b>		Burke	230	247	261	5.9	11,166	11,954	12,434	148
Alachua	2,931	3,102	3,309	6.7	16,078	16,692	17,468	21	Butts	192	203	221	8.6	12,455	13,081	14,082	102
Baker	232	245	260	6.1	12,470	12,908	13,437	53	Calhoun	65	72	73	1.7	12,999	14,456	15,120	62
Bay	1,909	2,057	2,204	7.1	14,988	15,787	16,445	29	Camden	366	414	461	11.2	11,871	12,108	12,237	151
Bradford	253	267	287	7.7	11,188	11,620	12,440	61	Candler	106	116	124	6.4	13,659	14,638	15,398	50
Brevard	7,104	7,484	7,964	6.4	17,621	18,019	18,715	15	Carroll	996	1,035	1,101	6.4	13,858	14,195	14,910	70
Broward	28,114	28,737	30,068	4.6	22,276	22,993	23,107	6	Catoosa	534	555	597	7.4	12,511	12,818	13,476	118
Calhoun	116	122	129	5.9	10,521	10,847	11,356	65	Charlton	91	97	103	6.3	10,686	11,289	11,688	155
Charlotte	1,945	2,014	2,118	5.1	17,265	17,251	17,761	19	Chatham	3,839	3,972	4,245	6.9	17,650	18,109	19,108	7
Citrus	1,367	1,429	1,508	5.5	14,447	14,685	15,123	38	Chattahoochee	195	211	241	14.4	11,613	13,945	14,782	76
Clay	1,786	1,874	1,970	5.1	16,720	16,999	17,241	22	Chattooga	276	294	319	8.4	12,397	13,123	14,202	96
Collier	4,209	4,377	4,486	2.5	27,300	27,327	27,232	4	Cherokee	1,507	1,571	1,722	9.6	16,497	16,227	16,675	21
Columbia	555	587	633	8.0	12,951	13,438	14,236	45	Clarke	1,306	1,362	1,434	5.3	14,876	15,484	16,263	31
Dade	34,274	35,238	34,384	-2.4	17,629	17,807	17,124	25	Clay	35	41	43	5.0	10,451	12,163	12,629	142
De Soto	326	361	368	2.0	13,622	14,898	15,148	37	Clayton	2,881	3,029	3,258	7.6	15,738	16,288	17,198	18
Dixie	114	113	123	8.1	10,635	10,265	10,790	66	Clinch	66	72	79	10.4	10,716	11,489	12,697	140
Duval	12,038	12,528	13,324	6.4	17,780	18,189	19,011	14	Cobb	9,890	10,280	11,188	8.8	21,933	22,148	23,368	2
Escambia	3,952	4,149	4,463	7.6	15,007	15,540	16,474	28	Coffee	409	435	471	8.2	13,777	14,465	15,292	53
Flagler	420	445	480	7.8	14,257	14,122	14,285	43	Colquitt	500	528	558	5.5	13,633	14,402	15,093	63
Franklin	115	123	132	6.9	12,843	13,512	14,272	44	Columbia	1,129	1,176	1,246	5.9	16,867	17,336	17,062	19
Gadsden	483	513	556	8.5	11,722	12,241	13,174	56	Cook	156	165	176	6.9	11,615	12,216	13,093	131
Gilchrist	111	121	131	8.2	11,416	12,029	12,538	60	Coweta	893	933	1,012	8.5	16,380	16,316	16,775	23
Glades	94	102	109	6.8	12,300	13,575	14,619	40	Crawford	107	112	119	6.7	11,869	12,107	12,888	135
Gulf	142	150	162	7.7	12,324	12,979	13,814	49	Crisp	265	284	303	6.4	13,227	13,896	14,850	72
Hamilton	123	126	136	8.3	11,227	11,353	12,127	63	Dade	151	158	168	5.8	11,446	11,917	12,556	146
Hardee	295	312	320	2.6	15,085	15,585	15,930	31	Dawson	140	149	160	7.0	14,687	15,058	15,473	47
Hendry	403	463	475	2.6	15,610	17,071	17,128	24	DeCATUR	344	372	382	2.9	13,446	14,424	14,766	77
Hernando	1,477	1,561	1,664	6.6	14,381	14,626	15,183	36	De Kalb	11,406	11,880	12,703	6.9	20,816	21,364	22,542	3
Highlands	1,066	1,134	1,171	3.2	15,454	16,217	16,996	26	Dodge	206	222	235	5.5	11,694	12,499	13,237	126
Hillsborough	14,214	14,919	15,960	7.0	16,997	17,620	18,589	17	Dooly	123	145	149	3.0	12,455	14,606	14,924	69
Holmes	168	182	196	7.9	10,645	11,406	12,044	64	Dougherty	1,388	1,480	1,545	4.4	14,425	15,302	15,801	42
Indian River	2,275	2,377	2,445	2.9	25,028	25,765	26,158	5	Douglas	1,112	1,155	1,248	8.0	15,521	15,721	16,550	25
Jackson	520	563	607	8.0	12,542	13,481	14,335	42	Early	153	168	175	3.9	12,893	14,500	14,617	82
Jefferson	145	157	170	8.3	12,758	13,571	14,473	41	Echols	26	27	29	7.1	11,244	11,599	12,571	144
Lafayette	66	68	72	5.6	11,784	12,078	12,550	59	Effingham	361	368	390	6.2	13,897	13,840	14,202	97
Lake	2,500	2,603	2,776	6.6	16,274	16,529	17,217	23	Elbert	254	268	280	4.7	13,388	14,104	14,783	75
Lee	6,563	6,801	7,151	5.1	19,396	19,603	20,312	11	Emanuel	241	255	265	3.8	11,730	12,392	12,836	136
Leon	3,235	3,423	3,639	6.3	16,697	17,234	17,920	18	Evans	116	124	131	6.0	13,297	14,117	14,731	79
Levy	306	328	351	6.9	11,710	12,337	12,920	58	Fannin	186	199	216	8.6	11,617	12,298	12,988	133
Liberty	68	72	78	9.1	12,098	12,612	13,584	52	Fayette	1,348	1,439	1,570	9.1	21,312	21,646	22,534	4
Madison	183	195	208	6.6	11,053	11,681	12,430	62	Floyd	1,270	1,345	1,440	7.0	15,612	16,458	17,515	14
Manatee	4,066	4,273	4,552	6.5	19,078	19,806	21,009	10	Forsyth	832	883	968	9.7	18,597	18,763	19,420	6
Marion	2,855	3,003	3,198	6.5	14,500	14,799	15,375	35	Franklin	249	262	281	7.2	14,924	15,498	16,389	29
Martin	2,897	2,995	3,129	4.5	28,443	28,900	30,005	2	Fulton	16,835	17,500	18,771	7.3	25,916	26,662	28,194	1
Monroe	1,673	1,732	1,767	2.0	21,389	21,853	22,056	8	Gilmer	192	201	214	6.4	14,252	14,455	14,925	68
Nassau	771	823	880	6.9	17,413	18,054	18,676	16	Glascock	31	34	36	7.3	13,283	14,689	15,867	41
Ocala	2,333	2,520	2,709	7.5	16,139	16,987	17,656	20	Glynn	1,096	1,135	1,205	6.2	17,481	17,914	18,881	9
Okeechobee	383	400	417	4.2	12,867	13,105	13,617	50	Gordon	509	531	580	9.2	14,463	14,852	15,944	38
Orange	12,138	12,739	13,639	7.1	17,727	18,176	19,086	13	Grady	233	249	267	7.1	11,469	12,282	13,021	132
Osceola	1,585	1,670	1,795	7.5	14,404	14,405	15,054	39	Greene	153	163	172	5.3	12,902	13,506	14,162	98
Palm Beach	25,319	26,866	27,831	3.6	29,103	30,347	30,901	1	Gwinnett	7,289	7,735	8,440	9.1	20,436	20,736	21,543	5
Pasco	4,074	4,178	4,401	5.3	14,456	14,726	15,489	34	Habersham	405	431	464	7.6	14,608	15,321	16,193	35
Pinellas	17,525	17,912	18,856	5.3	20,496	20,864	22,055	9	Hall	1,581	1,664	1,797	8.0	16,469	16,930	17,972	13
Polk	6,229	6,472	6,816	5.3	15,292	15,676	16,268	30	Hancock	97	103	111	7.7	10,841	11,525	12,340	149
Putnam	764	814	890	9.3	11,696	12,267	13,258	55	Haralson	299	312	327	4.9	13,569	14,093	14,594	83
St. Johns	1,848	1,939	2,064	6.4	21,786	22,095	22,842	7	Harris	284	293	308	5.0	15,918	16,441	16,895	20
St. Lucie	2,280	2,387	2,506	5.0	14,959	15,203	15,553	33	Hart	284	295	312	5.5	14,350	14,860	15,452	48
Santa Rosa	1,221	1,309	1,423	8													

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Mitchell	242	267	280	4.8	11,931	13,130	13,620	114	Custer	60	54	55	1.0	14,527	12,938	13,548	34
Monroe	243	249	265	6.2	14,177	14,210	14,792	74	Elmore	324	339	358	5.6	15,242	16,382	17,390	9
Montgomery	90	95	100	5.1	12,482	13,144	13,697	113	Franklin	98	103	110	6.6	10,637	10,906	11,563	43
Morgan	189	194	208	7.3	14,614	14,823	15,701	43	Freemont (incl. Ylwrst. Natl. Pk.)	143	141	154	9.2	13,038	12,608	13,698	33
Murray	325	340	376	10.4	12,329	12,540	13,517	117	Gem	164	174	189	8.7	13,750	14,178	15,021	22
Muscogee	2,733	2,942	3,135	6.6	15,200	16,345	16,823	22	Gooding	181	188	201	7.2	15,571	15,826	16,712	12
Newton	590	623	670	7.5	14,031	14,305	14,973	66	Idaho	188	193	208	7.4	13,580	13,896	14,625	27
Oconee	312	325	345	6.0	17,555	17,796	18,447	12	Jefferson	204	212	226	7.0	12,297	12,471	12,939	36
Oglethorpe	130	135	143	6.3	13,211	13,539	14,053	104	Jerome	230	235	253	8.0	15,121	15,149	16,153	13
Paulding	576	596	652	9.3	13,710	13,343	13,775	110	Kootenai	1,097	1,197	1,325	10.8	15,586	16,203	17,110	11
Peach	330	343	360	5.0	15,529	16,009	16,367	30	Latah	433	452	488	7.9	14,134	14,527	15,347	18
Pickens	222	230	248	8.2	15,307	15,505	16,526	26	Lemhi	90	93	99	6.6	12,989	13,216	13,993	31
Pierce	169	181	197	9.2	12,579	13,397	14,453	89	Lewis	62	61	62	1.9	17,565	17,007	17,122	10
Pike	142	151	162	7.1	13,740	14,332	15,380	51	Lincoln	51	46	51	10.4	15,193	13,977	14,961	23
Polk	437	446	472	5.8	12,899	13,084	13,767	111	Pulaski	230	235	245	4.4	9,692	9,965	10,228	44
Pulaski	115	131	140	7.3	14,160	16,266	17,367	15	Putnam	205	210	229	8.9	14,335	14,305	15,243	55
Putnam	205	210	229	8.9	14,335	14,305	15,243	55	Quitman	25	28	29	5.9	11,529	12,385	12,966	134
Quitman	25	28	29	5.9	11,529	12,385	12,966	134	Rabun	147	156	164	5.2	12,596	13,203	13,733	112
Rabun	147	156	164	5.2	12,596	13,203	13,733	112	Randolph	91	101	105	4.8	11,396	12,409	13,128	130
Randolph	91	101	105	4.8	11,396	12,409	13,128	130	Richmond	3,172	3,327	3,507	5.4	16,655	17,057	17,322	16
Richmond	3,172	3,327	3,507	5.4	16,655	17,057	17,322	16	Rockdale	966	1,018	1,100	8.1	17,677	17,851	18,648	10
Rockdale	966	1,018	1,100	8.1	17,677	17,851	18,648	10	Schley	46	47	50	7.3	12,767	13,094	14,073	103
Schley	46	47	50	7.3	12,767	13,094	14,073	103	Screven	175	189	200	5.9	12,679	13,763	14,520	87
Screven	175	189	200	5.9	12,679	13,763	14,520	87	Seminole	110	120	127	6.2	12,232	13,207	14,046	106
Seminole	110	120	127	6.2	12,232	13,207	14,046	106	Spalding	761	803	861	7.2	13,909	14,459	15,327	52
Spalding	761	803	861	7.2	13,909	14,459	15,327	52	Stephens	322	338	361	6.6	13,828	14,344	15,123	61
Stephens	322	338	361	6.6	13,828	14,344	15,123	61	Stewart	62	65	69	5.5	10,884	11,811	12,589	143
Stewart	62	65	69	5.5	10,884	11,811	12,589	143	Sumter	411	446	470	5.4	13,584	14,610	15,283	54
Sumter	411	446	470	5.4	13,584	14,610	15,283	54	Talbot	69	72	75	3.7	10,529	10,981	11,277	157
Talbot	69	72	75	3.7	10,529	10,981	11,277	157	Taliaferro	24	24	26	6.2	12,450	13,277	14,464	88
Taliaferro	24	24	26	6.2	12,450	13,277	14,464	88	Tattnall	219	236	248	5.0	12,373	13,259	13,812	109
Tattnall	219	236	248	5.0	12,373	13,259	13,812	109	Taylor	99	104	110	6.2	12,875	13,605	14,400	91
Taylor	99	104	110	6.2	12,875	13,605	14,400	91	Telfair	135	143	152	6.4	12,309	13,029	13,246	125
Telfair	135	143	152	6.4	12,309	13,029	13,246	125	Terrell	122	134	143	6.3	11,434	12,699	13,588	115
Terrell	122	134	143	6.3	11,434	12,699	13,588	115	Thomas	572	607	639	5.2	14,660	15,509	16,141	36
Thomas	572	607	639	5.2	14,660	15,509	16,141	36	Tift	495	528	555	5.1	14,132	14,933	15,603	44
Tift	495	528	555	5.1	14,132	14,933	15,603	44	Toombs	326	346	366	5.6	13,522	14,305	14,941	67
Toombs	326	346	366	5.6	13,522	14,305	14,941	67	Towns	86	89	94	6.3	12,627	12,880	13,440	120
Towns	86	89	94	6.3	12,627	12,880	13,440	120	Treutlen	65	71	74	4.3	10,864	11,884	12,527	147
Treutlen	65	71	74	4.3	10,864	11,884	12,527	147	Troup	846	868	918	5.9	15,220	15,375	16,243	33
Troup	846	868	918	5.9	15,220	15,375	16,243	33	Turner	106	122	130	6.4	12,221	13,995	15,193	57
Turner	106	122	130	6.4	12,221	13,995	15,193	57	Twiggs	102	109	115	5.7	10,331	11,148	11,825	154
Twiggs	102	109	115	5.7	10,331	11,148	11,825	154	Union	145	160	173	7.9	12,050	12,924	13,430	121
Union	145	160	173	7.9	12,050	12,924	13,430	121	Upson	335	350	376	7.5	12,735	13,344	14,348	94
Upson	335	350	376	7.5	12,735	13,344	14,348	94	Walker	772	809	865	6.9	13,223	13,739	14,577	85
Walker	772	809	865	6.9	13,223	13,739	14,577	85	Walton	563	601	649	8.0	14,507	15,047	15,923	39
Walton	563	601	649	8.0	14,507	15,047	15,923	39	Ware	455	485	513	5.8	12,844	13,672	14,354	93
Ware	455	485	513	5.8	12,844	13,672	14,354	93	Warren	69	72	77	8.0	11,333	11,777	12,830	137
Warren	69	72	77	8.0	11,333	11,777	12,830	137	Washington	277	293	316	8.1	14,480	15,250	16,392	28
Washington	277	293	316	8.1	14,480	15,250	16,392	28	Wayne	295	321	339	5.5	13,141	13,808	14,230	95
Wayne	295	321	339	5.5	13,141	13,808	14,230	95	Webster	28	32	33	3.1	12,410	14,171	14,825	73
Webster	28	32	33	3.1	12,410	14,171	14,825	73	Wheeler	57	60	64	6.1	11,544	12,334	13,306	123
Wheeler	57	60	64	6.1	11,544	12,334	13,306	123	White	206	222	240	8.4	15,741	16,532	17,293	17
White	206	222	240	8.4	15,741	16,532	17,293	17	Whitfield	1,215	1,259	1,374	9.2	16,723	17,177	18,531	11
Whitfield	1,215	1,259	1,374	9.2	16,723	17,177	18,531	11	Wilcox	84	96	101	5.5	12,021	13,730	14,580	84
Wilcox	84	96	101	5.5	12,021	13,730	14,580	84	Wilkes	154	161	169	4.5	14,517	15,279	15,912	40
Wilkes	154	161	169	4.5	14,517	15,279	15,912	40	Wilkinson	139	141	148	5.1	13,600	13,759	14,415	90
Wilkinson	139	141	148	5.1	13,600	13,759	14,415	90	Worth	239	263	274	4.3	12,097	13,168	13,465	119
Worth	239	263	274	4.3	12,097	13,168	13,465	119	Hawaii	23,266	24,488	25,657	4.8	20,905	21,576	22,200	.....
Hawaii	23,266	24,488	25,657	4.8	20,905	21,576	22,200	.....	Metropolitan portion	18,448	19,336	20,597	6.5	22,009	22,744	23,864	.....
Metropolitan portion	18,448	19,336	20,597	6.5	22,009	22,744	23,864	.....	Nonmetropolitan portion	4,818	5,152	5,060	-1.8	17,538	18,090	17,294	.....
Nonmetropolitan portion	4,818	5,152	5,060	-1.8	17,538	18,090	17,294	.....	Hawaii	1,948	2,087	2,196	5.2	16,032	16,520	16,846	3
Hawaii	1,948	2,087	2,196	5.2	16,032	16,520	16,846	3	Honolulu	18,448	19,336	20,597	6.5	22,009	22,744	23,864	1
Honolulu	18,448	19,336	20,597	6.5	22,009	22,744	23,864	1	Kauai	929	1,008	636	-37.0	17,996	18,928	11,721	4
Kauai	929	1,008	636	-37.0	17,996	18,928	11,721	4	Maui + Kalawao	1,941	2,056	2,228	8.4	19,107	19,551	20,633	2
Maui + Kalawao	1,941	2,056	2,228	8.4	19,107	19,551	20,633	2	Idaho	15,482	16,368	17,746	8.4	15,304	15,773	16,649	.....
Idaho	15,482	16,368	17,746	8.4	15,304	15,773	16,649	.....	Metropolitan portion	5,128	5,504	6,067	10.2	17,204	17,801	18,982	.....
Metropolitan portion	5,128	5,504	6,067	10.2	17,204	17,801	18,982	.....	Nonmetropolitan portion	10,355	10,865	11,679	7.5	14,511	14,912	15,649	.....
Nonmetropolitan portion	10,355	10,865	11,679	7.5	14,511	14,912	15,649	.....	Ada	3,961	4,259	4,713	10.7	19,093	19,739	21,105	3
Ada	3,961	4,259	4,713	10.7	19,093	19,739	21,105	3	Adams	48	50	53	5.9	14,840	15,048	15,071	20
Adams																	

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Macon	2,110	2,147	2,252	4.9	18,004	18,254	19,134	18	Johnson	1,618	1,699	1,834	7.9	18,257	18,564	19,648	7
Macoupin	759	759	818	7.7	15,924	15,864	17,119	50	Knox	574	598	661	10.7	14,431	15,020	16,623	46
Madison	4,433	4,528	4,795	5.9	17,747	17,985	18,931	19	Kosciusko	1,117	1,142	1,228	7.5	17,085	17,464	18,625	14
Marion	621	635	697	9.8	14,932	15,281	16,785	56	Lagrange	365	372	404	8.6	12,340	12,508	13,341	89
Marshall	212	214	232	8.2	16,498	16,754	18,095	28	Lake	7,962	8,218	8,633	5.1	16,707	17,138	17,918	23
Mason	238	241	263	9.0	14,582	14,678	15,936	73	La Porte	1,682	1,737	1,853	6.7	15,683	16,059	17,018	31
Massac	195	201	217	8.1	13,201	13,618	14,604	91	Lawrence	619	654	702	7.3	14,413	15,182	16,177	54
Menard	192	194	213	9.9	17,238	17,248	18,749	21	Madison	2,048	2,068	2,177	5.3	15,652	15,732	16,551	47
Mercer	263	265	284	7.1	15,239	15,286	16,362	64	Marion	15,625	16,352	17,521	7.1	19,554	20,269	21,555	3
Monroe	400	401	424	5.7	17,718	17,436	18,040	30	Marshall	649	666	721	8.3	15,360	15,538	16,708	43
Montgomery	448	456	504	10.6	14,610	14,908	16,522	62	Martin	140	148	158	6.7	13,483	14,225	15,022	75
Morgan	575	583	621	6.5	15,801	16,009	17,123	49	Miami	510	518	540	4.4	13,829	13,948	14,612	79
Moutrie	207	207	229	10.5	14,811	14,915	16,347	66	Monroe	1,589	1,678	1,804	7.5	14,541	15,265	16,239	53
Ogle	750	761	817	7.3	16,274	16,230	17,201	47	Montgomery	557	575	639	11.0	16,153	16,579	18,206	20
Peoria	3,375	3,457	3,806	4.3	18,436	18,801	19,647	15	Morgan	875	922	986	7.0	15,569	16,094	16,813	39
Perry	313	305	321	5.2	14,588	14,276	15,044	87	Newton	197	188	215	14.3	14,502	13,966	15,510	67
Platt	288	287	315	9.6	18,484	18,348	19,983	13	Noble	555	563	618	9.8	14,597	14,705	15,982	57
Pike	228	235	255	8.2	13,003	13,495	14,675	89	Ohio	68	71	76	7.3	12,729	13,331	14,350	82
Pope	49	50	55	7.9	11,330	11,560	12,676	101	Orange	229	237	259	9.6	12,409	12,748	14,006	84
Pulaski	90	91	101	11.1	12,002	12,308	13,739	98	Owen	217	232	253	9.1	12,511	13,118	13,864	87
Putnam	113	119	127	6.9	19,754	20,662	22,129	4	Parke	212	220	243	10.5	13,789	14,190	15,533	65
Randolph	503	505	526	4.2	14,580	14,607	15,282	85	Perry	240	248	264	6.4	12,556	13,015	13,965	85
Richland	238	245	271	10.3	14,398	14,814	16,351	65	Pike	190	193	205	6.0	15,196	15,596	16,442	50
Rock Island	2,798	2,872	3,020	5.1	18,827	19,245	20,151	11	Porter	2,411	2,505	2,645	5.6	18,632	18,916	19,593	9
St. Clair	4,113	4,234	4,517	6.7	15,653	16,133	17,166	48	Posey	416	431	478	10.9	16,022	16,607	18,316	19
Saline	400	417	441	5.7	15,102	15,851	16,715	58	Pulaski	196	183	204	11.4	15,517	14,381	15,843	60
Sangamon	3,465	3,570	3,803	6.5	19,389	19,841	20,968	7	Putnam	413	434	474	9.1	13,558	13,955	14,953	76
Schuyler	100	100	110	9.4	13,288	13,308	14,651	90	Randolph	394	396	410	3.4	14,525	14,586	15,141	73
Scott	75	73	82	11.1	13,354	13,700	14,538	92	Ripley	378	399	433	8.6	15,283	15,894	17,046	30
Shelby	321	317	350	10.4	14,412	14,244	15,732	77	Rush	259	265	291	10.0	14,260	14,558	15,943	58
Stark	104	99	111	12.5	15,899	15,415	17,499	41	St. Joseph	4,166	4,303	4,606	7.1	16,830	17,297	18,387	17
Stephenson	861	864	929	7.6	17,891	17,930	19,211	17	Scott	265	283	313	10.7	12,610	13,253	14,528	80
Tazewell	2,245	2,243	2,365	5.5	18,116	17,979	18,820	20	Shelby	661	684	748	9.3	16,355	16,750	18,148	21
Union	235	247	266	7.8	13,337	14,001	14,966	88	Spencer	276	278	303	8.9	14,121	14,199	15,391	68
Vermilion	1,336	1,369	1,472	7.5	15,153	15,583	16,802	55	Starke	262	259	288	11.3	11,461	11,321	12,790	91
Wabash	207	204	220	7.6	15,812	15,571	16,879	54	Steuben	435	453	488	7.9	15,810	16,181	17,130	28
Warren	243	268	300	11.8	14,278	14,008	15,691	78	Sullivan	269	278	307	10.1	14,168	14,682	16,173	55
Washington	274	238	280	9.1	16,244	16,058	17,592	37	Switzerland	89	97	105	7.7	11,445	12,468	13,140	90
Wayne	228	239	264	10.7	13,266	14,041	15,580	80	Tipton	2,021	2,126	2,278	7.2	15,476	16,124	17,104	29
White	521	523	577	9.5	15,240	15,513	17,257	46	Union	273	280	298	6.4	16,920	17,368	18,492	16
Whiteside	975	976	1,052	7.9	16,214	16,138	17,377	44	Vanderburgh	3,031	3,122	3,356	7.5	18,346	18,854	20,176	5
Will	6,679	6,913	7,444	7.7	18,587	18,823	19,824	14	Vermillion	241	256	273	6.7	14,371	15,493	16,487	48
Williamson	849	888	955	7.5	14,717	15,364	16,339	67	Vigo	1,585	1,678	1,804	7.6	14,944	15,732	16,836	37
Winnebago	4,694	4,786	5,074	6.0	18,512	18,625	19,555	16	Wabash	533	541	568	5.1	15,175	15,482	16,298	52
Woodford	559	563	602	7.0	17,018	16,907	18,100	27	Warren	117	101	128	26.0	14,273	12,421	15,658	62
<b>Indiana</b>	<b>93,415</b>	<b>96,720</b>	<b>103,922</b>	<b>7.4</b>	<b>16,815</b>	<b>17,251</b>	<b>18,366</b>		Warrick	787	807	855	6.0	17,476	17,602	18,346	18
<b>Metropolitan portion</b>	<b>69,910</b>	<b>72,650</b>	<b>77,819</b>	<b>7.1</b>	<b>17,606</b>	<b>18,107</b>	<b>19,203</b>		Washington	303	308	336	8.9	12,770	12,831	13,751	88
<b>Nonmetropolitan portion</b>	<b>23,506</b>	<b>24,071</b>	<b>26,103</b>	<b>8.4</b>	<b>14,833</b>	<b>15,098</b>	<b>16,254</b>		Wayne	1,099	1,129	1,204	6.6	15,264	15,673	16,689	44
Adams	467	471	491	4.3	14,969	15,029	15,640	63	Wells	432	436	469	7.4	16,646	16,786	17,985	22
Allen	5,725	5,865	6,279	7.1	18,997	19,337	20,583	4	White	363	358	399	11.4	15,587	15,323	16,745	40
Bartholomew	1,141	1,179	1,309	11.1	17,865	18,183	19,984	6	Whitley	440	449	481	7.0	15,869	16,021	16,895	35
Benton	152	138	162	17.3	16,097	14,668	16,836	36	<b>Iowa</b>	<b>46,375</b>	<b>47,695</b>	<b>51,225</b>	<b>7.4</b>	<b>16,683</b>	<b>17,096</b>	<b>18,275</b>	
Blackford	200	201	215	6.6	14,234	14,453	15,352	70	<b>Metropolitan portion</b>	<b>21,609</b>	<b>22,552</b>	<b>24,148</b>	<b>7.1</b>	<b>17,962</b>	<b>18,564</b>	<b>19,658</b>	
Boone	774	812	880	8.4	20,788	21,560	22,925	2	<b>Nonmetropolitan portion</b>	<b>24,766</b>	<b>25,143</b>	<b>27,077</b>	<b>7.7</b>	<b>15,707</b>	<b>15,963</b>	<b>17,197</b>	
Brown	201	212	229	8.0	14,218	14,706	15,583	64	Adair	127	125	136	9.2	15,140	14,940	16,453	71
Carroll	304	305	329	7.9	16,160	15,991	17,012	32	Adams	70	69	74	8.2	14,426	14,533	15,993	86
Cass	587	597	651	9.1	15,295	15,541	16,901	34	Allamakee	199	191	211	10.3	14,426	13,849	15,273	90
Clark	1,367	1,440	1,560	8.4	15,581	16,225	17,403	26	Appanoose	183	190	203	6.7	13,356	13,868	14,788	93
Clay	336	351	386	9.8	13,580	14,181	15,377	69	Audubon	116	120	127	6.1	15,780	16,559	17,925	24
Clinton	473	482	527	9.2	15,228	15,369	16,640	45	Benton	345	347	377	8.6	15,390	15,429	16,615	62
Crawford	108	114	124	8.6	10,909	11,483	12,309	92	Black Hawk	1,972	2,035	2,175	6.9	15,909	16,252	17,345	46
Daviess	378	390	422	8.2	13,698	14,084	15,175	72	Boone	425	442	477	8.0	16,879	17,468	18,929	11
Decatur	600	629	674	7.1	15,374	15,716	16,333	51	Bremer	353	359	390	8.5	15,440	15,780	17,086	52
De Kalb	352	368	406	10.4	14,900	15,384	16,743	41	Buchanan	312	318	339	6.7	14,958	15,190	16,193	79
Delaware	549	567	620	9.3	15,486	15,789	16,941	33	Buena Vista	312	319	342	7.3	15,623	15,966	17,122	50
Dubois	1,883	1,974	2,112	7.0	15,741	16,485	17,543	25	Butler	235	237	257	8.3	14,920	15,029	16,377	72
Elkhart	668	688	735	6.9	18,208	18,469	19,637	8	Calhoun	175	176	201	14.4	15,244	15,336	17,647	33
Fayette	389	391	431	10.1	14,968	15,056	16,482	49	Carroll	354	368	398	8.1	16,521	17,234	18,611	14
Floyd	1,098	1,156	1,252	8.3	16,932	17,443	18,628	13	Cass	2							

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Emmet	173	171	189	10.3	14,943	14,737	16,241	77	Crawford	520	549	588	7.2	14,641	15,554	16,599	73
Fayette	316	316	337	6.5	14,458	14,467	15,490	89	Decatur	76	75	76	1.3	18,891	19,230	19,915	22
Floyd	272	272	288	6.0	15,965	16,174	17,077	53	Dickinson	279	277	305	10.2	14,711	14,720	15,903	85
Franklin	180	173	198	14.6	15,859	15,313	17,755	29	Doniphan	118	131	140	6.9	14,602	16,160	17,406	53
Fremont	121	124	137	10.2	14,728	15,277	16,856	60	Douglas	1,175	1,238	1,326	7.1	14,302	14,853	15,682	91
Greene	152	158	181	14.5	15,127	15,812	18,094	20	Edwards	77	78	82	4.0	20,415	21,370	22,711	10
Grundy	206	211	230	9.3	17,120	17,673	19,164	9	Eik	44	44	48	9.1	13,359	13,916	15,281	97
Guthrie	175	179	193	8.1	15,950	16,117	17,364	43	Ellis	419	427	453	6.1	16,157	16,452	17,437	51
Hamilton	270	286	306	7.1	16,832	17,831	19,022	10	Ellsworth	96	94	100	7.0	14,638	14,213	15,499	96
Hancock	192	178	201	12.9	15,204	14,320	16,360	74	Finney	525	570	624	9.3	15,839	17,030	18,302	37
Hardin	307	308	335	8.8	16,104	16,286	17,877	27	Ford	435	449	460	2.4	15,849	16,191	16,509	75
Harrison	206	212	239	12.6	13,969	14,479	16,317	76	Franklin	305	316	347	10.1	13,847	14,252	15,567	93
Henry	299	307	330	7.3	15,512	15,882	16,929	58	Geary	400	403	468	16.2	13,148	13,677	14,224	105
Howard	146	146	156	6.6	14,929	14,936	15,902	87	Gove	79	70	77	9.4	23,805	21,335	23,479	7
Humboldt	189	163	188	14.2	15,688	15,303	17,710	31	Graham	56	53	59	12.6	15,824	15,093	17,430	52
Ida	133	131	146	11.3	15,963	15,884	17,658	32	Grant	123	132	146	10.7	16,646	17,788	19,138	25
Iowa	242	254	282	11.3	16,582	17,247	19,222	7	Gray	94	98	95	-2.8	17,508	18,205	17,647	46
Jackson	292	293	322	9.9	14,672	14,775	16,137	81	Greeley	52	57	48	-16.2	29,276	32,719	28,210	2
Jasper	589	596	638	6.9	16,910	17,143	18,255	18	Greenwood	117	118	125	6.1	14,859	15,036	15,986	84
Jefferson	249	247	265	7.1	15,252	15,096	16,086	83	Hamilton	59	70	70	-3	24,557	29,968	29,969	1
Johnson	1,652	1,730	1,836	6.1	17,145	17,940	18,824	12	Harper	124	116	125	8.0	17,501	16,583	18,502	32
Jones	270	264	286	8.3	13,886	13,503	14,495	92	Harvey	506	541	572	5.7	16,301	17,440	18,430	34
Keokuk	178	179	190	6.5	15,355	15,408	16,456	70	Haskell	84	88	91	3.6	21,740	22,363	22,958	8
Kossuth	289	263	315	19.6	15,602	14,414	17,359	45	Hodgeman	39	37	37	9	18,053	16,780	17,346	55
Lea	594	621	662	8.6	15,371	15,966	16,986	57	Jackson	178	177	196	10.6	15,462	15,395	17,113	61
Linn	312	3,310	3,534	6.8	18,870	19,396	20,443	2	Jefferson	251	256	282	10.0	15,737	16,031	17,393	54
Louisia	180	179	198	10.5	15,533	15,430	17,361	44	Jewell	75	63	71	11.8	17,823	15,444	17,546	49
Lucas	138	139	148	6.2	15,182	15,240	16,318	75	Jones	9,143	9,696	10,339	6.6	25,584	26,509	27,560	3
Lyon	170	174	185	6.0	14,151	14,629	15,527	88	Kearny	100	94	96	2.8	25,040	23,601	24,086	6
Madison	198	200	217	8.8	15,841	15,958	17,110	51	Kingman	129	126	139	10.4	15,587	15,171	16,904	65
Mahaska	328	331	354	7.2	15,221	15,429	16,564	66	Kiowa	65	66	66	-1.0	17,980	18,654	18,318	36
Marion	498	510	540	6.0	16,608	16,931	17,910	25	Labette	333	350	363	3.8	14,102	14,890	15,554	95
Marshall	662	682	709	4.1	17,280	17,894	18,814	13	Lane	51	51	48	-6.4	21,641	21,973	20,957	16
Mills	245	256	271	5.9	18,603	19,254	20,224	3	Leavenworth	891	940	1,043	11.0	13,770	14,151	15,558	94
Mitchell	192	188	200	5.9	17,562	17,342	18,510	16	Lincoln	61	56	64	14.1	16,826	15,838	18,299	38
Monona	148	145	164	13.6	14,746	14,563	16,583	64	Linn	115	114	127	11.5	13,940	13,598	15,083	101
Monroe	124	129	137	5.7	15,257	15,863	16,694	61	Logan	51	52	52	1	16,410	16,939	16,518	74
Montgomery	190	196	208	6.0	15,770	16,428	17,623	34	Lyon	500	535	566	5.9	14,398	15,546	16,497	76
Muscatine	708	729	788	8.0	17,710	18,006	19,292	6	McPherson	450	458	493	7.8	16,471	16,863	18,009	43
O'Brien	254	258	269	4.1	16,448	16,783	17,485	38	Marion	181	181	201	11.4	14,082	14,156	15,872	86
Osceola	109	111	116	4.7	14,937	15,356	16,189	80	Marshall	200	194	221	13.8	17,193	16,993	19,687	23
Page	270	277	299	8.2	15,996	16,478	18,093	21	Meade	83	86	86	3	19,690	20,172	20,341	18
Palo Alto	162	153	173	13.0	15,190	14,531	16,554	67	Miami	366	372	402	8.0	15,542	15,669	16,754	68
Plymouth	385	400	426	6.5	16,465	17,097	18,025	23	Mitchell	126	115	125	8.7	17,563	16,014	17,498	50
Pocahontas	144	144	163	12.9	15,173	15,410	17,617	35	Montgomery	571	580	610	5.3	14,729	15,012	16,120	80
Polk	6,675	7,029	7,548	7.4	20,324	21,101	22,315	1	Morris	87	85	94	10.1	13,962	13,597	15,086	100
Pottawattamie	1,250	1,307	1,389	6.3	15,109	15,747	16,584	63	Morton	58	61	63	4.4	16,814	17,772	18,516	30
Poweshiek	311	315	336	6.5	16,354	16,637	17,720	30	Neosho	179	186	197	5.9	17,202	17,879	19,035	26
Ringgold	73	72	80	10.4	13,471	13,487	15,004	91	Ness	254	269	287	6.8	14,944	15,763	16,914	64
Sac	187	187	207	10.9	15,212	15,407	17,174	49	Norton	79	72	79	9.2	19,670	18,154	20,320	19
Scott	2,723	2,817	2,978	5.7	17,988	18,364	19,184	8	Osage	221	226	246	9.1	14,505	14,660	15,850	87
Shelby	206	212	224	5.5	15,599	16,017	16,988	56	Osborne	82	75	84	11.4	16,351	15,363	17,651	45
Sickles	436	462	492	6.6	14,566	15,292	16,219	78	Ottawa	86	78	87	12.1	15,362	14,024	15,826	89
Story	1,146	1,206	1,278	5.9	15,430	16,208	17,191	48	Pawnee	142	145	155	6.9	18,856	19,220	20,377	17
Tama	271	269	286	6.3	15,573	15,501	16,482	68	Phillips	109	105	115	9.2	16,631	16,332	17,982	44
Taylor	88	90	98	7.9	12,372	12,862	14,006	98	Pottawattamie	237	243	265	9.4	14,653	14,819	15,781	90
Union	85	86	200	7.4	14,501	14,745	16,060	85	Pratt	169	178	185	3.9	17,552	18,571	19,264	24
Van Buren	98	99	109	10.3	12,734	12,782	14,125	97	Rawlins	58	52	55	6.5	17,061	15,414	16,694	70
Wapello	538	558	593	6.3	15,056	15,628	16,580	65	Reno	1,000	1,038	1,092	5.2	16,027	16,661	17,565	48
Warren	574	599	648	8.2	15,878	16,353	17,372	42	Republic	101	103	113	10.3	15,653	16,208	18,442	33
Washington	329	335	350	4.6	16,771	16,894	17,464	39	Rice	171	170	176	3.6	16,166	16,424	17,091	62
Wayne	96	95	104	8.6	13,626	13,617	14,993	92	Riley	872	910	1,020	12.1	12,973	14,071	15,204	99
Webster	617	655	701	7.0	15,293	16,287	17,538	36	Rooks	87	84	94	12.6	14,501	13,994	15,835	88
Winneshago	203	193	218	13.2	16,739	16,074	18,352	17	Rush	61	56	60	8.6	15,897	14,606	16,082	81
Winneshiek	321	320	346	8.2	15,422	15,396	16,460	69	Russell	141	133	144	8.0	18,129	17,208	18,920	27
Woodbury	1,615	1,699	1,853	8.1	16,396	17,105	18,539	15	Saline	939	965	1,023	6.0	19,023	19,313	20,273	20
Worth	125	117	126	8.0	15,627	14,861	16,071	84	Scott	116	127	139	9.1	22,025	24,335	26,429	4
Wright	222	218	240	10.1	15,559	15,447	16,891	59	Sedgwick	7,680	8,142	8,772	7.7	18,979	19,867	21,053	15
<b>Kansas</b>	<b>43,763</b>	<b>45,553</b>	<b>48,764</b>	<b>7.0</b>	<b>17,639</b>	<b>18,290</b>	<b>19,387</b>		Seward	303	352	342	-2.7	16,206	18,863	18,267	39
<b>Metropolitan portion</b>	<b>25,786</b>	<b>27,203</b>	<b>29,126</b>	<b>7.1</b>	<b>19,280</b>	<b>20,081</b>	<b>21,197</b>		Shawnee	2,995	3,110	3,281	5.5	18,563	19,130	20,076	21
<b>Nonmetropolitan portion</b>	<b>17,977</b>	<b>18,350</b>	<b>19,638</b>	<b>7.0</b>	<b>15,720</b>	<b>16,156</b>	<b>17,207</b>		Sheridan	53	60	65	8.3	17,708	20,238	22,052	13
Allen	198	200	219	9.6	13,543	13,694	14,986	102	Sherman	124	124	126	1.4	17,883	18,254	18,638	29
Anderson																	

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
<b>Kentucky</b>	<b>54,454</b>	<b>57,520</b>	<b>62,043</b>	<b>7.9</b>	<b>14,751</b>	<b>15,483</b>	<b>16,528</b>		Monroe	138	148	157	6.4	12,056	12,984	13,735	61
<b>Metropolitan portion</b>	<b>30,654</b>	<b>32,275</b>	<b>34,698</b>	<b>7.5</b>	<b>17,187</b>	<b>17,957</b>	<b>19,068</b>		Montgomery	250	259	278	7.2	12,766	13,255	14,111	53
<b>Nonmetropolitan portion</b>	<b>23,800</b>	<b>25,245</b>	<b>27,345</b>	<b>8.3</b>	<b>12,474</b>	<b>13,165</b>	<b>14,138</b>		Morgan	108	120	130	8.7	9,239	9,671	9,943	117
Adair	174	188	207	10.2	11,321	12,121	13,248	71	Muhlenberg	393	407	426	4.7	12,580	13,029	13,719	62
Allen	156	165	181	9.1	10,614	11,272	12,142	92	Nelson	417	440	474	7.6	14,019	14,469	15,181	41
Anderson	216	227	245	7.8	14,726	15,022	15,687	32	Nicholas	83	92	99	7.4	12,375	13,661	14,530	48
Ballard	119	118	133	12.6	15,048	14,926	16,946	17	Ohio	243	251	268	7.0	11,539	11,840	12,678	81
Barren	456	489	531	8.6	13,371	14,279	15,444	37	Oldham	756	799	835	4.5	22,516	22,713	22,891	1
Bath	109	115	124	7.8	11,238	11,868	12,620	82	Owen	105	115	124	8.1	11,583	12,385	13,296	70
Bell	327	351	378	7.6	10,412	11,278	12,248	89	Owsley	40	44	49	10.6	7,870	8,665	9,466	120
Boone	993	1,064	1,167	9.7	17,079	17,523	18,498	10	Pendleton	145	157	168	7.3	11,977	12,608	13,222	73
Bourbon	282	294	313	6.4	14,669	15,219	16,169	26	Perry	369	385	420	9.0	12,165	12,499	13,515	66
Boyd	854	884	960	8.6	16,704	17,206	18,730	8	Pike	923	981	1,035	5.4	12,741	13,426	14,105	54
Boyle	360	377	408	8.4	14,041	14,618	15,733	31	Powell	113	119	132	10.9	9,677	10,183	11,060	106
Bracken	96	101	105	3.8	12,289	12,782	13,043	77	Pulaski	619	666	720	8.1	12,473	13,212	13,978	58
Breathitt	162	168	189	11.9	10,333	11,210	12,453	84	Robertson	23	25	26	6.9	10,829	11,490	12,203	90
Breckinridge	184	195	213	9.2	11,298	11,945	12,932	79	Rockcastle	148	161	171	5.9	9,947	10,751	11,359	100
Bullitt	609	642	697	8.5	12,715	13,013	13,631	63	Rowan	201	221	235	6.1	9,814	10,704	11,208	102
Butler	114	121	132	9.2	10,162	10,690	11,586	98	Russell	173	182	200	10.1	11,726	12,149	13,143	76
Caldwell	162	171	182	6.1	12,254	13,143	13,989	57	Scott	385	418	460	10.1	16,094	17,041	18,177	11
Calloway	427	461	505	9.4	13,867	14,948	16,125	27	Shelby	423	450	491	9.1	16,951	17,709	18,996	6
Campbell	1,310	1,370	1,455	6.2	15,592	16,236	17,106	15	Simpson	200	211	233	10.4	13,228	13,721	15,021	44
Carlisle	77	78	87	12.2	14,735	14,884	16,685	21	Spencer	91	99	108	8.7	13,229	14,282	15,309	39
Carroll	124	134	148	9.9	13,387	14,225	15,498	34	Taylor	270	286	318	11.0	12,727	13,397	14,579	47
Carter	256	277	303	9.3	10,481	11,196	12,124	93	Todd	131	135	162	19.5	11,962	12,382	14,645	46
Casey	141	156	171	9.7	9,969	10,965	11,839	96	Trigg	134	141	155	9.8	12,899	13,492	14,275	51
Christian	742	799	911	14.1	10,783	12,072	13,371	68	Trimble	74	80	85	6.9	12,033	12,906	13,608	64
Clark	432	459	488	6.3	14,613	15,438	16,209	25	Union	249	257	275	7.3	15,065	15,700	16,877	18
Clay	198	218	243	11.6	9,136	9,937	10,940	109	Warren	1,165	1,239	1,357	9.5	15,156	15,943	17,196	13
Clinton	86	95	103	7.7	9,416	10,371	11,179	104	Washington	137	147	159	8.2	13,074	14,015	15,137	42
Crittenden	106	110	118	7.4	11,507	11,913	12,774	80	Wayne	158	174	192	10.3	9,023	9,834	10,671	112
Cumberland	66	72	77	6.9	9,804	10,669	11,455	99	Webster	212	213	234	9.6	15,201	15,475	17,152	14
Daviess	1,318	1,398	1,486	6.4	15,103	15,908	16,736	20	Whitley	368	393	423	7.5	11,025	11,750	12,421	86
Edmonson	97	106	115	8.2	9,356	10,202	11,182	103	Wolfe	57	66	76	15.3	8,854	9,721	10,946	108
Elliott	53	57	65	13.2	8,178	8,785	9,918	118	Woodford	411	424	442	4.3	20,538	20,757	21,219	3
Estill	147	156	168	8.2	10,018	10,442	11,082	105	<b>Louisiana</b>	<b>60,228</b>	<b>64,083</b>	<b>68,167</b>	<b>6.4</b>	<b>14,279</b>	<b>15,100</b>	<b>15,931</b>	
Fayette	4,381	4,590	4,887	6.5	19,361	20,064	21,015	4	<b>Metropolitan portion</b>	<b>48,264</b>	<b>51,215</b>	<b>54,419</b>	<b>6.3</b>	<b>17,279</b>	<b>18,098</b>	<b>18,953</b>	
Fleming	141	150	166	10.5	11,472	12,074	13,187	75	<b>Nonmetropolitan portion</b>	<b>11,964</b>	<b>12,868</b>	<b>13,748</b>	<b>6.8</b>	<b>11,295</b>	<b>12,112</b>	<b>12,862</b>	
Floyd	503	533	572	7.4	11,554	12,145	12,996	78	Acadia	628	669	710	6.1	11,265	11,911	12,602	45
Franklin	732	778	827	6.3	16,704	17,719	18,539	9	Allen	196	216	232	7.3	9,238	9,884	10,236	63
Fulton	111	115	129	12.7	13,479	14,108	16,072	28	Ascension	848	923	1,016	10.0	14,509	15,523	16,664	8
Gallatin	63	71	79	11.7	11,667	12,849	13,931	59	Assumption	260	275	287	4.5	11,438	12,133	12,708	43
Garrard	155	161	173	7.7	13,325	13,560	14,258	52	Avoyesles	384	402	442	10.1	9,812	10,309	11,311	59
Grant	201	220	238	7.9	12,600	13,503	14,076	56	Beauregard	390	414	440	6.2	12,962	13,461	14,146	22
Graves	455	485	555	14.3	13,518	14,423	16,371	23	Bieniville	179	195	209	7.6	11,211	12,265	13,294	34
Grayson	230	248	267	7.5	10,919	11,534	12,284	88	Bossier	1,183	1,266	1,353	6.8	13,781	14,718	15,644	11
Green	117	127	137	8.1	11,272	12,256	13,237	72	Caddo	3,903	4,134	4,433	7.2	15,769	16,828	17,996	5
Greenup	507	526	574	9.0	13,795	14,330	15,454	36	Calcasieu	2,409	2,626	2,768	5.4	14,322	15,438	16,137	10
Hancock	128	133	140	5.8	16,303	16,861	17,773	12	Caldwell	110	112	124	10.5	11,191	11,542	12,697	44
Hardin	1,160	1,206	1,308	8.4	12,970	13,993	15,482	35	Cameron	111	113	118	4.6	12,056	12,195	12,922	37
Harlan	407	420	440	4.9	11,146	11,476	12,104	95	Catahoula	114	122	141	15.5	10,344	11,015	12,727	42
Harrison	223	244	260	6.9	13,724	14,852	15,736	30	Claiborne	188	199	212	6.7	10,831	11,506	12,291	51
Hart	163	178	193	8.1	10,948	11,716	12,455	83	Concordia	230	243	261	7.4	11,048	11,723	12,478	49
Henderson	666	683	746	9.1	15,446	15,796	17,021	16	De Soto	292	306	339	10.9	11,547	12,222	13,528	28
Henry	174	189	202	6.9	13,541	14,325	14,988	45	East Baton Rouge	6,440	6,825	7,362	7.9	16,913	17,698	18,998	2
Hickman	72	72	83	15.7	12,945	12,954	15,134	43	East Carroll	88	117	109	-6.6	9,106	12,375	11,432	58
Hopkins	733	747	778	4.0	15,901	16,158	16,798	19	East Feliciana	225	238	255	7.1	11,743	12,156	12,864	38
Jackson	103	114	124	8.8	8,550	9,425	10,110	116	Evangeline	342	373	403	8.0	10,272	11,143	11,939	56
Jefferson	12,771	13,415	14,416	7.5	19,196	20,099	21,490	2	Franklin	222	252	269	6.7	9,912	11,376	12,125	54
Jessamine	437	458	492	7.5	14,234	14,555	15,219	40	Grant	187	193	206	6.4	10,695	11,021	11,690	57
Johnson	270	287	311	8.6	11,600	12,267	13,188	74	Iberia	893	963	1,015	5.3	13,075	13,963	14,574	17
Kenton	2,393	2,537	2,726	7.5	16,828	17,726	18,992	7	Iberville	387	410	449	9.5	12,472	13,207	14,435	20
Knott	178	186	202	8.6	9,902	10,273	11,059	107	Jackson	186	200	211	5.5	11,862	12,916	13,606	27
Knox	278	302	330	9.1	9,366	10											

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
St. Martin	454	484	495	2.3	10,309	10,956	11,111	61	Alpena	443	465	491	5.7	14,450	15,074	15,852	39
St. Mary	698	735	706	-4.0	12,018	12,631	12,161	53	Antrim	260	269	286	6.3	14,241	14,432	15,118	50
St. Tammany	2,472	2,662	2,825	6.1	17,024	17,685	18,089	4	Arenac	200	210	218	3.7	13,367	13,635	13,921	67
Tangipahoa	968	1,053	1,160	10.2	11,293	12,161	13,188	36	Baraga	96	103	106	3.7	12,060	12,820	13,576	70
Tensas	83	92	85	-7.5	11,838	13,314	12,511	48	Barry	769	818	859	5.1	15,351	16,181	16,785	29
Terrebonne	1,223	1,300	1,331	2.4	12,596	13,191	13,339	32	Bay	1,835	1,916	2,011	5.0	16,417	17,140	17,936	18
Union	254	263	293	11.3	12,291	12,765	14,064	24	Benzie	181	194	205	5.9	14,827	15,622	16,266	35
Vermilion	592	602	633	5.2	11,843	12,019	12,570	46	Berrien	2,579	2,670	2,836	6.2	15,985	16,553	17,566	20
Vernon	659	738	782	5.9	10,610	11,548	12,213	52	Branch	576	604	621	2.8	13,847	14,472	14,833	55
Washington	476	499	549	9.9	11,030	11,698	12,773	39	Calhoun	2,205	2,329	2,475	6.3	16,176	16,939	17,888	19
Webster	534	572	599	4.8	12,732	13,789	14,459	19	Cass	711	730	783	7.1	14,373	14,816	15,934	38
West Baton Rouge	276	291	322	10.7	14,228	14,849	16,267	9	Charlevoix	332	353	374	5.9	15,369	16,117	16,819	28
West Carroll	113	129	135	4.1	9,335	10,675	11,228	60	Cheboygan	288	301	315	4.5	13,435	14,075	14,454	58
West Feliciana	107	115	129	12.5	8,261	8,894	9,963	64	Chippewa	394	416	445	6.9	11,347	11,800	12,490	77
Winn	107	115	129	12.5	8,261	8,894	9,963	64	Clare	299	319	341	6.9	11,933	12,349	12,924	76
Winn	185	190	206	8.6	11,380	11,898	12,734	41	Clinton	919	963	1,013	5.2	15,808	16,323	17,054	25
Winn	185	190	206	8.6	11,380	11,898	12,734	41	Crawford	144	153	161	5.8	11,681	12,084	12,447	78
<b>Maine</b>	<b>20,981</b>	<b>21,378</b>	<b>22,456</b>	<b>5.0</b>	<b>17,041</b>	<b>17,294</b>	<b>18,163</b>		Delta	540	568	602	6.0	14,270	14,905	15,751	41
<b>Metropolitan portion</b>	<b>9,149</b>	<b>9,293</b>	<b>9,753</b>	<b>5.0</b>	<b>18,445</b>	<b>18,716</b>	<b>19,719</b>		Dickinson	450	435	462	6.3	16,728	16,156	17,118	24
<b>Nonmetropolitan portion</b>	<b>11,832</b>	<b>12,084</b>	<b>12,703</b>	<b>5.1</b>	<b>16,093</b>	<b>16,340</b>	<b>17,126</b>		Eaton	1,588	1,674	1,764	5.3	17,044	17,243	18,515	14
Androscoggin	1,729	1,757	1,836	4.5	16,412	16,784	17,677	8	Emmet	465	492	516	4.9	18,491	19,143	19,799	8
Aroostook	1,194	1,223	1,277	4.4	13,724	14,005	14,661	13	Genesee	7,245	7,698	7,893	2.5	16,809	17,798	18,208	15
Cumberland	416	5,166	5,420	4.9	20,993	21,116	22,178	1	Gladwin	272	286	305	6.8	12,336	12,658	13,271	74
Franklin	423	446	446	5.5	14,291	14,460	15,167	11	Goebell	233	254	263	3.5	12,929	14,178	14,715	56
Hancock	835	867	910	4.9	17,714	18,208	18,968	3	Grand Traverse	1,096	1,180	1,271	7.7	16,983	17,942	18,884	11
Kennebec	2,042	2,088	2,188	4.8	17,560	17,832	18,680	5	Gratiot	550	575	610	6.0	14,089	14,596	15,456	46
Knox	635	653	685	4.8	17,459	17,829	18,621	7	Hillsdale	606	617	670	8.5	13,929	14,323	15,063	52
Lincoln	874	577	609	5.6	18,866	18,920	19,913	2	Houghton	449	478	495	3.6	12,642	13,472	13,808	69
Oxford	752	764	801	4.9	14,267	14,535	15,228	10	Huron	545	570	596	4.6	15,599	16,252	17,032	26
Penobscot	2,305	2,370	2,498	5.4	15,678	16,100	17,063	9	Ingham	4,815	5,019	5,255	4.7	17,062	17,989	18,646	13
Piscataquis	246	252	265	5.1	13,125	13,489	14,138	16	Ionia	737	771	808	4.9	12,901	13,366	13,940	66
Sagadahoc	603	615	640	4.0	17,877	18,012	18,848	4	Ipswich	409	432	429	-7	13,521	13,990	14,191	61
Somerset	687	715	766	7.1	13,741	14,157	15,090	12	Iron	176	178	185	3.9	13,377	13,684	14,105	62
Waldo	456	465	495	6.4	13,753	13,795	14,507	14	Isabella	711	789	822	4.2	13,522	14,314	14,622	57
Washington	462	488	511	4.8	13,051	13,682	14,244	15	Jackson	2,340	2,403	2,523	5.0	15,586	15,893	16,628	31
York	2,929	2,953	3,109	5.3	17,743	17,811	18,658	6	Kalamazoo	4,191	4,396	4,628	5.3	18,737	19,608	20,511	6
<b>Maryland</b>	<b>105,985</b>	<b>109,400</b>	<b>114,414</b>	<b>4.6</b>	<b>22,088</b>	<b>22,494</b>	<b>23,268</b>		Kalkaska	162	179	189	5.8	12,001	12,845	13,457	72
<b>Metropolitan portion</b>	<b>100,104</b>	<b>103,275</b>	<b>108,011</b>	<b>4.6</b>	<b>22,473</b>	<b>22,880</b>	<b>23,669</b>		Kent	9,185	9,692	10,249	5.7	18,285	19,074	20,018	7
<b>Nonmetropolitan portion</b>	<b>5,881</b>	<b>6,125</b>	<b>6,403</b>	<b>4.6</b>	<b>17,102</b>	<b>17,516</b>	<b>18,095</b>		Keeweenaw	25	26	27	4.7	14,577	15,615	16,076	37
Allegany	1,122	1,155	1,200	3.9	14,986	15,437	16,102	21	Lake	93	103	110	7.1	10,831	11,653	12,201	81
Anne Arundel	9,331	9,536	9,929	4.1	21,759	21,936	22,492	5	Lapeer	1,247	1,296	1,333	2.8	16,589	16,869	16,971	27
Baltimore	16,391	16,841	17,483	3.8	23,616	24,034	24,794	4	Leelanau	291	307	331	7.7	17,601	18,327	19,129	10
Calvert	1,066	1,093	1,160	6.1	20,521	20,031	20,289	10	Leonia	1,458	1,530	1,622	6.0	15,883	16,373	17,231	23
Caroline	391	399	417	4.4	14,425	14,586	14,942	22	Livingston	2,326	2,397	2,550	6.4	19,950	20,047	20,786	5
Carroll	2,549	2,640	2,769	4.9	20,528	20,720	21,228	9	Luce	90	99	91	-7.4	15,561	17,185	16,297	34
Cecil	1,251	1,291	1,343	4.0	17,414	17,593	17,910	16	MacKinnon	158	169	179	6.1	14,818	15,736	16,654	30
Charles	1,954	2,025	2,137	5.5	19,190	19,438	20,147	12	Macomb	14,530	15,101	15,963	5.7	20,223	20,868	21,920	4
Dorchester	478	488	512	4.9	15,811	16,189	16,945	19	Manistee	299	323	342	5.8	14,098	15,074	15,581	44
Frederick	2,949	3,010	3,214	6.8	19,489	19,385	20,122	13	Marquette	992	1,074	1,127	4.9	13,979	15,104	15,779	40
Garrett	381	392	412	5.1	13,514	13,640	14,183	23	Mason	363	382	409	7.1	14,174	14,731	15,487	45
Harford	3,576	3,687	3,824	3.7	19,464	19,461	19,562	15	Mecosta	420	447	477	6.8	11,217	11,649	12,371	79
Hawthorne	5,074	5,227	5,486	4.9	26,799	26,832	27,439	2	Menominee	359	376	402	6.8	14,421	15,255	16,339	32
Hennepin	350	356	371	4.3	19,611	19,668	20,216	11	Midland	1,589	1,628	1,748	7.4	20,918	21,197	22,421	3
Montgomery	24,150	25,076	26,254	4.7	31,800	32,583	33,614	1	Missaukee	152	160	172	7.4	12,440	12,946	13,496	71
Prince Georges	14,881	15,286	16,043	5.0	20,326	20,532	21,373	7	Monroe	2,231	2,296	2,441	6.3	16,658	16,899	17,957	17
Queen Annes	722	732	763	4.2	21,167	21,095	21,690	6	Montcalm	662	684	738	7.8	12,426	12,519	13,303	73
St. Marys	1,246	1,324	1,398	5.6	16,301	16,874	17,560	18	Montmorency	101	107	115	7.5	11,276	11,780	12,340	80
Somerset	290	304	313	3.0	12,377	12,976	13,279	24	Muskegon	2,299	2,412	2,542	5.4	14,427	15,005	15,691	42
Talbot	777	805	836	3.9	25,360	25,835	26,779	3	Newaygo	502	536	570	6.5	13,072	13,627	13,992	64
Washington	1,954	2,014	2,114	5.0	16,037	16,281	16,846	20	Oakland	29,518	30,086	32,072	6.6	27,168	27,312	28,671	1
Wicomico	1,235	1,298	1,350	4.0	16,537	17,089	17,610	17	Oceana	311	329	349	5.9	13,799	14,432	15,185	48
Worcester	732	760	794	4.5	20,771	20,870	21,290	8	Ogemaw	209	226	237	5.0	11,108	11,717	12,086	82
Baltimore City	13,333																

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Beltrami .....	437	467	496	6.3	12,674	13,251	13,824	79	<b>Metropolitan portion .....</b>	<b>11,328</b>	<b>11,995</b>	<b>12,865</b>	<b>7.3</b>	<b>14,573</b>	<b>15,223</b>	<b>16,023</b>	.....
Benton .....	435	445	481	8.2	14,315	14,338	15,269	68	<b>Nonmetropolitan portion .....</b>	<b>21,070</b>	<b>22,269</b>	<b>23,962</b>	<b>7.6</b>	<b>11,716</b>	<b>12,343</b>	<b>13,222</b>	.....
Big Stone .....	92	96	100	4.5	14,761	15,555	16,789	43	Adams .....	449	458	497	8.5	12,726	12,973	14,306	15
Blue Earth .....	828	853	928	8.8	15,298	15,736	17,209	29	Alcorn .....	411	434	476	9.7	12,939	13,494	14,622	11
Brown .....	439	454	485	6.8	16,261	16,904	18,026	20	Amite .....	122	129	138	6.8	9,218	9,660	10,290	79
Carlton .....	396	419	453	8.3	13,516	14,213	15,299	65	Attala .....	199	213	225	5.2	10,776	11,527	12,215	52
Carver .....	979	1,005	1,108	10.3	20,238	20,033	21,322	7	Benton .....	74	78	85	8.8	9,230	9,820	10,617	74
Cass .....	279	295	321	9.0	12,737	13,286	14,058	78	Bolivar .....	437	497	535	7.6	10,444	11,960	12,795	43
Chippewa .....	216	213	221	3.7	16,380	16,258	17,073	33	Calhoun .....	166	174	192	9.9	11,118	11,789	12,911	41
Chisago .....	469	485	518	6.8	15,267	15,441	16,012	54	Carroll .....	93	98	106	8.7	10,052	10,488	11,420	68
Clay .....	696	709	780	10.0	13,791	14,008	15,277	67	Chickasaw .....	210	223	241	8.1	11,600	12,320	13,367	30
Clearwater .....	92	98	104	5.7	11,109	11,979	12,726	87	Choctaw .....	90	92	98	7.4	9,906	10,096	10,879	72
Cook .....	64	69	74	8.3	16,611	17,325	18,242	17	Claiborne .....	103	105	115	9.5	9,027	9,166	9,946	80
Cottonwood .....	196	192	204	6.3	15,466	15,507	16,496	46	Clarke .....	201	213	223	5.0	11,634	12,306	12,901	42
Crow Wing .....	650	688	739	7.4	14,625	15,170	15,913	57	Clay .....	256	269	286	6.2	10,927	11,614	13,364	31
Dakota .....	5,833	6,098	6,645	9.0	20,995	21,275	22,445	3	Coahoma .....	361	401	425	6.0	11,432	12,716	13,426	29
Dodge .....	251	254	271	6.9	15,848	15,885	16,749	44	Copiah .....	280	291	318	9.4	10,133	10,520	11,427	67
Douglas .....	404	419	449	7.2	14,087	14,443	15,397	63	Covington .....	173	183	201	10.0	10,447	11,097	12,190	54
Faribault .....	271	262	285	8.6	16,058	15,813	17,308	28	De Soto .....	1,087	1,139	1,227	7.7	15,846	15,943	16,572	3
Fillmore .....	306	312	315	8	14,720	15,203	15,336	64	Forrest .....	883	920	977	6.1	12,916	13,372	13,981	17
Freeborn .....	508	508	542	6.8	15,381	15,549	16,723	45	Franklin .....	82	86	93	7.8	9,816	10,471	11,382	69
Goodhue .....	675	707	770	8.8	16,553	17,249	18,729	11	George .....	175	185	202	9.1	10,448	10,885	11,748	64
Grant .....	100	114	114	14.1	15,504	16,187	18,765	10	Greene .....	95	101	113	11.2	9,260	9,659	10,522	75
Hennepin .....	25,577	26,348	28,322	7.5	24,738	25,377	27,197	1	Grenada .....	264	285	303	6.6	12,243	13,059	13,835	18
Houston .....	292	292	310	6.0	15,759	15,779	16,479	47	Hancock .....	397	423	451	6.7	12,456	13,025	13,549	25
Hubbard .....	187	198	211	6.4	12,537	13,028	13,648	81	Harrison .....	2,192	2,299	2,474	7.6	13,258	13,821	14,584	12
Isanti .....	385	400	430	7.5	14,820	15,148	16,132	53	Hinds .....	3,994	4,200	4,459	6.2	15,700	16,492	17,515	1
Itasca .....	550	581	609	4.9	13,424	14,119	14,690	72	Holmes .....	191	210	209	-4	8,850	9,776	9,805	81
Jackson .....	187	177	184	3.6	16,022	15,247	15,871	59	Humphreys .....	148	156	156	-1	12,239	13,080	13,061	36
Kanabec .....	164	172	185	7.7	12,789	13,375	14,264	75	Issaquena .....	22	27	26	-5.9	11,676	14,430	13,731	21
Kandiyohi .....	605	632	663	4.9	15,597	16,175	16,824	41	Itawamba .....	236	248	274	10.6	11,765	12,363	13,609	23
Kittson .....	111	92	123	34.2	19,286	16,164	21,991	4	Jackson .....	1,566	1,698	1,851	9.0	13,597	14,427	15,298	8
Koochiching .....	230	228	240	5.2	13,981	14,070	14,858	70	Jasper .....	175	189	206	8.9	10,245	11,139	11,980	58
Lac Qui Parle .....	139	139	146	4.8	15,656	15,958	16,886	38	Jefferson .....	68	70	80	14.5	7,949	8,298	9,435	82
Lake .....	137	147	156	6.1	13,141	14,096	14,781	71	Jefferson Davis .....	132	136	145	6.3	9,440	9,811	10,429	77
Lake of the Woods .....	59	62	66	6.1	14,484	14,683	15,292	66	Jones .....	782	835	905	8.4	12,621	13,487	14,578	13
Le Sueur .....	364	370	400	8.3	15,678	15,815	17,018	36	Kemper .....	104	111	120	7.8	10,048	10,779	11,760	63
Lincoln .....	98	101	101	-8.2	14,292	15,023	14,956	69	Lafayette .....	370	394	423	7.6	11,599	12,269	13,135	34
Lyon .....	396	422	457	7.7	15,999	17,178	18,547	14	Lamar .....	377	397	425	7.1	12,362	12,864	13,645	22
McLeod .....	517	537	586	9.2	16,088	16,664	18,098	19	Laurel .....	1,087	1,146	1,219	6.4	14,400	15,126	15,980	6
Mahnomen .....	61	67	65	12.8	12,197	11,441	12,852	86	Lawrence .....	133	140	153	9.8	10,678	11,234	12,387	49
Marshall .....	164	139	184	32.0	14,998	12,884	17,188	31	Leake .....	201	219	241	9.6	10,850	11,889	13,027	37
Martin .....	390	374	409	9.3	16,996	16,430	18,121	18	Lee .....	1,007	1,061	1,164	9.7	15,286	15,783	17,015	2
Meeker .....	310	317	330	3.9	14,852	15,151	15,879	58	Leflore .....	469	503	540	7.3	12,567	13,431	14,411	14
Mille Lacs .....	255	263	282	7.1	13,658	13,833	14,635	73	Lincoln .....	355	374	398	6.5	11,713	12,297	12,925	40
Morrison .....	366	372	398	7.0	12,334	12,564	13,417	82	Londwens .....	836	844	891	5.6	14,034	14,053	14,757	9
Mower .....	623	661	695	5.1	16,670	17,697	18,695	12	Madison .....	798	855	919	7.5	14,704	15,325	15,780	7
Murray .....	150	152	162	6.6	15,604	15,820	16,828	40	Marion .....	271	281	302	7.6	10,598	11,081	11,886	59
Nicollet .....	432	445	487	9.4	15,363	15,721	17,038	35	Marshall .....	325	336	365	8.5	10,682	10,802	11,634	66
Nobles .....	342	349	357	2.1	17,029	17,438	17,726	22	Monroe .....	427	441	475	7.6	11,659	12,010	12,941	39
Norman .....	137	121	144	18.7	17,281	15,485	18,662	13	Montgomery .....	129	137	149	8.1	10,371	11,201	12,150	55
Olmsted .....	2,131	2,250	2,386	6.1	19,923	20,617	21,595	5	Neshoba .....	283	305	332	8.9	11,391	12,266	13,080	35
Otter Tail .....	724	746	795	6.6	14,271	14,600	15,477	61	Newton .....	248	258	280	8.5	12,201	12,575	13,581	24
Pennington .....	197	200	219	9.6	14,824	14,977	16,475	48	Noxubee .....	117	121	138	14.5	9,273	9,687	11,058	71
Pine .....	252	266	286	7.5	11,800	12,374	13,083	85	Oktibbeha .....	427	447	473	5.9	11,112	11,648	12,319	51
Pipestone .....	157	166	166	2	15,006	15,962	16,004	55	Panola .....	329	349	379	8.6	10,934	11,433	12,194	53
Polk .....	505	489	555	13.5	15,545	15,138	17,164	32	Pearl River .....	422	442	472	6.9	10,864	11,239	11,848	61
Pope .....	143	142	156	9.6	13,247	13,277	14,518	74	Perry .....	101	103	115	11.7	9,342	9,342	10,337	78
Ramsey .....	9,995	10,561	11,242	6.4	20,576	21,766	23,129	2	Pike .....	400	428	460	7.6	10,861	11,631	12,436	46
Red Lake .....	57	54	62	15.0	12,614	12,215	14,245	76	Pontotoc .....	263	275	305	10.9	11,785	12,194	12,993	32
Redwood .....	283	282	301	6.6	16,493	16,519	17,698	23	Prentiss .....	246	260	283	8.6	10,572	11,110	12,085	56
Renville .....	287	294	306	3.9	16,286	16,793	17,616	24	Quitman .....	104	108	125	15.6	9,989	10,477	12,431	47
Rice .....	749	780	827	6.1	15,180	15,627	16,426	49	Rankin .....	1,294	1,382	1,485	7.4	14,755	15,417	16,106	5
Rock .....	175	176	181	3.0	17,899	18,023	18,464	15	Scott ..								

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
<b>Missouri</b>	<b>89,245</b>	<b>93,442</b>	<b>98,470</b>	<b>5.4</b>	<b>17,407</b>	<b>18,121</b>	<b>18,970</b>		Putnam	61	64	67	5.2	12,056	12,746	13,483	83
<b>Metropolitan portion</b>	<b>67,681</b>	<b>70,812</b>	<b>74,411</b>	<b>5.1</b>	<b>19,350</b>	<b>20,109</b>	<b>20,999</b>		Ralls	125	131	143	8.9	14,731	15,445	16,737	16
<b>Nonmetropolitan portion</b>	<b>21,564</b>	<b>22,631</b>	<b>24,058</b>	<b>6.3</b>	<b>13,236</b>	<b>13,841</b>	<b>14,605</b>		Randolph	338	348	362	4.1	13,899	14,705	15,197	47
Adair	306	327	350	7.0	12,456	13,400	14,344	68	Ray	297	305	329	7.8	13,486	13,927	15,105	50
Andrew	213	219	228	4.3	14,514	14,827	15,387	43	Reynolds	73	80	77	-2.9	10,974	11,861	11,740	106
Atchison	111	115	124	7.3	14,938	15,672	17,252	11	Ripley	122	133	141	5.9	9,892	10,656	11,148	113
Audrain	352	364	383	5.3	14,912	15,469	16,394	21	St. Charles	3,909	4,034	4,268	5.8	18,212	18,340	18,869	6
Barry	360	384	401	4.3	13,015	13,732	13,989	71	St. Clair	103	108	116	7.4	12,142	12,810	13,571	81
Barton	152	157	176	12.0	13,438	13,754	15,313	45	St. Genevieve	224	228	240	5.2	13,915	14,207	14,877	60
Bates	201	201	226	12.3	13,394	13,406	15,032	54	St. Francois	597	634	663	4.5	12,171	12,782	13,217	91
Benton	160	170	179	5.5	11,447	11,981	12,400	99	St. Louis	25,112	26,101	27,230	4.3	25,246	26,157	27,211	1
Bollinger	115	121	129	6.6	10,821	11,375	12,057	103	Saline	347	369	373	1.1	14,800	15,950	16,351	22
Boone	1,834	1,969	2,105	6.9	16,269	17,165	18,004	9	Schuyler	51	53	56	4.5	12,037	12,170	13,360	87
Buchanan	1,309	1,370	1,423	3.9	15,755	16,530	17,116	12	Scotland	64	67	75	11.7	13,353	14,891	15,921	29
Butler	506	549	593	8.0	13,020	13,972	15,007	56	Scott	551	572	608	6.5	13,964	14,557	15,394	42
Caldwell	102	105	115	9.3	12,219	12,610	13,731	79	Shannon	72	78	83	6.0	9,426	10,273	10,653	115
Callaway	480	503	528	4.9	14,607	15,086	15,658	37	Shelby	103	105	108	3.4	14,827	15,304	15,913	30
Camden	414	432	463	7.0	15,001	15,341	15,981	27	Stoddard	391	407	436	7.0	13,530	14,138	15,055	53
Cape Girardeau	982	1,035	1,107	7.0	15,900	16,599	17,482	10	Stone	288	304	340	11.8	15,034	15,368	16,308	23
Carroll	152	153	171	11.4	14,160	14,495	16,149	26	Sullivan	74	80	82	2.2	11,740	12,880	13,218	90
Carter	61	66	70	5.3	11,014	11,663	12,207	101	Taney	386	412	457	11.1	15,011	15,584	16,574	18
Cass	1,029	1,055	1,135	7.6	16,026	15,988	16,818	15	Texas	236	243	255	4.8	10,971	11,168	11,723	107
Cedar	147	151	158	4.6	12,157	12,563	13,148	93	Vernon	265	282	280	-6	13,919	14,743	14,953	57
Chariton	131	137	144	4.9	14,246	15,100	16,169	25	Warren	295	306	325	6.1	14,991	15,179	15,716	34
Christian	459	497	539	8.6	13,893	14,320	14,926	58	Washington	218	230	239	3.7	10,636	11,158	11,480	108
Clark	83	87	98	13.0	11,105	11,573	13,043	94	Wayne	121	131	135	3.3	10,478	11,027	11,138	114
Clay	2,853	2,936	3,132	6.7	18,502	18,716	19,691	5	Webster	283	292	315	7.9	11,916	12,169	12,913	98
Clinton	250	256	271	5.6	14,982	15,231	15,944	28	Worth	30	32	33	4.4	12,482	12,961	13,949	73
Cole	1,081	1,129	1,198	6.1	16,959	17,440	18,314	7	Wright	183	182	195	7.2	10,873	10,770	11,462	109
Cooper	203	218	233	6.9	13,687	14,702	15,573	39	St. Louis City	6,930	7,362	7,615	3.4	17,524	18,834	19,844	4
Crawford	245	254	275	8.0	12,728	12,947	13,844	76	<b>Montana</b>	<b>11,790</b>	<b>12,623</b>	<b>13,344</b>	<b>5.7</b>	<b>14,743</b>	<b>15,632</b>	<b>16,227</b>	
Dade	94	97	107	9.8	12,650	13,080	14,272	69	<b>Metropolitan portion</b>	<b>3,149</b>	<b>3,348</b>	<b>3,568</b>	<b>6.6</b>	<b>16,466</b>	<b>17,293</b>	<b>18,082</b>	
Dallas	147	152	162	6.6	11,589	11,668	12,263	100	<b>Nonmetropolitan portion</b>	<b>8,641</b>	<b>9,275</b>	<b>9,776</b>	<b>5.4</b>	<b>14,201</b>	<b>15,108</b>	<b>15,841</b>	
Daviess	94	97	104	7.7	11,944	12,236	13,447	85	Beaverhead	119	126	128	1.0	14,099	14,971	14,847	36
De Kalb	102	106	113	6.9	10,273	10,635	11,401	111	Big Horn	123	123	128	4.1	10,904	10,732	10,949	56
Dent	169	179	189	5.7	12,356	13,025	13,841	77	Blaine	79	79	85	7.0	11,848	11,733	12,524	53
Douglas	117	122	132	8.1	9,841	10,288	11,152	112	Broadwater	43	47	52	10.3	13,062	14,126	14,855	35
Dunklin	415	461	497	8.0	12,521	14,029	15,092	51	Carbon	121	127	132	4.1	15,025	15,912	16,029	23
Franklin	1,273	1,321	1,386	4.9	15,705	16,038	16,595	17	Carter	19	21	20	-5.0	12,608	14,510	13,328	48
Gasconade	204	211	222	5.3	14,550	14,988	15,699	36	Cascade	1,241	1,305	1,383	6.0	15,974	16,651	17,452	8
Gentry	88	95	98	2.9	12,917	14,084	14,560	67	Chouteau	95	110	97	-11.9	17,417	20,331	17,796	6
Greene	3,444	3,680	3,929	6.8	16,513	17,418	18,270	8	Custer	174	184	196	6.6	14,881	15,830	16,683	16
Grundy	142	147	156	5.9	13,555	14,061	15,009	55	Daniels	35	40	43	7.7	15,637	18,850	20,393	1
Harrison	113	120	124	3.2	13,387	14,366	14,924	59	Dawson	128	140	140	-4	13,646	15,140	15,443	30
Henry	269	273	296	8.3	13,394	13,544	14,627	66	Deer Lodge	125	129	138	7.0	12,232	12,766	13,759	44
Hickory	78	82	87	6.5	10,701	10,837	11,432	110	Fallon	42	47	48	1.8	13,643	15,062	15,754	26
Holt	85	92	96	4.5	13,994	15,409	16,239	24	Fergus	181	188	192	2.4	14,947	15,264	15,514	29
Howard	130	139	146	5.0	13,463	14,512	15,150	48	Flathead	892	956	1,033	8.0	14,989	15,721	16,440	18
Howell	376	403	431	6.8	11,887	12,561	13,220	89	Gallatin	742	810	873	7.8	14,627	15,620	16,202	22
Iron	121	130	138	6.6	11,258	12,098	12,983	95	Garfield	23	24	22	-10.1	14,679	16,009	15,065	33
Jackson	11,685	12,297	12,962	5.4	18,447	19,393	20,443	3	Glacier	136	155	160	3.3	11,228	12,834	13,095	50
Jasper	1,322	1,417	1,516	7.0	14,600	15,586	16,499	19	Golden Valley	13	15	15	-1.2	14,374	14,963	16,783	14
Jefferson	2,465	2,558	2,685	4.9	14,294	14,585	15,059	52	Granite	33	36	37	1.3	13,010	13,356	14,462	38
Johnson	528	553	592	7.1	12,369	12,785	13,504	82	Hill	261	285	289	1.7	14,757	16,065	16,257	21
Knox	57	58	63	8.2	12,644	13,039	14,233	70	Jefferson	128	133	143	7.7	16,023	16,346	17,316	10
Laclede	352	361	385	6.9	12,935	13,195	13,932	74	Jefferson Basin	32	35	35	-1	13,931	15,546	15,679	27
Lafayette	481	500	529	5.7	15,468	16,066	17,023	13	Lake	271	287	306	6.8	12,902	13,306	13,897	42
Lawrence	376	398	421	5.8	12,416	13,078	13,745	78	Lewis and Clark	755	806	871	8.1	15,880	16,679	17,534	7
Lewis	125	130	142	8.8	12,240	12,732	13,952	72	Liberty	44	50	45	-10.7	19,343	22,139	19,851	2
Lincoln	421	442	468	5.9	14,501	14,804	15,444	41	Lincoln	210	217	234	7.9	12,029	12,356	13,231	49
Linn	192	202	209	3.2	13,884	14,695	15,287	46	McCone	27	30	29	-2.6	12,126	13,831	13,960	41
Livingston	220	227	244	7.6	15,129	15,777	16,857	14	Madison	77	81	82	1.8	12,861	13,201	13,506	47
McDonald	201	218	230	5.6	11,832	12,735	13,209	92	Meagher	27	30	31	2.0	15,056	16,664	17,137	11
Macon	215	225	231	2.8	14,029	14,854	15,365	44	Mineral	37</							



Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Wibaux .....	13	15	14	-9	11,066	12,604	12,810	51	Sioux .....	22	19	21	9.4	14,062	12,300	13,366	91
Yellowstone .....	1,907	2,043	2,185	7.0	16,803	17,730	18,506	3	Stanton .....	98	99	103	4.2	15,681	15,721	16,612	70
Park (incl. Ylwstn. Natl. Park) .....	181	197	209	5.8	12,249	13,520	14,076	39	Thayer .....	124	121	128	5.8	18,789	18,361	19,632	20
<b>Nebraska .....</b>	<b>27,470</b>	<b>28,720</b>	<b>30,368</b>	<b>5.7</b>	<b>17,379</b>	<b>18,059</b>	<b>18,974</b>	.....	Thomas .....	15	16	16	3.6	17,750	19,083	19,959	16
<b>Metropolitan portion .....</b>	<b>14,532</b>	<b>15,395</b>	<b>16,335</b>	<b>6.1</b>	<b>18,396</b>	<b>19,240</b>	<b>20,181</b>	.....	Thurston .....	81	82	88	6.4	11,623	11,833	12,650	92
<b>Nonmetropolitan portion .....</b>	<b>12,938</b>	<b>13,325</b>	<b>14,033</b>	<b>5.3</b>	<b>16,364</b>	<b>16,863</b>	<b>17,738</b>	.....	Valley .....	86	85	87	2.6	16,741	16,870	17,467	54
Adams .....	509	533	562	5.4	17,214	18,006	19,062	29	Washington .....	298	309	335	8.1	17,907	18,487	19,703	19
Antelope .....	122	122	127	4.4	15,382	15,413	16,321	76	Wayne .....	127	133	142	6.6	13,550	13,913	14,918	87
Arthur .....	7	6	7	13.0	15,331	14,422	15,864	81	Webster .....	77	76	80	5.1	17,992	18,094	19,162	28
Banner .....	15	15	15	3.3	17,426	17,894	18,077	40	Wheeler .....	24	26	28	8.1	25,450	27,706	30,050	1
Blaine .....	13	12	14	12.7	18,857	17,827	20,600	12	York .....	253	264	284	7.9	17,551	18,321	19,601	22
Boone .....	122	124	128	3.4	18,318	18,700	19,616	21	<b>Nevada .....</b>	<b>24,682</b>	<b>26,582</b>	<b>28,931</b>	<b>8.8</b>	<b>20,248</b>	<b>20,639</b>	<b>21,648</b>	.....
Box Butte .....	249	253	259	2.4	18,947	19,392	20,008	14	<b>Metropolitan portion .....</b>	<b>21,026</b>	<b>22,666</b>	<b>24,744</b>	<b>9.2</b>	<b>20,429</b>	<b>20,773</b>	<b>21,826</b>	.....
Boyd .....	41	38	41	8.8	14,631	13,813	15,263	86	<b>Nonmetropolitan portion .....</b>	<b>3,656</b>	<b>3,917</b>	<b>4,187</b>	<b>6.9</b>	<b>19,267</b>	<b>19,896</b>	<b>20,652</b>	.....
Brown .....	62	60	64	5.7	16,951	16,532	17,574	51	Churchill .....	277	299	325	8.6	15,385	16,090	17,242	14
Buffalo .....	560	590	642	8.8	14,984	15,565	16,819	68	Clark .....	14,813	16,046	17,563	9.5	19,623	19,818	20,769	7
Burt .....	119	122	125	2.8	15,107	15,580	16,052	79	Douglas .....	701	763	804	5.4	25,101	25,623	25,820	2
Butler .....	139	144	156	8.2	16,174	16,836	18,105	39	Elko .....	621	670	724	8.0	18,148	18,660	19,385	9
Cass .....	344	365	389	6.5	16,075	16,900	17,623	48	Esmeralda .....	27	34	39	12.6	19,917	20,785	28,891	1
Cedar .....	138	139	148	6.8	13,680	13,789	14,738	88	Eureka .....	33	33	34	2.1	21,105	20,390	21,706	5
Chase .....	80	83	85	2.3	18,114	19,013	19,968	15	Humboldt .....	240	262	275	5.0	18,498	19,160	19,335	11
Cherry .....	98	89	100	11.9	15,578	14,226	15,795	82	Lander .....	116	121	130	7.4	18,429	18,810	19,414	8
Cheyenne .....	175	186	188	1.1	18,440	19,759	19,722	18	Lincoln .....	69	72	72	6	18,096	19,164	19,343	10
Clay .....	131	131	135	3.2	18,497	18,517	18,855	32	Lyon .....	339	366	394	7.7	16,738	17,099	17,714	13
Colfax .....	142	149	158	5.5	15,482	16,232	16,831	66	Mineral .....	107	109	119	8.6	16,662	17,742	19,138	12
Cuming .....	183	194	194	2	18,156	19,361	19,517	23	Nye .....	289	307	326	6.3	16,008	16,346	16,698	17
Custer .....	217	226	237	5.2	17,683	18,428	19,339	26	Pershing .....	72	72	74	2.5	16,637	16,520	16,707	16
Dakota .....	234	241	265	9.9	13,931	14,238	15,460	85	Storey .....	47	50	53	5.8	18,479	19,059	20,777	6
Dawes .....	116	120	128	6.6	12,984	13,644	14,548	90	Washoe .....	5,925	6,313	6,856	8.6	23,113	24,035	25,529	3
Dawson .....	343	377	395	4.7	17,169	18,255	18,253	37	White Pine .....	157	156	163	4.0	16,696	16,352	16,980	15
Deuel .....	91	41	42	2.9	18,137	18,487	19,383	24	Carson City .....	850	909	982	8.1	20,910	21,784	22,919	4
Dixon .....	45	101	105	4.2	15,487	16,316	17,064	62	<b>New Hampshire .....</b>	<b>22,491</b>	<b>23,231</b>	<b>24,457</b>	<b>5.3</b>	<b>20,231</b>	<b>20,773</b>	<b>21,933</b>	.....
Dodge .....	541	566	597	5.5	15,679	16,433	17,322	59	<b>Metropolitan portion .....</b>	<b>14,267</b>	<b>14,664</b>	<b>15,463</b>	<b>5.5</b>	<b>20,742</b>	<b>21,448</b>	<b>22,383</b>	.....
Douglas .....	8,347	8,841	9,404	6.4	19,987	20,933	22,055	5	<b>Nonmetropolitan portion .....</b>	<b>8,224</b>	<b>8,568</b>	<b>8,994</b>	<b>5.0</b>	<b>19,421</b>	<b>20,206</b>	<b>21,200</b>	.....
Dundy .....	54	55	57	3.1	20,922	21,734	23,118	3	Belknap .....	960	978	1,008	3.0	19,474	19,956	20,481	6
Fillmore .....	155	152	159	4.7	21,814	21,504	22,777	4	Carroll .....	756	785	823	4.9	21,279	21,921	22,700	3
Franklin .....	65	64	68	5.9	16,521	16,572	17,620	49	Cheshire .....	1,287	1,339	1,413	5.6	18,328	18,994	20,013	7
Frontier .....	48	44	48	9.3	15,515	14,228	15,487	84	Coos .....	582	619	642	3.7	16,674	17,019	18,684	9
Furnas .....	94	94	101	6.7	16,960	16,882	17,961	42	Grafton .....	1,489	1,577	1,662	5.4	19,856	21,023	21,969	5
Gage .....	380	380	404	6.3	16,663	16,790	17,878	44	Hillsborough .....	7,213	7,419	7,809	5.2	21,420	22,052	22,963	2
Garden .....	44	43	45	3.5	17,839	18,382	19,292	27	Merrimack .....	2,470	2,573	2,712	5.4	20,521	21,366	22,619	4
Garfield .....	34	35	36	4.1	15,812	15,972	17,228	60	Rockingham .....	5,274	5,406	5,706	5.6	21,379	22,210	23,181	1
Gosper .....	38	40	42	4.5	19,773	19,976	20,684	11	Strafford .....	1,779	1,838	1,949	6.0	17,049	17,707	18,623	10
Grant .....	14	14	13	-4.7	18,745	18,033	16,831	67	Sullivan .....	681	696	734	5.5	17,616	18,088	19,190	8
Greeley .....	47	47	50	7.4	15,624	15,596	17,073	61	<b>New Jersey .....</b>	<b>187,167</b>	<b>191,559</b>	<b>204,038</b>	<b>6.5</b>	<b>24,182</b>	<b>24,644</b>	<b>26,091</b>	.....
Hall .....	795	850	893	5.0	16,210	17,206	17,965	41	<b>Metropolitan portion .....</b>	<b>187,167</b>	<b>191,559</b>	<b>204,038</b>	<b>6.5</b>	<b>24,182</b>	<b>24,644</b>	<b>26,091</b>	.....
Hamilton .....	151	160	168	4.8	17,036	17,956	18,715	33	Atlantic .....	5,210	5,208	5,540	6.4	23,135	22,892	24,148	10
Harlan .....	68	66	69	4.8	17,917	17,600	18,683	34	Bergen .....	26,643	26,739	28,235	5.6	32,273	32,296	33,815	2
Hayes .....	28	35	35	2.3	23,343	29,124	29,938	2	Burlington .....	8,373	8,570	9,066	5.8	21,136	21,488	22,801	11
Hitchcock .....	58	60	62	4.0	15,389	16,186	17,480	53	Camden .....	10,160	10,402	11,042	6.2	20,181	20,563	21,748	17
Holt .....	203	202	223	10.4	16,152	16,073	17,878	45	Cape May .....	2,019	2,058	2,199	6.9	21,188	21,374	22,708	12
Hooker .....	14	14	14	3.7	17,713	18,182	19,885	15	Cumberland .....	2,378	2,482	2,661	7.2	17,199	17,911	19,213	21
Howard .....	82	83	91	10.1	13,621	13,536	14,683	89	Essex .....	18,204	18,974	20,268	6.8	23,417	24,515	26,206	8
Jefferson .....	152	147	157	7.0	17,345	16,992	18,419	36	Gloucester .....	4,260	4,371	4,664	6.7	18,430	18,838	19,691	20
Johnson .....	73	71	75	5.9	15,956	15,240	16,365	75	Hudson .....	10,753	11,011	11,853	7.7	19,440	19,689	21,359	18
Kearney .....	119	133	136	2.3	17,954	20,413	20,857	8	Hunterdon .....	3,024	3,142	3,373	7.3	27,965	28,773	30,139	4
Keith .....	130	133	138	3.9	15,121	15,747	16,479	72	Mercer .....	8,440	8,712	9,321	7.0	25,877	26,639	28,443	5
Keya Paha .....	18	14	16	16.3	17,953	13,656	16,682	69	Middlesex .....	15,817	16,242	17,364	6.9	23,502	23,968	25,369	9
Kimball .....	74	75	76	2.1	18,295	18,390	18,981	31	Monmouth .....	14,110	14,394	15,408	7.0	25,461	25,761	27,226	7
Knox .....	141	136	145	6.7	14,802	14,550	15,542	83	Morris .....	13,171	13,668	14,393	6.9	31,236	31,787	33,616	3
Lancaster .....	3,696	3,927	4,171	6.2	17,237	18,123	18,995	30	Ocean .....	8,782	9,128	9,633	5.5	20,211	20,924	21,976	15
Lincoln .....	512	548	574	4.8	15,754	16,697	17,331	58	Passaic .....								

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Lea	728	767	807	5.2	13,114	13,818	14,244	12	Metropolitan portion	76,585	79,968	86,372	8.0	17,426	17,886	19,045	.....
Lincoln	186	199	213	7.2	15,200	15,611	16,234	4	Nonmetropolitan portion	31,753	33,424	35,745	6.9	14,060	14,675	15,534	.....
Los Alamos	473	473	511	8.0	26,078	26,189	28,087	1	Alamance	1,790	1,865	1,977	6.0	16,496	16,989	17,801	18
Luna	199	219	236	7.7	10,978	11,604	11,976	24	Alexander	408	421	454	7.9	14,766	15,048	16,099	39
McKinley	540	578	619	7.1	8,807	9,178	9,500	32	Alleghany	127	132	142	7.5	13,223	13,684	14,722	64
Mora	35	37	40	8.3	8,275	8,825	9,455	33	Bertie	318	331	345	4.5	13,552	14,094	14,665	66
Otero	630	661	709	7.2	12,155	12,691	13,662	16	Anson	298	318	335	5.3	13,438	14,234	14,943	61
Quay	139	144	152	5.8	12,903	13,625	14,537	11	Ashe	204	218	231	5.8	13,664	14,601	15,486	52
Rio Arriba	322	339	360	6.3	9,322	9,842	10,332	30	Beaufort	597	631	663	5.0	14,097	14,763	15,417	54
Roosevelt	217	218	249	14.2	12,950	12,666	14,237	13	Bertie	253	269	274	1.9	12,393	13,170	13,478	90
Sandoval	855	925	1,001	8.2	13,348	13,963	14,560	10	Bladen	348	370	397	7.5	12,135	12,826	13,663	89
San Juan	1,114	1,188	1,273	7.1	12,176	12,694	13,381	18	Brunswick	681	747	791	5.9	13,277	14,201	14,562	69
San Miguel	255	270	290	7.3	9,882	10,368	10,959	27	Buncombe	2,985	3,126	3,372	7.9	17,009	17,584	18,714	12
Santa Fe	1,803	1,932	2,067	6.9	18,200	18,572	19,650	2	Burke	1,108	1,135	1,218	7.2	14,600	14,859	15,734	49
Sierra	122	130	137	5.0	12,184	12,582	13,911	14	Cabarrus	1,680	1,739	1,855	6.7	16,888	17,142	17,916	17
Socorro	159	167	177	5.5	10,780	11,387	11,783	26	Caldwell	1,026	1,055	1,145	8.5	14,488	14,807	15,951	43
Taos	259	277	291	5.1	11,161	11,699	12,030	23	Camden	77	82	88	7.7	12,904	13,611	14,350	73
Torrance	111	118	127	7.9	10,772	11,119	11,898	25	Carteret	752	795	846	6.4	14,238	14,805	15,405	55
Union	64	65	62	-3.6	15,525	15,704	15,394	5	Caswell	252	266	283	6.4	12,181	12,810	13,669	88
Valencia	573	618	666	7.9	12,561	13,208	13,793	15	Catawba	2,121	2,168	2,340	7.9	17,844	18,017	19,203	10
Cherokee	233	239	254	6.3	11,551	11,785	12,465	96	Chatham	685	715	770	7.7	17,583	18,051	19,136	11
New York	401,833	412,663	436,354	5.7	22,322	22,866	24,095	.....	Cherokee	233	239	254	6.3	11,551	11,785	12,465	96
Metropolitan portion	379,525	389,558	412,129	5.8	22,969	23,527	24,808	.....	Chowan	190	204	207	1.4	14,040	14,994	15,063	58
Nonmetropolitan portion	22,308	23,106	24,225	4.8	15,900	15,519	16,183	.....	Clay	86	89	95	6.5	11,988	12,267	13,011	93
Albany	6,383	6,565	6,900	5.1	21,814	22,384	23,559	8	Cleveland	1,256	1,288	1,376	6.9	14,782	15,014	15,835	45
Allegany	635	652	685	5.1	12,561	12,694	13,328	62	Columbus	625	673	728	8.3	12,605	13,513	14,507	70
Bronx	17,714	18,381	19,569	6.5	14,714	15,328	16,381	40	Craven	1,164	1,231	1,348	9.5	14,217	14,914	16,050	40
Broome	3,811	3,924	4,064	3.6	17,966	18,486	19,127	21	Cumberland	3,559	3,811	4,451	16.8	12,928	13,725	16,059	41
Cattaraugus	1,176	1,205	1,281	6.3	13,929	14,161	14,950	53	Currituck	200	208	219	5.4	14,508	14,545	14,834	63
Cayuga	1,228	1,245	1,299	4.3	14,897	15,049	15,712	46	Dare	366	382	405	6.0	15,939	16,462	17,065	24
Chautauqua	2,100	2,178	2,278	4.6	14,796	15,331	16,083	44	Davidson	1,987	2,039	2,189	7.4	15,634	15,863	16,861	29
Chemung	1,517	1,574	1,640	4.2	15,922	16,545	17,231	30	Davie	524	532	571	7.3	18,702	18,807	20,069	9
Chenango	752	775	821	6.0	14,517	14,883	15,728	45	Duplin	551	594	653	9.9	13,783	14,848	16,103	38
Clinton	1,228	1,261	1,313	4.1	14,248	14,620	15,263	51	Durham	3,431	3,597	3,935	9.4	18,775	19,352	20,920	6
Columbia	1,104	1,117	1,178	5.5	17,523	17,788	18,695	23	Edgecombe	739	795	844	6.2	13,095	14,121	15,012	60
Cortland	698	725	768	5.9	14,225	14,750	15,531	49	Forsyth	5,565	5,746	6,113	6.4	20,882	21,402	22,559	3
Delaware	659	674	703	4.3	13,944	14,215	14,801	55	Franklin	479	499	540	8.3	13,086	13,248	14,245	79
Dutchess	5,619	5,673	5,894	3.9	21,618	21,739	22,424	11	Gaston	2,742	2,820	3,020	7.1	15,633	15,903	16,901	27
Erie	17,586	18,352	19,250	4.9	18,151	18,901	19,798	15	Gates	124	135	139	2.6	13,349	14,446	14,673	65
Essex	578	592	623	5.3	15,501	15,763	16,595	37	Graham	71	75	83	10.6	9,934	10,266	11,256	100
Franklin	607	635	679	6.8	13,001	13,387	14,147	57	Granville	493	516	568	10.1	12,842	13,383	14,501	71
Fulton	810	844	894	6.0	14,927	15,565	16,561	38	Greene	230	250	251	6	14,897	15,939	15,939	44
Genesee	1,000	1,024	1,072	4.7	16,626	16,932	17,617	27	Guilford	6,949	7,228	7,722	6.8	19,940	20,456	21,585	5
Greene	706	720	759	5.4	15,724	15,868	16,360	41	Halifax	704	752	801	6.5	12,662	13,471	14,257	78
Hamilton	82	87	92	5.8	15,493	16,191	17,089	33	Harnett	851	904	988	9.4	12,527	13,184	14,235	80
Herkimer	931	943	1,001	6.2	14,141	14,261	15,130	52	Haywood	681	718	758	5.5	14,504	15,155	15,792	48
Jefferson	1,595	1,679	1,766	5.2	14,308	14,934	15,535	48	Henderson	1,204	1,255	1,333	6.3	17,274	17,756	18,577	13
Kings	39,735	40,922	43,885	7.2	17,285	17,874	19,196	20	Hertford	260	276	291	5.3	11,532	12,254	12,906	94
Lewis	352	370	383	3.6	13,087	13,599	13,967	60	Hoke	247	267	291	9.1	10,755	11,512	12,436	97
Livingston	994	1,028	1,081	5.1	15,898	16,297	17,059	34	Hyde	74	85	87	2.4	13,738	15,870	16,260	35
Madison	1,118	1,150	1,203	4.6	16,133	16,347	16,935	35	Iredell	1,497	1,556	1,678	7.8	16,030	16,304	17,324	21
Monroe	15,350	15,859	16,563	4.4	21,467	22,053	22,863	10	Jackson	338	358	383	7.2	12,556	13,139	13,924	84
Montgomery	819	855	894	4.5	15,737	16,456	17,165	31	Johnston	1,242	1,307	1,422	8.8	15,189	15,593	16,517	32
Nassau	40,167	40,363	42,018	4.1	31,237	31,195	32,270	3	Jones	143	151	171	13.2	15,190	16,078	18,144	15
New York	66,077	68,033	73,257	7.7	44,426	45,811	49,197	1	Lee	683	718	793	10.4	16,422	17,049	18,387	14
Niagara	3,691	3,842	3,992	3.9	16,998	17,353	18,013	26	Lenoir	837	903	981	8.6	14,585	15,666	16,902	26
Oneida	4,071	4,176	4,369	4.6	16,215	16,551	17,326	29	Lincoln	784	808	868	7.4	15,464	15,692	16,519	31
Onondaga	8,999	9,195	9,581	4.2	19,157	19,467	20,221	13	McDowell	454	475	509	7.1	12,710	13,197	14,074	82
Ontario	1,774	1,846	1,896	2.7	18,606	19,137	19,424	17	Macon	328	345	366	6.1	13,916	14,450	15,100	57
Orange	5,683	5,870	6,240	6.3	18,405	18,821	19,762	16	Madison	215	225	238	5.8	12,627	13,084	13,779	87
Orleans	624	653	681	4.3	14,862	15,355	15,568	47	Martin	339	364	395	8.4	13,529	14,386	15,647	51
Oswego	1,843	1,895	2,076	9.6	15,065	15,326	16,225	36	Mecklenburg	11,215	11,696	12,558	7.4	21,776	22,133	23,354	1
Otsego	906	940	997	6.1	14,940	15,434	16,345	42	Mitchell	178	191	201	5.4	12,305	13,176	13,823	85
Putnam	2,013	2,038	2,131	4.6	23,892	23,785	24,439	5	Montgomery	304	316	335	5.8	12,987	13,652	14,350	74
Queens	41,862	42,651	45,169	5.9	21,444	21,864	23,151	9	Moore	1,129	1,187	1,258	6.0	19,027	19,696	20,534	8
Rensselaer	2,709	2,809	2,951	5.1	17,518	18,037	18,877	22	Nash	1,279	1,329	1,380	3.8	16,565	16,887	17,134	22
Richmond	8,349	8,575	9,368	9.2	21,967	22,259	23,954	6	New Hanover	2,007	2,149	2,307	7.3	16,588	17,262	18,050	16
Rockland	6,691	6,774	7,130	5.3	25,160	25,241	26,323	4	Northampton	255	277	286	3.2	12,255	13,338	13,800	86
St. Lawrence	1,434	1,502	1,601	6.6	12,787	13,301	14,065	59	Onslow	1,529	1,601	1,847	15.4	10,201			

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Stokes	550	567	606	6.9	14,729	15,001	15,714	50	Clermont	2,384	2,492	2,692	8.0	15,780	16,116	17,023	38
Surry	956	998	1,070	7.2	15,453	15,971	16,989	25	Clinton	536	564	614	8.9	15,057	15,640	16,748	43
Swain	115	125	132	6.1	10,188	10,892	11,509	99	Columbiana	1,520	1,567	1,651	5.4	14,014	14,327	14,948	63
Transylvania	399	418	440	5.3	15,630	16,239	16,892	28	Coshocton	485	499	530	6.2	13,679	14,011	14,829	65
Tyrell	53	58	59	3	13,802	15,486	15,343	56	Crawford	695	702	742	5.7	14,523	14,705	15,562	57
Union	1,399	1,431	1,526	6.6	16,517	16,489	17,115	23	Cuyahoga	29,945	31,105	32,639	4.9	21,210	22,040	23,128	1
Vance	538	555	595	7.1	13,784	14,106	14,943	62	Darke	827	849	892	5.1	15,410	15,816	16,618	45
Wake	9,057	9,621	10,425	8.4	21,215	21,799	22,805	2	Defiance	649	666	703	5.6	16,467	16,822	17,755	28
Warren	180	189	201	6.3	10,425	10,915	11,522	98	Delaware	1,408	1,473	1,590	7.9	20,886	21,144	22,263	4
Washington	193	208	218	5.0	13,767	14,739	15,419	53	Erie	1,327	1,397	1,496	7.1	17,268	18,127	19,297	11
Watauga	491	501	542	8.1	13,259	13,424	14,258	77	Fairfield	1,725	1,814	1,947	7.4	16,591	17,070	17,817	27
Wayne	1,379	1,446	1,543	6.7	13,146	13,571	14,325	75	Fayette	366	377	415	9.9	13,290	13,578	14,877	64
Wilkes	890	913	948	3.9	14,971	15,296	15,805	47	Franklin	18,306	19,204	20,631	7.4	18,975	19,629	20,795	5
Wilson	1,057	1,103	1,170	6.1	15,983	16,599	17,536	19	Fulton	637	660	716	8.4	16,508	16,938	18,020	22
Yadkin	467	475	514	8.2	15,302	15,333	16,368	34	Gallia	392	413	449	8.8	12,648	13,209	13,897	73
Yancey	190	195	207	5.8	12,313	12,504	13,184	91	Geauga	1,739	1,765	1,861	5.4	21,370	21,462	22,355	3
									Greene	2,370	2,491	2,624	5.3	17,279	17,971	18,728	16
North Dakota	9,765	9,891	10,809	9.3	15,320	15,617	17,048	.....	Guernsey	488	518	549	6.1	12,509	13,206	13,957	71
Metropolitan portion	4,149	4,318	4,638	7.4	16,101	16,645	17,604	.....	Hamilton	18,295	18,807	19,930	6.0	21,113	21,622	22,855	2
Nonmetropolitan portion	5,616	5,573	6,171	10.7	14,791	14,904	16,654	.....	Hancock	1,173	1,213	1,305	7.6	17,905	18,361	19,558	9
Adams	44	44	50	13.6	14,011	14,126	16,497	34	Hanock	400	396	435	10.0	12,844	12,688	13,956	72
Barnes	193	180	199	10.8	15,436	14,530	16,300	38	Harrison	193	199	215	8.1	12,048	12,452	13,502	78
Benson	93	84	92	8.7	13,005	12,064	13,323	49	Henry	470	488	525	7.7	16,146	16,695	17,842	24
Billings	15	17	17	3.0	13,959	14,947	14,960	44	Highland	440	463	509	9.7	12,282	12,703	13,671	77
Bottineau	132	115	137	19.3	16,617	14,871	18,035	18	Hocking	327	341	365	6.9	12,774	13,140	13,693	75
Bowman	57	58	62	6.9	15,902	16,680	18,284	15	Holmes	368	383	417	8.9	11,174	11,487	12,348	85
Burke	50	44	52	16.2	16,956	15,830	19,167	6	Huron	903	921	974	5.7	16,010	16,095	16,887	40
Burleigh	1,018	1,058	1,150	8.7	16,894	17,297	18,404	14	Jackson	361	384	406	5.8	11,930	12,446	12,942	81
Cass	1,791	1,869	2,003	7.1	17,355	17,863	18,797	11	Jefferson	1,194	1,227	1,295	5.5	14,901	15,343	16,259	48
Cavalier	94	90	113	25.4	15,616	15,385	19,778	3	Knox	671	707	757	7.1	14,086	14,784	15,623	54
Dickey	92	92	103	11.2	15,236	15,525	17,519	23	Lake	4,159	4,250	4,508	6.1	19,262	19,485	20,450	6
Divide	42	42	47	13.6	14,740	15,018	17,718	21	Lawrence	764	804	864	7.4	12,327	12,879	13,688	76
Dunn	43	44	50	13.7	10,693	11,161	12,830	50	Licking	2,056	2,162	2,326	7.6	15,955	16,539	17,627	29
Eddy	45	42	45	7.4	15,493	14,478	15,940	39	Logan	659	697	757	8.5	15,532	16,178	17,322	35
Emmons	57	58	71	23.2	11,853	12,262	15,307	43	Lorain	4,369	4,494	4,824	7.3	16,080	16,400	17,436	31
Foster	66	63	72	13.0	16,602	16,401	18,814	10	Lucas	8,225	8,396	8,940	6.5	17,785	18,172	19,371	10
Golden Valley	30	28	32	12.9	14,195	14,306	16,712	28	Madison	518	539	593	9.9	13,951	14,232	15,211	61
Grand Forks	1,020	1,059	1,123	6.0	14,463	15,113	15,844	40	Mahoning	4,246	4,433	4,627	4.4	16,029	16,736	17,419	32
Grant	34	35	42	20.0	9,534	10,266	12,669	51	Marion	939	959	1,036	8.0	14,595	14,935	16,043	50
Griggs	54	50	54	8.7	16,555	15,648	17,300	24	Medina	2,237	2,300	2,452	6.6	18,205	18,321	19,080	12
Hettinger	45	42	53	26.2	13,155	12,789	16,732	27	Meigs	266	274	293	6.9	11,539	11,823	12,506	82
Kidder	45	40	45	11.7	13,443	12,393	14,188	46	Mercer	649	650	688	5.9	16,400	16,365	17,221	36
La Moure	76	70	87	24.7	14,241	13,293	16,681	29	Miami	1,590	1,643	1,754	6.8	17,040	17,464	18,488	19
Logan	42	38	44	16.0	14,756	13,813	16,419	36	Monroe	196	203	217	7.2	12,649	13,177	14,227	70
McHenry	89	81	88	8.3	13,625	12,820	14,184	47	Montgomery	10,617	11,160	11,690	4.7	18,924	19,354	20,202	7
McIntosh	56	58	67	13.8	14,068	15,310	17,592	22	Morgan	199	197	206	4.8	14,013	13,903	14,427	68
McKenzie	87	88	99	13.5	13,748	14,196	16,459	35	Morrow	349	359	385	7.2	12,544	12,760	13,473	79
McLean	157	148	170	15.1	15,125	14,564	17,097	25	Muskingum	1,181	1,209	1,305	7.9	14,373	14,671	15,795	52
Mercer	164	167	181	8.1	16,793	17,348	19,200	5	Noble	130	137	144	5.2	11,512	11,853	12,410	84
Morton	319	331	363	9.5	13,487	14,098	15,379	42	Ottawa	721	731	763	4.4	18,010	18,247	19,027	13
Mountrail	100	97	113	16.9	14,390	14,208	16,737	26	Paulding	287	290	314	8.4	14,012	14,255	15,604	55
Nelson	77	65	80	21.9	17,507	15,378	19,030	8	Perry	374	378	403	6.7	11,814	11,889	12,690	83
Oliver	30	30	37	22.2	12,516	13,209	16,605	32	Pickaway	651	679	759	11.8	13,480	13,778	15,082	62
Pembina	167	168	193	15.1	18,195	18,727	21,681	1	Pike	282	304	333	9.5	11,560	12,298	13,160	80
Pierce	89	83	89	7.8	17,637	16,878	18,742	12	Portage	2,170	2,239	2,384	6.5	15,195	15,511	16,304	47
Ramsey	199	200	223	11.6	15,752	15,934	17,883	19	Preble	601	596	637	6.9	14,965	14,713	15,572	56
Ransom	88	92	96	4.4	14,910	15,732	16,567	33	Putnam	540	535	577	7.8	15,952	15,657	16,737	44
Renville	51	42	54	27.8	16,250	13,899	18,231	16	Richland	1,995	2,009	2,085	3.8	15,813	15,798	16,313	46
Richland	256	271	279	2.6	14,153	15,192	15,619	41	Ross	921	963	1,045	8.4	13,263	13,643	14,611	67
Rolette	129	137	156	14.1	10,062	10,641	11,970	52	Sandusky	994	1,016	1,081	6.4	16,041	16,252	17,206	37
Sargent	78	84	89	5.9	17,258	18,881	20,410	2	Scioto	992	1,035	1,115	7.8	12,336	12,898	13,750	74
Sheridan	28	24	28	13.0	12,979	11,669	13,469	48	Seneca	922	945	1,009	6.7	15,411	15,811	16,830	42
Sioux	28	30	33	12.2	7,440	7,813	8,606	53	Shelby	745	769	818	6.3	16,542	16,875	17,832	25
Slope	11	12	16	39.2	12,733	12,846	18,116	17	Stark	6,178	6,355	6,742	6.1	16,790	17,185	18,117	21
Stark	306	317	339	7.1	13,429	13,880	14,881	45	Summit	9,488	9,786	10,373	6.0	18,395	18,826	19,825	8
Steele	43	39	45	16.4	17,957	16,572	19,504	4	Trumbull	3,888	4,039	4,253	5.3	17,069	17,648	18,507	18
Stutsman	351	341	363	6.5	15,846	15,508	16,619	30	Tuscarawas	1,221	1,240	1,346	8.5	14,509	14,609	15,734	53
Towner	51	53	64	21.8	14,285	15,258	19,113	7	Union	564	577	624	8.2	17,606	17,636	18,534	17
Traill	138	142	153	7.1	15,795	16,434	17,831	20	Van Wert	471	473	509	7.5	15,488	15,613	16,839	41
Walsh	216	224	248	10.8	15,650	16,787	18,819	9	Vinton	125	131	140	6.2	11,283	11,696	12,202	87
Ward	864	889	955	7.5	14,956	15,536											

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Canadian	1,128	1,189	1,272	7.0	15,112	15,647	16,452	15	Josephine	892	927	985	6.3	14,162	14,378	15,070	34
Carter	615	645	688	6.6	14,343	15,108	15,986	18	Klamath	812	840	923	9.8	14,020	14,396	15,690	28
Cherokee	440	468	499	6.5	12,898	13,417	14,035	43	Lake	108	106	117	10.5	15,067	14,846	16,152	20
Choctaw	179	188	202	7.3	11,676	12,320	13,138	62	Lane	4,519	4,692	5,003	6.6	15,908	16,313	17,202	10
Cimarron	69	71	72	.9	20,960	22,325	22,801	1	Lincoln	597	635	678	6.8	15,283	15,880	16,559	18
Cleveland	2,579	2,700	2,880	6.7	14,764	15,175	15,878	19	Linn	1,344	1,414	1,499	6.0	14,662	15,150	15,853	24
Coal	56	59	63	6.2	9,731	10,414	10,966	75	Malheur	359	376	396	5.4	13,741	14,144	14,625	36
Comanche	1,468	1,540	1,724	12.0	13,183	13,832	14,310	38	Marion	3,586	3,805	4,061	6.7	15,616	16,232	16,969	14
Cotton	102	96	104	8.4	15,400	14,911	16,069	17	Morrow	124	114	120	5.1	16,244	14,553	14,731	35
Craig	172	182	196	7.7	12,223	12,989	13,916	45	Multnomah	11,532	12,232	13,054	6.7	19,677	20,258	21,727	1
Creek	799	848	909	7.2	13,138	13,759	14,606	32	Polk	734	774	828	7.0	14,722	15,083	15,748	27
Custer	367	374	391	4.6	13,687	14,180	14,867	27	Sherman	39	36	38	6.7	20,204	18,529	19,633	4
Delaware	362	383	414	8.1	12,880	13,438	14,112	41	Tillamook	300	314	337	7.1	13,859	14,272	15,101	33
Dewey	85	79	84	5.7	15,279	14,534	15,613	20	Umatilla	841	886	939	6.0	14,174	14,725	15,361	30
Ellis	70	73	73	-3	15,604	16,691	16,982	12	Union	344	360	382	6.2	14,513	14,994	15,839	25
Garfield	908	933	981	5.2	16,021	16,580	17,398	11	Wallowa	114	123	129	5.1	16,362	17,203	17,782	7
Garvin	353	371	383	3.1	13,283	14,029	14,514	34	Wasco	345	359	379	5.5	15,865	16,255	17,041	12
Grady	518	536	575	7.4	12,425	12,830	13,732	50	Washington	6,302	6,625	7,150	7.9	20,020	20,239	21,145	2
Grant	102	95	102	7.3	18,397	17,217	18,837	6	Wheeler	21	22	23	4.5	14,763	15,112	15,780	26
Greer	85	79	86	8.3	12,969	12,451	13,630	53	Yamhill	1,020	1,077	1,157	7.4	15,472	15,945	16,701	17
Harmon	54	45	54	19.9	14,293	12,454	14,988	26	Pennsylvania	224,628	233,676	247,611	6.0	18,884	19,557	20,642	.....
Harper	78	70	80	13.7	19,200	17,775	20,755	3	Metropolitan portion	197,469	205,496	217,697	5.9	15,864	16,276	17,405	.....
Haskell	120	124	131	6.0	10,988	11,381	11,972	72	Nonmetropolitan portion	27,159	28,180	29,914	6.2	15,073	15,537	16,391	.....
Hughes	145	149	159	6.9	11,194	11,594	12,528	69	Adams	1,314	1,369	1,444	5.5	16,685	17,085	17,777	26
Jackson	380	366	392	7.0	13,269	12,889	13,677	52	Allegheny	28,270	29,859	31,774	6.4	21,163	22,368	23,812	4
Jefferson	85	93	98	5.8	12,122	13,371	14,174	40	Armstrong	1,096	1,118	1,182	5.8	14,913	15,125	15,998	49
Johnston	93	99	109	9.5	9,255	10,001	10,759	76	Beaver	2,854	2,971	3,180	7.0	15,318	15,852	16,854	33
Kay	805	834	894	7.2	16,771	17,365	18,453	8	Bedford	600	621	683	9.9	12,491	12,863	14,042	64
Kingfisher	194	201	213	6.2	14,734	15,417	16,464	14	Berks	6,516	6,673	7,111	6.6	19,310	19,581	20,723	10
Kiowa	161	151	163	8.1	14,192	13,540	14,837	29	Blair	1,925	2,005	2,151	7.3	14,741	15,292	16,384	41
Latimer	112	120	128	6.1	10,810	11,411	12,129	71	Bradford	892	902	962	6.6	14,608	14,709	15,584	55
Le Flore	495	507	550	8.6	11,400	11,648	12,638	68	Bucks	12,210	12,489	13,183	5.6	22,483	23,709	23,699	5
Lincoln	356	377	402	6.6	12,201	12,828	13,709	51	Butler	2,575	2,682	2,881	7.4	16,870	17,333	18,379	22
Logan	401	420	445	6.1	13,825	14,413	15,120	25	Cambria	2,410	2,522	2,645	4.9	14,793	15,526	16,319	42
Love	103	110	117	6.0	12,678	13,377	13,971	44	Cameron	92	94	101	7.7	15,679	16,030	17,223	29
McCain	310	332	355	6.9	13,583	14,393	15,141	24	Carbon	876	905	969	7.0	15,363	15,713	16,691	35
McClintock	364	386	429	11.1	10,888	11,596	12,761	66	Centre	1,893	2,001	2,124	6.2	15,254	15,954	16,780	34
McIntosh	193	200	214	7.1	11,480	11,787	12,449	70	Chester	9,803	10,314	10,980	6.5	25,947	26,945	28,297	2
Major	112	110	120	8.7	14,065	14,070	15,505	21	Clarion	572	597	634	6.2	13,714	14,357	15,137	58
Marshall	131	138	149	8.3	12,104	12,599	13,432	58	Clearfield	1,125	1,156	1,230	6.4	14,405	14,798	15,691	54
Mayes	428	442	463	4.7	12,787	13,043	13,492	55	Clinton	497	514	561	9.0	13,356	13,821	14,988	60
Murray	136	145	155	6.6	11,344	12,085	12,829	65	Columbia	924	966	1,028	6.4	14,596	15,229	16,202	45
Muskogee	868	896	947	5.8	12,722	13,089	13,787	48	Crawford	1,253	1,290	1,370	6.2	14,536	14,906	15,792	52
Noble	157	159	168	5.4	14,240	14,382	15,177	23	Cumberland	3,951	4,130	4,356	5.5	20,171	20,783	21,662	8
Nowata	121	126	132	5.2	12,163	12,745	13,456	56	Dauphin	4,709	4,958	5,239	5.7	19,751	20,693	21,645	9
Okfuskee	115	122	133	8.9	9,953	10,852	11,882	73	Delaware	12,343	12,774	13,470	5.5	22,527	23,276	24,513	3
Oklahoma	10,524	10,891	11,552	6.1	17,541	17,995	18,854	5	Elk	571	597	642	7.6	16,387	17,062	18,274	24
Okmulgee	427	455	489	7.6	11,719	12,456	13,314	59	Erie	4,478	4,682	4,983	6.4	16,235	16,856	17,819	25
Osage	501	532	550	3.3	12,057	12,761	13,050	63	Fayette	1,981	2,066	2,208	6.8	13,626	14,161	15,092	59
Otawa	401	420	444	5.8	13,117	13,747	14,570	33	Forest	57	59	63	6.9	11,862	12,299	13,021	67
Pawnee	203	207	216	4.3	13,060	13,348	13,865	46	Franklin	1,999	2,100	2,209	5.2	16,458	17,064	17,771	27
Payne	810	858	913	6.4	13,176	14,049	14,776	30	Fulton	182	181	193	6.6	13,124	12,875	13,564	66
Pittsburg	497	529	567	7.1	12,232	12,855	13,545	54	Greene	506	526	564	7.2	12,806	13,270	14,204	63
Ponotoc	435	454	475	4.6	12,758	13,381	14,091	42	Huntingdon	537	564	606	7.5	12,145	12,712	13,615	65
Pottawatomie	758	801	851	6.3	12,888	13,595	14,369	36	Indiana	1,284	1,317	1,388	5.4	14,275	14,531	15,275	57
Pushmataha	103	111	121	9.0	9,424	10,110	10,996	74	Jefferson	681	703	753	7.0	14,772	15,221	16,296	43
Roger Mills	56	57	61	6.1	13,605	14,099	15,360	22	Juniata	295	305	324	6.4	14,240	14,617	15,385	56
Rogers	812	879	936	6.5	14,671	15,529	16,164	16	Lackawanna	3,744	3,896	4,133	6.1	17,098	17,835	19,003	15
Seminole	292	307	327	6.4	11,521	12,352	13,251	60	Lancaster	8,035	8,178	8,696	6.3	18,918	19,002	20,018	11
Sequoyah	384	411	446	8.7	11,353	12,031	12,854	64	Lawrence	1,424	1,473	1,560	5.9	14,790	15,314	16,165	46
Stephens	570	609	637	4.6	13,515	14,265	14,841	28	Lebanon	1,926	1,995	2,122	6.4	16,887	17,326	18,321	23
Texas	260	292	303	3.8	15,806	17,977	18,763	7	Lehigh	5,802	6,056	6,466	6.8	19,895	20,593	21,842	7
Tillman	138	124	144	16.0	13,371	12,164	14,389	35	Luzerne	5,536	5,732	6,115	6.7	16,851	17,421	18,589	19
Tulsa	9,606	10,050	10,566	5.1	19,020	19,590	20,326	4	Lycoming	1,876							

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Wayne	636	651	691	6.1	15,831	15,856	16,475	40	Fall River	106	108	110	2.4	14,478	14,968	15,617	44
Westmoreland	6,260	6,630	7,030	6.0	16,896	17,835	18,783	17	Faulk	52	48	52	9.0	18,888	17,384	19,322	10
Wyoming	429	445	477	7.2	15,261	15,727	16,541	38	Grant	132	138	142	3.0	15,787	16,620	17,004	33
York	6,427	6,643	6,988	5.2	18,863	19,225	19,970	12	Gregory	83	83	88	6.1	15,471	15,799	16,871	36
<b>Rhode Island</b>	<b>19,121</b>	<b>19,411</b>	<b>20,304</b>	<b>4.6</b>	<b>19,035</b>	<b>19,340</b>	<b>20,276</b>	.....	Haakon	51	51	48	-6.2	19,754	19,809	18,798	12
<b>Metropolitan portion</b>	<b>17,372</b>	<b>17,656</b>	<b>18,488</b>	<b>4.7</b>	<b>18,942</b>	<b>19,273</b>	<b>20,214</b>	.....	Hamlin	73	74	76	3.0	14,692	14,847	15,252	50
<b>Nonmetropolitan portion</b>	<b>1,749</b>	<b>1,755</b>	<b>1,815</b>	<b>3.4</b>	<b>20,009</b>	<b>20,037</b>	<b>20,931</b>	.....	Hand	84	85	79	-7.1	19,769	19,898	18,628	17
Bristol	1,097	1,086	1,134	4.4	22,453	22,228	23,220	1	Hanson	36	35	41	17.9	12,104	11,780	13,965	56
Kent	3,180	3,217	3,392	5.4	19,707	19,871	20,876	3	Harding	26	26	26	-7	15,402	15,904	16,211	41
Newport	1,749	1,755	1,815	3.4	20,009	20,037	20,931	2	Hughes	236	253	270	7.0	15,931	16,948	17,768	23
Providence	10,918	11,137	11,636	4.5	18,303	18,753	19,702	5	Hutchinson	127	125	140	12.5	15,407	15,399	17,529	25
Washington	2,177	2,216	2,326	5.0	19,721	19,882	20,641	4	Hyde	30	30	28	-4.4	17,807	18,062	17,291	30
<b>South Carolina</b>	<b>52,855</b>	<b>55,130</b>	<b>58,410</b>	<b>5.9</b>	<b>15,101</b>	<b>15,484</b>	<b>16,212</b>	.....	Jackson	30	30	31	3.7	10,708	10,672	10,823	62
<b>Metropolitan portion</b>	<b>38,636</b>	<b>40,304</b>	<b>42,606</b>	<b>5.7</b>	<b>15,878</b>	<b>16,240</b>	<b>16,947</b>	.....	Jerauld	49	49	49	.9	20,426	20,497	20,763	3
<b>Nonmetropolitan portion</b>	<b>14,218</b>	<b>14,827</b>	<b>15,803</b>	<b>6.6</b>	<b>13,330</b>	<b>13,745</b>	<b>14,515</b>	.....	Jones	27	26	24	-8.2	20,259	19,863	18,786	13
Abbeville	287	296	321	8.3	11,984	12,339	13,338	29	Kingsbury	92	97	99	2.5	15,577	16,664	17,044	31
Aiken	2,091	2,207	2,391	8.3	17,160	17,522	18,595	2	Lake	167	174	180	3.9	15,833	16,257	17,038	32
Allendale	112	120	128	6.2	9,522	10,193	10,890	46	Lawrence	298	314	337	7.1	14,379	14,935	15,791	42
Anderson	2,170	2,227	2,382	6.9	14,906	15,210	16,063	11	Lincoln	259	273	296	8.5	16,760	17,588	18,710	14
Bamberg	178	185	203	9.4	10,575	10,933	11,939	41	Lyman	61	63	60	-4.7	16,622	17,600	16,527	38
Barnwell	273	285	312	9.6	13,382	13,765	14,796	20	McCook	82	82	92	12.1	14,408	14,540	16,497	39
Beaufort	1,641	1,698	1,800	6.0	18,848	19,030	19,596	1	McPherson	50	52	56	7.8	15,598	16,707	18,466	18
Berkeley	1,659	1,733	1,803	4.1	12,806	12,992	13,240	32	Marshall	94	92	96	3.5	19,489	19,406	20,165	6
Calhoun	169	176	184	4.5	13,217	13,708	14,184	25	Meade	306	319	341	6.7	13,987	14,198	14,636	53
Charleston	4,958	5,210	5,466	4.9	16,759	17,149	17,947	6	Mellette	25	23	22	-3.2	11,955	10,770	10,570	64
Cherokee	579	589	632	7.3	12,978	13,052	13,861	27	Miner	52	54	56	3.8	15,792	16,798	18,022	22
Chester	385	396	428	8.2	11,942	12,162	13,117	34	Minnehaha	2,266	2,422	2,623	8.3	18,216	19,067	20,179	5
Chesterfield	484	502	557	11.0	12,536	12,849	14,290	24	Moody	115	124	116	-6.1	17,662	18,852	17,447	26
Clarendon	301	318	336	5.7	10,564	11,038	11,602	43	Pennington	1,248	1,348	1,436	6.5	15,279	16,102	16,896	35
Colleton	419	436	465	6.8	12,133	12,391	13,075	35	Perkins	73	75	76	1.9	18,828	19,695	20,304	4
Darlington	840	893	957	7.1	13,538	14,236	15,034	17	Potter	56	54	59	9.2	17,678	16,991	18,901	11
Dillon	317	334	356	6.5	10,881	11,430	12,086	39	Roberts	128	125	137	9.9	12,942	12,825	14,214	54
Dorchester	1,227	1,282	1,314	2.5	14,648	14,805	14,966	18	Sanborn	48	47	49	3.8	17,041	16,821	17,568	24
Edgefield	234	248	264	6.4	12,702	13,385	14,156	26	Shannon	60	65	72	9.6	6,001	6,366	6,826	66
Fairfield	270	276	297	7.8	12,111	12,269	13,270	31	Spink	161	165	171	3.6	20,265	20,842	21,720	2
Florence	1,696	1,795	1,920	7.0	14,786	15,352	16,192	9	Stanley	40	40	41	.9	16,443	16,419	16,536	37
Georgetown	673	702	746	6.3	14,427	14,681	15,260	16	Sully	51	50	53	5.5	31,601	32,265	33,851	1
Greenville	5,625	5,831	6,084	4.3	17,492	17,980	18,574	3	Todd	61	67	69	2.0	7,292	7,951	7,954	65
Greenwood	884	912	971	6.4	14,836	15,168	16,029	13	Tripp	105	108	108	2	15,238	15,456	15,625	43
Hampton	219	223	237	6.6	12,036	12,160	12,855	36	Turner	152	150	168	12.0	17,669	17,785	19,840	8
Horry	2,200	2,316	2,443	5.5	15,182	15,524	16,040	12	Union	166	182	195	7.3	16,291	17,624	18,704	15
Jasper	179	185	201	8.7	11,563	11,810	12,772	37	Walton	95	98	104	6.0	15,814	16,759	18,079	21
Kershaw	660	685	713	4.1	15,143	15,503	15,870	15	Yankton	298	320	347	8.4	15,415	16,257	17,427	27
Lancaster	753	771	819	6.2	13,775	13,969	14,817	19	Ziebach	27	28	27	-4.8	12,042	13,210	12,580	58
Laurens	826	877	941	7.3	14,181	14,947	15,906	14	<b>Tennessee</b>	<b>77,786</b>	<b>81,831</b>	<b>88,816</b>	<b>8.5</b>	<b>15,903</b>	<b>16,524</b>	<b>17,674</b>	.....
Lee	187	202	211	4.6	10,124	10,884	11,286	44	<b>Metropolitan portion</b>	<b>57,401</b>	<b>60,414</b>	<b>65,458</b>	<b>8.3</b>	<b>17,354</b>	<b>18,031</b>	<b>19,227</b>	.....
Lexington	2,950	3,091	3,261	5.5	17,463	17,830	18,338	5	<b>Nonmetropolitan portion</b>	<b>20,384</b>	<b>21,418</b>	<b>23,359</b>	<b>9.1</b>	<b>12,873</b>	<b>13,371</b>	<b>14,411</b>	.....
McCormick	88	92	100	8.2	9,964	10,367	11,082	45	Anderson	1,111	1,203	1,311	8.9	16,244	17,366	18,587	6
Marion	385	412	440	6.9	11,362	11,985	12,727	38	Belford	442	458	495	8.1	14,461	14,738	15,589	28
Marlboro	305	343	353	3.1	10,373	11,577	11,924	42	Benton	189	208	210	1.1	12,989	14,024	13,945	52
Newberry	436	456	483	5.9	13,127	13,641	14,447	22	Bledsoe	103	105	113	8.0	10,587	10,971	11,588	91
Oconee	901	919	954	3.8	15,603	15,757	16,182	10	Blount	1,308	1,416	1,546	9.2	15,156	16,015	17,098	15
Orangeburg	1,076	1,111	1,196	7.7	12,657	12,908	13,773	28	Bradley	1,125	1,173	1,281	9.2	15,210	15,648	16,868	17
Pickens	1,314	1,357	1,423	4.9	13,913	14,009	14,425	23	Campbell	137	148	162	8.8	10,604	10,969	11,846	86
Richland	4,948	5,132	5,455	6.3	17,266	17,621	18,553	4	Cannon	373	386	411	10.0	13,001	13,746	14,944	38
Saluda	217	231	240	4.1	13,259	14,132	14,608	21	Carroll	350	370	405	9.4	12,685	13,270	14,643	44
Spartanburg	3,514	3,668	3,932	7.2	15,447	15,921	16,887	8	Carter	600	636	686	7.8	11,636	12,379	13,176	63
Sumter	1,243	1,309	1,388	6.0	12,081	12,523	13,171	33	Cheatham	370	388	425	9.3	13,541	13,863	14,743	43
Union	361	373	406	8.8	11,918	12,258	13,289	30	Chester	131	137	151	10.3	10,171	10,663	11,673	88
Williamsburg	391	415	445	7.1	10,632	11,232	12,004	40	Claiborne	291	308	340	10.3	11,115	11,575	12,559	77
York	2,229	2,308	2,448	6.0	16,848	17,073	17,838	7	Clay	82	87	94	7.9	11,292	12,119	13,016	67
<b>South Dakota</b>	<b>10,888</b>	<b>11,427</b>	<b>12,183</b>	<b>6.6</b>	<b>15,628</b>	<b>16,286</b>	<b>17,198</b>	.....	Coke	329	354	396	11.7	11,261	12,095	13,412	59
<b>Metropolitan portion</b>	<b>3,772</b>	<b>4,043</b>	<b>4,3</b>														

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Hickman	197	208	224	7.4	11,667	12,057	12,728	72	Cameron	2,512	2,680	2,968	10.8	9,590	9,923	10,649	242
Houston	75	80	84	4.3	10,672	11,369	11,640	89	Camp	161	172	189	10.1	16,255	17,140	18,663	45
Humphreys	199	209	222	6.6	12,582	13,213	14,022	50	Carson	106	109	123	12.8	16,193	16,833	19,039	38
Jackson	102	107	116	8.7	10,907	11,663	12,791	70	Cass	396	419	445	6.3	13,204	13,931	14,851	175
Jefferson	431	453	490	8.2	13,028	13,345	14,100	49	Castro	160	163	166	1.9	17,796	18,495	19,008	40
Johnson	132	142	152	6.5	9,582	9,482	9,966	95	Chambers	302	326	338	3.5	15,015	16,032	16,433	100
Knox	5,937	6,323	6,813	7.8	17,634	18,491	19,601	5	Cherokee	555	581	627	7.9	13,552	14,355	15,558	144
Lake	75	74	87	17.0	10,514	10,498	11,911	83	Chidress	91	88	102	15.9	15,267	14,836	16,535	97
Lauderdale	274	286	322	12.4	11,642	12,181	13,611	58	Clay	149	146	158	8.1	14,931	14,941	16,361	103
Lawrence	465	508	553	8.8	13,134	14,139	15,177	34	Cochran	66	64	75	17.4	14,991	15,304	17,873	62
Lewis	101	110	124	12.2	10,918	11,475	12,592	75	Coke	44	47	50	6.2	12,987	13,975	15,023	167
Lincoln	386	389	425	9.4	13,689	13,727	14,951	37	Coleman	123	123	135	9.8	12,717	13,144	14,363	196
Loudon	457	478	518	8.3	14,530	14,818	15,569	30	Collin	6,231	6,606	7,087	7.3	23,372	23,748	24,363	6
McMinn	574	585	627	7.2	13,535	13,663	14,394	47	Collingsworth	57	52	61	18.6	15,957	14,846	17,662	66
McNairy	293	292	316	8.1	12,572	12,908	13,999	51	Colorado	280	297	304	2.3	15,271	16,308	16,656	91
Macon	189	201	223	10.6	11,864	12,492	13,630	57	Comal	933	981	1,070	9.1	17,963	18,499	19,393	34
Madison	1,206	1,267	1,391	9.8	15,418	16,032	17,340	12	Comanche	203	195	211	8.4	15,152	14,755	16,008	121
Marion	315	330	351	6.4	12,640	13,126	13,878	53	Concho	41	37	46	22.9	13,543	12,314	15,230	158
Marshall	331	356	398	11.7	15,239	15,844	17,315	13	Cooke	454	468	499	6.6	14,649	15,268	16,116	114
Maury	802	887	987	11.3	14,496	15,257	16,517	18	Coryell	622	604	705	16.7	9,670	9,808	10,971	238
Meigs	95	98	106	8.3	11,709	11,852	12,611	73	Cottle	34	33	37	10.6	15,300	15,630	17,793	63
Monroe	340	361	395	9.5	11,108	11,685	12,602	74	Crane	60	63	64	2.1	12,987	13,305	13,823	209
Montgomery	1,318	1,413	1,635	15.7	12,976	13,704	14,868	39	Crockett	59	63	66	6.1	14,486	15,159	16,289	105
Moore	59	62	67	7.3	12,613	12,944	13,659	56	Crosby	111	88	108	22.9	15,136	12,112	14,990	169
Morgan	173	187	207	10.3	9,974	10,763	11,675	87	Culberson	32	30	32	6.5	9,394	9,244	9,981	245
Obion	486	482	533	10.6	15,309	15,199	16,889	16	Dallam	107	123	129	5.1	19,596	22,201	23,190	10
Overton	186	195	212	8.7	10,510	10,992	11,920	82	Dallas	39,390	41,802	44,812	7.2	21,172	22,027	23,420	8
Peery	75	78	86	9.6	11,270	11,612	12,579	76	Dawson	224	180	225	24.5	15,658	12,737	15,967	124
Pickett	50	55	59	7.1	11,050	12,169	12,970	68	Deaf Smith	312	331	336	1.7	16,253	17,587	17,910	61
Polk	160	169	183	8.0	11,694	12,291	13,152	64	Delta	67	70	75	7.7	13,936	14,665	16,072	117
Putnam	746	784	851	8.5	14,446	15,011	16,000	22	Denton	5,092	5,354	5,781	8.0	18,443	18,814	19,614	28
Rhea	29	305	330	7.9	12,265	12,354	13,040	66	De Witt	285	275	295	7.2	14,094	15,017	16,168	111
Roane	674	710	770	8.5	14,274	14,874	16,016	21	Dickens	37	35	38	8.2	14,615	14,466	15,720	135
Robertson	592	623	687	10.4	14,202	14,584	15,714	27	Dimmit	86	92	97	5.8	8,291	8,593	9,213	249
Rutherford	1,909	2,047	2,301	12.4	15,948	16,492	17,875	8	Donley	62	62	67	6.5	16,775	17,708	19,020	39
Scott	107	206	224	8.6	10,706	11,095	11,888	85	Duval	119	123	139	12.7	9,272	9,643	10,902	239
Sequatchie	195	113	122	7.3	11,784	12,575	13,245	60	Eastland	236	245	260	6.2	12,832	13,448	14,561	192
Sevier	750	779	861	10.5	14,612	14,671	15,749	26	Ector	1,664	1,761	1,820	3.3	14,007	14,600	14,878	173
Shelby	15,460	16,118	17,274	7.2	16,671	19,281	20,447	3	Edwards	27	29	31	6.5	12,031	12,955	12,614	228
Smith	193	203	219	7.8	13,607	14,185	15,210	33	Ellis	1,222	1,406	1,548	10.1	15,483	16,284	17,577	68
Stewart	111	119	127	6.5	11,697	12,371	12,524	78	El Paso	6,863	7,124	7,854	10.2	11,508	11,615	12,497	230
Sullivant	2,348	2,458	2,610	6.2	16,321	16,956	17,794	10	Erath	436	435	472	8.5	15,547	15,374	16,587	93
Sumner	1,688	1,766	1,922	8.9	16,270	16,737	17,807	9	Falls	210	228	239	4.7	11,859	13,063	13,852	212
Tipton	507	543	590	8.7	13,393	14,090	15,044	36	Fannin	346	360	387	7.7	13,962	14,754	15,983	122
Trousdale	65	68	74	9.3	10,955	11,458	12,491	79	Fayette	323	344	366	7.1	16,137	17,360	18,411	50
Union	220	230	249	7.9	13,313	13,926	14,808	40	Fisher	73	60	74	23.7	15,234	13,020	16,414	101
Van Buren	136	146	163	11.4	9,915	10,473	11,579	92	Hall	149	144	145	1.0	17,616	16,946	17,186	75
Warren	45	46	50	7.6	9,318	9,421	10,157	93	Floyd	34	29	33	14.7	18,874	16,701	19,831	26
Washington	431	446	486	8.9	13,020	13,344	14,510	46	Fort Bend	4,386	4,778	5,188	8.6	19,204	19,765	20,283	23
Wayne	149	162	182	12.6	10,641	11,430	11,965	81	Franklin	111	115	124	8.5	14,084	14,478	15,572	143
Weakley	414	427	471	10.4	12,931	13,341	14,753	42	Freestone	212	225	244	8.3	13,403	14,329	15,609	140
White	238	249	271	8.9	11,836	12,250	13,221	62	Frio	141	149	162	9.0	10,379	10,289	10,661	241
Williamson	1,900	2,089	2,318	11.0	23,221	24,524	26,149	1	Gaines	195	168	202	20.1	13,841	11,836	14,141	201
Wilson	1,100	1,158	1,294	11.7	16,174	16,618	18,181	7	Galveston	3,787	4,023	4,317	7.3	17,344	18,032	18,928	42
<b>Texas</b>	<b>285,497</b>	<b>302,627</b>	<b>326,016</b>	<b>7.7</b>	<b>16,747</b>	<b>17,440</b>	<b>18,487</b>		Garza	62	60	72	18.2	12,145	12,024	14,416	194
<b>Metropolitan portion</b>	<b>246,922</b>	<b>262,586</b>	<b>283,066</b>	<b>7.8</b>	<b>17,353</b>	<b>18,075</b>	<b>19,074</b>		Gillespie	272	297	318	7.3	15,822	17,064	17,972	59
<b>Nonmetropolitan portion</b>	<b>38,575</b>	<b>40,041</b>	<b>42,951</b>	<b>7.3</b>	<b>13,690</b>	<b>14,178</b>	<b>15,110</b>		Glasscock	27	24	30	27.4	18,492	16,369	21,129	19
Anderson	558	580	624	7.6	11,643	12,124	13,023	221	Goliad	76	81	86	5.8	12,657	13,332	14,157	200
Andrews	197	201	215	7.2	13,763	13,790	14,747	179	Gonzales	231	247	271	9.6	13,488	14,367	15,846	127
Angelina	1,027	1,096	1,165	6.3	14,686	15,499	16,181	110	Gray	419	430	460	7.0	17,631	18,288	19,647	27
Aransas	257	276	293	6.2	14,409	14,975	15,323	154	Grayson	1,527	1,582	1,656	4.7	16,073	16,578	17,418	69
Archer	129	128	139	9.1	16,234	16,464	18,090	56	Gregg	1,815	1,903	2,040	7.2	17,272	17,801	18,900	43
Armstrong	32	33	38	14.0	15,869	17,018	19,436	33	Gnines	239	245	260	6.1	12,663	12,843	13,432	217
Atascosa	358	372	405	8.6	11,717	11,941	12,853	224	Guadalupe	910	965	1,051	9.0	13,994	14,671	15,783	129
Austin	320	328	345	5.4	16,067	16,201	16,654	92	Hale	513	500	518	3.6	14,796	14,398	14,721	180
Bailey	116	120	119	-3.3	16,565	17,309	17,592	67	Hamilton	61	51	59	15.0	15,625	13,218	15,437	148
Bandera	168	178	189	5.9	15,813	16,533	17,000	83	Hansford	117	125	135	8.2	15,160	16,565	18,110	55
Bastrop	499	533	580	8.8	13,053	13,795	14,662	185	Hardeman	141	148	161	8.7	24,175	26,145	28,701	3
Bea	71	68	74	9.5	16,168	16,016	17,758	64	Harris	81	76	82	8.5	15,453	15,276	16,535	98
Bee	290	304	317	4.2	11,599	12,051	12,823	226	Hardin	574	625	674	7.9	13,870	14,740	15,491	146
Bell	2,676	2,715	3,087	13.7	13,982	14,338	16,196	109	Harris	57,080	61,644	66,265	7.5	20,140	21,217	22,298	14
Brewster	18,553	19,683	21,365	8.5	15,61												

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Irion	26	29	30	4.7	16,242	18,139	18,543	47	Schleicher	36	37	40	6.9	11,850	12,280	13,061	220
Jack	92	97	102	5.3	13,219	14,391	15,105	163	Scurry	256	255	274	7.4	13,741	13,859	14,660	186
Jackson	193	213	218	2.3	14,859	16,613	16,835	85	Shackelford	53	56	58	4.5	16,099	17,063	18,016	58
Jasper	412	441	481	9.0	13,278	14,184	15,366	150	Shelby	294	309	341	10.2	13,378	14,047	15,646	136
Jeff Davis	27	28	29	2.4	13,832	14,784	15,105	164	Sherman	88	97	103	5.3	31,174	34,234	36,822	1
Jefferson	4,024	4,313	4,644	7.7	16,814	17,864	19,089	37	Smith	2,560	2,685	2,880	7.3	16,906	17,532	18,648	46
Jim Hogg	58	64	68	6.9	11,445	12,632	13,485	216	Somervell	79	86	92	7.0	15,034	16,244	16,586	94
Jim Wells	436	467	497	6.4	11,589	12,273	12,998	222	Starr	215	240	270	12.7	5,261	5,592	6,015	254
Johnson	1,450	1,501	1,619	7.9	14,913	15,249	16,159	112	Stephens	122	127	135	6.6	13,664	14,686	15,764	132
Jones	225	210	235	12.0	13,720	13,027	14,977	170	Sterling	15	17	20	17.2	10,188	11,502	12,964	223
Karnes	147	156	166	6.7	11,818	12,680	13,645	213	Stonewall	34	33	36	9.8	17,081	16,353	18,072	57
Kaufman	767	806	869	7.9	14,617	15,021	15,976	123	Sutton	58	65	66	2.2	14,001	14,973	15,591	141
Kendall	288	311	338	8.6	19,638	20,386	21,333	18	Swisher	167	177	181	2.6	20,727	22,209	21,872	17
Kenedy	9	10	10	1.4	20,590	23,660	23,606	7	Tarrant	22,527	23,587	25,351	7.5	19,149	19,627	20,778	21
Kerr	13	12	14	17.5	12,437	12,564	15,004	168	Taylor	1,871	1,947	2,081	6.9	15,658	16,438	17,263	71
Kerr	652	687	730	6.2	17,951	18,796	19,586	29	Terrell	23	24	25	4.9	16,387	17,208	18,434	49
Kimble	54	58	63	8.2	13,067	14,063	15,247	157	Terry	181	182	200	10.2	13,737	13,888	15,417	149
King	6	6	6	-9.5	15,932	19,697	17,195	74	Throckmorton	46	40	43	7.3	24,832	22,998	24,378	5
Kinney	28	32	34	6.4	9,091	10,126	10,574	243	Titus	366	386	418	8.3	15,213	15,080	17,132	80
Kleberg	350	389	390	3	11,627	12,978	12,845	225	Tom Green	1,513	1,582	1,684	6.5	15,401	16,151	16,993	84
Knox	73	70	76	8.0	14,972	14,740	15,907	125	Travis	10,641	11,289	12,307	9.0	18,355	18,951	20,072	24
Lamar	648	673	730	8.4	14,724	15,331	16,585	95	Trinity	143	149	160	7.7	12,550	13,009	13,947	206
Lamb	238	226	243	7.8	15,909	15,228	16,576	96	Tyler	215	233	248	6.4	12,928	13,823	13,942	207
Lampasas	177	184	200	8.7	13,110	13,656	14,670	184	Upshur	408	440	475	8.0	12,997	13,734	14,674	183
La Salle	55	58	64	9.6	10,333	10,758	11,773	234	Upton	60	60	65	9.0	13,732	14,004	15,632	137
Lavaca	277	289	309	7.1	14,881	15,510	16,790	86	Uvalde	277	291	309	6.3	11,862	12,326	12,774	227
Lee	171	183	201	10.2	13,359	14,300	15,586	142	Val Verde	391	424	454	7.2	10,111	10,615	11,167	236
Leon	175	189	204	8.1	13,858	14,747	15,779	130	Van Zandt	512	538	577	7.3	13,476	13,968	14,864	174
Liberty	728	787	847	7.6	13,769	14,648	15,442	147	Victoria	1,223	1,327	1,415	6.7	16,399	17,335	18,371	51
Limestone	279	298	315	5.6	13,367	14,337	15,264	155	Walker	576	588	626	6.4	11,320	11,438	11,881	232
Lipscomb	58	57	60	6.5	18,713	18,357	19,970	25	Waller	325	347	375	8.1	13,884	15,044	15,733	133
Live Oak	112	125	140	11.9	11,748	12,841	14,273	198	Ward	178	184	183	-4	13,661	14,373	14,647	187
Llano	187	199	210	5.3	16,133	17,141	17,969	60	Washington	456	474	503	6.1	17,456	18,166	18,962	41
Loving	3	3	4	14.3	26,589	30,772	25,184	4	Webb	1,208	1,356	1,542	13.7	8,972	9,624	10,387	244
Lubbock	3,521	3,626	3,860	6.5	15,801	16,181	17,185	76	Wharton	595	614	640	4.4	14,924	15,661	16,055	118
Lynn	111	90	116	28.7	16,507	13,375	17,220	73	Wheeler	96	101	106	4.9	16,553	17,810	19,216	36
McCulloch	116	121	130	7.2	13,303	14,625	15,851	126	Wichita	1,977	2,060	2,192	6.4	16,180	17,042	18,204	53
McLennan	2,776	2,916	3,117	6.9	14,648	15,289	16,272	106	Wilbarger	231	219	237	8.7	15,348	14,781	16,293	104
McMullen	15	17	18	4.4	18,896	21,485	21,952	16	Willacy	135	149	170	14.1	7,615	8,303	9,299	248
Madison	145	153	167	9.1	13,299	13,895	15,108	162	Williamson	2,180	2,370	2,625	10.8	15,501	16,183	17,146	79
Marion	120	126	135	7.3	12,061	12,679	13,537	214	Wilson	293	311	339	9.0	12,858	13,356	14,278	197
Martin	78	62	69	12.0	15,752	12,837	14,204	199	Winkler	104	109	114	5.1	12,171	12,676	13,522	215
Mason	50	52	55	6.1	14,753	15,604	16,389	102	Wise	497	505	549	8.8	14,291	14,279	15,550	152
Matagorda	534	595	593	-4	14,516	15,791	15,622	138	Wood	411	429	465	8.4	13,986	14,583	15,620	139
Maverick	254	279	312	12.1	6,900	7,192	7,687	253	Yoakum	124	129	147	14.4	14,204	14,773	16,720	89
Medina	341	364	390	7.4	12,426	13,977	13,708	211	Young	300	308	330	7.1	16,651	17,319	18,747	44
Menard	28	30	33	12.0	12,428	13,568	14,795	177	Zapata	72	79	86	9.4	7,727	8,248	8,743	250
Midland	2,223	2,417	2,550	5.5	20,828	22,159	22,880	11	Zavala	86	93	100	7.0	7,054	7,571	8,094	252
Milam	314	337	362	7.6	13,695	14,789	15,836	128	<b>Utah</b>	<b>24,320</b>	<b>26,076</b>	<b>28,206</b>	<b>8.2</b>	<b>14,063</b>	<b>14,759</b>	<b>15,093</b>	.....
Mills	66	66	72	9.7	14,546	14,569	16,024	120	<b>Metropolitan portion</b>	<b>19,444</b>	<b>20,910</b>	<b>22,615</b>	<b>8.2</b>	<b>14,500</b>	<b>15,269</b>	<b>16,117</b>	.....
Mitchell	110	105	115	9.3	13,824	13,659	15,028	166	<b>Nonmetropolitan portion</b>	<b>4,876</b>	<b>5,166</b>	<b>5,591</b>	<b>8.2</b>	<b>12,554</b>	<b>13,001</b>	<b>13,703</b>	.....
Montague	238	249	269	8.1	13,838	14,537	15,772	131	Beaver	60	61	65	6.2	12,503	12,766	13,265	15
Montgomery	3,174	3,443	3,730	8.3	17,235	17,810	18,313	52	Box Elder	516	531	564	6.2	14,110	14,397	15,043	6
Moore	274	295	303	2.9	15,403	16,337	16,787	87	Cache	869	922	996	8.1	12,351	12,851	13,610	12
Morris	172	185	196	6.1	13,105	14,116	15,135	161	Carbon	286	294	314	6.5	14,202	14,558	15,491	5
Motter	23	23	23	1.1	15,353	15,561	16,150	113	Daggett	9	9	10	8.0	12,303	12,185	13,155	16
Nacogdoches	722	755	815	8.0	13,179	13,768	14,890	172	Davis	2,621	2,790	2,998	7.5	13,875	14,371	14,994	7
Navarro	565	598	646	8.1	14,155	15,055	16,271	107	Duchesne	144	153	171	11.4	11,449	11,998	13,065	17
Newton	137	149	161	8.5	10,149	11,067	11,952	231	Emery	124	129	138	7.7	11,993	12,414	13,504	13
Nolan	228	229	245	6.9	13,762	14,049	15,199	160	Garfield	147	84	51	6.6	11,982	12,039	12,631	22
Nueces	4,440	4,756	5,118	7.6	15,213	16,034	17,013	82	Grand	81	48	95	13.8	12,200	12,448	13,343	14
Ochiltree	169	156	173	11.0	18,544	17,539	19,533	31	Iron	232	241	266	10.1	11,105	11,333	12,154	25
Oldham	47	52	52	-6	20,871	23,583	23,200	9	Juab	64	69	75	7.8	11,027	11,753	12,556	23
Orange	1,144	1,238	1,336	7.9	14,196	15,119	16,077	116	Kane	64	66	72	8.7	12,295	12,910	13,788	11
Palo Pinto	347	357	381	6.9	13,868	14,264	15,524	145	Millard	139	145	150	3.4	12,299	12,700	13,002	19
Panola	288	294	312	6.1	13,075	13,355	14,130	202	Morgan	71	75	81	8.3	12,786	13,365	14,022	9
Parker	1,033	1,080	1,164	7.8	15,827	16,254	17,165	78	Piute	13	13	14	5.9	10,332	10,437	11,079	28
Parmer	201	221	224	11.3	20,343	22,221	22,461	13	Rice	21	26	27	3.5	12,071	15,439	15,859	4
Pecos	148	156	165	5.9	10,131	10,773	11,526	235	Salt Lake	11,420	12,260	13,291	8.4	15,668	16,455	17,408	2
Polk	425	450	491	9.1	13,767	14,092	14,635	188	San Juan	103	107	123	14.4	8,132	8,839	9,609	29
Potter</																	

Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
Caledonia .....	409	421	459	9.0	14,615	14,958	16,236	10	Independent Cities:								
Chittenden .....	2,661	2,731	2,876	5.3	20,151	20,510	21,430	1	Alexandria .....	3,387	3,499	3,706	5.9	30,442	31,095	32,761	2
Essex .....	74	77	83	7.8	11,524	11,983	12,646	14	Chesapeake .....	2,595	2,756	2,940	6.7	16,914	17,324	17,712	34
Franklin .....	602	618	670	8.3	14,962	15,127	16,171	11	Hampton .....	2,027	2,156	2,268	5.2	15,119	15,896	16,551	49
Grand Isle .....	96	100	106	6.8	17,873	17,988	18,919	5	Newport News .....	2,648	2,769	2,949	6.5	15,501	16,109	16,632	47
Lamoille .....	335	347	374	7.8	16,890	17,093	18,227	7	Norfolk .....	3,878	4,011	4,267	6.4	14,851	15,869	16,815	45
Orange .....	387	390	419	7.4	14,694	14,680	15,627	12	Portsmouth .....	1,534	1,607	1,695	5.5	14,778	15,506	16,237	55
Orleans .....	336	346	373	7.6	13,919	14,232	15,226	13	Richmond .....	4,680	4,743	5,037	6.2	23,012	23,385	24,902	5
Rutland .....	1,027	1,060	1,125	6.1	16,502	16,990	18,009	8	Roanoke .....	1,759	1,804	1,937	7.4	18,200	18,563	20,024	20
Washington .....	969	980	1,038	6.0	17,592	17,770	18,729	6	Suffolk .....	630	674	915	4.7	15,867	16,571	17,182	41
Windham .....	762	778	842	8.3	18,295	18,772	20,236	2	Virginia Beach .....	7,495	7,890	8,429	6.8	18,928	19,508	20,210	15
Windsor .....	1,013	1,025	1,086	5.9	18,717	18,890	19,977	4	Combination Areas: <sup>5</sup>								
Virginia .....	121,397	126,206	133,534	5.8	19,543	20,071	20,883		Albemarle + Charlottesville .....	2,189	2,293	2,411	5.1	20,124	21,015	22,128	11
Metropolitan portion .....	100,583	104,620	110,959	5.9	20,979	21,568	22,396		Alleghany, Clifton Fig. + Covington .....	365	378	398	5.3	14,735	15,327	16,307	53
Nonmetropolitan portion .....	20,813	21,386	22,575	5.6	14,665	14,976	15,677		Augusta, Staunton + Waynesboro .....	1,676	1,690	1,764	4.4	17,096	17,096	17,707	35
Accomack .....	464	472	496	5.1	14,649	14,813	15,504	69	Bedford + Bedford City .....	887	929	982	5.7	17,052	17,442	17,991	31
Amelia .....	133	137	145	5.5	15,083	15,338	15,735	63	Campbell + Lynchburg .....	1,909	1,946	2,038	4.7	16,776	17,015	17,753	33
Amherst .....	382	391	408	4.4	13,326	13,562	14,050	91	Carroll + Galax .....	420	432	460	6.3	12,599	12,925	13,676	95
Appomattox .....	178	185	195	5.2	14,493	14,797	15,530	67	Dinwiddie, Col. Hts. + Petersburg .....	1,279	1,322	1,387	5.0	16,327	16,920	17,290	29
Arlington .....	5,166	5,337	5,640	5.7	30,248	31,293	32,872	1	Fairfax, Fairfax City + Falls Church .....	24,591	26,105	27,674	6.0	28,895	30,088	31,204	3
Arlington .....	80	83	89	6.8	16,699	17,480	18,648	26	Frederick + Winchester .....	1,196	1,226	1,290	5.2	17,504	17,592	18,205	28
Bland .....	78	80	84	5.6	11,933	12,251	12,690	103	Greensville + Emporia .....	199	217	229	5.6	14,062	13,825	13,607	97
Botetourt .....	398	415	442	6.3	15,885	16,268	17,110	43	Halifax + South Boston .....	487	500	528	5.5	13,491	13,888	14,522	86
Brunswick .....	188	195	202	3.4	11,784	12,127	12,422	104	Henry + Martinsville .....	1,215	1,211	1,278	5.5	16,622	16,603	17,537	36
Buchanan .....	458	466	491	5.4	14,655	14,717	15,509	68	James City + Williamsburg .....	941	984	1,035	5.2	20,142	20,546	21,095	13
Buckingham .....	163	172	183	6.1	12,623	13,251	14,053	90	Montgomery + Radford .....	1,169	1,182	1,238	4.7	12,972	13,166	13,657	96
Caroline .....	284	286	303	5.8	14,697	14,441	15,078	78	Pittsylvania + Danville .....	1,575	1,614	1,717	6.4	14,461	14,775	15,705	64
Charlotte City .....	93	95	101	6.1	14,717	15,117	15,838	62	Prince George + Hopewell .....	769	798	845	6.0	15,173	15,990	16,369	51
Charlotte .....	145	150	159	6.3	12,364	12,687	13,433	98	Pr. William, Manassas + Manassas Park .....	4,855	5,053	5,365	6.2	19,239	19,934	20,100	18
Chesterfield .....	4,543	4,635	4,878	5.3	21,493	21,239	21,660	12	Roanoke + Salem .....	2,142	2,175	2,296	5.6	20,761	20,952	22,139	10
Clarke .....	224	232	242	4.1	18,516	19,239	20,170	17	Rockbridge, Buena Vista + Lexington .....	451	469	490	4.4	14,180	14,673	15,230	73
Craig .....	60	63	66	4.6	13,234	13,386	14,065	89	Rockingham + Harrisonburg .....	1,423	1,498	1,597	6.6	16,057	16,737	17,525	37
Culpeper .....	498	506	523	3.5	17,708	17,640	17,963	32	Southampton + Franklin .....	401	418	440	5.3	15,732	16,523	17,209	40
Cumberland .....	117	124	129	4.0	14,925	15,853	16,393	50	Spotsylvania + Fredricksburg .....	1,419	1,452	1,543	6.3	18,286	18,163	18,753	24
Dickenson .....	213	227	245	7.7	12,138	12,911	13,788	94	Washington + Bristol .....	948	988	1,041	5.4	14,724	15,254	16,004	57
Essex .....	133	138	149	7.4	15,260	15,762	16,701	46	Wise + Norton .....	635	663	705	6.4	14,491	15,065	15,965	58
Fauquier .....	1,155	1,190	1,236	3.9	23,581	23,961	24,389	7	York + Poquoson .....	1,054	1,114	1,176	5.5	19,615	19,915	20,203	16
Floyd .....	163	171	176	3.3	13,556	14,050	14,240	87	Washington .....	94,420	100,758	109,485	8.7	19,268	20,087	21,289	
Fluvanna .....	198	207	222	7.0	15,721	15,590	15,853	60	Metropolitan portion .....	81,190	86,711	94,300	8.8	19,967	20,831	22,084	
Franklin .....	568	577	618	7.2	14,298	14,228	15,107	77	Nonmetropolitan portion .....	13,230	14,046	15,186	8.1	15,857	16,455	17,400	
Giles .....	234	239	250	4.7	14,311	14,610	15,272	72	Adams .....	248	239	267	12.1	18,213	17,034	18,693	14
Gloucester .....	484	506	536	6.0	15,986	16,488	17,137	42	Asotin .....	267	291	315	8.2	15,069	16,132	17,010	26
Goochland .....	328	340	361	5.9	23,088	23,372	24,054	8	Benton .....	2,000	2,192	2,423	10.5	17,621	18,821	20,122	5
Grayson .....	194	201	214	6.5	11,917	12,466	13,247	101	Chelan .....	909	983	1,065	8.3	17,369	18,550	19,732	7
Greene .....	149	154	164	6.4	14,347	14,084	14,206	88	Ciallam .....	982	1,037	1,106	6.6	17,287	17,847	18,532	15
Hanover .....	1,266	1,280	1,353	5.7	19,843	19,486	19,972	21	Clark .....	4,305	4,537	4,909	8.2	17,880	18,004	18,837	10
Henrico .....	5,155	5,305	5,564	4.9	23,604	24,073	24,933	4	Columbia .....	69	67	74	11.0	17,268	17,191	18,757	12
Highland .....	39	40	41	2.8	14,629	15,539	15,926	59	Cowlitz .....	1,374	1,485	1,541	3.7	16,663	17,659	18,102	18
Isle of Wight .....	414	437	455	4.3	16,431	17,006	17,405	39	Douglas .....	396	429	480	12.0	15,001	15,513	16,823	28
King and Queen .....	97	100	110	10.1	15,418	16,877	17,448	38	Ferry .....	83	86	91	5.2	13,038	13,178	13,476	39
King George .....	199	261	270	3.4	18,245	18,699	18,851	22	Franklin .....	538	584	633	8.4	14,272	14,920	15,620	34
King William .....	247	204	217	6.3	17,901	18,208	18,756	23	Garfield .....	42	41	43	4.8	18,921	18,378	19,236	8
Lancaster .....	236	247	254	2.8	21,619	22,680	23,286	9	Grant .....	788	853	957	12.2	14,328	14,983	16,289	31
Lee .....	267	278	300	8.1	10,917	11,405	12,314	105	Grays Harbor .....	995	1,052	1,133	7.7	15,457	16,263	17,295	23
Loudoun .....	2,141	2,198	2,332	6.1	24,587	24,403	24,743	6	Island .....	985	1,051	1,137	8.2	16,158	16,799	17,363	22
Louisa .....	309	313	331	5.8	15,084	14,960	15,424	70	Jefferson .....	359	389	419	7.8	17,609	18,215	18,765	11
Lunenburg .....	146	147	154	4.7	12,807	12,772	13,407	100	King .....	37,272	39,802	43,251	8.7	24,593	25,947	27,769	1
Madison .....	163	170	178	4.2	13,585	14,059	14,763	83	Kitsap .....	3,324	3,635	3,945	8.5	17,318	18,145	18,717	13
Mathews .....	158	162	171	5.5	18,932	19,393	20,402	14	Kittitas .....	397	417	454	8.9	14,808	15,074	16,251	32
Mecklenburg .....	415	429	451	5.2	14,207	14,572	15,194	75	Klickitat .....	251	257	274	6.4	15,072	15,356	15,974	33
Middlesex .....	150	157	165	5.3	17,269	17,748	18,542	27	Lewis .....	921	962	1,038	7.8	15,451	15,850	16,883	27
Nelson .....	181	186	196	4.9	14,154	14,295	14,940	81	Lincoln .....	174	168	182	8.8	18,607	18,752	20,242	4
New Kent .....	182	198	198	5.0	17,273	17,425	17,994	30									



Table 2.—Total Personal Income and Per Capita Personal Income by County, 1990–92—Continued

Area name	Total personal income				Per capita personal income <sup>3</sup>				Area name	Total personal income				Per capita personal income <sup>3</sup>			
	Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State		Millions of dollars			Percent change <sup>2</sup>	Dollars			Rank in State
	1990	1991	1992		1990	1991	1992			1990	1991	1992		1990	1991	1992	
<b>West Virginia</b>	<b>25,034</b>	<b>26,440</b>	<b>28,215</b>	<b>6.7</b>	<b>13,964</b>	<b>14,695</b>	<b>15,598</b>		<b>Fond du Lac</b>	1,572	1,634	1,754	7.3	17,421	17,975	19,140	11
<b>Metropolitan portion</b>	<b>11,845</b>	<b>12,429</b>	<b>13,238</b>	<b>6.5</b>	<b>15,824</b>	<b>16,527</b>	<b>17,507</b>		<b>Forest</b>	99	103	114	10.1	11,230	11,655	12,746	69
<b>Nonmetropolitan portion</b>	<b>13,189</b>	<b>14,012</b>	<b>14,976</b>	<b>6.9</b>	<b>12,631</b>	<b>13,380</b>	<b>14,227</b>		<b>Grant</b>	698	713	745	4.6	14,148	14,527	15,154	46
Barbour	168	177	190	7.3	10,705	11,319	11,996	45	<b>Green</b>	540	549	585	6.5	17,783	17,922	18,840	14
Berkeley	879	942	1,016	7.8	14,694	15,290	16,103	10	<b>Green Lake</b>	300	308	327	6.1	16,054	16,424	17,365	24
Boone	375	371	396	6.6	13,383	14,241	14,921	19	<b>Iowa</b>	297	307	332	8.1	14,734	15,107	16,178	34
Braxton	147	150	159	6.2	11,272	11,429	12,136	44	<b>Iron</b>	79	87	91	5.0	12,882	13,999	14,458	54
Brooke	376	384	403	4.9	13,923	14,230	15,055	18	<b>Jackson</b>	229	238	256	7.4	13,812	14,276	15,300	43
Cabell	1,512	1,596	1,708	7.0	15,636	16,526	17,713	4	<b>Jefferson</b>	1,090	1,126	1,198	6.3	16,023	16,451	17,315	27
Cairo	76	80	88	10.7	9,670	10,133	11,117	51	<b>Juneau</b>	288	304	321	5.3	13,309	13,787	14,442	55
Callhoun	90	96	104	8.2	9,031	9,610	10,328	55	<b>Kenosha</b>	2,163	2,270	2,421	6.7	16,805	17,242	18,071	18
Clay	72	75	81	7.1	10,293	10,622	11,337	50	<b>Kewaunee</b>	276	277	301	8.9	14,602	14,661	15,913	37
Doddridge	70	72	75	6.7	11,661	12,598	13,401	32	<b>Lafayette</b>	1,667	1,744	1,864	6.8	16,988	17,718	18,784	15
Fayette	558	602	643	6.7	11,661	12,598	13,401	32	<b>Lafayette</b>	245	244	249	1.9	15,244	15,251	15,480	39
Gilmer	80	87	92	6.8	10,499	11,578	12,325	43	<b>Langlade</b>	261	273	298	9.0	13,392	13,877	15,066	48
Grant	148	160	166	3.7	14,211	15,176	15,555	15	<b>Lincoln</b>	370	390	416	6.9	13,653	14,185	14,970	50
Greenbrier	475	507	542	6.8	13,701	14,504	15,360	16	<b>Lincoln</b>	370	390	416	6.9	13,653	14,185	14,970	50
Hancock	190	201	216	7.5	11,461	11,722	12,339	42	<b>Monroe</b>	491	517	557	7.7	13,351	13,904	14,772	51
Hampshire	590	592	626	5.8	16,758	16,788	17,802	3	<b>Oconto</b>	399	406	431	6.4	13,165	13,348	14,029	61
Hardy	143	153	168	9.9	13,010	13,667	14,877	20	<b>Oneida</b>	500	534	578	8.2	15,730	16,495	17,429	22
Harrison	998	1,064	1,132	6.4	14,413	15,319	16,160	9	<b>Outagamie</b>	2,483	2,622	2,832	8.0	17,618	18,473	19,681	9
Jackson	313	330	365	10.6	12,078	12,691	13,980	28	<b>Ozaukee</b>	1,821	1,908	2,042	7.0	24,887	25,584	26,812	1
Jefferson	572	588	616	4.7	15,817	15,921	16,360	7	<b>Pepin</b>	100	100	107	7.0	14,033	14,103	15,152	47
Kanawha	3,685	3,855	4,114	6.7	17,771	18,597	19,803	2	<b>Pierce</b>	503	525	559	6.5	15,335	15,853	16,709	31
Lewis	203	216	228	5.6	11,837	12,595	13,169	33	<b>Polk</b>	486	503	543	8.0	13,945	14,278	15,283	44
Lincoln	201	210	229	9.3	9,403	9,775	10,579	53	<b>Portage</b>	917	958	1,057	10.4	14,912	15,379	16,791	30
Logan	539	575	617	7.4	12,567	13,331	14,361	24	<b>Price</b>	225	235	250	6.3	14,403	14,998	15,981	35
McDowell	368	383	409	6.7	10,521	11,118	11,988	46	<b>Racine</b>	3,270	3,440	3,614	5.0	18,641	19,361	20,131	6
Marion	824	866	896	3.5	14,407	15,103	15,572	14	<b>Richland</b>	222	229	244	6.9	12,631	12,992	13,786	64
Marshall	506	530	555	4.8	13,565	14,259	14,868	21	<b>Rock</b>	2,365	2,404	2,637	9.7	16,906	17,036	18,474	16
Masson	306	319	344	7.8	12,169	12,706	13,814	29	<b>Rusk</b>	173	177	185	4.6	11,440	11,711	12,305	71
Mercer	944	1,000	1,056	5.6	14,552	15,442	16,231	8	<b>St. Croix</b>	927	960	1,046	8.9	18,357	18,731	20,072	7
Mineral	346	366	380	3.9	12,970	13,639	14,086	27	<b>Sauk</b>	768	797	853	7.0	16,277	16,725	17,563	21
Mingo	415	447	484	8.2	12,334	13,201	14,395	23	<b>Sawyer</b>	173	185	201	8.9	12,169	12,764	13,557	66
Monongalia	1,139	1,220	1,341	10.0	15,072	16,024	17,306	6	<b>Sheboygan</b>	1,806	1,855	1,987	7.2	17,345	17,767	18,921	13
Monroe	146	152	158	4.2	11,794	12,172	12,589	38	<b>Taylor</b>	249	247	271	9.6	13,156	13,066	14,255	59
Morgan	160	174	188	7.9	13,149	13,997	14,701	22	<b>Trempealeau</b>	359	368	388	5.5	14,203	14,507	15,263	45
Nicholas	319	333	348	4.7	11,906	12,437	12,901	35	<b>Vernon</b>	333	339	362	7.0	12,996	13,198	13,933	63
Ohio	925	979	1,035	5.7	18,227	19,505	20,640	1	<b>Vilas</b>	254	268	286	6.7	14,290	14,815	15,372	41
Pendleton	98	108	115	6.7	12,230	13,413	14,333	25	<b>Walworth</b>	1,232	1,295	1,374	6.1	16,372	16,979	17,709	20
Pleasants	103	108	119	10.1	13,634	14,270	15,733	12	<b>Washington</b>	1,863	1,948	2,092	7.4	19,436	19,757	20,591	4
Pocahontas	107	114	124	8.5	11,956	12,813	13,755	30	<b>Waukesha</b>	7,082	7,386	7,960	7.8	23,131	23,563	24,850	2
Preston	350	363	382	5.3	12,041	12,417	12,990	34	<b>Waupaca</b>	702	743	804	8.1	15,200	15,904	16,978	28
Putnam	625	674	725	7.6	14,531	15,253	15,986	11	<b>Waushara</b>	280	285	302	5.7	14,446	14,538	15,035	49
Raleigh	1,064	1,145	1,216	6.2	13,854	14,840	15,705	13	<b>Winnebago</b>	2,488	2,613	2,821	7.9	17,677	18,301	19,479	10
Randolph	338	368	398	8.3	12,146	13,070	14,142	26	<b>Wood</b>	1,283	1,337	1,429	6.9	17,405	17,998	19,122	12
Ritchie	111	117	127	8.9	10,803	11,488	12,596	37	<b>Shawano (incl. Menominee)</b>	507	531	570	7.4	12,335	12,869	13,726	65
Roane	153	164	178	8.9	10,187	10,851	11,784	47	<b>Wyoming</b>	<b>7,664</b>	<b>8,278</b>	<b>8,659</b>	<b>4.6</b>	<b>16,905</b>	<b>18,076</b>	<b>18,631</b>	
Summers	140	152	163	7.7	9,897	10,864	11,539	49	<b>Metropolitan portion</b>	<b>2,484</b>	<b>2,603</b>	<b>2,716</b>	<b>4.3</b>	<b>18,494</b>	<b>19,173</b>	<b>19,675</b>	
Taylor	155	167	177	6.3	10,280	10,985	11,702	48	<b>Nonmetropolitan portion</b>	<b>5,180</b>	<b>5,675</b>	<b>5,943</b>	<b>4.7</b>	<b>16,236</b>	<b>17,615</b>	<b>18,190</b>	
Tucker	93	100	106	6.4	12,085	12,914	13,688	31	Albany	415	448	467	4.3	13,499	14,665	15,121	21
Tyler	111	117	124	5.6	11,381	11,928	12,570	39	Big Horn	145	154	160	3.7	13,883	14,685	15,082	22
Upshur	266	277	289	4.1	11,611	12,010	12,538	40	Campbell	517	578	607	4.9	17,590	19,345	19,806	6
Wayne	477	503	539	7.1	11,469	12,011	12,832	36	Carbon	280	295	303	2.5	16,850	17,998	18,737	8
Webster	97	99	109	10.0	9,036	9,370	10,390	54	Converse	169	178	187	5.3	15,280	15,925	16,412	18
Weitzel	260	279	292	4.8	13,532	14,534	15,241	17	Crook	90	105	107	1.9	16,920	17,941	19,843	5
Wirt	51	53	58	9.6	9,781	10,050	10,868	52	Fremont	439	483	506	4.8	13,073	14,134	14,713	23
Wood	1,352	1,420	1,521	7.1	15,546	16,298	17,383	5	Goshen	182	212	214	9	14,733	17,123	17,265	16
Wyoming	323	338	361	6.9	11,151	11,647	12,346	41	Hot Springs	76	82	87	5.9	15,971	17,591	18,503	12
<b>Wisconsin</b>	<b>85,288</b>	<b>88,812</b>	<b>95,049</b>	<b>7.0</b>	<b>17,399</b>	<b>17,954</b>	<b>19,038</b>		Johnson	102	113	114	1.1	16,485	18,185	18,233	13
<b>Metropolitan portion</b>	<b>62,184</b>	<b>64,806</b>	<b>69,382</b>	<b>7.1</b>	<b>18,625</b>	<b>19,224</b>	<b>20,395</b>		Laramie	1,292	1,360	1,441	5.9	17,663	18,432	19,093	7
<b>Nonmetropolitan portion</b>	<b>23,105</b>	<b>24,006</b>	<b>25,667</b>	<b>6.9</b>	<b>14,774</b>	<b>15,238</b>	<b>16,136</b>										

# BUSINESS CYCLE INDICATORS

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NOTE.—This section of the SURVEY is prepared by the Business Cycle Indicators Branch.

Series no.	Series title and timing classification	1993												1994		
		1993	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>1. COMPOSITE INDEXES</b>																
<b>The Leading Index</b>																
910	Composite index of leading indicators, 1987=100 (L,L,L) ....	98.7	99.1	98.4	98.4	98.1	98.1	97.9	98.4	98.6	99.1	99.5	<sup>r</sup> 100.2	100.5	<sup>r</sup> 100.5	<sup>p</sup> 101.2
	Percent change from previous month .....	.1	.2	-.7	0	-.3	0	-.2	.5	.2	.5	.4	<sup>r</sup> .7	<sup>r</sup> .3	<sup>r</sup> .0	<sup>p</sup> .7
	Percent change over 3-month span, AR .....	1.4	-3.2	-2.0	-4.0	-1.2	-2.0	1.2	2.1	5.0	4.5	<sup>r</sup> 6.7	5.8	<sup>r</sup> 4.1	<sup>p</sup> 4.1	.....
Leading index components:																
1	Average weekly hours, mfg. (L,L,L) .....	41.4	41.4	41.2	41.5	41.4	41.2	41.4	41.4	41.5	41.6	41.7	41.7	41.8	41.2	<sup>p</sup> 42.2
5	Average weekly initial claims for unemployment insurance, thous. (L,C,L) † .....	365	349	375	374	387	383	399	371	370	354	336	<b>318</b>	360	338	327
8	Mfrs.' new orders, consumer goods and materials, bil. 1987\$ (L,L,L) .....	1,304.70	109.79	107.23	106.72	105.54	106.58	105.35	106.55	109.03	111.43	<sup>r</sup> 112.55	<sup>r</sup> 114.63	<sup>r</sup> 116.20	<sup>r</sup> 115.30	<sup>p</sup> 116.82
32	Vendor performance, slower deliveries diffusion index, percent (L,L,L) * .....	51.6	53.0	52.5	53.1	51.7	50.2	50.0	51.3	50.9	50.7	50.7	51.7	55.0	<b>58.8</b>	55.1
20	Contracts and orders for plant and equipment, bil. 1987\$ (L,L,L) * .....	434.98	36.26	<sup>r</sup> 34.41	34.15	33.96	37.86	34.67	36.38	35.84	37.71	<sup>r</sup> 40.53	39.98	<sup>r</sup> 41.30	<sup>r</sup> 41.39	<sup>p</sup> 42.74
29	Index of new private housing units authorized by local building permits, 1967=100 (L,L,L) .....	96.4	91.0	82.5	87.8	89.4	88.9	92.7	99.0	101.4	104.0	109.6	<b>117.7</b>	108.3	99.7	105.1
92	Change in mfrs.' unfilled orders, durable goods, bil. 1987\$, smoothed (L,L,L) † .....	-2.87	-2.08	-2.18	-2.42	-2.97	-3.35	-3.30	-3.15	-3.23	-3.10	-2.92	-2.89	<sup>r</sup> -2.21	<sup>r</sup> -1.69	<sup>p</sup> -1.40
99	Change in sensitive materials prices, percent, smoothed (L,L,L) † .....	-.26	-.15	-.18	-.30	-.40	-.43	-.43	-.48	<sup>r</sup> -.50	<sup>r</sup> -.32	<sup>r</sup> -.05	.29	.52	.80	<b>1.06</b>
19	Index of stock prices, 500 common stocks, 1941-43=10, NSA (L,L,L) † .....	451.41	441.70	450.16	443.08	445.25	448.06	447.29	454.13	459.24	463.90	462.89	465.95	<b>472.99</b>	471.58	463.81
106	Money supply M2, bil. 1987\$ (L,L,L) .....	2,774.0	2,775.4	2,769.3	2,763.0	2,775.3	2,778.5	<sup>r</sup> 2,778.0	2,773.1	<sup>r</sup> 2,777.1	2,769.6	2,769.6	2,768.5	<sup>r</sup> 2,773.4	<sup>r</sup> 2,764.3	<sup>p</sup> 2,767.5
83	Index of consumer expectations, U. of Michigan, 1966:I=100, NSA (L,L,L) © ² .....	72.8	80.6	75.8	76.4	68.5	70.4	64.7	65.8	66.8	72.5	70.3	78.8	86.4	83.5	85.1
950	Diffusion index of 11 leading indicator components:															
	Percent rising over 1-month span .....	56.1	59.1	9.1	54.5	36.4	54.5	40.9	77.3	68.2	81.8	72.7	81.8	81.8	45.5	<sup>p</sup> 81.8
	Percent rising over 6-month span .....	64.4	45.5	22.7	31.8	36.4	63.6	63.6	81.8	90.9	90.9	81.8	<sup>p</sup> 90.9	.....	.....	.....
<b>The Coincident Index</b>																
920	Composite index of coincident indicators, 1987=100 (C,C,C) .....	109.1	107.9	108.1	108.6	108.8	108.9	108.8	109.4	109.6	110.0	110.5	111.1	<sup>r</sup> 110.8	<sup>r</sup> 111.6	<sup>3</sup> 112.1
	Percent change from previous month .....	.1	.3	.2	.5	.2	.1	-.1	.6	.2	.4	.5	.5	<sup>r</sup> -.3	<sup>r</sup> .7	<sup>3</sup> .4
	Percent change over 3-month span, AR .....	2.5	-5.0	3.8	3.4	3.0	.7	2.2	2.6	4.5	4.1	5.6	<sup>r</sup> 2.9	<sup>r</sup> 4.0	<sup>3</sup> 3.6	.....
Coincident index components:																
41	Employees on nonagricultural payrolls, thous. (C,C,C) ....	110,178	109,539	109,565	109,820	110,058	110,101	110,338	110,305	110,502	110,664	110,880	111,110	111,079	111,277	<sup>p</sup> 111,733
51	Personal income less transfer payments, bil. 1987\$, AR (C,C,C) .....	3,519.7	3,449.3	3,471.1	3,517.7	3,524.3	3,511.7	3,499.1	3,542.3	3,544.2	3,559.7	3,578.2	3,597.4	<sup>r</sup> 3,562.8	<sup>r</sup> 3,618.8	<sup>p</sup> 3,632.6
47	Index of industrial production, 1987=100 (C,C,C) .....	110.9	109.9	110.0	110.5	110.0	110.4	110.9	111.1	111.3	111.9	112.8	114.0	<sup>r</sup> 114.4	<sup>r</sup> 115.0	<sup>p</sup> 115.6
57	Manufacturing and trade sales, mil. 1987\$ (C,C,C) .....	6,197,402	<sup>r</sup> 510,300	<sup>r</sup> 509,203	507,439	510,535	514,723	510,834	518,086	520,538	523,160	528,675	534,561	<sup>r</sup> 532,478	<sup>p</sup> 537,128	.....
951	Diffusion index of 4 coincident indicator components:															
	Percent rising over 1-month span .....	80.2	100.0	62.5	75.0	75.0	62.5	50.0	87.5	100.0	100.0	100.0	100.0	37.5	100.0	<sup>3</sup> 100.0
	Percent rising over 6-month span .....	97.9	100.0	75.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	<sup>3</sup> 100.0	.....	.....	.....
<b>The Lagging Index</b>																
930	Composite index of lagging indicators, 1987=100 (Lg,Lg,Lg) .....	96.4	96.6	96.4	96.4	96.3	96.3	96.7	96.4	96.6	96.4	96.2	<sup>r</sup> 96.2	<sup>r</sup> 96.5	<sup>r</sup> 96.1	<sup>4</sup> 96.0
	Percent change from previous month .....	.1	0	-.2	0	-.1	0	.4	-.3	.2	-.2	-.2	<sup>r</sup> 0	<sup>r</sup> .3	<sup>r</sup> -.4	<sup>4</sup> -.1
	Percent change over 3-month span, AR .....	0	3.4	-1.8	-1.2	-.4	1.3	.4	1.3	-1.2	-.8	<sup>r</sup> -1.6	.4	<sup>r</sup> -.4	<sup>r</sup> -.8	.....
Lagging index components:																
91	Average duration of unemployment, weeks (Lg,Lg,Lg) † ² .....	18.1	18.2	17.7	<b>17.7</b>	17.8	17.8	17.9	18.3	18.4	18.4	18.9	18.2	18.3	18.7	19.2
77	Ratio, mfg. and trade inventories to sales in 1987\$ (Lg,Lg,Lg) .....	1.56	1.57	1.57	1.58	1.58	1.56	1.58	1.56	1.56	1.55	1.54	1.52	1.52	1.52	.....
62	Change in labor cost per unit of output, mfg., percent, AR, smoothed (Lg,Lg,Lg) † ² .....	-2.5	-3.6	-3.9	-4.0	-3.3	-2.9	-2.5	-1.8	-.8	-.9	-1.6	-2.5	<sup>r</sup> -.24	<sup>r</sup> -.19	<sup>p</sup> -1.9
109	Average prime rate charged by banks, percent, NSA (Lg,Lg,Lg) * .....	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.06
101	Commercial and industrial loans outstanding, mil. 1987\$ (Lg,Lg,Lg) .....	371,320	369,653	363,441	365,115	368,471	370,002	375,158	376,605	376,574	373,963	374,072	<sup>r</sup> 373,204	<sup>r</sup> <b>377,946</b>	<sup>r</sup> 373,103	<sup>p</sup> 370,667
95	Ratio, consumer installment credit outstanding to personal income, percent (Lg,Lg,Lg) .....	14.13	14.24	14.18	14.02	13.94	14.00	14.12	14.04	14.13	14.16	14.20	14.24	<sup>r</sup> <b>14.48</b>	<sup>p</sup> 14.29	.....
120	Change in Consumer Price Index for services, percent, AR, smoothed (Lg,Lg,Lg) † .....	3.8	3.8	3.9	4.0	4.1	4.1	4.0	3.9	3.7	3.6	3.5	3.5	3.1	3.2	3.6
952	Diffusion index of 7 lagging indicator components:															
	Percent rising over 1-month span .....	49.4	71.4	35.7	71.4	50.0	57.1	64.3	28.6	50.0	28.6	28.6	<sup>r</sup> 42.9	<sup>r</sup> 57.1	<sup>r</sup> 42.9	<sup>4</sup> 50.0
	Percent rising over 6-month span .....	43.3	35.7	57.1	50.0	50.0	35.7	50.0	50.0	<sup>r</sup> 50.0	<sup>r</sup> 21.4	<sup>r</sup> 20.0	.....	.....	.....	.....
940	Ratio, coincident index to lagging index, 1987=100 (L,L,L) .	113.2	111.7	112.1	112.7	113.0	113.1	112.5	113.5	113.5	114.1	114.9	<sup>r</sup> 115.5	<sup>r</sup> 114.8	<sup>r</sup> 116.1	<sup>p</sup> 116.8

NOTE.—The following current high values were reached before February 1993: May 1991—BCI-106 (2,865.8); August 1991—BCI-92 smoothed (-0.83); December 1991—BCI-62 smoothed (3.0) and BCI-77 (1.65); January 1992—BCI-120 smoothed (4.2); and December 1992—BCI-51 (3,689.9) and BCI-83 (89.5). See page C-6 for other footnotes.

Series no.	Series title and timing classification	Year	1993												1994		
		1993	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	
<b>2. LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT</b>																	
441	Labor force:																
442	Civilian labor force, thous. <sup>1</sup>	128,040	127,400	127,440	127,539	128,075	128,056	128,102	128,334	128,108	128,580	128,662	128,898	130,667	130,776	130,580	
	Civilian employment, thous. <sup>1</sup>	119,306	118,442	118,562	118,585	119,180	119,187	119,370	119,692	119,568	119,941	120,332	120,661	121,971	122,258	122,037	
	Civilian labor force participation rates (percent):																
451	Males 20 years and over <sup>1</sup>	76.9	76.9	76.9	76.9	77.1	77.0	77.0	77.0	76.7	77.0	76.8	76.8	77.0	76.9	76.8	
452	Females 20 years and over <sup>1</sup>	58.4	58.2	58.2	58.2	58.4	58.5	58.4	58.5	58.4	58.6	58.7	58.9	59.3	59.5	59.3	
453	Both sexes 16-19 years of age <sup>1</sup>	51.5	51.9	51.5	51.8	52.5	51.5	51.8	51.6	51.2	51.1	51.2	50.9	53.3	52.4	52.3	
	Marginal employment adjustments:																
1 ♦	Average weekly hours, mfg. (L,L,L)	41.4	41.4	41.2	41.5	41.4	41.2	41.4	41.4	41.5	41.6	41.7	41.7	41.8	41.2	<sup>P</sup> 42.2	
21 ♦	Average weekly overtime hours, mfg. (L,C,L)	4.1	4.2	4.0	4.2	4.1	4.0	4.0	4.1	4.1	4.3	4.3	4.4	4.4	4.6	<sup>P</sup> 4.8	
5 ♦	Average weekly initial claims for unemployment insurance, thous. (L,C,L) <sup>2</sup>	365	349	375	374	387	383	399	371	370	354	336	<b>318</b>	360	338	327	
	Job vacancies:																
46 ♦	Index of help-wanted advertising, 1967=100 (L,L,U)	101	97	96	96	100	97	101	103	101	106	107	110	105	115	<sup>P</sup> 117	
60	Ratio, help-wanted advertising to unemployed (L,L,U) <sup>1</sup>	.344	.322	.322	.319	.334	.325	.344	.355	.352	.365	.382	.397	.359	.402	<sup>P</sup> .407	
	Employment:																
48 ♦	Employee hours in nonagricultural establishments, bil. hours, AR (U,C,C)	203.97	202.47	202.33	202.78	205.28	203.57	204.05	204.76	204.06	205.26	205.16	205.91	<sup>r</sup> 207.65	<sup>r</sup> 204.97	<sup>P</sup> 207.23	
42	Persons engaged in nonagricultural activities, thous. (U,C,C) <sup>1</sup>	116,232	115,326	115,463	115,514	116,106	116,156	116,327	116,687	116,475	116,920	117,218	117,565	118,639	<b>118,867</b>	118,611	
41 ♦	Employees on nonagricultural payrolls, thous. (C,C,C)	110,178	109,539	109,565	109,820	110,058	110,101	110,338	110,305	110,502	110,664	110,880	111,110	111,079	111,277	<sup>P</sup> 111,733	
963	Diffusion index of employees on private nonagricultural payrolls, 356 industries:																
	Percent rising over 1-month span	54.7	59.7	51.0	53.8	56.9	46.5	57.9	44.4	57.2	53.9	61.0	56.0	55.8	<sup>r</sup> 57.0	<sup>P</sup> 61.9	
	Percent rising over 6-month span	57.0	58.3	58.3	57.7	49.7	51.1	52.9	55.9	58.7	57.0	<sup>r</sup> 61.0	<sup>P</sup> 63.9				
40 ♦	Employees in goods-producing industries, thous. (L,C,U)	22,975	23,069	23,016	22,980	23,006	22,941	22,948	22,903	22,886	22,934	22,994	23,008	23,024	23,018	<sup>P</sup> 23,101	
90 ♦	Ratio, civilian employment to population of working age, percent (U,L,U)	61.6	61.4	61.4	61.4	61.7	61.6	61.6	61.8	61.6	61.8	61.8	62.0	62.2	<b>62.3</b>	62.2	
	Unemployment:																
37	Number of persons unemployed, thous. (L,L,U) <sup>1</sup> ‡	8,734	8,958	8,878	8,954	8,895	8,869	8,732	8,642	8,540	8,639	8,330	<b>8,237</b>	8,696	8,518	8,543	
43 ♦	Civilian unemployment rate, percent (L,L,U) <sup>1</sup> ‡	6.8	7.0	7.0	7.0	6.9	6.9	6.8	6.7	6.7	6.7	6.5	<b>6.4</b>	6.7	6.5	6.5	
45	Average weekly insured unemployment rate, percent (L,L,U) <sup>3</sup> ‡	2.6	2.5	2.5	2.6	2.6	2.7	2.7	2.6	2.6	2.6	2.6	2.5	<b>2.5</b>	2.6	2.6	
91 ♦	Average duration of unemployment, weeks (L,L,L) <sup>1</sup> ‡	18.1	18.2	17.7	<b>17.7</b>	17.8	17.8	17.9	18.3	18.4	18.4	18.9	18.2	18.3	18.7	19.2	
44	Unemployment rate, 15 weeks and over, percent (L,L,L) <sup>1</sup> ‡	2.4	2.5	2.4	2.3	2.4	2.4	2.3	2.3	2.4	2.4	2.3	<b>2.2</b>	2.3	2.4	2.4	

**3. OUTPUT, PRODUCTION, AND CAPACITY UTILIZATION**

55 ♦	Output:															
	Gross domestic product, bil. 1987\$, AR (C,C,C)	5,136.0	5,078.2			5,102.1			5,138.3			5,225.6				<sup>P</sup> 5,259.0
	Percent change from previous quarter, AR	3.0	.8			1.9			2.9			7.0				<sup>P</sup> 2.6
50	Gross national product, bil. 1987\$, AR (C,C,C)	5,138.6	5,080.7			5,104.1			5,145.8			5,223.7				
49	Value of domestic goods output, bil. 1987\$, AR (C,C,C)	2,083.8	2,060.2			2,069.1			2,074.9			2,130.9				<sup>P</sup> 2,161.0
	Industrial production indexes, 1987=100:															
47 ♦	Total (C,C,C)	110.9	109.9	110.0	110.5	110.0	110.4	110.9	111.1	111.3	111.9	112.8	114.0	<sup>r</sup> 114.4	<sup>r</sup> 115.0	<sup>P</sup> 115.6
73 ♦	Durable manufactures (C,C,C)	114.3	112.1	112.5	113.5	113.2	113.0	113.7	113.9	115.0	116.2	118.0	120.1	<sup>r</sup> 120.4	<sup>r</sup> 121.3	<sup>P</sup> 121.9
74 ♦	Nondurable manufactures (C,L,L)	108.6	108.2	108.2	108.7	108.5	108.9	109.1	109.2	108.5	108.8	109.1	<sup>r</sup> 109.7	<sup>r</sup> 109.6	<sup>r</sup> 110.1	<sup>P</sup> 111.0
75 ♦	Consumer goods (C,L,C)	108.8	108.9	108.9	108.6	107.8	108.1	108.9	108.2	108.5	109.2	109.7	110.1	<sup>r</sup> 110.6	<sup>r</sup> 111.8	<sup>P</sup> 111.5
	Capacity utilization rates (percent):															
124	Total industry (L,C,U)	81.5	81.2	81.2	81.4	81.0	81.1	81.3	81.4	81.4	81.7	82.2	<sup>r</sup> 82.9	<sup>r</sup> 83.1	83.4	<sup>P</sup> 83.6
82 ♦	Manufacturing (L,C,U)	80.6	80.2	80.1	80.6	80.2	80.1	80.3	80.3	80.4	80.8	81.5	82.3	<sup>r</sup> 82.2	<sup>r</sup> 82.5	<sup>P</sup> 82.8

**4. SALES, ORDERS, AND DELIVERIES**

57 ♦	Sales:															
59 ♦	Manufacturing and trade sales, mil. 1987\$ (C,C,C)	6,197,402	<sup>r</sup> 5,103,300	<sup>r</sup> 5,092,203	5,074,399	5,105,535	5,147,223	5,108,834	5,188,086	5,205,538	5,231,160	5,286,675	5,344,561	<sup>r</sup> 5,324,478	<sup>P</sup> 5,377,128	
	Sales of retail stores, mil. 1987\$ (U,L,U)	1,757,913	<sup>r</sup> 1,422,834	<sup>r</sup> 1,411,543	1,433,700	1,449,933	1,458,871	1,464,477	1,473,360	1,476,695	1,498,968	1,500,802	1,528,695	<sup>r</sup> 1,502,626	<sup>P</sup> 1,527,786	<sup>P</sup> 1,553,164
	Orders and deliveries:															
7 ♦	Mfrs.' new orders, durable goods, bil. 1987\$ (L,L,L)	1,381.61	1,171.19	1,129.96	1,126.61	1,099.77	1,145.50	1,110.08	1,136.68	1,151.01	1,117.87	<sup>r</sup> 1,210.10	1,222.20	<b>1,269.96</b>	<sup>r</sup> 1,245.51	<sup>P</sup> 1,274.79
8 ♦	Mfrs.' new orders, consumer goods and materials, bil. 1987\$ (L,L,L)	1,304.70	1,099.79	1,072.23	1,066.72	1,055.54	1,065.58	1,053.35	1,065.55	1,093.03	1,111.43	<sup>r</sup> 1,125.55	<sup>r</sup> 1,114.63	<sup>r</sup> 1,116.20	<sup>r</sup> 1,115.30	<sup>P</sup> 1,116.82
	Mfrs.' unfilled orders, durable goods, mil. 1987\$ <sup>♦</sup>	362,630	396,886	390,926	387,356	381,879	378,466	377,172	374,775	370,372	368,404	366,140	362,630	<sup>r</sup> 364,684	<sup>r</sup> 363,373	<sup>P</sup> 361,553
	Change from previous month, bil. 1987\$	-2.88	-35	-5.96	-3.57	-5.48	-3.41	-1.29	-2.40	-4.40	-1.97	-2.26	-3.51	<sup>r</sup> 2.05	<sup>r</sup> -1.31	<sup>P</sup> -1.82
92 ♦	Change from previous month, bil. 1987\$, smoothed (L,L,L) <sup>†</sup>	-2.87	-2.08	-2.18	-2.42	-2.97	-3.35	-3.30	-3.15	-3.23	-3.10	-2.92	-2.89	<sup>r</sup> -2.21	<sup>r</sup> -1.69	<sup>P</sup> -1.40
32 ♦	Vendor performance, slower deliveries diffusion index, percent (L,L,L) <sup>†</sup>	51.6	53.0	52.5	53.1	51.7	50.2	50.0	51.3	50.9	50.7	50.7	51.7	55.0	<b>58.8</b>	55.1

**5. FIXED CAPITAL INVESTMENT**

12 ♦	Formation of business enterprises:															
13 ♦	Index of net business formation, 1967=100 (L,L,L)	121.2	120.9	122.0	121.0	117.6	120.8	120.7	121.1	122.3	119.2	<sup>r</sup> 123.5	<sup>r</sup> 126.1	<sup>r</sup> 125.8	<sup>P</sup> 126.4	
	Number of new business incorporations (L,L,L)		59,691	61,002	59,648	51,765	60,422	58,387	58,209	<b>63,758</b>	55,294	<sup>r</sup> 61,739				
	Business investment commitments:															
10	Contracts and orders for plant and equipment, bil.\$ (L,L,L)	427.36	36.36	<sup>r</sup> 34.04	33.89	33.25	38.15	33.77	35.63	34.94	36.56	38.78	38.84	40.91	<sup>r</sup> 40.73	<sup>P</sup> 41.40
20 ♦	Contracts and orders for plant and equipment, bil. 1987\$ (L,L,L)	434.98	36.26	<sup>r</sup> 34.41	34.15	33.96	37.86	34.67	36.38	35.84	37.71	<sup>r</sup> 40.53	39.98	<sup>r</sup> 41.30	<sup>r</sup> 41.39	<sup>P</sup> 42.74
27 ♦	Mfrs.' new orders, nondefense capital goods, bil. 1987\$ (L,L,L)	394.44	33.09	30.13	31.18	31.08	34.11	31.47	33.24	32.44	34.49	<sup>r</sup> 37.19	36.76	<sup>r</sup> 37.68	<sup>r</sup> 37.73	<sup>P</sup> 38.54
9 ♦	Construction contracts awarded for commercial and industrial buildings, mil. sq.ft.(L,C,U) <sup>♦</sup>	535.60	40.20	43.22	43.80	42.80	43.43	47.58	44.44	45.34	46.74	47.15	52.36	52.76	49.34	<b>61.83</b>
	Business investment expenditures:															
61	New plant and equipment expenditures by business, bil.\$, AR (C,L,L)	585.64	564.13			579.79			594.11			<b>604.51</b>				<sup>r</sup> 621.28
100 ♦	New plant and equipment expenditures by business, bil. 1987\$, AR (C,L,L)	555.70	533.70			546.97			565.28			<b>576.82</b>				<sup>r</sup> 595.36
69 ♦	Mfrs.' machinery and equipment sales and business construction expenditures, bil.\$, AR (C,L,L)	464.32	447.24	465.62	448.70	454.96	462.72	442.00	468.37	464.07	469.92	492.08	<b>513.28</b>	<sup>r</sup> 484.00	<sup>r</sup> 491.97	<sup>P</sup> 502.18

NOTE.—The following current high values were reached before February 1993: July 1991—BCI-92 change (6.72) and August 1991—BCI-92 smoothed (-0.83).

See page C-6 for other footnotes.

Series no.	Series title and timing classification	Year	1993												1994		
		1993	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	
<b>5. FIXED CAPITAL INVESTMENT—Continued</b>																	
76 ♦	Business investment expenditures—Continued: Index of industrial production, business equipment, 1987=100 (C,Lg,U) .....	134.6	130.0	131.5	133.1	133.5	133.9	134.6	134.8	136.3	137.7	139.7	141.8	143.1	144.7	145.7	
	Gross private nonresidential fixed investment, bil. 1987\$, AR .....																
86 ♦	Total (C,Lg,C) .....	591.8	562.3			584.3				594.8			625.7			634.1	
87 ♦	Structures (Lg,Lg,Lg) .....	151.5	148.2			151.1				151.2			155.6			148.9	
88 ♦	Producers' durable equipment (C,Lg,C) .....	440.2	414.1			433.2				443.6			470.0			485.1	
Residential construction and investment:																	
28 ♦	New private housing units started, thous., AR (L,L,L) .....	1,288	1,194	1,092	1,232	1,241	1,238	1,245	1,319	1,359	1,409	1,406	1,612	1,271	1,314	1,473	
29 ♦	Index of new private housing units authorized by local building permits, 1967=100 (L,L,L) .....	96.4	91.0	82.5	87.8	89.4	88.9	92.7	99.0	101.4	104.0	109.6	117.7	108.3	99.7	105.1	
89 ♦	Gross private residential fixed investment, bil. 1987\$, AR (L,L,L) .....	214.2	211.4			206.2				212.1			227.2			232.2	

**6. INVENTORIES AND INVENTORY INVESTMENT**

70	Inventories on hand:															
77 ♦	Mfg. and trade inventories, bil. 1987\$ (Lg,Lg,Lg) ◊ .....	810.80	799.49	801.86	803.31	804.68	805.35	806.10	806.64	809.45	809.90	812.33	810.80	811.15	814.34	
	Ratio, mfg. and trade inventories to sales in 1987\$ (Lg,Lg,Lg) .....	1.56	1.57	1.57	1.58	1.58	1.56	1.58	1.56	1.56	1.55	1.54	1.52	1.52	1.52	
Inventory investment:																
30 ♦	Change in business inventories, bil. 1987\$, AR (L,L,L) ...	14.3	29.3			13.0				6.5			8.5			30.5
31 ♦	Change in mfg. and trade inventories, bil.\$, AR (L,L,L) ...	23.9	26.1	53.2	35.1	24.9	6.8	1.9	23.7	22.9	14.7	55.3	-13.6	17.8	52.3	

**7. PRICES**

Sensitive commodity prices:																
99 ♦	Index of sensitive materials prices, 1987=100 .....	99.60	101.30	100.81	99.87	99.31	99.15	98.88	98.03	97.67	98.55	99.48	100.77	101.25	102.92	104.42
	Percent change from previous month .....	-.01	-.07	-.48	-.93	-.56	-.16	-.27	-.86	-.37	-.90	-.94	1.30	.48	1.65	1.46
	Percent change from previous month, smoothed (L,L,L) † .....	-.26	-.15	-.18	-.30	-.40	-.43	-.43	-.48	-.50	-.32	-.05	.29	.52	.80	1.06
98	Index of producer prices for sensitive crude and intermediate materials, 1987=100 (L,L,L) .....	161.88	157.91	161.00	161.06	159.80	159.63	160.26	159.54	161.51	165.78	169.43	172.97	173.90	172.55	173.03
	Cattle hides .....	180.4	175.9	177.0	173.0	175.6	176.8	181.1	179.7	185.9	184.4	185.2	182.7	181.7	176.4	178.1
	Lumber and wood products .....	174.2	168.1	174.6	177.1	175.1	172.0	170.7	172.1	174.4	177.7	181.3	185.2	186.6	181.7	181.5
	Wastepaper, news .....	100.7	109.1	110.1	112.5	104.0	104.0	97.2	94.0	93.5	94.2	94.0	91.5	87.8	94.5	97.9
	Wastepaper, mixed, NSA .....	90.6	86.5	97.1	101.5	107.5	107.4	102.8	80.8	80.4	80.2	79.3	79.2	73.8	72.0	75.2
	Wastepaper, corrugated .....	142.0	143.6	149.0	147.5	143.3	140.6	140.2	139.4	138.9	139.0	139.9	138.0	136.4	153.7	195.0
	Iron and steel scrap .....	172.8	160.5	157.8	154.6	158.0	170.4	179.1	170.0	171.2	190.7	202.5	207.7	202.7	203.8	200.3
	Copper base scrap .....	136.0	160.8	151.6	142.3	131.5	135.4	133.8	130.2	125.1	119.0	117.3	121.2	128.5	135.3	136.6
	Aluminum base scrap .....	129.3	135.4	129.7	123.5	125.1	126.6	130.6	127.5	125.6	128.7	128.1	129.9	131.3	141.1	148.7
	Other nonferrous scrap, n.e.c., NSA .....	113.9	128.6	125.0	118.4	113.3	113.3	115.0	113.5	107.5	100.7	98.5	103.7	106.6	115.4	119.8
	Sand, gravel, and crushed stone .....	134.0	132.6	132.6	133.1	132.8	133.3	133.7	133.8	134.8	136.3	135.7	136.3	136.5	136.7	136.9
	Raw cotton .....	92.2	93.5	94.7	89.4	88.3	84.7	85.5	85.7	90.5	95.9	97.9	104.3	114.8	124.6	121.4
	Domestic apparel wool .....	56.5	63.6	57.2	53.5	53.5	55.2	53.4	54.9	51.7	53.1	56.8	58.1	56.7	63.2	69.3
23 ♦	Index of spot market prices, raw industrial materials, 1967=100, NSA (U,L,L) ◊ 1 .....	260.4	270.0	266.9	261.5	257.8	257.1	257.2	255.5	253.1	255.6	258.1	263.7	268.8	275.2	279.1
	Copper scrap, \$ per lb. ◊ .....	.702	.864	.812	.737	.702	.693	.672	.654	.611	.578	.572	.644	.696	.717	.747
	Lead scrap, \$ per lb. ◊ .....	.139	.157	.157	.146	.143	.144	.140	.134	.123	.118	.123	.124	.128	.131	.130
	Steel scrap, \$ per ton ◊ .....	115.553	108.543	108.044	105.069	104.412	112.183	119.654	114.042	110.402	127.351	138.940	140.435	139.625	140.201	138.530
	Tin, \$ per lb., NSA ◊ .....	3.494	3.835	3.779	3.738	3.703	3.482	3.395	3.294	3.095	3.189	3.225	3.286	3.324	3.598	3.621
	Zinc, \$ per lb., NSA ◊ .....	4.84	5.35	4.96	5.04	4.94	4.67	4.70	4.51	4.45	4.59	4.66	4.92	4.96	4.83	4.67
	Burlap, \$ per yd., NSA ◊ .....	.247	.245	.245	.245	.245	.245	.245	.240	.241	.247	.256	.265	.269	.273	.275
	Cotton, \$ per lb. ◊ .....	5.56	5.69	5.62	5.40	5.32	5.02	5.09	5.13	5.47	5.71	6.07	6.44	7.03	7.53	7.26
	Print cloth, \$ per yd., NSA ◊ .....	6.77	6.40	6.52	6.50	6.55	6.44	6.40	6.88	7.00	7.00	7.50	7.50	7.50	7.50	7.50
	Wool tops, \$ per lb., NSA ◊ .....	3.339	3.312	3.160	3.000	3.050	3.400	3.400	3.400	3.400	3.450	3.600	3.500	3.500	3.750	3.900
	Hides, \$ per lb., NSA ◊ .....	.799	.800	.816	.814	.805	.774	.762	.792	.805	.815	.808	.798	.756	.746	.788
	Rosin, \$ per 100 lb. ◊ .....	59.238	59.880	59.880	59.880	60.000	60.000	60.000	59.940	59.940	59.118	56.112	56.225	55.944	55.944	55.944
	Rubber, \$ per lb. ◊ .....	.450	.473	.461	.443	.441	.440	.437	.441	.447	.442	.448	.446	.448	.447	.493
	Tallow, \$ per lb. ◊ .....	.147	.150	.153	.157	.152	.148	.148	.146	.142	.140	.138	.143	.152	.156	.155
Producer Price Indexes:																
336	Finished goods, 1982=100 .....	124.7	124.8	125.1	125.7	125.7	125.1	125.1	124.1	124.3	124.2	124.3	124.2	124.5	125.1	125.4
	Percent change over 1-month span .....	0	.4	.2	.5	0	-.5	0	-.8	.2	-.1	.1	-.1	.2	.5	.2
	Percent change over 6-month span, AR .....	-.2	2.9	1.9	1.3	-1.1	-1.3	-2.4	-2.2	-1.4	-1.0	1.6	1.8			
337	Finished goods less foods and energy, 1982=100 .....	135.8	135.9	136.1	136.5	136.8	136.4	136.6	135.1	135.2	134.8	135.5	135.5	136.1	136.3	136.6
	Percent change over 1-month span .....	0	.3	.1	.3	.2	-.3	-.1	-1.1	-.1	-.3	.4	.1	.4	.1	.2
	Percent change over 6-month span, AR .....	-.3	2.8	2.1	1.6	-1.2	-1.3	-2.5	-1.2	-1.3	-1.3	1.8	2.1			
334	Finished consumer goods, 1982=100 .....	123.0	123.3	123.6	124.3	124.2	123.5	123.4	122.1	122.3	122.3	122.4	122.1	122.3	123.0	123.2
	Percent change over 1-month span .....	0	.4	.2	.6	-.1	-.6	-.1	-1.1	-.2	0	.1	-.2	.2	.6	.2
	Percent change over 6-month span, AR .....	-.2	3.0	1.8	1.0	-1.9	-2.1	-3.2	-2.9	-2.3	-1.8	1.5	1.5			
333	Capital equipment, 1982=100 .....	131.4	130.8	131.0	131.3	131.3	131.2	131.6	131.8	131.9	131.4	131.8	132.2	133.0	133.1	133.5
	Percent change over 1-month span .....	-.2	-.3	.2	.2	0	-.1	.3	.2	.1	-.4	.3	.3	.6	.1	.3
	Percent change over 6-month span, AR .....	1.8	2.6	2.3	1.8	1.5	1.4	2	.8	1.5	2.1	2.0	2.4			
332	Intermediate materials, supplies, and components, 1982=100 .....	116.2	115.9	116.3	116.6	116.3	116.3	116.3	116.3	116.3	116.4	116.6	116.2	116.4	116.9	117.1
	Percent change over 1-month span .....	.1	.4	.3	.3	-.3	0	0	0	0	.1	.2	-.3	.2	.4	.2
	Percent change over 6-month span, AR .....	1.0	2.1	2.1	1.6	.7	0	-.3	.5	-.2	.2	1.0	1.4			
331	Crude materials for further processing, 1982=100 .....	102.4	101.6	101.8	103.0	105.2	103.6	101.5	100.8	101.5	103.7	103.4	101.2	102.5	101.2	104.0
	Percent change over 1-month span .....	0	-.1	.2	1.2	2.1	-1.5	-2.0	-.7	.7	2.2	-.3	-.2	1.3	-1.3	2.8
	Percent change over 6-month span, AR .....	.6	4.7	3.8	-.4	-1.6	-.6	1.4	-.3	-.4	2.0	.8	5.0			
311	Fixed-weighted price index, gross domestic business product, 1987=100 .....	124.6	123.5			124.4			125.0			125.7			126.4	
	Percent change from previous quarter, AR .....	3.0	3.7			2.9			1.9			2.2			2.4	
Consumer Price Indexes for all urban consumers:																
320	All items, 1982-84=100, NSA .....	144.5	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8	146.2	146.7	147.2
	Percent change over 1-month span .....	-.2	-.4	.2	.3	.2	.1	.1	.3	.1	.3	.3	.2	0	.3	.3
	Percent change over 6-month span, AR .....	2.6	3.1	2.8	2.7	2.5	2.2	2.2	2.4	2.6	2.4	2.4	2.9			
323	All items less food and energy, 1982-84=100 .....	152.2	150.8	151.1	151.6	152.0	152.3	152.6	153.0	153.1	153.5	154.1	154.4	154.6	155.0	155.5
	Percent change over 1-month span .....	-.3	-.4	.2	.3	.3	.2	.2	.3	.1	.3	.4	.2	.1		

Series no.	Series title and timing classification	1993												1994		
		1993	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>8. PROFITS AND CASH FLOW</b>																
	Profits and profit margins:															
16 ♦	Corporate profits after tax, bil.\$, AR (L,L,L) .....	275.4	258.9			272.3				274.3					295.9	
18 ♦	Corporate profits after tax, bil. 1987\$, AR (L,L,L) .....	233.9	219.2			230.7				232.7					252.8	
22 ♦	Ratio, corporate domestic profits after tax to corporate domestic income, percent (L,L,L) .....	7.2	6.9			7.2				7.0					7.8	
81 ♦	Ratio, corporate domestic profits after tax with IVA and CCA <sub>adj</sub> to corporate domestic income, percent(U,L,L) .....	7.8	7.3			7.6				7.9					8.4	
26 ♦	Ratio, implicit price deflator to unit labor cost, all persons, nonfarm business sector, 1982=100 (L,L,L) .....	104.3	103.9			103.8				104.3					105.3	
35	Corporate net cash flow, bil. 1987\$, AR (L,L,L) .....	496.2	477.8			490.2				498.2					518.6	

<b>9. WAGES, LABOR COSTS, AND PRODUCTIVITY</b>																
345	Wages and compensation: Index of average hourly compensation, all employees, nonfarm business sector, 1982=100 .....	158.7	157.2			157.9				159.4					160.5	
	Percent change from previous quarter, AR .....	3.6	2.9			1.7				3.9					2.8	
346	Index of real average hourly compensation, all employees, nonfarm business sector, 1982=100 .....	106.0	106.0			105.6				106.1					106.1	
	Percent change from previous quarter, AR .....	.5	-.1			-1.4				2.0					-2	
53 ♦	Wages and salaries in mining, mfg., and construction, bil. 1987\$, AR (C,C,C) .....	592.5	581.7	578.8	596.3	596.0	592.8	594.7	595.2	596.9	596.9	598.8	600.8	602.1	604.3	P 604.2
63	Unit labor costs: Index of unit labor cost, all persons, business sector, 1982=100 (Lg,Lg) .....	136.8	136.4			137.3				137.4					136.1	
	Index of labor cost per unit of output, mfg., 1987=100 <sup>1</sup> .....	109.1	109.6	109.6	109.3	109.4	109.1	109.0	109.0	109.3	108.7	108.2	107.7	107.9	108.0	P 107.6
	Percent change from previous month, AR <sup>1</sup> .....	-3.6	-3.2	0	-3.2	1.1	-3.2	-1.1	0	3.4	-6.4	-5.4	-5.4	2.3	1.1	P -4.4
62 ♦	Percent change from previous month, AR, smoothed (Lg,Lg) <sup>1</sup> .....	-2.5	-3.6	-3.9	-4.0	-3.3	-2.9	-2.5	-1.8	-8	-9	-1.6	-2.5	-2.4	-1.9	P -1.9
370	Productivity: Index of output per hour, all persons, business sector, 1982=100 .....	117.6	116.6			116.6				117.6					119.6	
	Percent change over 1-quarter span, AR .....	1.8	-1.6			0				3.3					6.9	
	Percent change over 4-quarter span, AR .....	1.3	1.3			2.1										
358	Index of output per hour, all persons, nonfarm business sector, 1982=100 .....	115.7	114.8			114.7				115.8					117.5	

<b>10. PERSONAL INCOME AND CONSUMER ATTITUDES</b>																
52	Personal income: Personal income, bil. 1987\$, AR (C,C,C) .....	4,236.9	4,156.1	4,181.2	4,228.2	4,236.5	4,227.9	4,217.8	4,264.0	4,267.1	4,283.6	4,302.3	4,327.7	4,297.7	4,354.6	P 4,366.7
51 ♦	Personal income less transfer payments, bil. 1987\$, AR (C,C,C) .....	3,519.7	3,449.3	3,471.1	3,517.7	3,524.3	3,511.7	3,499.1	3,542.3	3,544.2	3,559.7	3,578.2	3,597.4	3,562.8	3,618.8	P 3,632.6
58	Indexes of consumer attitudes: Consumer sentiment, U. of Michigan, 1966:1=100, NSA (L,L,L) ⊗ <sup>2</sup> .....	82.8	86.6	85.9	85.6	80.3	81.5	77.0	77.3	77.9	82.7	81.2	88.2	94.3	93.2	91.5
83 ♦	Consumer expectations, U. of Michigan, 1966:1=100, NSA (L,L,L) ⊗ <sup>2</sup> .....	72.8	80.6	75.8	76.4	68.5	70.4	64.7	65.8	66.8	72.5	70.3	78.8	86.4	83.5	85.1
122	Consumer confidence, The Conference Board, 1985=100 (L,L,L)* .....	65.9	68.5	63.2	67.6	61.9	58.6	59.2	59.3	63.8	60.5	71.9	79.8	82.6	79.9	86.7
123 ♦	Consumer expectations, The Conference Board, 1985=100 (L,L,L)* .....	77.4	84.7	77.3	81.1	73.1	69.6	66.8	66.8	72.8	66.7	80.3	91.8	92.6	84.4	92.6

<b>11. SAVING</b>																
290	Gross saving, bil.\$, AR .....	780.2	762.0			766.7				774.3					817.8	
295	Business saving, bil.\$, AR .....	794.9	766.9			779.6				809.0					824.1	
292	Personal saving, bil.\$, AR .....	189.9	177.9			208.7				179.7					193.4	
298 ♦	Government surplus or deficit, bil.\$, AR .....	-224.6	-262.8			-221.5				-214.4					-199.7	
293 ♦	Personal saving rate, percent .....	4.0	3.9			4.4				3.8					4.0	

<b>12. MONEY, CREDIT, INTEREST RATES, AND STOCK PRICES</b>																
85 ♦	Money: Percent change in money supply M1 (L,L,L)* .....	.81	.23	.46	.66	1.97	.83	.95	.78	.89	.75	.81	.53	.45	.45	P .33
102 ♦	Percent change in money supply M2 (L,C,U) .....	.13	-.25	.02	.09	.68	.19	.14	.06	.22	.04	.31	.19	.18	-.10	P .43
105	Money supply M1, bil. 1987\$ (L,L,L) .....	848.9	822.4	824.2	827.1	841.4	847.7	854.4	859.1	866.1	869.8	874.1	876.8	880.7	882.6	P 882.8
106 ♦	Money supply M2, bil. 1987\$ (L,L,L) .....	2,774.0	2,775.4	2,769.3	2,763.0	2,775.3	2,778.5	2,778.0	2,773.1	2,777.1	2,769.6	2,769.6	2,768.5	2,773.4	2,764.3	P 2,767.5
107	Velocity of money: Ratio, gross domestic product to money supply M1 (C,C,C) .....	5.912	6.043			5.948				5.837					5.820	P 5.807
108	Ratio, personal income to money supply M2 (C,Lg,C) .....	1.528	1.502	1.513	1.534	1.528	1.523	1.518	1.536	1.535	1.545	1.550	1.557	1.541	1.570	P 1.573
93	Bank reserves: Free reserves, mil.\$, NSA (L,U,U) ‡ .....	901	1,059	1,122	1,023	875	730	845	600	662	804	1,012	981	1,375	1,070	P 912
94	Member bank borrowings from the Federal Reserve, mil.\$, NSA (L,Lg,U) .....	180	45	91	73	121	181	244	352	428	285	89	82	73	70	P 55
112 ♦	Credit flows: Net change in business loans, bil.\$, AR (L,L,L) .....	1.09	18.70	-72.79	45.11	64.40	12.50	58.39	2.05	-43	-22.73	-2.98	-34.44	88.24	-58.30	P -11.64
113 ♦	Net change in consumer installment credit, bil.\$, AR (L,L,L) .....	48.99	43.74	34.84	24.74	-22.80	25.62	60.44	60.47	72.84	84.56	83.28	90.25	76.51	42.52	P 42.52
111	Percent change in business and consumer credit outstanding, AR (L,L,L) .....															
110 ♦	Funds raised by private nonfinancial borrowers in credit markets, mil.\$, AR (L,L,L) .....	396,874	225,244			369,424				481,616					511,212	
14	Credit difficulties: Current liabilities of business failures, mil.\$, NSA (L,L,L) ‡ .....	48,504.3	2,630.0	P 4,343.0	P 2,973.4	P 6,634.4	P 2,675.4	P 5,496.4	P 7,382.0	P 3,062.6	P 2,222.1	P 2,991.0	P 2,552.3	P 1,736.4	P 2,141.3	
39	Percent of consumer installment loans delinquent 30 days and over (L,L,L) ⊗ <sup>3</sup> † .....	1.77	2.39	2.31	2.01	2.16	2.06	2.08	2.03	1.95	1.93	1.86	1.77			

NOTE.—The following current high values were reached before February 1993: May 1991—BCI-106 (2,865.8); July 1991—BCI-93 (343); August 1991—BCI-94 (764); December 1991—BCI-62 index (113.0) and BCI-62 smoothed (3.0); October 1992—BCI-111 (3.0); and December 1992—BCI-51 (3,689.9), BCI-52 (4,391.8), BCI-53 (659.1), BCI-62

change (13.8), BCI-83 (89.5), and BCI-123 (103.9).  
See page C-6 for other footnotes.

Series no.	Series title and timing classification	1993												1994		
		1993	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
<b>12. MONEY, CREDIT, INTEREST RATES, AND STOCK PRICES—Continued</b>																
66	Outstanding debt:															
	Consumer installment credit outstanding, mil.\$ (Lg,Lg) 0.	790,082	747,228	750,131	752,193	750,293	752,428	757,465	762,503	768,573	775,620	782,561	790,082	796,458	800,000	.....
72	Commercial and industrial loans outstanding, mil.\$ (Lg,Lg).	429,399	425,840	419,774	423,533	428,900	429,942	434,808	434,979	434,943	433,049	432,801	429,931	437,284	432,426	431,456
101	Commercial and industrial loans outstanding, mil. 1987\$ (Lg,Lg).	371,320	369,653	363,441	365,115	368,471	370,002	375,158	376,605	376,574	373,963	374,072	373,204	377,946	373,103	370,667
95	Ratio, consumer installment credit outstanding to personal income, percent (Lg,Lg,Lg).	14.13	14.24	14.18	14.02	13.94	14.00	14.12	14.04	14.13	14.16	14.20	14.24	14.48	14.29	.....
	Interest rates (percent, NSA):															
119	Federal funds rate (L,Lg,Lg)*	3.02	3.03	3.07	2.96	3.00	3.04	3.06	3.03	3.09	2.99	3.02	2.96	3.05	3.25	3.34
114	Discount rate on new 91-day Treasury bills (C,Lg,Lg)*	3.02	2.95	2.97	2.89	2.96	3.10	3.05	3.05	2.96	3.04	3.12	3.08	3.02	3.21	3.52
116	Yield on new high-grade corporate bonds (Lg,Lg,Lg)*	7.35	7.73	7.39	7.48	7.52	7.48	7.35	7.04	6.88	6.88	7.22	7.28	7.16	7.27	7.64
115	Yield on long-term Treasury bonds (C,Lg,Lg)*	6.46	6.89	6.65	6.64	6.68	6.55	6.34	6.18	5.94	5.90	6.25	6.27	6.24	6.44	6.90
117	Yield on municipal bonds, 20-bond average (U,Lg,Lg)*	5.60	5.87	5.64	5.76	5.73	5.63	5.57	5.45	5.29	5.25	5.47	5.35	5.31	5.40	5.91
118	Secondary market yields on FHA mortgages (Lg,Lg,Lg)	7.46	7.55	7.57	7.56	7.59	7.52	7.51	7.02	7.03	7.08	7.51	7.52	7.05	7.59	8.57
109	Average prime rate charged by banks (Lg,Lg,Lg)*	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.06
19	Index of stock prices, 500 common stocks, 1941-43=10, NSA (L,L,L)*	451.41	441.70	450.16	443.08	445.25	448.06	447.29	454.13	459.24	463.90	462.89	465.95	472.99	471.58	463.81
<b>13. NATIONAL DEFENSE</b>																
525	Defense Department prime contract awards, mil.\$	.....	9,579	11,628	10,231	9,317	10,169	9,656	11,785	11,359	.....	.....	.....	10,247	9,343	.....
548	Manufacturers' new orders, defense products, mil.\$	76,649	6,361	7,411	6,853	5,434	5,788	7,231	6,598	6,446	5,304	5,172	5,239	7,738	6,133	5,107
557	Index of industrial production, defense and space equipment, 1987=100.	74.8	77.9	76.8	76.9	75.6	74.9	74.6	74.0	73.7	72.7	72.5	71.5	70.9	69.8	69.1
570	Employment, defense products industries, thous.	950	992	982	975	964	954	943	933	929	922	912	899	890	884	.....
564	Federal Government purchases, national defense, bil.\$, AR	303.4	304.8	.....	.....	307.6	.....	.....	301.9	.....	.....	299.2	.....	.....	292.8	.....
<b>14. EXPORTS AND IMPORTS</b>																
602	Exports, excluding military aid shipments, mil.\$	464,980	36,928	38,894	38,479	38,930	37,639	37,109	38,050	38,885	40,092	40,236	42,234	39,306	37,899	.....
604	Exports of domestic agricultural products, mil.\$	41,807	3,424	3,357	3,498	3,470	3,537	3,405	3,350	3,540	3,565	3,458	3,777	3,497	3,118	.....
606	Exports of nonelectrical machinery, mil.\$	99,711	8,090	8,371	8,119	8,231	8,094	8,169	8,513	8,322	8,288	8,655	8,935	8,435	8,363	.....
612	General imports, mil.\$	580,511	44,832	49,347	48,660	47,306	49,998	47,534	48,097	49,506	50,990	49,914	49,801	49,475	50,252	.....
614	Imports of petroleum and petroleum products, mil.\$	49,926	4,387	4,813	4,958	4,342	4,651	4,149	3,745	3,759	3,888	3,613	3,406	2,951	3,895	.....
616	Imports of automobiles and parts, mil.\$	80,672	6,811	7,048	6,945	6,619	6,819	6,090	6,691	6,861	6,966	6,880	6,943	6,212	6,801	.....
618	Merchandise exports, adjusted, excluding military, mil.\$ <sup>1</sup>	456,766	111,480	.....	.....	113,067	.....	.....	111,935	.....	.....	120,284	.....	.....	.....	
620	Merchandise imports, adjusted, excluding military, mil.\$ <sup>1</sup>	589,244	140,805	.....	.....	147,465	.....	.....	147,907	.....	.....	153,067	.....	.....	.....	
622	Balance on merchandise trade, mil.\$ <sup>1</sup>	-132,478	-29,325	.....	.....	-34,398	.....	.....	-35,972	.....	.....	-32,783	.....	.....	.....	
<b>15. INTERNATIONAL COMPARISONS</b>																
	Industrial production indexes (1987=100):															
47	United States	110.9	109.9	110.0	110.5	110.0	110.4	110.9	111.1	111.3	111.9	112.8	114.0	114.4	115.0	115.6
721	OECD, European countries <sup>2</sup>	107	107	107	105	107	106	107	107	107	108	108	107	.....	.....	.....
728	Japan	111.7	113.5	116.5	113.4	110.6	112.5	111.9	110.9	113.3	107.4	109.8	108.0	108.1	108.1	.....
725	Federal Republic of Germany	107	106	107	106	107	107	106	108	108	107	107	107	105	107	.....
726	France	107	108	107	106	106	106	107	107	107	106	107	106	106	106	.....
722	United Kingdom	105	104	103	104	105	104	106	106	106	106	107	106	107	106	.....
727	Italy	104.4	106.8	105.2	100.7	105.1	102.8	105.1	103.4	103.1	105.3	107.9	102.5	.....	.....	.....
723	Canada	103.2	101.7	103.2	102.2	102.0	103.7	102.7	103.5	104.4	104.4	105.1	104.6	105.1	104.5	.....
	Consumer price indexes (1982-84=100):															
320	United States, NSA	144.5	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8	146.2	146.7	147.2
	Percent change over 6-month span, AR	2.6	3.1	2.8	2.7	2.5	2.2	2.2	2.4	2.6	2.4	2.4	2.9	.....	.....	.....
738	Japan, NSA	118.5	117.4	117.7	118.5	118.6	118.5	118.8	119.2	119.3	119.2	118.5	118.6	118.7	118.7	.....
	Percent change over 6-month span, AR	.....	1.0	1.0	2.6	2.7	2.0	1.0	1.0	.....	.....	.....	.....	.....	.....	.....
735	Federal Republic of Germany, NSA	125.6	124.3	124.7	125.1	125.5	125.7	126.0	126.0	126.1	126.4	126.7	126.9	128.0	128.5	128.7
	Percent change over 6-month span, AR	3.5	4.5	4.6	3.8	3.2	2.9	2.7	2.9	2.7	2.9	3.4	3.5	.....	.....	.....
736	France, NSA	143.5	142.4	143.1	143.2	143.5	143.4	143.5	143.5	144.0	144.3	144.4	144.3	144.5	144.9	145.2
	Percent change over 6-month span, AR	1.9	2.7	2.6	2.1	1.5	1.3	1.5	1.7	1.8	1.5	1.8	1.7	.....	.....	.....
732	United Kingdom, NSA	165.3	163.1	163.7	165.2	165.8	165.7	165.3	166.0	166.7	166.6	166.4	166.7	166.0	167.0	167.4
	Percent change over 6-month span, AR	1.9	.....	.....	2.7	2.3	2.3	2.3	2.0	2.6	2.4	2.4	2.2	.....	.....	.....
737	Italy, NSA	186.4	183.6	184.0	184.7	185.4	186.4	187.1	187.2	187.5	188.6	189.5	189.5	189.5	190.6	191.4
	Percent change over 6-month span, AR	4.2	3.8	4.1	4.6	5.1	5.0	4.7	4.5	3.8	3.8	3.4	3.5	.....	.....	.....
733	Canada, NSA	147.9	147.4	147.3	147.3	147.6	147.6	148.0	148.1	148.2	148.4	149.1	148.8	148.8	147.7	147.6
	Percent change over 6-month span, AR	1.1	1.1	.....	1.0	1.4	2.1	1.9	2.2	2.6	1.5	.....	.....	.....	.....	.....
	Stock price indexes (1967=100, NSA):															
19	United States*	491.0	480.5	489.7	482.0	484.3	487.4	486.6	494.0	499.6	504.6	503.5	506.9	514.5	513.0	504.5
748	Japan*	1,380.4	1,171.5	1,233.8	1,409.7	1,471.1	1,462.1	1,468.4	1,509.9	1,504.5	1,489.2	1,380.9	1,306.9	1,374.5	1,444.0	1,467.7
745	Federal Republic of Germany*	312.2	291.9	296.8	293.6	286.1	293.3	311.6	325.3	322.8	337.9	345.9	362.9	374.1	372.7	374.0
746	France*	969.7	908.6	945.8	938.8	902.3	907.8	954.3	1,021.0	1,006.6	1,047.2	1,023.6	1,111.7	1,146.0	1,141.6	1,096.0
742	United Kingdom*	1,373.6	1,324.5	1,351.0	1,324.5	1,324.5	1,339.0	1,323.9	1,404.6	1,412.4	1,438.9	1,429.9	1,507.5	1,582.8	1,582.2	1,526.4
747	Italy*	575.2	528.2	534.4	544.0	575.4	559.7	579.9	634.6	633.2	617.1	575.1	622.9	646.5	699.6	696.5
743	Canada*	441.1	390.0	407.1	428.2	437.4	448.2	448.3	467.5	450.9	480.9	472.3	488.3	514.7	499.9	489.2
	Exchange rates:															
750	Exchange value of U.S. dollar, index: March 1973=100, NSA <sup>3</sup> .	93.18	93.82	93.65	90.62	90.24	91.81	94.59	94.32	92.07	93.29	95.47	95.73	96.54	95.79	94.35
	Foreign currency per U.S. dollar (NSA):															
758	Japan (yen)*	111.08	120.76	117.02	112.41	110.34	107.41	107.69	103.77	105.57	107.02	107.88	109.91	111.44	106.30	105.10
755	Federal Republic of Germany (d. mark)*	1.6545	1.6414	1.6466	1.5964	1.6071	1.6547	1.7157	1.6944	1.6219	1.6405	1.7005	1.7105	1.7426	1.7355	1.6909
756	France (franc)*	5.6689	5.5594	5.5944	5.3984	5.4180	5.5700	5.8464	5.9298	5.6724	5.7541	5.9069	5.8477	5.9207	5.8955	5.7647
752	United Kingdom (pound)*	.6662	.6947	.6841	.6474	.6461	.6630	.6687	.6705	.6558	.6656	.6753	.6706	.6701	.6760	.6703
757	Italy (lira)*	1,573.41	1,550.43	1,591.35	1,536.14	1,475.66	1,505.05	1,586.02								

## FOOTNOTES FOR PAGES C-1 THROUGH C-5

a	Anticipated.	NSA	Not seasonally adjusted.
AR	Annual rate.	p	Preliminary.
c	Corrected.	r	Revised.
©	Copyrighted.	♦	Graph included for this series.
e	Estimated.	§	Major revision—see notes.
*	Later data listed in notes.	◇	End of period.

L,C,Lg,U Cyclical indicator series are classified as L (leading), C (coincident), Lg (lagging), or U (unclassified) at reference cycle peaks, troughs, and overall. Series classifications are shown in parentheses following the series titles.

‡ Cyclical indicator series denoted by ‡ are inverted (i.e., the sign is reversed) for cyclical analysis calculations, including classifications, contributions to composite indexes, and current high values.

† Cyclical indicator series denoted by † are smoothed by an autoregressive-moving-average filter developed by Statistics Canada.

For information on composite indexes and other concepts used in this section, see "Business Cycle Indicators: Upcoming Revision of the Composite Indexes" in the October 1993 SURVEY OF CURRENT BUSINESS and "The Composite Index of Coincident Indicators and Alternative Coincident Indexes" in the June 1992 SURVEY.

References to series in this section use the prefix "BCI-" followed by the series number. Unless otherwise noted, series are seasonally adjusted.

Percent change data are centered within the spans: 1-month changes are placed in the ending month, 3-month changes are placed in the 3d month, 6-month changes are placed in the 4th month, 1-quarter changes are placed in the ending quarter, and 4-quarter changes are placed in the 3d quarter.

Diffusion indexes are defined as the percent of components rising plus one-half of the percent of components unchanged. Diffusion index data are centered within the spans: 1-month indexes are placed in the ending month and 6-month indexes are placed in the 4th month.

High values reached by cyclical indicators in the expansion following the last reference cycle trough (March 1991) are shown in boldface type; high values reached prior to the period shown in the table are listed at the bottom of each page. For inverted series, low values are indicated as highs.

Sources for series in this section are shown on pages C-30 and C-31.

### Page C-1

\* Preliminary April 1994 values: BCI-32 = 57.6, BCI-19 = 447.23, and BCI-109 = 6.34.

1. Data include initial claims made under the July 1992 Emergency Unemployment Compensation amendments. Data exclude Puerto Rico, which is included in figures published by the source agency.

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3. Excludes BCI-57, for which data are not available.

4. Excludes BCI-77 and BCI-95, for which data are not available.

5. Data beginning January 1994 are based on the revised Current Population Survey and are not directly comparable with data for earlier periods.

6. The wages and salaries portion of this series has been adjusted to smooth yearend 1992 bonus payments that are in the revised national income and product accounts data. The bonus payments were too large to be adequately dealt with by the autoregressive-moving-average filter used to smooth this series.

### Page C-2

\* Preliminary April 1994 values: BCI-32 = 57.6; anticipated 2d quarter 1994 values: BCI-61 = 624.99 and BCI-100 = 601.46.

1. See footnote 5 for page C-1.

2. Data include initial claims made under the July 1992 Emergency Unemployment Compensation amendments. Data exclude Puerto Rico, which is included in figures published by the source agency.

3. Data exclude Puerto Rico, which is included in figures published by the source agency.

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### Page C-3

\* Preliminary April 1994 value: BCI-23 = 280.9.

1. Copyrighted. This series may not be reproduced without written permission from Knight-Ridder Financial Publishing, 30 South Wacker Drive, Suite 1820, Chicago, IL 60606.

### Page C-4

\* Preliminary April 1994 values: BCI-122 = 91.7, BCI-123 = 95.6, and BCI-85 = 0.12.

1. See footnote 6 for page C-1.

2. Copyrighted. This series may not be reproduced without written permission from the University of Michigan, Survey Research Center, P.O. Box 1248, Ann Arbor, MI 48106-1248.

3. Copyrighted. This series may not be reproduced without written permission from the American Bankers Association, 1120 Connecticut Avenue, NW, Washington, DC 20036.

### Page C-5

\* Preliminary April 1994 values: BCI-119 = 3.55, BCI-114 = 3.70, BCI-116 = 7.94, BCI-115 = 7.28, BCI-117 = 6.25, BCI-109 = 6.34, BCI-19 (1941-43=10) = 447.23, BCI-19 (1967=100) = 486.5, BCI-748 = 1,452.0, BCI-745 = 388.2, BCI-746 = 1,071.4, BCI-742 = 1,501.9, BCI-747 = 802.5, BCI-743 = 482.2, BCI-750 = 94.77, BCI-758 = 103.80, BCI-755 = 1.7069, BCI-756 = 5.8433, BCI-752 = 0.6777, BCI-757 = 1,633.34, and BCI-753 = 1.3844.

1. Balance of payments basis: Excludes transfers under military grants and Department of Defense sales contracts (exports) and Department of Defense purchases (imports).

2. Organisation for Economic Co-operation and Development.

3. This index is the weighted-average exchange value of the U.S. dollar against the currencies of the other G-10 countries plus Switzerland. Each country is weighted by its 1972-76 global trade. For a description of this index, see the August 1978 *Federal Reserve Bulletin* (p. 700).

4. This index is compiled by the Center for International Business Cycle Research (CIBCR), Graduate School of Business, Columbia University, New York, NY 10027.

## Notes for Pages C-7 Through C-27

The following notes explain general features of the charts that appear in this section:

- Business cycle peaks (P) and troughs (T), as designated by the National Bureau of Economic Research, Inc., are indicated at the top of each chart. The shaded areas represent recessions.

- For each series classified as a cyclical indicator, the timing classifications at peaks, at troughs, and overall are shown in a box adjacent to the title. (L = leading, C = coincident, Lg = lagging, U = unclassified.) A complete list of series titles and sources is shown on pages C-30 through C-32.

- *Arithmetic scales* are designated "Scale A." On the same arithmetic scale, equal vertical distances represent equal differences in data. (For example, the vertical distance from 10 to 15 is the same as the distance from 100 to 105.)

- *Logarithmic (log) scales* are designated L-1, L-2, or L-3 to indicate their relative size. On log scales of the same size, equal vertical distances represent equal percentage changes. (For

example, the vertical distance from 10 to 15 is the same as the distance from 100 to 150.) Compared with an L-1 scale, the same percentage change covers half the distance on an L-2 scale and one-third the distance on an L-3 scale.

- Data are monthly unless otherwise indicated. Quarterly data are indicated by a "Q" following the series title.

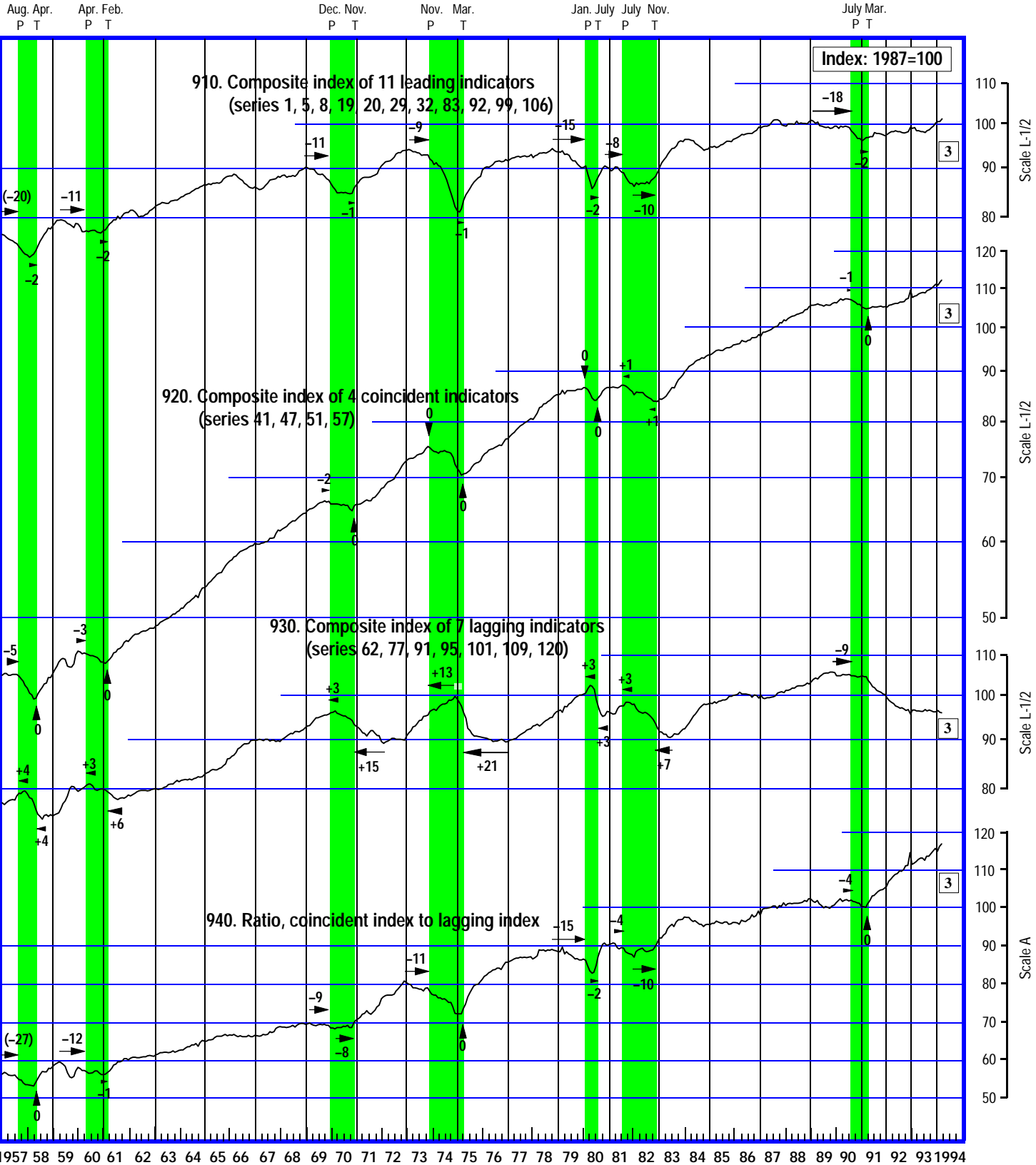
- Some series include a centered moving average, which is shown as a heavy line superimposed on the actual monthly data.

- Parallel lines across a plotted series indicate a missing data value, change in definition, or other significant break in continuity.

- The box near the end of each plotted series indicates the latest data month (Arabic numeral) or quarter (Roman numeral) shown or, for series computed over a span of time (diffusion indexes and rates of change), the latest data period used in computing the series.

# CYCLICAL INDICATORS

## Composite Indexes

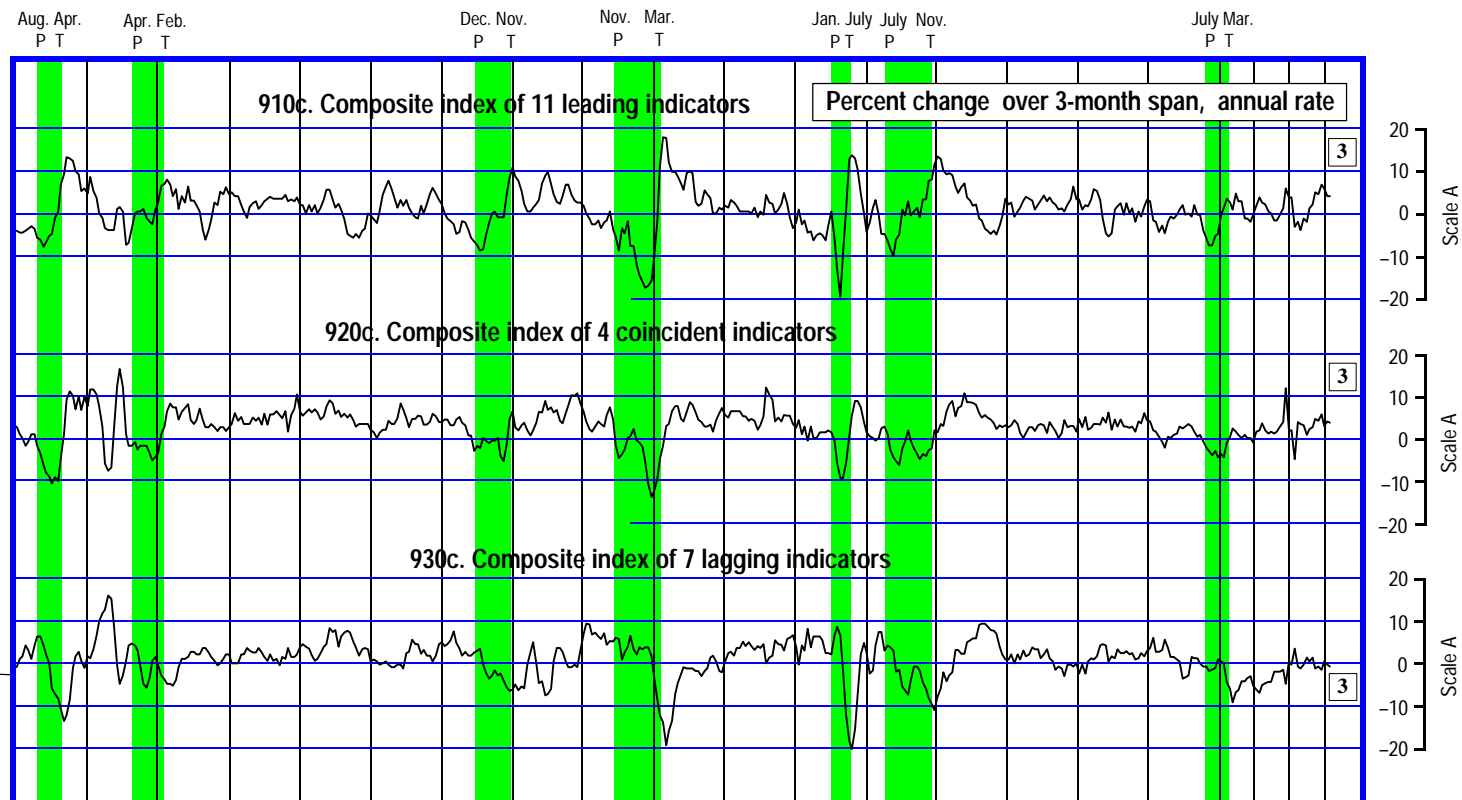


NOTE.—The numbers and arrows indicate length of leads (-) and lags (+) in months from business cycle turning dates. Current data for these series are shown on page C-1.

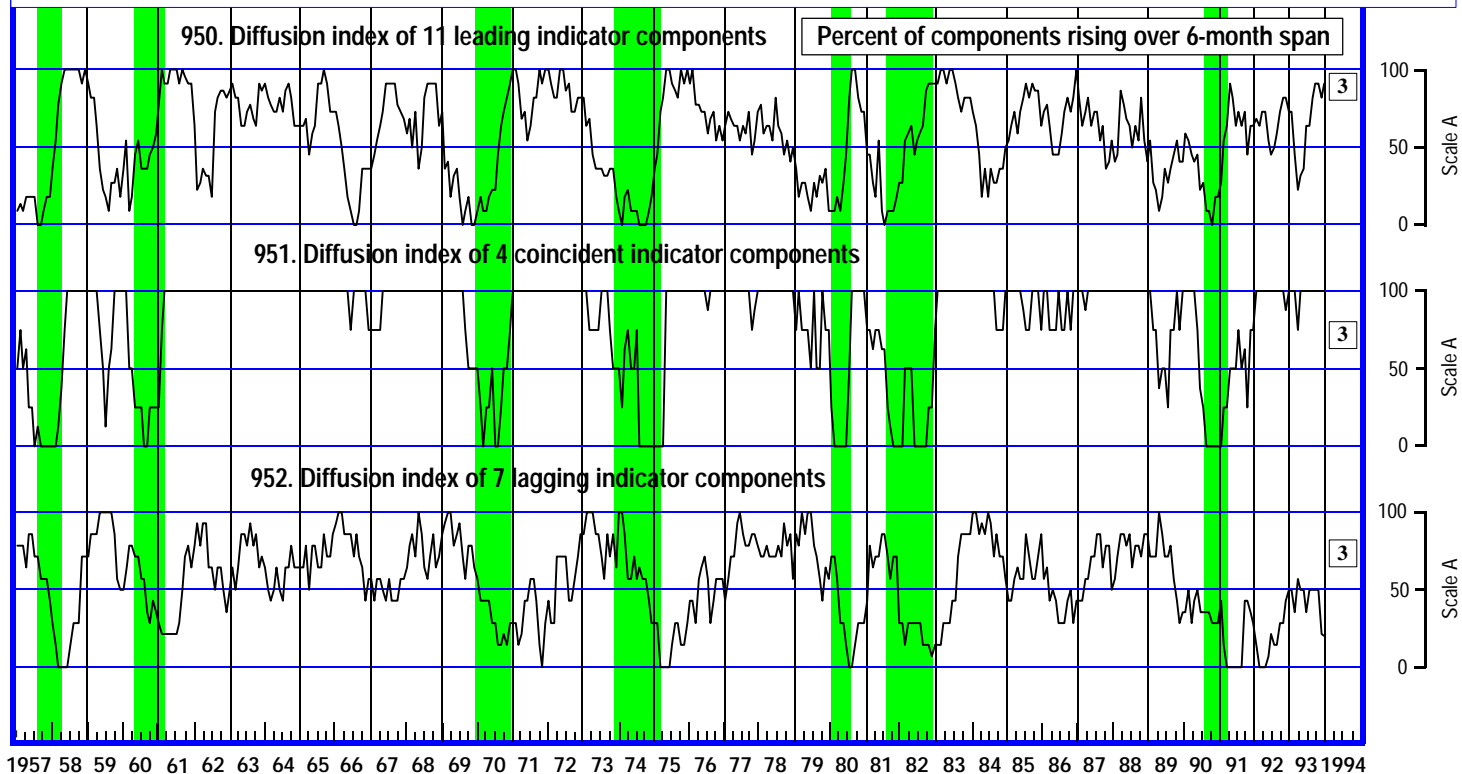


# CYCLICAL INDICATORS

## Composite Indexes: Rates of Change



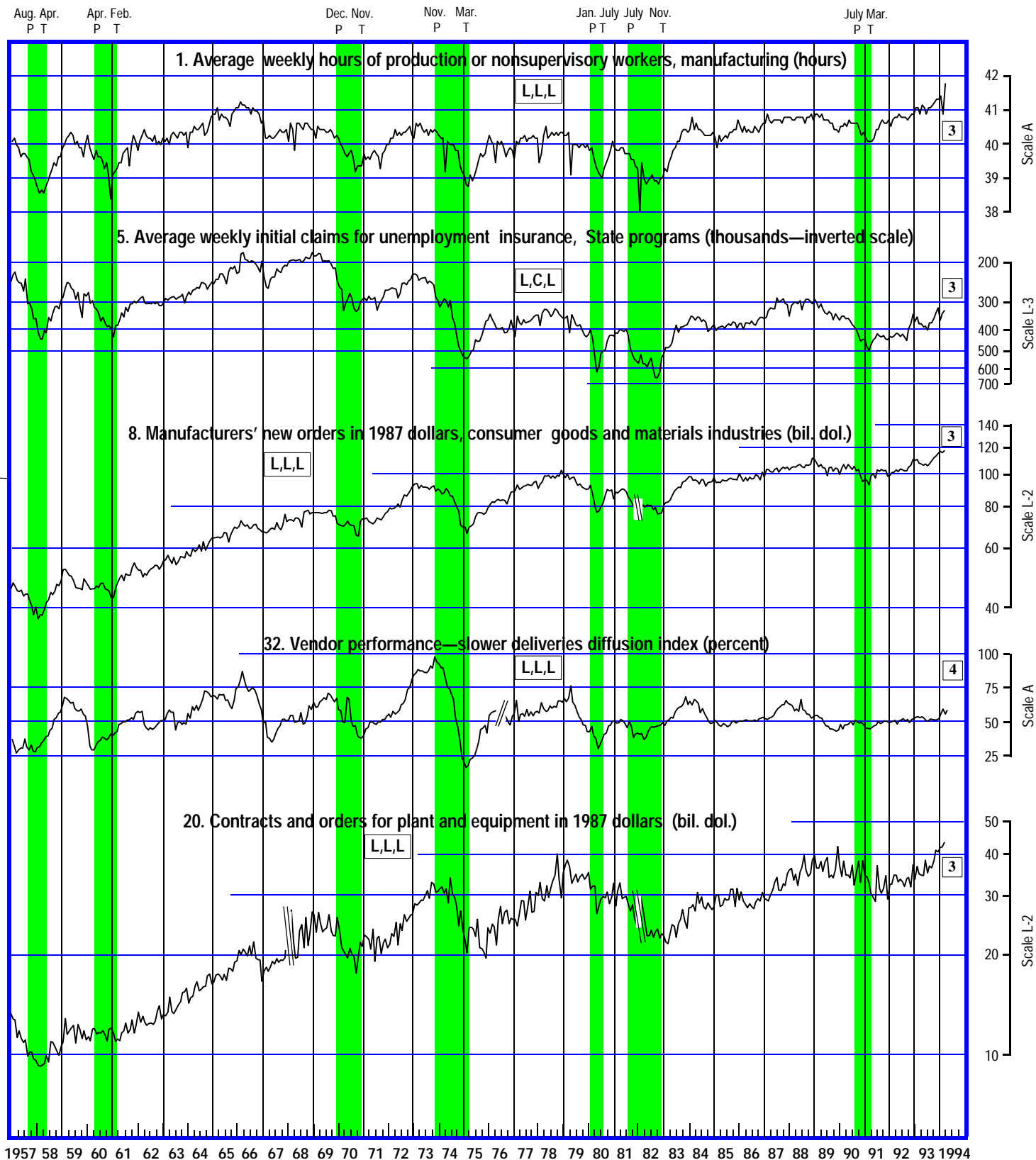
## Composite Indexes: Diffusion



NOTE.—Current data for these series are shown on page C-1.

# CYCLICAL INDICATORS

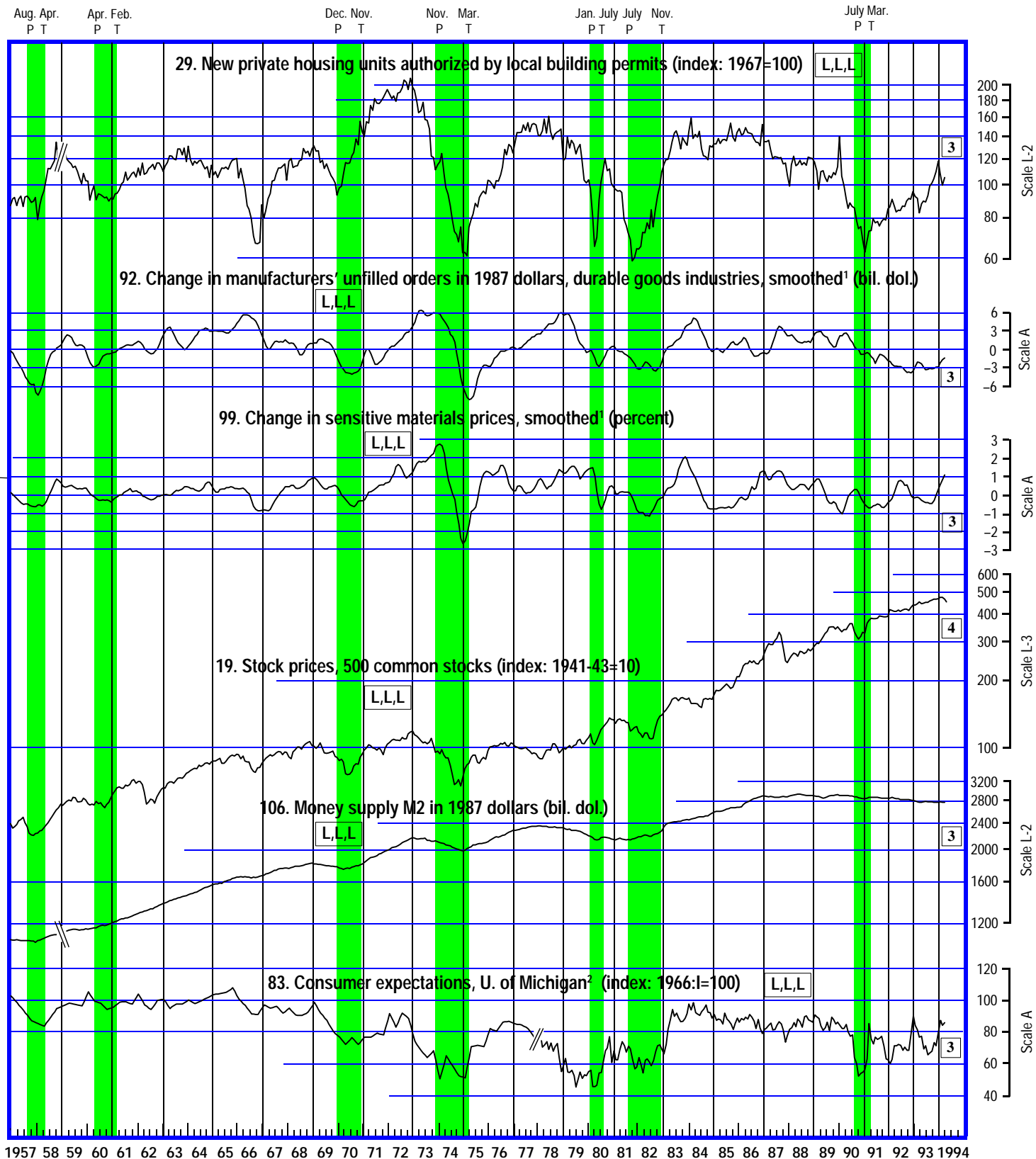
## Composite Indexes: Leading Index Components



NOTE.—Current data for these series are shown on page C-1.

**CYCLICAL INDICATORS**

**Composite Indexes: Leading Index Components—Continued**



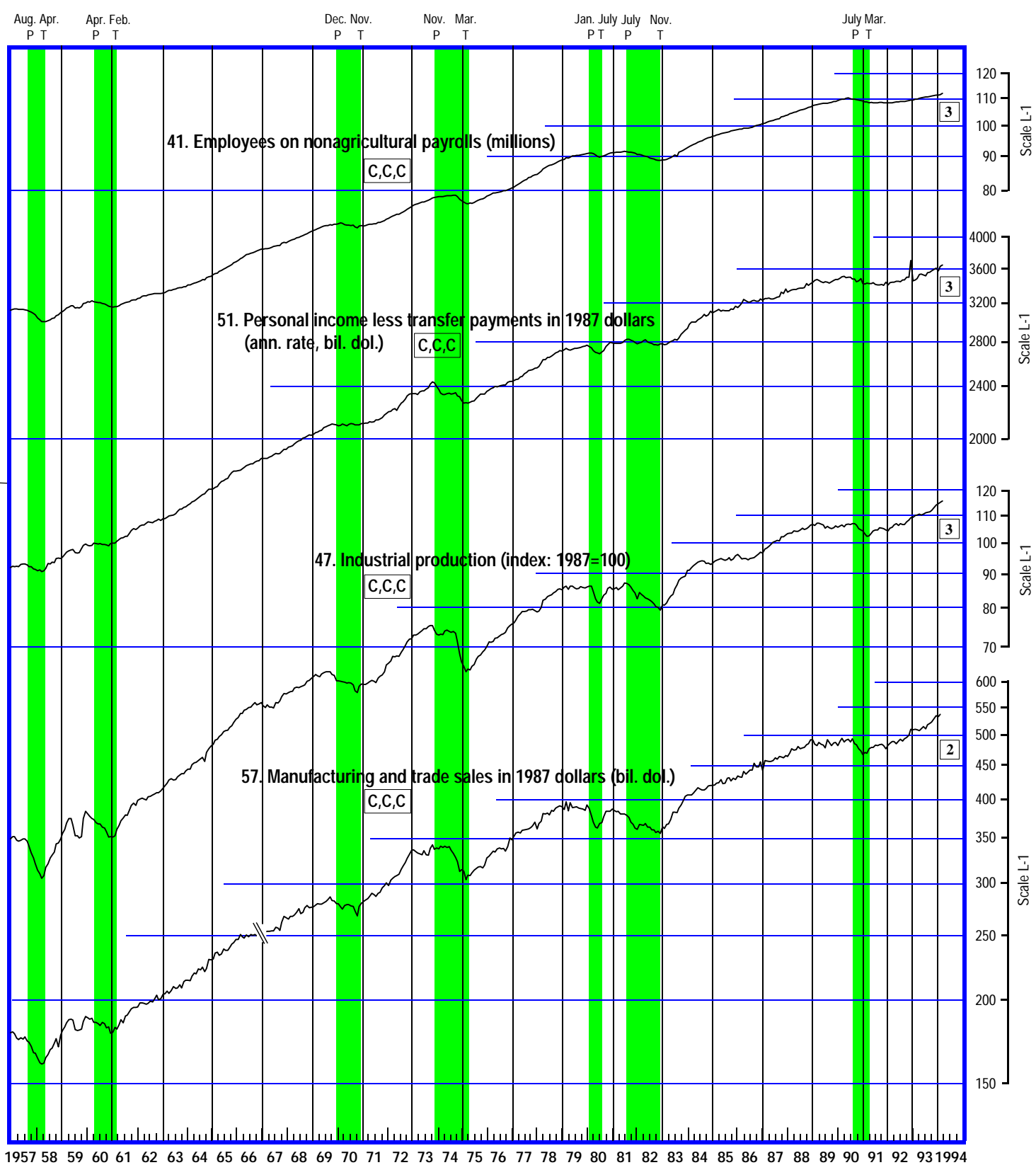
1. This series is smoothed by an autoregressive-moving-average filter developed by Statistics Canada.

NOTE.—Current data for these series are shown on page C-1.

2. This is a copyrighted series used by permission; it may not be reproduced without written permission from the University of Michigan, Survey Research Center.

# CYCLICAL INDICATORS

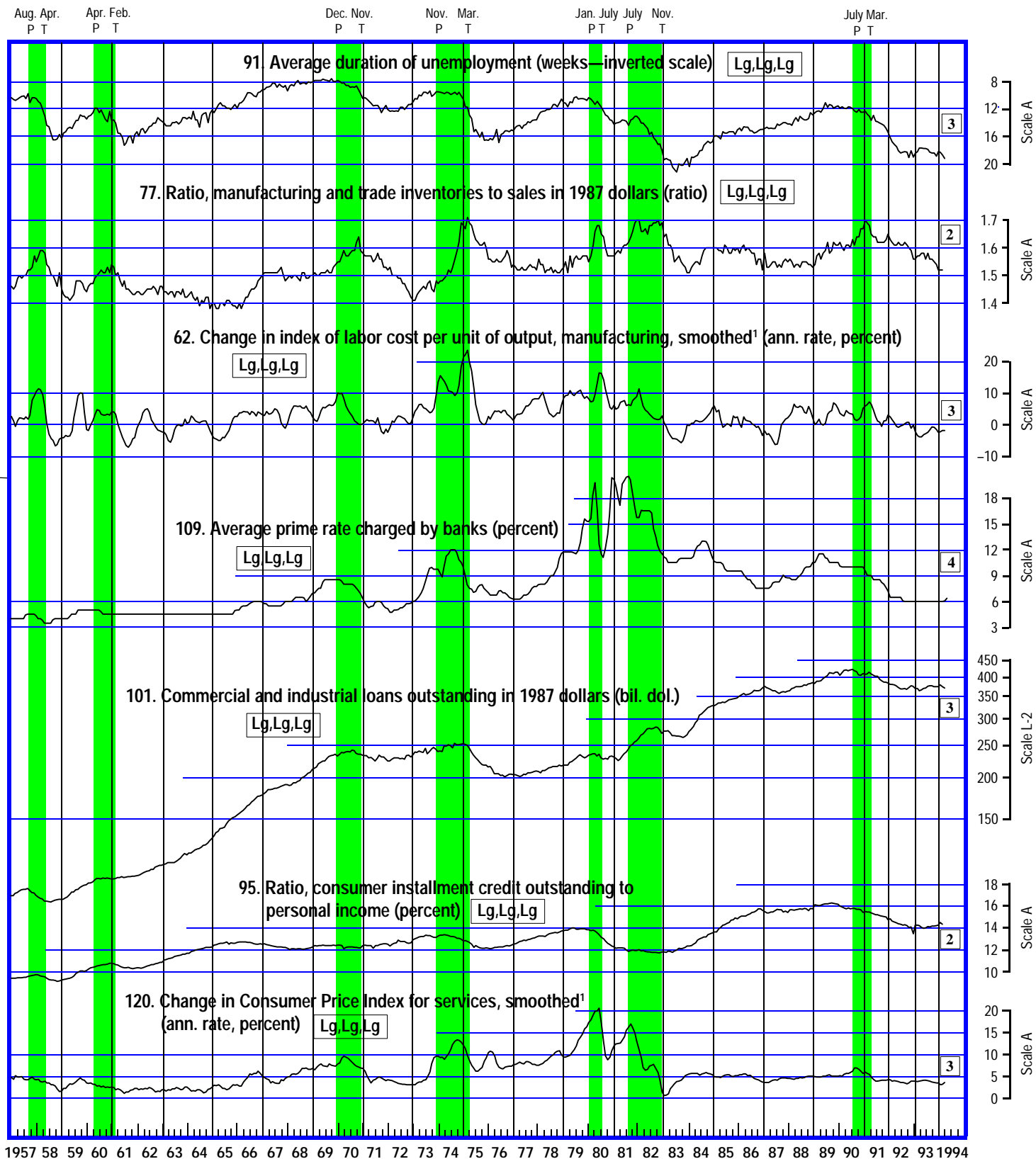
## Composite Indexes: Coincident Index Components



NOTE.—Current data for these series are shown on page C-1.

# CYCLICAL INDICATORS

## Composite Indexes: Lagging Index Components

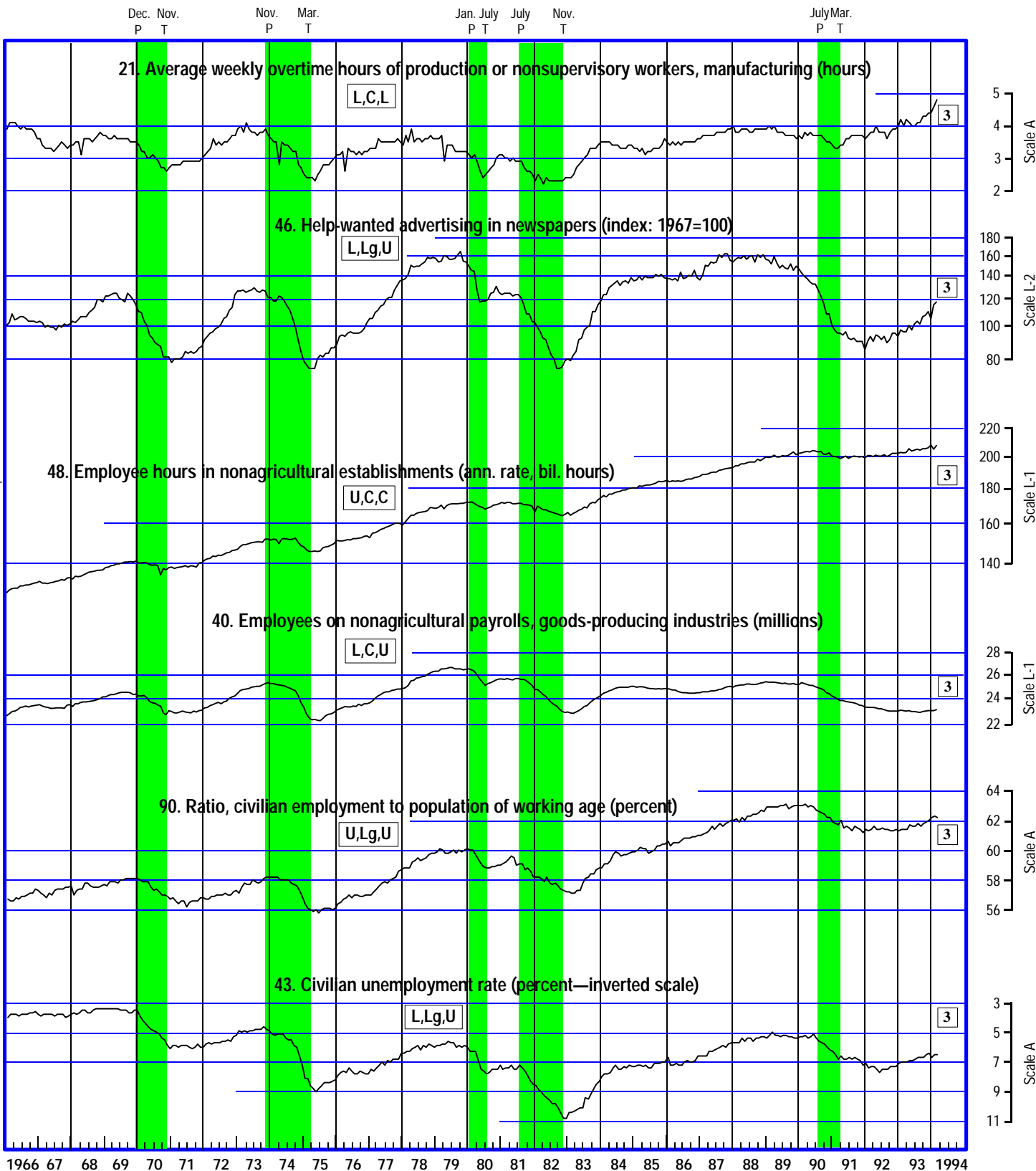


1. This series is smoothed by an autoregressive-moving-average filter developed by Statistics Canada.

NOTE.—Current data for these series are shown on page C-1.

# CYCLICAL INDICATORS

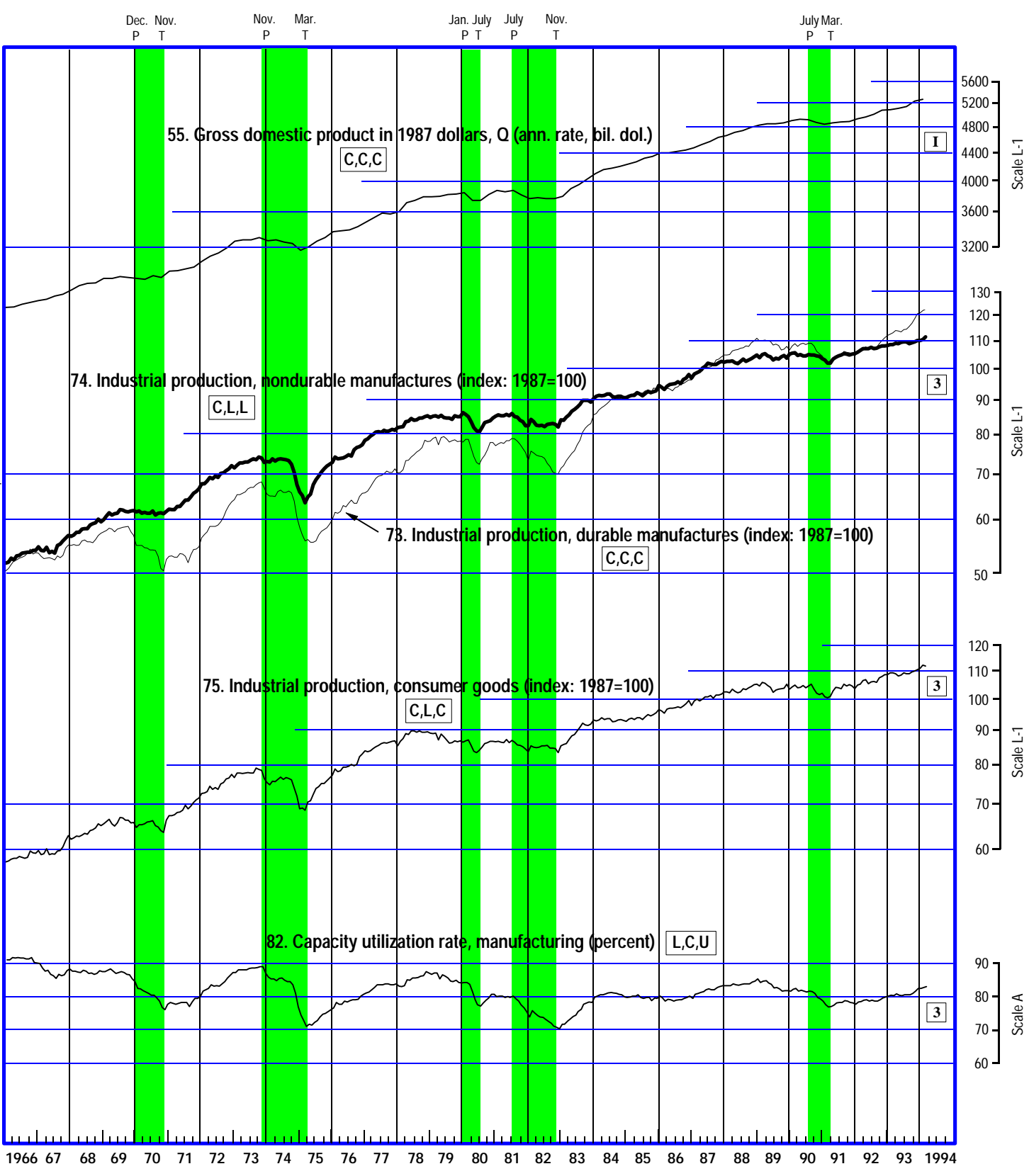
## Employment and Unemployment



NOTE.—Current data for these series are shown on page C-2.

# CYCLICAL INDICATORS

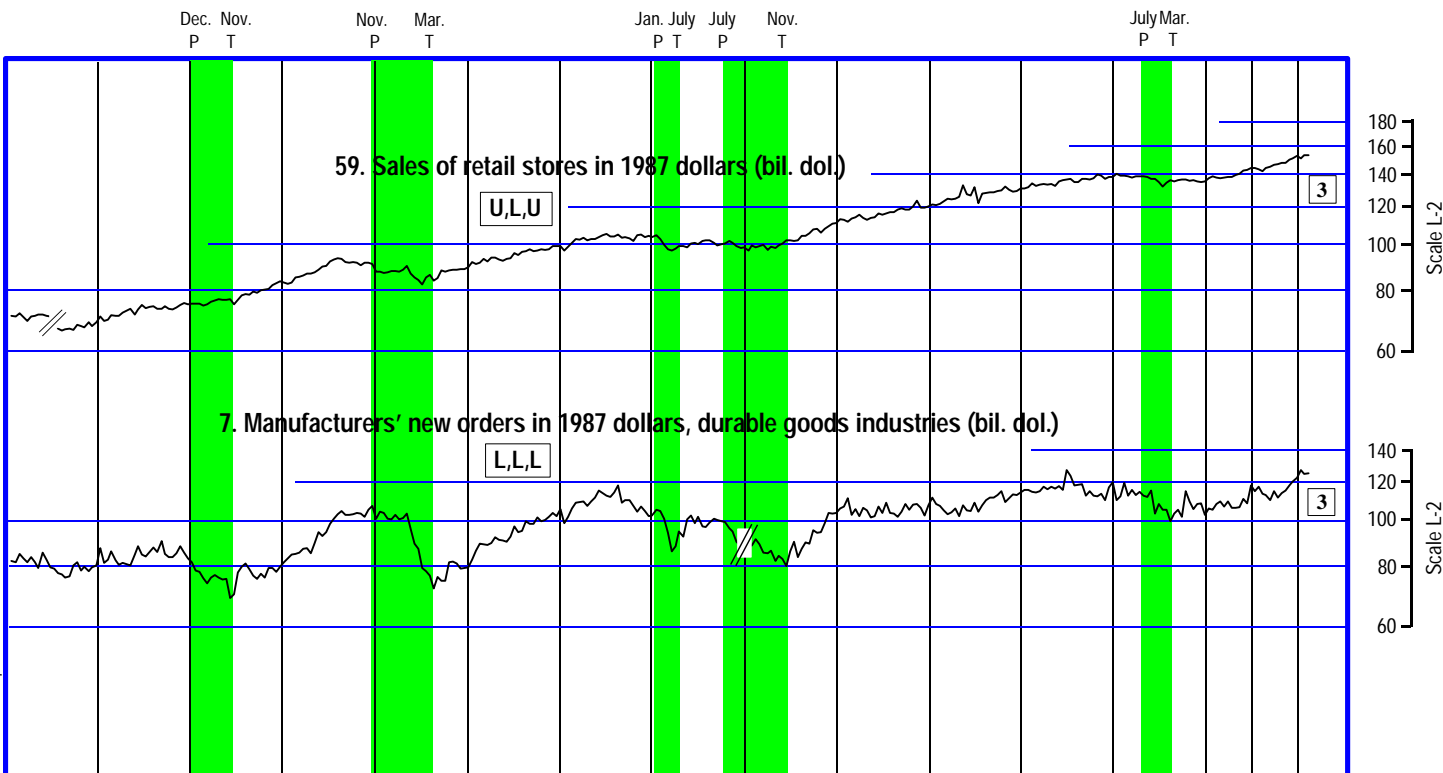
## Output, Production, and Capacity Utilization



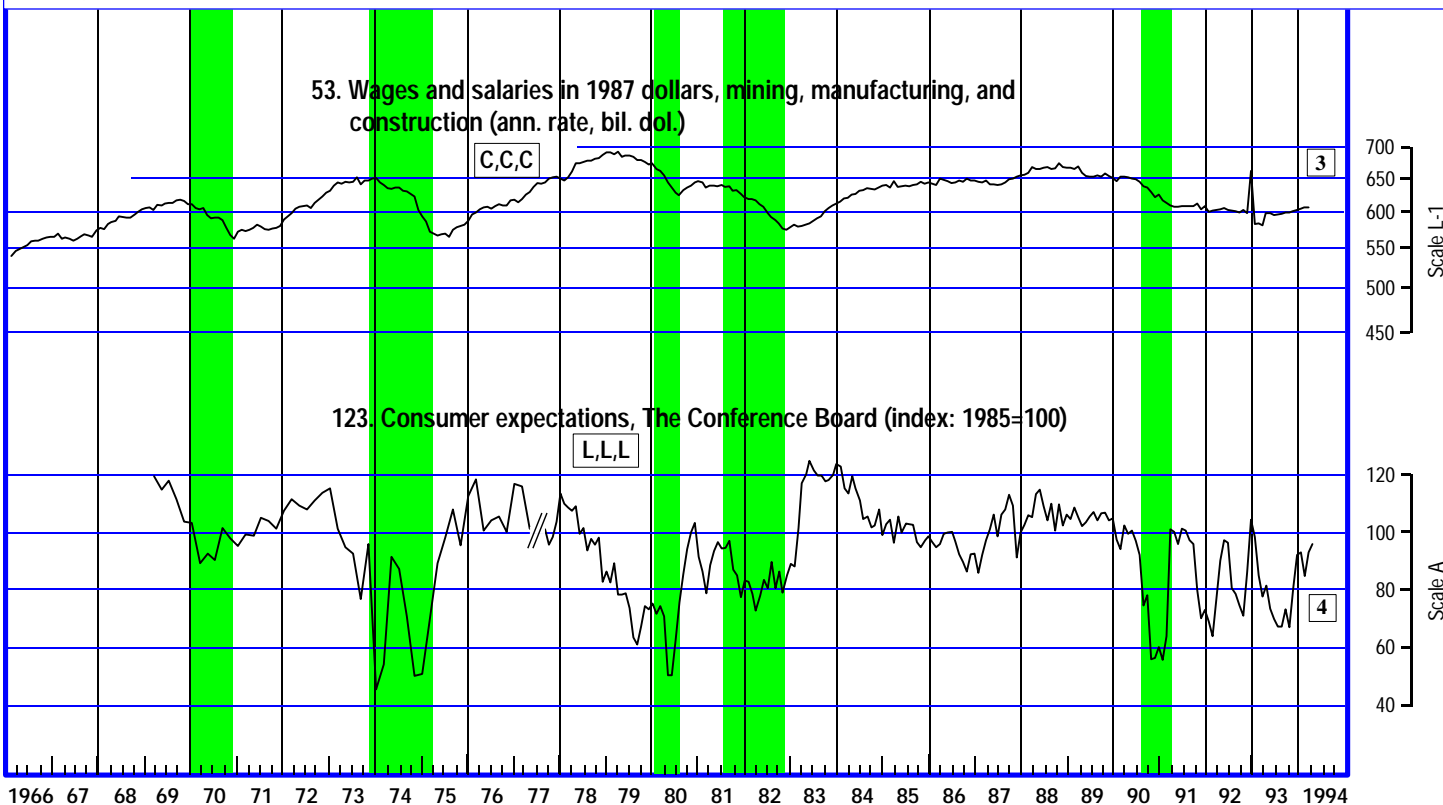
NOTE.—Current data for these series are shown on page C-2.

CYCLICAL INDICATORS

Sales and Orders



Wages and Consumer Attitudes

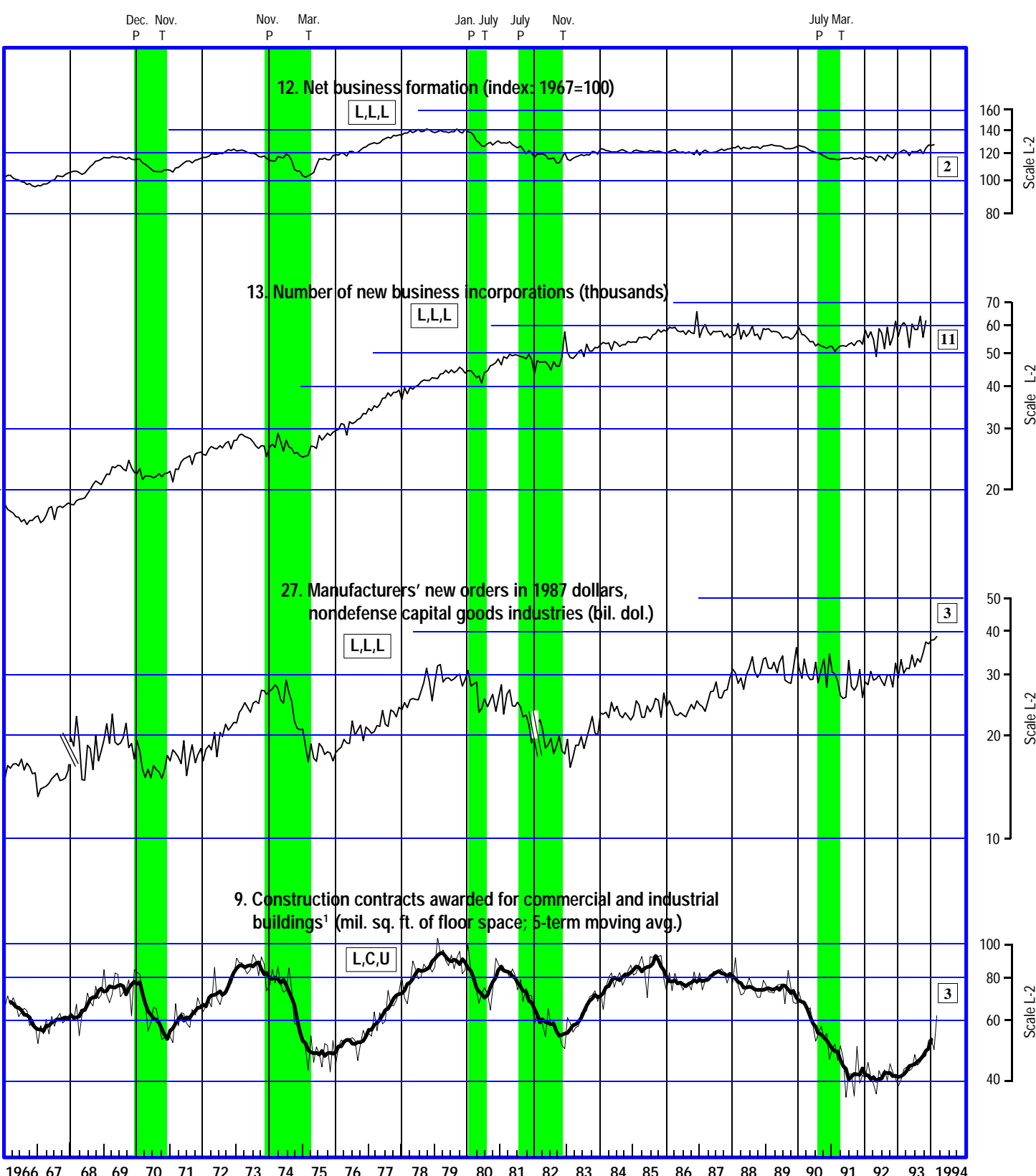


NOTE.—Current data for these series are shown on pages C-2 and C-4.



# CYCLICAL INDICATORS

## Fixed Capital Investment

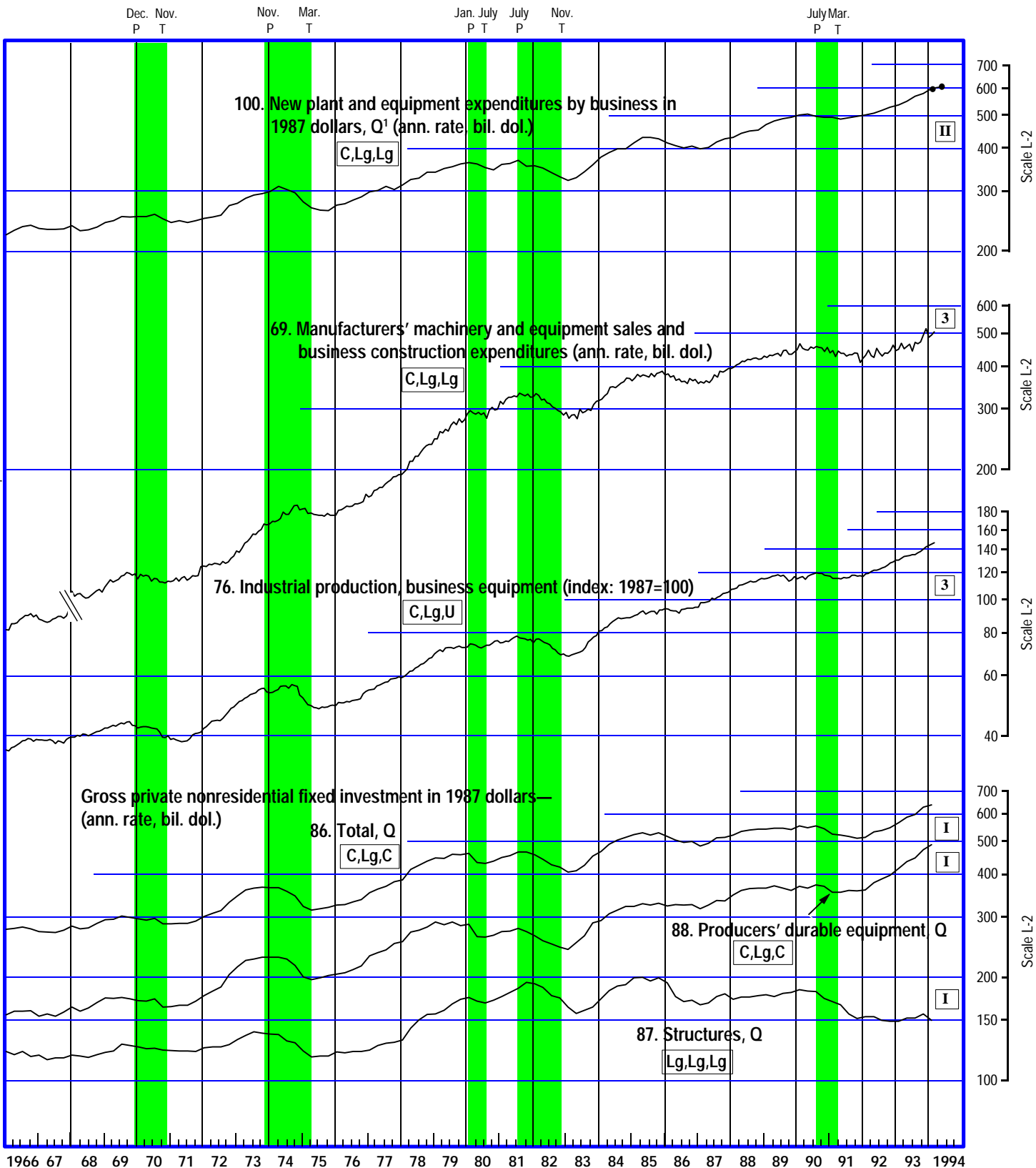


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NOTE.—Current data for these series are shown on page C-2.

CYCLICAL INDICATORS

Fixed Capital Investment—Continued

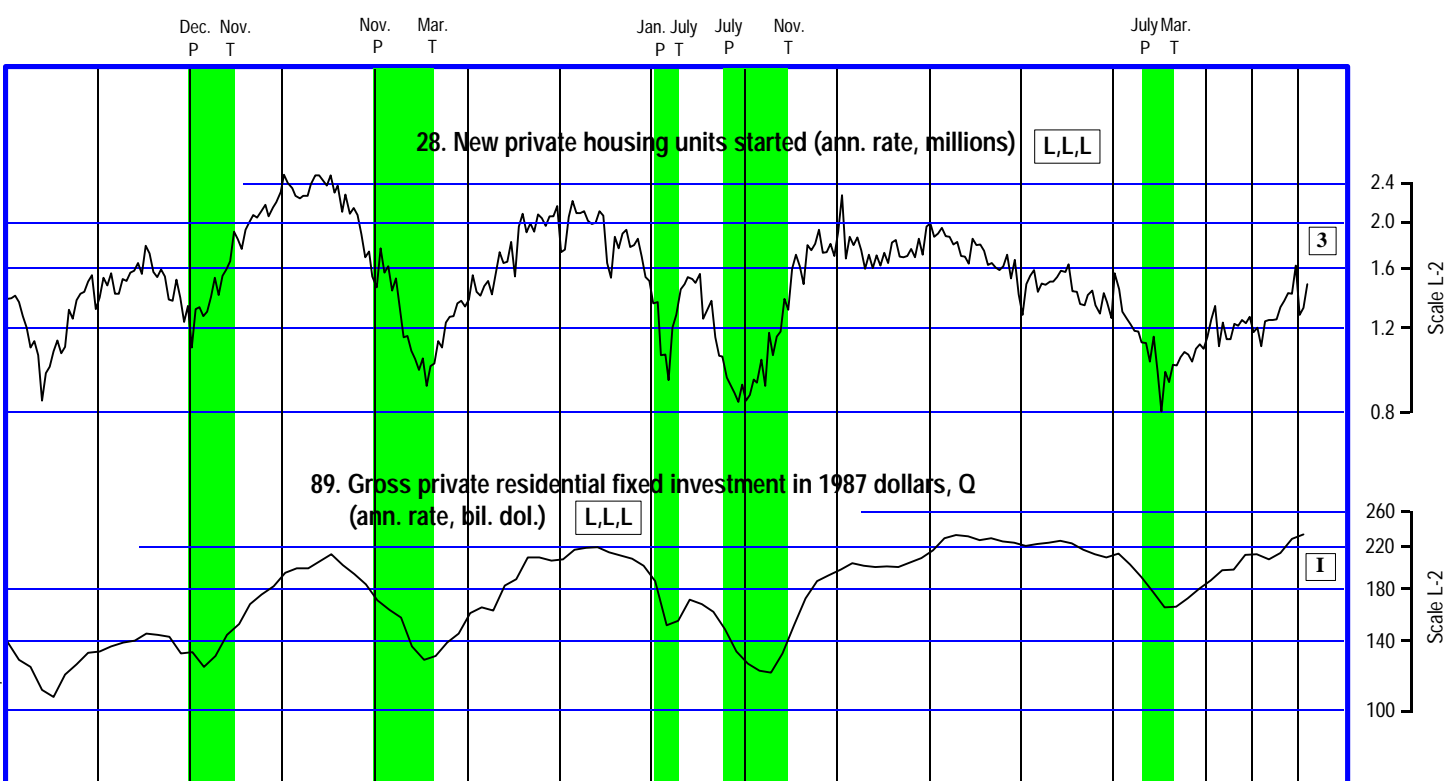


1. Dotted line represents anticipated expenditures.

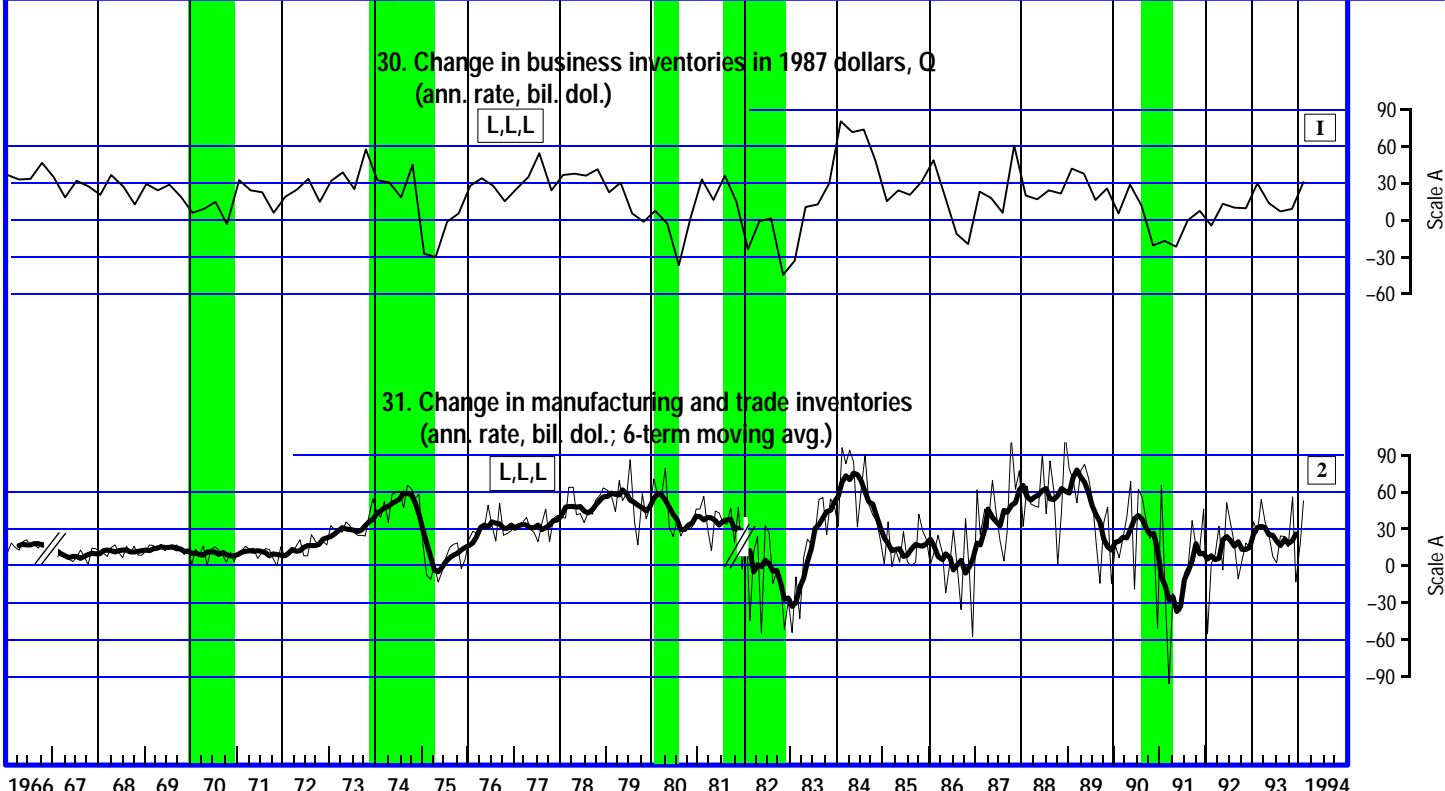
NOTE.—Current data for these series are shown on pages C-2 and C-3.

# CYCLICAL INDICATORS

## Fixed Capital Investment—Continued



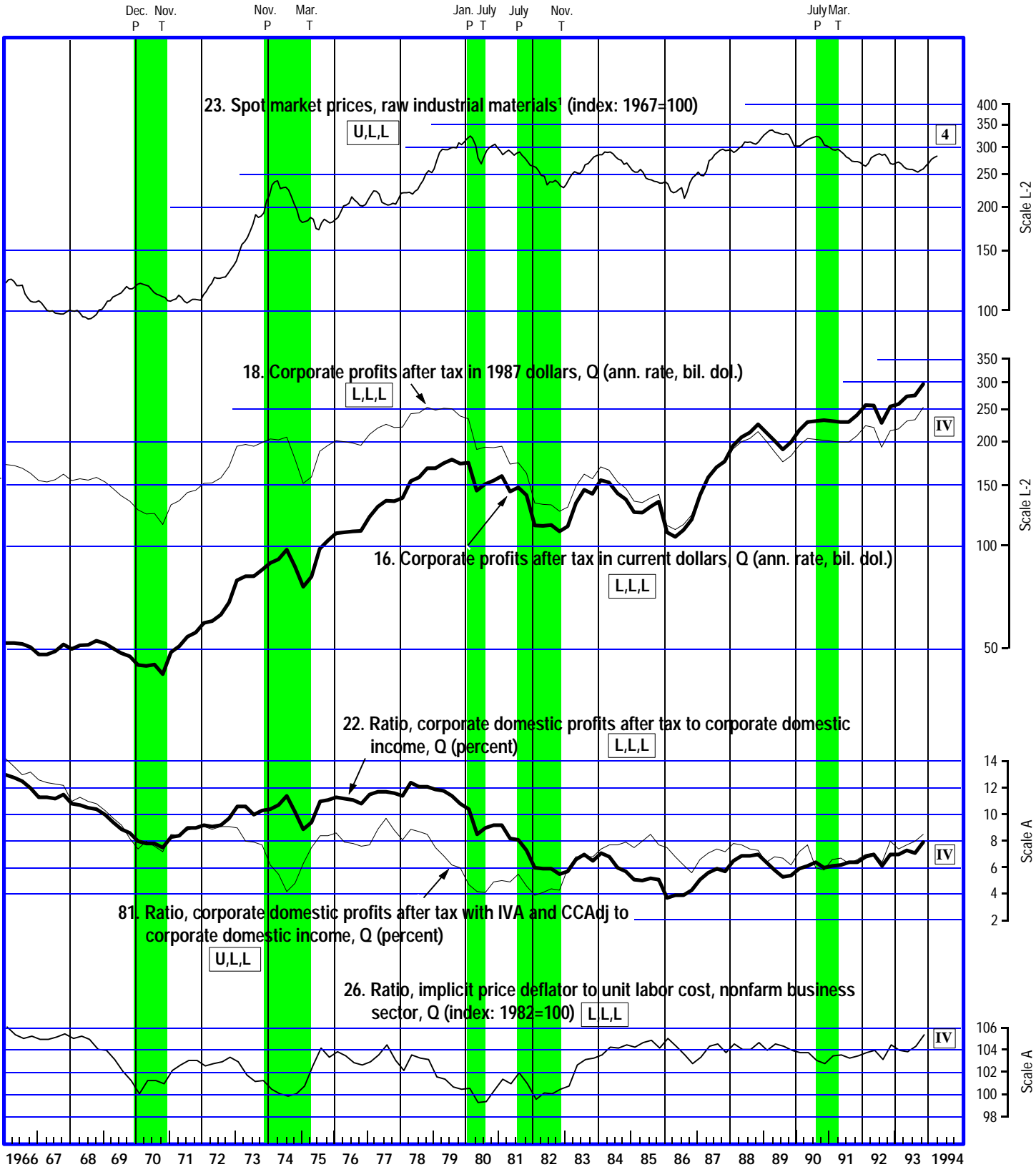
## Inventories and Inventory Investment



NOTE.—Current data for these series are shown on page C-3.

# CYCLICAL INDICATORS

## Prices and Profits

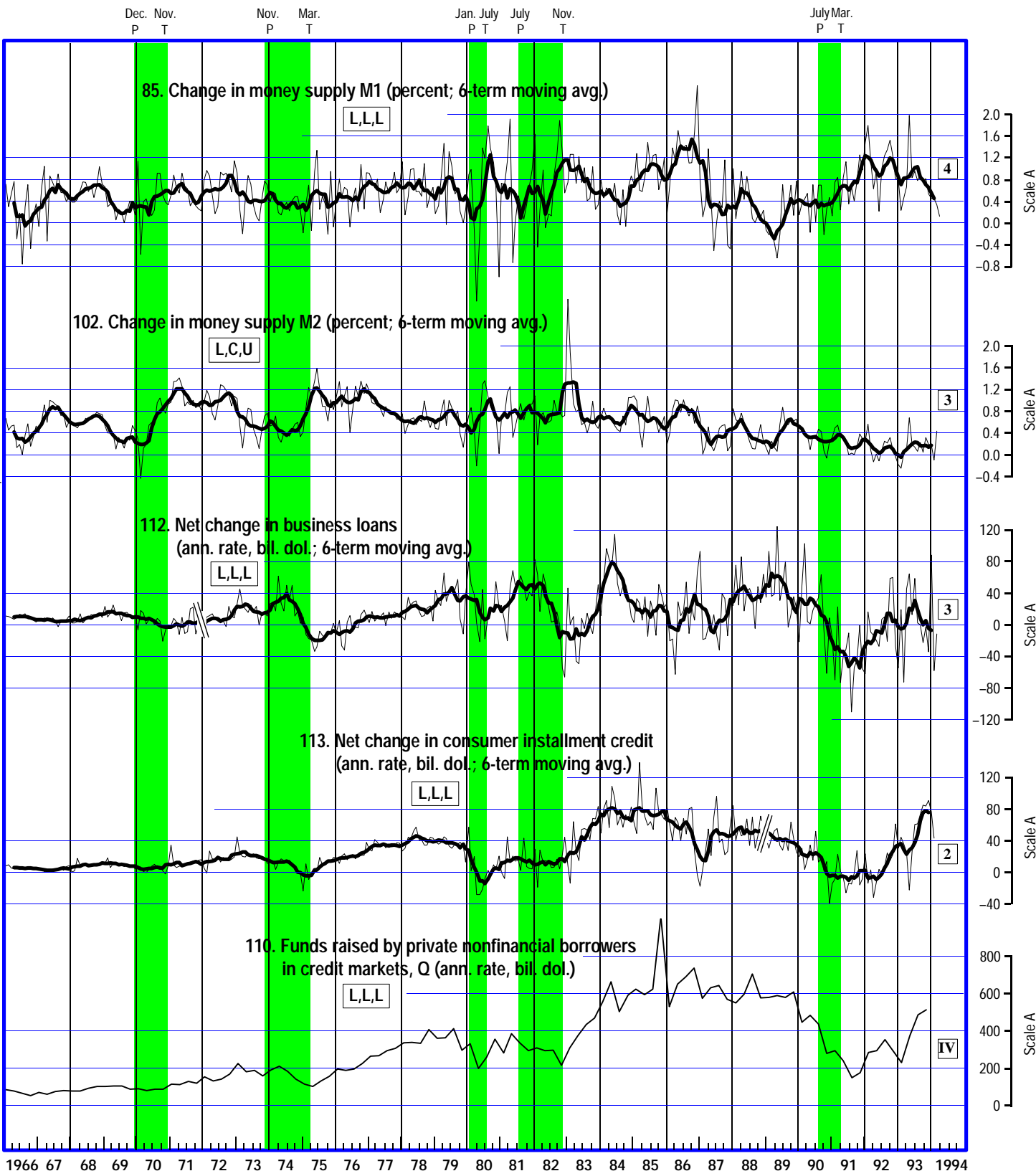


IVA Inventory valuation adjustment. CCAdj Capital consumption adjustment.  
 NOTE.—Current data for these series are shown on pages C-3 and C-4.

1. From June 1981 forward, this is a copyrighted series used by permission; it may not be reproduced without written permission from Knight-Ridder Financial Publishing.

# CYCLICAL INDICATORS

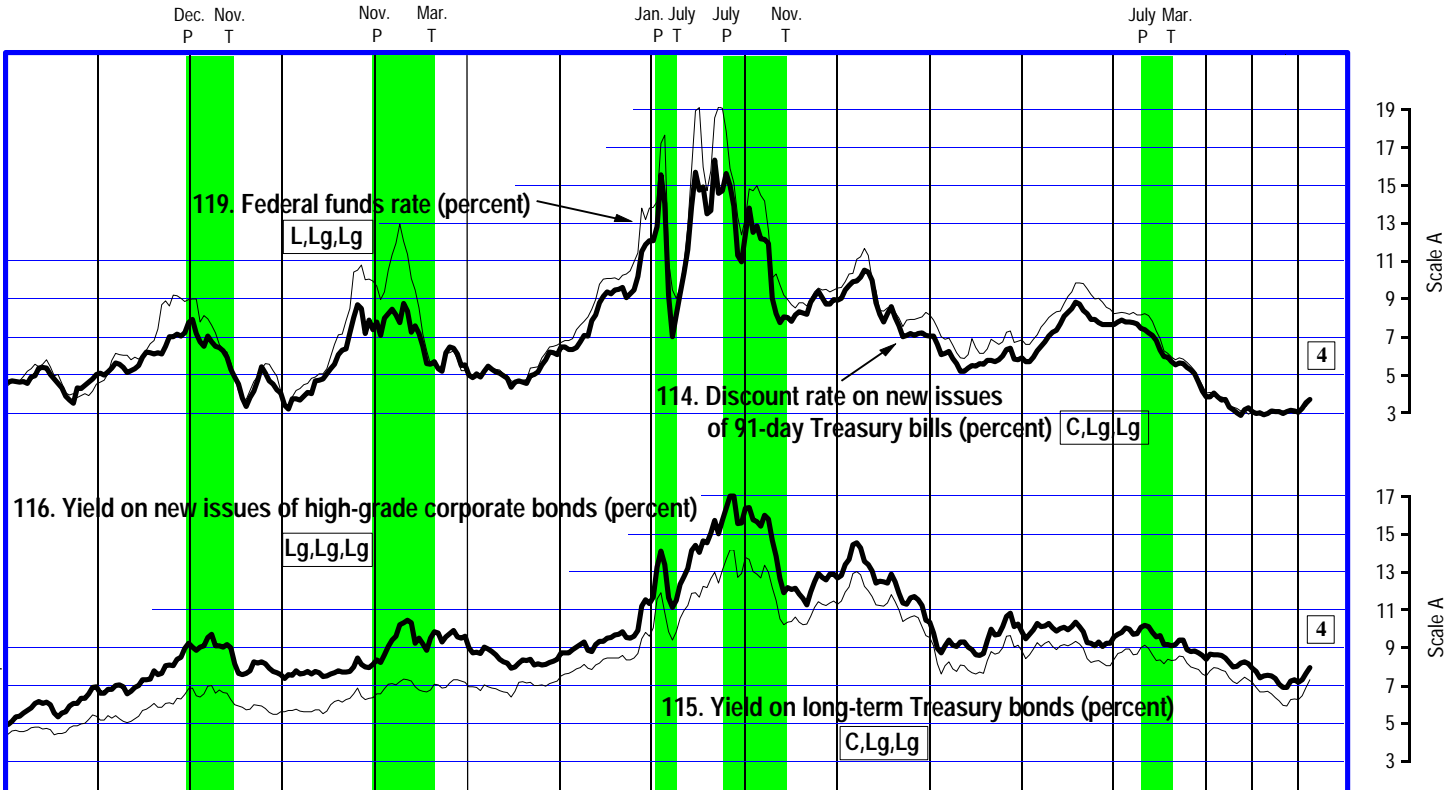
## Money, Credit, and Interest Rates



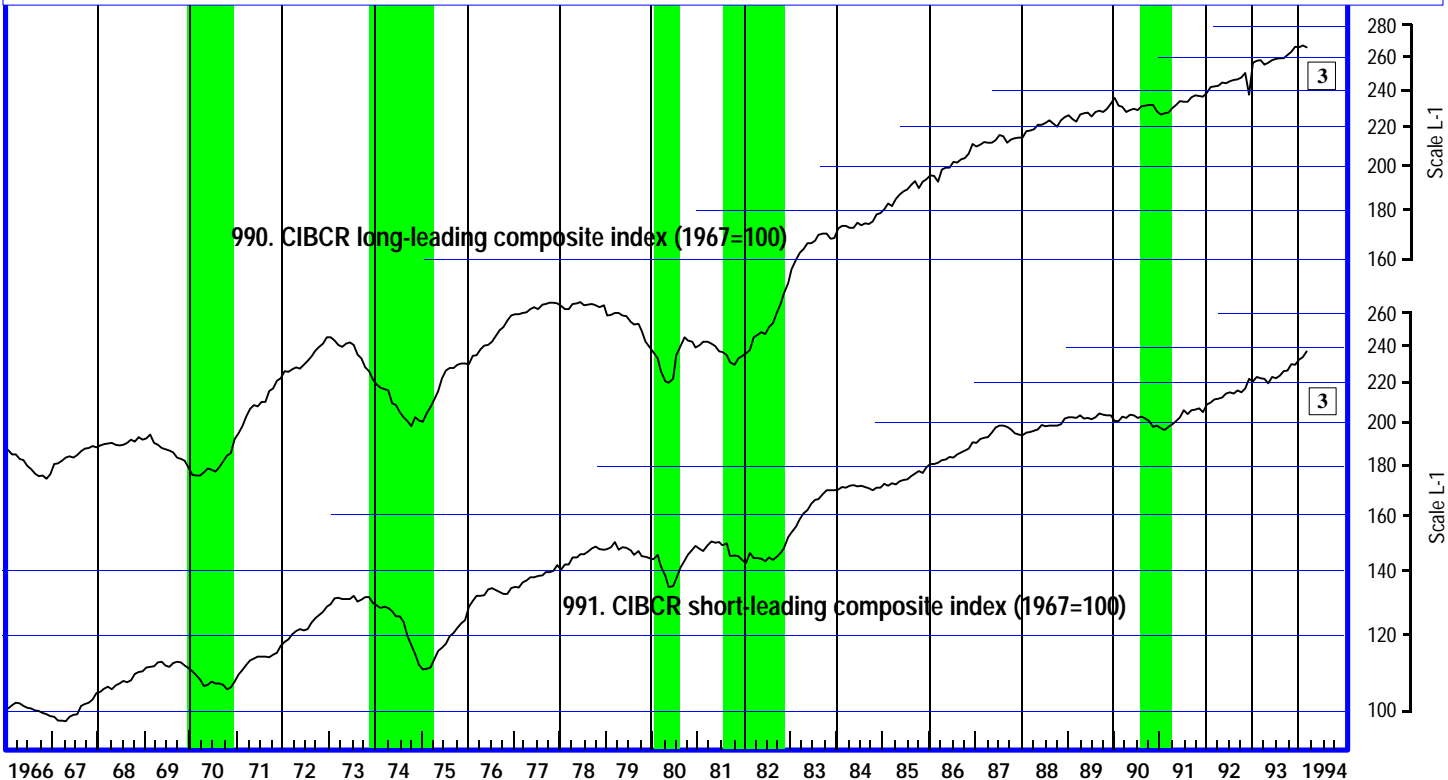
NOTE.—Current data for these series are shown on page C-4.

CYCLICAL INDICATORS

Money, Credit, and Interest Rates—Continued



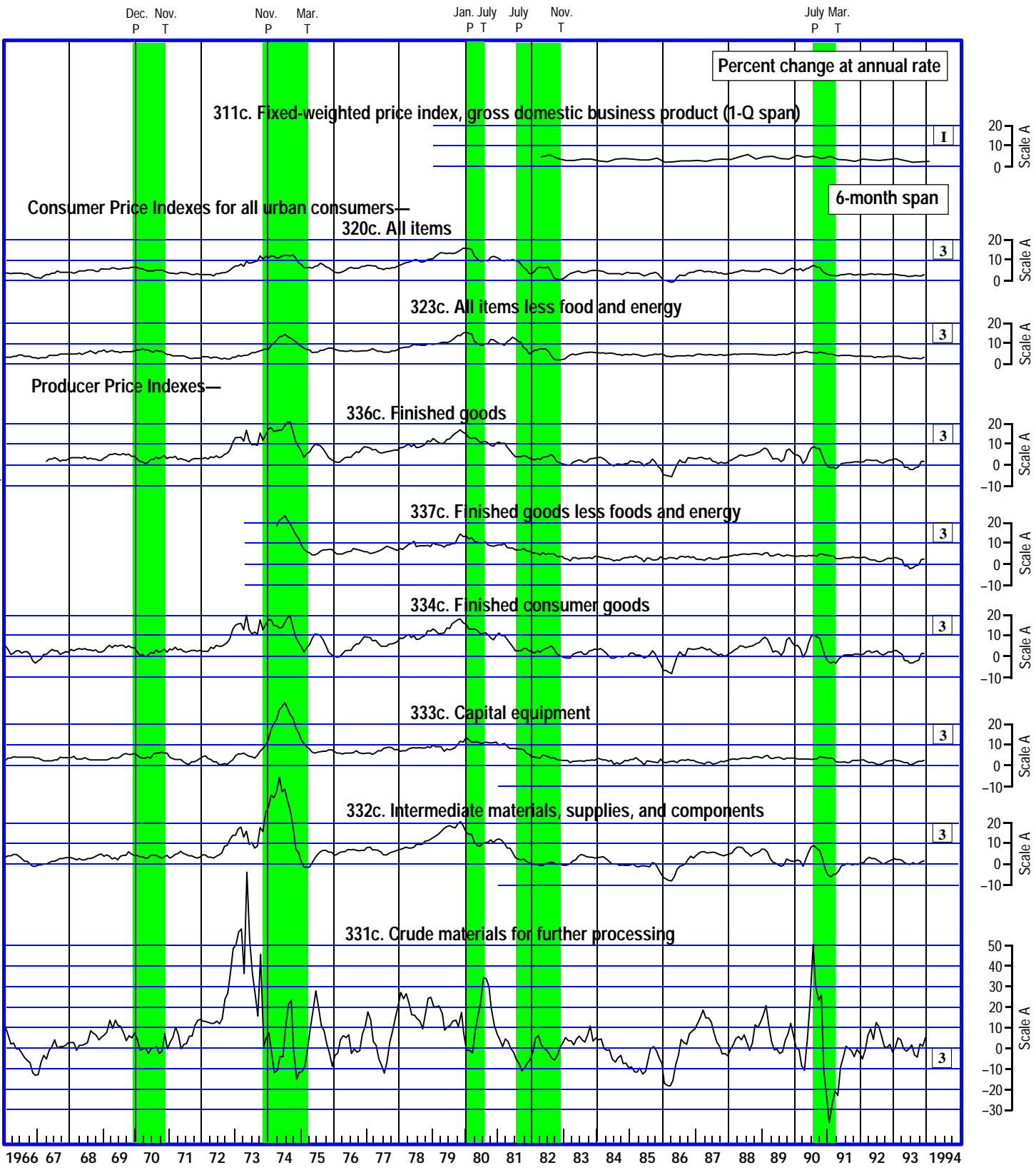
Alternative Composite Indexes



CIBCR Center for International Business Cycle Research (Columbia University).  
 NOTE.—Current data for these series are shown on page C-5.

# OTHER IMPORTANT ECONOMIC MEASURES

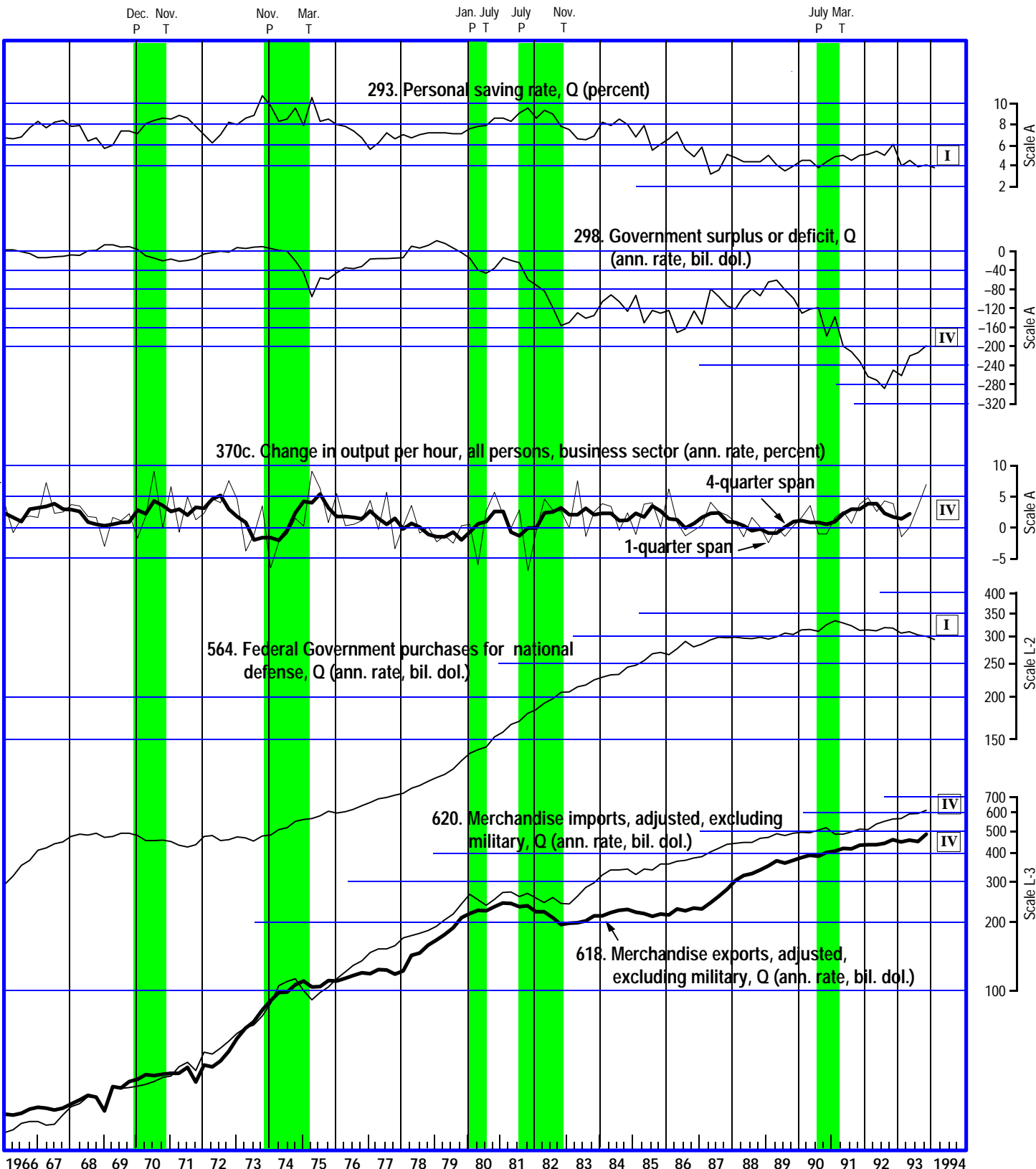
## Prices



NOTE.—Current data for these series are shown on page C-3.

# OTHER IMPORTANT ECONOMIC MEASURES

## Other Measures

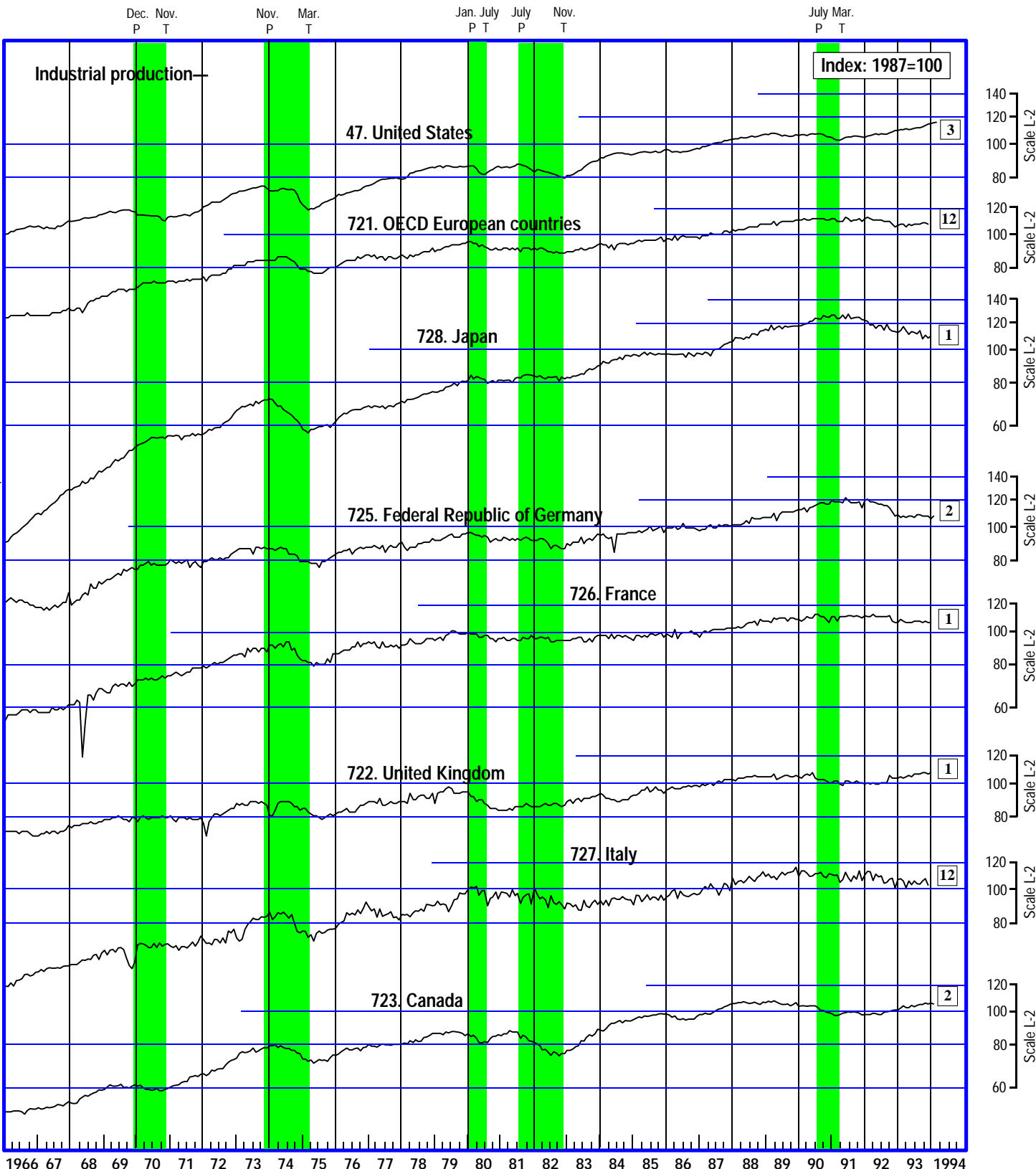


NOTE.—Current data for these series are shown on pages C-4 and C-5.



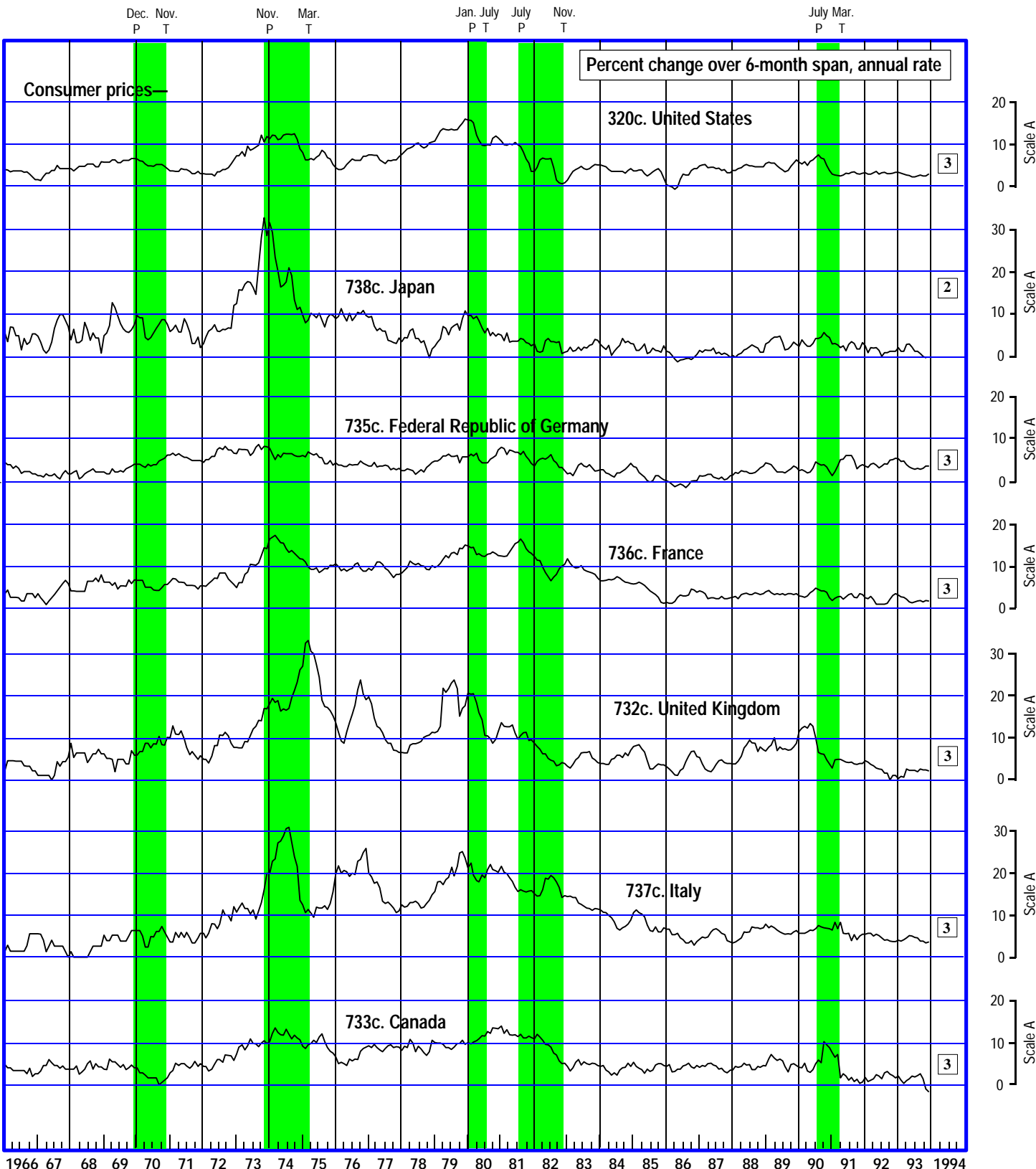
# OTHER IMPORTANT ECONOMIC MEASURES

## International Industrial Production



# OTHER IMPORTANT ECONOMIC MEASURES

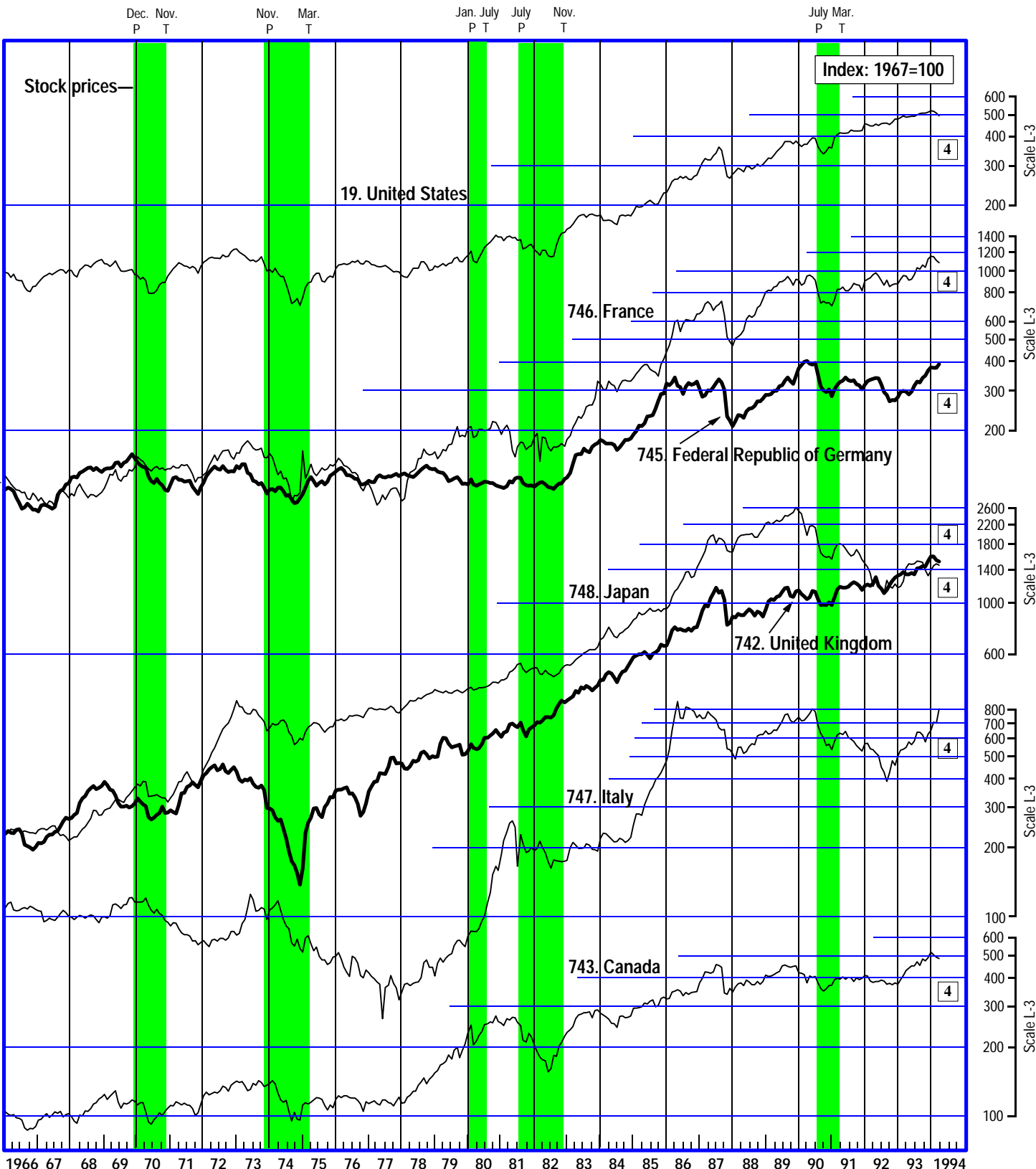
## International Consumer Prices



NOTE.—Current data for these series are shown on page C-5.

# OTHER IMPORTANT ECONOMIC MEASURES

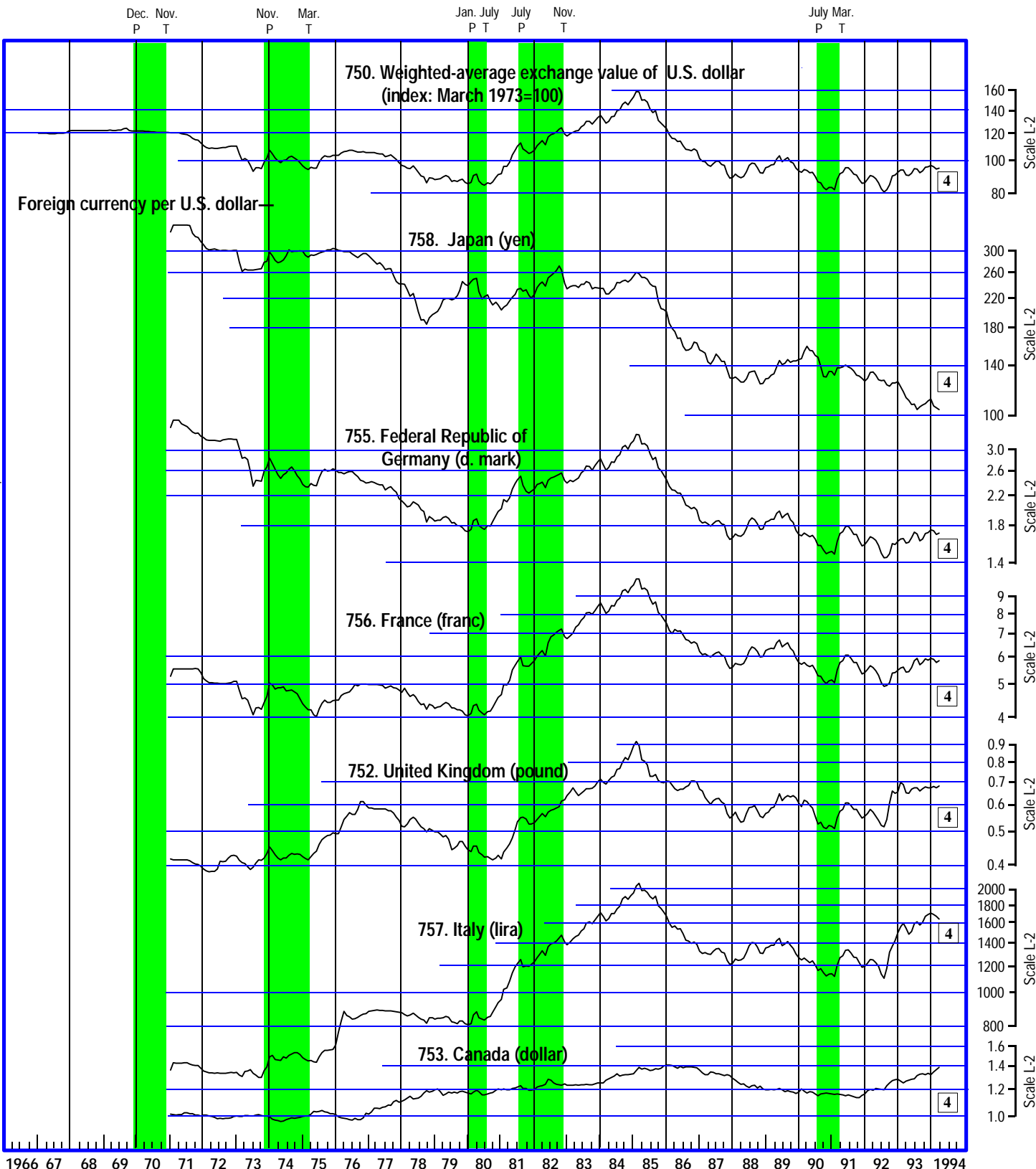
## International Stock Prices



NOTE.—Current data for these series are shown on page C-5.

# OTHER IMPORTANT ECONOMIC MEASURES

## International Exchange Rates



NOTE.—Current data for these series are shown on page C-5.

## Business Cycle Expansions and Contractions

Business cycle reference dates		Duration in months			
Trough	Peak	Contraction (trough from previous peak)	Expansion (trough to peak)	Cycle	
				Trough from previous trough	Peak from previous peak
December 1854 .....	June 1857 .....		30		
December 1858 .....	October 1860 .....	18	22	48	40
June 1861 .....	April 1865 .....	8	<b>46</b>	30	<b>54</b>
December 1867 .....	June 1869 .....	<b>32</b>	18	<b>78</b>	50
December 1870 .....	October 1873 .....	18	34	36	52
March 1879 .....	March 1882 .....	65	36	99	101
May 1885 .....	March 1887 .....	38	22	74	60
April 1888 .....	July 1890 .....	13	27	35	40
May 1891 .....	January 1893 .....	10	20	37	30
June 1894 .....	December 1895 .....	17	18	37	35
June 1897 .....	June 1899 .....	18	24	36	42
December 1900 .....	September 1902 .....	18	21	42	39
August 1904 .....	May 1907 .....	23	33	44	56
June 1908 .....	January 1910 .....	13	19	46	32
January 1912 .....	January 1913 .....	24	12	43	36
December 1914 .....	August 1918 .....	23	<b>44</b>	35	<b>67</b>
March 1919 .....	January 1920 .....	<b>7</b>	10	<b>51</b>	17
July 1921 .....	May 1923 .....	18	22	28	40
July 1924 .....	October 1926 .....	14	27	36	41
November 1927 .....	August 1929 .....	13	21	40	34
March 1933 .....	May 1937 .....	43	50	64	93
June 1938 .....	February 1945 .....	13	<b>80</b>	63	<b>93</b>
October 1945 .....	November 1948 .....	<b>8</b>	37	<b>88</b>	45
October 1949 .....	July 1953 .....	11	<b>45</b>	48	<b>56</b>
May 1954 .....	August 1957 .....	<b>10</b>	39	<b>55</b>	49
April 1958 .....	April 1960 .....	8	24	47	32
February 1961 .....	December 1969 .....	10	<b>106</b>	34	<b>116</b>
November 1970 .....	November 1973 .....	<b>11</b>	36	<b>117</b>	47
March 1975 .....	January 1980 .....	16	58	52	74
July 1980 .....	July 1981 .....	6	12	64	18
November 1982 .....	July 1990 .....	16	92	28	108
March 1991 .....		8		100	
<b>Average, all cycles:</b>					
1854-1991 (31 cycles) .....		18	35	53	<sup>1</sup> 53
1854-1919 (16 cycles) .....		22	27	48	<sup>2</sup> 49
1919-1945 (6 cycles) .....		18	35	53	53
1945-1991 (9 cycles) .....		11	50	61	61
<b>Average, peacetime cycles:</b>					
1854-1991 (26 cycles) .....		19	29	48	<sup>3</sup> 48
1854-1919 (14 cycles) .....		22	24	46	<sup>4</sup> 47
1919-1945 (5 cycles) .....		20	26	46	45
1945-1991 (7 cycles) .....		11	43	53	53

1. 30 cycles.
2. 15 cycles.
3. 25 cycles.
4. 13 cycles.

NOTE.—Figures printed in bold italic are the wartime expansions (Civil War, World Wars I and II, Korean war, and Vietnam war), the postwar contractions, and the full cycles that include the wartime expansions.

Source: National Bureau of Economic Research, Inc., 1050 Massachusetts Avenue, Cambridge, MA 02138.

Cyclical Leads (-) and Lags (+) for Selected Indicators

[Length in months]

Series no.	Series title	At reference peaks										
		July 1990	July 1981	Jan. 1980	Nov. 1973	Dec. 1969	Apr. 1960	Aug. 1957	July 1953	Nov. 1948	Mean	
<b>LEADING INDICATORS</b>												
1	Average weekly hours, manufacturing .....	-15	-7	-10	-7	-14	-11	-21	-3	-11	-11.0	
5	Average weekly initial claims for unemployment insurance (inverted) <sup>1</sup> .....	-22	0	-16	-9	-11	-12	-23	-10	-13	-12.9	
8	Manufacturers' new orders in 1987 dollars, consumer goods and materials .....	-2	-2	-13	-8	-13	-13	-25	-3	-5	-9.3	
32	Vendor performance, slower deliveries diffusion index .....	+1	-3	-9	0	-4	-14	-28	-12	-7	-8.4	
20	Contracts and orders for plant and equipment in 1987 dollars .....	-7	-3	-10	-1	-11	-13	-9	-5	-7	-7.3	
29	Building permits, new private housing units .....	-21	-10	-19	-11	-10	-17	-30	-8	-13	-15.4	
92	Change in manufacturers' unfilled orders in 1987 dollars, durable goods (smoothed) <sup>2</sup> .....	-3	-6	-13	-6	-7	-12	-19	-26	-3	-10.6	
99	Change in sensitive materials prices (smoothed) <sup>2</sup> .....	+2	-7	-7	+3	-10	-17	-17	-9	n.a.	-7.8	
19	Index of stock prices, 500 common stocks .....	-1	-8	NST	-10	-12	-9	-13	-6	-30	-11.1	
106	Money supply M2 in 1987 dollars .....	-7	NST	-24	-10	-11	NST	-16	NST	-17	-14.2	
83	Index of consumer expectations .....	-18	-2	-38	-15	-10	-2	-9	-5	n.a.	-12.4	
910	Composite index of 11 leading indicators .....	-18	-8	-15	-9	-11	-11	-20	-5	-7	-11.6	
940	Ratio, coincident index to lagging index .....	-4	-4	-15	-11	-9	-12	-27	-9	-10	-11.2	
<b>COINCIDENT INDICATORS</b>												
41	Employees on nonagricultural payrolls .....	-1	0	+2	+11	+3	0	-5	-1	-2	+0.8	
51	Personal income less transfer payments in 1987 dollars .....	-3	+1	0	0	NST	+1	0	-1	-1	-4	
47	Index of industrial production .....	+2	0	+2	0	-2	-3	-5	0	-4	-1.1	
57	Manufacturing and trade sales in 1987 dollars .....	-4	-6	-10	0	-2	-3	-6	-3	+1	-3.7	
920	Composite index of 4 coincident indicators .....	-1	+1	0	0	-2	-3	-5	0	-1	-1.2	
<b>LAGGING INDICATORS</b>												
91	Average duration of unemployment (inverted) <sup>1</sup> .....	-13	+5	-6	-2	-2	+2	+1	+2	0	-1.4	
77	Ratio, manufacturing and trade inventories to sales in 1987 dollars .....	+6	+15	+5	+16	+11	+9	+8	+5	+8	+9.2	
62	Change in index of labor cost per unit of output, manufacturing (smoothed) <sup>2</sup> .....	+8	+6	+5	+16	+1	+10	+6	+6	0	+6.4	
109	Average prime rate charged by banks .....	-14	+1	+3	+10	+2	+3	+4	+7	NST	+2.0	
101	Commercial and industrial loans outstanding in 1987 dollars .....	0	+14	+2	+10	+8	NST	+1	-1	+3	+4.6	
95	Ratio, consumer installment credit to personal income .....	-10	NST	-7	+5	NST	+8	+5	+5	NST	+1.0	
120	Change in Consumer Price Index for services (smoothed) <sup>2</sup> .....	+2	+2	+5	+11	+4	-6	-5	n.a.	n.a.	+1.9	
930	Composite index of 7 lagging indicators .....	-9	+3	+3	+13	+3	+3	+4	+5	NST	+3.1	
<b>At reference troughs</b>												
		Mar. 1991	Nov. 1982	July 1980	Mar. 1975	Nov. 1970	Feb. 1961	Apr. 1958	May 1954	Oct. 1949	Mean	
<b>LEADING INDICATORS</b>												
1	Average weekly hours, manufacturing .....	+1	-1	0	0	-2	-2	0	-1	-6	-1.2	
5	Average weekly initial claims for unemployment insurance (inverted) <sup>1</sup> .....	0	-2	-2	0	-1	0	0	+4	0	-1	
8	Manufacturers' new orders in 1987 dollars, consumer goods and materials .....	0	-1	-2	0	0	0	-2	-7	-4	-1.8	
32	Vendor performance, slower deliveries diffusion index .....	0	-8	-2	-1	+1	-11	-4	-6	-7	-4.2	
20	Contracts and orders for plant and equipment in 1987 dollars .....	+3	+4	-2	+9	-1	+1	-1	-2	-6	+6	
29	Building permits, new private housing units .....	-2	-13	-3	0	-10	-2	-2	-8	-9	-5.4	
92	Change in manufacturers' unfilled orders in 1987 dollars, durable goods (smoothed) <sup>2</sup> .....	+20	-2	-1	+1	-3	-9	-2	-5	-4	-6	
99	Change in sensitive materials prices (smoothed) <sup>2</sup> .....	0	-5	0	-2	-2	-1	-4	-4	-4	-2.4	
19	Index of stock prices, 500 common stocks .....	-5	-4	NST	-3	-5	-4	-4	-8	-4	-4.6	
106	Money supply M2 in 1987 dollars .....	-2	NST	-2	-2	-7	NST	-3	NST	-15	-5.2	
83	Index of consumer expectations .....	-5	-8	-4	-1	-6	-3	+1	-6	n.a.	-4.0	
910	Composite index of 11 leading indicators .....	-2	-10	-2	-1	-1	-2	-2	-4	-4	-3.1	
940	Ratio, coincident index to lagging index .....	0	-10	-2	0	-8	-1	0	-5	0	-2.9	
<b>COINCIDENT INDICATORS</b>												
41	Employees on nonagricultural payrolls .....	+11	0	0	+1	0	0	+1	+3	0	+1.8	
51	Personal income less transfer payments in 1987 dollars .....	+8	0	0	-1	NST	-2	0	-1	-3	+1	
47	Index of industrial production .....	0	+1	0	0	0	0	0	-1	0	0	
57	Manufacturing and trade sales in 1987 dollars .....	-2	+1	-1	0	0	-1	0	-5	-3	-1.2	
920	Composite index of 4 coincident indicators .....	0	+1	0	0	0	0	0	+2	0	+3	
<b>LAGGING INDICATORS</b>												
91	Average duration of unemployment (inverted) <sup>1</sup> .....	+19	+8	+6	+10	+19	+5	+6	+12	+8	+10.3	
77	Ratio, manufacturing and trade inventories to sales in 1987 dollars .....	n.a.	+14	+6	+44	+27	+14	+13	+12	+9	+17.4	
62	Change in index of labor cost per unit of output, manufacturing (smoothed) <sup>2</sup> .....	+25	+10	+7	+8	+12	+7	+6	+11	+1	+9.7	
109	Average prime rate charged by banks .....	n.a.	+8	+1	+25	+16	+57	+4	+14	NST	+17.9	
101	Commercial and industrial loans outstanding in 1987 dollars .....	+24	+11	+8	+18	+15	NST	+4	+3	-1	+10.2	
95	Ratio, consumer installment credit to personal income .....	+21	0	NST	+11	NST	+9	+7	+6	NST	+9.0	
120	Change in Consumer Price Index for services (smoothed) <sup>2</sup> .....	+18	+2	+3	+5	+27	+5	+8	n.a.	n.a.	+9.7	
930	Composite index of 7 lagging indicators .....	n.a.	+7	+3	+21	+15	+6	+4	+9	NST	+9.3	

n.a. Not available. Data needed to determine a specific turning point are not available.

1. This series is inverted; i.e., low values are peaks and high values are troughs.

2. This series is smoothed by an autoregressive-moving-average filter developed by Statistics Canada.

NOTE.—Reference peaks and troughs are the cyclical turning points in overall business activity (see page C-28); specific peaks and troughs are the cyclical turning points in individual series. This table lists, for the composite

indexes and their components, the leads (-) and lags (+) of the specific peaks and troughs in relation to the corresponding reference peaks and troughs. See *Measuring Business Cycles* by Arthur F. Burns and Wesley C. Mitchell (National Bureau of Economic Research, Inc., 1946) for information on the selection of cyclical peaks and troughs.

NST No specific turn. No specific turning point is discernible in the data.

## TITLES AND SOURCES OF SERIES

Series are listed below in numerical order within each of the two major groups. Series numbers are for identification only and do not reflect relationships or order among the series. "M" following a series title indicates monthly data; "Q" indicates quarterly data. Data apply to the whole period except when indicated by "EOM" (end of month) or "EOQ" (end of quarter).

To save space, the following commonly used sources are referred to by number:

Source 1—U.S. Department of Commerce, Bureau of Economic Analysis; Source 2—U.S. Department of Commerce, Bureau of the Census; Source 3—U.S. Department of Labor, Bureau of Labor Statistics; Source 4—Board of Governors of the Federal Reserve System.

The numbers in parentheses following the sources indicate the C-pages on which the series appear: Numbers in plain type indicate data tables; numbers in bold type indicate charts.

### 1. Cyclical Indicators

1. **Average weekly hours of production or nonsupervisory workers, manufacturing** (M).—Source 3 (1, 2, 9)
5. **Average weekly initial claims for unemployment insurance, State programs** (M).—Source 1 and U.S. Department of Labor, Employment and Training Administration (1, 2, 9)
7. **Manufacturers' new orders in 1987 dollars, durable goods industries** (M).—Sources 1, 2, and 3 (2, 15)
8. **Manufacturers' new orders in 1987 dollars, consumer goods and materials industries** (M).—Sources 1, 2, and 3 (1, 2, 9)
9. **Construction contracts awarded for commercial and industrial buildings, floor space** (M).—McGraw-Hill Information Systems Company; seasonal adjustment by Bureau of Economic Analysis (This is a copyrighted series used by permission; it may not be reproduced without written permission from the source.) (2, 16)
10. **Contracts and orders for plant and equipment in current dollars** (M).—Sources 1, 2, and McGraw-Hill Information Systems Company (2)
12. **Index of net business formation** (M).—Source 1 and Dun & Bradstreet, Inc. (2, 16)
13. **Number of new business incorporations** (M).—Dun & Bradstreet, Inc. (2, 16)
14. **Current liabilities of business failures** (M).—Dun & Bradstreet, Inc. (4)
16. **Corporate profits after tax in current dollars** (Q).—Source 1 (4, 19)
18. **Corporate profits after tax in 1987 dollars** (Q).—Source 1 (4, 19)
19. **Index of stock prices, 500 common stocks** (M).—Standard & Poor's Corporation (1, 5, 10, 26)
20. **Contracts and orders for plant and equipment in 1987 dollars** (M).—Sources 1, 2, and McGraw-Hill Information Systems Company (1, 2, 9)
21. **Average weekly overtime hours of production or nonsupervisory workers, manufacturing** (M).—Source 3 (2, 13)
22. **Ratio, corporate domestic profits after tax to total corporate domestic income** (Q).—Source 1 (4, 19)
23. **Index of spot market prices, raw industrial materials** (M).—Sources 1, 3, and Knight-Ridder Financial Publishing. (From June 1981 forward, this is a copyrighted series used by permission; it may not be reproduced without written permission from Knight-Ridder Financial Publishing.) (3, 19)
26. **Ratio, implicit price deflator to unit labor cost, all persons, nonfarm business sector** (Q).—Sources 1 and 3 (4, 19)
27. **Manufacturers' new orders in 1987 dollars, nondefense capital goods industries** (M).—Sources 1, 2, and 3 (2, 16)
28. **New private housing units started** (M).—Source 2 (3, 18)
29. **Index of new private housing units authorized by local building permits** (M).—Sources 1 and 2 (1, 3, 10)
30. **Change in business inventories in 1987 dollars** (Q).—Source 1 (3, 18)
31. **Change in manufacturing and trade inventories** (M).—Sources 1 and 2 (3, 18)
32. **Vendor performance, slower deliveries diffusion index** (M).—National Association of Purchasing Management and Purchasing Management Association of Chicago; seasonal adjustment by U.S. Department of Commerce, Office of the Chief Economist (1, 2, 9)
35. **Corporate net cash flow in 1987 dollars** (Q).—Source 1 (4)
37. **Number of persons unemployed** (M).—Source 3 (2)
39. **Percent of consumer installment loans delinquent 30 days and over** (EOM).—American Bankers Association (This is a copyrighted series used by permission; it may not be reproduced without written permission from the source.) (4)
40. **Employees on nonagricultural payrolls, goods-producing industries** (M).—Source 3 (2, 13)
41. **Employees on nonagricultural payrolls** (M).—Source 3 (1, 2, 11)
42. **Number of persons engaged in nonagricultural activities** (M).—Source 3 (2)
43. **Civilian unemployment rate** (M).—Source 3 (2, 13)
44. **Unemployment rate, persons unemployed 15 weeks and over** (M).—Source 3 (2)
45. **Average weekly insured unemployment rate, State programs** (M).—Source 1 and U.S. Department of Labor, Employment and Training Administration (2)
46. **Index of help-wanted advertising in newspapers** (M).—The Conference Board (2, 13)
47. **Index of industrial production** (M).—Source 4 (1, 2, 5, 11, 24)
48. **Employee hours in nonagricultural establishments** (M).—Source 3 (2, 13)
49. **Value of domestic goods output in 1987 dollars** (Q).—Source 1 (2)
50. **Gross national product in 1987 dollars** (Q).—Source 1 (2)
51. **Personal income less transfer payments in 1987 dollars** (M).—Source 1 (1, 4, 11)
52. **Personal income in 1987 dollars** (M).—Source 1 (4)
53. **Wages and salaries in 1987 dollars, mining, manufacturing, and construction** (M).—Sources 1 and 3 (4, 15)
55. **Gross domestic product in 1987 dollars** (Q).—Source 1 (2, 14)
57. **Manufacturing and trade sales in 1987 dollars** (M).—Sources 1 and 2 (1, 2, 11)
58. **Index of consumer sentiment** (Q,M).—University of Michigan, Survey Research Center (This is a copyrighted series used by permission; it may not be reproduced without written permission from the source.) (4)
59. **Sales of retail stores in 1987 dollars** (M).—Sources 1 and 2 (2, 15)
60. **Ratio, help-wanted advertising in newspapers to number of persons unemployed** (M).—Sources 1, 3, and The Conference Board (2)
61. **New plant and equipment expenditures by business in current dollars** (Q).—Source 2 (2)
62. **Change in index of labor cost per unit of output, manufacturing, smoothed** (M).—Sources 1 and 4 (1, 4, 12)
63. **Index of unit labor cost, all persons, business sector** (Q).—Source 3 (4)
66. **Consumer installment credit outstanding** (EOM).—Source 4 (5)
69. **Manufacturers' machinery and equipment sales and business construction expenditures** (M).—Sources 1 and 2 (2, 17)
70. **Manufacturing and trade inventories in 1987 dollars** (EOM).—Sources 1 and 2 (3)

72. **Commercial and industrial loans outstanding in current dollars** (M).—Sources 1, 4, and The Federal Reserve Bank of New York (5)
73. **Index of industrial production, durable manufactures** (M).—Source 4 (2, 14)
74. **Index of industrial production, nondurable manufactures** (M).—Source 4 (2, 14)
75. **Index of industrial production, consumer goods** (M).—Source 4 (2, 14)
76. **Index of industrial production, business equipment** (M).—Source 4 (3, 17)
77. **Ratio, manufacturing and trade inventories to sales in 1987 dollars** (M).—Sources 1 and 2 (1, 3, 12)
81. **Ratio, corporate domestic profits after tax with inventory valuation and capital consumption adjustments to total corporate domestic income** (Q).—Source 1 (4, 19)
82. **Capacity utilization rate, manufacturing** (M).—Source 4 (2, 14)
83. **Index of consumer expectations** (Q,M).—University of Michigan, Survey Research Center (This is a copyrighted series used by permission; it may not be reproduced without written permission from the source.) (1, 4, 10)
85. **Change in money supply M1** (M).—Sources 1 and 4 (4, 20)
86. **Gross private nonresidential fixed investment in 1987 dollars** (Q).—Source 1 (3, 17)
87. **Gross private nonresidential fixed investment in 1987 dollars, structures** (Q).—Source 1 (3, 17)
88. **Gross private nonresidential fixed investment in 1987 dollars, producers' durable equipment** (Q).—Source 1 (3, 17)
89. **Gross private residential fixed investment in 1987 dollars** (Q).—Source 1 (3, 18)
90. **Ratio, civilian employment to population of working age** (M).—Source 3 (2, 13)
91. **Average duration of unemployment in weeks** (M).—Source 3 (1, 2, 12)
92. **Change in manufacturers' unfilled orders in 1987 dollars, durable goods industries, smoothed** (M).—Sources 1, 2, and 3 (1, 2, 10)
93. **Free reserves** (M).—Sources 1 and 4 (4)
94. **Member bank borrowings from the Federal Reserve** (M).—Source 4 (4)
95. **Ratio, consumer installment credit outstanding to personal income** (M).—Sources 1 and 4 (1, 5, 12)
98. **Index of producer prices for sensitive crude and intermediate materials** (M).—Sources 1 and 3 (3)
99. **Change in sensitive materials prices, smoothed** (M).—Sources 1, 3, and Knight-Ridder Financial Publishing. (1, 3, 10)
100. **New plant and equipment expenditures by business in 1987 dollars** (Q).—Source 2 (2, 17)
101. **Commercial and industrial loans outstanding in 1987 dollars** (M).—Sources 1, 3, 4, and The Federal Reserve Bank of New York (1, 5, 12)
102. **Change in money supply M2** (M).—Sources 1 and 4 (4, 20)
105. **Money supply M1 in 1987 dollars** (M).—Sources 1, 3, and 4 (4)
106. **Money supply M2 in 1987 dollars** (M).—Sources 1, 3, and 4 (1, 4, 10)
107. **Ratio, gross domestic product to money supply M1** (Q).—Sources 1 and 4 (4)
108. **Ratio, personal income to money supply M2** (M).—Sources 1 and 4 (4)
109. **Average prime rate charged by banks** (M).—Source 4 (1, 5, 12)
110. **Funds raised by private nonfinancial borrowers in credit markets** (Q).—Source 4 (4, 20)
111. **Change in business and consumer credit outstanding** (M).—Sources 1, 4, Federal Home Loan Bank Board, and The Federal Reserve Bank of New York (4)
112. **Net change in business loans** (M).—Sources 1, 4, and The Federal Reserve Bank of New York (4, 20)
113. **Net change in consumer installment credit** (M).—Sources 1 and 4 (4, 20)
114. **Discount rate on new issues of 91-day Treasury bills** (M).—Source 4 (5, 21)
115. **Yield on long-term Treasury bonds** (M).—U.S. Department of the Treasury (5, 21)
116. **Yield on new issues of high-grade corporate bonds** (M).—Citibank and U.S. Department of the Treasury (5, 21)
117. **Yield on municipal bonds, 20-bond average** (M).—The Bond Buyer (5)
118. **Secondary market yields on FHA mortgages** (M).—U.S. Department of Housing and Urban Development, Federal Housing Administration (5)
119. **Federal funds rate** (M).—Source 4 (5, 21)
120. **Change in Consumer Price Index for services, smoothed** (M).—Sources 1 and 3 (1, 3, 12)
122. **Index of consumer confidence** (M).—The Conference Board (4)
123. **Index of consumer expectations** (M).—The Conference Board (4, 15)
124. **Capacity utilization rate, total industry** (M).—Source 4 (2)
910. **Composite index of 11 leading indicators** (includes series 1, 5, 8, 19, 20, 29, 32, 83, 92, 99, 106) (M).—Source 1 (1, 7, 8)
920. **Composite index of 4 coincident indicators** (includes series 41, 47, 51, 57) (M).—Source 1 (1, 7, 8)
930. **Composite index of 7 lagging indicators** (includes series 62, 77, 91, 95, 101, 109, 120) (M).—Source 1 (1, 7, 8)
940. **Ratio, coincident composite index (series 920) to lagging composite index (series 930)** (M).—Source 1 (1, 7)
950. **Diffusion index of 11 leading indicator components** (M).—Source 1 (1, 8)
951. **Diffusion index of 4 coincident indicator components** (M).—Source 1 (1, 8)
952. **Diffusion index of 7 lagging indicator components** (M).—Source 1 (1, 8)
963. **Diffusion index of employees on private nonagricultural payrolls, 356 industries** (M).—Source 3 (2)
990. **CIBCR long-leading composite index** (M).—Columbia University, Center for International Business Cycle Research (5, 21)
991. **CIBCR short-leading composite index** (M).—Columbia University, Center for International Business Cycle Research (5, 21)

## 2. Other Important Economic Measures

290. **Gross saving** (Q).—Source 1 (4)
292. **Personal saving** (Q).—Source 1 (4)
293. **Personal saving rate** (Q).—Source 1 (4, 23)
295. **Business saving** (Q).—Source 1 (4)
298. **Government surplus or deficit** (Q).—Source 1 (4, 23)
311. **Fixed-weighted price index, gross domestic business product** (Q).—Source 1 (3, 22)
320. **Consumer Price Index for all urban consumers, all items** (M).—Source 3 (3, 5, 22, 25)
323. **Consumer Price Index for all urban consumers, all items less food and energy** (M).—Source 3 (3, 22)
331. **Producer Price Index, crude materials for further processing** (M).—Sources 1 and 3 (3, 22)
332. **Producer Price Index, intermediate materials, supplies, and components** (M).—Sources 1 and 3 (3, 22)
333. **Producer Price Index, capital equipment** (M).—Sources 1 and 3 (3, 22)
334. **Producer Price Index, finished consumer goods** (M).—Sources 1 and 3 (3, 22)
336. **Producer Price Index, finished goods** (M).—Sources 1 and 3 (3, 22)
337. **Producer Price Index, finished goods less foods and energy** (M).—Sources 1 and 3 (3, 22)
345. **Index of average hourly compensation, all employees, nonfarm business sector** (Q).—Source 3 (4)



346. **Index of real average hourly compensation, all employees, nonfarm business sector** (Q).—Source 3 (4)
358. **Index of output per hour, all persons, nonfarm business sector** (Q).—Source 3 (4)
370. **Index of output per hour, all persons, business sector** (Q).—Source 3 (4, 23)
441. **Civilian labor force** (M).—Source 3 (2)
442. **Civilian employment** (M).—Source 3 (2)
451. **Civilian labor force participation rate, males 20 years and over** (M).—Source 3 (2)
452. **Civilian labor force participation rate, females 20 years and over** (M).—Source 3 (2)
453. **Civilian labor force participation rate, both sexes 16–19 years of age** (M).—Source 3 (2)
525. **Defense Department prime contract awards for work performed in the United States** (M).—U.S. Department of Defense, Office of the Assistant Secretary of Defense (Comptroller), Washington Headquarters Services, Directorate for Information Operations and Reports; seasonal adjustment by Bureau of Economic Analysis (5)
548. **Manufacturers' new orders, defense products** (M).—Source 2 (5)
557. **Index of industrial production, defense and space equipment** (M).—Source 4 (5)
564. **Federal Government purchases, national defense** (Q).—Source 1 (5, 23)
570. **Employment, defense products industries** (M).—Sources 1 and 3 (5)
602. **Exports, excluding military aid shipments** (M).—Sources 1 and 2 (5)
604. **Exports of domestic agricultural products** (M).—Sources 1 and 2 (5)
606. **Exports of nonelectrical machinery** (M).—Sources 1 and 2 (5)
612. **General imports** (M).—Source 2 (5)
614. **Imports of petroleum and petroleum products** (M).—Sources 1 and 2 (5)
616. **Imports of automobiles and parts** (M).—Sources 1 and 2 (5)
618. **Merchandise exports, adjusted, excluding military** (Q).—Source 1 (5, 23)
620. **Merchandise imports, adjusted, excluding military** (Q).—Source 1 (5, 23)
622. **Balance on merchandise trade** (Q).—Source 1 (5)
721. **Organisation for Economic Co-operation and Development, European countries, index of industrial production** (M).—Organisation for Economic Co-operation and Development (Paris) (5, 24)
722. **United Kingdom, index of industrial production** (M).—Central Statistical Office (London) (5, 24)
723. **Canada, index of industrial production** (M).—Statistics Canada (Ottawa) (5, 24)
725. **Federal Republic of Germany, index of industrial production** (M).—Statistisches Bundesamt (Wiesbaden) (5, 24)
726. **France, index of industrial production** (M).—Institut National de la Statistique et des Etudes Economiques (Paris) (5, 24)
727. **Italy, index of industrial production** (M).—Istituto Centrale di Statistica (Rome) (5, 24)
728. **Japan, index of industrial production** (M).—Ministry of International Trade and Industry (Tokyo) (5, 24)
732. **United Kingdom, consumer price index** (M).—Department of Employment (London); percent changes seasonally adjusted by Bureau of Economic Analysis (5, 25)
733. **Canada, consumer price index** (M).—Statistics Canada (Ottawa); percent changes seasonally adjusted by Bureau of Economic Analysis (5, 25)
735. **Federal Republic of Germany, consumer price index** (M).—Statistisches Bundesamt (Wiesbaden); percent changes seasonally adjusted by Bureau of Economic Analysis (5, 25)
736. **France, consumer price index** (M).—Institut National de la Statistique et des Etudes Economiques (Paris); percent changes seasonally adjusted by Bureau of Economic Analysis (5, 25)
737. **Italy, consumer price index** (M).—Istituto Centrale di Statistica (Rome); percent changes seasonally adjusted by Bureau of Economic Analysis (5, 25)
738. **Japan, consumer price index** (M).—Bureau of Statistics, Office of the Prime Minister (Tokyo); percent changes seasonally adjusted by Bureau of Economic Analysis (5, 25)
742. **United Kingdom, index of stock prices** (M).—Central Statistical Office (London) (5, 26)
743. **Canada, index of stock prices** (M).—Toronto Stock Exchange (Toronto) (5, 26)
745. **Federal Republic of Germany, index of stock prices** (M).—Statistisches Bundesamt (Wiesbaden) (5, 26)
746. **France, index of stock prices** (M).—Institut National de la Statistique et des Etudes Economiques (Paris) (5, 26)
747. **Italy, index of stock prices** (M).—Banca d'Italia (Rome) (5, 26)
748. **Japan, index of stock prices** (M).—Bank of Japan (Tokyo) (5, 26)
750. **Index of weighted-average exchange value of U.S. dollar against currencies of 10 industrial countries** (M).—Source 4 (5, 27)
752. **United Kingdom, exchange rate per U.S. dollar** (M).—Sources 1 and 4 (5, 27)
753. **Canada, exchange rate per U.S. dollar** (M).—Source 4 (5, 27)
755. **Federal Republic of Germany, exchange rate per U.S. dollar** (M).—Source 4 (5, 27)
756. **France, exchange rate per U.S. dollar** (M).—Source 4 (5, 27)
757. **Italy, exchange rate per U.S. dollar** (M).—Source 4 (5, 27)
758. **Japan, exchange rate per U.S. dollar** (M).—Source 4 (5, 27)