

Bureau of Economic Analysis

Survey of Current Business

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Special in this issue

7. **A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes**

The upcoming comprehensive revision of the NIPA's will feature a number of definitional and classificational changes that will significantly improve the NIPA measures of output, investment, and saving. In particular, business and government expenditures for software will be recognized as fixed investment, government employee retirement plans will be reclassified from the government sector to the personal sector, and certain transactions will be reclassified as capital transfers. The recognition of software as investment will raise GDP (for 1996, by roughly 1 percent); the other definitional and classificational changes will have little effect on GDP, but several of them will raise private saving and reduce government saving.

21. **Foreign Direct Investment in the United States: Preliminary Results From the 1997 Benchmark Survey**

In 1997, U.S. affiliates of foreign companies accounted for 6.3 percent of U.S. gross product originating in private nonbank industries and for 4.9 percent of U.S. employment. Trade by U.S. affiliates accounted for 20 percent of U.S. exports of goods and for 30 percent of U.S. imports of goods. Affiliates accounted for more than half of U.S. exports of goods to Japan and for more than half of U.S. imports from Japan, Switzerland, Germany, and Sweden. These findings are based on the preliminary results of BEA's 1997 Benchmark Survey of Foreign Investment in the United States. This survey marks the first use by BEA of a new industry classification system that is based on the North American Industry Classification System.

Regular features

1. **Business Situation**

Real GDP increased 2.3 percent in the second quarter of 1999 after increasing 4.3 percent in the first quarter; the slowdown was mainly accounted for by a deceleration in consumer spending and a downturn in government spending. The price index for gross domestic purchases increased 2.1 percent after increasing 1.2 percent; the step-up reflected a sharp upturn in energy prices.

57. **State Personal Income, First Quarter 1999**

Personal income in the Nation increased 1.2 percent in the first quarter of 1999. The States with the fastest growth were Idaho, Maine, South Carolina, Wyoming, New York, Florida, and California. Personal income declined in North Dakota, Nebraska, South Dakota, and Iowa, and it was unchanged in Delaware.

Reports and statistical presentations

D-1. **BEA Current and Historical Data**

LOOKING AHEAD

Revision of the National Income and Product Accounts. The upcoming comprehensive, or benchmark, revision of the NIPA's is scheduled for initial release on October 28, 1999. This revision will include the annual revision of the NIPA's that would normally have been published in this issue of the SURVEY. (See this issue for a preview of the definitional and classificational changes that will be introduced in the comprehensive revision.) The September SURVEY will include an article about the new and redesigned NIPA tables that will be introduced in the comprehensive revision. Subsequent issues will include articles that describe the statistical changes, including a shift in the reference year for the chain-type measures, and other aspects of the revision.

B U S I N E S S S I T U A T I O N

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

REAL GROSS domestic product (GDP) increased 2.3 percent in the second quarter of 1999, according to the "advance" estimates of the national income and product accounts (NIPAs), after increasing 4.3 percent in the first quarter (chart 1 and table 1).¹ Prices paid by U.S. residents for goods and services—the price index for gross domestic purchases—increased 2.1 percent after increasing 1.2 percent; the step-up

reflected sharply higher energy prices. Reflecting the step-up in prices, growth of real disposable personal income slowed to 2.4 percent from 3.5 percent; the personal saving rate (current-dollar saving as a percentage of current-dollar disposable personal income) continued its downtrend, decreasing to negative 1.1 percent.²

The slowdown in real GDP growth was mainly accounted for by a deceleration in personal consumption expenditures (PCE) and by a downturn in government spending. PCE increased 4.0 percent after increasing 6.7 percent; the decel-

1. Quarterly estimates in the NIPAs are expressed at seasonally adjusted annual rates. Quarter-to-quarter dollar changes are the differences between the published estimates. Quarter-to-quarter percent changes are annualized and are calculated from unrounded data unless otherwise specified.

Real estimates are calculated using a chain-type Fisher formula with annual weights for all years and for all quarters except those in the most recent year, which are calculated using quarterly weights; real estimates are expressed both as index numbers (1992=100) and as chained (1992) dollars. Price indexes (1992=100) are also calculated using a chain-type Fisher formula.

2. For a perspective on the downtrend in the saving rate, see "Note on the Personal Saving Rate," SURVEY OF CURRENT BUSINESS 79 (February 1999): 8–9.

Table 1.—Real Gross Domestic Product, Real Gross Domestic Purchases, and Real Final Sales to Domestic Purchasers

[Seasonally adjusted at annual rates]

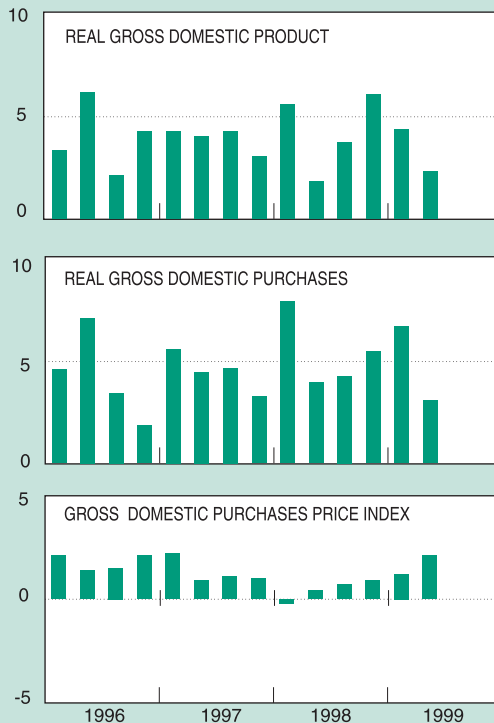
	Billions of chained (1992) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				1998		1999	
		1999	1998	1998	1999	III	IV	I	II
		II	III	IV	I	II			
Gross domestic product	7,803.6	67.9	111.2	81.9	44.0	3.7	6.0	4.3	2.3
Less: Exports of goods and services	1,007.6	-6.8	44.3	-13.1	11.1	-2.8	19.7	-5.1	4.5
Plus: Imports of goods and services	1,330.6	7.0	35.3	40.5	30.5	2.3	12.0	13.5	9.7
Equals: Gross domestic purchases	8,087.0	80.2	102.5	126.5	59.2	4.2	5.4	6.6	3.0
Less: Change in business inventories	19.4	17.5	-11.5	-5.5	-19.3				
Nonfarm	15.8	17.1	-9.5	-2.4	-19.3				
Farm	3.8	.4	-1.9	-3.6	.2				
Equals: Final sales to domestic purchasers	8,059.7	63.4	112.7	131.1	76.1	3.3	6.0	6.8	3.9
Personal consumption expenditures	5,384.7	51.6	64.2	85.9	52.8	4.1	5.0	6.7	4.0
Durable goods	809.8	4.3	41.3	23.9	10.9	2.4	24.5	12.9	5.6
Nondurable goods	1,612.7	8.2	16.0	35.8	11.8	2.1	4.2	9.5	3.0
Services	2,977.2	38.0	12.4	29.6	30.4	5.4	1.7	4.1	4.2
Gross private domestic fixed investment	1,373.6	6.8	40.1	33.0	29.6	2.2	13.2	10.5	9.1
Nonresidential fixed investment	1,038.5	-1.7	33.2	20.3	26.3	-7	14.6	8.5	10.8
Structures	207.2	.1	3.0	2.8	-6	.2	6.0	5.7	-1.2
Producers' durable equipment	849.6	-2.0	32.2	18.3	29.8	-1.0	17.8	9.5	15.3
Residential investment	340.1	7.4	7.6	11.8	4.2	9.9	10.0	15.4	5.1
Government consumption expenditures and gross investment	1,320.0	4.8	10.7	13.6	-3.9	1.5	3.3	4.2	-1.2
Federal	454.7	-1.6	8.1	-2.2	-3.7	-1.4	7.3	-1.9	-3.2
National defense	296.9	3.2	1.1	-5.2	-2.5	4.3	1.3	-6.6	-3.2
Nondefense	156.8	-4.5	6.8	2.8	-1.2	-11.5	19.8	7.4	-3.1
State and local	865.5	6.4	2.7	15.8	-3	3.1	1.3	7.7	-1
Addendum: Final sales of domestic product	7,776.0	51.2	121.3	86.5	60.6	2.8	6.6	4.6	3.2

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates usually are not additive. Chained (1992) dollar levels and residuals, which measure the extent of nonadditivity in each table, are in NIPA tables 1.2, 1.4, and 1.6. Percent changes are calculated from unrounded data. Percent changes in major aggregates are in NIPA table 8.1. (See "Selected NIPA Tables," which begin on page D-2 of this issue.)

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

eration was accounted for by nondurable goods and durable goods. Government spending decreased 1.2 percent after increasing 4.2 percent; the downturn was mainly in spending by State and local governments. The slowdown in GDP was moderated by an upturn in exports.

The largest contributor to the second-quarter increase in real GDP was PCE, which contributed 2.73 percentage points to GDP growth; durable goods, nondurable goods, and services all increased (table 2). Nonresidential fixed invest-

ment increased 10.8 percent and contributed 1.15 percentage points to GDP growth; producers' durable equipment accounted for the increase. Exports increased 4.5 percent and contributed 0.49 percentage point to GDP growth. These increases were partly offset by an increase in imports, which subtracted 1.24 percentage points from GDP growth, and by a drop in inventory investment, which subtracted 0.86 percentage point. The increase in imports was largely accounted for by computers; the drop in inventory

Second-Quarter 1999 Advance GDP Estimate: Source Data and Assumptions

The "advance" GDP estimate for the second quarter is based on preliminary and incomplete source data; as more and better data become available, the estimate will be revised. The advance estimate is based on the following major source data. (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 other than aircraft (3), aircraft shipments (2), and exports and imports of machinery and equipment (2);

Residential investment: Construction put in place (2) and single-family 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 consumption expenditures and gross investment: Department of Defense outlays (3), other Federal outlays (3), State and local construction put in place (2), State and local employment (3), and the Employment Cost Index for the quarter;

GDP prices: Consumer Price Index (3), Producer Price Index (3), U.S. Import and Export Price Indexes (3), and values and quantities of petroleum imports (2).

BEA made assumptions for source data that were not available. Table A shows the assumptions for key series; a more comprehensive listing of assumptions is available on the Department of Commerce's Economic Bulletin Board or from BEA.

Table A.—Summary of Major Data Assumptions for Advance Estimates, 1999:II

[Billions of dollars, seasonally adjusted at annual rates]

	1999					
	January	February	March	April	May	June ¹
Fixed investment:						
Nonresidential structures:						
Buildings, utilities, and farm:						
Value of new nonresidential construction put in place	185.8	189.0	189.3	182.1	179.6	188.5
Producers' durable equipment:						
Manufacturers' shipments of complete civilian aircraft	58.3	37.4	34.4	41.2	37.9	33.3
Residential structures:						
Value of new residential construction put in place:						
1-unit structures	208.7	210.3	212.4	211.4	210.6	208.9
2-or-more-unit structures	26.4	27.8	29.1	28.2	27.0	27.7
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	-8.0	27.2	9.6	7.1	20.1	28.9
Net exports: ²						
Exports of goods:						
U.S. exports of goods, balance-of-payments basis	663.2	656.4	651.9	663.2	655.6	667.7
Excluding nonmonetary gold	660.5	653.4	649.0	659.2	653.4	664.7
Imports of goods:						
U.S. imports of goods, balance-of-payments basis	943.4	958.5	960.1	967.2	994.1	1002.6
Excluding nonmonetary gold	939.8	955.8	956.6	964.0	991.1	999.6
Net exports of goods (exports less imports)	-280.2	-302.1	-308.2	-304.0	-338.5	-334.9
Excluding nonmonetary gold	-279.3	-302.4	-307.6	-304.8	-337.7	-334.9
Government consumption expenditures and gross investment:						
State and local:						
Structures:						
Value of new construction put in place	140.5	146.5	146.1	140.6	139.5	143.8

1. Assumed.

2. Nonmonetary gold is included in balance-of-payments-basis exports and imports but is not used directly in the estimation of NIPA exports and imports.

investment was largely accounted for by retail trade.

Motor vehicles.—Real motor vehicle output increased 8.9 percent in the second quarter after decreasing 18.7 percent in the first (table 3). The upturn was accounted for by auto output.

Final sales of motor vehicles to domestic purchasers increased 7.5 percent after little change. Auto sales turned up; truck sales increased less than in the first quarter. Purchases of motor vehicles by consumers increased after decreasing, and purchases by businesses increased more than in the first quarter.

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

[Seasonally adjusted at annual rates]

	1998		1999	
	III	IV	I	II
Percent change at annual rate:				
Gross domestic product	3.7	6.0	4.3	2.3
Percentage points at annual rates:				
Personal consumption expenditures	2.78	3.48	4.56	2.73
Durable goods .....	.20	1.90	1.09	.48
Nondurable goods .....	.42	.84	1.77	.59
Services	2.15	.74	1.70	1.67
Gross private domestic investment	1.22	1.42	1.31	.52
Fixed investment .....	.33	1.95	1.58	1.38
Nonresidential	-.08	1.52	.91	1.15
Structures .....	.01	.17	.15	-.03
Producers' durable equipment	-.09	1.35	.76	1.18
Residential .....	.41	.43	.66	.23
Change in business inventories .....	.89	-.53	-.27	-.86
Net exports of goods and services	-.62	.52	-2.23	-.75
Exports	-.32	2.02	-.58	.49
Goods .....	.04	1.76	-.68	.36
Services	-.36	.26	.10	.13
Imports	-.30	-1.50	-1.65	-1.24
Goods	-.32	-1.46	-1.42	-1.22
Services .....	.01	-.04	-.23	-.03
Government consumption expenditures and gross investment .....	.27	.60	.70	-.21
Federal	-.09	.44	-.08	-.19
National defense .....	.17	.06	-.23	-.13
Nondefense	-.26	.38	.14	-.07
State and local .....	.35	.16	.78	-.01

NOTE.—NIPA table 8.2 also shows contributions for 1998:I and 1998:II.

Factors frequently considered in analyses of consumer spending were mixed in the second quarter. Growth in real disposable personal income slowed to 2.4 percent from 3.5 percent, but the Index of Consumer Sentiment (prepared by the University of Michigan Survey Research Center as a measure of consumer attitudes and expectations) increased from an already high level. The unemployment rate was unchanged at 4.3 percent.

Factors specific to motor vehicle purchases were also mixed. For example, interest rates on new-car loans at commercial banks changed little, but the prices of new motor vehicles decreased, partly reflecting manufacturers' sales-incentive programs.

Imports of motor vehicles turned down, and exports turned up. Purchases by government decreased more than in the first quarter.

Motor vehicle inventory investment decreased slightly less than in the first quarter; the second-quarter decrease reflected a step-up in the liquidation of auto inventories. The inventory-sales

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

[Seasonally adjusted at annual rates]

	Billions of chained (1992) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				1998		1999	
	1999	1998		1999		III	IV	I	II
	II	III	IV	I	II				
Output	287.3	-7.7	43.2	-15.0	6.1	-11.2	87.7	-18.7	8.9
Autos	115.3	4.5	11.6	-14.5	6.8	17.8	48.9	-39.4	27.2
Trucks	171.5	-12.1	31.4	-6	-5	-27.9	122.9	-1.4	-1.1
Less: Exports	24.2	-4.6	2.7	-1.6	1.6	-54.0	62.1	-24.4	30.4
Autos	15.9	-1.6	2.6	-1.4	1.4	-37.9	106.8	-31.8	46.4
Trucks	8.3	-2.9	.1	-.2	.1	-70.3	6.1	-8.9	5.6
Plus: Imports	99.0	-1.9	12.3	8.2	-2.6	-9.2	76.6	40.0	-9.8
Autos	79.6	-2.7	11.3	5.8	-5.5	-14.6	85.1	32.7	-23.7
Trucks	19.4	.7	1.1	2.4	2.9	27.0	37.0	86.2	93.5
Equals: Gross domestic purchases	362.1	-5.2	52.7	-5.1	2.0	-6.4	86.5	-5.5	2.2
Autos	178.8	3.3	20.4	-7.1	-5	8.4	58.9	-14.4	-1.0
Trucks	182.7	-8.4	32.2	2.0	2.3	-20.2	121.9	4.4	5.3
Less: Change in business inventories	-2.9	13.4	16.2	-5.2	-4.8				
Autos	-9.3	9.3	4.9	-5.3	-5.9				
Trucks	5.8	4.2	10.9	0	.9				
Equals: Final sales to domestic purchasers	364.6	-18.6	36.5	0	6.5	-20.2	53.8	0	7.5
Autos	187.6	-5.9	15.6	-1.9	5.1	-12.7	42.2	-4.1	11.7
Trucks	176.7	-12.8	21.0	1.8	1.5	-27.5	67.4	4.4	3.3
Addenda:									
Personal consumption expenditures	215.7	-5.8	22.9	-2.0	1.6	-11.2	56.6	-3.6	3.1
Producers' durable equipment	142.6	-11.3	11.6	3.5	6.6	-29.9	43.9	11.1	21.1
Gross government investment	7.7	-2.0	2.2	-1.4	-1.6	-56.8	141.9	-42.4	-52.0

NOTE.—See note to table 1 for an explanation of chained (1992) dollars. Truck output includes new trucks only; auto output includes new cars and used cars. Chained (1992) dollar levels for motor vehicle output, auto and truck output, and residuals, which measure the extent of nonadditivity in each table, are in NIPA tables 1.4, 8.5, and 8.7.

ratio for new domestic autos, which is calculated from units data, decreased from 2.1 at the end of the first quarter to 1.9 at the end of the second; the traditional industry target is 2.4.

Prices

As noted, the price index for gross domestic purchases, which measures prices paid by U.S. residents for goods and services wherever produced, increased 2.1 percent in the second quarter after increasing 1.2 percent in the first (chart 2 and table 4). A sharp upturn in energy prices accounted for the step-up. The price index for gross domestic purchases less food and energy increased 1.4 percent after increasing 1.3 percent.

The GDP price index, which measures prices paid for goods and services produced in the United States, increased 1.6 percent, the same as in the first quarter. This index, unlike the price index for gross domestic purchases, excludes the prices of imports and includes the prices of exports. Import prices increased 4.0 percent after decreasing 3.3 percent; the price of petroleum imports jumped from an average of \$10.38 per barrel in the first quarter to an average of \$14.85 per barrel in the second, largely reflecting a decision in March by the Organization of Petroleum Exporting Countries (OPEC) and some non-OPEC oil producing countries to cut production by about 3 percent. Export prices decreased slightly in both quarters.

PCE prices increased 2.5 percent after increasing 1.2 percent. Energy prices mainly accounted for the step-up, as gasoline and oil prices increased sharply after a moderate decrease; the price of

fuel oil and coal also turned up. Food prices increased less than in the first quarter, and the prices of PCE excluding food and energy increased somewhat more than in the first quarter.

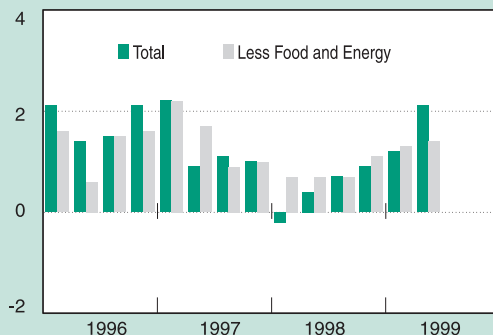
Prices of nonresidential fixed investment decreased 1.5 percent after decreasing 2.0 percent. Prices of nonresidential structures increased more than in the first quarter, and prices of producers' durable equipment decreased about the same as in the first quarter. The price of information processing equipment, including computers and peripheral equipment, decreased less than in the first quarter; the price of transportation equipment increased less than in the first quarter, as auto prices turned down.

Prices of government consumption expenditures and gross investment increased 2.9 percent, slightly less than in the first quarter. A slowdown in prices paid by the Federal Government was largely offset by a step-up in prices paid by State and local governments. Prices paid by the Federal Government increased 0.8 percent after increasing 6.6 percent; the first-quarter increase had reflected a pay raise for civilian and military personnel. Prices paid by State and local governments increased 4.1 percent after increasing 1.3 percent; the step-up largely reflected an upturn in prices paid for nondurable goods and an acceleration in prices paid for structures.

CHART 2

Gross Domestic Purchases Prices: Change From Preceding Quarter

Percent



Note—Percent change at annual rate from preceding quarter; based on seasonally adjusted index numbers (1992=100).

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

Table 4.—Price Indexes

[Percent change at annual rates; based on seasonally adjusted index numbers (1992=100)]

	1998		1999	
	III	IV	I	II
Gross domestic product	1.0	0.8	1.6	1.6
Less: Exports of goods and services	-2.8	-9	-6	-2
Plus: Imports of goods and services	-4.8	-2	-3.3	4.0
Equals: Gross domestic purchases .....	.7	.9	1.2	2.1
Less: Change in business inventories				
Equals: Final sales to domestic purchasers .....	.7	.9	1.2	2.1
Personal consumption expenditures	1.0	1.1	1.2	2.5
Food	2.8	2.0	1.8	1.2
Energy	-5.8	-6.8	-2.4	28.2
Personal consumption expenditures less food and energy	1.1	1.3	1.3	1.6
Private nonresidential fixed investment	-3.6	-2.5	-2.0	-1.5
Structures	1.2	1.8	.9	2.3
Producers' durable equipment	-5.3	-4.0	-3.0	-2.8
Private residential investment	3.7	4.2	2.2	2.7
Government consumption expenditures and gross investment	1.5	1.5	3.1	2.9
Federal .....	.4	1.5	6.6	.8
National defense .....	.4	1.8	6.0	1.0
Nondefense .....	.5	1.1	7.6	.4
State and local	2.1	1.5	1.3	4.1
Addendum: Gross domestic purchases less food and energy .....	.7	1.1	1.3	1.4

NOTE.—Percent changes in major aggregates are in NIPA table 8.1. Index number levels are in tables 7.1, 7.2, and 7.4.

Personal income

Personal income (in current dollars) increased \$93.2 billion in the second quarter, about the same as in the first (table 5). Disposable personal income—personal income less personal tax and nontax payments—increased \$75.2 billion, and personal outlays increased \$100.4 billion; as the increase in outlays exceeded that in income, personal saving fell. The personal saving rate decreased to negative 1.1 percent from negative 0.7 percent (chart 3).

Wages and salaries increased \$60.2 billion after increasing \$74.2 billion. The slowdown reflected slowdowns in the service industries and in the government; government wages and salaries had increased sharply in the first quarter as a result of the pay raise for Federal workers. Wages and salaries for goods-producing industries and for distributive industries increased more than in the first quarter.

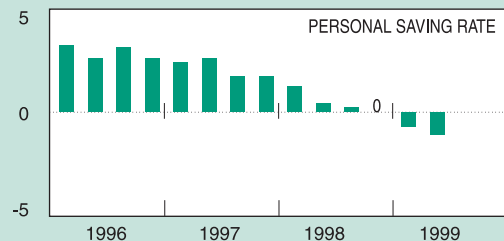
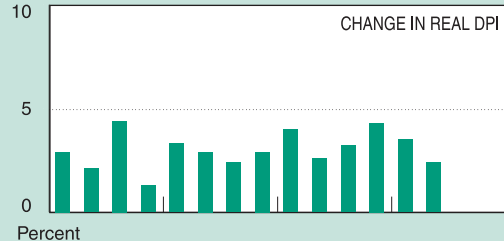
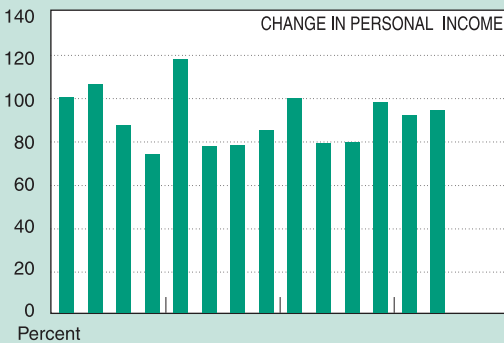
Proprietors' income increased \$11.6 billion after increasing \$1.4 billion. The step-up was more than accounted for by farm proprietors' income, which turned up. The upturn was primarily accounted for by farm subsidy payments, which increased after decreasing. (The first-quarter decrease was from an unusually high fourth-quarter level that had reflected an acceleration in subsidy payments authorized by the Federal 1998 Omnibus Budget Resolution.) Farm income excluding subsidies decreased less in the second quarter than in the first, mostly because of an upturn in livestock output. Nonfarm proprietors' income increased less than in the first quarter.

Transfer payments increased \$6.8 billion after increasing \$16.9 billion. The large first-quarter increase had primarily been due to cost-of-living increases in several Federal transfer programs and to an increase in the Earned Income Tax Credit program.

CHART 3

Selected Personal Income and Saving Measures

Billions \$



Note—Changes are from preceding quarter, based on seasonally adjusted annual rates.

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Table 5.—Personal Income and Its Disposition

[Billions of dollars; seasonally adjusted at annual rates]


	Level	Change from preceding quarter			
	1999	1998		1999	
	II	III	IV	I	II
Wage and salary disbursements	4,377.2	59.5	65.7	74.2	60.2
Private industries	3,661.2	52.6	59.1	62.2	55.5
Goods-producing industries	1,060.3	4.8	9.4	10.7	12.2
Manufacturing	766.9	.1	3.2	5.1	7.7
Distributive industries	983.0	13.6	15.7	9.9	11.6
Service industries	1,617.9	34.2	34.0	41.6	31.7
Government	716.0	6.9	6.5	12.0	4.8
Other labor income	419.6	2.7	2.6	3.7	4.9
Proprietors' income with IVA and CCAAdj	609.9	4.4	20.8	1.4	11.6
Farm	24.0	-2.5	9.5	-12.2	1.5
Nonfarm	585.9	6.9	11.3	13.6	10.1
Rental income of persons with CCAAdj	171.0	2.6	3.9	.2	3.3
Personal dividend income	272.7	.9	2.7	3.1	3.9
Personal interest income	777.8	6.2	.7	1.1	6.8
Transfer payments to persons	1,182.0	7.1	5.4	16.9	6.8
Less: Personal contributions for social insurance	367.7	4.4	4.6	9.3	4.3
Personal income	7,442.5	78.9	97.1	91.4	93.2
Less: Personal tax and nontax payments	1,162.1	15.5	16.5	19.2	18.0
Equals: Disposable personal income	6,280.4	63.5	80.7	72.1	75.2
Less: Personal outlays	6,351.1	76.5	93.8	117.1	100.4
Equals: Personal saving	-70.7	-13.0	-13.2	-44.9	-25.2
Addenda: Special factors in personal income:					
In wages and salaries:					
Federal Government and Postal Service pay adjustments	6.1	0	0	6.1	0
In farm proprietors' income:					
Subsidies	7.4	0	10.1	-6.9	4.2
In transfer payments to persons:					
Social security retroactive payments	0	0	1.2	-1.2	0
Cost-of-living adjustments in Federal transfer programs	6.3	0	0	6.3	0
Earned Income Tax Credit and Child Tax Credit payments	25.3	0	0	3.4	0
In personal tax and nontax payments:					
Recent tax law changes		-6	0	-5.7	0

NOTE.—Most dollar levels are in NIPA table 2.1.
IVA Inventory valuation adjustment
CCAAdj Capital consumption adjustment

Personal interest income, rental income of persons, and personal dividend income increased more in the second quarter than in the first.

Personal contributions for social insurance, which is subtracted in the calculation of personal income, increased \$4.3 billion after increasing \$9.3 billion. The slowdown was primarily due to

a slowdown in the growth of the taxable wage base.

Personal tax and nontax payments increased \$18.0 billion after increasing \$19.2 billion. The slowdown was due to a slowdown in the growth of wages and salaries and to State tax refunds mandated by State legislatures. 

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B U S I N E S S S I T U A T I O N

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

REAL GROSS domestic product (GDP) increased 2.3 percent in the second quarter of 1999, according to the "advance" estimates of the national income and product accounts (NIPAs), after increasing 4.3 percent in the first quarter (chart 1 and table 1).¹ Prices paid by U.S. residents for goods and services—the price index for gross domestic purchases—increased 2.1 percent after increasing 1.2 percent; the step-up

reflected sharply higher energy prices. Reflecting the step-up in prices, growth of real disposable personal income slowed to 2.4 percent from 3.5 percent; the personal saving rate (current-dollar saving as a percentage of current-dollar disposable personal income) continued its downtrend, decreasing to negative 1.1 percent.²

The slowdown in real GDP growth was mainly accounted for by a deceleration in personal consumption expenditures (PCE) and by a downturn in government spending. PCE increased 4.0 percent after increasing 6.7 percent; the decel-

1. Quarterly estimates in the NIPAs are expressed at seasonally adjusted annual rates. Quarter-to-quarter dollar changes are the differences between the published estimates. Quarter-to-quarter percent changes are annualized and are calculated from unrounded data unless otherwise specified.

Real estimates are calculated using a chain-type Fisher formula with annual weights for all years and for all quarters except those in the most recent year, which are calculated using quarterly weights; real estimates are expressed both as index numbers (1992=100) and as chained (1992) dollars. Price indexes (1992=100) are also calculated using a chain-type Fisher formula.

2. For a perspective on the downtrend in the saving rate, see "Note on the Personal Saving Rate," SURVEY OF CURRENT BUSINESS 79 (February 1999): 8–9.

Table 1.—Real Gross Domestic Product, Real Gross Domestic Purchases, and Real Final Sales to Domestic Purchasers

[Seasonally adjusted at annual rates]

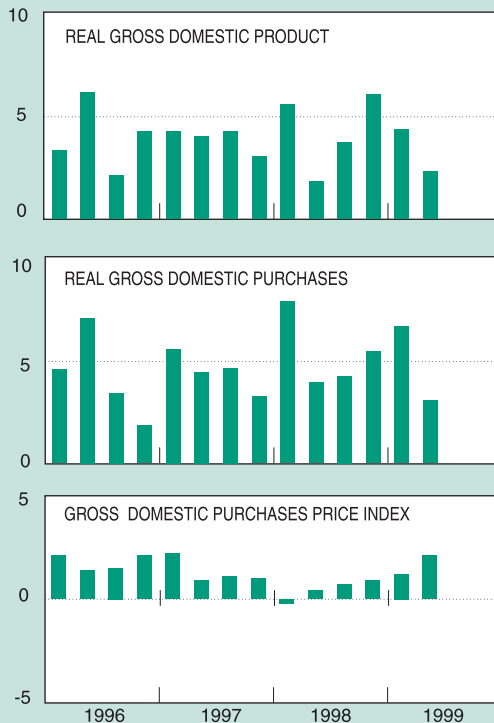
	Billions of chained (1992) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				1998		1999	
		1999	1998	1999		III	IV	I	II
	II	III	IV	I	II				
Gross domestic product	7,803.6	67.9	111.2	81.9	44.0	3.7	6.0	4.3	2.3
Less: Exports of goods and services	1,007.6	-6.8	44.3	-13.1	11.1	-2.8	19.7	-5.1	4.5
Plus: Imports of goods and services	1,330.6	7.0	35.3	40.5	30.5	2.3	12.0	13.5	9.7
Equals: Gross domestic purchases	8,087.0	80.2	102.5	126.5	59.2	4.2	5.4	6.6	3.0
Less: Change in business inventories	19.4	17.5	-11.5	-5.5	-19.3	.....	.....	.....	.....
Nonfarm	15.8	17.1	-9.5	-2.4	-19.3	.....	.....	.....	.....
Farm	3.8	.4	-1.9	-3.6	.2	.....	.....	.....	.....
Equals: Final sales to domestic purchasers	8,059.7	63.4	112.7	131.1	76.1	3.3	6.0	6.8	3.9
Personal consumption expenditures	5,384.7	51.6	64.2	85.9	52.8	4.1	5.0	6.7	4.0
Durable goods	809.8	4.3	41.3	23.9	10.9	2.4	24.5	12.9	5.6
Nondurable goods	1,612.7	8.2	16.0	35.8	11.8	2.1	4.2	9.5	3.0
Services	2,977.2	38.0	12.4	29.6	30.4	5.4	1.7	4.1	4.2
Gross private domestic fixed investment	1,373.6	6.8	40.1	33.0	29.6	2.2	13.2	10.5	9.1
Nonresidential fixed investment	1,038.5	-1.7	33.2	20.3	26.3	-7	14.6	8.5	10.8
Structures	207.2	.1	3.0	2.8	-6	.2	6.0	5.7	-1.2
Producers' durable equipment	849.6	-2.0	32.2	18.3	29.8	-1.0	17.8	9.5	15.3
Residential investment	340.1	7.4	7.6	11.8	4.2	9.9	10.0	15.4	5.1
Government consumption expenditures and gross investment	1,320.0	4.8	10.7	13.6	-3.9	1.5	3.3	4.2	-1.2
Federal	454.7	-1.6	8.1	-2.2	-3.7	-1.4	7.3	-1.9	-3.2
National defense	296.9	3.2	1.1	-5.2	-2.5	4.3	1.3	-6.6	-3.2
Nondefense	156.8	-4.5	6.8	2.8	-1.2	-11.5	19.8	7.4	-3.1
State and local	865.5	6.4	2.7	15.8	-3	3.1	1.3	7.7	-1
Addendum: Final sales of domestic product	7,776.0	51.2	121.3	86.5	60.6	2.8	6.6	4.6	3.2

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates usually are not additive. Chained (1992) dollar levels and residuals, which measure the extent of nonadditivity in each table, are in NIPA tables 1.2, 1.4, and 1.6. Percent changes are calculated from unrounded data. Percent changes in major aggregates are in NIPA table 8.1. (See "Selected NIPA Tables," which begin on page D-2 of this issue.)

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

eration was accounted for by nondurable goods and durable goods. Government spending decreased 1.2 percent after increasing 4.2 percent; the downturn was mainly in spending by State and local governments. The slowdown in GDP was moderated by an upturn in exports.

The largest contributor to the second-quarter increase in real GDP was PCE, which contributed 2.73 percentage points to GDP growth; durable goods, nondurable goods, and services all increased (table 2). Nonresidential fixed invest-

ment increased 10.8 percent and contributed 1.15 percentage points to GDP growth; producers' durable equipment accounted for the increase. Exports increased 4.5 percent and contributed 0.49 percentage point to GDP growth. These increases were partly offset by an increase in imports, which subtracted 1.24 percentage points from GDP growth, and by a drop in inventory investment, which subtracted 0.86 percentage point. The increase in imports was largely accounted for by computers; the drop in inventory

Second-Quarter 1999 Advance GDP Estimate: Source Data and Assumptions

The "advance" GDP estimate for the second quarter is based on preliminary and incomplete source data; as more and better data become available, the estimate will be revised. The advance estimate is based on the following major source data. (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 other than aircraft (3), aircraft shipments (2), and exports and imports of machinery and equipment (2);

Residential investment: Construction put in place (2) and single-family 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 consumption expenditures and gross investment: Department of Defense outlays (3), other Federal outlays (3), State and local construction put in place (2), State and local employment (3), and the Employment Cost Index for the quarter;

GDP prices: Consumer Price Index (3), Producer Price Index (3), U.S. Import and Export Price Indexes (3), and values and quantities of petroleum imports (2).

BEA made assumptions for source data that were not available. Table A shows the assumptions for key series; a more comprehensive listing of assumptions is available on the Department of Commerce's Economic Bulletin Board or from BEA.

Table A.—Summary of Major Data Assumptions for Advance Estimates, 1999:II

[Billions of dollars, seasonally adjusted at annual rates]

	1999					
	January	February	March	April	May	June ¹
Fixed investment:						
Nonresidential structures:						
Buildings, utilities, and farm:						
Value of new nonresidential construction put in place	185.8	189.0	189.3	182.1	179.6	188.5
Producers' durable equipment:						
Manufacturers' shipments of complete civilian aircraft	58.3	37.4	34.4	41.2	37.9	33.3
Residential structures:						
Value of new residential construction put in place:						
1-unit structures	208.7	210.3	212.4	211.4	210.6	208.9
2-or-more-unit structures	26.4	27.8	29.1	28.2	27.0	27.7
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	-8.0	27.2	9.6	7.1	20.1	28.9
Net exports: ²						
Exports of goods:						
U.S. exports of goods, balance-of-payments basis	663.2	656.4	651.9	663.2	655.6	667.7
Excluding nonmonetary gold	660.5	653.4	649.0	659.2	653.4	664.7
Imports of goods:						
U.S. imports of goods, balance-of-payments basis	943.4	958.5	960.1	967.2	994.1	1002.6
Excluding nonmonetary gold	939.8	955.8	956.6	964.0	991.1	999.6
Net exports of goods (exports less imports)	-280.2	-302.1	-308.2	-304.0	-338.5	-334.9
Excluding nonmonetary gold	-279.3	-302.4	-307.6	-304.8	-337.7	-334.9
Government consumption expenditures and gross investment:						
State and local:						
Structures:						
Value of new construction put in place	140.5	146.5	146.1	140.6	139.5	143.8

1. Assumed.

2. Nonmonetary gold is included in balance-of-payments-basis exports and imports but is not used directly in the estimation of NIPA exports and imports.

investment was largely accounted for by retail trade.

Motor vehicles.—Real motor vehicle output increased 8.9 percent in the second quarter after decreasing 18.7 percent in the first (table 3). The upturn was accounted for by auto output.

Final sales of motor vehicles to domestic purchasers increased 7.5 percent after little change. Auto sales turned up; truck sales increased less than in the first quarter. Purchases of motor vehicles by consumers increased after decreasing, and purchases by businesses increased more than in the first quarter.

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

[Seasonally adjusted at annual rates]

	1998		1999	
	III	IV	I	II
Percent change at annual rate:				
Gross domestic product	3.7	6.0	4.3	2.3
Percentage points at annual rates:				
Personal consumption expenditures	2.78	3.48	4.56	2.73
Durable goods .....	.20	1.90	1.09	.48
Nondurable goods .....	.42	.84	1.77	.59
Services	2.15	.74	1.70	1.67
Gross private domestic investment	1.22	1.42	1.31	.52
Fixed investment .....	.33	1.95	1.58	1.38
Nonresidential	-.08	1.52	.91	1.15
Structures .....	.01	.17	.15	-.03
Producers' durable equipment	-.09	1.35	.76	1.18
Residential .....	.41	.43	.66	.23
Change in business inventories .....	.89	-.53	-.27	-.86
Net exports of goods and services	-.62	.52	-2.23	-.75
Exports	-.32	2.02	-.58	.49
Goods .....	.04	1.76	-.68	.36
Services	-.36	.26	.10	.13
Imports	-.30	-1.50	-1.65	-1.24
Goods	-.32	-1.46	-1.42	-1.22
Services .....	.01	-.04	-.23	-.03
Government consumption expenditures and gross investment .....	.27	.60	.70	-.21
Federal	-.09	.44	-.08	-.19
National defense .....	.17	.06	-.23	-.13
Nondefense	-.26	.38	.14	-.07
State and local .....	.35	.16	.78	-.01

NOTE.—NIPA table 8.2 also shows contributions for 1998:I and 1998:II.

Factors frequently considered in analyses of consumer spending were mixed in the second quarter. Growth in real disposable personal income slowed to 2.4 percent from 3.5 percent, but the Index of Consumer Sentiment (prepared by the University of Michigan Survey Research Center as a measure of consumer attitudes and expectations) increased from an already high level. The unemployment rate was unchanged at 4.3 percent.

Factors specific to motor vehicle purchases were also mixed. For example, interest rates on new-car loans at commercial banks changed little, but the prices of new motor vehicles decreased, partly reflecting manufacturers' sales-incentive programs.

Imports of motor vehicles turned down, and exports turned up. Purchases by government decreased more than in the first quarter.

Motor vehicle inventory investment decreased slightly less than in the first quarter; the second-quarter decrease reflected a step-up in the liquidation of auto inventories. The inventory-sales

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

[Seasonally adjusted at annual rates]

	Billions of chained (1992) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter				1998		1999	
	1999	1998		1999		III	IV	I	II
	II	III	IV	I	II				
Output	287.3	-7.7	43.2	-15.0	6.1	-11.2	87.7	-18.7	8.9
Autos	115.3	4.5	11.6	-14.5	6.8	17.8	48.9	-39.4	27.2
Trucks	171.5	-12.1	31.4	-6	-5	-27.9	122.9	-1.4	-1.1
Less: Exports	24.2	-4.6	2.7	-1.6	1.6	-54.0	62.1	-24.4	30.4
Autos	15.9	-1.6	2.6	-1.4	1.4	-37.9	106.8	-31.8	46.4
Trucks	8.3	-2.9	.1	-2	.1	-70.3	6.1	-8.9	5.6
Plus: Imports	99.0	-1.9	12.3	8.2	-2.6	-9.2	76.6	40.0	-9.8
Autos	79.6	-2.7	11.3	5.8	-5.5	-14.6	85.1	32.7	-23.7
Trucks	19.4	.7	1.1	2.4	2.9	27.0	37.0	86.2	93.5
Equals: Gross domestic purchases	362.1	-5.2	52.7	-5.1	2.0	-6.4	86.5	-5.5	2.2
Autos	178.8	3.3	20.4	-7.1	-5	8.4	58.9	-14.4	-1.0
Trucks	182.7	-8.4	32.2	2.0	2.3	-20.2	121.9	4.4	5.3
Less: Change in business inventories	-2.9	13.4	16.2	-5.2	-4.8				
Autos	-9.3	9.3	4.9	-5.3	-5.9				
Trucks	5.8	4.2	10.9	0	.9				
Equals: Final sales to domestic purchasers	364.6	-18.6	36.5	0	6.5	-20.2	53.8	0	7.5
Autos	187.6	-5.9	15.6	-1.9	5.1	-12.7	42.2	-4.1	11.7
Trucks	176.7	-12.8	21.0	1.8	1.5	-27.5	67.4	4.4	3.3
Addenda:									
Personal consumption expenditures	215.7	-5.8	22.9	-2.0	1.6	-11.2	56.6	-3.6	3.1
Producers' durable equipment	142.6	-11.3	11.6	3.5	6.6	-29.9	43.9	11.1	21.1
Gross government investment	7.7	-2.0	2.2	-1.4	-1.6	-56.8	141.9	-42.4	-52.0

NOTE.—See note to table 1 for an explanation of chained (1992) dollars. Truck output includes new trucks only; auto output includes new cars and used cars. Chained (1992) dollar levels for

motor vehicle output, auto and truck output, and residuals, which measure the extent of nonadditivity in each table, are in NIPA tables 1.4, 8.5, and 8.7.

ratio for new domestic autos, which is calculated from units data, decreased from 2.1 at the end of the first quarter to 1.9 at the end of the second; the traditional industry target is 2.4.

Prices

As noted, the price index for gross domestic purchases, which measures prices paid by U.S. residents for goods and services wherever produced, increased 2.1 percent in the second quarter after increasing 1.2 percent in the first (chart 2 and table 4). A sharp upturn in energy prices accounted for the step-up. The price index for gross domestic purchases less food and energy increased 1.4 percent after increasing 1.3 percent.

The GDP price index, which measures prices paid for goods and services produced in the United States, increased 1.6 percent, the same as in the first quarter. This index, unlike the price index for gross domestic purchases, excludes the prices of imports and includes the prices of exports. Import prices increased 4.0 percent after decreasing 3.3 percent; the price of petroleum imports jumped from an average of \$10.38 per barrel in the first quarter to an average of \$14.85 per barrel in the second, largely reflecting a decision in March by the Organization of Petroleum Exporting Countries (OPEC) and some non-OPEC oil producing countries to cut production by about 3 percent. Export prices decreased slightly in both quarters.

PCE prices increased 2.5 percent after increasing 1.2 percent. Energy prices mainly accounted for the step-up, as gasoline and oil prices increased sharply after a moderate decrease; the price of

fuel oil and coal also turned up. Food prices increased less than in the first quarter, and the prices of PCE excluding food and energy increased somewhat more than in the first quarter.

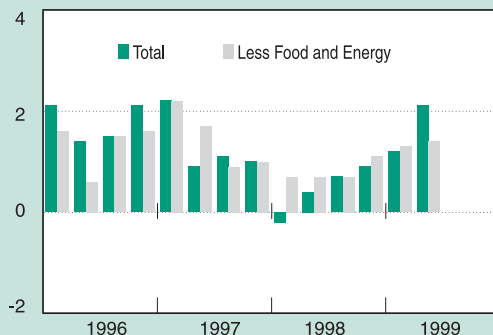
Prices of nonresidential fixed investment decreased 1.5 percent after decreasing 2.0 percent. Prices of nonresidential structures increased more than in the first quarter, and prices of producers' durable equipment decreased about the same as in the first quarter. The price of information processing equipment, including computers and peripheral equipment, decreased less than in the first quarter; the price of transportation equipment increased less than in the first quarter, as auto prices turned down.

Prices of government consumption expenditures and gross investment increased 2.9 percent, slightly less than in the first quarter. A slowdown in prices paid by the Federal Government was largely offset by a step-up in prices paid by State and local governments. Prices paid by the Federal Government increased 0.8 percent after increasing 6.6 percent; the first-quarter increase had reflected a pay raise for civilian and military personnel. Prices paid by State and local governments increased 4.1 percent after increasing 1.3 percent; the step-up largely reflected an upturn in prices paid for nondurable goods and an acceleration in prices paid for structures.

CHART 2

Gross Domestic Purchases Prices: Change From Preceding Quarter

Percent



Note.—Percent change at annual rate from preceding quarter; based on seasonally adjusted index numbers (1992=100).

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

Table 4.—Price Indexes

[Percent change at annual rates; based on seasonally adjusted index numbers (1992=100)]

	1998		1999	
	III	IV	I	II
Gross domestic product	1.0	0.8	1.6	1.6
Less: Exports of goods and services	-2.8	-9	-6	-2
Plus: Imports of goods and services	-4.8	-2	-3.3	4.0
Equals: Gross domestic purchases .....	.7	.9	1.2	2.1
Less: Change in business inventories				
Equals: Final sales to domestic purchasers .....	.7	.9	1.2	2.1
Personal consumption expenditures	1.0	1.1	1.2	2.5
Food	2.8	2.0	1.8	1.2
Energy	-5.8	-6.8	-2.4	28.2
Personal consumption expenditures less food and energy	1.1	1.3	1.3	1.6
Private nonresidential fixed investment	-3.6	-2.5	-2.0	-1.5
Structures	1.2	1.8	.9	2.3
Producers' durable equipment	-5.3	-4.0	-3.0	-2.8
Private residential investment	3.7	4.2	2.2	2.7
Government consumption expenditures and gross investment	1.5	1.5	3.1	2.9
Federal .....	.4	1.5	6.6	.8
National defense .....	.4	1.8	6.0	1.0
Nondefense .....	.5	1.1	7.6	.4
State and local	2.1	1.5	1.3	4.1
Addendum: Gross domestic purchases less food and energy .....	.7	1.1	1.3	1.4

NOTE.—Percent changes in major aggregates are in NIPA table 8.1. Index number levels are in tables 7.1, 7.2, and 7.4.

Personal income

Personal income (in current dollars) increased \$93.2 billion in the second quarter, about the same as in the first (table 5). Disposable personal income—personal income less personal tax and nontax payments—increased \$75.2 billion, and personal outlays increased \$100.4 billion; as the increase in outlays exceeded that in income, personal saving fell. The personal saving rate decreased to negative 1.1 percent from negative 0.7 percent (chart 3).

Wages and salaries increased \$60.2 billion after increasing \$74.2 billion. The slowdown reflected slowdowns in the service industries and in the government; government wages and salaries had increased sharply in the first quarter as a result of the pay raise for Federal workers. Wages and salaries for goods-producing industries and for distributive industries increased more than in the first quarter.

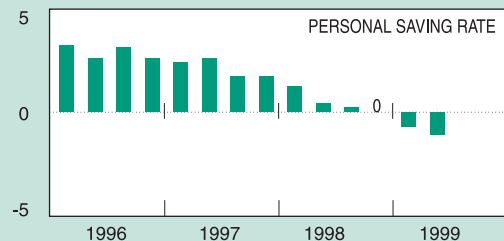
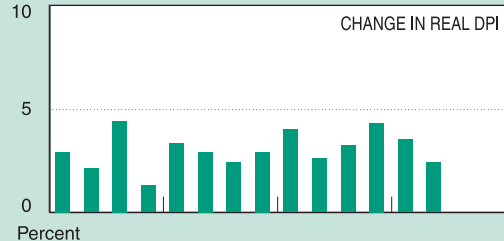
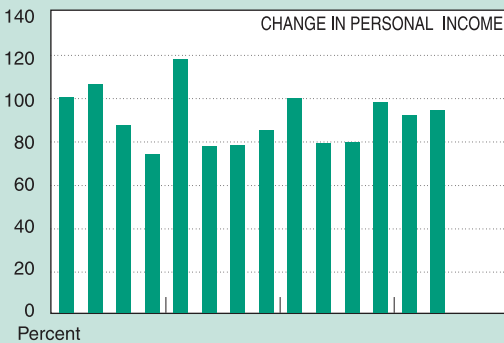
Proprietors' income increased \$11.6 billion after increasing \$1.4 billion. The step-up was more than accounted for by farm proprietors' income, which turned up. The upturn was primarily accounted for by farm subsidy payments, which increased after decreasing. (The first-quarter decrease was from an unusually high fourth-quarter level that had reflected an acceleration in subsidy payments authorized by the Federal 1998 Omnibus Budget Resolution.) Farm income excluding subsidies decreased less in the second quarter than in the first, mostly because of an upturn in livestock output. Nonfarm proprietors' income increased less than in the first quarter.

Transfer payments increased \$6.8 billion after increasing \$16.9 billion. The large first-quarter increase had primarily been due to cost-of-living increases in several Federal transfer programs and to an increase in the Earned Income Tax Credit program.

CHART 3

Selected Personal Income and Saving Measures

Billions \$



Note—Changes are from preceding quarter, based on seasonally adjusted annual rates.

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

Table 5.—Personal Income and Its Disposition

[Billions of dollars; seasonally adjusted at annual rates]


	Level	Change from preceding quarter			
	1999	1998		1999	
	II	III	IV	I	II
Wage and salary disbursements	4,377.2	59.5	65.7	74.2	60.2
Private industries	3,661.2	52.6	59.1	62.2	55.5
Goods-producing industries	1,060.3	4.8	9.4	10.7	12.2
Manufacturing	766.9	.1	3.2	5.1	7.7
Distributive industries	983.0	13.6	15.7	9.9	11.6
Service industries	1,617.9	34.2	34.0	41.6	31.7
Government	716.0	6.9	6.5	12.0	4.8
Other labor income	419.6	2.7	2.6	3.7	4.9
Proprietors' income with IVA and CCAAdj	609.9	4.4	20.8	1.4	11.6
Farm	24.0	-2.5	9.5	-12.2	1.5
Nonfarm	585.9	6.9	11.3	13.6	10.1
Rental income of persons with CCAAdj	171.0	2.6	3.9	.2	3.3
Personal dividend income	272.7	.9	2.7	3.1	3.9
Personal interest income	777.8	6.2	.7	1.1	6.8
Transfer payments to persons	1,182.0	7.1	5.4	16.9	6.8
Less: Personal contributions for social insurance	367.7	4.4	4.6	9.3	4.3
Personal income	7,442.5	78.9	97.1	91.4	93.2
Less: Personal tax and nontax payments	1,162.1	15.5	16.5	19.2	18.0
Equals: Disposable personal income	6,280.4	63.5	80.7	72.1	75.2
Less: Personal outlays	6,351.1	76.5	93.8	117.1	100.4
Equals: Personal saving	-70.7	-13.0	-13.2	-44.9	-25.2
Addenda: Special factors in personal income:					
In wages and salaries:					
Federal Government and Postal Service pay adjustments	6.1	0	0	6.1	0
In farm proprietors' income:					
Subsidies	7.4	0	10.1	-6.9	4.2
In transfer payments to persons:					
Social security retroactive payments	0	0	1.2	-1.2	0
Cost-of-living adjustments in Federal transfer programs	6.3	0	0	6.3	0
Earned Income Tax Credit and Child Tax Credit payments	25.3	0	0	3.4	0
In personal tax and nontax payments:					
Recent tax law changes		-6	0	-5.7	0

NOTE.—Most dollar levels are in NIPA table 2.1.
IVA Inventory valuation adjustment
CCAAdj Capital consumption adjustment

Personal interest income, rental income of persons, and personal dividend income increased more in the second quarter than in the first.

Personal contributions for social insurance, which is subtracted in the calculation of personal income, increased \$4.3 billion after increasing \$9.3 billion. The slowdown was primarily due to

a slowdown in the growth of the taxable wage base.

Personal tax and nontax payments increased \$18.0 billion after increasing \$19.2 billion. The slowdown was due to a slowdown in the growth of wages and salaries and to State tax refunds mandated by State legislatures. 

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A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts

Definitional and Classificational Changes

By Brent R. Moulton, Robert P. Parker, and Eugene P. Seskin

IN OCTOBER, the Bureau of Economic Analysis (BEA) will release the initial results of a comprehensive, or benchmark, revision of the national income and product accounts (NIPA's). This revision is the 11th of its kind; the last such revision was released in January 1996.

Comprehensive revisions differ from annual NIPA revisions because of the scope of the changes and because of the number of years subject to revision. Comprehensive revisions incorporate three major types of improvements: (1) Definitional and classificational changes that update the accounts to more accurately portray the evolving U.S. economy, (2) statistical changes that update the accounts to reflect the introduction of new and improved methodologies and the incorporation of newly available and revised source data, and (3) presentational changes that update the NIPA tables to reflect the definitional, classificational, and statistical changes and to make the tables more informative.

Comprehensive revisions, and to a lesser extent annual revisions, provide the opportunity to introduce major changes that are outlined in BEA's strategic plan for maintaining and improving its economic accounts.¹ The plan emphasizes efforts to provide new and improved measures of output, investment, saving, and wealth and to increase the consistency of the accounts with international guidelines.²

This article on the definitional and classificational changes is the first in a series of articles about the comprehensive revision. An article in the September issue will describe the new and redesigned tables; subsequent articles will de-

scribe the statistical changes and other aspects of the revision, including estimates of the effects of the definitional, classificational, and statistical changes.

In this comprehensive revision, the following definitional and classificational changes will be introduced.

- Recognize business and government expenditures for software as fixed investment
- Reclassify government employee retirement plans
- Modify the treatment of private noninsured pension plans
- Reclassify certain transactions as capital transfers
- Redefine dividend payments by regulated investment companies to exclude distributions that reflect capital gains income
- Redefine the value of imputed services of regulated investment companies
- Reclassify several government taxes and transfer programs
- Reclassify as financial transactions the implicit subsidies associated with Federal direct loan housing programs
- Reclassify directors' fees

In the following sections of the article, each change is described, the reason for the change is given, and the effects on the accounts is provided. With the exception of the change related to software, for which rough estimates are provided, the other changes will have little or no effect on gross domestic product (GDP) or on gross domestic income (GDI). Among these other changes, the reclassifications of government pensions and of capital transfers will significantly affect the estimates of personal saving and of the government current surplus or deficit, and the modification of private noninsured pension plans will significantly affect the estimates of corporate profits

1. The BEA strategic plan is available on our Web site at <www.bea.doc.gov>; click on "BEA's mission." BEA's plan was presented and discussed at a conference of major users of the economic accounts in March 1995; see "Mid-Decade Strategic Review of BEA's Economic Accounts: An Update," SURVEY OF CURRENT BUSINESS 75 (April 1995): 48-56.

2. For detailed information on the international guidelines for national accounts, see Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, and the World Bank, *System of National Accounts 1993* (Brussels/Luxembourg, New York, Paris, and Washington, DC, 1993).

and of net interest. Estimates of these effects will be provided in subsequent articles.

For each change, [table 1](#) shows the aggregates and components from the current NIPA five-account system (see [table 2](#)) that will be affected and the initial year of revision. A technical note at the end of the article describes the methodology that BEA has developed in order to implement the change that recognizes software expenditures as investment.

Business and government expenditures for software

Business and government expenditures for software will be recognized as fixed investment, beginning with 1959. This change represents another step in the effort to improve the NIPA measures of investment and saving. Software will be recognized as investment because, like other assets currently included in fixed investment, it produces a flow of services that lasts more than 1 year; BEA estimates that the average service life is 3–5 years, depending on the type of software. The new treatment also eliminates an inconsistency in the NIPA estimates of investment, in which “embedded,” or bundled, software is included but software purchases by both business and government are excluded. The change will provide users of the accounts with better information on the important role of software in the economy, re-

flecting the rapid growth in software purchases in the past decade. In addition, it will make the NIPA’s more consistent with the economic accounts of most other countries.³

Currently, except for software embedded in equipment by the producer of that equipment, business purchases and the costs associated with own-account production of software are classified as inputs to production, and government purchases and own-account production of software are classified as government consumption expenditures (“own-account” production refers to software produced by a business or government for its own use).

As a result of the new treatment, GDP will be increased by business purchases and own-account production of software, by government enterprises purchases and own-account production of software, and by the depreciation, or consumption of fixed capital (CFC), on general government purchases and own-account production of software. For general government, the depreciation

3. As part of the 1993 revision of the international guidelines, the definition of investment was expanded to include the following types of intangible assets that are expected to be used for more than 1 year: Mineral exploration, computer software, databases, and literary and artistic works. The NIPA’s previously had included mineral exploration as investment; the recognition of databases and literary and artistic works as investment was not considered for this comprehensive revision.

Table 1.—Major Definitional and Classificational Changes

Change	Components affected	Initial year of revision
Recognize business and government expenditures for software as fixed investment.	Private fixed investment in equipment and software, government consumption expenditures and gross investment, proprietors’ income, consumption of fixed capital, corporate profits, subsidies less current surplus of government enterprises, personal saving, and government current surplus or deficit.	1959
Reclassify government employee retirement plans	PCE, government consumption expenditures and gross investment, employer contributions for social insurance, personal contributions for social insurance, other labor income, personal saving, personal income, personal outlays, personal dividend income, dividends received by government, personal interest income, net interest paid by government, transfer payments to persons from government, transfer payments to the rest of the world from government (net), transfer payments to the rest of the world from persons (net), and government current surplus or deficit.	1929
Modify the treatment of private noninsured pension plans ...	Corporate profits, dividends, rental income of persons, personal dividend income, net interest, and personal interest income.	1946
Reclassify certain transactions as capital transfers	Corporate profits, subsidies less current surplus of government enterprises, personal tax and nontax payments, personal saving, transfer payments to the rest of the world from persons (net), transfer payments to the rest of the world from government (net), government current surplus or deficit, and net foreign investment.	1929
Redefine dividend payments by regulated investment companies to exclude distributions that reflect capital gains income.	Dividends, undistributed profits, personal dividend income, and personal saving	1946 ¹
Redefine the value of imputed services of regulated investment companies.	PCE, government consumption expenditures and gross investment, personal interest income, net interest, and net interest paid by government.	1959
Reclassify several government taxes and transfer programs	PCE, S&L government consumption expenditures and gross investment, employer contributions for social insurance, personal contributions for social insurance, subsidies less current surplus of government enterprises, transfer payments to persons, personal tax and nontax payments, personal saving, government current surplus or deficit, and the statistical discrepancy.	1938 (Federal) 1973 (S&L)
Reclassify as financial transactions the implicit subsidies associated with Federal direct loan housing programs.	Net interest, subsidies less current surplus of government enterprises, and net interest paid by government.	1968
Reclassify directors’ fees	Proprietors’ income, other labor income, the statistical discrepancy, and personal saving	1929

1. This change will affect the estimates through 1981 (see the section in the text).

PCE Personal consumption expenditures

S&L State and local

Table 2.—Summary National Income and Product Accounts

Account 1.—National Income and Product Account

Compensation of employees Wage and salary accruals Supplements to wages and salaries Employer contributions for social insurance Other labor income Proprietors' income with IVA and CCA _{adj} Rental income of persons with CCA _{adj} Corporate profits with IVA and CCA _{adj} Profits tax liability Dividends Undistributed profits with IVA and CCA _{adj} Net interest National income Business transfer payments Indirect business tax and nontax liability Less: Subsidies less current surplus of government enterprises Consumption of fixed capital Less: Receipts of factor income from the rest of the world Plus: Payments of factor income to the rest of the world Gross domestic income Statistical discrepancy GROSS DOMESTIC PRODUCT	Personal consumption expenditures Gross private domestic investment Fixed investment Nonresidential Residential Change in business inventories Net exports of goods and services Exports Imports Government consumption expenditures and gross investment Federal State and local
	GROSS DOMESTIC PRODUCT

Account 2.—Personal Income and Outlays Account

Personal tax and nontax payments Personal outlays Personal consumption expenditures Interest paid by persons Personal transfer payments to the rest of the world (net) Personal saving PERSONAL TAXES, OUTLAYS, AND SAVING	Wage and salary disbursements Other labor income Proprietors' income with IVA and CCA _{adj} Rental income of persons with CCA _{adj} Personal dividend income Personal interest income Transfer payments to persons Less: Personal contributions for social insurance
	PERSONAL INCOME

Account 3.—Government Receipts and Expenditures Account

Consumption expenditures Transfer payments Net interest paid Less: Dividends received by government Subsidies less current surplus of government enterprises Less: Wage accruals less disbursements Current surplus or deficit (-), national income and product accounts GOVERNMENT CURRENT EXPENDITURES AND SURPLUS	Personal tax and nontax payments Corporate profits tax liability Indirect business tax and nontax liability Contributions for social insurance Employer Personal
	GOVERNMENT RECEIPTS

Account 4.—Foreign Transactions Account

Exports of goods and services Receipts of factor income RECEIPTS FROM THE REST OF THE WORLD	Imports of goods and services Payments of factor income Transfer payments to the rest of the world (net) Net foreign investment PAYMENTS TO THE REST OF THE WORLD
--------------------------------------------------------------------------------------------------------------	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Account 5.—Gross Saving and Investment Account

Gross private domestic investment Gross government investment Net foreign investment GROSS INVESTMENT	Personal saving Wage accruals less disbursements (private) Undistributed corporate profits with IVA and CCA _{adj} Consumption of fixed capital Government current surplus or deficit (-), national income and product accounts Statistical discrepancy GROSS SAVING AND STATISTICAL DISCREPANCY
---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

CCA_{adj} Capital consumption adjustment
 IVA Inventory valuation adjustment

represents a partial measure of the services of the stock of government software.⁴

Based on preliminary estimates for 1996, this change will increase GDP by about 1½ percent, or \$115 billion—about \$95 billion in private fixed investment and about \$20 billion in government consumption expenditures and gross investment.

The effects on NIPA components due to the recognition of software as investment by business and by government are described below, followed by a section on how the recognition will affect the NIPA tables, including the five summary accounts.⁵ For a summary description of the methodology used to prepare the newly developed estimates of the output and prices necessary to implement this change, see the technical note at the end of this article.

Business.—Business purchases of software will be added to fixed investment and thus to GDP. Currently, these purchases are treated as intermediate inputs; as a result, they are omitted from the calculation of GDP as the sum of final expenditures, and they are subtracted from gross output in the calculation of gross product by industry.⁶ Business own-account software production, measured as the sum of the costs of production, will also be added to fixed investment and thus to GDP. For the calculation of industry gross product, own-account software production will be redefined as part of gross output and thus will be added to the gross output and gross product of industries engaged in producing own-account software.⁷

The recognition of software as investment will also affect the business incomes and private CFC components of GDI. Business incomes (proprietors' income and corporate profits) will be increased by the elimination of the deductions for the purchases of software and by the addition of the value of the production of own-account software as a receipt. These effects will be partly offset by the deduction of the CFC on both purchased software and own-account software production.

4. The service value of an asset should be measured as the reduction in the value of the asset as a result of its use in the current period (measured by the depreciation) plus a return equal to the value the asset could earn if it were invested elsewhere. Source data to estimate this return are not currently available.

5. For both business and government, purchases of software will consist of purchases of both prepackaged and custom software.

6. Estimates of gross product by industry that reflect the NIPA revision will be released in the spring of 2000. For information on gross product by industry, see Sherlene K.S. Lum and Brian C. Moyer, "Gross Product by Industry, 1985–97," SURVEY 78 (November 1998): 20–40.

7. This treatment is the same as that for own-account, or "force-account," new construction and major improvements, which is currently recognized as investment in private and government structures in the NIPAs.

Government.—Purchases of software by general government agencies will be reclassified to gross government investment from government consumption expenditures. In addition, as is the current convention for all government investment, the services of purchased software, measured by depreciation, will be added to government consumption expenditures and thus to GDP.⁸

Own-account production of software by general government agencies, measured as the sum of the costs of production, will also be reclassified to gross government investment from government consumption expenditures, and CFC on own-account software production will be added to government consumption expenditures. As a result of the reclassification of the costs of own-account software production, the compensation of employees engaged in own-account production and the related costs of production, such as rent and utilities, will be classified as investment expenditures rather than as consumption expenditures. The gross product of general government, which is measured as the sum of compensation of employees (including compensation related to own-account production) and CFC, will increase by the value of the CFC of software investment.

For government enterprises, purchases of software and own-account software production will be added to gross government investment and thus to GDP.⁹ Government consumption expenditures will not be affected, because the current purchases of government enterprises are treated as costs of production and thus are deducted in the calculation of the current surplus of government enterprises, a business-type income component of GDI. The effect on the current surplus of government enterprises is similar to that on proprietors' income and corporate profits discussed above; that is, the surplus will be increased by the elimination of the deductions for the purchases of software and by the addition of the value of own-account software production as a receipt, and it will be reduced by the deduction of the CFC on both purchased software and own-account software production.

8. For a discussion of the treatment of investment by government agencies, see "Preview of the Comprehensive Revision of the National Income and Product Accounts: Recognition of Government Investment and Incorporation of a New Methodology for Calculating Depreciation," SURVEY 75 (September 1995): 33–41.

9. For a detailed discussion of the treatment of government enterprises, see "Recognition of Government Investment," 34–35; and *Government Transactions*, Methodology Paper No. 5 (November 1988), which is available from the National Technical Information Service, accession no. PB 90–118480, and on BEA's Web site at <www.bea.doc.gov>.

Effect on the five summary accounts.—The recognition of business and government expenditures for software as investment will affect the following major components of the five summary accounts of the NIPA'S.

In the national income and product account (account 1), GDP will increase to reflect the amounts of purchased and own-account software by business in private fixed investment, of purchased and own-account software of government enterprises in gross government investment, and of software CFC of general government in government consumption expenditures. Purchased software by general government agencies will be reclassified from government consumption expenditures to gross government investment. Within GDI, the components proprietors' income, corporate profits, and the current surplus of government enterprises will increase for most periods, because the elimination of deductions for purchased software and the addition of the value of own-account software as a receipt are expected to exceed the deduction of software CFC. The CFC component of GDI will increase to reflect the addition of the software CFC.

In the personal income and outlay account (account 2), personal income and personal saving will increase for most periods by the amount of the change in proprietors' income.

In the government receipts and expenditures account (account 3), government consumption expenditures will decrease for most periods by the sum of the amounts of general government purchased software and of general government own-account compensation and other production costs, less the amount of general government software CFC. The current surplus of government enterprises will increase by the sum of the amounts of government enterprises purchased software and of government enterprises own-account compensation and other production costs, less the amount of government enterprises software CFC. The "government current surplus or deficit" will increase for most periods by the amounts of the change in government consumption expenditures and the change in the current surplus of government enterprises.

In the foreign transactions account (account 4), receipts from the rest of the world and payments to the rest of the world will not be affected.

In the gross saving and investment account (account 5), personal saving, undistributed corporate profits, CFC, the government current surplus or deficit, gross private domestic investment, and gross government investment will change as de-

scribed above. Gross saving and gross investment will increase by the same amount as the sum of the changes in gross private domestic investment and in gross government investment.

Changes in series titles.—The recognition of software as investment will result in the following changes to series titles for major NIPA tables: The title of the nonresidential producers' durable equipment component of private fixed investment will be changed to "equipment and software"; the title of the residential producers' durable equipment component of private fixed investment will be changed to "equipment"; and the title of the equipment component of gross government investment will be changed to "equipment and software." In addition, annual and quarterly estimates of private investment in software will be published.

The next article in this series on the comprehensive NIPA revision will provide additional details on the specific tables affected by these changes.

Government employee retirement plans

Government employee retirement plans will no longer be classified as social insurance funds within the government sector. The reclassification will cover Federal civilian, Federal military, and State and local government retirement plans and will treat these plans similarly to private pension plans.¹⁰ It will also achieve greater comparability with the treatments by other countries.¹¹ The change, which will be carried back to 1929, will not affect GDP, GDI, or national saving, but it will increase personal saving and decrease government saving by offsetting amounts.

Under the new treatment, employer contributions will be reclassified to personal income (in other labor income in compensation of employees) from government receipts (in contributions

10. The reclassification covers unfunded retirement plans, such as the military retirement plan as it existed before a trust fund was established in the fourth quarter of 1984. The change will not affect the Federal Government employees' Thrift Savings Plan (TSP), a tax-deferred retirement savings plan that is similar to a 401(k) plan and invests in a variety of financial assets; the NIPA'S currently treat the TSP similarly to a private noninsured pension plan.

The treatment of other social insurance funds will not be affected; these funds include old-age, survivors, and disability insurance (social security), hospital insurance (medicare), unemployment insurance, and workers' compensation insurance. Social security has features similar to those of government and private employee pension plans, but it also has other features that make it different from those plans. For example, social security benefit payments are not directly proportional to prior earnings; low-wage earners receive a much larger proportion than do high-wage earners. In addition, social security benefits are provided to society at large rather than to specific groups of employees.

11. The System of National Accounts (SNA) recommends that both private and government employee retirement plans appear in a subsector for insurance corporations and pension funds; however, BEA is deferring a decision on sector reclassification, pending a review of differences in the classifications between the NIPA'S and the SNA.

for social insurance) and current expenditures (partly in compensation of general government employees in consumption expenditures and partly in compensation of government enterprise employees in the expenses used to estimate the current surplus of government enterprises). Personal contributions will no longer be included in government receipts (in contributions for social insurance) and as a deduction from personal income (in personal contributions for social insurance). Interest and dividends received by the retirement plans will be reclassified to personal income (in personal interest income and in personal dividend income) from a deduction in government current expenditures (in government interest and dividends received).¹² Benefits paid by the plans will be treated as transactions within the personal sector rather than as transfer payments from government to persons. Benefits paid to beneficiaries living outside the United States will be treated as transfer payments to the rest of the world (net) from persons rather than from government.¹³ The administrative expenses associated with the plans will be treated as personal consumption expenditures (PCE) (in expense of handling life insurance and pension plans in personal business services) rather than as government current expenditures (in consumption expenditures). As a result of these changes, the savings associated with the plans will appear in personal saving rather than in the government current surplus or deficit.¹⁴

Effect on the five summary accounts.—The reclassification of government employee pension plans will affect the following major components of the five summary accounts of the NIPA's.

In the national income and product account (account 1), GDP and national income will not be affected. Within GDP, government consumption expenditures will decrease, and PCE will increase, by the amount of the reclassified administrative expenses. Within national income, other labor income will increase, and employer contributions for social insurance will decrease, by the amount of the reclassification of employer contributions.

In the personal income and outlay account (account 2), personal income will increase by the amounts of employer and personal contributions,

dividends received, and interest received, and it will decrease by the amount of transfer payments to persons. Personal outlays will increase by the amounts of the reclassification of administrative expenses (affecting PCE) and of the reclassification of transfer payments to the rest of the world (net). Personal saving will increase by the amount of the difference between the increase in personal income and the increase in personal outlays.

In the government receipts and expenditures account (account 3), government receipts will decrease by the amounts of employer and personal contributions. Government current expenditures will decrease by the amounts of reclassified administrative expenses (in consumption expenditures) and benefits paid (in transfer payments), and it will increase by the amounts of interest and dividends received. The "government current surplus or deficit" will decrease by the amount of reclassified savings associated with the plans.

In the foreign transactions account (account 4), receipts from the rest of the world and payments to the rest of the world will not be affected. An increase in transfer payments to the rest of the world from persons (net) will be offset by a decrease in transfer payments to the rest of the world from government (net).

In the gross saving and investment account (account 5), gross investment and gross saving will not be affected. An increase in personal saving will be offset by a decrease in the "government current surplus or deficit."

Private noninsured pension plans

The treatment of noninsured pension plans as it relates to the measurement of corporate profits and to the recording of property income—rents, dividends, and interest—will be modified. The corporate profits that are associated with the plans will be recorded as zero; the property income will be recorded as being received directly by persons in the corresponding components of personal income. Currently, the profits of these plans are negative because they are defined to equal net dividends (paid less received), and all sources of property income are treated as imputed interest paid by business to persons. This modification in treatment will increase profits, will increase rental income of persons and personal dividend income, and will decrease net interest and personal interest income. The increases in rental income and in dividend income will be offset by the decrease in personal interest income. GDP, national income, personal income,

12. Interest paid by the Federal Government to Federal employee retirement plans will be included in personal interest income and in Federal interest paid. Currently, this transaction is within the government sector and is not shown in the NIPA's.

13. Data are not currently available to estimate benefits paid from State and local government plans to beneficiaries living outside the United States.

14. These savings equal employer contributions plus personal contributions plus interest received plus dividends received less benefits paid less administrative expenses.

personal saving, and business saving will not be affected.

Capital transfers

Certain transactions now included in the NIPA's will be reclassified as capital transfers. These transactions, which mainly represent transfers of existing assets and so do not affect the level of disposable income in the current period, will be removed from the NIPA's, which record only transactions that reflect current production and the related income and saving.¹⁵ This reclassification, which will be carried back to 1929, will not affect GDP, but it will affect national saving.

Capital transfers are transactions in which one party provides something (usually cash) to another party without receiving anything in return, and these transactions are linked to, or are conditional upon, the acquisition or the disposition of an asset.

The classification of a transaction as a capital transfer is sometimes difficult because a transaction may represent the acquisition or disposition of an asset to one party and disposable income to the other party. For example, estate and gift taxes are linked to the transfer of assets and therefore are capital transactions from the point of view of the household; however, from the government's point of view, these taxes represent funds that are available for spending and would be considered as current transactions. In general, BEA will follow international guidelines in which a transaction is classified as a capital transfer if it is viewed as a capital transaction by either party to the transaction. As a result of the reclassification of these transactions, the NIPA's will be more closely aligned with the international guidelines for national economic accounts.¹⁶ In order to facilitate comparisons of NIPA measures of saving with other measures of saving, estimates of capital transfers will continue to be published as part

of the NIPA tables (see the upcoming article on presentational changes to the NIPA tables).¹⁷

The following transactions will be reclassified as capital transfers: (1) Federal Government investment grants to State and local governments for highways, transit, air transportation, and water treatment plants (now part of Federal Government grants to State and local governments); (2) Federal Government investment subsidies to business, that is, maritime construction subsidies (now part of Federal subsidies); (3) estate and gift taxes (now part of personal tax and non-tax payments); (4) immigrants' transfers to the United States (now part of personal transfer payments to the rest of the world); and (5) Federal Government forgiveness of debt owed by foreign governments (the forgiveness of original principal amounts is currently excluded from the NIPA's as a financial transaction; the forgiveness of accrued interest is currently part of government transfer payments to the rest of the world).¹⁸

In a related reclassification, the capital transaction "capital grants received by the United States (net)," which is now a NIPA category in the foreign transactions account, will be dropped from the NIPA's; this change is consistent with international guidelines.¹⁹

Effect on the five summary accounts.—The reclassification of capital transfers will affect the following major components of the five summary accounts of the NIPA's.

In the national income and product account (account 1), GDP and its expenditure components will not be affected. National income and corporate profits will decrease by the amount of Federal Government investment subsidies to business (maritime construction subsidies). GDI will not be affected; the decrease in national income will be offset by a corresponding decrease in subsidies, which is subtracted in the calculation of GDI.

In the personal income and outlay account (account 2), personal income and its components will not be affected. Personal outlays will

17. Because some data users are specifically interested in the series on estate and gift taxes, quarterly estimates will be made available through STAT-USA as "unpublished detail."

18. In future comprehensive revisions, BEA will consider reclassifying additional transactions as capital transfers. For example, a portion of Federal disaster assistance programs and Federal Government investment grants to foreign countries might be classified as capital transfers. To date, BEA has been unable to complete the conceptual and statistical work required to implement these additional reclassifications.

19. This category consists primarily of allocations of special drawing rights (SDR's), which are international reserve assets created by the International Monetary Fund (IMF) and allocated to its members, but they are not considered to be liabilities to any organization. Allocations of SDR's by the IMF are not therefore considered to be transactions between two parties: The United States gains an asset, but the IMF does not acquire a liability.

15. The NIPA investment flows are used to prepare BEA's accounts of the stock of fixed assets presented in *Fixed Reproducible Tangible Wealth, 1925-94* (forthcoming). A new table, which will be described in the forthcoming article on presentational changes, will provide an integration of the estimates of the stocks of fixed assets and inventories and the associated investment flows. BEA intends to continue its work toward developing integrated accounts of the stocks and flows of nonfinancial and financial assets, with the objective of developing national balance sheets. When that objective is reached, the capital transfers will be presented as part of a capital account.

16. The U.S. international transactions accounts were recently restructured to show capital transfers to or from the rest of the world in a separate capital account; this change brought the U.S. accounts closer to existing international guidelines for balance of payments accounts. For more details, see Christopher L. Bach, "U.S. International Transactions, Revised Estimates for 1982-98," SURVEY 79 (July 1999): 63-64.

increase, and personal saving will decrease, by the amount of immigrants' transfers to the United States; these transfers are now classified as negative entries in personal transfer payments to the rest of the world (net). Personal tax and non-tax payments will decrease, and personal saving will increase, by the amount of estate and gift tax payments. On balance, personal saving will be higher.

In the government receipts and expenditures account (account 3), total government receipts will decrease by the amount of estate and gift taxes, which are now part of personal tax and nontax payments. Government current expenditures will decrease by the amounts of Federal Government investment subsidies to business (now part of Federal subsidies) and of the accrued interest included in debt forgiveness (now part of transfer payments to the rest of the world from government (net)). In addition, both Federal Government current expenditures and State and local government receipts will decrease by the amount of Federal Government investment grants to State and local governments. These grants are now part of Federal grants-in-aid to State and local governments, which are current expenditures for the Federal Government and receipts for State and local governments, but they are consolidated in the total government account.

In the foreign transactions account (account 4), receipts from, and payments to, the rest of the world will decrease by the amount of the presently published capital grants received by the United States (net) category. Transfer payments to the rest of the world from persons (net) will increase, and net foreign investment will decrease, by the amount of immigrants' transfers to the United States. Transfer payments to the rest of the world from government (net) will decrease, and net foreign investment will increase, by the amount of the accrued interest included in debt forgiveness. Net foreign investment will decrease by the amounts of the capital grants and of the immigrants' transfers to the United States, and it will increase by the amount of the accrued interest included in debt forgiveness.

In the gross saving and investment account (account 5), gross investment and gross saving will decrease by the same amount as net foreign investment. Personal saving will increase, and the "government current surplus or deficit" will decrease, by the amount of estate and gift taxes. The "government current surplus or deficit" will increase, and undistributed corporate profits will decrease, by the amount of Federal Govern-

ment investment subsidies to business (maritime construction subsidies).

Dividend distributions of regulated investment companies

As part of the 1998 annual NIPA revision, dividend payments were redefined to exclude the distributions of regulated investment companies (mutual funds) that reflect capital gains income.²⁰ In the annual revision, the estimates were carried back to 1982; for this comprehensive revision, the estimates for 1946–81 will be revised.

This change will affect dividend payments of mutual funds and the aggregates that include them. Personal income (personal dividend income) and personal saving will decrease, and undistributed corporate profits will increase, by the amount of the capital gains distributions that are excluded. GDP, GDI, corporate profits, and gross saving will not be affected.

Imputed services of regulated investment companies

The value of the imputed services of regulated investment companies—that is, mutual funds—will be redefined to equal operating expenses; currently, the value of the imputed services is defined as net property income received. This redefinition, which will be carried back to 1959, will affect GDP and GDI but not national saving.

In the NIPA's, an imputation is made to account for the implicit service charges of financial intermediaries. The output of these intermediaries is equal to these charges plus any explicit charges. The imputed service is allocated among GDP expenditure components based on each sector's share of deposits with mutual funds. The imputed services of mutual funds that are allocated to persons and to governments are included in GDP as part of the component "services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans" in PCE and in government consumption expenditures. The imputed services allocated to businesses are treated as intermediate inputs and thus are not included in GDP.

The imputation is in GDI as an interest income payment, which is a measure of the income associated with the production of the implicit

20. See Eugene P. Seskin, "Annual Revision of the National Income and Product Accounts," SURVEY 78 (August 1998): 29.

service.²¹ In domestic net interest, a component of GDI that equals interest paid by domestic business less interest received by domestic business, the total imputed payment is included as interest paid, and the payments received by business are included in interest received. The payments to persons are included in personal interest income, a component of personal income. The payments to government are included in net interest paid by government (as a subtraction), a component of government current expenditures. The payments to domestic business are included in net interest paid by domestic business (as a subtraction).

Currently, mutual funds are classified as depository institutions, and the value of the implicit service charge is defined as the difference between property income received and property income paid.

In the mid-1990's, the source data that had been used to measure this net property income showed unusually large increases. In the 1997 annual NIPA revision, BEA determined that the underlying source data had a number of practical problems, including the effects of significant lags between the receipt of income by the regulated investment companies and its distribution to shareholders. Consequently, BEA changed its methodology for estimating the imputed charges of these companies and began extrapolating their charges using operating expenses, as measured by "total deductions" reported on their income tax returns.

Under the new definition, the value of the imputed service charges will be defined as operating expenses; it will be measured as "total deductions" plus implicit charges by securities dealers and "services furnished without payment" by other financial intermediaries. The effect of this redefinition will be to increase GDP and GDI in some years and to decrease them in other years. Within GDP, PCE and government consumption expenditures will be affected, and within GDI, net interest will be affected. Personal saving and the government current surplus or deficit will not be affected. For personal saving, the change in personal interest income will be offset by the change in personal outlays. For the government current surplus or deficit, the change in consumption expenditures will be offset by the change in net interest paid by government.

In addition, beginning with this comprehensive revision, the consumption of the imputed serv-

ice charges of regulated investment companies by State and local governments will be recognized, and the allocation to other GDP expenditure components will be revised accordingly.

Government taxes and transfer programs

The following paragraphs describe the reclassifications of several Federal tax items and State and local contributions and transfer items. None of these reclassifications will affect GDP; except for a reclassification of certain excise taxes, GDI and national saving will not be affected.

The refunds under the Federal Insurance Contribution Act (FICA) will be reclassified as negative contributions for social insurance; currently, the FICA refunds are treated as offsets to personal income taxes. As a result of this change, the treatment of FICA refunds will be consistent with the present treatment of FICA payments, which are treated as contributions for social insurance. The change, which will be carried back to 1938, will increase nonwithheld income taxes and decrease contributions for social insurance by the amounts of the FICA refunds; Federal receipts and the current surplus or deficit will not be affected.

The excise taxes related to private pension plans, such as taxes on pension-plan "reversions," will be reclassified as business nontaxes; currently, these taxes are treated as personal nonwithheld income taxes. This change recognizes that these excise taxes are more like fees than like conventional taxes and that they are paid by the employer. The change, which will be carried back to 1982, will decrease personal nonwithheld income taxes, and will increase business nontaxes, by the amounts of these excise taxes. GDI and the statistical discrepancy will be affected; the increase in business nontaxes (indirect business tax and nontax liability) will not be offset in corporate profits, because excise taxes are already deducted in the source data used to estimate corporate profits. Federal receipts and the current surplus or deficit will not be affected. Disposable personal income and personal saving will increase.

The food-cost portion of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) will be reclassified as State and local transfer payments to persons and added to PCE; currently, these food-related expenditures are classified as State and local consumption expenditures. This change recognizes that the food benefits associated with WIC are similar to those in the Federal food stamp program, which are classified as transfer payments to persons. This

21. The imputation of income payments to depositors is made so that the imputation for implicit service charges by financial intermediaries does not affect national or sector measures of saving.

change, which will be carried back to 1974, will increase State and local transfer payments to persons, personal income, and PCE, and will decrease State and local consumption expenditures, by the amounts of these expenditures. State and local current expenditures, the current surplus or deficit, and personal saving will not be affected.

Payments for foster care and for adoption assistance will be reclassified as "other" public assistance. Currently, the federally funded portion of these payments is treated as "family assistance," and the State-funded portion of foster care assistance is treated as "other" State and local transfer payments (the State-funded portion of adoption assistance was not previously estimated). The change will combine both types of payments—regardless of the source of government funding—into one category, recognizing that the current classification of the federally funded portion as family assistance is not consistent with the definition of the items in that category, and it will include estimates of State-funded adoption assistance. As a result of the change, family assistance will decrease, and "other" public assistance will increase, by the amounts of the federally funded payments. "Other" State and local transfer payments will decrease, and "other" public assistance will increase, by the amounts of the State-funded foster care payments (beginning with 1973). State and local transfer payments to persons will increase by the amounts of State-funded adoption assistance not previously captured (beginning with 1985). State and local government consumption expenditures will decrease by the amounts of federally funded payments (beginning with 1982) and the amounts of State-funded adoption assistance (beginning with 1985); previously, only the State-funded portion of foster care assistance had been removed from consumption expenditures.

Implicit subsidies associated with Federal direct loan housing programs

Implicit subsidy payments and offsetting interest payments that are associated with Federal direct loan housing programs will be reclassified as financial transactions back to 1968; as such, they will be removed from the NIPA'S. Currently, the difference between the contract interest and the interest actually owed (depending on certain income conditions) on these loans is included in subsidy payments to homeowners and, as an offset within government expenditures, in interest received from them by the Federal Government. The change will eliminate both of these payments

and will result in consistency with the treatment of interest subsidy costs of other direct loan credit programs. These costs are classified as financial transactions and thus are excluded from the NIPA'S, because transactions in financial assets represent the exchange of existing assets rather than current income or production.

The reclassification of the implicit payments will increase net interest paid by government, and will decrease subsidy payments, by the same amount; thus, government current expenditures and the government current surplus or deficit will not be affected.²² GDP will not be affected; in GDI, the decrease in subsidy payments will be offset by a decrease in net interest. Rental income of persons will not be affected, because the removal of the subsidy will be offset by the reduction in interest payments. National income will be reduced by the amount of the decrease in net interest. Personal interest income, personal income, and personal saving will not be affected.

Directors' fees

The fees that are paid to outside directors—that is, directors who are not employees of the company on whose board they serve—will be reclassified from other labor income to nonfarm proprietors' income.²³ This reclassification, which will be carried back to 1929, will not affect GDP, but because it will eliminate a double-counting of these fees in the NIPA'S that began in 1979, it will affect GDI, the statistical discrepancy, and national saving, beginning with 1979.

Directors' fees will be reclassified to proprietors' income for two reasons. First, in 1979, directors were instructed to report the fees as part of business income on Schedule C of their individual income tax return Form 1040. As a result, these fees are included in the estimates of nonfarm proprietors' income, which are based on tabulations of business tax returns; currently, these fees are also included in other labor income, where they are derived independently on the basis of the compensation paid to corporate officers that is reported on corporate income tax returns. Second, Schedule C does not separately identify these fees, so they cannot be measured and used to estimate other labor income.

For all years, the change will reduce other labor income by the amount of the current estimates

22. For some years, there will be additional effects because the amounts of the implicit payments recorded in interest and in subsidies were not the same.

23. Director's fees paid to employees who serve on their company's board of directors are classified as wages and salaries.

of directors' fees, and for years prior to 1979, the change will increase proprietors' income by that amount. Thus, prior to 1979, personal income and national income will not be affected; beginning with 1979, personal income and national income will be reduced by the same amount as other labor income.

Technical Note

Methodology for Estimates of Software

One of the major definitional changes that will be introduced in the upcoming comprehensive revision of the NIPA's is the recognition of software as investment. This note describes the methodologies that BEA has developed to prepare (1) annual estimates of business and government purchases of software, (2) annual estimates of own-account production of software, (3) price indexes that are needed to prepare the real estimates for both types of software, and (4) estimates of consumption of fixed capital (CFC) and business incomes. The methodologies used to prepare the estimates for the most recent periods are described at the end of the note.

More detailed information about the methodologies and the historical quarterly estimates will be available after the release of the comprehensive revision.

Current-dollar estimates

For 1987 and 1992, the estimates of business and government purchases of prepackaged software and custom software are based on estimates from the benchmark input-output (I-O) accounts. For other years, estimates are prepared using the commodity-flow method in which directly measured output is allocated among the various expenditure components, primarily using relationships from the benchmark I-O accounts.²⁴

First, the estimates of the total output of purchased software are derived. Beginning with 1985, output is based on industry receipts data from the Census Bureau's service annual survey.²⁵ For 1960-84, output is based on trade source data on revenues for software and computer services, and for 1959, output is based on

a judgmental trend. Second, estimates of purchases by households are derived, beginning with 1974. For 1977-91, these purchases are estimated using data from the Bureau of Labor Statistics (BLS) consumer expenditures survey; for 1992, these purchases are from the benchmark I-O table and are based on Census Bureau retail sales and services receipts from the 1992 Economic Censuses, and beginning with 1993, these purchases are based on data from the Census Bureau retail trade surveys. Third, net exports of software are derived, beginning with 1960, from data on trade in goods from the Census Bureau.²⁶ Fourth, estimates of business purchases of software that is embedded in other equipment and of the change in business inventories of software are prepared using benchmark I-O relationships of these transactions to total output.²⁷ Fifth, total investment is estimated as the difference between total output and the sum of the estimates from steps two, three, and four. Finally, the total investment estimates are divided between business purchases and government purchases, using benchmark I-O relationships of business purchases and of government purchases to total investment.

For own-account software, newly developed estimates have been prepared to measure this type of investment in software.²⁸ Own-account production of software is measured as the sum of production costs; in general, these costs consist of the following: Intermediate inputs; factor incomes, such as compensation of employees; nonfactor charges, such as indirect business taxes; and CFC. Because of the lack of available source data, these costs are limited to intermediate inputs and compensation of employees.

Beginning with 1985, total output of own-account software is calculated by multiplying the number of programmers and systems analysts in selected industries times a factor to account for the share of time spent doing tasks associated with software investment, times the median wage rate in those industries, times various factors that cover nonwage compensation costs and intermediate inputs. Data on the number of computer programmers and systems analysts by industry

26. The definitional change does not affect the current estimates of consumer purchases of software or exports and imports of software, so these estimates are used in the new methodology.

27. Annual estimates of software inventories are available only from the benchmark I-O tables. For the calculation of investment in prepackaged software, it is assumed that the inventory changes for all years except 1987 and 1992 are zero.

28. Federal Government agencies provide data on obligations for information technology to the Office of Management and Budget; however, these data do not provide sufficient detail to estimate the costs that are solely related to own-account production.

24. For a description of these accounts, see U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Input-Output Accounts of the United States, 1992* (Washington, DC: U.S. Government Printing Office, 1998). For a description of the commodity-flow method, see *Benchmark Input-Output Accounts, M-5*.

25. Beginning with 1990, the receipts data are derived from data for the following two industries: Computer programming services (SIC industry 7371) and prepackaged software (SIC 7372). For 1985-89, the receipts data are derived from data for the computer and data processing services industry (SIC 737).

are then used to provide estimates of output for private employees, for Federal Government employees, and for State and local government employees.

Data on the number of programmers and systems analysts are available from BLS by occupation and by industry.²⁹ In order to avoid double-counting the work performed by some of these employees to create embedded software or to produce software for sale, an adjustment is made to the total number of programmers and systems analysts that reduces the number of employees from the mining, manufacturing, and business services industries. This adjustment is made judgmentally on the basis of unpublished BLS data on the employment of computer programmers and systems analysts as a share of all industry employment.

Data on the proportion of time spent by programmers and systems analysts on the development of new software are based on a private study.³⁰

Wages are derived from BLS data on median weekly earnings for computer programmers and systems analysts.³¹ The other production costs are derived as follows: Nonwage compensation, on the basis of the relationship between compensation and wages derived from published NIPA data by industry;³² and intermediate inputs, on the basis of the relationship between intermediate inputs and compensation derived primarily from the Census Bureau's census of service industries.³³

For years before 1985, this methodology is modified to reflect the availability of source data. For 1972–84, the modifications are as follows: Trade source data are used for the total number of programmers and systems analysts; the NIPA measure of wages and salaries per full-time equivalent employee for the business services industry (SIC 73) is used for the median wage rates of business; and price indexes for compensation of Federal nondefense employees and for compensation of State and local noneducation employees are used for median wage rates for

government. For 1959–71, a different methodology is used; the business and the government estimates of own-account software production are extrapolated back using NIPA measures of business purchases of computers and peripheral equipment.

Prices

Currently, the information available on the prices of prepackaged software is limited, and no information is available on the prices of custom software or of own-account software. To estimate real software investment, BEA is developing quality-adjusted price indexes in order to better reflect the rapid technological changes in these products.

Prepackaged software.—The price indexes for prepackaged software are based on information from the following sources: BEA hedonic price indexes for 1985–94 for business applications; matched-model indexes for selected types of prepackaged software, including spreadsheets, databases, and word processing; matched-model price indexes for 1985–93 that were developed by Steven Oliner and Daniel Sichel;³⁴ and beginning with December 1997, a BLS producer price index (PPI) for applications software that is also based on prices of matched models.

For 1985–93, the quality-adjusted price index is estimated by combining the BEA-developed hedonic price indexes and the Oliner-Sichel matched-model indexes. BEA developed hedonic price indexes for two types of prepackaged software—spreadsheets and word processing.³⁵ These hedonic price indexes are estimated using a methodology that is an extension of earlier work on software prices by Brynjolfsson and Kemerer and by Gandal.³⁶ The price index estimates are based on regressions in which the logarithm of prices of prepackaged software is a linear function of selected quality characteristics and of dummy variables for each year of the price observations. The resulting indexes are “regression” price indexes in which the coefficients of the dummy variables for each year are used to construct price

29. See Bureau of Labor Statistics, “Employment by Occupation and Industry, 1983–96” in the National Industry-Occupation Employment Matrix (unpublished).

30. Barry W. Boehm, *Software Engineering Economics* (Englewood Cliffs, NJ: Prentice-Hall, 1981): 533–35, 548–50.

31. See “Median Usual Weekly Earnings of Full-time Wage and Salary Workers by Detailed Occupation and Sex, 1996,” *Employment and Earnings* (January 1998): table 39. The estimates in this table are based on data collected in the current population survey.

32. See NIPA tables 6.2, 6.4, and 6.6.

33. The relationship is primarily based on data in the 1987 *Census of Service Industries: Capital Expenditures, Depreciable Assets, and Operating Expenses* (Washington, DC: U.S. Government Printing Office (GPO), 1991) and the 1992 *Census of Service Industries: Capital Expenditures, Depreciable Assets, and Operating Expenses* (Washington, DC: U.S. GPO, 1996).

34. Steven Oliner and Daniel Sichel, “Computers and Output Growth Revisited: How Big Is the Puzzle,” in *Brookings Papers on Economic Activity* vol. 2 (Washington, DC, 1994): 299–301.

35. The data on prices and quality characteristics used to estimate the regressions are obtained from published editions of National Software Testing Laboratories' *Ratings Reports*. These data are available only through 1994.

36. Erik Brynjolfsson and Chris F. Kemerer, “Network Externalities in Microcomputer Software: An Econometric Analysis of the Spreadsheet Market,” Center for Information Systems Research Working Paper No. 265 (Massachusetts Institute of Technology, November 1993), and Neil Gandal, “Hedonic Price Indexes for Spreadsheets and an Empirical Test for Network Externalities,” *Rand Journal of Economics* vol. 25, no. 1 (Spring 1994): 164–70.

index values for the sample periods of the regressions.³⁷ The individual hedonic price indexes for the two types of software are weighted together equally to produce a summary hedonic price index for prepackaged software.

For 1985–93, the quality-adjusted price index is estimated using an unweighted average of the percent changes in the Oliner-Sichel matched-model index and the BEA summary hedonic index. This approach reflects the concern that the hedonic index may overstate price declines because over time, the characteristics of high-priced packages with limited sales are incorporated into lower priced packages that have much greater sales.

For 1994–97, source data to prepare hedonic indexes are not available, so BEA is using private source data on retail prices and quantities sold to develop a matched-model index that covers only business-oriented software. This index extends the Oliner-Sichel matched-model index to 1997; the BLS PPI series is then used to extend the matched-model series to the current period. In addition, an annual bias adjustment is made because it is likely that the matched-model indexes understate quality-adjusted price declines; quality improvements, such as enhanced power and performance, tend to be introduced in new versions of software, so they are not captured by the matched-model estimates. The bias adjustment is equal to one-half the 6.3-percent per year difference between the matched-model index and BEA's averaged index for 1985–94.

The price index for prepackaged software is extended back from 1985 using an indicator series that is equal to 60 percent of the annual change in BEA's price index for computers and peripherals. This percentage corresponds to the average difference for 1985–97 in the annual rates of change in the computer and peripherals price index and the annual rates of change in the prepackaged software price index.

Own-account software.—The price indexes for own-account software investment are input-cost indexes that are calculated from a weighted average of compensation rates for computer programmers and systems analysts and the intermediate inputs associated with their work. (These intermediate input costs vary somewhat, but they average slightly more than half the total costs.) Compensation cost indexes are

estimated separately for government and for business own-account software investment because the compensation rates for computer programmers and systems analysts in the two sectors have moved somewhat differently over time.

For 1972–96, chain-weighted indexes of input costs are calculated using estimates of compensation of programmers, compensation of systems analysts, and intermediate inputs. The compensation rates for 1987–96 are based on BLS estimates of median usual weekly earnings for programmers and systems analysts; for 1972–86, they are based on NIPA estimates of wages and salaries per full-time equivalent employees in the business services industry. A single intermediate input index is used for business and government for 1972–96; it is based primarily on detailed PPI's. These own-account price estimates are based on the assumption that the productivity of computer programmers and systems analysts does not change; thus, increases in their compensation rates pass directly into higher prices. This assumption is the same as that made elsewhere in the NIPA's when prices are based on costs.

Beginning with 1997, a fixed-weighted index (1996 weights) of compensation rates and intermediate input costs is used. In the next annual NIPA revision, a chain-weighted index will be incorporated for 1997.

Prior to 1972, a fixed-weighted index (1972 weights) of compensation rates and of intermediate inputs is used. Source data to calculate weights are not available for these years.

Custom software.—Custom software consists of both new programming and existing programs or program modules, including prepackaged software, that is incorporated into new systems. Therefore, the price index for custom software is constructed as a weighted average of the percentage changes in the price indexes for business own-account software and for prepackaged software. The weights, which are selected arbitrarily, are 75 percent for changes in business own-account software prices and 25 percent for changes in prepackaged software prices.

CFC and business incomes

The CFC estimates for software are derived from BEA's capital stock estimates, which are prepared using the perpetual-inventory method.³⁸ In determining the depreciation pattern, a 3-year service life is used for prepackaged software,

37. For a discussion of the construction of quality-adjusted price indexes using hedonic methods, see Roseanne Cole et al., "Quality-Adjusted Price Indexes for Computer Processors and Selected Peripheral Equipment," *SURVEY* 66 (January 1986): 41–50.

38. For detailed information on the capital stock estimates, see Arnold J. Katz and Shelby W. Herman, "Improved Estimates of Fixed Reproducible Tangible Wealth, 1925–95," *SURVEY* 77 (May 1997): 69–92.

and a 5-year service life is used for both custom software and own-account software; the 3-year service life is the same as that used in current tax law. (These service lives roughly correspond to annual geometric depreciation rates of 55 percent and 33 percent, respectively.) For business, the capital consumption allowance (or tax-return-based depreciation) is calculated using the same service lives as the CFC; it is distributed by industry based on the distribution of the capital stock of computers and peripheral equipment.

For consistency with the recognition of software as investment, the business incomes (proprietors' income and corporate profits) for each industry having investment are changed as follows: The costs of the production of own-account software are added as a receipt, the deductions for the purchases of software are removed, and the depreciation on purchased software and own-account software production is deducted.³⁹ The estimates of own-account software production and purchases of software by industry and by legal form of organization are based on the investment data from BEA's capital stock estimates; the estimates of depreciation are derived as described in the previous paragraph.

Methodologies for recent-period estimates

Except for the estimates of the prices of prepackaged software, the estimates of software investment for the most recent quarters are prepared


39. The changes reflect BEA's use of business income tax returns as the primary source data for these NIPA estimates. Consequently, the actual amount of the change reflects the extent to which businesses have been treating software purchases as investment for income tax purposes and have been deducting depreciation and not the value of the purchase; a special BEA analysis of income tax returns of large corporations indicated that the amounts that were depreciated were small. For additional details, see Seskin, "Annual Revision," 28-29.

using methodologies that differ from those just described. For current-dollar purchases of software by business and by government, the last annual totals for these estimates, which are based on Census Bureau receipts data, are extrapolated using total wages for the computer programming services industry and the prepackaged software industry—the two industries whose receipts are used to extrapolate the most recent I-O benchmark estimates.

For current-dollar own-account production of software, recent trends in the business purchases and in the government purchases of computers and peripheral equipment are used to extrapolate the own-account series.

For prices of prepackaged software, the estimates are based on changes in the PPI for applications software.

For prices of own-account software, a fixed-weighted index is calculated using the weights of the most recent year for which source data are available. The costs of compensation of computer programmers and systems analysts are based on the BLS employment cost index for private industry white-collar employees. The costs of compensation of government programmers and systems analysts are based on the NIPA chain-type price indexes for compensation of Federal nondefense employees and for compensation of State and local noneducation employees. Estimates of prices for intermediate inputs are based primarily on detailed PPI's, as described earlier.

Price indexes for custom software are calculated as a weighted average of the percent changes in the prices of prepackaged software and of business own-account software. 

A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts

Definitional and Classificational Changes

By Brent R. Moulton, Robert P. Parker, and Eugene P. Seskin

IN OCTOBER, the Bureau of Economic Analysis (BEA) will release the initial results of a comprehensive, or benchmark, revision of the national income and product accounts (NIPA's). This revision is the 11th of its kind; the last such revision was released in January 1996.

Comprehensive revisions differ from annual NIPA revisions because of the scope of the changes and because of the number of years subject to revision. Comprehensive revisions incorporate three major types of improvements: (1) Definitional and classificational changes that update the accounts to more accurately portray the evolving U.S. economy, (2) statistical changes that update the accounts to reflect the introduction of new and improved methodologies and the incorporation of newly available and revised source data, and (3) presentational changes that update the NIPA tables to reflect the definitional, classificational, and statistical changes and to make the tables more informative.

Comprehensive revisions, and to a lesser extent annual revisions, provide the opportunity to introduce major changes that are outlined in BEA's strategic plan for maintaining and improving its economic accounts.¹ The plan emphasizes efforts to provide new and improved measures of output, investment, saving, and wealth and to increase the consistency of the accounts with international guidelines.²

This article on the definitional and classificational changes is the first in a series of articles about the comprehensive revision. An article in the September issue will describe the new and redesigned tables; subsequent articles will de-

scribe the statistical changes and other aspects of the revision, including estimates of the effects of the definitional, classificational, and statistical changes.

In this comprehensive revision, the following definitional and classificational changes will be introduced.

- Recognize business and government expenditures for software as fixed investment
- Reclassify government employee retirement plans
- Modify the treatment of private noninsured pension plans
- Reclassify certain transactions as capital transfers
- Redefine dividend payments by regulated investment companies to exclude distributions that reflect capital gains income
- Redefine the value of imputed services of regulated investment companies
- Reclassify several government taxes and transfer programs
- Reclassify as financial transactions the implicit subsidies associated with Federal direct loan housing programs
- Reclassify directors' fees

In the following sections of the article, each change is described, the reason for the change is given, and the effects on the accounts is provided. With the exception of the change related to software, for which rough estimates are provided, the other changes will have little or no effect on gross domestic product (GDP) or on gross domestic income (GDI). Among these other changes, the reclassifications of government pensions and of capital transfers will significantly affect the estimates of personal saving and of the government current surplus or deficit, and the modification of private noninsured pension plans will significantly affect the estimates of corporate profits

1. The BEA strategic plan is available on our Web site at <www.bea.doc.gov>; click on "BEA's mission." BEA's plan was presented and discussed at a conference of major users of the economic accounts in March 1995; see "Mid-Decade Strategic Review of BEA's Economic Accounts: An Update," SURVEY OF CURRENT BUSINESS 75 (April 1995): 48-56.

2. For detailed information on the international guidelines for national accounts, see Commission of the European Communities, International Monetary Fund, Organisation for Economic Co-operation and Development, United Nations, and the World Bank, *System of National Accounts 1993* (Brussels/Luxembourg, New York, Paris, and Washington, DC, 1993).

and of net interest. Estimates of these effects will be provided in subsequent articles.

For each change, [table 1](#) shows the aggregates and components from the current NIPA five-account system (see [table 2](#)) that will be affected and the initial year of revision. A technical note at the end of the article describes the methodology that BEA has developed in order to implement the change that recognizes software expenditures as investment.

Business and government expenditures for software

Business and government expenditures for software will be recognized as fixed investment, beginning with 1959. This change represents another step in the effort to improve the NIPA measures of investment and saving. Software will be recognized as investment because, like other assets currently included in fixed investment, it produces a flow of services that lasts more than 1 year; BEA estimates that the average service life is 3–5 years, depending on the type of software. The new treatment also eliminates an inconsistency in the NIPA estimates of investment, in which “embedded,” or bundled, software is included but software purchases by both business and government are excluded. The change will provide users of the accounts with better information on the important role of software in the economy, re-

flecting the rapid growth in software purchases in the past decade. In addition, it will make the NIPA’s more consistent with the economic accounts of most other countries.³

Currently, except for software embedded in equipment by the producer of that equipment, business purchases and the costs associated with own-account production of software are classified as inputs to production, and government purchases and own-account production of software are classified as government consumption expenditures (“own-account” production refers to software produced by a business or government for its own use).

As a result of the new treatment, GDP will be increased by business purchases and own-account production of software, by government enterprises purchases and own-account production of software, and by the depreciation, or consumption of fixed capital (CFC), on general government purchases and own-account production of software. For general government, the depreciation

3. As part of the 1993 revision of the international guidelines, the definition of investment was expanded to include the following types of intangible assets that are expected to be used for more than 1 year: Mineral exploration, computer software, databases, and literary and artistic works. The NIPA’s previously had included mineral exploration as investment; the recognition of databases and literary and artistic works as investment was not considered for this comprehensive revision.

Table 1.—Major Definitional and Classificational Changes

Change	Components affected	Initial year of revision
Recognize business and government expenditures for software as fixed investment.	Private fixed investment in equipment and software, government consumption expenditures and gross investment, proprietors’ income, consumption of fixed capital, corporate profits, subsidies less current surplus of government enterprises, personal saving, and government current surplus or deficit.	1959
Reclassify government employee retirement plans	PCE, government consumption expenditures and gross investment, employer contributions for social insurance, personal contributions for social insurance, other labor income, personal saving, personal income, personal outlays, personal dividend income, dividends received by government, personal interest income, net interest paid by government, transfer payments to persons from government, transfer payments to the rest of the world from government (net), transfer payments to the rest of the world from persons (net), and government current surplus or deficit.	1929
Modify the treatment of private noninsured pension plans ...	Corporate profits, dividends, rental income of persons, personal dividend income, net interest, and personal interest income.	1946
Reclassify certain transactions as capital transfers	Corporate profits, subsidies less current surplus of government enterprises, personal tax and nontax payments, personal saving, transfer payments to the rest of the world from persons (net), transfer payments to the rest of the world from government (net), government current surplus or deficit, and net foreign investment.	1929
Redefine dividend payments by regulated investment companies to exclude distributions that reflect capital gains income.	Dividends, undistributed profits, personal dividend income, and personal saving	1946 ¹
Redefine the value of imputed services of regulated investment companies.	PCE, government consumption expenditures and gross investment, personal interest income, net interest, and net interest paid by government.	1959
Reclassify several government taxes and transfer programs	PCE, S&L government consumption expenditures and gross investment, employer contributions for social insurance, personal contributions for social insurance, subsidies less current surplus of government enterprises, transfer payments to persons, personal tax and nontax payments, personal saving, government current surplus or deficit, and the statistical discrepancy.	1938 (Federal) 1973 (S&L)
Reclassify as financial transactions the implicit subsidies associated with Federal direct loan housing programs.	Net interest, subsidies less current surplus of government enterprises, and net interest paid by government.	1968
Reclassify directors’ fees	Proprietors’ income, other labor income, the statistical discrepancy, and personal saving	1929

1. This change will affect the estimates through 1981 (see the section in the text).

PCE Personal consumption expenditures

S&L State and local

Table 2.—Summary National Income and Product Accounts

Account 1.—National Income and Product Account

Compensation of employees Wage and salary accruals Supplements to wages and salaries Employer contributions for social insurance Other labor income Proprietors' income with IVA and CCA _{adj} Rental income of persons with CCA _{adj} Corporate profits with IVA and CCA _{adj} Profits tax liability Dividends Undistributed profits with IVA and CCA _{adj} Net interest National income Business transfer payments Indirect business tax and nontax liability Less: Subsidies less current surplus of government enterprises Consumption of fixed capital Less: Receipts of factor income from the rest of the world Plus: Payments of factor income to the rest of the world Gross domestic income Statistical discrepancy GROSS DOMESTIC PRODUCT	Personal consumption expenditures Gross private domestic investment Fixed investment Nonresidential Residential Change in business inventories Net exports of goods and services Exports Imports Government consumption expenditures and gross investment Federal State and local
GROSS DOMESTIC PRODUCT	GROSS DOMESTIC PRODUCT

Account 2.—Personal Income and Outlays Account

Personal tax and nontax payments Personal outlays Personal consumption expenditures Interest paid by persons Personal transfer payments to the rest of the world (net) Personal saving PERSONAL TAXES, OUTLAYS, AND SAVING	Wage and salary disbursements Other labor income Proprietors' income with IVA and CCA _{adj} Rental income of persons with CCA _{adj} Personal dividend income Personal interest income Transfer payments to persons Less: Personal contributions for social insurance
PERSONAL TAXES, OUTLAYS, AND SAVING	PERSONAL INCOME

Account 3.—Government Receipts and Expenditures Account

Consumption expenditures Transfer payments Net interest paid Less: Dividends received by government Subsidies less current surplus of government enterprises Less: Wage accruals less disbursements Current surplus or deficit (-), national income and product accounts GOVERNMENT CURRENT EXPENDITURES AND SURPLUS	Personal tax and nontax payments Corporate profits tax liability Indirect business tax and nontax liability Contributions for social insurance Employer Personal
GOVERNMENT CURRENT EXPENDITURES AND SURPLUS	GOVERNMENT RECEIPTS

Account 4.—Foreign Transactions Account

Exports of goods and services Receipts of factor income RECEIPTS FROM THE REST OF THE WORLD	Imports of goods and services Payments of factor income Transfer payments to the rest of the world (net) Net foreign investment PAYMENTS TO THE REST OF THE WORLD
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Account 5.—Gross Saving and Investment Account

Gross private domestic investment Gross government investment Net foreign investment GROSS INVESTMENT	Personal saving Wage accruals less disbursements (private) Undistributed corporate profits with IVA and CCA _{adj} Consumption of fixed capital Government current surplus or deficit (-), national income and product accounts Statistical discrepancy GROSS SAVING AND STATISTICAL DISCREPANCY
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CCA_{adj} Capital consumption adjustment
 IVA Inventory valuation adjustment

represents a partial measure of the services of the stock of government software.⁴

Based on preliminary estimates for 1996, this change will increase GDP by about 1½ percent, or \$115 billion—about \$95 billion in private fixed investment and about \$20 billion in government consumption expenditures and gross investment.

The effects on NIPA components due to the recognition of software as investment by business and by government are described below, followed by a section on how the recognition will affect the NIPA tables, including the five summary accounts.⁵ For a summary description of the methodology used to prepare the newly developed estimates of the output and prices necessary to implement this change, see the technical note at the end of this article.

Business.—Business purchases of software will be added to fixed investment and thus to GDP. Currently, these purchases are treated as intermediate inputs; as a result, they are omitted from the calculation of GDP as the sum of final expenditures, and they are subtracted from gross output in the calculation of gross product by industry.⁶ Business own-account software production, measured as the sum of the costs of production, will also be added to fixed investment and thus to GDP. For the calculation of industry gross product, own-account software production will be redefined as part of gross output and thus will be added to the gross output and gross product of industries engaged in producing own-account software.⁷

The recognition of software as investment will also affect the business incomes and private CFC components of GDI. Business incomes (proprietors' income and corporate profits) will be increased by the elimination of the deductions for the purchases of software and by the addition of the value of the production of own-account software as a receipt. These effects will be partly offset by the deduction of the CFC on both purchased software and own-account software production.

4. The service value of an asset should be measured as the reduction in the value of the asset as a result of its use in the current period (measured by the depreciation) plus a return equal to the value the asset could earn if it were invested elsewhere. Source data to estimate this return are not currently available.

5. For both business and government, purchases of software will consist of purchases of both prepackaged and custom software.

6. Estimates of gross product by industry that reflect the NIPA revision will be released in the spring of 2000. For information on gross product by industry, see Sherlene K.S. Lum and Brian C. Moyer, "Gross Product by Industry, 1985–97," SURVEY 78 (November 1998): 20–40.

7. This treatment is the same as that for own-account, or "force-account," new construction and major improvements, which is currently recognized as investment in private and government structures in the NIPAs.

Government.—Purchases of software by general government agencies will be reclassified to gross government investment from government consumption expenditures. In addition, as is the current convention for all government investment, the services of purchased software, measured by depreciation, will be added to government consumption expenditures and thus to GDP.⁸

Own-account production of software by general government agencies, measured as the sum of the costs of production, will also be reclassified to gross government investment from government consumption expenditures, and CFC on own-account software production will be added to government consumption expenditures. As a result of the reclassification of the costs of own-account software production, the compensation of employees engaged in own-account production and the related costs of production, such as rent and utilities, will be classified as investment expenditures rather than as consumption expenditures. The gross product of general government, which is measured as the sum of compensation of employees (including compensation related to own-account production) and CFC, will increase by the value of the CFC of software investment.

For government enterprises, purchases of software and own-account software production will be added to gross government investment and thus to GDP.⁹ Government consumption expenditures will not be affected, because the current purchases of government enterprises are treated as costs of production and thus are deducted in the calculation of the current surplus of government enterprises, a business-type income component of GDI. The effect on the current surplus of government enterprises is similar to that on proprietors' income and corporate profits discussed above; that is, the surplus will be increased by the elimination of the deductions for the purchases of software and by the addition of the value of own-account software production as a receipt, and it will be reduced by the deduction of the CFC on both purchased software and own-account software production.

8. For a discussion of the treatment of investment by government agencies, see "Preview of the Comprehensive Revision of the National Income and Product Accounts: Recognition of Government Investment and Incorporation of a New Methodology for Calculating Depreciation," SURVEY 75 (September 1995): 33–41.

9. For a detailed discussion of the treatment of government enterprises, see "Recognition of Government Investment," 34–35; and *Government Transactions*, Methodology Paper No. 5 (November 1988), which is available from the National Technical Information Service, accession no. PB 90–118480, and on BEA's Web site at <www.bea.doc.gov>.

Effect on the five summary accounts.—The recognition of business and government expenditures for software as investment will affect the following major components of the five summary accounts of the NIPA'S.

In the national income and product account (account 1), GDP will increase to reflect the amounts of purchased and own-account software by business in private fixed investment, of purchased and own-account software of government enterprises in gross government investment, and of software CFC of general government in government consumption expenditures. Purchased software by general government agencies will be reclassified from government consumption expenditures to gross government investment. Within GDI, the components proprietors' income, corporate profits, and the current surplus of government enterprises will increase for most periods, because the elimination of deductions for purchased software and the addition of the value of own-account software as a receipt are expected to exceed the deduction of software CFC. The CFC component of GDI will increase to reflect the addition of the software CFC.

In the personal income and outlay account (account 2), personal income and personal saving will increase for most periods by the amount of the change in proprietors' income.

In the government receipts and expenditures account (account 3), government consumption expenditures will decrease for most periods by the sum of the amounts of general government purchased software and of general government own-account compensation and other production costs, less the amount of general government software CFC. The current surplus of government enterprises will increase by the sum of the amounts of government enterprises purchased software and of government enterprises own-account compensation and other production costs, less the amount of government enterprises software CFC. The "government current surplus or deficit" will increase for most periods by the amounts of the change in government consumption expenditures and the change in the current surplus of government enterprises.

In the foreign transactions account (account 4), receipts from the rest of the world and payments to the rest of the world will not be affected.

In the gross saving and investment account (account 5), personal saving, undistributed corporate profits, CFC, the government current surplus or deficit, gross private domestic investment, and gross government investment will change as de-

scribed above. Gross saving and gross investment will increase by the same amount as the sum of the changes in gross private domestic investment and in gross government investment.

Changes in series titles.—The recognition of software as investment will result in the following changes to series titles for major NIPA tables: The title of the nonresidential producers' durable equipment component of private fixed investment will be changed to "equipment and software"; the title of the residential producers' durable equipment component of private fixed investment will be changed to "equipment"; and the title of the equipment component of gross government investment will be changed to "equipment and software." In addition, annual and quarterly estimates of private investment in software will be published.

The next article in this series on the comprehensive NIPA revision will provide additional details on the specific tables affected by these changes.

Government employee retirement plans

Government employee retirement plans will no longer be classified as social insurance funds within the government sector. The reclassification will cover Federal civilian, Federal military, and State and local government retirement plans and will treat these plans similarly to private pension plans.¹⁰ It will also achieve greater comparability with the treatments by other countries.¹¹ The change, which will be carried back to 1929, will not affect GDP, GDI, or national saving, but it will increase personal saving and decrease government saving by offsetting amounts.

Under the new treatment, employer contributions will be reclassified to personal income (in other labor income in compensation of employees) from government receipts (in contributions

10. The reclassification covers unfunded retirement plans, such as the military retirement plan as it existed before a trust fund was established in the fourth quarter of 1984. The change will not affect the Federal Government employees' Thrift Savings Plan (TSP), a tax-deferred retirement savings plan that is similar to a 401(k) plan and invests in a variety of financial assets; the NIPA'S currently treat the TSP similarly to a private noninsured pension plan.

The treatment of other social insurance funds will not be affected; these funds include old-age, survivors, and disability insurance (social security), hospital insurance (medicare), unemployment insurance, and workers' compensation insurance. Social security has features similar to those of government and private employee pension plans, but it also has other features that make it different from those plans. For example, social security benefit payments are not directly proportional to prior earnings; low-wage earners receive a much larger proportion than do high-wage earners. In addition, social security benefits are provided to society at large rather than to specific groups of employees.

11. The System of National Accounts (SNA) recommends that both private and government employee retirement plans appear in a subsector for insurance corporations and pension funds; however, BEA is deferring a decision on sector reclassification, pending a review of differences in the classifications between the NIPA'S and the SNA.

for social insurance) and current expenditures (partly in compensation of general government employees in consumption expenditures and partly in compensation of government enterprise employees in the expenses used to estimate the current surplus of government enterprises). Personal contributions will no longer be included in government receipts (in contributions for social insurance) and as a deduction from personal income (in personal contributions for social insurance). Interest and dividends received by the retirement plans will be reclassified to personal income (in personal interest income and in personal dividend income) from a deduction in government current expenditures (in government interest and dividends received).¹² Benefits paid by the plans will be treated as transactions within the personal sector rather than as transfer payments from government to persons. Benefits paid to beneficiaries living outside the United States will be treated as transfer payments to the rest of the world (net) from persons rather than from government.¹³ The administrative expenses associated with the plans will be treated as personal consumption expenditures (PCE) (in expense of handling life insurance and pension plans in personal business services) rather than as government current expenditures (in consumption expenditures). As a result of these changes, the savings associated with the plans will appear in personal saving rather than in the government current surplus or deficit.¹⁴

Effect on the five summary accounts.—The reclassification of government employee pension plans will affect the following major components of the five summary accounts of the NIPA's.

In the national income and product account (account 1), GDP and national income will not be affected. Within GDP, government consumption expenditures will decrease, and PCE will increase, by the amount of the reclassified administrative expenses. Within national income, other labor income will increase, and employer contributions for social insurance will decrease, by the amount of the reclassification of employer contributions.

In the personal income and outlay account (account 2), personal income will increase by the amounts of employer and personal contributions,

dividends received, and interest received, and it will decrease by the amount of transfer payments to persons. Personal outlays will increase by the amounts of the reclassification of administrative expenses (affecting PCE) and of the reclassification of transfer payments to the rest of the world (net). Personal saving will increase by the amount of the difference between the increase in personal income and the increase in personal outlays.

In the government receipts and expenditures account (account 3), government receipts will decrease by the amounts of employer and personal contributions. Government current expenditures will decrease by the amounts of reclassified administrative expenses (in consumption expenditures) and benefits paid (in transfer payments), and it will increase by the amounts of interest and dividends received. The "government current surplus or deficit" will decrease by the amount of reclassified savings associated with the plans.

In the foreign transactions account (account 4), receipts from the rest of the world and payments to the rest of the world will not be affected. An increase in transfer payments to the rest of the world from persons (net) will be offset by a decrease in transfer payments to the rest of the world from government (net).

In the gross saving and investment account (account 5), gross investment and gross saving will not be affected. An increase in personal saving will be offset by a decrease in the "government current surplus or deficit."

Private noninsured pension plans

The treatment of noninsured pension plans as it relates to the measurement of corporate profits and to the recording of property income—rents, dividends, and interest—will be modified. The corporate profits that are associated with the plans will be recorded as zero; the property income will be recorded as being received directly by persons in the corresponding components of personal income. Currently, the profits of these plans are negative because they are defined to equal net dividends (paid less received), and all sources of property income are treated as imputed interest paid by business to persons. This modification in treatment will increase profits, will increase rental income of persons and personal dividend income, and will decrease net interest and personal interest income. The increases in rental income and in dividend income will be offset by the decrease in personal interest income. GDP, national income, personal income,

12. Interest paid by the Federal Government to Federal employee retirement plans will be included in personal interest income and in Federal interest paid. Currently, this transaction is within the government sector and is not shown in the NIPA's.

13. Data are not currently available to estimate benefits paid from State and local government plans to beneficiaries living outside the United States.

14. These savings equal employer contributions plus personal contributions plus interest received plus dividends received less benefits paid less administrative expenses.

personal saving, and business saving will not be affected.

Capital transfers

Certain transactions now included in the NIPA's will be reclassified as capital transfers. These transactions, which mainly represent transfers of existing assets and so do not affect the level of disposable income in the current period, will be removed from the NIPA's, which record only transactions that reflect current production and the related income and saving.¹⁵ This reclassification, which will be carried back to 1929, will not affect GDP, but it will affect national saving.

Capital transfers are transactions in which one party provides something (usually cash) to another party without receiving anything in return, and these transactions are linked to, or are conditional upon, the acquisition or the disposition of an asset.

The classification of a transaction as a capital transfer is sometimes difficult because a transaction may represent the acquisition or disposition of an asset to one party and disposable income to the other party. For example, estate and gift taxes are linked to the transfer of assets and therefore are capital transactions from the point of view of the household; however, from the government's point of view, these taxes represent funds that are available for spending and would be considered as current transactions. In general, BEA will follow international guidelines in which a transaction is classified as a capital transfer if it is viewed as a capital transaction by either party to the transaction. As a result of the reclassification of these transactions, the NIPA's will be more closely aligned with the international guidelines for national economic accounts.¹⁶ In order to facilitate comparisons of NIPA measures of saving with other measures of saving, estimates of capital transfers will continue to be published as part

of the NIPA tables (see the upcoming article on presentational changes to the NIPA tables).¹⁷

The following transactions will be reclassified as capital transfers: (1) Federal Government investment grants to State and local governments for highways, transit, air transportation, and water treatment plants (now part of Federal Government grants to State and local governments); (2) Federal Government investment subsidies to business, that is, maritime construction subsidies (now part of Federal subsidies); (3) estate and gift taxes (now part of personal tax and non-tax payments); (4) immigrants' transfers to the United States (now part of personal transfer payments to the rest of the world); and (5) Federal Government forgiveness of debt owed by foreign governments (the forgiveness of original principal amounts is currently excluded from the NIPA's as a financial transaction; the forgiveness of accrued interest is currently part of government transfer payments to the rest of the world).¹⁸

In a related reclassification, the capital transaction "capital grants received by the United States (net)," which is now a NIPA category in the foreign transactions account, will be dropped from the NIPA's; this change is consistent with international guidelines.¹⁹

Effect on the five summary accounts.—The reclassification of capital transfers will affect the following major components of the five summary accounts of the NIPA's.

In the national income and product account (account 1), GDP and its expenditure components will not be affected. National income and corporate profits will decrease by the amount of Federal Government investment subsidies to business (maritime construction subsidies). GDI will not be affected; the decrease in national income will be offset by a corresponding decrease in subsidies, which is subtracted in the calculation of GDI.

In the personal income and outlay account (account 2), personal income and its components will not be affected. Personal outlays will

17. Because some data users are specifically interested in the series on estate and gift taxes, quarterly estimates will be made available through STAT-USA as "unpublished detail."

18. In future comprehensive revisions, BEA will consider reclassifying additional transactions as capital transfers. For example, a portion of Federal disaster assistance programs and Federal Government investment grants to foreign countries might be classified as capital transfers. To date, BEA has been unable to complete the conceptual and statistical work required to implement these additional reclassifications.

19. This category consists primarily of allocations of special drawing rights (SDR's), which are international reserve assets created by the International Monetary Fund (IMF) and allocated to its members, but they are not considered to be liabilities to any organization. Allocations of SDR's by the IMF are not therefore considered to be transactions between two parties: The United States gains an asset, but the IMF does not acquire a liability.

15. The NIPA investment flows are used to prepare BEA's accounts of the stock of fixed assets presented in *Fixed Reproducible Tangible Wealth, 1925-94* (forthcoming). A new table, which will be described in the forthcoming article on presentational changes, will provide an integration of the estimates of the stocks of fixed assets and inventories and the associated investment flows. BEA intends to continue its work toward developing integrated accounts of the stocks and flows of nonfinancial and financial assets, with the objective of developing national balance sheets. When that objective is reached, the capital transfers will be presented as part of a capital account.

16. The U.S. international transactions accounts were recently restructured to show capital transfers to or from the rest of the world in a separate capital account; this change brought the U.S. accounts closer to existing international guidelines for balance of payments accounts. For more details, see Christopher L. Bach, "U.S. International Transactions, Revised Estimates for 1982-98," SURVEY 79 (July 1999): 63-64.

increase, and personal saving will decrease, by the amount of immigrants' transfers to the United States; these transfers are now classified as negative entries in personal transfer payments to the rest of the world (net). Personal tax and non-tax payments will decrease, and personal saving will increase, by the amount of estate and gift tax payments. On balance, personal saving will be higher.

In the government receipts and expenditures account (account 3), total government receipts will decrease by the amount of estate and gift taxes, which are now part of personal tax and nontax payments. Government current expenditures will decrease by the amounts of Federal Government investment subsidies to business (now part of Federal subsidies) and of the accrued interest included in debt forgiveness (now part of transfer payments to the rest of the world from government (net)). In addition, both Federal Government current expenditures and State and local government receipts will decrease by the amount of Federal Government investment grants to State and local governments. These grants are now part of Federal grants-in-aid to State and local governments, which are current expenditures for the Federal Government and receipts for State and local governments, but they are consolidated in the total government account.

In the foreign transactions account (account 4), receipts from, and payments to, the rest of the world will decrease by the amount of the presently published capital grants received by the United States (net) category. Transfer payments to the rest of the world from persons (net) will increase, and net foreign investment will decrease, by the amount of immigrants' transfers to the United States. Transfer payments to the rest of the world from government (net) will decrease, and net foreign investment will increase, by the amount of the accrued interest included in debt forgiveness. Net foreign investment will decrease by the amounts of the capital grants and of the immigrants' transfers to the United States, and it will increase by the amount of the accrued interest included in debt forgiveness.

In the gross saving and investment account (account 5), gross investment and gross saving will decrease by the same amount as net foreign investment. Personal saving will increase, and the "government current surplus or deficit" will decrease, by the amount of estate and gift taxes. The "government current surplus or deficit" will increase, and undistributed corporate profits will decrease, by the amount of Federal Govern-

ment investment subsidies to business (maritime construction subsidies).

Dividend distributions of regulated investment companies

As part of the 1998 annual NIPA revision, dividend payments were redefined to exclude the distributions of regulated investment companies (mutual funds) that reflect capital gains income.²⁰ In the annual revision, the estimates were carried back to 1982; for this comprehensive revision, the estimates for 1946–81 will be revised.

This change will affect dividend payments of mutual funds and the aggregates that include them. Personal income (personal dividend income) and personal saving will decrease, and undistributed corporate profits will increase, by the amount of the capital gains distributions that are excluded. GDP, GDI, corporate profits, and gross saving will not be affected.

Imputed services of regulated investment companies

The value of the imputed services of regulated investment companies—that is, mutual funds—will be redefined to equal operating expenses; currently, the value of the imputed services is defined as net property income received. This redefinition, which will be carried back to 1959, will affect GDP and GDI but not national saving.

In the NIPA's, an imputation is made to account for the implicit service charges of financial intermediaries. The output of these intermediaries is equal to these charges plus any explicit charges. The imputed service is allocated among GDP expenditure components based on each sector's share of deposits with mutual funds. The imputed services of mutual funds that are allocated to persons and to governments are included in GDP as part of the component "services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans" in PCE and in government consumption expenditures. The imputed services allocated to businesses are treated as intermediate inputs and thus are not included in GDP.

The imputation is in GDI as an interest income payment, which is a measure of the income associated with the production of the implicit

20. See Eugene P. Seskin, "Annual Revision of the National Income and Product Accounts," SURVEY 78 (August 1998): 29.

service.²¹ In domestic net interest, a component of GDI that equals interest paid by domestic business less interest received by domestic business, the total imputed payment is included as interest paid, and the payments received by business are included in interest received. The payments to persons are included in personal interest income, a component of personal income. The payments to government are included in net interest paid by government (as a subtraction), a component of government current expenditures. The payments to domestic business are included in net interest paid by domestic business (as a subtraction).

Currently, mutual funds are classified as depository institutions, and the value of the implicit service charge is defined as the difference between property income received and property income paid.

In the mid-1990's, the source data that had been used to measure this net property income showed unusually large increases. In the 1997 annual NIPA revision, BEA determined that the underlying source data had a number of practical problems, including the effects of significant lags between the receipt of income by the regulated investment companies and its distribution to shareholders. Consequently, BEA changed its methodology for estimating the imputed charges of these companies and began extrapolating their charges using operating expenses, as measured by "total deductions" reported on their income tax returns.

Under the new definition, the value of the imputed service charges will be defined as operating expenses; it will be measured as "total deductions" plus implicit charges by securities dealers and "services furnished without payment" by other financial intermediaries. The effect of this redefinition will be to increase GDP and GDI in some years and to decrease them in other years. Within GDP, PCE and government consumption expenditures will be affected, and within GDI, net interest will be affected. Personal saving and the government current surplus or deficit will not be affected. For personal saving, the change in personal interest income will be offset by the change in personal outlays. For the government current surplus or deficit, the change in consumption expenditures will be offset by the change in net interest paid by government.

In addition, beginning with this comprehensive revision, the consumption of the imputed serv-

ice charges of regulated investment companies by State and local governments will be recognized, and the allocation to other GDP expenditure components will be revised accordingly.

Government taxes and transfer programs

The following paragraphs describe the reclassifications of several Federal tax items and State and local contributions and transfer items. None of these reclassifications will affect GDP; except for a reclassification of certain excise taxes, GDI and national saving will not be affected.

The refunds under the Federal Insurance Contribution Act (FICA) will be reclassified as negative contributions for social insurance; currently, the FICA refunds are treated as offsets to personal income taxes. As a result of this change, the treatment of FICA refunds will be consistent with the present treatment of FICA payments, which are treated as contributions for social insurance. The change, which will be carried back to 1938, will increase nonwithheld income taxes and decrease contributions for social insurance by the amounts of the FICA refunds; Federal receipts and the current surplus or deficit will not be affected.

The excise taxes related to private pension plans, such as taxes on pension-plan "reversions," will be reclassified as business nontaxes; currently, these taxes are treated as personal nonwithheld income taxes. This change recognizes that these excise taxes are more like fees than like conventional taxes and that they are paid by the employer. The change, which will be carried back to 1982, will decrease personal nonwithheld income taxes, and will increase business nontaxes, by the amounts of these excise taxes. GDI and the statistical discrepancy will be affected; the increase in business nontaxes (indirect business tax and nontax liability) will not be offset in corporate profits, because excise taxes are already deducted in the source data used to estimate corporate profits. Federal receipts and the current surplus or deficit will not be affected. Disposable personal income and personal saving will increase.

The food-cost portion of the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) will be reclassified as State and local transfer payments to persons and added to PCE; currently, these food-related expenditures are classified as State and local consumption expenditures. This change recognizes that the food benefits associated with WIC are similar to those in the Federal food stamp program, which are classified as transfer payments to persons. This

21. The imputation of income payments to depositors is made so that the imputation for implicit service charges by financial intermediaries does not affect national or sector measures of saving.

change, which will be carried back to 1974, will increase State and local transfer payments to persons, personal income, and PCE, and will decrease State and local consumption expenditures, by the amounts of these expenditures. State and local current expenditures, the current surplus or deficit, and personal saving will not be affected.

Payments for foster care and for adoption assistance will be reclassified as "other" public assistance. Currently, the federally funded portion of these payments is treated as "family assistance," and the State-funded portion of foster care assistance is treated as "other" State and local transfer payments (the State-funded portion of adoption assistance was not previously estimated). The change will combine both types of payments—regardless of the source of government funding—into one category, recognizing that the current classification of the federally funded portion as family assistance is not consistent with the definition of the items in that category, and it will include estimates of State-funded adoption assistance. As a result of the change, family assistance will decrease, and "other" public assistance will increase, by the amounts of the federally funded payments. "Other" State and local transfer payments will decrease, and "other" public assistance will increase, by the amounts of the State-funded foster care payments (beginning with 1973). State and local transfer payments to persons will increase by the amounts of State-funded adoption assistance not previously captured (beginning with 1985). State and local government consumption expenditures will decrease by the amounts of federally funded payments (beginning with 1982) and the amounts of State-funded adoption assistance (beginning with 1985); previously, only the State-funded portion of foster care assistance had been removed from consumption expenditures.

Implicit subsidies associated with Federal direct loan housing programs

Implicit subsidy payments and offsetting interest payments that are associated with Federal direct loan housing programs will be reclassified as financial transactions back to 1968; as such, they will be removed from the NIPA'S. Currently, the difference between the contract interest and the interest actually owed (depending on certain income conditions) on these loans is included in subsidy payments to homeowners and, as an offset within government expenditures, in interest received from them by the Federal Government. The change will eliminate both of these payments

and will result in consistency with the treatment of interest subsidy costs of other direct loan credit programs. These costs are classified as financial transactions and thus are excluded from the NIPA'S, because transactions in financial assets represent the exchange of existing assets rather than current income or production.

The reclassification of the implicit payments will increase net interest paid by government, and will decrease subsidy payments, by the same amount; thus, government current expenditures and the government current surplus or deficit will not be affected.²² GDP will not be affected; in GDI, the decrease in subsidy payments will be offset by a decrease in net interest. Rental income of persons will not be affected, because the removal of the subsidy will be offset by the reduction in interest payments. National income will be reduced by the amount of the decrease in net interest. Personal interest income, personal income, and personal saving will not be affected.

Directors' fees

The fees that are paid to outside directors—that is, directors who are not employees of the company on whose board they serve—will be reclassified from other labor income to nonfarm proprietors' income.²³ This reclassification, which will be carried back to 1929, will not affect GDP, but because it will eliminate a double-counting of these fees in the NIPA'S that began in 1979, it will affect GDI, the statistical discrepancy, and national saving, beginning with 1979.

Directors' fees will be reclassified to proprietors' income for two reasons. First, in 1979, directors were instructed to report the fees as part of business income on Schedule C of their individual income tax return Form 1040. As a result, these fees are included in the estimates of nonfarm proprietors' income, which are based on tabulations of business tax returns; currently, these fees are also included in other labor income, where they are derived independently on the basis of the compensation paid to corporate officers that is reported on corporate income tax returns. Second, Schedule C does not separately identify these fees, so they cannot be measured and used to estimate other labor income.

For all years, the change will reduce other labor income by the amount of the current estimates

22. For some years, there will be additional effects because the amounts of the implicit payments recorded in interest and in subsidies were not the same.

23. Director's fees paid to employees who serve on their company's board of directors are classified as wages and salaries.

of directors' fees, and for years prior to 1979, the change will increase proprietors' income by that amount. Thus, prior to 1979, personal income and national income will not be affected; beginning with 1979, personal income and national income will be reduced by the same amount as other labor income.

Technical Note

Methodology for Estimates of Software

One of the major definitional changes that will be introduced in the upcoming comprehensive revision of the NIPA's is the recognition of software as investment. This note describes the methodologies that BEA has developed to prepare (1) annual estimates of business and government purchases of software, (2) annual estimates of own-account production of software, (3) price indexes that are needed to prepare the real estimates for both types of software, and (4) estimates of consumption of fixed capital (CFC) and business incomes. The methodologies used to prepare the estimates for the most recent periods are described at the end of the note.

More detailed information about the methodologies and the historical quarterly estimates will be available after the release of the comprehensive revision.

Current-dollar estimates

For 1987 and 1992, the estimates of business and government purchases of prepackaged software and custom software are based on estimates from the benchmark input-output (I-O) accounts. For other years, estimates are prepared using the commodity-flow method in which directly measured output is allocated among the various expenditure components, primarily using relationships from the benchmark I-O accounts.²⁴

First, the estimates of the total output of purchased software are derived. Beginning with 1985, output is based on industry receipts data from the Census Bureau's service annual survey.²⁵ For 1960-84, output is based on trade source data on revenues for software and computer services, and for 1959, output is based on

a judgmental trend. Second, estimates of purchases by households are derived, beginning with 1974. For 1977-91, these purchases are estimated using data from the Bureau of Labor Statistics (BLS) consumer expenditures survey; for 1992, these purchases are from the benchmark I-O table and are based on Census Bureau retail sales and services receipts from the 1992 Economic Censuses, and beginning with 1993, these purchases are based on data from the Census Bureau retail trade surveys. Third, net exports of software are derived, beginning with 1960, from data on trade in goods from the Census Bureau.²⁶ Fourth, estimates of business purchases of software that is embedded in other equipment and of the change in business inventories of software are prepared using benchmark I-O relationships of these transactions to total output.²⁷ Fifth, total investment is estimated as the difference between total output and the sum of the estimates from steps two, three, and four. Finally, the total investment estimates are divided between business purchases and government purchases, using benchmark I-O relationships of business purchases and of government purchases to total investment.

For own-account software, newly developed estimates have been prepared to measure this type of investment in software.²⁸ Own-account production of software is measured as the sum of production costs; in general, these costs consist of the following: Intermediate inputs; factor incomes, such as compensation of employees; nonfactor charges, such as indirect business taxes; and CFC. Because of the lack of available source data, these costs are limited to intermediate inputs and compensation of employees.

Beginning with 1985, total output of own-account software is calculated by multiplying the number of programmers and systems analysts in selected industries times a factor to account for the share of time spent doing tasks associated with software investment, times the median wage rate in those industries, times various factors that cover nonwage compensation costs and intermediate inputs. Data on the number of computer programmers and systems analysts by industry

26. The definitional change does not affect the current estimates of consumer purchases of software or exports and imports of software, so these estimates are used in the new methodology.

27. Annual estimates of software inventories are available only from the benchmark I-O tables. For the calculation of investment in prepackaged software, it is assumed that the inventory changes for all years except 1987 and 1992 are zero.

28. Federal Government agencies provide data on obligations for information technology to the Office of Management and Budget; however, these data do not provide sufficient detail to estimate the costs that are solely related to own-account production.

24. For a description of these accounts, see U.S. Department of Commerce, Bureau of Economic Analysis, *Benchmark Input-Output Accounts of the United States, 1992* (Washington, DC: U.S. Government Printing Office, 1998). For a description of the commodity-flow method, see *Benchmark Input-Output Accounts, M-5*.

25. Beginning with 1990, the receipts data are derived from data for the following two industries: Computer programming services (SIC industry 7371) and prepackaged software (SIC 7372). For 1985-89, the receipts data are derived from data for the computer and data processing services industry (SIC 737).

are then used to provide estimates of output for private employees, for Federal Government employees, and for State and local government employees.

Data on the number of programmers and systems analysts are available from BLS by occupation and by industry.²⁹ In order to avoid double-counting the work performed by some of these employees to create embedded software or to produce software for sale, an adjustment is made to the total number of programmers and systems analysts that reduces the number of employees from the mining, manufacturing, and business services industries. This adjustment is made judgmentally on the basis of unpublished BLS data on the employment of computer programmers and systems analysts as a share of all industry employment.

Data on the proportion of time spent by programmers and systems analysts on the development of new software are based on a private study.³⁰

Wages are derived from BLS data on median weekly earnings for computer programmers and systems analysts.³¹ The other production costs are derived as follows: Nonwage compensation, on the basis of the relationship between compensation and wages derived from published NIPA data by industry;³² and intermediate inputs, on the basis of the relationship between intermediate inputs and compensation derived primarily from the Census Bureau's census of service industries.³³

For years before 1985, this methodology is modified to reflect the availability of source data. For 1972–84, the modifications are as follows: Trade source data are used for the total number of programmers and systems analysts; the NIPA measure of wages and salaries per full-time equivalent employee for the business services industry (SIC 73) is used for the median wage rates of business; and price indexes for compensation of Federal nondefense employees and for compensation of State and local noneducation employees are used for median wage rates for

government. For 1959–71, a different methodology is used; the business and the government estimates of own-account software production are extrapolated back using NIPA measures of business purchases of computers and peripheral equipment.

Prices

Currently, the information available on the prices of prepackaged software is limited, and no information is available on the prices of custom software or of own-account software. To estimate real software investment, BEA is developing quality-adjusted price indexes in order to better reflect the rapid technological changes in these products.

Prepackaged software.—The price indexes for prepackaged software are based on information from the following sources: BEA hedonic price indexes for 1985–94 for business applications; matched-model indexes for selected types of prepackaged software, including spreadsheets, databases, and word processing; matched-model price indexes for 1985–93 that were developed by Steven Oliner and Daniel Sichel;³⁴ and beginning with December 1997, a BLS producer price index (PPI) for applications software that is also based on prices of matched models.

For 1985–93, the quality-adjusted price index is estimated by combining the BEA-developed hedonic price indexes and the Oliner-Sichel matched-model indexes. BEA developed hedonic price indexes for two types of prepackaged software—spreadsheets and word processing.³⁵ These hedonic price indexes are estimated using a methodology that is an extension of earlier work on software prices by Brynjolfsson and Kemerer and by Gandal.³⁶ The price index estimates are based on regressions in which the logarithm of prices of prepackaged software is a linear function of selected quality characteristics and of dummy variables for each year of the price observations. The resulting indexes are “regression” price indexes in which the coefficients of the dummy variables for each year are used to construct price

29. See Bureau of Labor Statistics, “Employment by Occupation and Industry, 1983–96” in the National Industry-Occupation Employment Matrix (unpublished).

30. Barry W. Boehm, *Software Engineering Economics* (Englewood Cliffs, NJ: Prentice-Hall, 1981): 533–35, 548–50.

31. See “Median Usual Weekly Earnings of Full-time Wage and Salary Workers by Detailed Occupation and Sex, 1996,” *Employment and Earnings* (January 1998): table 39. The estimates in this table are based on data collected in the current population survey.

32. See NIPA tables 6.2, 6.4, and 6.6.

33. The relationship is primarily based on data in the 1987 *Census of Service Industries: Capital Expenditures, Depreciable Assets, and Operating Expenses* (Washington, DC: U.S. Government Printing Office (GPO), 1991) and the 1992 *Census of Service Industries: Capital Expenditures, Depreciable Assets, and Operating Expenses* (Washington, DC: U.S. GPO, 1996).

34. Steven Oliner and Daniel Sichel, “Computers and Output Growth Revisited: How Big Is the Puzzle,” in *Brookings Papers on Economic Activity* vol. 2 (Washington, DC, 1994): 299–301.

35. The data on prices and quality characteristics used to estimate the regressions are obtained from published editions of National Software Testing Laboratories' *Ratings Reports*. These data are available only through 1994.

36. Erik Brynjolfsson and Chris F. Kemerer, “Network Externalities in Microcomputer Software: An Econometric Analysis of the Spreadsheet Market,” Center for Information Systems Research Working Paper No. 265 (Massachusetts Institute of Technology, November 1993), and Neil Gandal, “Hedonic Price Indexes for Spreadsheets and an Empirical Test for Network Externalities,” *Rand Journal of Economics* vol. 25, no. 1 (Spring 1994): 164–70.

index values for the sample periods of the regressions.³⁷ The individual hedonic price indexes for the two types of software are weighted together equally to produce a summary hedonic price index for prepackaged software.

For 1985–93, the quality-adjusted price index is estimated using an unweighted average of the percent changes in the Oliner-Sichel matched-model index and the BEA summary hedonic index. This approach reflects the concern that the hedonic index may overstate price declines because over time, the characteristics of high-priced packages with limited sales are incorporated into lower priced packages that have much greater sales.

For 1994–97, source data to prepare hedonic indexes are not available, so BEA is using private source data on retail prices and quantities sold to develop a matched-model index that covers only business-oriented software. This index extends the Oliner-Sichel matched-model index to 1997; the BLS PPI series is then used to extend the matched-model series to the current period. In addition, an annual bias adjustment is made because it is likely that the matched-model indexes understate quality-adjusted price declines; quality improvements, such as enhanced power and performance, tend to be introduced in new versions of software, so they are not captured by the matched-model estimates. The bias adjustment is equal to one-half the 6.3-percent per year difference between the matched-model index and BEA's averaged index for 1985–94.

The price index for prepackaged software is extended back from 1985 using an indicator series that is equal to 60 percent of the annual change in BEA's price index for computers and peripherals. This percentage corresponds to the average difference for 1985–97 in the annual rates of change in the computer and peripherals price index and the annual rates of change in the prepackaged software price index.

Own-account software.—The price indexes for own-account software investment are input-cost indexes that are calculated from a weighted average of compensation rates for computer programmers and systems analysts and the intermediate inputs associated with their work. (These intermediate input costs vary somewhat, but they average slightly more than half the total costs.) Compensation cost indexes are

estimated separately for government and for business own-account software investment because the compensation rates for computer programmers and systems analysts in the two sectors have moved somewhat differently over time.

For 1972–96, chain-weighted indexes of input costs are calculated using estimates of compensation of programmers, compensation of systems analysts, and intermediate inputs. The compensation rates for 1987–96 are based on BLS estimates of median usual weekly earnings for programmers and systems analysts; for 1972–86, they are based on NIPA estimates of wages and salaries per full-time equivalent employees in the business services industry. A single intermediate input index is used for business and government for 1972–96; it is based primarily on detailed PPI's. These own-account price estimates are based on the assumption that the productivity of computer programmers and systems analysts does not change; thus, increases in their compensation rates pass directly into higher prices. This assumption is the same as that made elsewhere in the NIPA's when prices are based on costs.

Beginning with 1997, a fixed-weighted index (1996 weights) of compensation rates and intermediate input costs is used. In the next annual NIPA revision, a chain-weighted index will be incorporated for 1997.

Prior to 1972, a fixed-weighted index (1972 weights) of compensation rates and of intermediate inputs is used. Source data to calculate weights are not available for these years.

Custom software.—Custom software consists of both new programming and existing programs or program modules, including prepackaged software, that is incorporated into new systems. Therefore, the price index for custom software is constructed as a weighted average of the percentage changes in the price indexes for business own-account software and for prepackaged software. The weights, which are selected arbitrarily, are 75 percent for changes in business own-account software prices and 25 percent for changes in prepackaged software prices.

CFC and business incomes

The CFC estimates for software are derived from BEA's capital stock estimates, which are prepared using the perpetual-inventory method.³⁸ In determining the depreciation pattern, a 3-year service life is used for prepackaged software,

37. For a discussion of the construction of quality-adjusted price indexes using hedonic methods, see Roseanne Cole et al., "Quality-Adjusted Price Indexes for Computer Processors and Selected Peripheral Equipment," *SURVEY* 66 (January 1986): 41–50.

38. For detailed information on the capital stock estimates, see Arnold J. Katz and Shelby W. Herman, "Improved Estimates of Fixed Reproducible Tangible Wealth, 1925–95," *SURVEY* 77 (May 1997): 69–92.

and a 5-year service life is used for both custom software and own-account software; the 3-year service life is the same as that used in current tax law. (These service lives roughly correspond to annual geometric depreciation rates of 55 percent and 33 percent, respectively.) For business, the capital consumption allowance (or tax-return-based depreciation) is calculated using the same service lives as the CFC; it is distributed by industry based on the distribution of the capital stock of computers and peripheral equipment.

For consistency with the recognition of software as investment, the business incomes (proprietors' income and corporate profits) for each industry having investment are changed as follows: The costs of the production of own-account software are added as a receipt, the deductions for the purchases of software are removed, and the depreciation on purchased software and own-account software production is deducted.³⁹ The estimates of own-account software production and purchases of software by industry and by legal form of organization are based on the investment data from BEA's capital stock estimates; the estimates of depreciation are derived as described in the previous paragraph.

Methodologies for recent-period estimates

Except for the estimates of the prices of prepackaged software, the estimates of software investment for the most recent quarters are prepared


39. The changes reflect BEA's use of business income tax returns as the primary source data for these NIPA estimates. Consequently, the actual amount of the change reflects the extent to which businesses have been treating software purchases as investment for income tax purposes and have been deducting depreciation and not the value of the purchase; a special BEA analysis of income tax returns of large corporations indicated that the amounts that were depreciated were small. For additional details, see Seskin, "Annual Revision," 28-29.

using methodologies that differ from those just described. For current-dollar purchases of software by business and by government, the last annual totals for these estimates, which are based on Census Bureau receipts data, are extrapolated using total wages for the computer programming services industry and the prepackaged software industry—the two industries whose receipts are used to extrapolate the most recent I-O benchmark estimates.

For current-dollar own-account production of software, recent trends in the business purchases and in the government purchases of computers and peripheral equipment are used to extrapolate the own-account series.

For prices of prepackaged software, the estimates are based on changes in the PPI for applications software.

For prices of own-account software, a fixed-weighted index is calculated using the weights of the most recent year for which source data are available. The costs of compensation of computer programmers and systems analysts are based on the BLS employment cost index for private industry white-collar employees. The costs of compensation of government programmers and systems analysts are based on the NIPA chain-type price indexes for compensation of Federal nondefense employees and for compensation of State and local noneducation employees. Estimates of prices for intermediate inputs are based primarily on detailed PPI's, as described earlier.

Price indexes for custom software are calculated as a weighted average of the percent changes in the prices of prepackaged software and of business own-account software. 

Foreign Direct Investment in the United States

Preliminary Results From the 1997 Benchmark Survey

By William J. Zeile

PRELIMINARY RESULTS from BEA's latest benchmark survey of foreign direct investment in the United States (FDIUS) indicate that the share of U.S. affiliates of foreign companies in U.S. gross product originating in private non-bank industries increased slightly in 1997, while their share in U.S. nonbank private employment fell slightly.¹

1. A U.S. affiliate is a U.S. business enterprise in which there is foreign direct investment—that is, in which a single foreign person owns or controls, directly or indirectly, 10 percent or more of the voting securities of an incorporated U.S. business enterprise or an equivalent interest in an unincorporated U.S. business enterprise. The term "U.S. affiliate" denotes that the affiliate is located in the United States; in this article, "affiliate" and "U.S. affiliate" are used interchangeably.

A "person" is any individual, corporation, branch, partnership, associated group, association, estate, trust, or other organization and any government (including any corporation, institution, or other entity or instrumentality of a government). A "foreign person" is a person who resides outside the 50 States, the District of Columbia, the Commonwealth of Puerto Rico, and all U.S. territories and possessions.

The financial and operating data of U.S. affiliates cover the entire operations of the U.S. affiliate, irrespective of the percentage of foreign ownership.

Table 1.—Percentage of U.S. Private-Industry Gross Product and Employment Accounted for by Nonbank U.S. Affiliates, 1977–97

	Gross product	Employment
1977	2.3	1.7
1978	2.5	1.9
1979	2.9	2.3
1980	3.4	2.7
1981	4.2	3.1
1982	4.3	3.2
1983	4.3	3.3
1984	4.4	3.4
1985	4.3	3.4
1986	4.3	3.5
1987	4.5	3.7
1988	5.0	4.3
1989	5.4	4.9
1990	5.5	5.1
1991	5.9	5.3
1992	5.8	5.1
1993	5.8	5.0
1994	6.0	4.9
1995	5.9	4.9
1996	6.2	5.0
1997	6.3	4.9

NOTES.—For improved comparability with U.S.-affiliate gross product, gross product originating in private industries was adjusted to exclude gross product originating in depository institutions and private households, imputed rental income from owner occupied housing, and business transfer payments.

For improved comparability with U.S.-affiliate employment, U.S. employment in private industries was adjusted to exclude employment in depository institutions and private households.

For consistency with the coverage of the data on U.S. employment in private industries, U.S.-affiliate employment in Puerto Rico, in "other U.S. areas," and in "foreign" was excluded from the U.S.-affiliate total when the employment shares were computed. Because the data used to calculate gross product are not broken down by geographic location in the survey forms filed by affiliates, this adjustment could not be made in computing affiliate shares of gross product.

The U.S.-affiliate share of gross product was 6.3 percent, up slightly from 6.2 percent in 1996 and up considerably from 5.9 percent in 1995 (table 1 and chart 1). The 2 years of increases, which followed several years of mild fluctuation, partly reflected a renewed surge in new foreign direct investment in the United States after a falloff in the early 1990's.² In the wake of the investment surge in the late 1980's, the affiliate share of gross product had increased substantially, from 4.3 percent in 1986 to 5.9 percent in 1991.

Because U.S. affiliates tend to be relatively concentrated in less labor-intensive sectors of the economy (such as manufacturing), the

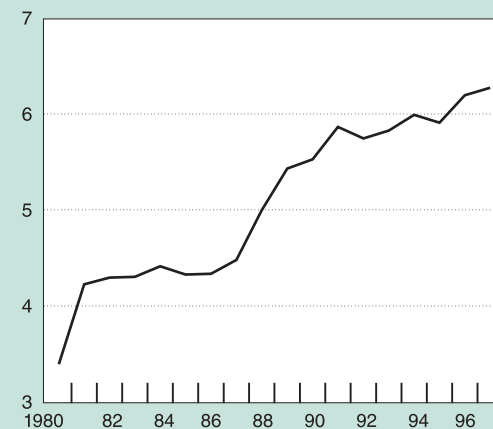
All data on the overall operations of nonbank U.S. affiliates are on a fiscal year basis. Thus, for 1997, an individual affiliate's fiscal year is its financial reporting year that ended in calendar year 1997.

2. According to data from BEA's annual survey of new foreign investments, outlays by foreign direct investors to acquire or establish businesses in the United States increased from \$15.3 billion in 1992 to \$79.9 billion in 1996 and \$69.7 billion in 1997 (the previous high was \$72.7 million in 1988). Outlays by foreign direct investors surged to a record \$201.0 billion in 1998, which suggests that the affiliate share of U.S. private-industry GDP will increase further when the figures for 1998 are available next year. See Mahnaz Fahim-Nader, "Foreign Direct Investment in the United States: New Investment in 1998," SURVEY OF CURRENT BUSINESS 79 (June 1999): 16–23.

CHART 1

U.S. Affiliate Share of Gross Product Originating in Private Industries, 1980–97

Percent



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

share of U.S. affiliates in U.S. private nonbank employment—4.9 percent—in 1997 was less than their share in U.S. GDP. The affiliate share of employment was down slightly from 5.0 percent in 1996 and was considerably below the peak of 5.3 percent in 1991.

The benchmark survey results reported in this article are preliminary and cover only nonbank U.S. affiliates.³ The final results, which will be released next year, will also cover bank affiliates. (For information, see the box “[The 1997 Benchmark Survey](#)” on the next page.)

In the 1997 benchmark survey, a new industry classification system that is based on the North American Industry Classification System (NAICS) was used to classify the data of the affiliates (see the box “[New Industry Classifications](#)” on page 24); in previous surveys, the data were classified

by industry using a system based on the Standard Industrial Classification (SIC). The NAICS better reflects new and emerging industries, industries involved in the production of advanced technologies, and the growth and diversification of service industries.

In this article, the 1997 data on gross product and other key items by industry are presented on both the new NAICS-based classifications and the SIC-based classifications; the data for earlier years are presented on the SIC-based classifications, the only basis on which these data are available. The 1997 data on FDIUS operations are among the first data to be collected on a NAICS basis, so industry-level comparisons with other data on U.S.-business operations are necessarily limited (in some cases, special tabulations of the 1997 data on an SIC basis are presented to facilitate comparisons with other data that are available only on an SIC basis). In a related change, petroleum is no longer shown as

3. The estimates for data items on the operations of nonbank affiliates in 1996 are revised; for most of the key data items, the revisions from the preliminary estimates resulted in changes of 3 to 6 percent in the totals.

Data on Foreign Direct Investment in the United States

BEA collects three broad sets of data on foreign direct investment in the United States (FDIUS): (1) Financial and operating data of U.S. affiliates, (2) data on U.S. businesses newly acquired or established by foreign direct investors (new investments), and (3) balance of payments and direct investment position data. This article presents the financial and operating data; new investment data were published in “[Foreign Direct Investment in the United States: New Investment in 1998](#)” in the June 1999 issue of the SURVEY OF CURRENT BUSINESS; the balance of payments and direct investment position data were published in the articles “[The International Investment Position of the United States at Yearend 1998](#),” “[U.S. International Transactions, First Quarter 1999](#),” and “[Direct Investment Positions for 1998: Country and Industry Detail](#),” in the July 1999 issue of the SURVEY.

Each of the three data sets focuses on a distinct aspect of FDIUS. The *financial and operating data* provide a picture of the overall activities of the U.S. affiliates; the *new investment data* provide information about U.S. businesses that are newly acquired or established by foreign direct investors, regardless of whether the invested funds were raised in the United States or abroad; and the *balance of payments and direct investment position data* cover transactions and positions of both new and existing U.S. affiliates with their foreign parents.¹

Financial and operating data of U.S. affiliates.—The data on the overall operations of U.S. affiliates are collected in BEA’s annual and benchmark surveys of FDIUS. The data cover U.S. affiliates’ balance

sheets and income statements, employment and compensation of employees, trade in goods, research and development expenditures, sources of finance, and selected data by State. In addition, the gross product of affiliates is estimated from data reported in these surveys.

Except in benchmark survey years, these data, unlike the new investment data, cover only nonbank affiliates. (The preliminary benchmark survey data presented in this article cover nonbank affiliates; the final data, which will be published next year, will also cover bank affiliates.) The financial and operating data for affiliates are on a fiscal year basis. The data cover the entire operations of the U.S. affiliate, irrespective of the percentage of foreign ownership.

New investment data.—The data on outlays by foreign direct investors to acquire or establish affiliates in the United States are collected in BEA’s survey of new FDIUS. The data on investment outlays and on the number and types of investment and investors are on a calendar year basis.

In addition, the new investment survey collects selected data on the operations of the newly acquired or established affiliates. For newly acquired affiliates, these data are for (or as of the end of) the most recent fiscal year preceding the acquisition, and for newly established businesses, they are projected for (or as of the end of) the first year of operation. The data cover the entire operations of the business, irrespective of the percentage of foreign ownership.

Balance of payments and the direct investment position data.—These data are collected in the quarterly survey of FDIUS. The data cover the U.S. affiliate’s transactions and positions with its foreign parent or other members of its foreign parent group, so these data focus on the foreign parent’s share, or interest, in the affiliate rather than on the affiliate’s overall size or level of operations. The major items included in the U.S. balance of payments are direct investment capital flows, direct investment income, royalties and license fees, and other services transactions with the foreign parent group.

1. For a more detailed discussion of the differences between these three sets of data, see Alicia M. Quijano, “A Guide to BEA Statistics on Foreign Direct Investment in the United States,” SURVEY 70 (February 1990): 29–37. This guide is available on BEA’s Web site at <www.bea.doc.gov/bea/ail.htm>.

For a comparison of the data on affiliate operations with the data on new investment, see the appendix “Sources of Data” in Mahnaz Fahim-Nader and William J. Zeile, “Foreign Direct Investment in the United States: New Investment in 1994 and Affiliate Operations in 1993,” SURVEY 75 (May 1995): 68–70.

a separate major industry in the tables; instead, the various petroleum-related activities are distributed among the major NAICS industry groups to which they belong.

The following are additional highlights of the survey results for 1997:

- By country of ownership, the United Kingdom remained the largest investing country in terms of affiliate gross product, followed by Japan and Germany. Canada, which had ranked as the third-largest investing country in 1992, had dropped to fifth in 1997, below France.
- By NAICS sector, the affiliate share of employment was highest in mining, followed by manufacturing and information. Within manufacturing, the affiliate share was highest in the chemicals industry.
- By State, the affiliate share of total business employment was highest in Hawaii, followed by South Carolina and North Carolina.
- The net income of affiliates surged 75 percent to a new high of \$42.5 billion, mainly as a result of increased operating profits. The surge continues a pattern of improved performance since 1992, when affiliates as a group reported record net losses.
- The rate of return on assets of nonfinancial affiliates increased to 6.5 percent in 1997 from 6.0 percent in 1996. In comparison, the rate of return for all U.S. nonfinancial corporations remained unchanged at 8.0 percent.
- Expenditures on research and development (R&D) performed by affiliates accounted for about 12 percent of the R&D performed by all U.S. businesses. The ratio of R&D to gross product for affiliates was 5 percent, twice the ratio for all U.S. businesses. More than half of the R&D performed by affiliates was accounted for by affiliates in chemicals manufacturing and in computer and electronic product manufacturing.
- The share of affiliate employment covered by collective bargaining agreements was 15 percent, down from 20 percent in 1992, but higher than the 11-percent share for all U.S. workers. In retail trade, the union-represented share

The 1997 Benchmark Survey

Benchmark surveys are BEA's most comprehensive surveys of foreign direct investment, in terms of both coverage of companies and subject matter. The 1997 survey covered all U.S. affiliates of foreign direct investors that had assets, sales, or net income of more than \$3 million. It collected detailed information on the financial structure and operations of U.S. affiliates and on the transactions and positions between the U.S. affiliates and their foreign parents.

The concepts and definitions underlying the 1997 data are essentially the same as those for the 1992 benchmark survey. The methodology of the 1997 survey will be published with the final survey results next year.

For the financial and operating data, the data from the benchmark survey extend universe estimates that begin with the year 1977 and that are derived from both annual and benchmark surveys. In addition, the data will be used in preparing annual estimates in subsequent nonbenchmark years; these estimates are derived by extrapolating forward the benchmark survey data by the sample data reported in BEA's annual surveys of foreign direct investment in the United States.

Many of the items for which data were collected in the 1997 benchmark survey are also collected annually, but other items are collected only in benchmark survey years. These items include expenditures on research and development performed by affiliates (whether financed by themselves or by others), the number of employees covered by collective bargaining agreements, U.S. exports and imports of goods by product and by country of destination or origin, and U.S. imports of goods by intended use.

Affiliates with total assets, sales, or net income of more than \$3 million were required to complete a benchmark survey report for

1997. Affiliates that did not meet these criteria were exempt from reporting, but they had to file an exemption form with information on the affiliates' total assets, sales, and net income. Because only very small affiliates were exempt from reporting, the exclusion of their data from the preliminary results has virtually no effect in terms of value.¹ Estimates for these affiliates will be included in the final benchmark survey data published next year.

In order to reduce the reporting burden of small enterprises, the exemption level for the 1997 benchmark survey was raised to \$3 million; the 1992 benchmark survey covered affiliates with assets, sales, or net income of more than \$1 million. This change has virtually no effect on the published totals because the amounts involved are negligible.

The preliminary results from the benchmark survey include estimates of data for reports that could not be fully processed in time for publication. The final results will incorporate data from the reports received and processed after the publication of the preliminary results. Revisions are generally expected to be small, but they could be sizable for some countries, industries, States, or items.

To minimize the burden on respondents to the 1997 benchmark survey, the long form that requested detailed information was filed only by affiliates with assets, sales, or net income of more than \$100 million. The short form was filed by smaller affiliates; for these affiliates, BEA estimated the items that are only on the long form, so that the published results are presented in the same detail for all affiliates.

1. For example, the total assets of exempt affiliates was equal to only 0.1 percent of the total assets of the covered affiliates.

of employment for affiliates was much higher than the share for all workers; in manufacturing, the share for affiliates was slightly lower than that for all workers.

- Affiliates accounted for 20 percent of U.S. exports of goods and for 30 percent of U.S. imports of goods. These shares were

down somewhat from earlier years, due to reduced exports and imports by wholesale trade affiliates. By product, affiliates accounted for 50 percent of U.S. exports of mineral fuels and lubricants and for 55 percent of U.S. imports of road vehicles and parts. By major U.S. trading partner, affiliates accounted for more than half

New Industry Classifications

This article introduces two changes in industry classification for the FDIUS financial and operating data. First, the 1997 data presented here are based on new industry classifications derived from the 1997 North American Industry Classification System (NAICS). Second, petroleum is no longer shown as a separate major industry in the tables; instead, beginning with 1997, the various petroleum-related activities are distributed among the major NAICS industry groups or sectors to which they belong.

The 1997 NAICS is the new industry classification system of the United States, Canada, and Mexico.¹ It supplants the 1987 Standard Industrial Classification (SIC) system that has been used by the United States.² In the NAICS, classification is based on a production-oriented economic concept in which economic units with similar production processes are classified in the same industry. In the SIC, classification is based on the production process for some industries and on the type of product produced for others. In addition, the NAICS better reflects new and emerging industries, industries involved in the production of advanced technologies, and the growth and diversification of service industries.

The 1997 NAICS classifications had to be adapted for use in BEA's surveys of direct investment, because the surveys collect data at the enterprise level while the NAICS classifies establishments within an enterprise. The major adaptation is the use of industry classifications that are less detailed than those in NAICS. Many direct investment enterprises are active in several industries, and it is not meaningful to classify all their data in a single industry if that industry is defined too narrowly. Accordingly, the new NAICS-based International Survey Industry (ISI) classifications are limited to 197 industries, compared with 1,170 U.S. industries in NAICS. For the most part, the ISI classifications are equivalent to NAICS four-digit industries. (At its most detailed level, NAICS classifies industries at a six-digit level.)

The 1997 benchmark survey data are the first data on FDIUS to be classified by industry using the new NAICS-based ISI classifications. Other FDIUS data (including the 1992–96 financial and operating data presented in this article) are classified by industry using the previous ISI classifications that were based on the 1987 SIC.

Many of the NAICS industries correspond directly to SIC industries; similarly, many of the NAICS-based ISI industries correspond directly to SIC-based ISI industries. However, many of these industries have been rearranged among the higher level groups in which they appear. In addition, several new, higher level groups have been introduced in NAICS. At the highest level of aggregation, the 20 industry groups—termed “sectors”—in the NAICS replace the 10

industry divisions in the SIC. Several of the NAICS (and NAICS-based ISI) sectors do not correspond directly to these SIC (and SIC-based ISI) industry divisions. For example, the new “information” sector consists of industry groups from several SIC industry divisions.³

The second major change in industry presentation is that the various petroleum subindustries are no longer grouped in the major industry group “petroleum.” Instead, beginning with the 1997 benchmark survey data, these subindustries are spread among the NAICS-based ISI sectors; for example, oil and gas extraction is now included in mining, petroleum refining is in manufacturing, and gasoline stations are in retail trade. For earlier years, petroleum is shown as a separate major industry group because petroleum-related activities accounted for a major portion of all direct investment activity; however, their relative importance has declined significantly in recent years, reducing the need for a separate group. Accordingly, the industry presentation of the direct investment data has been changed to bring it into conformity with that used for most other data on the U.S. economy.

To facilitate the assessment of the impact of these two changes and to provide a bridge between data classified on the old basis and data classified on the new basis, the 1997 data are presented on both bases. Data on the new basis are shown in tables 4, 8, 13, 16, 17, 20, 22.3, and 24.3; data on the old basis are shown in tables 5, 9, 12, 18, 22.1, 22.2, 24.1, and 24.2.

The changes in industry classification introduced here for the FDIUS financial and operating data will be carried over to other direct investment series in the coming years. Next year, the data on U.S. businesses newly acquired or established by foreign direct investors will be published based on the new classifications (see the box “Data on Foreign Direct Investment in the United States”). Data on U.S. direct investment abroad (USDIA) will be collected using the new classifications, beginning with the 1999 benchmark survey of USDIA, and preliminary results will be published in 2001. Estimates of balance of payments transactions and direct investment positions of FDIUS and USDIA will be published on the new classification basis after the underlying data have been rebenchmarking to the 1997 and 1999 benchmark surveys.

3. Specifically, the information sector includes publishing, which is included in the SIC manufacturing industry division; “motion picture and sound recording industries” and “information and data processing services,” which are included in the SIC services division; and broadcasting and communications, which are included in the SIC transportation, communication, and public utilities division.

For additional information on the differences between the NAICS and the SIC classifications (and therefore between the new NAICS-based, and old SIC-based, ISI classifications), see NAICS: *United States, 1997* and U.S. Census Bureau, *1997 Economic Census, Core Business Statistics Series, Advance Report* (Washington, DC: March 1999), which can be accessed on the Internet at <www.census.gov/epcd/www/econ97.html>. For a description of NAICS-based ISI classifications (and their relationship to the NAICS), see Bureau of Economic Analysis, *Guide to Industry and Foreign Trade Classifications for International Surveys*, which can be accessed at <www.bea.doc.gov/bea/surveys.htm>. A concordance between the new NAICS-based ISI codes and the old SIC-based ISI codes will be available on BEA's Web site <www.bea.doc.gov> later this summer.

1. Office of Management and Budget, *North American Industry Classification System: United States, 1997* (Washington, DC, 1998). Information on NAICS can be accessed on the Internet at <www.census.gov/epcd/www/naics.html>.

2. See Office of Management and Budget, *Standard Industrial Classification Manual, 1987*, (Washington, DC: U.S. Government Printing Office, 1987).

of U.S. exports of goods to Japan and for more than half of U.S. imports of goods from Japan, Switzerland, Germany, and Sweden.

to acquire or establish U.S. businesses—and expansions in the operations of existing affiliates. The U.S.-affiliate share of total U.S. gross product originating in private industries increased to 6.3 percent, the highest share in the two decades for which annual data on affiliate operations have been collected.

The rest of this article consists of two parts. The first part discusses trends and patterns in affiliate operations using the data items that are collected in both the benchmark and the annual surveys of FDIUS. The second part presents findings from the data items that are collected only in benchmark surveys.

Partly as a result of new foreign investment in U.S. businesses, the total assets of affiliates increased 13 percent, following a 12-percent increase. However, affiliate sales increased only 3 percent—the lowest rate of increase since 1991—mainly because of selloffs of large affiliates in wholesale trade (an industry characterized by large sales relative to assets or other measures of affiliate operations).

Trends and Patterns in Affiliate Operations

In 1997, gross product (or value added) of U.S. affiliates increased 7 percent to \$385 billion, following an increase of 11 percent in 1996 (table 2). In comparison, gross product originating in private nonbank industries in current dollars increased 6 percent in 1997 and in 1996. The increase in affiliate gross product in 1997 reflected both new investments—that is, outlays by foreign investors

Reflecting the continued expansion of the U.S. economy, expenditures on new plant and equipment by affiliates increased 11 percent. (In comparison, private fixed nonresidential investment in the United States increased 9 percent in 1997.) The net income of affiliates increased

Table 2.—Selected Data of Nonbank U.S. Affiliates of Foreign Direct Investors, 1977–97

	Billions of dollars					Thousands of employees	Billions of dollars									
	Gross product	Sales	Net income	Com-pensation of employees	Total assets		Gross property, plant, and equipment		Expendi-tures for new plant and equipment	Research and develop-ment expendi-tures ¹	U.S. exports of goods shipped by affiliates		U.S. imports of goods shipped to affiliates			
							Total	Of which: Commer-cial property			Total	Of which: To the foreign parent group ²	Total	Of which: From the foreign parent group ³		
1977	35.2	194.0	4.0	18.8	1,218.7	143.5	66.8	n.a.	7.6	0.9	24.9	11.7	43.9	30.9		
1978	42.9	241.5	4.8	24.2	1,429.9	181.2	80.7	n.a.	9.3	1.2	32.2	16.6	56.6	39.5		
1979	55.4	327.9	7.3	31.7	1,753.2	228.6	101.2	n.a.	11.2	1.6	44.3	22.1	63.0	45.3		
1980	70.9	412.4	8.8	40.0	2,033.9	291.3	127.8	n.a.	16.9	1.9	52.2	21.0	75.8	47.0		
1981	98.8	510.2	11.2	54.8	2,416.6	407.0	188.0	n.a.	26.7	3.1	64.1	26.9	82.3	52.2		
1982	103.5	518.1	3.8	61.5	2,448.1	476.4	225.2	n.a.	28.1	3.7	60.2	25.0	84.3	51.9		
1983	111.5	536.6	5.6	66.8	2,546.5	531.7	244.0	n.a.	23.2	4.2	53.9	22.6	81.5	54.8		
1984	128.8	593.6	9.6	73.2	2,714.3	602.5	269.5	n.a.	25.2	4.7	58.2	27.1	100.5	70.5		
1985	134.9	633.0	5.4	79.9	2,862.2	741.1	295.2	n.a.	28.9	5.2	56.4	25.9	113.3	81.7		
1986	142.1	672.0	2.5	86.5	2,937.9	838.0	320.2	n.a.	28.5	5.8	49.6	21.9	125.7	93.4		
1987	157.9	744.6	7.8	96.0	3,224.3	943.7	353.3	89.9	33.0	6.5	48.1	19.1	143.5	108.2		
1988	190.4	886.4	12.0	119.6	3,844.2	1,200.8	418.1	104.0	44.3	7.8	69.5	26.4	155.5	118.4		
1989	223.4	1,056.6	9.3	144.2	4,511.5	1,431.3	489.5	124.8	55.2	9.5	86.3	34.3	171.8	129.9		
1990	239.3	1,175.9	-4.5	163.6	4,734.5	1,550.2	578.4	146.5	69.6	11.5	92.3	37.8	182.9	137.5		
1991	257.6	1,185.9	-11.0	176.0	4,871.9	1,752.6	640.1	165.8	69.8	11.9	96.9	42.2	178.7	132.2		
1992	266.3	1,232.0	-21.3	182.1	4,715.4	1,825.2	660.8	172.6	61.4	13.7	103.9	48.8	184.5	137.8		
1993	285.7	1,329.4	-4.4	193.0	4,765.6	2,065.8	705.7	173.9	63.2	14.2	106.6	47.4	200.6	150.8		
1994	313.0	1,443.5	8.1	200.6	4,840.5	2,206.7	754.4	173.1	68.2	15.6	120.7	51.1	232.4	174.6		
1995	322.6	1,544.6	15.5	206.4	4,941.8	2,388.7	769.5	168.4	74.5	17.5	135.2	57.2	250.8	191.2		
1996 ^r	358.1	1,667.6	24.4	220.6	5,105.0	2,681.7	825.7	167.6	90.6	18.0	140.9	60.8	268.7	197.7		
1997 ^p	384.9	1,717.2	42.5	230.3	5,164.3	3,034.4	866.2	172.2	100.8	19.7	140.9	62.8	261.5	195.5		
Percent change from preceding year:																
1987	11.1	10.8	218.1	11.0	9.7	12.6	10.3	n.a.	15.8	12.4	-3.0	-12.6	14.2	15.8		
1988	20.6	19.0	54.1	24.6	19.2	27.3	18.3	15.7	34.2	20.1	44.6	38.3	8.4	9.4		
1989	17.4	19.2	-22.9	20.5	17.4	19.2	17.1	20.0	24.5	20.8	24.1	29.7	10.5	9.8		
1990	7.1	11.3	n.m.	13.5	4.9	8.3	18.2	17.4	26.1	21.7	6.9	10.2	6.5	5.8		
1991	7.7	.9	n.m.	7.6	2.9	13.1	10.7	13.1	.3	3.0	5.0	11.8	-2.3	-3.8		
1992	3.4	3.9	n.m.	3.5	-3.2	4.1	3.2	4.1	-12.1	15.4	7.2	15.5	3.2	4.3		
1993	7.3	7.9	n.m.	6.0	1.1	13.2	6.8	.7	3.1	3.7	2.6	-2.9	8.7	9.4		
1994	9.5	8.6	n.m.	3.9	1.6	6.8	6.9	-4	7.8	9.6	13.2	8.0	15.8	15.8		
1995	3.1	7.0	90.5	2.9	2.1	8.2	2.0	-2.7	9.3	12.7	12.0	11.9	7.9	9.5		
1996	11.0	8.0	57.4	6.9	3.3	12.3	7.3	-5	21.6	2.5	4.2	6.3	7.1	3.4		
1997	7.5	3.0	74.5	4.4	1.2	13.2	4.9	2.7	11.2	9.5	(*)	3.3	-2.7	-1.1		

^p Preliminary.
^r Revised.
^{*} Less than 0.05 percent.
 1. Research and development funded by affiliates, whether performed by the affiliates themselves or by others.
 2. The foreign parent group consists of (1) the foreign parent, (2) any foreign person, proceeding up the foreign

parent's ownership chain, that owns more than 50 percent of the person below it, up to and including the UBO, and (3) any foreign person, proceeding down the ownership chain(s) of each of these members, that is owned more than 50 percent by the person above it.
 n.a. Not available.
 n.m. Not meaningful.

75 percent, continuing a sharp uptrend from the large net losses recorded in 1992.

Employment by affiliates increased only 1 percent, following a 3-percent increase. In comparison, total U.S. employment in private industries increased 3 percent in 1997; much of this increase was in service industries, where foreign direct investment activity is relatively sparse. U.S. employment in manufacturing, where foreign direct investment is relatively concentrated, decreased 1 percent. The share of private industry employment that was accounted for by U.S. affiliates dipped slightly from 5.0 percent in 1996 to 4.9 percent in 1997.

The slower growth in affiliate employment in 1997 was the result of a smaller increase in employment from new investments and a larger reduction in employment from sales and liquidations of affiliates: New investments increased affiliate employment by 307,900—compared with 373,200 in 1996—and sales and liquidations reduced employment by 313,800—compared with 286,300 (table 3). As in 1996, the increase in affiliate employment from expansions of existing operations exceeded the reduction in affiliate employment from cutbacks in operations.

U.S. exports of goods shipped by affiliates were unchanged in 1997, due to substantially reduced exports by large wholesale trade affiliates—particularly by affiliates specializing in the trade of agricultural commodities and by affiliates of Japanese general trading companies. The reduced exports by these Japanese-owned affiliates reflected weakened demand associated with the appreciation of the dollar against the Japanese yen (which made U.S. goods more expensive in Japan) and sluggish economic conditions in Japan. Foreign parents' selloffs of affiliates were

a secondary factor that contributed to the reduction in exports in wholesale trade. The affiliate share of total U.S. exports of goods decreased from 23 percent in 1996 to 20 percent in 1997; the share accounted for by affiliate exports to their foreign parent groups decreased from 10 percent to 9 percent.

U.S. imports of goods shipped to affiliates decreased 3 percent, following a 7-percent increase in 1996. The decrease in 1997 was more than accounted for by a decrease in imports by wholesale trade affiliates; imports by manufacturing affiliates continued to increase. The affiliate share of total U.S. imports of goods decreased from 34 percent to 30 percent; the share accounted for by affiliate imports from their foreign parent groups decreased from 25 percent to 22 percent.

Gross product

This section examines the relative magnitude of affiliate operations—measured by affiliate gross product—by industry of affiliate and by country of ultimate beneficial owner (UBO).⁴ The industry distribution of affiliate operations in 1997 is presented both in terms of the new industry classification system that is based on NAICS and in terms of the old SIC-based system. Comparisons with the industry distributions of affiliate operations in earlier years are made in terms of the SIC-based system.

4. The UBO is that person, proceeding up a U.S. affiliate's ownership chain, beginning with and including the foreign parent, that is not owned more than 50 percent by another person. The foreign parent is the first foreign person in the affiliate's ownership chain. Unlike the foreign parent, the UBO of an affiliate may be located in the United States. The UBO of each U.S. affiliate is identified to ascertain the person that ultimately owns or controls the U.S. affiliate and that therefore ultimately derives the benefits from ownership or control.

Table 3.—Sources of Change in Nonbank U.S. Affiliate Employment, 1990–97

[Thousands of employees]

Line		1990	1991	1992	1993	1994	1995	1996	1997
1	Change in total affiliate employment	223.0	137.5	-156.5	50.2	74.9	101.2	163.2	59.3
	Change in employment of large affiliates resulting from:								
2	New investments	481.6	291.1	101.7	261.9	280.0	301.2	373.2	307.9
3	Expansions of existing operations	107.9	107.4	141.1	110.2	98.1	102.9	146.0	149.6
4	Sales or liquidations of businesses	-354.1	-152.2	-316.2	-239.9	-245.2	-241.5	-286.3	-313.8
5	Cutbacks in existing operations	-126.5	-136.4	-132.2	-95.1	-55.4	-69.9	-107.5	-97.8
6	Combinations of new investments and sales or liquidations of businesses	-16.9	-9.6	-18.0	6.3	-7.4	24.5	30.2	41.7
7	Change not accounted for in lines 2–6	131.1	37.3	67.1	6.8	-4.9	-15.9	7.5	-28.3

NOTE.—Lines 2–6 cover only large affiliates—that is, affiliates with more than 500 employees—because a substantial number of small affiliates change their organizational structures, and in such cases, it is particularly difficult to determine the reasons for the changes in their employment.

Line 2 equals the yearend employment of affiliates that were acquired or established during the year plus the change in employment of existing affiliates that had an increase in employment and that had acquired another U.S. business during the year.

Line 3 equals the change in employment of affiliates that did not acquire another U.S. business but had an increase in employment.

Line 4 equals the employment at the end of the prior year of affiliates that were liquidated or sold during the year plus the change in employment of affiliates that had a decline in employ-

ment and that sold a business or business segment during the year.

Line 5 equals the change in employment of affiliates that did not sell a business or business segment but had a decline in employment.

Line 6 equals the change in employment of affiliates that both acquired and sold a business or business segment during the year.

Line 7 equals the change in employment of large affiliates not accounted for in lines 2–6 plus all changes in employment for affiliates with 500 or fewer employees. It includes changes resulting from the addition to the survey universe of affiliates that were required to report in earlier years but did not.

Industry distribution in 1997.—By NAICS-based industry, affiliates in manufacturing accounted for about half of the gross product of all nonbank affiliates (table 4). Within manufacturing, the gross product of affiliates was largest in chemicals, followed by petroleum and coal products, machinery, and computers and electronic products.

Excluding manufacturing, the gross product of affiliates was largest in wholesale trade—which includes a number of large affiliates with substan-

tial secondary operations in manufacturing—followed by information, finance (except depository institutions) and insurance, and retail trade. The affiliates in these four NAICS sectors together accounted for about one-third of the gross product of all nonbank affiliates.

Information is one of the new sectors in NAICS that does not have an approximate counterpart in the SIC. In 1997, more than half of the gross product of affiliates in this sector was accounted for by affiliates in broadcasting and

Table 4.—Gross Product of All Nonbank U.S. Affiliates and of Majority-Owned Nonbank U.S. Affiliates by NAICS-Based Industry of Affiliate, 1997

	Millions of dollars		Percentage of all-industries total		Addendum: Gross product of majority-owned affiliates as a percentage of that of all nonbank affiliates
	All nonbank affiliates	Majority-owned affiliates	All nonbank affiliates	Majority-owned affiliates	
All industries	384,883	309,628	100.0	100.0	80.4
Manufacturing	188,477	166,656	49.0	53.8	88.4
Food	10,953	9,760	2.8	3.2	89.1
Beverages and tobacco products	5,907	5,827	1.5	1.9	98.6
Paper	5,048	(P)	1.3	(P)	(P)
Printing and related support activities	2,803	2,774	.7	.9	99.0
Petroleum and coal products	23,421	(P)	6.1	(P)	(P)
Chemicals	40,906	37,789	10.6	12.2	92.4
Pharmaceuticals and medicines	16,094	15,818	4.2	5.1	98.3
Other	24,812	21,971	6.4	7.1	88.5
Plastics and rubber products	7,991	7,224	2.1	2.3	90.4
Nonmetallic mineral products	12,044	11,577	3.1	3.7	96.1
Primary metals	8,600	5,252	2.2	1.7	61.1
Fabricated metal products	7,910	6,148	2.1	2.0	77.7
Machinery	16,607	15,451	4.3	5.0	93.0
Computers and electronic products	15,658	14,700	4.1	4.7	93.9
Computers and peripheral equipment	1,022	1,185	.3	.4	115.9
Communications equipment	5,889	5,765	1.5	1.9	97.9
Semiconductors and other electronic components	4,512	4,290	1.2	1.4	95.1
Navigational, measuring, and other instruments	2,542	(P)	.7	(P)	(P)
Other	1,693	(P)	.4	(P)	(P)
Electrical equipment, appliances, and components	7,537	6,999	2.0	2.3	92.9
Transportation equipment	13,554	11,827	3.5	3.8	87.3
Motor vehicles, bodies and trailers, and parts	11,372	9,704	3.0	3.1	85.3
Other	2,182	2,123	.6	.7	97.3
Other	9,538	7,923	2.5	2.6	83.1
Wholesale trade	51,856	47,327	13.5	15.3	91.3
Motor vehicles and motor vehicle parts and supplies	11,879	11,867	3.1	3.8	99.9
Other	39,977	35,460	10.4	11.5	88.7
Retail trade	25,009	15,992	6.5	5.2	63.9
Food and beverage stores	17,720	10,931	4.6	3.5	61.7
Other	7,290	5,061	1.9	1.6	69.4
Information	27,120	10,784	7.0	3.5	39.8
Publishing industries	7,348	6,078	1.9	2.0	82.7
Motion picture and sound recording industries	2,542	2,438	.7	.8	95.9
Broadcasting and telecommunications	16,153	1,615	4.2	.5	10.0
Information services and data processing services	1,076	1,103	.3	.4	102.5
Finance (except depository institutions) and insurance	26,331	21,879	6.8	7.1	83.1
Real estate and rental and leasing	9,084	7,006	2.4	2.3	77.1
Professional, scientific, and technical services	5,981	5,289	1.6	1.7	88.4
Other industries	51,025	34,694	13.3	11.2	68.0
Agriculture, forestry, fishing, and hunting	730	519	.2	.2	71.1
Mining	9,826	6,204	2.6	2.0	63.1
Utilities	1,445	472	.4	.2	32.7
Construction	4,358	3,697	1.1	1.2	84.8
Transportation and warehousing	11,999	5,733	3.1	1.9	47.8
Management of nonbank companies and enterprises ¹	-364	-263	-.1	-.1	n.m.
Administration, support, and waste management	8,993	7,470	2.3	2.4	83.1
Health care and social assistance	3,714	2,671	1.0	.9	71.9
Accommodation and food services	8,577	6,582	2.2	2.1	76.7
Miscellaneous services	1,746	1,610	.5	.5	92.2

^P Suppressed to avoid disclosure of data of individual companies.
n.m. Not meaningful.
1. For U.S. affiliates, mainly consists of holding companies.

NOTE.—Shares of more than 100 percent may result where the gross product of minority-owned affiliates is negative.

telecommunications, an industry that is mainly classified in transportation and public utilities in the SIC. Most of the remaining gross product was accounted for by affiliates in publishing, an industry that is mainly classified in manufacturing in the SIC.

As in previous years, affiliates that were majority owned by foreign direct investors accounted for about 80 percent of the gross product of all nonbank affiliates. In manufacturing and in wholesale trade, the majority-owned-affiliate share was about 90 percent. In contrast, in information, the share was only 40 percent, reflecting restrictions on foreign ownership in broadcasting and telecommunications.

Under the old SIC-based system, affiliates in manufacturing accounted for 45 percent of the gross product of nonbank affiliates in 1997, a share somewhat lower than that under the new NAICS-based system (table 5). The difference in these shares is largely the net result of differences in the treatment of petroleum and coal products manufacturing (which is classified in manufacturing under the new NAICS-based system but in the special industry group "petroleum" under the old system) and publishing (which is classified in information under NAICS but in manufacturing under the SIC).

Within manufacturing, the gross product of affiliates in the SIC-based industry "motor vehicles and equipment" was substantially less than

Table 5.—Gross Product of Nonbank U.S. Affiliates by SIC-Based Industry of Affiliate, 1992, 1996, and 1997

	Millions of dollars			Percentage of all-industries total			Addendum: Percent change in affiliate gross product, 1996-97
	1992	1996	1997	1992	1996	1997	
All industries	266,333	358,085	384,883	100.0	100.0	100.0	7.5
Petroleum	25,553	33,007	35,220	9.6	9.2	9.2	6.7
Petroleum and coal products manufacturing	18,967	23,099	23,449	7.1	6.5	6.1	1.5
Other	6,586	9,908	11,772	2.5	2.8	3.1	18.8
Manufacturing	134,127	166,558	172,409	50.4	46.5	44.8	3.5
Food and kindred products	12,283	12,579	14,166	4.6	3.5	3.7	12.6
Paper and allied products	3,513	5,893	5,106	1.3	1.6	1.3	-13.4
Printing and publishing	6,054	9,260	9,753	2.3	2.6	2.5	5.3
Chemicals and allied products	41,940	43,771	41,197	15.7	12.2	10.7	-5.9
Drugs	11,358	16,051	16,110	4.3	4.5	4.2	.4
Other	30,582	27,720	25,087	11.5	7.7	6.5	-9.5
Rubber and plastics products	5,459	7,733	8,123	2.0	2.2	2.1	5.0
Stone, clay, and glass products	6,215	9,822	12,067	2.3	2.7	3.1	22.9
Primary metal industries	8,710	9,204	9,255	3.3	2.6	2.4	.6
Fabricated metal products	6,310	9,098	8,496	2.4	2.5	2.2	-6.6
Industrial machinery and equipment	10,160	14,578	16,915	3.8	4.1	4.4	16.0
Computer and office equipment	2,209	1,178	960	.8	.3	.2	-18.5
Other	7,951	13,400	15,955	3.0	3.7	4.1	19.1
Electronic and other electric equipment	15,694	19,934	21,318	5.9	5.6	5.5	6.9
Transportation equipment	4,840	9,374	11,273	1.8	2.6	2.9	20.3
Motor vehicles and equipment	2,659	7,058	9,054	1.0	2.0	2.4	28.3
Other	2,180	2,316	2,219	.8	.6	.6	-4.2
Instruments and related products	6,100	6,536	6,483	2.3	1.8	1.7	-8
Other	6,849	6,849	8,776	2.6	1.9	2.3	28.1
Wholesale trade	31,000	41,714	45,776	11.6	11.6	11.9	9.7
Motor vehicles and equipment	7,866	9,697	11,841	3.0	2.7	3.1	22.1
Other	23,134	32,017	33,935	8.7	8.9	8.8	6.0
Retail trade	19,896	24,770	28,313	7.5	6.9	7.4	14.3
Food stores	11,491	14,661	17,776	4.3	4.1	4.6	21.2
Other	8,405	10,109	10,537	3.2	2.8	2.7	4.2
Finance, except depository institutions	3,222	6,277	9,669	1.2	1.8	2.5	54.0
Insurance	5,666	11,414	16,629	2.1	3.2	4.3	45.7
Real estate	6,390	6,101	7,318	2.4	1.7	1.9	19.9
Services	20,260	26,230	29,278	7.6	7.3	7.6	11.6
Hotels and other lodging places	3,383	4,928	4,962	1.3	1.4	1.3	.7
Business services	8,953	10,882	14,123	3.4	3.0	3.7	29.8
Motion pictures	1,995	1,715	1,671	.7	.5	.4	-2.6
Health services	793	2,802	3,716	.3	.8	1.0	32.6
Other	5,135	5,903	4,806	1.9	1.6	1.2	-18.6
Other industries	20,219	42,014	40,270	7.6	11.7	10.5	-4.2
Agriculture, forestry, and fishing	659	779	732	.2	.2	.2	-6.0
Mining	5,527	5,475	5,952	2.1	1.5	1.5	8.7
Construction	3,230	3,552	3,955	1.2	1.0	1.0	11.3
Transportation	7,609	13,524	11,499	2.9	3.8	3.0	-15.0
Communication and public utilities	3,195	18,685	18,132	1.2	5.2	4.7	-3.0

that of affiliates in the NAICS-based industry “motor vehicles, bodies and trailers, and parts.” The larger gross product in the NAICS-based industry is mainly due to the inclusion of several parts-producing affiliates that are classified in other manufacturing industries—most notably in fabricated metal products, machinery, and electronics—in the SIC-based system.

In wholesale trade and in mining, the gross product of affiliates under the SIC-based sys-

tem was substantially less than that of affiliates in the corresponding NAICS-based sectors. The difference reflected the separate classification of petroleum affiliates under the SIC-based system and their inclusion in wholesale trade or oil and gas extraction under the NAICS-based system.

In retail trade, the gross product of affiliates was larger on an SIC basis than on a NAICS basis due to the inclusion of restaurants, which under

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Data Availability

This article presents summary data from the 1997 benchmark survey. A publication presenting more detailed data from the survey will be available early this fall from the U.S. Government Printing Office; its availability will be announced on the inside back cover of the SURVEY. Both this article and the publication present preliminary results of the benchmark survey. The final results of the benchmark survey will be published next year.

Estimates of U.S. affiliate operations in 1977–96 are available on diskettes and in compressed files that can be downloaded from BEA’s Web site at <www.bea.doc.gov>. The estimates for 1991–96 are also available in publications.

For more information on these products and how to get them, see the International Investment Division Product Guide on BEA’s Web site at <www.bea.doc.gov/bea/ai/o8-99.htm>, or write to Research Branch (BE-50), International Investment Division, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230.

Using Employment Data to Estimate Affiliate Shares of the U.S. Economy

In this article, data on employment are used to estimate affiliate shares of the U.S. economy by industry because these data can be disaggregated by industry of sales, a basis that approximates the disaggregation of the data for all U.S. businesses by industry of establishment. Thus, the data on affiliate employment can be used to calculate the affiliate shares of the U.S. economy at a greater level of industry detail than can be calculated using the gross product estimates or other data, which can only be disaggregated on the basis of industry of affiliate.¹

In the classification by industry of sales, the data on affiliate employment (and sales) are distributed among all

of the industries in which the affiliate reports sales. As a result, employment classified by industry of sales should approximate that classified by industry of establishment (or plant), because an affiliate that has an establishment in an industry usually also has sales in that industry.²

In contrast, in the classification by industry of affiliate, all of the operations data (including the employment data) for an affiliate are assigned to that affiliate’s “primary” industry—that is, the industry in which it has the most sales.³ As a result, any affiliate operations that take place in secondary industries will be classified as operations in the primary industry.

1. Establishment-level data from a joint project of BEA and the Bureau of the Census can be used to calculate affiliate shares at an even greater level of detail. These data show each four-digit manufacturing industry in the Standard Industrial Classification; they are currently available for 1987–92. The data for 1990 are analyzed in Ned G. Howenstine and William J. Zeile, “Characteristics of Foreign-Owned U.S. Manufacturing Establishments,” SURVEY 74 (January 1994): 34–59. The data for 1991 are analyzed in Ned G. Howenstine and Dale P. Shannon, “Differences in Foreign-Owned U.S. Manufacturing Establishments by Country of Owner,” SURVEY 76 (March 1996): 43–60.

2. However, this is not the case if one establishment of an affiliate provides all of its output to another establishment of that affiliate. For example, if an affiliate operates both a metal mine and a metal-manufacturing plant and if the entire output of the mine is used by the manufacturing plant, all of the affiliate’s sales will be in metal manufacturing, and none in metal mining. When the mining employees are distributed by industry of sales, they are classified in manufacturing even though the industry of that establishment is mining.

3. An affiliate’s primary industry is based on a breakdown of the affiliate’s sales by BEA International Surveys Industry classification code.

NAICS, are classified in accommodation and food services. The effect of this difference in classification was partly offset by the difference in the treatment of affiliates that specialize in retailing gasoline, which are included in retail trade under the NAICS-based system but are classified in petroleum under the SIC-based system.

Change in industry distribution.—On the SIC basis, the share of nonbank-affiliate gross product accounted for by manufacturing declined from 50 percent in 1992 to 45 percent in 1997 (table 5). The decline partly reflects the selloff of foreign ownership shares in some large U.S. manufacturing companies, particularly in chemicals. It also reflects recent expansions in foreign direct

investment activity in other industries, such as finance, except depository institutions; insurance; and communication and public utilities.

The shares of affiliate gross product accounted for by affiliates in the finance and insurance industries increased substantially from 1992 to 1997, partly as a result of large increases in gross product in 1997. The gross product of affiliates in finance increased more than 50 percent and those in insurance, more than 40 percent; these increases reflected both acquisitions of new affiliates and expansions in the operations of existing affiliates.

Within manufacturing, the gross product of affiliates in stone, clay, and glass products and in

Table 6.—Gross Product of Nonbank U.S. Affiliates by Country of Ultimate Beneficial Owner, 1992–97

	Millions of dollars						Percentage of all-countries total						Addendum: Percent change in affiliate gross product, 1996–97
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997	
All countries	266,333	285,738	312,981	322,631	358,085	384,883	100.0	100.0	100.0	100.0	100.0	100.0	7.5
Canada	33,479	41,062	41,613	35,277	32,550	34,464	12.6	14.4	13.3	10.9	9.1	9.0	5.9
Europe	161,226	168,296	188,372	201,965	229,286	245,919	60.5	58.9	60.2	62.6	64.0	63.9	7.3
Belgium	3,725	3,711	4,161	4,290	4,661	5,598	1.4	1.3	1.3	1.3	1.3	1.5	20.1
Denmark	1,143	1,689	1,915	1,849	2,079	1,194	.4	.6	.6	.6	.6	.3	-42.6
Finland	1,262	1,435	1,450	1,645	1,688	1,917	.5	.5	.5	.5	.5	.5	13.6
France	18,899	19,274	23,163	23,895	34,227	35,863	7.1	6.7	7.4	7.4	9.6	9.3	4.8
Germany	28,716	32,055	35,043	37,047	42,929	46,171	10.8	11.2	11.2	11.5	12.0	12.0	7.6
Ireland	1,852	1,655	1,937	2,607	2,527	2,544	.7	.6	.6	.8	.7	.7	.7
Italy	2,318	2,541	2,992	3,056	3,106	3,167	.9	.9	1.0	.9	.9	.8	2.0
Luxembourg	697	814	968	845	1,582	617	.3	.3	.3	.3	.4	.2	-61.0
Netherlands	19,657	20,765	24,927	27,697	30,078	33,750	7.4	7.3	8.0	8.6	8.4	8.8	12.2
Norway	563	709	1,043	1,074	1,452	1,858	.2	.2	.3	.3	.4	.5	28.0
Sweden	7,053	5,944	5,255	5,484	6,409	7,896	2.6	2.1	1.7	1.7	1.8	2.1	23.2
Switzerland	17,117	16,847	17,113	18,563	20,677	25,637	6.4	5.9	5.5	5.8	5.8	6.7	24.0
United Kingdom	57,412	59,864	67,288	72,478	76,602	78,550	21.6	21.0	21.5	22.5	21.4	20.4	2.5
Other	812	992	1,117	1,433	1,269	1,157	.3	.3	.4	.4	.4	.3	-8.8
Latin America and Other Western Hemisphere	8,739	10,126	12,045	12,367	12,955	13,545	3.3	3.5	3.8	3.8	3.6	3.5	4.6
Mexico	1,109	1,400	1,642	1,754	1,862	1,347	.4	.5	.5	.5	.3	.3	-27.7
Panama	1,638	1,460	1,275	(P)	826	696	.6	.5	.4	(P)	.2	.2	-15.7
Venezuela	3,124	3,757	4,729	4,712	5,089	5,247	1.2	1.3	1.5	1.5	1.4	1.4	3.1
Bermuda	1,153	1,274	2,022	2,398	2,403	3,295	.4	.4	.6	.7	.7	.9	37.1
Netherlands Antilles	1,071	1,233	1,208	1,182	1,319	(P)	.4	.4	.4	.4	(P)	(P)	(P)
Other	645	1,002	1,169	(P)	1,456	(P)	.2	.4	.4	(P)	.4	(P)	(P)
Africa	1,267	1,387	1,571	2,352	2,555	2,843	.5	.5	.5	.7	.7	.7	11.3
South Africa	877	897	1,012	1,867	2,011	2,208	.3	.3	.3	.6	.6	.6	9.8
Other	390	489	560	484	544	635	.1	.2	.2	.2	.2	.2	16.7
Middle East	3,460	4,556	5,802	4,792	6,387	7,295	1.3	1.6	1.9	1.5	1.8	1.9	14.2
Kuwait	953	1,062	1,057	776	756	868	.4	.4	.3	.2	.2	.2	14.8
Saudi Arabia	2,117	2,923	3,204	3,033	3,545	4,263	.8	1.0	1.0	.9	1.0	1.1	20.3
Other	390	571	1,541	983	2,086	2,164	.1	.2	.5	.3	.6	.6	3.7
Asia and Pacific	54,318	56,342	58,769	61,080	69,190	73,667	20.4	19.7	18.8	18.9	19.3	19.1	6.5
Australia	8,101	7,732	4,680	4,615	5,758	5,207	3.0	2.7	1.5	1.4	1.6	1.4	-9.6
Hong Kong	1,056	1,395	1,312	1,335	1,559	1,474	.4	.5	.4	.4	.4	.4	-5.5
Japan	42,659	44,539	48,810	50,513	58,069	62,345	16.0	15.6	15.6	15.7	16.2	16.2	7.4
Korea, Republic of	549	693	657	1,120	644	655	.2	.2	.2	.3	.2	.2	1.7
Singapore	129	112	232	170	261	696	(*)	(*)	.1	.1	.1	.2	166.7
Taiwan	560	744	1,359	1,808	1,639	1,717	.2	.3	.4	.6	.5	.4	4.8
Other	1,263	1,127	1,719	1,520	1,260	1,573	.5	.4	.5	.5	.4	.4	24.8
United States	3,843	3,969	4,810	4,798	5,161	7,151	1.4	1.4	1.5	1.5	1.4	1.9	38.6

* Less than 0.05 percent.

(P) Suppressed to avoid disclosure of data of individual companies.

transportation equipment increased more than 20 percent in 1997. The increase in stone, clay, and glass products was mainly due to new investment transactions and to intracompany reorganizations in which operations were transferred to these affiliates from affiliates in other industries. The increase in transportation equipment was mainly due to expanded production by existing affiliates in motor vehicles and equipment.

By country.—In 1997, as in 1992, more than 80 percent of the gross product of all nonbank affiliates was accounted for by affiliates with UBO's in seven major investing countries: Canada, France, Germany, the Netherlands, Switzerland, the United Kingdom, and Japan (table 6). In

both years, the largest investing country was the United Kingdom, followed by Japan. In 1997, Germany was the third-largest investing country. In 1992, Canada was the third-largest investing country, but by 1997, its ranking had slipped to the fifth largest, partly as a result of Canadian disinvestment in several large minority-owned U.S. companies; the share of Canadian-owned affiliates' gross product accounted for by majority-owned affiliates increased from 66 percent in 1992 to 86 percent in 1997 (table 7).

Among the seven major investing countries, the gross product of Swiss-owned affiliates increased 24 percent in 1997, partly as a result of new investments. The gross product of affiliates with UBO's in the Netherlands increased 12 percent,

Table 7.—Gross Product of Majority-Owned Nonbank U.S. Affiliates by Country of Ultimate Beneficial Owner, 1992, 1996, and 1997

	Millions of dollars			Percentage of all-industries total			Addenda: Gross product of majority-owned affiliates as a percentage of that of all nonbank affiliates		
	1992	1996	1997	1992	1996	1997	1992	1996	1997
All countries	214,781	283,422	309,628	100.0	100.0	100.0	80.6	79.1	80.4
Canada	22,115	27,687	29,476	10.3	9.8	9.5	66.1	85.1	85.5
Europe	141,505	180,729	197,413	65.9	63.8	63.8	87.8	78.8	80.3
Belgium	3,564	4,587	(P)	1.7	1.6	(P)	95.7	98.4	(P)
Denmark	(P)	2,082	1,183	(P)	.7	.4	(P)	100.1	99.1
Finland	1,162	1,536	1,666	.5	.5	.5	92.1	91.0	86.9
France	16,611	23,166	23,886	7.7	8.2	7.7	87.9	67.7	66.6
Germany	24,203	34,224	36,851	11.3	12.1	11.9	84.3	79.7	79.8
Ireland	(P)	1,153	(P)	(P)	.4	(P)	(P)	45.6	(P)
Italy	2,032	2,973	3,187	.9	1.0	1.0	87.7	95.7	100.6
Luxembourg	467	421	411	.2	.1	.1	67.0	26.6	66.6
Netherlands	17,797	25,060	27,446	8.3	8.8	8.9	90.5	83.3	81.3
Norway	421	1,250	(P)	.2	.4	(P)	74.8	86.1	(P)
Sweden	4,356	4,736	6,176	2.0	1.7	2.0	61.8	73.9	78.2
Switzerland	15,824	17,764	21,719	7.4	6.3	7.0	92.4	85.9	84.7
United Kingdom	52,777	60,898	66,313	24.6	21.5	21.4	91.9	79.5	84.4
Other	(P)	879	995	(P)	.3	.3	(P)	69.3	86.0
Latin America and Other Western Hemisphere	7,020	10,841	11,873	3.3	3.8	3.8	80.3	83.7	87.7
Mexico	848	1,380	1,153	.4	.5	.4	76.5	74.1	85.6
Panama	1,610	(P)	(P)	.7	(P)	(P)	98.3	(P)	(P)
Venezuela	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)
Bermuda	1,009	2,348	3,203	.5	.8	1.0	87.5	97.7	97.2
Netherlands Antilles	799	1,281	(P)	.4	.5	(P)	74.6	97.1	(P)
Other	(P)	1,412	1,137	(P)	.5	.4	(P)	97.0	(P)
Africa	(P)	1,048	(P)	(P)	.4	(P)	(P)	41.0	(P)
South Africa	(P)	1,037	(P)	(P)	.4	(P)	(P)	51.6	(P)
Other	(P)	12	(P)	(P)	(*)	(P)	(P)	2.2	(P)
Middle East	(P)	2,058	2,426	(P)	.7	.8	(P)	32.2	33.3
Kuwait	510	310	(P)	.2	.1	(P)	53.5	41.0	(P)
Saudi Arabia	(P)	491	626	(P)	.2	.2	(P)	13.9	14.7
Other	(P)	1,257	(P)	(P)	.4	(P)	(P)	60.3	(P)
Asia and Pacific	40,240	59,496	63,879	18.7	21.0	20.6	74.1	86.0	86.7
Australia	3,558	4,696	4,397	1.7	1.7	1.4	43.9	81.6	84.4
Hong Kong	946	1,053	1,139	.4	.4	.4	89.5	67.5	77.3
Japan	33,729	50,412	54,312	15.7	17.8	17.5	79.1	86.8	87.1
Korea, Republic of	431	462	432	.2	.2	.1	78.5	71.7	66.0
Singapore	124	239	716	.1	.1	.2	96.1	91.6	102.9
Taiwan	526	1,554	1,615	.2	.5	.5	93.9	94.8	94.1
Other	926	1,080	1,268	.4	.4	.4	73.3	85.7	80.6
United States	(P)	1,563	(P)	(P)	.6	(P)	(P)	30.3	(P)

* Less than 0.05 percent.

(P) Suppressed to avoid disclosure of data of individual companies.
n.m. Not meaningful.

NOTE.—Shares of more than 100 percent may result where the gross product of minority-owned affiliates is negative.

reflecting increases in the value added of existing affiliates.

Share of U.S. employment

In 1997, U.S. affiliates of foreign companies accounted for 4.9 percent of total U.S. private-industry employment, down slightly from a 5.1-percent share in 1992 (table 1). The decrease in the affiliate share partly reflects the concentration of affiliate activity in manufacturing, an industry whose share of total U.S. employment has declined.⁵

By industry.—Among the NAICS sectors, the affiliate share of employment in 1997 was largest in mining (15.0 percent), followed by manufacturing (12.3 percent) and information (7.8 percent) (table 8).⁶ Within manufacturing, the affiliate

shares were largest in chemicals (34.0 percent), nonmetallic minerals (21.2 percent), and electrical equipment, appliances, and components (20.2 percent). Affiliates accounted for more than 10 percent of employment in 12 of the 21 subsectors in manufacturing.

Similar patterns in affiliate shares of employment were evident in the data by SIC division in 1996. The affiliate share was largest in mining, followed by manufacturing (table 9). Within manufacturing, the affiliate shares were largest in chemicals; tobacco products; stone, clay, and glass products; and electronic and other electric equipment.

In communications, the affiliate share of employment increased from less than 2 percent in 1992 to more than 8 percent in 1996, mainly as a result of foreign acquisitions of U.S. companies. Within manufacturing, the affiliate share of employment in motor vehicles and equipment

5. Manufacturing's share of U.S. private-industry employment (excluding depository institutions and private households) decreased from 20.2 percent in 1992 to 17.8 percent in 1997.

6. Employment data by industry of sales are used to estimate shares; this basis approximates the establishment-based disaggregation of the correspond-

ing data for all U.S. businesses. See the box "Using Employment Data to Estimate Affiliate Shares of the U.S. Economy" on page 29.

Table 8.—Employment by Nonbank U.S. Affiliates by NAICS-Based Industry of Sales, 1997

	Thousands of employees	Employment as a percentage of total U.S. employment in nonbank private industries ¹		Thousands of employees	Employment as a percentage of total U.S. employment in nonbank private industries ¹
All industries²	5,164.3	4.9	Wholesale trade	390.4	6.7
Agriculture, forestry, fishing, and hunting	25.7	n.a.	Retail trade	725.8	5.1
Mining, excluding oil and gas extraction	64.4	15.0	Transportation and warehousing	187.6	n.a.
Utilities	8.0	1.1	Information	250.3	7.8
Construction	74.0	1.3	Publishing industries	66.9	6.9
Manufacturing	2,106.5	12.3	Motion picture and sound recording industries	25.5	8.8
Food	139.0	9.3	Broadcasting and telecommunications	128.8	8.3
Beverages and tobacco	31.2	17.6	Information services and data processing services	29.1	7.1
Textile mills	33.0	8.2	Finance (except depository institutions) and insurance	217.0	n.a.
Textile product mills	14.0	6.3	Finance, except depository institutions	74.1	n.a.
Apparel	35.3	4.7	Insurance carriers and related activities	142.9	6.2
Leather and allied products	2.3	2.6	Real estate and rental and leasing	58.3	3.3
Wood products	11.6	2.0	Professional, scientific, and technical services	135.6	2.5
Paper	57.5	10.0	Management of nonbank companies and enterprises	3.3	n.a.
Printing and related support activities	60.0	7.1	Administration, support, waste management, and remediation services	272.1	3.7
Petroleum and coal products ³	38.3	16.9	Educational services	6.5	2.0
Chemicals	307.4	34.0	Health care and social assistance	99.9	.7
Plastics and rubber products	143.9	14.0	Arts, entertainment, and recreation	38.5	2.4
Nonmetallic mineral products	107.9	21.2	Accommodation and food services	287.0	n.a.
Primary metals	92.5	15.2	Other services (except public administration and private households)	51.1	1.5
Fabricated metal products	119.4	6.7	Auxiliaries, except management of companies and enterprises	118.6	n.a.
Machinery	207.9	14.5	Unspecified ⁴	43.5	.....
Computer and electronic products	261.4	15.5			
Electrical equipment, appliance, and components	120.3	20.2			
Transportation equipment	225.2	11.9			
Furniture and related products	16.9	2.8			
Miscellaneous manufacturing	81.4	11.1			

n.a. Data required to compute shares are not available.

1. The data on U.S. employment in private industries that were used in calculating these percentages are classified by industry of establishment. For "all industries," they are from table 6.4C of the "National Income and Product Accounts (NIPA) Tables" (see the August 1998 issue of the SURVEY OF CURRENT BUSINESS); for NAICS sectors and subsectors, they are from the Census Bureau's 1997 Economic Census. The Economic Census does not cover all industries in the agriculture and transportation sectors. In addition, data from the 1997 Economic Census for some sectors have not yet been released.

For "all industries," the total for U.S. employment in nonbank private industries is equal to employment in private industries less the employment of depository institutions and private households. The U.S. private-industry employment totals used to calculate the affiliate shares in "all industries" in this table differ from the U.S. employment totals used to calculate affiliate shares in table 10; the latter are from BEA's Regional Economic Information System. The estimates used for table 10, unlike those used for this table, do not exclude employment in depository institutions. In addition, the estimates used for table 10, unlike those used for this table, exclude U.S. residents temporarily employed abroad by U.S. businesses. They may also differ from NIPA estimates used for "all industries" in this table because of different definitions and revision schedules.

2. For consistency with the coverage of the data on U.S. employment in private industries, U.S.-affiliate employment in Puerto Rico, in "other U.S. areas," and in "foreign" was excluded from the U.S.-affiliate employment total when the percentage shares on this line were computed.

3. For both U.S. affiliates and all U.S. businesses, includes oil and gas extraction. (See note below.)

4. This line includes all employment that U.S. affiliates did not specify in terms of industry of sales when they filled out their 1997 benchmark survey form. Affiliates that filed the long form (that is, affiliates with assets, sales, or net income or loss greater than \$100 million) had to specify only their ten largest sales categories, and affiliates that filed the short form had to specify only their three largest sales categories.

NOTE.—A significant portion of U.S. affiliate employment in petroleum and coal products is accounted for by integrated petroleum companies that have, in addition to their manufacturing employees, substantial numbers of employees in petroleum extraction; because these employees cannot be identified separately, they are included in petroleum and coal products manufacturing. For consistency, employees of affiliates classified in the "oil and gas extraction without refining" industry and employees of all U.S. businesses in oil and gas extraction are also included in petroleum and coal products manufacturing rather than in mining.

increased substantially, from 11.0 in 1992 to 14.6 percent in 1996, largely as a result of expansions of operations by existing affiliates.

By State.—In 1997, the affiliate shares of private-industry employment were highest in Hawaii (11.4 percent), South Carolina (7.9 percent), and North Carolina (7.1 percent) (table 10). Hawaii also had the highest share in each year in 1992–96. In 1992–94, Delaware had the second-highest share, but the share dropped sharply in 1995 as a result of foreign disinvestments. South Carolina

had the third-highest share in 1992–94 and the second highest in 1995–96.

In 1996, affiliates in Kentucky (20.0 percent) had the highest share of manufacturing employment, followed by South Carolina (18.1 percent) (table 11).⁷ In 1992, Delaware had the highest share, followed by West Virginia.

7. Data on affiliate employment in manufacturing by State were collected in the 1997 benchmark survey for manufacturing on a NAICS basis. However, the affiliate shares of State manufacturing employment cannot be computed for 1997, because the industry-level data on all-U.S.-business employment by State are currently available only for industries on an SIC basis.

Table 9.—Employment by Nonbank U.S. Affiliates by SIC-Based Industry of Sales, 1992 and 1996

	Thousands of employees		Employment as a percentage of total U.S. employment in nonbank private industries ¹	
	1992	1996	1992	1996
All industries²	4,715.4	5,105.0	5.1	5.0
Agriculture, forestry, and fishing	31.9	28.6	1.7	1.4
Mining, excluding oil and gas extraction	68.1	63.1	24.0	24.1
Construction	68.0	72.2	1.4	1.3
Manufacturing³	2,139.7	2,210.9	11.5	11.7
Food and kindred products	197.7	168.0	11.9	9.9
Tobacco products	1	9.5	(D)	23.2
Textile mill products	45.3	45.9	6.7	7.3
Apparel and other textile products	32.4	38.9	3.2	4.5
Lumber and wood products	14.2	12.4	2.0	1.5
Furniture and fixtures	16.4	14.6	3.4	2.9
Paper and allied products	51.9	59.9	7.5	8.8
Printing and publishing	101.0	114.9	6.6	7.3
Chemicals and allied products	347.7	322.3	32.1	31.2
Petroleum and coal products ⁴	88.6	54.5	17.4	11.8
Rubber and miscellaneous plastics products	130.0	150.7	14.8	15.4
Leather and leather products	8.4	3.1	6.9	3.1
Stone, clay, and glass products	107.2	117.8	20.9	21.6
Primary metal industries	110.4	102.1	15.9	14.4
Fabricated metal products	110.1	135.9	8.3	9.4
Industrial machinery and equipment	217.3	236.9	11.3	11.2
Electronic and other electric equipment	263.2	307.8	17.2	18.6
Transportation equipment	139.8	175.0	7.6	9.8
Motor vehicles and equipment	89.8	140.8	11.0	14.6
Other transportation equipment	50.0	34.2	4.9	4.2
Instruments and related products	110.6	113.3	11.9	13.3
Miscellaneous manufacturing industries	K	27.4	(D)	6.8
Transportation and public utilities	229.8	365.7	4.0	5.8
Transportation	197.0	235.4	5.6	5.8
Communications	17.2	114.3	1.4	8.5
Electric, gas, and sanitary services	15.6	16.0	1.6	1.8
Wholesale trade	345.8	388.2	5.6	5.9
Retail trade	798.5	922.5	4.0	4.1
Finance, except depository institutions	69.8	69.7	6.3	5.2
Insurance	142.6	136.9	6.5	6.1
Real estate	32.0	28.2	2.4	2.0
Services⁵	701.5	766.5	2.3	2.2
Hotels and other lodging places	161.1	119.3	9.7	6.6
Business services	299.2	342.5	5.5	4.6
Motion pictures	24.3	23.5	5.9	4.4
Other	216.9	281.2	1.0	1.1
Unspecified⁶	87.9	52.4	n.a.	n.a.

n.a. Not applicable.

1. The data on U.S. employment in private industries that were used in calculating these percentages are classified by industry of establishment. They are from table 6.4C of the "National Income and Product Accounts (NIPA) Tables" (see the August 1998 issue of the SURVEY OF CURRENT BUSINESS). The total for U.S. employment in nonbank private industries is equal to employment in private industries less the employment of depository institutions and private households. The U.S. private-industry employment totals used to calculate the affiliate shares in "all industries" in this table differ from the U.S. employment totals used to calculate affiliate shares in tables 10 and 11; the data used for tables 10 and 11 are from BEA's Regional Economic Information System. The estimates used for table 10, unlike those used for this table, do not exclude employment in depository institutions. The estimates used for tables 10 and 11, unlike those used for this table, exclude U.S. residents temporarily employed abroad by U.S. businesses. They may also differ from NIPA estimates used for this table because of different definitions and revision schedules.

2. For consistency with the coverage of the data on U.S. employment in private industries, U.S.-affiliate employment in Puerto Rico, in "other U.S. areas," and in the "foreign" category was excluded from the U.S.-affiliate employment total when the percentage shares on this line were computed.

3. Total affiliate manufacturing employment and the shares of all-U.S.-business manufacturing employment accounted for by affiliates shown in this table differ from those shown in table 11. In this table, employment is classified by industry of sales, and the total for manufacturing includes some nonmanufacturing employees (see the box "Using Employment Data to Estimate Affiliate Shares of the U.S. Economy"), whereas in table 11, affiliate manufacturing employment consists only of employees on the payroll of manufacturing plants. Data on the latter basis are not available for the subindustries within manufacturing shown in this table. In addition, the total for manu-

facturing in this table includes oil and gas extraction, which is excluded from the manufacturing total in table 11.

4. For both U.S. affiliates and all U.S. businesses, includes oil and gas extraction. (See note below.)

5. Excludes private households.

6. This line includes all employment that U.S. affiliates did not specify in terms of industry of sales when they filled out their survey forms for 1992 and 1996. Affiliates that filed the long form (that is, affiliates with assets, sales, or net income or loss greater than \$50 million) had to specify only their eight largest sales categories, and affiliates that filed the short form had to specify only their three largest sales categories.

NOTES.—In this table, petroleum is not shown as a separate major industry. Instead, in order to be consistent with the all-U.S. data on employment by industry, affiliate employment in the various petroleum subindustries is distributed among the other major industries. Thus, manufacturing includes petroleum and coal products, wholesale trade includes petroleum wholesale trade, retail trade includes gasoline service stations, and transportation includes petroleum tanker operations, pipelines, and storage. A significant portion of U.S. affiliate employment in petroleum and coal products is accounted for by integrated petroleum companies that have, in addition to their manufacturing employees, substantial numbers of employees in petroleum extraction; because these employees cannot be identified separately, they are included in petroleum and coal products manufacturing. For consistency, employees of affiliates classified in the "oil and gas extraction without refining" industry and employees of all U.S. businesses in oil and gas extraction are also included in petroleum and coal products manufacturing rather than in mining.

Size ranges are given in employment cells that are suppressed. The size ranges are A—1 to 499; F—500 to 999; G—1,000 to 2,499; H—2,500 to 4,999; I—5,000 to 9,999; J—10,000 to 24,999; K—25,000 to 49,999; L—50,000 to 99,999; M—100,000 or more.

Profitability

In 1997, the net income of affiliates—after-tax profits on a financial-accounting basis—increased \$18.2 billion, to \$42.5 billion, following an increase of \$8.9 billion in 1996.⁸ The increase in 1997 was mainly due to increased operating profits, as “profit-type return”—before-tax profits generated from current production on an economic-accounting basis—increased \$14.8 billion, to \$57.8 billion (table 12).⁹ Capital losses of \$1.3 billion in 1996 shifted to capital gains of \$2.7 billion, and U.S. income taxes paid by affiliates increased \$1.3 billion, to \$25.6 billion.

The large increases in net income and profit-type return in 1997 continue a pattern of strong growth since 1992. Some of this growth reflected the entry of affiliates into the direct investment

universe, but most of it was attributable to the improved profitability of existing affiliates.

By SIC-based industry, affiliates' net income and profit-type return in most of the major industries increased substantially in 1997. In manufacturing, affiliates' net income increased \$6.2 billion, or 76 percent, mainly because of a \$4.9 billion increase in profit-type return. Within manufacturing, profit-type return increased \$2.2 billion in transportation equipment, reflecting increased operating profits by affiliates in motor vehicle manufacturing. In wholesale trade, profit-type return increased \$3.4 billion, mainly as a result of increased operating profits by affiliates in motor vehicle wholesale trade.

Affiliates' net income increased more than \$3 billion in finance, except depository institutions, and in insurance, reflecting large increases in both operating profits and capital gains. In petroleum, net income and profit-type return each increased more than \$1 billion, but the increases were smaller than in 1996. As a result of increases in operating profits, affiliates' net income in real estate and in services both turned positive for the first time in over a decade.¹⁰

On a NAICS basis, affiliates' net income and profit-type return in 1997 were positive in most

8. Net income of affiliates is that shown in the affiliates' income statements; it includes capital gains and losses, income from investments, and other nonoperating income.

9. Affiliates' profit-type return is calculated before the deduction of income taxes or depletion charges; it excludes capital gains and losses, income from investments, and other nonoperating income, and it includes an inventory valuation adjustment (IVA). Conceptually, profit-type return should also include a capital consumption adjustment (CCAdj), but estimates of CCAdj by industry are not available; estimates of profit-type return with both IVA and CCAdj are presented for nonfinancial U.S. affiliates in table 14. For a more detailed description of this measure and for a comparison of this measure and the corresponding measure used in the U.S. national income and product accounts, see Jeffrey H. Lowe, "Gross Product of U.S. Affiliates of Foreign Companies, 1977-87," SURVEY 70 (June 1990): 53.

10. In real estate, the net income of affiliates was negative every year in 1986-96; in services, net income was negative every year in 1981-96.

Table 12.—Net Income and Profit-Type Return of Nonbank U.S. Affiliates by SIC-Based Industry of Affiliate, 1992-97

(Millions of dollars)

	Net income ¹						Profit-type return ²					
	1992	1993	1994	1995	1996	1997	1992	1993	1994	1995	1996	1997
All industries	-21,331	-4,354	8,132	15,493	24,379	42,547	2,914	8,798	22,615	27,847	43,007	57,849
Petroleum	-485	1,098	428	2,101	5,401	6,527	3,044	3,298	4,062	4,735	6,713	7,918
Manufacturing	-9,171	-6,351	6,432	9,189	8,096	14,268	1,680	4,329	12,310	12,726	15,965	20,886
Food and kindred products	238	-1,621	-172	512	3,425	675	384	151	211	-71	571	1,870
Chemicals and allied products	-1,281	3,338	5,123	3,834	878	4,359	4,602	6,323	7,921	6,117	6,724	5,532
Stone, clay, and glass products	-1,005	-563	-439	801	597	2,226	-557	-234	16	977	1,345	2,837
Primary metal industries	-2,014	-1,445	1,025	1,210	990	938	-565	(*)	790	1,368	1,535	1,335
Fabricated metal products	-15	-408	-641	101	421	1,136	82	-79	-467	271	571	909
Industrial machinery and equipment	-1,638	-2,193	52	-384	-254	157	-1,261	-1,301	677	110	599	1,405
Electronic and other electric equipment	-1,112	-1,778	13	607	-320	1,308	-788	-759	504	928	527	1,681
Transportation equipment	-920	-683	408	410	187	1,690	-880	-282	391	483	118	2,317
Other	-1,424	-998	1,063	2,098	2,172	1,779	663	510	2,266	2,543	3,975	3,000
Wholesale trade	-335	-70	1,787	-157	1,548	3,439	770	1,529	3,090	4,541	4,139	7,521
Retail trade	-2,086	-611	982	466	305	1,213	14	272	1,778	2,199	1,814	2,128
Finance, except depository institutions	551	1,087	473	1,287	1,049	4,124	547	894	512	506	2,620	3,746
Insurance	2,318	4,960	2,961	3,434	5,667	9,071	1,966	2,726	3,379	1,841	5,030	7,907
Real estate	-4,672	-3,142	-2,248	-2,022	-1,722	35	-2,706	-2,199	-2,049	-1,899	-1,244	296
Services	-3,125	-2,359	-2,347	-2,403	-1,787	159	-2,310	-1,620	-2,221	-2,150	-733	480
Hotels and other lodging places	-1,603	-1,427	-1,181	-1,142	-289	478	-1,541	-1,206	-1,147	-1,110	-312	139
Business services	136	-45	238	24	-1,235	-222	225	310	260	90	-472	479
Motion pictures	-1,200	-422	-314	-576	140	107	-682	-434	-555	-373	-12	-240
Other	-458	-465	-1,090	-709	-403	-204	-312	-291	-779	-757	63	102
Other industries	-4,326	1,034	-336	3,599	5,822	3,712	-91	-431	1,755	5,350	8,745	6,966

* Less than \$500,000.

1. Net income is after-tax profits on a financial accounting basis, as shown in affiliates' income statements. It includes capital gains and losses, income from investments, and other nonoperating income.

2. Profit-type return is a component of gross product originating in U.S. affiliates. It is before income taxes; it excludes capital gains and losses, income from investments, and other nonoperating income; it is before deduction of depletion charges; and it includes an inventory valuation adjustment.

of the industries with substantial foreign direct investment activity (table 13). In finance (except depository institutions) and insurance, operating profits were particularly strong, accounting for more than 40 percent of gross product.

Return on assets.—The rate of return on assets of nonfinancial affiliates increased to 6.5 percent in 1997 from 6.0 percent in 1996 (table 14 and chart 2). In comparison, the rate of return for all U.S. nonfinancial corporations was unchanged at 8.0 percent.¹¹ Although the rate of return for affiliates has been lower than that for U.S. nonfinancial corporations for many years, the gap has

been narrowing recently, and the gap in 1997 was the smallest since 1988.

Expanded Information from the Benchmark Survey

The 1997 benchmark survey provides information on U.S.-affiliate research and development (R&D), employment, and trade in goods that is collected only in benchmark survey years. The data on R&D include expenditures on R&D performed by affiliates broken down by source of funding—that

11. For both U.S. affiliates and all U.S. corporations, the rate of return is measured as profit-type return plus interest paid as a percentage of total assets. In the computation of these measures, both the return and the assets that generate the return are valued in prices of the current period.

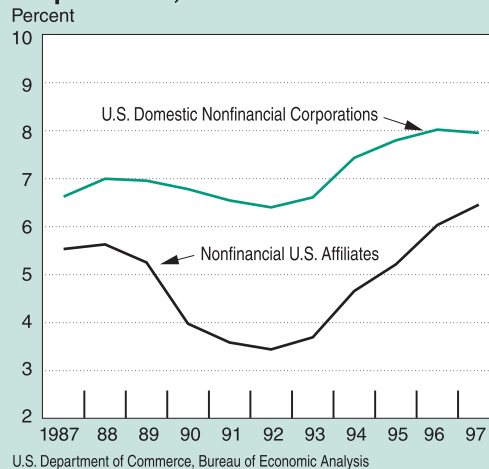
Table 13.—Net Income and Profit-Type Return of Nonbank U.S. Affiliates by NAICS-Based Industry of Affiliate, 1997

	Net income ¹	Profit-type return ²	Addendum: Profit-type return as a percentage of gross product
All industries	42,547	57,849	15.0
Manufacturing	18,826	26,027	13.8
Food	183	1,231	11.2
Beverages and tobacco products	605	1,264	21.4
Paper	63	73	1.4
Printing and related support activities	189	301	10.7
Petroleum and coal products	4,463	4,859	20.7
Chemicals	4,280	5,443	13.3
Plastics and rubber products	260	564	7.1
Nonmetallic mineral products	2,225	2,835	23.5
Primary metals	788	1,140	13.3
Fabricated metal products	956	812	10.3
Machinery	1,390	2,373	14.3
Computers and electronic products	-257	331	2.1
Electrical equipment, appliances, and components	631	710	9.4
Transportation equipment	2,060	2,709	20.0
Motor vehicles, bodies and trailers, and parts	1,883	2,409	21.2
Other	176	300	13.7
Other	990	1,382	14.5
Wholesale trade	3,889	8,147	15.7
Motor vehicles and motor vehicle parts and supplies	1,543	2,605	21.9
Other	2,346	5,542	13.9
Retail trade	1,197	2,039	8.2
Information	2,445	4,041	14.9
Publishing industries	338	310	4.2
Motion picture and sound recording industries	28	-359	-14.1
Broadcasting and telecommunications	2,004	3,850	23.8
Information services and data processing services	75	240	22.3
Finance (except depository institutions) and insurance	11,220	12,077	45.9
Real estate and rental and leasing	204	481	5.3
Professional, scientific, and technical services	-570	-265	-4.4
Other industries	5,337	5,302	10.4

1. See table 12, footnote 1.
2. See table 12, footnote 2.

CHART 2

Return on Assets of Nonfinancial U.S. Affiliates and U.S. Domestic Nonfinancial Corporations, 1987-97



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

Table 14.—Return on Assets of Nonfinancial U.S. Affiliates and U.S. Domestic Nonfinancial Corporations, 1987-97

	Nonfinancial U.S. affiliates ¹				U.S. domestic non-financial corporations	
	Billions of dollars			Percent		Percent
	Property income			Rate of return ((col. 1/ col. 4) x 100)	Rate of return ⁴	
	Total	Profit-type return ²	Monetary interest paid			Total assets ³
	(1)	(2)	(3)	(4)	(5)	(6)
1987	30.3	10.7	19.6	546.6	5.5	6.6
1988	37.8	11.7	26.1	670.2	5.6	7.0
1989	43.9	8.5	35.4	833.4	5.3	7.0
1990	39.3	-1	39.4	984.2	4.0	6.8
1991	38.7	-2.1	40.8	1,076.0	3.6	6.6
1992	37.9	2.1	35.7	1,097.3	3.5	6.4
1993	42.0	7.0	35.0	1,135.2	3.7	6.6
1994	56.5	21.2	35.4	1,211.5	4.7	7.4
1995	66.4	26.3	40.1	1,270.5	5.2	7.8
1996	80.8	40.2	40.6	1,338.4	6.0	8.0
1997	94.6	50.5	44.1	1,464.1	6.5	8.0

1. Excludes finance, except depository institutions, and insurance (in addition to depository institutions, which are excluded from all data on U.S. affiliate operations).
2. Profit-type return as shown in table 13 plus a capital consumption adjustment (CCAdj). (Estimates of CCAdj by industry are not available.)
3. Average of beginning- and end-of-year value.
4. Equals the ratio of property income to total assets. Data on property income of U.S. domestic nonfinancial corporations are from tables 1.16 and 8.18 in the national income and product accounts. Data on total assets are from the Federal Reserve Board's flow of funds accounts.

is, whether the R&D is performed for the affiliates themselves, for the Federal Government, or for others under contract. The data on affiliate employment include the number of employees covered by collective bargaining agreements. The data on U.S. trade in goods of affiliates include exports and imports by product and by country of destination or origin. They also include imports by intended use—that is, whether intended for further manufacture, for resale without further processing, or as additions to the affiliates' capital stock.¹²

Research and development

In 1997, expenditures on R&D performed by U.S. affiliates (both for themselves and for others) totaled \$19 billion and accounted for about 12 percent of the R&D performed by all U.S. businesses (table 15). The amount of R&D performed by affiliates was slightly less than the amount of R&D funded by affiliates, which includes R&D performed for affiliates by others under contract and excludes R&D performed by affiliates for others.¹³

Of the total R&D performed by affiliates, nearly all—93 percent—was financed by the affiliates themselves, less than 7 percent was financed by other private companies under contract, and less than 1 percent was financed by the Federal Government. In contrast, 15 percent of the R&D

performed by all U.S. businesses was financed by the Federal Government. U.S. affiliates accounted for 14 percent of the privately funded R&D performed by all U.S. businesses, but they accounted for less than 1 percent of the federally funded R&D. The low affiliate share of federally funded R&D may reflect the fact that much of this research is military related and is therefore generally off limits to foreign-owned companies.

The ratio of R&D performed by affiliates to affiliate gross product was 5 percent, twice the ratio of R&D to gross product for all U.S. businesses. The higher ratio for affiliates reflects the tendency of U.S. affiliates to be large companies, which typically perform more R&D than small companies, and the tendency for affiliates to be more concentrated in research-intensive industries, such as chemicals.

By NAICS-based industry, more than one-half of the total expenditures on R&D performed by affiliates was accounted for by affiliates in two manufacturing industries: Chemicals and computers and electronic products (table 16). Within chemicals, affiliates in pharmaceuticals and medicines—one of the most research-intensive industries—accounted for more than one-fourth of affiliate R&D. In 1997, expenditures on R&D performed by these affiliates amounted to about 10 percent of affiliate sales and one-third of affiliate gross product. In comparison, for affiliates in all industries, the ratio of R&D to sales was

12. Since 1993, data on imports intended for further manufacture by affiliates have also been collected in BEA's annual surveys of affiliate operations.

13. R&D funded by affiliates is the basis on which annual data on affiliate R&D expenditures were collected in BEA's previous surveys. Beginning with the 1998 annual survey, the basis will shift to R&D performed by affiliates, which is the basis on which National Science Foundation surveys collect information on R&D from U.S. businesses.

Table 15.—Research and Development Performed by Nonbank U.S. Affiliates and by All U.S. Businesses, 1997

	Millions of dollars		Percent of total		Addendum: Nonbank U.S. affiliates as a percentage of all U.S. businesses
	By nonbank U.S. affiliates	By all U.S. businesses ¹	By nonbank U.S. affiliates	By all U.S. businesses ¹	
Total	19,260	157,539	100.0	100.0	12.2
For Federal Government	84	23,928	.4	15.2	.4
For private companies	19,176	133,611	99.6	84.8	14.4
For themselves	17,881	n.a.	92.8	n.a.	n.a.
For others	1,295	n.a.	6.7	n.a.	n.a.
Addendum: Total research and development funded by affiliates ²	19,690				

1. Data are from the National Science Foundation.

2. See table 2, footnote 1.

n.a. Not available.

Table 16.—Research and Development Performed by Nonbank U.S. Affiliates by NAICS-Based Industry of Affiliate, 1997

	Millions of dollars	Percentage of all industries total	As a percentage of:	
			Sales	Gross product
All industries	19,260	100.0	1.1	5.0
Manufacturing	15,627	81.1	2.3	8.3
Chemicals	7,009	36.4	4.9	17.1
Pharmaceuticals and medicines	5,398	28.0	10.9	33.5
Other	1,611	8.4	1.7	6.5
Machinery	980	5.1	1.7	5.9
Computers and electronic products	4,012	20.8	5.5	25.6
Computers and peripheral equipment	250	1.3	1.5	24.5
Communications equipment	2,252	11.7	9.2	38.2
Semiconductors and other electronic components	633	3.3	3.6	14.0
Navigational, measuring, and other instruments	619	3.2	9.6	24.4
Other	258	1.3	3.2	15.2
Electrical equipment, appliances, and components	809	4.2	3.1	10.7
Transportation equipment	707	3.7	1.0	5.2
Other	2,110	11.0	.7	2.2
Wholesale trade	1,895	9.8	.4	3.7
Information	588	3.1	.7	2.2
Professional, scientific, and technical services	762	4.0	4.8	12.7
Other	388	2.0	.1	.3

1 percent, and the ratio of R&D to gross product was 5 percent. Within computers and electronic products, the research intensity of affiliate operations was particularly high in communications equipment and in navigational, measuring, and other instruments.

Union-represented employment

In 1997, 15 percent of the employees of nonbank U.S. affiliates were covered by collective bargaining agreements (table 17). The union-represented share of affiliate employment varied considerably across industries: By NAICS-based industry at the sector level, the share ranged from 38 percent in transportation and warehousing to zero per-

cent in finance (except depository institutions) and insurance. The union employment share in manufacturing was 17 percent. Within manufacturing, the share was highest in such basic industries as paper (43 percent) and primary metals (39 percent); the share was lowest in such research-intensive industries as chemicals (10 percent) and computers and electronic products (9 percent).

Overall, the union employment share for affiliates in 1997 (15 percent) was higher than that for all U.S. private wage and salary workers (11 percent) (table 18). The higher share for affiliates mainly reflects industry-mix effects; for example, on an SIC-division basis, services (an industry with relatively low unionization) accounted for nearly one-third of employment for all private wage and salary workers but for less than 12 percent of affiliate employment. On a disaggregated-industry basis, the union employment share for U.S. affiliates exceeded that for all private wage and salary workers in half of the industries for which comparable data are available. The difference is particularly marked in retail trade, where the affiliate union employment share was 23 percent, compared with 6 percent for all wage and salary workers. In this industry, the higher affiliate share can probably be attributed to the tendency for foreign direct investment to be concentrated in large-scale enterprises (such as large grocery store chains),

Table 17.—Employment of Nonbank U.S. Affiliates Covered by Collective Bargaining Agreements by NAICS-Based Industry of Affiliate, 1997

	Thousands of employees		Union employment as a percentage of total employment
	Union employment	Total employment	
All industries	774.2	5,164.3	15.0
Manufacturing	380.8	2,227.0	17.1
Food	39.3	152.7	25.7
Beverages and tobacco products	9.5	31.2	30.4
Paper	26.5	61.6	43.0
Petroleum and coal products	9.2	58.8	15.6
Chemicals	40.8	389.4	10.5
Plastics and rubber products	26.4	124.3	21.2
Nonmetallic mineral products	30.0	132.8	22.6
Primary metals	36.9	95.6	38.6
Fabricated metal products	26.9	123.8	21.7
Machinery	34.6	260.8	13.3
Computers and electronic products	20.9	239.6	8.7
Electrical equipment, appliances, and components	16.1	129.5	12.4
Transportation equipment	31.5	207.9	15.2
Motor vehicles, bodies and trailers, and parts	28.4	170.0	16.7
Other	3.1	37.9	8.2
Other	32.2	219.0	14.7
Wholesale trade	30.3	538.5	5.6
Motor vehicles and motor vehicle parts and supplies	11.0	88.0	12.5
Other	19.3	450.5	4.3
Retail trade	192.3	688.7	27.9
Food and beverage stores	187.8	475.0	39.5
Other	4.4	213.7	2.1
Information	24.3	293.4	8.3
Finance (except depository institutions) and insurance	0	219.8	0
Real estate and rental and leasing	1.3	47.0	2.8
Professional, scientific, and technical services	2.0	82.6	2.4
Other industries	143.1	1,067.3	13.4
Mining	12.3	65.2	18.9
Construction	12.5	76.9	16.3
Transportation and warehousing	70.0	185.5	37.7
Administration, support, and waste management	23.8	279.1	8.5
Accommodation and food services	18.9	270.4	7.0
Other	5.6	190.2	2.9

Table 18.—Union Employment as a Percentage of Total Employment for Nonbank U.S. Affiliates and All Private Wage and Salary Workers by SIC-Based Industry, 1992 and 1997

	U.S. affiliates		All private wage and salary workers ¹	
	1992	1997	1992	1997
All industries	20.3	15.0	12.5	10.6
Mining ²	35.1	26.5	16.1	14.3
Construction ³	33.5	17.4	21.1	19.5
Manufacturing ³	24.7	16.5	21.0	17.2
Transportation	35.8	35.0	30.3	27.9
Communication and public utilities	25.9	10.0	36.3	26.7
Wholesale trade	9.7	5.3	7.5	6.6
Retail trade	20.3	23.1	7.2	6.1
Finance, insurance, and real estate ⁴ .....	.8	.4	2.9	2.8
Services	12.2	7.8	7.1	6.5
Other ⁵	6.9	5.7	2.8	2.4

1. Estimates are from household survey data reported in Bureau of Labor Statistics, *Employment and Earnings*, January 1994 and January 1999. These estimates include employees of depository institutions.
 2. For U.S. affiliate data, excludes oil and gas extraction.
 3. Includes petroleum and coal products manufacturing.
 4. For U.S. affiliate data, excludes depository institutions.
 5. For U.S. affiliates, consists of agriculture, forestry, and fishing plus all industries grouped in petroleum other than petroleum and coal products manufacturing. For all U.S. businesses, consists of agriculture.
 NOTE.—For U.S. affiliates, "union employment" refers to employees covered by a collective bargaining agreement. For all private wage and salary workers, "union employment" refers to members of a labor union or an employee association similar to a union as well as workers who report no union affiliation but whose jobs are covered by a union or an employee association contract.

which generally have higher rates of unionization than small businesses.

Both in the aggregate and within most SIC-based industries, the union-represented share of affiliate employment was substantially lower in 1997 than in 1992. For affiliates in all industries, the share dropped from 20 percent in 1992 to 15 percent in 1997. In comparison, the union employment share for all private wage and salary workers declined less rapidly, from 13 percent to 11 percent. The more rapid decline in union representation for affiliates may reflect a relative absence of constraints on foreign direct investors (compared with domestically owned U.S. businesses with existing union contracts) to set up new operations in areas with low union activity.

In manufacturing, the union employment share for affiliates declined from 25 percent to 17 percent, while the share for all workers declined from 21 percent to 17 percent. Declines in the affiliate shares were also relatively pronounced in mining, construction, and communication and public utilities.

Trade in goods

U.S. affiliates have accounted for a substantial share of U.S. trade in goods since at least 1977, the first year for which annual data on affiliate operations are available: In most years, affil-

ates have accounted for 20–25 percent of exports and for 30–35 percent of imports.¹⁴ In 1997, the share of U.S. exports of goods accounted for by affiliates was 20 percent, down from 23 percent in 1992. Most of this decrease occurred in 1997 and reflected reductions in exports by wholesale trade affiliates—particularly affiliates of Japanese general trading companies and foreign-owned wholesalers specializing in agricultural commodities. The affiliate share of U.S. imports of goods was 30 percent in 1997, down from 35 percent in 1992. As with exports, most of the decrease occurred in 1997; the level of affiliate imports decreased in 1997 as a result of decreased imports by wholesale trade affiliates—mainly Japanese- and Korean-owned affiliates specializing in electrical goods and in professional equipment and supplies.

By product.—In 1997, U.S. affiliates accounted for more than 40 percent of U.S. exports of food, beverages, and tobacco and for about half of U.S. exports of mineral fuels and lubricants (a product category that mainly consists of petroleum and products); both shares were somewhat lower in 1997 than in 1992 (table 19 and chart 3). U.S. affiliates continued to account for less than

14. For a discussion of trends in U.S. affiliate trade in 1977–91, see William J. Zeile, "Merchandise Trade of U.S. Affiliates of Foreign Companies," SURVEY 73 (October 1993): 52–65.

Table 19.—U.S. Trade in Goods by Nonbank U.S. Affiliates by Product, 1992 and 1997

	Millions of dollars				As a percentage of total U.S. trade ¹				Addenda: Intrafirm trade as a percentage of total trade by affiliates	
	Total trade by affiliates		Intrafirm trade by affiliates ²		Total trade by affiliates		Intrafirm trade by affiliates ²		1992	1997
	1992	1997	1992	1997	1992	1997	1992	1997		
U.S. exports of goods, total	103,925	140,924	48,767	62,815	23.2	20.4	10.9	9.1	46.9	44.6
Food, beverages, and tobacco	19,247	21,006	9,951	12,085	47.0	42.6	24.3	24.5	51.7	57.5
Crude materials, inedible, except fuels	9,344	10,237	5,637	2,578	36.3	31.8	21.9	8.0	60.3	25.2
Mineral fuels and lubricants	6,471	6,318	3,753	2,642	57.8	50.1	33.5	20.9	58.0	41.8
Chemicals	14,929	20,070	5,432	9,666	33.4	28.3	12.1	13.6	36.4	48.2
Machinery	22,504	40,615	9,864	18,493	16.3	16.1	7.1	7.3	43.8	45.5
Industrial machinery and equipment		17,162		6,583		17.9		6.9		38.4
Office machines and automatic data processing machines		3,414		1,273		6.6		2.5		37.3
Telecommunications, sound equipment, and other electrical machinery		20,039		10,637		19.2		10.2		53.1
Road vehicles and parts	4,882	9,676	2,784	4,761	12.9	16.8	7.3	8.3	57.0	49.2
Other transport equipment	4,122	3,717	2,873	1,733	10.7	8.6	7.4	4.0	69.7	46.6
Other products	22,426	29,285	8,472	10,857	20.4	17.2	7.7	6.4	37.8	37.1
U.S. imports of goods, total	184,464	261,482	137,799	195,495	34.6	30.0	25.9	22.5	74.7	74.8
Food, beverages, and tobacco	9,386	12,193	4,968	6,319	33.5	30.6	17.7	15.9	52.9	51.8
Crude materials, inedible, except fuels	5,029	5,575	2,390	2,878	36.0	25.3	17.1	13.1	47.5	51.6
Mineral fuels and lubricants	18,890	18,278	9,932	10,580	34.5	23.4	18.2	13.5	52.6	57.9
Chemicals	13,767	20,877	10,668	16,657	49.7	41.5	38.5	33.1	77.5	79.8
Machinery	57,295	84,407	48,155	67,811	38.6	31.1	32.5	25.0	84.0	80.3
Industrial machinery and equipment		21,087		15,689		26.6		19.8		74.3
Office machines and automatic data processing machines		13,940		12,420		18.6		16.6		89.1
Telecommunications, sound equipment, and other electrical machinery		49,380		39,722		42.2		33.9		80.4
Road vehicles and parts	36,474	62,479	31,590	49,899	48.5	55.4	42.0	44.2	86.6	79.9
Other transport equipment	3,670	3,697	2,651	2,795	43.9	31.2	31.7	23.6	72.2	75.6
Other products	39,955	53,976	27,447	38,555	22.7	19.0	15.6	13.6	68.7	71.4

1. Data are from the Bureau of the Census.

2. Trade between U.S. affiliates and their foreign parent groups.

20 percent of U.S. exports of machinery, of road vehicles and parts, and of other transport equipment; however, the share for road vehicles and parts—17 percent—was higher than in 1992, reflecting expanded affiliate operations in the motor vehicle industry.

Affiliate exports of food, beverages, and tobacco were mainly exports to the affiliates' foreign parent groups; most of these intrafirm exports were by Japanese-owned wholesale trade affiliates. Intrafirm exports also accounted for more than half of affiliate exports of telecommuni-

cations, sound equipment, and other electrical machinery.

Wholesale trade affiliates accounted for three-fourths of affiliate exports of food, beverages, and tobacco and for 80 percent of affiliate exports of crude materials (a commodity group that includes soybeans, oil seeds, wood, pulp, and metal ores) (table 20). Affiliates in manufacturing accounted for three-fourths of affiliate exports of chemicals and for more than 60 percent of affiliate exports of telecommunications, sound equipment, and other electrical machinery.

On the import side, U.S. affiliates in 1997 accounted for 55 percent of U.S. imports of road vehicles and parts, up from 49 percent in 1992, and for more than 40 percent of U.S. imports of chemicals and of telecommunications, sound equipment, and other electrical machinery (table 19 and chart 4). For all three product groups, about 80 percent of the affiliate imports were intrafirm imports from the affiliates' foreign parent groups. The affiliate imports of road vehicles and parts were mainly by wholesale trade affiliates of Japanese, German, and Swedish automobile firms. Wholesale trade affiliates also accounted for most of the affiliate imports of telecommunications, sound equipment, and other electrical machinery, and manufacturing affiliates accounted for most of the affiliate imports of chemicals.

CHART 3

Affiliate Shares of U.S. Exports of Selected Products, 1997

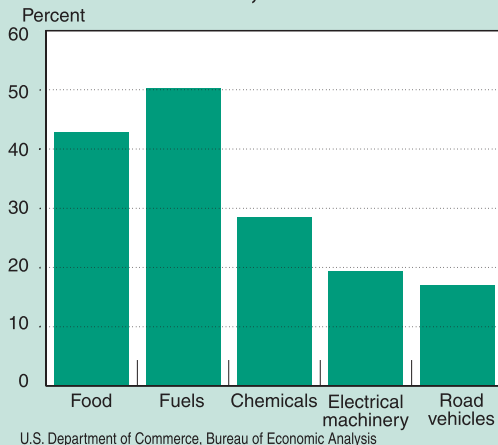


Table 20.—Exports by Product, and Imports by Product and Intended Use, of Nonbank U.S. Affiliates by NAICS-Based Industry of Affiliate, 1997

(Millions of dollars)

	All industries	Manufacturing	Wholesale trade	Other
U.S. exports of goods, total	140,924	70,053	63,231	7,640
By product:				
Food, beverages, and tobacco	21,006	4,302	15,562	1,142
Crude materials, inedible, except fuels	10,237	1,128	8,246	863
Mineral fuels and lubricants	6,318	2,385	3,231	702
Chemicals	20,070	15,018	4,792	260
Industrial machinery and equipment	17,162	9,585	7,161	416
Office machines and automatic data processing machines	3,414	1,256	1,566	592
Telecommunications, sound equipment, and other electrical machinery	20,039	12,755	7,252	32
Road vehicles and parts	9,676	5,514	4,107	55
Other transport equipment	3,717	1,818	1,779	120
Other products	29,285	16,293	9,535	3,457
U.S. imports of goods, total	261,482	99,304	155,716	6,462
By product:				
Food, beverages, and tobacco	12,193	3,783	7,632	778
Crude materials, inedible, except fuels	5,575	3,027	2,438	110
Mineral fuels and lubricants	18,278	11,086	6,782	410
Chemicals	20,877	15,445	5,426	6
Industrial machinery and equipment	21,087	10,309	10,489	289
Office machines and automatic data processing machines	13,940	3,209	10,186	545
Telecommunications, sound equipment, and other electrical machinery	49,380	18,410	30,883	87
Road vehicles and parts	62,479	13,742	48,651	86
Other transport equipment	3,697	1,848	1,273	576
Other products	53,976	18,446	31,954	3,576
By intended use:				
Capital equipment	1,631	720	384	527
Goods for resale without further manufacture	176,851	33,490	138,186	5,175
Goods for further manufacture	83,001	65,093	17,146	762

Imports by intended use.—About two-thirds of the imports by U.S. affiliates in 1997 were goods for resale without further processing, assembly, or manufacture by the affiliates. For wholesale trade affiliates, the share of goods for resale without further manufacture was just under 90 percent.

Most of the remaining imports by affiliates were goods for further manufacture by the affiliates; as would be expected, these imports were mainly by manufacturing affiliates. About two-thirds of the imports by manufacturing affiliates were goods for further manufacture.

By country of destination or origin.—Among the 28 largest U.S. trading partners in 1997, the affiliate shares of U.S. exports of goods were highest for Japan (52 percent), Sweden (43 percent), and the Republic of Korea (30 percent) (table 21, column 8). For these three trading partners, most of the affiliate exports to the country were by affiliates with UBO's in the country; for Japan, more than 80 percent of all affiliate exports to Japan were by Japanese-owned affiliates (table 21, column 11). The affiliate exports to Japan and Korea were mainly by wholesale trade affiliates

(including affiliates of the countries' large general trading companies); in contrast, the affiliate exports to Sweden were mainly by manufacturing affiliates.

The affiliate share of U.S. exports to Japan was substantially lower in 1997 than in 1992, partly due to reduced exports by wholesale trade affiliates of Japan's general trading companies. In contrast, the affiliate share of U.S. exports to Sweden was substantially higher than in 1992, reflecting expanded production and exports by Swedish-owned manufacturing affiliates.

On the import side, U.S. affiliates accounted for more than 50 percent of U.S. imports of goods from four countries: Japan (80 percent), Switzerland (61 percent), Germany (55 percent), and Sweden (54 percent) (table 21, column 8). Affiliate imports from these four countries were mainly by affiliates with UBO's in the countries (table 21, column 11). In addition, most of these imports were imports from the affiliates' foreign parent groups: The share of U.S. imports accounted for by intrafirm imports of U.S. affiliates was 70 percent for Japan and slightly more than 50 percent for Switzerland, Germany, and Sweden (table 21, column 10).

Most of the affiliate imports from Japan were by wholesale trade affiliates of Japanese manufacturing companies. These affiliates were initially set up to market the products of their parent companies, but many of them have since developed substantial secondary operations in manufacturing. Affiliate imports from Germany, Sweden, and Switzerland were also predominantly by affiliates of the investing country's manufacturing companies, which include both wholesale trade affiliates and manufacturing affiliates.

Consistent with the overall decline in the affiliate share of U.S. imports, the affiliate shares for Switzerland, Germany, and Sweden were lower in 1997 than in 1992. In contrast, the much higher affiliate share of U.S. imports from Japan in 1997 was unchanged from 1992.


Tables 21 through 25 follow. 

CHART 4

Affiliate Shares of U.S. Imports of Selected Products, 1997

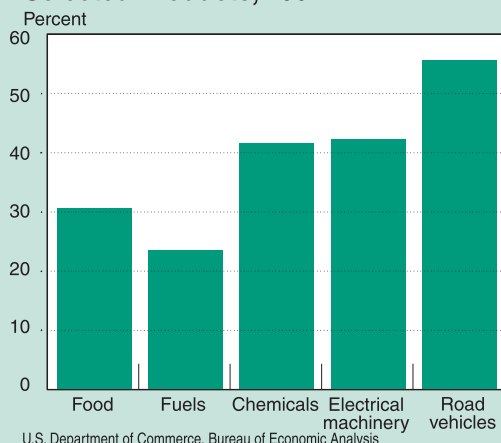


Table 21.—Total U.S. Trade in Goods and Trade in Goods by Nonbank U.S. Affiliates by Country of Destination and Origin, 1992 and 1997

	Exports by country of destination											
	Millions of dollars						Percentage of total U.S. exports accounted for by:				Addenda: Percentage of U.S.-affiliate total and intrafirm exports to country that are accounted for by affiliates with UBO's in the country	
	Total ¹		Exports by nonbank U.S. affiliates				Total exports by affiliates		Intrafirm exports by affiliates		Total	Intrafirm
			Total		Of which: Intrafirm exports							
	1992	1997	1992	1997	1992	1997	1992	1997	1992	1997	1997	1997
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
All countries	448,164	689,182	103,925	140,924	48,767	62,815	23.2	20.4	10.9	9.1	.....	.....
Canada	90,594	151,767	11,418	19,884	3,606	7,478	12.6	13.1	4.0	4.9	20.9	35.9
Europe	122,617	163,273	24,081	27,669	10,671	13,885	19.6	16.9	8.7	8.5	.....	.....
Belgium and Luxembourg	10,047	14,132	1,953	1,689	455	540	19.4	12.0	4.5	3.8	2.1	6.1
France	14,593	15,965	2,235	2,801	972	1,630	15.3	17.5	6.7	10.2	54.0	73.7
Germany	21,249	24,458	3,965	5,727	1,902	3,360	18.7	23.4	9.0	13.7	50.8	74.3
Ireland	2,862	4,642	230	281	53	129	8.0	6.1	1.9	2.8	4.6	10.1
Italy	8,721	8,995	1,114	2,335	446	1,089	12.8	26.0	5.1	12.1	31.9	67.8
Netherlands	13,752	19,827	1,729	3,206	800	951	12.6	16.2	5.8	4.8	19.4	60.1
Spain	5,537	5,539	696	739	244	185	12.6	13.3	4.4	3.3	5.3	21.1
Sweden	2,845	3,314	452	1,440	176	928	15.9	43.5	6.2	28.0	75.5	85.3
Switzerland	4,540	8,307	1,450	2,195	835	1,432	31.9	26.4	18.4	17.2	54.4	79.9
United Kingdom	22,800	36,425	6,085	5,379	3,072	2,824	26.7	14.8	13.5	7.8	41.2	45.4
Other	15,671	21,669	4,172	1,877	1,716	817	26.6	8.7	11.0	3.8	.....	.....
Latin America and Other	75,801	134,416	8,852	15,371	1,640	4,852	11.7	11.4	2.2	3.6	.....	.....
Western Hemisphere	5,751	15,915	1,307	3,402	491	1,673	22.7	21.4	8.5	10.5	25.5	51.9
Mexico	40,592	71,388	4,075	7,200	591	1,688	10.0	10.1	1.5	2.4	4.6	19.0
Venezuela	5,444	6,602	785	617	68	162	14.4	9.3	1.2	2.5	3.1	11.7
Other	24,014	40,511	2,685	4,152	490	1,329	11.2	10.2	2.0	3.3	.....	.....
Africa	9,907	11,390	1,830	1,471	376	289	18.5	12.9	3.8	2.5	.....	.....
Middle East	16,873	20,928	2,082	1,480	492	440	12.3	7.1	2.9	2.1	.....	.....
Israel	4,077	5,995	389	565	80	166	9.5	9.4	2.0	2.8	26.9	91.6
Saudi Arabia	7,167	8,438	1,025	604	302	171	14.3	7.2	4.2	2.0	B	E
Other	5,629	6,495	668	311	110	103	11.9	4.8	2.0	1.6	.....	.....
Asia and Pacific	132,071	207,069	52,790	57,355	31,421	35,265	40.0	27.7	23.8	17.0	.....	.....
Australia	8,876	12,063	1,109	1,495	274	749	12.5	12.4	3.1	6.2	18.3	27.0
China	7,418	12,862	3,078	3,364	1,308	1,410	41.5	26.2	17.6	11.0	B	E
Hong Kong	9,077	15,117	1,296	1,877	612	711	14.3	12.4	6.7	4.7	1.4	3.1
India	1,917	3,608	529	755	60	147	27.6	20.9	3.1	4.1	B	E
Indonesia	2,779	4,522	652	984	142	179	23.5	21.8	5.1	4.0	.3	1.7
Japan	47,813	65,549	34,006	33,991	25,933	25,778	71.1	51.9	54.2	39.3	83.4	95.5
Korea, Republic of	14,639	25,046	5,209	7,598	1,339	3,641	35.6	30.3	9.1	14.5	56.1	92.9
Malaysia	4,363	10,780	358	420	113	123	8.2	3.9	2.6	1.1	8.3	28.5
Philippines	2,759	7,417	534	394	66	148	19.4	5.3	2.4	2.0	.3	.7
Singapore	9,626	17,696	1,628	2,078	624	946	16.9	11.7	6.5	5.3	.9	1.9
Taiwan	15,250	20,366	3,211	3,259	738	962	21.1	16.0	4.8	4.7	8.4	28.0
Thailand	3,989	7,349	830	806	155	405	20.8	11.0	3.9	5.5	.2	.5
Other	3,565	4,694	350	334	57	66	9.8	7.1	1.6	1.4	.....	.....
Unallocated .....	.....	.....	2,872	17,694	562	607	.....	.....	.....	.....	.....	.....

See footnote and notes at the end of the table.

Table 21.—Total U.S. Trade in Goods and Trade in Goods by Nonbank U.S. Affiliates by Country of Destination and Origin, 1992 and 1997—Continued

	Imports by country of origin											
	Millions of dollars						Percentage of total U.S. trade accounted for by:				Addenda: Percentage of U.S.-affiliate total and intrafirm imports from country that are accounted for by affiliates with UBO's in the country	
	Total ¹		Imports by nonbank U.S. affiliates				Total imports by affiliates		Intrafirm imports by affiliates		Total	Intrafirm
			Total		Of which: Intrafirm imports							
	1992	1997	1992	1997	1992	1997	1992	1997	1992	1997	1997	1997
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
All countries	532,665	870,671	184,464	261,482	137,799	195,495	34.6	30.0	25.9	22.5	.....	.....
Canada	98,630	168,201	14,031	22,773	9,448	15,827	14.2	13.5	9.6	9.4	53.0	71.1
Europe	112,707	181,440	47,953	65,942	39,259	57,850	42.5	36.3	34.8	31.9	.....	.....
Belgium and Luxembourg	4,703	8,151	2,119	2,417	1,767	2,248	45.1	29.7	37.6	27.6	16.0	16.9
France	14,797	20,636	5,146	6,260	3,888	5,538	34.8	30.3	26.3	26.8	80.3	86.8
Germany	28,820	43,122	16,984	23,892	14,880	22,044	58.9	55.4	51.6	51.1	90.3	93.9
Ireland	2,262	5,867	349	529	202	409	15.4	9.0	8.9	7.0	B	C
Italy	12,314	19,408	2,147	4,180	1,291	3,164	17.4	21.5	10.5	16.3	66.6	85.0
Netherlands	5,300	7,293	2,922	3,259	2,530	2,953	55.1	44.7	47.7	40.5	83.5	89.5
Spain	3,002	4,606	337	751	206	637	11.2	16.3	6.9	13.8	39.4	46.5
Sweden	4,716	7,299	3,160	3,955	2,928	3,701	67.0	54.2	62.1	50.7	86.8	92.2
Switzerland	5,645	8,405	4,547	5,129	3,999	4,471	80.5	61.0	70.8	53.2	78.4	87.7
United Kingdom	20,093	32,659	6,755	10,722	5,514	9,008	33.6	32.8	27.4	27.6	66.4	75.1
Other	11,055	23,994	3,487	4,848	2,054	3,677	31.5	20.2	18.6	15.3	.....	.....
Latin America and Other	68,755	139,644	14,589	21,510	6,032	10,463	21.2	15.4	8.8	7.5	.....	.....
Western Hemisphere	7,609	9,626	2,038	2,158	1,040	1,359	26.8	22.4	13.7	14.1	45.6	72.4
Brazil	35,211	85,938	4,831	11,351	1,470	5,076	13.7	13.2	4.2	5.9	14.2	22.3
Mexico	8,181	13,477	4,380	3,932	3,102	2,690	53.5	29.2	37.9	20.0	E	F
Venezuela	17,754	30,603	3,340	4,069	420	1,338	18.8	13.3	2.4	4.4	.....	.....
Other	14,346	19,925	4,069	2,658	966	499	28.4	13.3	6.7	2.5	.....	.....
Middle East	15,726	20,403	4,250	4,894	3,750	4,529	27.0	24.0	23.8	22.2	.....	.....
Israel	3,815	7,326	489	550	403	499	12.8	7.5	10.6	6.8	90.7	100.0
Saudi Arabia	10,371	9,365	(^D)	(^D)	(^D)	(^D)	(^D)	C	(^D)	C	F	F
Other	1,540	3,712	(^D)	(^D)	(^D)	(^D)	(^D)	A	(^D)	A	.....	.....
Asia and Pacific	222,501	341,059	97,875	129,824	77,617	105,606	44.0	38.1	34.9	31.0	.....	.....
Australia	3,688	4,602	1,034	1,030	677	781	28.0	22.4	18.4	17.0	67.9	86.3
China	25,728	62,558	1,503	2,342	502	751	5.8	3.7	2.0	1.2	4.5	13.8
Hong Kong	9,793	10,288	2,906	4,533	1,342	2,646	29.7	44.1	13.7	25.7	13.9	20.0
India	3,780	7,322	141	177	20	22	3.7	2.4	.5	.3	4.0	31.8
Indonesia	4,529	9,188	634	1,400	119	609	14.0	15.2	2.6	6.6	1.0	A
Japan	97,414	121,663	77,440	97,670	67,456	85,606	79.5	80.3	69.2	70.4	98.1	99.5
Korea, Republic of	16,682	23,173	5,802	10,651	3,497	7,854	34.8	46.0	21.0	33.9	81.3	95.8
Malaysia	8,294	18,027	1,262	1,676	520	623	15.2	9.3	6.3	3.5	.4	1.1
Philippines	4,355	10,445	575	967	274	426	13.2	9.3	6.3	4.1	A	A
Singapore	11,313	20,075	2,396	3,174	1,550	2,117	21.2	15.8	13.7	10.5	10.7	16.1
Taiwan	24,596	32,629	2,603	4,250	1,104	3,116	10.6	13.0	4.5	9.5	47.2	63.9
Thailand	7,529	12,602	1,193	1,301	313	585	15.8	10.3	4.2	4.6	A	A
Other	4,800	8,487	386	653	243	470	8.0	7.7	5.1	5.5	.....	.....
Unallocated .....	.....	.....	1,696	13,882	727	719	.....	.....	.....	.....	.....	.....

^D Suppressed to avoid the disclosure of data of individual companies.

1. Data are from the Bureau of the Census.

NOTES.—The countries shown in this table are the 28 U.S. trading partners for which the sum

of total U.S. exports and total U.S. imports was at least \$10 billion in 1997.

Size ranges are given in the percentage cells for 1997 that are suppressed; these ranges are A—0.01 to 19.9; B—20.0 to 39.9; C—40.0 to 59.9; E—60.0 to 79.9; F—80.0 to 100.

State Personal Income, First Quarter 1999

By Duke Tran

IN THE first quarter of 1999, U.S. personal income grew 1.2 percent after growing 1.5 percent in the fourth quarter of 1998.¹ The slower growth reflected slowdowns in net earnings, which grew 1.4 percent after growing 2.0 percent, and in dividends, interest, and rent, which grew 0.4 percent after growing 0.6 percent.² Transfer payments grew 1.5 percent after

growing 0.5 percent; the pickup reflected increases in cost-of-living adjustments to benefits under social security and several other Federal retirement and income support programs.

Text continues on page 61.

1. In this article, percent changes are expressed at quarterly rates. The estimate of U.S. personal income—the sum of the estimates of State personal income for each State—differs from the estimate of personal income in the national income and product accounts (NIPAS) because of differences in coverage, in the methodologies used to prepare the estimates, and in the timing of the availability of source data (see the section “Revisions to the State Personal Income Estimates”).

2. Net earnings is calculated as earnings by place of work less personal contributions for social insurance plus an adjustment that converts these

earnings to a place-of-residence basis. Earnings by place of work is the sum of wage and salary disbursements (payrolls), other labor income, and proprietors’ income.

Net earnings is used to analyze changes in the composition of personal income; earnings by place of work is used to analyze changes in the industrial structure of earnings. Net earnings by industry is not available, because the source data used to adjust earnings to a place-of-residence basis are not available by industry and because personal contributions for social insurance are not estimated by industry. For the definitions of the components of earnings, see U.S. Department of Commerce, Bureau of Economic Analysis, *State Personal Income, 1929–97* (Washington, DC: U.S. Government Printing Office, 1999), or go to BEA’s Web site at <www.bea.doc.gov/bea/mp.htm>, and look under Regional programs for State Personal Income, 1929–97.

CHART 1

Personal Income: Percent Change, 1998:IV–1999:I

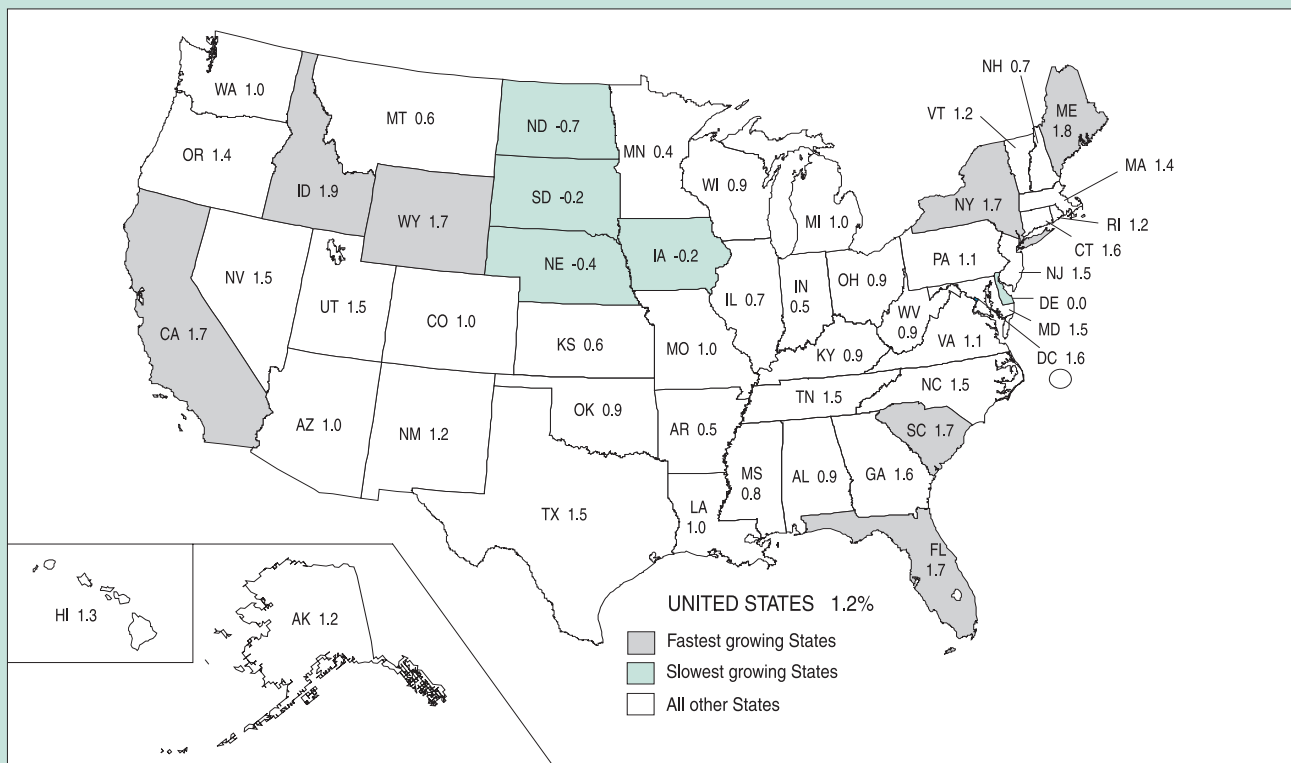


Table A.—Personal Income by Component, 1998:IV-1999:I

[Seasonally adjusted]

	Percent change ¹				Percent change in personal income ¹	Contribution to percent change in personal income (percentage points)			Dollar change (millions) ³			
	Personal income	Net earnings ²	Dividends, interest, and rent	Transfer payments		Net earnings ²	Dividends, interest, and rent	Transfer payments	Personal income	Net earnings ²	Dividends, interest, and rent	Transfer payments
United States	1.2	1.4	0.4	1.5	1.2	1.0	0.1	0.2	91,081	69,753	4,422	16,906
New England	1.4	1.7	.4	1.4	1.4	1.1	.1	.2	6,202	4,999	306	899
Connecticut	1.6	1.9	.4	1.7	1.6	1.3	.1	.2	2,053	1,691	91	271
Maine	1.8	2.2	.4	1.6	1.8	1.4	.1	.3	513	401	18	93
Massachusetts	1.4	1.7	.4	1.2	1.4	1.2	.1	.2	2,910	2,384	146	381
New Hampshire .....	.7	.7	.4	1.1	.7	.5	.1	.1	239	168	25	46
Rhode Island	1.2	1.3	.3	1.3	1.2	.8	.1	.3	313	228	14	71
Vermont	1.2	1.3	.4	1.6	1.2	.9	.1	.2	173	126	11	36
Mideast	1.5	1.8	.3	1.4	1.5	1.2	.1	.2	20,264	16,263	821	3,180
Delaware	0	-4	.4	1.4	0	-3	.1	.2	-5	-65	18	43
District of Columbia	1.6	2.1	.4	.9	1.6	1.3	.1	.2	315	267	12	37
Maryland	1.5	1.9	.4	1.3	1.5	1.3	.1	.2	2,423	2,020	101	302
New Jersey	1.5	1.8	.3	1.4	1.5	1.2	.1	.2	4,144	3,482	166	496
New York	1.7	2.1	.3	1.5	1.7	1.4	.1	.3	9,829	7,910	312	1,606
Pennsylvania	1.1	1.2	.4	1.2	1.1	.8	.1	.2	3,558	2,650	211	697
Great Lakes .....	.8	.8	.4	1.3	.8	.5	.1	.2	9,570	6,473	694	2,402
Illinois .....	.7	.6	.4	1.6	.7	.4	.1	.2	2,392	1,420	222	750
Indiana .....	.5	.3	.3	1.3	.5	.2	.1	.2	697	359	74	264
Michigan	1.0	1.1	.3	1.3	1.0	.8	.1	.2	2,671	1,995	147	528
Ohio .....	.9	1.0	.4	1.3	.9	.6	.1	.2	2,657	1,854	160	642
Wisconsin .....	.9	.9	.4	1.1	.9	.6	.1	.2	1,153	847	89	218
Plains .....	.4	.2	.3	1.4	.4	.1	.1	.2	1,851	576	278	998
Iowa	-2	-6	.3	1.3	-2	-4	.1	.2	-129	-306	39	139
Kansas .....	.6	.6	.4	1.3	.6	.4	.1	.2	433	265	43	126
Minnesota .....	.4	.3	.3	1.5	.4	.2	.1	.2	577	244	73	259
Missouri	1.0	1.0	.3	1.4	1.0	.7	.1	.2	1,290	896	82	312
Nebraska	-4	-1.0	.4	1.4	-4	-7	.1	.2	-182	-293	26	86
North Dakota	-7	-1.5	.3	1.4	-7	-1.0	0	.3	-97	-139	7	36
South Dakota	-2	-8	.3	1.4	-2	-5	0	.2	-42	-90	8	40
Southeast	1.3	1.5	.4	1.6	1.3	1.0	.1	.3	21,502	16,069	1,013	4,420
Alabama .....	.9	.9	.4	1.4	.9	.6	.1	.3	863	537	48	278
Arkansas .....	.5	.2	.3	1.3	.5	.2	0	.3	251	85	26	139
Florida	1.7	2.2	.4	1.7	1.7	1.3	.1	.3	6,617	5,049	345	1,222
Georgia	1.6	1.8	.4	1.6	1.6	1.3	.1	.2	3,065	2,501	119	445
Kentucky .....	.9	.8	.3	1.4	.9	.5	0	.3	764	470	43	250
Louisiana	1.0	1.0	.3	1.4	1.0	.7	0	.3	960	642	46	272
Mississippi .....	.8	.7	.3	1.5	.8	.4	0	.3	433	231	21	180
North Carolina	1.5	1.6	.4	1.7	1.5	1.1	.1	.3	2,720	2,095	120	504
South Carolina	1.7	2.1	.4	1.6	1.7	1.4	.1	.3	1,468	1,165	49	254
Tennessee	1.5	1.8	.4	1.5	1.5	1.2	.1	.3	2,010	1,592	68	350
Virginia	1.1	1.1	.4	1.6	1.1	.8	.1	.2	2,023	1,495	111	417
West Virginia .....	.9	1.0	.3	1.2	.9	.6	0	.3	327	203	15	108
Southwest	1.3	1.4	.4	1.8	1.3	1.0	.1	.3	9,731	7,365	390	1,976
Arizona	1.0	1.0	.5	1.6	1.0	.7	.1	.3	1,169	791	85	293
New Mexico	1.2	1.2	.4	1.7	1.2	.8	.1	.3	414	273	22	120
Oklahoma .....	.9	.8	.3	1.6	.9	.5	0	.3	641	379	31	230
Texas	1.5	1.6	.4	1.9	1.5	1.2	.1	.3	7,507	5,921	253	1,333
Rocky Mountain	1.2	1.3	.4	1.5	1.2	.9	.1	.2	2,611	1,998	150	463
Colorado	1.0	1.0	.4	1.6	1.0	.7	.1	.2	1,124	804	84	236
Idaho	1.9	2.4	.4	1.4	1.9	1.6	.1	.2	507	426	19	60
Montana .....	.6	.4	.3	1.4	.6	.2	.1	.3	105	41	11	53
Utah	1.5	1.7	.4	1.4	1.5	1.3	.1	.2	680	569	25	86
Wyoming	1.7	2.2	.5	1.5	1.7	1.4	.1	.2	197	158	11	28
Far West	1.5	1.8	.4	1.4	1.5	1.3	.1	.2	19,348	16,009	770	2,570
Alaska	1.2	1.3	.4	1.5	1.2	.9	.1	.3	194	138	8	48
California	1.7	2.0	.3	1.4	1.7	1.4	.1	.2	15,243	12,904	532	1,807
Hawaii	1.3	1.5	.3	1.5	1.3	1.0	.1	.3	409	310	16	82
Nevada	1.5	1.8	.5	1.5	1.5	1.3	.1	.2	765	630	40	95
Oregon	1.4	1.6	.4	1.5	1.4	1.0	.1	.2	1,123	863	59	201
Washington	1.0	1.0	.4	1.4	1.0	.7	.1	.2	1,614	1,163	114	338

1. Percent changes are expressed at quarterly rates.

2. Net earnings is earnings by place of work—the sum of wage and salary disbursements (payrolls), other labor income, and proprietors' income—less personal contributions for social insurance plus an adjustment to convert earnings by place of work to a place-of-residence basis.

ings by place of work to a place-of-residence basis.

3. Dollar changes are expressed at annual rates.

NOTE.—Estimates may not add to totals due to rounding.

Table B.—Earnings by Place of Work: Percent Change by Industry Group, 1998:IV-1999:I

[Seasonally adjusted at quarterly rates]

	Earnings by place of work ¹	Private goods-producing industries				Private services-producing industries						Government
		Total ²	Farms	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	
United States	1.5	0.1	-21.6	2.7	0.6	2.0	0.6	0.9	1.4	3.1	2.5	1.6
New England	1.7	.8	-13.9	4.8	-2	2.1	1.2	0	.8	3.4	2.6	1.5
Connecticut	2.0	.8	-11.6	4.2	0	2.5	.6	.7	1.7	4.0	2.7	1.6
Maine	2.3	2.7	-4.8	6.9	1.2	2.1	1.6	.6	.6	5.1	2.4	2.2
Massachusetts	1.8	.6	-13.0	5.7	-9	2.2	1.7	.1	1.3	3.7	2.5	1.3
New Hampshire .....	.4	.9	-14.8	2.2	.6	-1	.7	-5.7	-3.5	-4.5	3.8	2.5
Rhode Island	1.4	1.2	-27.0	-1.1	2.2	1.6	1.0	2.4	.4	2.9	1.6	.5
Vermont	1.5	-.8	-19.2	8.4	-2.4	2.5	.5	1.8	-1	4.7	3.5	2.0
Mideast	1.9	1.2	-9.7	3.3	.6	2.1	-2	.7	1.4	3.4	2.4	1.7
Delaware	-.7	-1.6	-23.4	9.9	-4.0	-.7	1.3	.7	1.9	-8.2	2.5	2.1
District of Columbia	2.3	-.8	.....	2.5	-3.0	1.9	1.2	-11.2	-.5	3.2	2.1	3.3
Maryland	2.0	-.5	-20.6	2.2	-1.9	2.5	.7	1.7	1.2	5.1	2.7	2.4
New Jersey	1.8	1.0	-2.4	2.5	.6	2.3	.4	1.0	1.8	4.8	2.4	1.0
New York	2.2	2.3	-5.7	3.7	2.0	2.3	.4	.6	1.2	3.3	2.6	1.4
Pennsylvania	1.3	.7	-7.0	3.3	.2	1.5	-2.2	.1	1.5	3.6	2.1	1.5
Great Lakes .....	.9	-.1	-30.4	1.7	.3	1.4	-.1	1.1	1.5	.6	2.0	1.0
Illinois .....	.6	-.4	-31.1	1.8	.2	1.1	.5	1.5	1.5	-2.1	2.1	.5
Indiana .....	.4	-1.7	-21.0	.6	-1.6	1.9	-.7	1.4	2.7	4.2	1.7	1.2
Michigan	1.2	.5	-40.1	1.2	.8	1.8	.5	.5	1.6	3.5	2.1	1.0
Ohio	1.0	.1	-22.5	2.1	.3	1.6	-1.5	1.2	1.1	3.7	1.9	1.1
Wisconsin	1.0	1.0	-52.1	3.2	1.8	.9	.4	1.1	1.0	-3.0	2.1	1.6
Plains .....	.3	-2.5	-29.6	2.6	.5	1.5	0	1.3	1.3	1.9	1.9	1.6
Iowa	-.4	-4.4	-29.1	2.5	.7	1.6	.3	1.5	1.7	2.8	1.6	1.6
Kansas .....	.7	-2.0	-19.5	3.8	-.3	2.0	-1.5	1.3	2.1	3.9	2.7	1.3
Minnesota .....	.4	-1.3	-45.4	4.8	.1	.9	-1.0	.6	1.2	-1.4	2.1	1.6
Missouri	1.1	-.6	-50.1	.7	.7	1.7	.7	2.0	1.0	3.7	1.6	2.0
Nebraska	-.8	-.8	-24.0	.2	1.2	1.2	1.0	-.1	-.1	3.7	1.3	1.2
North Dakota	-1.0	-10.0	-31.1	1.5	3.5	2.2	1.1	2.3	1.5	3.4	2.6	2.3
South Dakota	-.5	-6.2	-24.7	3.0	2.2	2.4	.7	3.7	1.9	3.8	2.4	1.4
Southeast	1.6	.6	-23.7	2.3	2.0	2.0	1.1	.7	1.6	3.5	2.3	1.7
Alabama .....	.9	-.4	-29.8	3.1	1.3	1.5	1.3	1.1	2.1	-3.4	2.7	1.6
Arkansas .....	.4	-1.3	-26.6	3.4	3.4	1.6	-.6	1.1	1.3	3.9	2.2	.4
Florida	2.3	1.9	-12.2	2.1	3.4	2.5	.9	.5	1.7	3.8	3.2	1.4
Georgia	1.9	-.3	-30.5	2.2	1.5	2.7	1.8	.6	1.8	4.6	3.4	2.2
Kentucky	1.0	-1.2	-22.4	1.8	.5	2.3	.4	1.3	1.8	4.0	3.0	1.4
Louisiana	1.1	.2	-22.9	2.3	2.6	1.5	.1	.3	.5	2.9	2.2	1.4
Mississippi .....	.8	-1.2	-26.1	4.3	.5	1.9	1.8	.2	2.3	3.7	1.6	1.3
North Carolina	1.7	.6	-23.7	1.9	2.0	2.5	1.4	.8	2.2	3.7	3.0	1.6
South Carolina	2.1	.9	-21.2	2.3	1.1	2.8	2.0	1.8	1.2	4.4	3.5	2.6
Tennessee	1.8	2.1	-34.0	2.3	2.7	1.8	1.1	0	1.2	3.2	2.3	1.4
Virginia	1.0	2.2	-11.4	2.0	2.9	.2	1.6	1.3	1.2	4.0	-1.5	2.4
West Virginia	1.0	-1.6	-45.5	2.5	-1.8	2.1	-1.2	.8	2.2	5.4	2.7	1.9
Southwest	1.5	-.5	-18.8	3.0	-.2	2.4	1.5	1.1	1.8	4.1	2.7	1.7
Arizona	1.1	-.4	-11.6	4.7	-2.5	1.9	.6	1.1	2.6	3.9	1.4	.4
New Mexico	1.3	-1.0	-5.9	1.8	-.8	1.8	0	.9	1.2	3.4	2.2	1.9
Oklahoma .....	.9	-2.8	-27.3	1.4	-2.3	2.5	1.4	1.1	1.6	4.2	3.1	1.7
Texas	1.7	-.3	-20.4	2.8	.4	2.6	1.7	1.2	1.6	4.3	3.0	1.9
Rocky Mountain	1.4	.6	-16.7	2.6	1.7	1.6	-1.5	1.0	1.3	4.0	2.2	1.7
Colorado	1.0	.8	-13.0	2.3	1.6	.9	-3.3	.8	2.0	4.0	1.0	2.0
Idaho	2.6	.7	-7.1	3.3	1.4	3.7	2.1	1.5	2.2	4.9	5.1	2.5
Montana .....	.6	-.6.5	-69.4	3.9	2.7	2.6	2.5	1.4	1.8	3.8	3.0	2.3
Utah	1.8	1.4	-11.7	1.8	2.1	2.2	.9	1.1	-1.0	3.9	3.6	.6
Wyoming	2.2	3.0	200.0	6.6	-1.1	2.3	.6	1.5	1.8	4.0	3.0	1.1
Far West	1.9	.4	-10.3	2.8	.2	2.5	1.1	1.2	1.3	3.6	3.1	2.0
Alaska	1.3	-.1	-16.7	7.1	4.7	1.7	.3	1.8	1.3	4.5	1.9	1.8
California	2.1	.9	-12.1	2.8	1.2	2.6	1.4	1.4	1.1	3.4	3.2	2.0
Hawaii	1.5	2.8	-5.5	3.1	4.7	1.6	-.2	.2	.9	2.8	2.2	.8
Nevada	1.8	-.3	-10.0	2.0	-5.4	2.1	-1.9	1.0	2.5	4.3	2.3	3.7
Oregon	1.7	.5	.7	3.1	-.6	2.1	-.2	-1.0	1.3	4.3	3.3	2.2
Washington	1.1	-2.5	-6.5	2.9	-4.7	2.4	1.5	1.3	1.6	4.4	2.6	1.8

1. Earnings by place of work is the sum of wage and salary disbursements (payrolls), other labor income, and proprietors' income.

2. Also includes mining and agricultural services, forestry, and fishing, which are not shown separately.

Table C.—Earnings by Place of Work: Contribution to Percent Change by Industry Group, 1998:IV-1999:I

[Seasonally adjusted]

	Percent change in earnings by place of work ¹	Percentage points										
		Private goods-producing industries				Private services-producing industries						Government
		Total ²	Farms	Construction	Manufacturing	Total	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	
United States	1.5	0	-0.2	0.2	0.1	1.2	0	0.1	0.1	0.3	0.7	0.2
New England	1.7	.2	0	.2	0	1.3	.1	0	.1	.4	.8	.2
Connecticut	2.0	.2	0	.2	0	1.6	0	0	.1	.6	.8	.2
Maine	2.3	.7	0	.5	.2	1.2	.1	0	.1	.4	.7	.4
Massachusetts	1.8	.1	0	.3	-.1	1.5	.1	0	.1	.4	.9	.1
New Hampshire .....	.4	.3	0	.1	.1	-.1	0	-.4	-.4	-.3	1.0	.3
Rhode Island	1.4	.3	-.1	-.1	.4	1.0	.1	.1	0	.3	.5	.1
Vermont	1.5	-.2	-.3	.6	-.5	1.4	0	.1	0	.3	1.0	.3
Mideast	1.9	.2	0	.2	.1	1.4	0	0	.1	.5	.8	.3
Delaware	-.7	-.5	-.2	.6	-.1	-.4	.1	0	.2	-.1	.6	.2
District of Columbia	2.3	0	.....	0	-.1	1.1	0	-.1	0	.2	.9	1.3
Maryland	2.0	-.1	-.1	.2	-.2	1.6	0	.1	.1	.4	.9	.5
New Jersey	1.8	.2	0	.1	.1	1.5	0	.1	.1	.5	.8	.1
New York	2.2	.4	0	.1	.2	1.6	0	0	.1	.6	.8	.2
Pennsylvania	1.3	.2	0	.2	0	.9	-.2	0	.1	.3	.6	.2
Great Lakes .....	.9	0	-2	.1	.1	.8	0	.1	.1	0	.5	.1
Illinois .....	.6	-.1	-.2	.1	0	.7	0	.1	.1	-.2	.6	.1
Indiana .....	.4	-.7	-.2	0	-.5	.9	0	.1	.3	.3	.4	.1
Michigan	1.2	.2	-.1	.1	.2	.9	0	0	.1	.2	.5	.1
Ohio	1.0	0	-.1	.1	.1	.8	-.1	.1	.1	.3	.5	.1
Wisconsin	1.0	.3	-.4	.2	.5	.5	0	.1	.1	-.2	.5	.2
Plains .....	.3	-.7	-1.0	.2	.1	.9	0	.1	.1	.1	.5	.2
Iowa	-.4	-.1	-.2	.2	.1	.8	0	.1	.2	.2	.3	.2
Kansas .....	.7	-.6	-.8	.2	0	1.1	-.1	.1	.2	.2	.6	.2
Minnesota .....	.4	-.4	-.7	.3	0	.5	-.1	0	.1	-.1	.6	.2
Missouri	1.1	-.2	-.3	0	.1	1.0	.1	.1	.1	.3	.4	.3
Nebraska	-.8	-.1	-.8	0	.2	.7	.1	0	.3	.3	.3	.2
North Dakota	-1.0	-.2	-.3	.1	.3	1.2	.1	.2	.1	.2	.7	.4
South Dakota	-.5	-.2	-.4	.2	.3	1.3	0	.2	.2	.3	.6	.2
Southeast	1.6	.1	-3	.1	.3	1.2	.1	0	.2	.3	.6	.3
Alabama .....	.9	-.1	-.6	.2	.3	.8	.1	.1	.2	-.2	.6	.3
Arkansas .....	.4	-.4	-.4	.2	.7	.8	0	.1	.1	.2	.5	.1
Florida	2.3	.3	-.1	.1	.3	1.7	.1	0	.2	.4	1.1	.2
Georgia	1.9	-.1	-.5	.1	.2	1.6	.2	.1	.2	.4	.9	.3
Kentucky	1.0	-.4	-.5	.1	.1	1.2	0	.1	.2	.2	.7	.2
Louisiana	1.1	-.1	-.2	.2	.3	.8	0	0	0	.2	.6	.2
Mississippi .....	.8	-.4	-.8	.3	.1	.9	.1	0	.2	.2	.4	.2
North Carolina	1.7	.2	-.4	.1	.5	1.3	.1	.1	.2	.3	.7	.3
South Carolina	2.1	.3	-.1	.2	.2	1.4	.1	.1	.1	.3	.8	.5
Tennessee	1.8	.6	-.1	.1	.6	1.1	.1	0	.1	.2	.6	.2
Virginia	1.0	.4	0	.1	.4	.1	-.1	.1	.1	.3	-.5	.5
West Virginia	1.0	-.5	0	.1	-.3	1.1	-.1	0	.2	.2	.7	.4
Southwest	1.5	-.1	-2	.2	0	1.4	.1	.1	.2	.3	.7	.2
Arizona	1.1	-.1	-.1	.4	-.3	1.1	0	.1	.3	.4	.4	.1
New Mexico	1.3	-.2	-.1	.1	-.1	1.0	0	0	.1	.2	.6	.5
Oklahoma .....	.9	-.8	-.3	.1	-.4	1.4	.1	.1	.2	.2	.8	.3
Texas	1.7	-.1	-.2	.2	.1	1.5	.2	.1	.1	.3	.8	.3
Rocky Mountain	1.4	.1	-2	.2	.2	1.0	-.1	.1	.1	.3	.6	.3
Colorado	1.0	.2	-.1	.2	.2	.6	-.3	0	.2	.4	.3	.3
Idaho	2.6	.2	-.3	.3	.2	1.9	.1	.1	.2	.3	1.2	.4
Montana .....	.6	-.4	-.9	.3	.2	1.6	.2	.1	.2	.2	.8	.4
Utah	1.8	.3	-.1	.1	.3	1.3	.1	.1	-.1	.3	1.0	.1
Wyoming	2.2	.9	.6	.6	-.1	1.1	.1	.1	.2	.6	.2	.2
Far West	1.9	.1	-1	.2	0	1.5	.1	.1	.1	.3	1.0	.3
Alaska	1.3	0	0	.5	.2	.8	0	.1	.1	.2	.4	.5
California	2.1	.2	-.1	.2	.2	1.6	.1	.1	.1	.3	1.0	.3
Hawaii	1.5	.3	0	.2	.2	1.0	0	0	.1	.2	.7	.2
Nevada	1.8	-.1	0	.2	-.2	1.4	-.1	0	.2	.3	.9	.5
Oregon	1.7	.1	0	.2	-.1	1.2	0	-.1	.1	.3	.9	.3
Washington	1.1	-.6	-.1	.2	-.8	1.4	-.1	.1	.1	.3	.8	.3

1. Earnings by place of work is the sum of wage and salary disbursements (payrolls), other labor income, and proprietors' income. Percent changes are expressed at quarterly rates.

2. Also includes mining and agricultural services, forestry, and fishing, which are not shown separately. NOTE.—Estimates may not add to totals because of rounding.

Text continues from page 57.

In the first quarter of 1999, the growth rates in personal income in 45 States and the District of Columbia exceeded the 0.3-percent increase in the prices paid by U.S. consumers (as measured by the price index for personal consumption expenditures). Personal income was unchanged in Delaware, and it declined in North Dakota, Nebraska, South Dakota, and Iowa.

At the end of this article, **table 1** presents the annual estimates of personal income and per capita personal income for each State and region for 1993–98, and **table 2** presents the annual estimates of disposable personal income and per capita disposable personal income for 1993–98. **Table 3** presents the quarterly estimates of personal income, beginning with the first quarter of 1996, and **table 4** presents the annual estimates for 1997–98 and the quarterly estimates, beginning with the first quarter of 1998, of personal income by major source and of earnings by industry.

Fastest growing States.—The seven States with the fastest growth rates in personal income in the first quarter of 1999 were geographically widespread: Idaho (1.9 percent), Maine (1.8 percent), South Carolina (1.7 percent), Wyoming (1.7 percent), New York (1.7 percent), Florida (1.7 percent), and California (1.7 percent) (**chart 1**). By type of income, net earnings accounted for most of the personal income growth in all these States (**table A**).

By industry, earnings in services was the major contributor to growth in earnings by place of work in all these States; earnings in finance, insurance, and real estate also contributed substantially in all these States except Wyoming (**tables B and C**). Other industries that contributed substantially were construction and government in Idaho and Maine; government in South Carolina and California; farms and construction in Wyoming; and manufacturing in Florida.

Slowest growing States.—The four States with declines in personal income were in the Plains region: North Dakota (–0.7 percent), Nebraska (–0.4 percent), South Dakota (–0.2 percent), and Iowa (–0.2 percent). In Delaware, personal income was unchanged.

In the Plains States, declines in earnings by place of work mainly reflected large declines in earnings in farms as a result of a reduction in farm subsidy payments from an unusually high level in the fourth quarter.

In Delaware, earnings declined in manufacturing, in finance, insurance, and real estate, and in farms. The decline in finance, insurance, and real estate reflected a reduction in lump-sum payments (such as bonus payments) from an unusually high level in the fourth quarter.

Revisions to the State personal income estimates

The annual and quarterly estimates of State personal income for 1998 have been revised to incorporate newly available unemployment insurance

Table D.—Revisions in Personal Income for States and Regions, 1998

(Millions of dollars; quarters at seasonally adjusted annual rates)

Area name	Revision					Percent revision, 1998
	1998	1998				
		I	II	III	IV	
United States	19,119	10,263	16,754	22,375	27,084	0.3
New England	1,424	369	516	1,254	3,558	.3
Connecticut	332	-167	-183	270	1,407	.3
Maine	61	57	60	84	44	.2
Massachusetts	647	354	497	639	1,098	.3
New Hampshire	234	46	50	146	693	.7
Rhode Island	126	65	59	92	287	.5
Vermont	24	16	33	22	30	.2
Mideast	813	1,150	2,685	3,642	-4,225	.1
Delaware	88	15	43	79	215	.4
District of Columbia	25	13	30	42	15	.1
Maryland	411	149	321	445	731	.3
New Jersey	133	277	660	870	-1,272	0
New York	-1,011	381	957	1,338	-6,721	-2
Pennsylvania	1,166	315	674	869	2,807	.4
Great Lakes	4,657	1,763	2,985	4,897	8,983	.4
Illinois	1,245	392	835	994	2,764	.4
Indiana	488	193	399	600	759	.3
Michigan	1,198	594	664	1,733	1,802	.5
Ohio	1,179	365	744	1,041	2,564	.4
Wisconsin	546	221	342	530	1,093	.4
Plains	1,404	611	1,293	1,866	1,844	.3
Iowa	237	65	106	210	565	.3
Kansas	178	95	189	251	179	.3
Minnesota	741	190	516	788	1,466	.6
Missouri	110	152	306	380	-398	.1
Nebraska	54	68	98	143	-95	.1
North Dakota	21	20	41	46	-23	.2
South Dakota	64	21	37	49	150	.4
Southeast	4,506	2,606	4,123	5,230	6,066	.3
Alabama	252	108	94	210	597	.3
Arkansas	119	67	124	177	105	.2
Florida	1,051	862	1,086	1,192	1,065	.3
Georgia	657	347	800	687	792	.3
Kentucky	176	97	337	271	-1	.2
Louisiana	169	91	228	357	0	.2
Mississippi	108	62	124	159	86	.2
North Carolina	652	349	476	666	1,116	.4
South Carolina	297	112	184	375	520	.4
Tennessee	302	293	197	441	276	.2
Virginia	704	188	393	597	1,637	.4
West Virginia	20	29	78	97	-127	.1
Southwest	1,904	812	1,732	2,409	2,661	.3
Arizona	427	76	182	376	1,069	.4
New Mexico	125	47	47	89	318	.4
Oklahoma	-53	66	198	186	-662	-1
Texas	1,405	623	1,304	1,758	1,935	.3
Rocky Mountain	908	336	597	734	1,966	.4
Colorado	652	153	301	380	1,775	.6
Idaho	-1	41	56	86	-187	0
Montana	66	39	76	63	85	.4
Utah	163	82	132	166	271	.4
Wyoming	28	21	32	38	21	.3
Far West	3,504	2,616	2,823	2,345	6,233	.3
Alaska	58	19	36	69	110	.4
California	2,457	758	1,970	1,439	5,662	.3
Hawaii	86	32	65	93	155	.3
Nevada	280	46	104	160	808	.6
Oregon	29	155	236	137	-414	0
Washington	594	1,606	411	446	-88	.4

(U1) tabulations of wages and salaries for the fourth quarter and revised tabulations for the first three quarters from the Bureau of Labor Statistics. In addition, the estimate of railroad wage and salary disbursements incorporated revised fourth-quarter reports from the Department of Transportation.

As a result of the revisions to wage and salary disbursements, the U.S. total of State personal income for 1998 was revised up \$19.1 billion, to \$7,158.2 billion, from the estimate that was published in the May 1999 SURVEY OF CURRENT BUSINESS. The industries with the largest upward revisions were services (\$5.6 billion), durable goods manufacturing (\$4.1 billion), and State and local government (\$3.4 billion). The industry with the largest downward revision was finance, insurance, and real estate (-\$2.1 billion).


In percentage terms, the annual estimates of personal income were revised up for all the States except Idaho, Oregon, New Jersey, Oklahoma, and New York (table D). The largest upward percent revisions were for New Hampshire, Nevada, Colorado, Minnesota, and Michigan. All the regions except the Mideast had upward revisions for each quarter.

Because of differences in the timing of incorporating the source data for wages and salaries and for farm proprietors' income, the annual increase in the U.S. total of the State personal income for 1997-98 is about \$45 billion more than the increase in the presently published estimate of personal income in the national income and product accounts (NIPA's).³ In October, as part

3. In April 1999, when BEA incorporated newly available source data for wage and salary disbursements and for farm proprietors' income into the

of a comprehensive revision, the NIPA estimate for 1998 will be revised to incorporate the U1 tabulations for all four quarters, the latest data from the Department of Agriculture, and other source data that are more complete, more detailed, and otherwise more appropriate than those that were previously incorporated. These source data are usually incorporated into the NIPA estimates in July as part of the annual NIPA revision, but this year's annual revision will be combined with the comprehensive revision.

In the spring of 2000, BEA will release the results of the comprehensive revision of State personal income. This revision will incorporate the definitional and classificational changes and additional statistical revisions to the estimates of personal income that will be introduced in the comprehensive NIPA revision (see "A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes" in this issue). The annual revision of State personal income that is scheduled for September will be combined with the comprehensive State revision.

Tables 1 through 4 follow. 

State estimates, the increase in the U.S. total was \$26 billion more than the increase in the NIPA estimate (see the box "Note on the Estimates of State Personal Income," SURVEY 79 (May 1999): 28).

The State estimate also differs from the NIPA estimate because of differences in coverage and in the methodologies used to prepare the estimates. The largest source of these differences is that, by definition, State estimates exclude the earnings of Federal civilian and military personnel stationed abroad and of U.S. residents employed abroad temporarily by private U.S. firms. For a detailed description of the differences, see the box "Relation of Personal Income in the National Income and Product Accounts (NIPA's) and in the State Personal Income Series" in Wallace K. Bailey, "State Personal Income, Revised Estimates for 1982-97," SURVEY 78 (October 1998): 21.

Table 4.—Personal Income by Major Source

[Millions of dollars, seasonally]

Line	Item	United States							New England						
		1997	1998 ^r	1998				1999	1997	1998 ^r	1998				1999
				I ^r	II ^r	III ^r	IV ^r				I ^p	I ^r	II ^r	III ^r		IV^{r}	I^{p}
Income by Place of Residence															
1	Personal income (lines 4-11)	6,770,650	7,158,176	7,016,041	7,108,060	7,199,440	7,309,162	7,400,243	406,858	429,852	419,963	426,088	433,011	440,347	446,549
2	Nonfarm personal income	6,725,875	7,114,828	6,976,702	7,067,229	7,159,779	7,255,600	7,358,261	406,263	429,163	419,308	425,407	432,302	439,633	
3	Farm income (line 17)	44,775	43,348	39,340	40,830	39,661	53,562	41,982	595	689	655	680	708	714	
Derivation of Personal Income															
4	Earnings by place of work (lines 12-16 or 17-34)	4,824,055	5,169,822	5,044,626	5,124,942	5,203,985	5,305,736	5,384,798	284,091	304,118	295,240	300,574	306,835	313,825	
5	Less: Personal contributions for social insurance ²	325,765	346,910	340,434	344,592	349,001	353,611	362,846	18,490	19,646	19,164	19,444	19,797	20,180	
6	Plus: Adjustment for residence ³	-3,812	-4,162	-4,045	-4,117	-4,200	-4,285	-4,360	5,218	5,611	5,472	5,665	5,713	5,595	
7	Equals: Net earnings by place of residence	4,494,478	4,818,751	4,700,147	4,776,233	4,850,784	4,947,839	5,017,592	270,819	290,083	281,548	286,795	292,750	299,238	
8	Plus: Dividends, interest, and rent ⁴	1,165,828	1,190,497	1,176,971	1,186,108	1,195,773	1,203,134	1,207,556	74,305	75,769	74,891	75,479	76,103	76,602	
9	Plus: Transfer payments	1,110,344	1,148,929	1,138,923	1,145,719	1,152,883	1,158,189	1,175,095	61,733	64,001	63,524	63,814	64,158	64,505	
10	State unemployment insurance benefits	19,502	19,159	19,195	19,183	19,139	19,119	19,203	1,402	1,338	1,366	1,315	1,296	1,377	
11	Transfers excluding State unemployment insurance benefits	1,090,842	1,129,770	1,119,728	1,126,536	1,133,744	1,139,070	1,155,892	60,332	62,662	62,158	62,500	62,862	63,129	
Earnings by Place of Work															
Components of earnings:															
12	Wage and salary disbursements	3,886,261	4,188,007	4,081,731	4,151,065	4,222,301	4,296,929	4,370,851	230,960	248,258	240,504	245,193	250,695	256,642	
13	Other labor income	392,712	406,707	402,519	405,438	408,118	410,754	414,467	23,226	23,929	23,546	23,758	24,054		
14	Proprietors' income ⁵	545,082	575,109	560,376	568,439	573,566	598,053	599,480	29,905	31,931	31,190	31,622	32,087		
15	Farm proprietors' income	29,321	26,620	23,561	24,418	22,615	35,886	23,672	242	311	298	309	322		
16	Nonfarm proprietors' income	515,761	548,489	536,815	544,021	550,951	562,167	575,808	29,622	31,620	30,892	31,314	31,764		
Earnings by Industry															
17	Farm earnings	47,775	43,348	39,340	40,830	39,661	53,562	41,982	595	689	655	680	708		
18	Nonfarm earnings	4,779,280	5,126,474	5,005,287	5,084,111	5,164,324	5,252,174	5,342,816	283,496	303,429	294,585	299,893	306,126		
19	Private earnings	4,064,270	4,382,933	4,272,864	4,343,932	4,416,112	4,496,663	4,574,861	249,684	268,287	260,220	265,035	270,812		
20	Agricultural services, forestry, fishing, and other ⁶	30,233	33,615	31,985	32,985	33,852	35,637	36,680	1,562	1,760	1,682	1,735	1,756		
21	Mining	42,619	44,287	44,573	44,105	44,406	44,064	42,335	234	256	249	256	263		
22	Construction	274,893	303,842	293,067	299,944	307,194	315,162	323,624	13,952	15,583	15,076	15,363	15,665		
23	Manufacturing	856,058	899,735	895,982	898,345	900,079	904,535	910,276	53,595	56,076	55,268	55,615	56,409		
24	Durable goods	526,522	557,971	556,606	557,180	557,021	561,077	563,534	36,276	38,121	37,510	37,782	38,279		
25	Non-durable goods	329,536	341,765	339,377	341,166	343,058	343,458	346,742	17,320	17,956	17,758	17,832	18,130		
26	Transportation and public utilities	330,559	352,897	346,566	349,614	353,910	361,497	363,629	15,417	16,642	16,446	16,403	16,602		
27	Wholesale trade	305,592	330,278	321,321	327,348	332,762	339,683	342,728	18,397	19,758	19,201	19,561	19,774		
28	Retail trade	439,206	468,201	456,152	464,756	472,156	479,740	486,613	25,239	26,846	25,903	26,525	27,143		
29	Finance, insurance, and real estate	411,415	458,153	439,683	452,999	462,922	477,006	491,582	29,118	32,359	31,215	31,635	32,615		
30	Services	1,373,695	1,491,396	1,443,535	1,473,836	1,508,832	1,539,341	1,577,395	99,180	109,006	105,180	107,941	110,584		
31	Government and government enterprises	715,010	744,081	732,423	740,180	748,212	755,510	767,955	33,802	35,142	34,365	34,858	35,315		
32	Federal, civilian	134,273	136,648	135,501	136,084	136,892	138,114	142,737	5,454	5,584	5,494	5,543	5,609		
33	Military	47,608	47,536	48,081	47,517	47,482	47,064	48,105	1,244	1,192	1,207	1,195	1,188		
34	State and local	533,128	559,897	548,841	556,578	563,837	570,333	577,114	27,104	28,366	27,664	28,120	28,518		

See footnotes at end of table.

Table 4.—Personal Income by Major Source

[Millions of dollars, seasonally]

Line	Item	District of Columbia						Maryland							
		1997	1998 ^r	1998				1999	1997	1998 ^r	1998				1999
				I ^r	II ^r	III ^r	IV ^r				I ^r	II ^r	III ^r	IV ^r	
Income by Place of Residence															
1	Personal income (lines 4-11)	18,919	19,526	19,191	19,408	19,687	19,817	20,132	146,090	154,164	150,778	153,116	155,299	157,464	159,887
2	Nonfarm personal income	18,919	19,526	19,191	19,408	19,687	19,817	20,132	145,855	153,789	150,432	152,738	154,927	157,061	159,567
3	Farm income (line 17)	0	0	0	0	0	0	0	235	375	346	378	372	403	320
Derivation of Personal Income															
4	Earnings by place of work (lines 12-16 or 17-34)	35,024	37,129	36,297	36,801	37,744	37,674	38,543	91,509	97,538	94,809	96,743	98,314	100,287	102,284
5	Less: Personal contributions for social insurance ²	2,259	2,379	2,338	2,362	2,416	2,400	2,479	6,250	6,602	6,449	6,559	6,646	6,754	6,959
6	Plus: Adjustment for residence ³	-20,939	-22,457	-21,962	-22,248	-22,885	-22,733	-23,256	14,065	15,422	14,779	14,979	15,381	15,429	15,657
7	Equals: Net earnings by place of residence	11,825	12,293	11,997	12,191	12,443	12,541	12,808	99,324	106,076	103,138	105,163	107,049	108,962	110,982
8	Plus: Dividends, interest, and rent ⁴	3,135	3,159	3,140	3,151	3,163	3,181	3,193	25,325	25,798	25,527	25,706	25,897	26,063	26,164
9	Plus: Transfer payments	3,959	4,074	4,053	4,066	4,081	4,094	4,131	21,441	22,288	22,112	22,246	22,352	22,439	22,741
10	State unemployment insurance benefits	68	60	64	60	58	58	54	341	314	331	334	303	287	267
11	Transfers excluding State unemployment insurance benefits	3,891	4,014	3,990	4,006	4,023	4,036	4,077	21,099	21,974	21,782	21,912	22,050	22,152	22,474
Earnings by Place of Work															
Components of earnings:															
12	Wage and salary disbursements	30,129	32,064	31,299	31,765	32,632	32,560	33,333	76,260	81,482	79,058	80,770	82,198	83,903	85,707
13	Other labor income	2,620	2,685	2,659	2,674	2,722	2,686	2,731	7,052	7,245	7,130	7,228	7,277	7,345	7,439
14	Proprietors' income ⁵	2,275	2,380	2,339	2,362	2,391	2,427	2,479	8,197	8,811	8,621	8,745	8,839	9,038	9,138
15	Farm proprietors' income	0	0	0	0	0	0	0	121	252	230	258	246	273	186
16	Nonfarm proprietors' income	2,275	2,380	2,339	2,362	2,391	2,427	2,479	8,076	8,559	8,390	8,487	8,592	8,765	8,952
Earnings by Industry															
17	Farm earnings	0	0	0	0	0	0	0	235	375	346	378	372	403	320
18	Nonfarm earnings	35,024	37,129	36,297	36,801	37,744	37,674	38,543	91,274	97,163	94,463	96,365	97,942	99,884	101,964
19	Private earnings	20,877	22,617	21,959	22,319	23,175	23,015	23,398	72,029	76,924	74,660	76,230	77,177	79,628	81,216
20	Agricultural services, forestry, fishing, and other ⁶	330	293	296	303	288	284	290	514	567	542	551	578	597	613
21	Mining	17	16	16	17	15	15	15	81	94	92	90	96	99	100
22	Construction	422	434	432	433	434	437	448	6,242	6,738	6,520	6,590	6,786	7,057	7,210
23	Manufacturing	966	1,052	1,000	1,080	1,117	1,012	982	8,329	8,743	8,714	8,751	8,653	8,852	8,680
24	Durable goods	118	165	125	195	165	176	177	4,482	4,711	4,743	4,778	4,651	4,673	4,572
25	Non-durable goods	848	887	876	885	951	836	805	3,847	4,032	3,971	3,974	4,002	4,179	4,108
26	Transportation and public utilities	1,347	1,227	1,348	1,179	1,164	1,217	1,231	5,298	5,587	5,515	5,560	5,610	5,663	5,701
27	Wholesale trade	312	327	332	339	298	339	301	5,177	5,490	5,357	5,440	5,531	5,633	5,727
28	Retail trade	874	913	907	908	901	936	931	8,677	9,160	8,940	9,087	9,139	9,474	9,587
29	Finance, insurance, and real estate	2,015	2,299	2,125	2,307	2,414	2,353	2,429	7,449	8,079	7,464	8,245	8,123	8,483	8,912
30	Services	14,595	16,055	15,504	15,752	16,544	16,421	16,771	30,284	32,466	31,516	31,915	32,660	33,771	34,686
31	Government and government enterprises	14,146	14,512	14,339	14,482	14,569	14,659	15,145	19,245	20,240	19,803	20,134	20,765	20,256	20,748
32	Federal, civilian	11,568	11,846	11,766	11,808	11,880	11,931	12,389	7,889	8,288	8,199	8,251	8,303	8,399	8,702
33	Military	728	738	744	738	740	728	751	1,349	1,360	1,375	1,355	1,360	1,351	1,398
34	State and local	1,850	1,928	1,829	1,937	1,948	2,000	2,005	10,007	10,591	10,228	10,528	11,102	10,506	10,649

See footnotes at end of table.

and Earnings by Industry, 1997-1999: I - Continued

adjusted at annual rates]

Table with columns for Iowa, Kansas, and Minnesota. Sub-columns for years 1997, 1998, and 1999, and industry codes I, II, III, IV, P. Includes a 'Line' column on the right with numbers 1-34.

Table with columns for North Dakota, South Dakota, and Southeast. Sub-columns for years 1997, 1998, and 1999, and industry codes I, II, III, IV, P. Includes a 'Line' column on the right with numbers 1-34.

Table 4.—Personal Income by Major Source

[Millions of dollars, seasonally]

Line	Item	Alabama						Arkansas							
		1997	1998 ^r	1998				1999	1997	1998 ^r	1998				1999
				I ^r	II ^r	III ^r	IV ^r				I ^r	II ^r	III ^r	IV ^r	
Income by Place of Residence															
1	Personal income (lines 4-11)	89,348	93,567	91,987	92,976	94,041	95,265	96,128	49,442	51,763	50,874	51,403	51,790	52,984	53,235
2	Nonfarm personal income	88,304	92,368	90,858	91,773	92,836	94,005	95,243	47,799	50,225	49,511	49,924	50,445	51,019	51,791
3	Farm income (line 17)	1,044	1,199	1,128	1,202	1,205	1,260	885	1,643	1,538	1,363	1,479	1,345	1,966	1,444
Derivation of Personal Income															
4	Earnings by place of work (lines 12-16 or 17-34)	62,382	65,678	64,423	65,171	66,015	67,105	67,734	34,537	36,417	35,711	36,105	36,353	37,500	37,668
5	Less: Personal contributions for social insurance ²	4,563	4,763	4,700	4,731	4,780	4,839	4,955	2,370	2,498	2,472	2,482	2,504	2,534	2,606
6	Plus: Adjustment for residence ³	869	757	721	745	774	787	811	-299	-312	-318	-308	-308	-313	-323
7	Equals: Net earnings by place of residence	58,488	61,673	60,443	61,184	62,010	63,053	63,590	31,868	33,607	32,920	33,315	33,542	34,654	34,739
8	Plus: Dividends, interest, and rent ⁴	12,503	12,780	12,615	12,729	12,849	12,926	12,974	7,154	7,345	7,247	7,315	7,387	7,432	7,458
9	Plus: Transfer payments	18,356	19,114	18,928	19,062	19,182	19,285	19,563	10,419	10,810	10,707	10,772	10,862	10,899	11,038
10	State unemployment insurance benefits	204	214	211	221	209	215	187	198	197	190	190	190	196	174
11	Transfers excluding State unemployment insurance benefits	18,152	18,900	18,717	18,841	18,973	19,070	19,377	10,221	10,613	10,517	10,582	10,651	10,702	10,864
Earnings by Place of Work															
Components of earnings:															
12	Wage and salary disbursements	50,617	53,363	52,308	52,896	53,673	54,577	55,395	26,607	28,329	27,846	28,090	28,454	28,925	29,489
13	Other labor income	5,353	5,426	5,395	5,406	5,433	5,469	5,507	2,894	2,958	2,945	2,948	2,962	2,976	3,014
14	Proprietors' income ⁵	6,412	6,889	6,721	6,868	6,910	7,059	6,831	5,036	5,131	4,920	5,068	4,937	5,599	5,165
15	Farm proprietors' income	908	1,052	990	1,058	1,055	1,105	726	1,415	1,292	1,131	1,238	1,094	1,706	1,179
16	Nonfarm proprietors' income	5,503	5,837	5,731	5,810	5,855	5,954	6,105	3,621	3,839	3,789	3,830	3,843	3,893	3,986
Earnings by Industry															
17	Farm earnings	1,044	1,199	1,128	1,202	1,205	1,260	885	1,643	1,538	1,363	1,479	1,345	1,966	1,444
18	Nonfarm earnings	61,338	64,480	63,295	63,968	64,811	65,845	66,849	32,895	34,879	34,348	34,626	35,008	35,535	36,224
19	Private earnings	50,139	52,866	52,044	52,527	53,133	53,765	54,572	27,680	29,486	29,150	29,278	29,599	29,915	30,580
20	Agricultural services, forestry, fishing, and other ⁶	345	386	370	379	386	406	422	253	281	280	282	278	285	295
21	Mining	833	640	645	639	643	631	600	176	182	187	181	184	177	172
22	Construction	3,905	4,192	4,095	4,207	4,216	4,250	4,380	2,014	2,152	2,140	2,178	2,152	2,139	2,212
23	Manufacturing	13,485	13,869	13,769	13,827	13,957	13,922	14,103	7,790	8,131	8,056	8,093	8,192	8,183	8,460
24	Durable goods	7,528	7,820	7,823	7,758	7,829	7,869	7,969	4,317	4,542	4,499	4,533	4,562	4,575	4,728
25	Non-durable goods	5,957	6,049	5,945	6,070	6,128	6,053	6,134	3,473	3,589	3,557	3,560	3,630	3,608	3,732
26	Transportation and public utilities	4,111	4,243	4,218	4,171	4,226	4,358	4,415	2,826	3,003	2,985	2,973	3,018	3,038	3,020
27	Wholesale trade	3,600	3,819	3,733	3,793	3,853	3,896	3,937	1,769	1,905	1,874	1,889	1,908	1,947	1,969
28	Retail trade	6,009	6,329	6,209	6,284	6,392	6,432	6,569	3,819	4,144	4,170	4,138	4,064	4,205	4,259
29	Finance, insurance, and real estate	3,578	3,902	3,774	3,877	3,821	4,138	3,996	1,676	1,833	1,801	1,805	1,828	1,899	1,974
30	Services	14,474	15,488	15,231	15,350	15,638	15,733	16,151	7,357	7,854	7,658	7,739	7,975	8,042	8,218
31	Government and government enterprises	11,199	11,612	11,250	11,441	11,677	12,080	12,277	5,215	5,904	5,198	5,348	5,410	5,620	5,644
32	Federal, civilian	2,549	2,590	2,566	2,581	2,599	2,615	2,655	896	909	879	886	906	964	941
33	Military	840	837	847	835	835	829	836	286	292	298	295	289	288	290
34	State and local	7,811	8,185	7,837	8,026	8,243	8,635	8,785	4,033	4,192	4,021	4,166	4,214	4,368	4,412

See footnotes at end of table.

Table 4.—Personal Income by Major Source

[Millions of dollars, seasonally]

Line	Item	Montana					Utah								
		1997	1998 ^r	1998				1997	1998 ^r	1998				1999	
				I ^r	II ^r	III ^r	IV ^r			I ^r	II ^r	III ^r	IV ^r		
Income by Place of Residence															
1	Personal income (lines 4-11)	17,276	17,827	17,547	17,786	17,728	18,246	18,351	41,681	44,297	43,288	44,070	44,561	45,269	45,949
2	Nonfarm personal income	16,959	17,311	17,490	17,788	17,731	17,916	18,250	41,500	44,065	43,063	43,840	44,329	45,029	45,737
3	Farm income (line 17)	317	516	56	-2	-3	330	101	181	225	230	233	240	212	
Derivation of Personal Income															
4	Earnings by place of work (lines 12-16 or 17-34)	11,333	11,730	11,499	11,721	11,604	12,096	12,172	32,610	34,976	34,068	34,788	35,189	35,857	36,490
5	Less: Personal contributions for social insurance ²	926	971	958	982	968	979	1,014	2,160	2,297	2,249	2,288	2,306	2,343	2,406
6	Plus: Adjustment for residence ³	-28	-29	-28	-30	-28	-29	-30	1	4	3	2	4	7	
7	Equals: Net earnings by place of residence	10,379	10,730	10,512	10,709	10,609	11,088	11,129	30,452	32,683	31,822	32,502	32,887	33,521	34,090
8	Plus: Dividends, interest, and rent ⁴	3,384	3,458	3,423	3,447	3,471	3,490	3,501	5,525	5,686	5,586	5,659	5,724	5,763	5,788
9	Plus: Transfer payments	3,513	3,640	3,611	3,630	3,648	3,668	3,721	5,705	5,929	5,870	5,910	5,950	5,985	6,071
10	State unemployment insurance benefits	62	62	64	62	58	62	63	76	88	83	86	87	94	90
11	Transfers excluding State unemployment insurance benefits	3,451	3,578	3,547	3,568	3,590	3,607	3,658	5,629	5,841	5,787	5,824	5,863	5,891	5,981
Earnings by Place of Work															
Components of earnings:															
12	Wage and salary disbursements	8,530	9,034	8,849	9,108	9,018	9,162	9,405	26,656	28,650	27,865	28,485	28,826	29,424	29,947
13	Other labor income	901	918	912	935	910	913	931	2,717	2,797	2,764	2,800	2,804	2,820	2,850
14	Proprietors' income ⁵	1,903	1,778	1,738	1,678	1,676	2,021	1,836	3,237	3,529	3,439	3,504	3,559	3,613	3,692
15	Farm proprietors' income	166	-73	-102	-166	-174	152	-86	82	121	120	119	119	122	89
16	Nonfarm proprietors' income	1,737	1,851	1,840	1,844	1,851	1,869	1,922	3,155	3,408	3,319	3,383	3,439	3,491	3,604
Earnings by Industry															
17	Farm earnings	317	95	56	-2	-3	330	101	181	232	225	230	233	240	212
18	Nonfarm earnings	11,017	11,634	11,442	11,722	11,607	11,766	12,071	32,428	34,744	33,843	34,558	34,957	35,618	36,277
19	Private earnings	8,813	9,355	9,200	9,445	9,306	9,469	9,721	27,076	29,143	28,386	28,931	29,421	29,836	30,463
20	Agricultural services, forestry, fishing, and other ⁶	96	110	107	109	109	115	119	130	144	135	141	150	148	154
21	Mining	297	286	289	281	303	274	271	454	448	463	453	445	432	421
22	Construction	876	971	1,025	987	958	916	952	2,608	2,836	2,747	2,835	2,919	2,842	2,892
23	Manufacturing	863	955	902	1,108	887	921	946	4,837	4,995	4,993	5,009	5,003	4,974	5,080
24	Durable goods	546	630	580	781	568	593	592	3,411	3,513	3,541	3,544	3,515	3,454	3,550
25	Non-durable goods	316	324	322	327	319	328	354	1,426	1,481	1,452	1,465	1,488	1,520	1,530
26	Transportation and public utilities	461	939	947	942	927	938	961	2,423	2,577	2,556	2,554	2,624	2,575	2,598
27	Wholesale trade	596	627	622	625	633	627	636	1,873	2,048	1,993	2,027	2,078	2,092	2,114
28	Retail trade	1,426	1,488	1,456	1,478	1,487	1,529	1,557	3,548	3,756	3,651	3,718	3,757	3,900	3,860
29	Finance, insurance, and real estate	626	693	663	679	692	737	765	2,416	2,717	2,526	2,694	2,794	2,855	2,965
30	Services	3,092	3,287	3,189	3,236	3,309	3,412	3,513	8,788	9,623	9,321	9,500	9,622	10,019	10,379
31	Government and government enterprises	2,204	2,280	2,243	2,278	2,301	2,297	2,350	5,352	5,601	5,457	5,627	5,536	5,782	5,814
32	Federal, civilian	532	550	543	550	553	556	586	1,319	1,344	1,332	1,352	1,340	1,354	1,393
33	Military	150	153	153	151	153	154	157	254	251	253	251	252	249	254
34	State and local	1,522	1,577	1,547	1,577	1,595	1,587	1,607	3,779	4,005	3,873	4,025	3,944	4,180	4,167

^r Preliminary.
^r Revised.
 1. The estimates of earnings for 1997-99 are based on the 1987 Standard Industrial Classification.
 2. Personal contributions for social insurance are included in earnings by type and by industry, but they are excluded from personal income.
 3. The adjustment for residence is the net inflow of the earnings of interarea commuters. For the United States, it consists of adjustments for border workers and for certain temporary and migratory workers: Wage and salary

disbursements to U.S. residents commuting or working temporarily outside U.S. borders less wage and salary disbursements to foreign residents commuting or working temporarily inside U.S. borders.
 4. Rental income of persons includes the capital consumption adjustment.
 5. Proprietors' income includes the inventory valuation adjustment and the capital consumption adjustment.
 6. "Other" consists of the wage and salary disbursements of U.S. residents employed by international organizations and foreign embassies and consulates in the United States.

National Data

A. Selected NIPA Tables

The tables in this section include the most recent estimates of gross domestic product and its components; these estimates were released on July 29, 1999 and include the "advance" estimates for the second quarter of 1999.

The selected set of NIPA tables shown in this section presents quarterly estimates, which are updated monthly. In most tables, the annual estimates are also shown. Most of the "annual only" NIPA tables were presented in the August 1998 SURVEY OF CURRENT BUSINESS; table 8.26 was presented in the September 1998 SURVEY; and the remaining "annual only" tables—tables 3.15–3.20 and 9.1–9.6—were presented in the October 1998 SURVEY.

The news release on gross domestic product (GDP) is available at the time of release, and the "Selected NIPA Tables" are available later that day, on STAT-USA's Economic Bulletin Board and Internet services; for information, call STAT-USA on 202-482-1986. In addition, the GDP news release is available the afternoon of the day of the release, and the "Selected NIPA Tables" a day or two later, on BEA's Web site <www.bea.doc.gov>.

The "Selected NIPA Tables" are also available on printouts or diskettes from BEA. To order NIPA subscription products using Visa or MasterCard, call the BEA Order Desk at 1-800-704-0415 (outside the United States, 202-606-9666).

NOTE.—An article in this issue of the SURVEY describes the definitional and classificational changes that will be introduced in the upcoming comprehensive revision of the NIPAs.

1. National Product and Income

Table 1.1.—Gross Domestic Product

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Gross domestic product	8,110.9	8,511.0	8,384.2	8,440.6	8,537.9	8,681.2	8,808.7	8,893.3
Personal consumption expenditures	5,493.7	5,807.9	5,676.5	5,773.7	5,846.7	5,934.8	6,050.6	6,148.3
Durable goods	673.0	724.7	705.1	720.1	718.9	754.5	771.2	777.6
Nondurable goods	1,600.6	1,662.4	1,633.1	1,655.2	1,670.0	1,691.3	1,736.0	1,771.3
Services	3,220.1	3,420.8	3,338.2	3,398.4	3,457.7	3,488.9	3,543.4	3,599.4
Gross private domestic investment	1,256.0	1,367.1	1,366.6	1,345.0	1,364.4	1,392.4	1,417.4	1,426.7
Fixed investment	1,188.6	1,307.8	1,271.1	1,305.8	1,307.5	1,346.7	1,377.9	1,407.1
Nonresidential	860.7	938.2	921.3	941.9	931.6	957.9	972.6	994.0
Structures	240.2	246.9	245.0	245.4	246.2	250.9	255.0	255.7
Producers' durable equipment	620.5	691.3	676.3	696.6	685.4	706.9	717.6	738.3
Residential	327.9	369.6	349.8	363.8	375.8	388.9	405.3	413.1
Change in business inventories	67.4	59.3	95.5	39.2	57.0	45.7	39.5	19.6
Net exports of goods and services	-93.4	-151.2	-123.7	-159.3	-165.5	-156.2	-196.9	-225.7
Exports	965.4	959.0	973.3	949.6	936.2	976.8	962.7	972.9
Goods	688.3	680.8	694.5	668.8	663.3	696.6	677.7	683.1
Services	277.1	278.2	278.8	280.8	272.9	280.2	285.0	289.8
Imports	1,058.8	1,110.2	1,097.1	1,108.9	1,101.7	1,133.0	1,159.6	1,198.6
Goods	888.3	932.4	920.9	931.8	924.7	952.2	975.2	1,009.6
Services	170.4	177.8	176.2	177.1	177.0	180.8	184.5	189.0
Government consumption expenditures and gross investment	1,454.6	1,487.1	1,464.9	1,481.2	1,492.3	1,510.2	1,537.5	1,544.1
Federal	520.2	520.6	511.6	520.7	519.4	530.7	536.6	533.3
National defense	346.0	340.4	331.6	339.8	343.7	346.4	345.5	343.5
Nondefense	174.3	180.2	180.0	180.9	175.7	184.3	191.1	189.8
State and local	934.4	966.5	953.3	960.4	972.9	979.5	1,000.9	1,010.8

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

Table 1.2.—Real Gross Domestic Product

[Billions of chained (1992) dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Gross domestic product	7,269.8	7,551.9	7,464.7	7,498.6	7,566.5	7,677.7	7,759.6	7,803.6
Personal consumption expenditures	4,913.5	5,153.3	5,055.1	5,130.2	5,181.8	5,246.0	5,331.9	5,384.7
Durable goods	668.6	737.1	710.3	729.4	733.7	775.0	798.9	809.8
Nondurable goods	1,486.3	1,544.1	1,521.2	1,540.9	1,549.1	1,565.1	1,600.9	1,612.7
Services	2,761.5	2,879.5	2,829.3	2,866.8	2,904.8	2,917.2	2,946.8	2,977.2
Gross private domestic investment	1,206.4	1,330.1	1,321.8	1,306.5	1,331.6	1,360.6	1,388.5	1,399.5
Fixed investment	1,138.0	1,267.8	1,224.9	1,264.1	1,270.9	1,311.0	1,344.0	1,373.6
Nonresidential	859.4	960.7	931.9	960.4	958.7	991.9	1,012.2	1,038.5
Structures	203.2	203.0	203.1	201.9	202.0	205.0	207.8	207.2
Producers' durable equipment	660.9	770.2	738.8	771.3	769.3	801.5	819.8	849.6
Residential	282.8	312.0	298.5	309.1	316.5	324.1	335.9	340.1
Change in business inventories	63.2	57.4	91.4	38.2	55.7	44.2	38.7	19.4
Net exports of goods and services	-136.1	-238.2	-198.5	-245.2	-259.0	-250.0	-303.6	-323.0
Exports	970.0	984.7	991.9	972.1	965.3	1,009.6	996.5	1,007.6
Goods	726.5	742.6	748.5	726.3	727.3	768.4	751.2	760.0
Services	247.0	246.4	247.8	248.8	242.1	247.0	249.6	252.0
Imports	1,106.1	1,222.9	1,190.4	1,217.3	1,224.3	1,259.6	1,300.1	1,330.6
Goods	945.7	1,054.4	1,021.0	1,048.8	1,056.3	1,091.7	1,127.6	1,158.4
Services	161.8	171.2	171.3	171.0	170.8	171.6	176.5	177.0
Government consumption expenditures and gross investment	1,285.0	1,296.9	1,283.0	1,294.8	1,299.6	1,310.3	1,323.9	1,320.0
Federal	458.0	453.3	446.1	454.1	452.5	460.6	458.4	454.7
National defense	308.9	300.4	293.3	300.3	303.5	304.6	299.4	296.9
Nondefense	148.6	152.1	151.9	152.9	148.4	155.2	158.0	156.8
State and local	827.1	843.8	837.1	840.9	847.3	850.0	865.8	865.5
Residual	-7.3	-11.1	-14.2	-8.4	-6.1	-16.3	-9.1	-8.2

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the more detailed lines. %Percent changes from preceding period for selected items in this table are shown in table 8.1; contributions to the percent change in real gross domestic product are shown in table 8.2.

Chain-type quantity indexes for the series in this table appear in table 7.1.

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

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Gross domestic product	8,110.9	8,511.0	8,384.2	8,440.6	8,537.9	8,681.2	8,808.7	8,893.3
Plus: Receipts of factor income from the rest of the world	265.5	269.2	270.3	270.6	265.0	270.7	274.3	.....
Less: Payments of factor income to the rest of the world	273.5	289.6	285.1	289.3	292.1	291.9	294.6	.....
Equals: Gross national product	8,102.9	8,490.5	8,369.4	8,421.8	8,510.9	8,660.0	8,788.4	.....
Less: Consumption of fixed capital	871.8	908.0	894.5	902.3	912.3	923.0	931.9	942.5
Private	720.2	753.3	741.1	748.5	757.3	766.4	774.9	784.1
Capital consumption allowances	760.5	810.4	790.5	803.2	816.8	831.0	844.7	858.4
Less: Capital consumption adjustment	40.4	57.0	49.4	54.7	59.5	64.6	69.8	74.3
Government	151.6	154.7	153.4	153.7	155.0	156.6	157.0	158.4
General government	128.3	130.4	129.4	129.6	130.6	131.9	132.0	133.0
Government enterprises	23.4	24.3	24.0	24.2	24.4	24.7	25.0	25.4
Equals: Net national product	7,231.1	7,582.5	7,474.9	7,519.6	7,598.5	7,737.1	7,856.5	.....
Less: Indirect business tax and nontax liability	627.2	655.3	641.9	647.7	656.5	675.1	673.6	682.3
Business transfer payments	35.1	36.1	35.6	36.0	36.3	36.4	36.4	36.8
Statistical discrepancy	-55.8	-76.5	-54.1	-85.7	-102.0	-64.2	-93.1	.....
Plus: Subsidies less current surplus of government enterprises	21.9	27.1	23.5	23.9	24.6	36.3	25.5	31.5
Equals: National income	6,646.5	6,994.7	6,875.0	6,945.5	7,032.3	7,126.0	7,265.2	.....
Less: Corporate profits with inventory valuation and capital consumption adjustments	817.9	824.6	829.2	820.6	827.0	821.7	868.8	.....
Net interest	432.0	449.3	440.5	447.1	454.0	455.6	463.9	.....
Contributions for social insurance	727.0	767.5	755.0	762.9	771.6	780.7	798.2	806.7
Wage accruals less disbursements	3.7	4.0	4.0	4.0	4.0	4.0	0	0
Plus: Personal interest income	747.3	764.8	757.0	763.0	769.2	769.9	771.0	777.8
Personal dividend income	260.3	263.1	261.6	262.1	263.0	265.7	268.8	272.7
Government transfer payments to persons	1,083.3	1,120.8	1,111.2	1,117.7	1,124.6	1,129.6	1,146.2	1,152.8
Business transfer payments to persons	27.2	28.2	27.8	28.1	28.3	28.6	28.9	29.3
Equals: Personal income	6,784.0	7,126.1	7,003.9	7,081.9	7,160.8	7,257.9	7,349.3	7,442.5
Addenda:								
Gross domestic income	8,166.7	8,587.5	8,438.4	8,526.3	8,639.9	8,745.4	8,901.8	.....
Gross national income	8,158.7	8,567.0	8,423.6	8,507.6	8,612.8	8,724.2	8,881.5	.....
Net domestic product	7,239.1	7,603.0	7,489.8	7,538.3	7,625.6	7,758.2	7,876.8	7,950.9

Table 1.10.—Relation of Real Gross Domestic Product, Real Gross National Product, and Real Net National Product

[Billions of chained (1992) dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Gross domestic product	7,269.8	7,551.9	7,464.7	7,498.6	7,566.5	7,677.7	7,759.6	7,803.6
Plus: Receipts of factor income from the rest of the world	238.0	239.5	241.0	241.0	235.7	240.4	242.8	.....
Less: Payments of factor income to the rest of the world	240.7	252.7	249.6	252.8	254.6	253.9	255.3	.....
Equals: Gross national product	7,266.2	7,537.8	7,455.2	7,485.9	7,546.7	7,663.3	7,746.3	.....
Less: Consumption of fixed capital	808.8	861.5	841.1	854.4	867.8	882.6	898.1	914.3
Private	672.2	713.9	694.4	707.2	719.8	734.0	748.9	764.6
Government	137.4	139.4	138.6	139.0	139.8	140.3	140.8	141.4
General government	116.1	117.5	116.9	117.2	117.8	118.1	118.5	118.9
Government enterprises	20.6	21.2	21.0	21.1	21.3	21.5	21.6	21.8
Equals: Net national product	6,457.3	6,680.8	6,617.8	6,635.8	6,683.8	6,785.8	6,853.9	.....
Addenda:								
Gross domestic income ¹	7,319.7	7,619.7	7,512.9	7,574.8	7,656.8	7,734.5	7,841.6	.....
Gross national income ²	7,316.2	7,605.7	7,503.4	7,562.1	7,637.0	7,720.1	7,828.3	.....
Net domestic product	6,460.8	6,695.4	6,627.8	6,649.0	6,704.0	6,800.7	6,867.6	6,896.6

1. Gross domestic income deflated by the implicit price deflator for gross domestic product.

2. Gross national income deflated by the implicit price deflator for gross national product.

NOTE.—Except as noted in footnotes 1 and 2, chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive.

Chain-type quantity indexes for the series in this table appear in table 7.3.

Table 1.11.—Command-Basis Real Gross National Product

[Billions of chained (1992) dollars]

Gross national product	7,266.2	7,537.8	7,455.2	7,485.9	7,546.7	7,663.3	7,746.3	.....
Less: Exports of goods and services and receipts of factor income from the rest of the world	1,208.2	1,224.2	1,232.8	1,213.7	1,201.1	1,249.2	1,239.4	.....
Plus: Command-basis exports of goods and services and receipts of factor income ¹	1,246.7	1,294.8	1,296.5	1,283.4	1,275.1	1,324.2	1,320.8	.....
Equals: Command-basis gross national product	7,304.7	7,608.4	7,518.9	7,555.6	7,620.7	7,738.2	7,827.7	.....
Addendum:								
Terms of trade ²	103.2	105.8	105.2	105.7	106.2	106.0	106.6	.....

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

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

Chain-type quantity indexes for the series in this table appear in table 7.3.

3. Government Receipts, Current Expenditures, and Gross Investment

Table 3.1.—Government Receipts and Current Expenditures

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Receipts	2,589.2	2,761.2	2,703.6	2,745.2	2,779.7	2,816.2	2,866.6	.....
Personal tax and nontax receipts	989.0	1,098.3	1,066.8	1,092.9	1,108.4	1,124.9	1,144.1	1,162.1
Corporate profits tax accruals	246.1	240.1	239.9	241.6	243.2	235.6	250.7	.....
Indirect business tax and nontax accruals	627.2	655.3	641.9	647.7	656.5	675.1	673.6	682.3
Contributions for social insurance	727.0	767.5	755.0	762.9	771.6	780.7	798.2	806.7
Current expenditures	2,476.1	2,538.2	2,504.6	2,529.5	2,538.9	2,579.8	2,574.1	2,596.8
Consumption expenditures	1,219.2	1,250.2	1,227.5	1,248.7	1,252.6	1,271.9	1,282.0	1,292.7
Transfer payments (net)	1,096.0	1,134.0	1,121.1	1,126.7	1,135.8	1,152.2	1,156.1	1,163.5
To persons	1,083.3	1,120.8	1,111.2	1,117.7	1,124.6	1,129.6	1,146.2	1,152.8
To the rest of the world (net)	12.7	13.2	9.9	9.0	11.2	22.6	9.9	10.7
Net interest paid	153.8	143.1	148.2	146.2	141.9	136.1	127.3	126.1
Interest paid	316.9	312.3	314.3	314.5	312.0	308.3	300.8	301.9
To persons and business	229.4	222.3	224.4	223.4	221.7	219.9	212.4	.....
To the rest of the world	87.5	89.9	89.9	91.0	90.3	88.5	88.3	.....
Less: Interest received by government	163.1	169.2	166.1	168.3	170.1	172.2	173.5	175.8
Less: Dividends received by government	14.8	16.1	15.7	16.0	16.0	16.6	16.7	17.0
Subsidies less current surplus of government enterprises	21.9	27.1	23.5	23.9	24.6	36.3	25.5	31.5
Subsidies	33.4	34.2	31.8	31.4	31.0	42.8	34.8	41.5
Less: Current surplus of government enterprises	11.5	7.2	8.4	7.5	6.4	6.5	9.3	10.1
Less: Wage accruals less disbursements	0	0	0	0	0	0	0	0
Current surplus or deficit (-), national income and product accounts	113.1	223.0	199.0	215.7	240.7	236.3	292.4	.....
Social insurance funds	138.5	161.9	152.0	158.3	163.8	173.3	183.1	189.9
Other	-25.4	61.1	47.0	57.4	76.9	63.0	109.3	.....

Table 3.2.—Federal Government Receipts and Current Expenditures

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Receipts	1,719.9	1,844.2	1,809.1	1,838.3	1,858.8	1,870.4	1,914.7	.....
Personal tax and nontax receipts	769.1	858.0	836.5	855.7	863.8	875.9	891.3	908.8
Income taxes	745.8	829.6	810.0	826.3	836.5	845.7	860.7	875.6
Estate and gift taxes	20.6	25.1	23.5	26.2	23.8	26.8	27.1	29.8
Nontaxes	2.7	3.3	3.0	3.2	3.5	3.4	3.4	3.4
Corporate profits tax accruals	210.0	204.9	204.8	206.2	207.5	201.0	213.8	.....
Federal Reserve banks	20.6	21.7	21.6	21.5	21.8	21.7	21.5	.....
Other	189.5	183.2	183.2	184.7	185.7	179.3	192.3	.....
Indirect business tax and nontax accruals	93.8	95.9	93.9	95.2	98.3	96.0	95.7	96.0
Excise taxes	59.5	62.6	60.7	61.9	63.8	64.0	63.9	64.5
Customs duties	19.6	19.6	19.1	19.3	20.7	19.2	19.1	19.0
Nontaxes	14.6	13.6	14.1	13.9	13.7	12.8	12.6	12.5
Contributions for social insurance	647.0	685.4	673.9	681.2	689.2	697.5	714.0	721.7
Current expenditures	1,741.0	1,771.4	1,750.3	1,763.9	1,766.7	1,804.6	1,792.0	1,804.7
Consumption expenditures	460.4	461.0	450.9	464.0	458.7	470.6	471.8	469.8
Transfer payments (net)	791.9	816.6	808.5	811.1	817.0	829.8	830.4	834.4
To persons	779.2	803.4	798.6	802.1	805.8	807.2	820.5	823.7
To the rest of the world (net)	12.7	13.2	9.9	9.0	11.2	22.6	9.9	10.7
Grants-in-aid to State and local governments	225.0	231.1	228.7	226.9	231.4	237.4	241.1	245.4
Net interest paid	231.2	226.1	228.8	228.3	225.7	221.4	214.3	214.9
Interest paid	253.6	248.4	250.7	250.6	248.0	244.2	236.5	237.4
To persons and business	166.1	158.4	160.7	159.6	157.7	155.7	148.1	.....
To the rest of the world	87.5	89.9	89.9	91.0	90.3	88.5	88.3	.....
Less: Interest received by government	22.4	22.3	21.8	22.3	22.3	22.8	22.2	22.5
Subsidies less current surplus of government enterprises	32.5	36.6	33.4	33.5	34.0	45.4	34.5	40.2
Subsidies	33.0	33.9	31.5	31.0	30.6	42.4	34.4	41.1
Less: Current surplus of government enterprises	.5	-2.7	-1.9	-2.5	-3.4	-3.0	-1	.9
Less: Wage accruals less disbursements	0	0	0	0	0	0	0	0
Current surplus or deficit (-), national income and product accounts	-21.1	72.8	58.8	74.4	92.0	65.8	122.7	.....
Social insurance funds	70.3	94.2	84.5	90.6	96.4	105.4	115.3	121.9
Other	-91.4	-21.5	-25.7	-16.2	-4.4	-39.6	7.4	.....

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

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Receipts	1,094.3	1,148.1	1,123.3	1,133.8	1,152.3	1,183.1	1,192.9	.....
Personal tax and nontax receipts	219.9	240.3	230.4	237.2	244.6	248.9	252.8	253.3
Income taxes	164.3	180.7	172.3	178.3	184.5	187.7	190.5	189.9
Nontaxes	32.0	34.5	33.6	34.2	34.9	35.5	36.2	36.9
Other	23.6	25.0	24.5	24.7	25.3	25.7	26.1	26.5
Corporate profits tax accruals	36.0	35.2	35.1	35.4	35.7	34.5	36.9	.....
Indirect business tax and nontax accruals	533.4	559.4	548.0	552.5	558.2	579.1	577.9	586.3
Sales taxes	261.5	271.6	268.4	270.4	271.1	276.6	283.8	288.2
Property taxes	209.1	217.4	213.9	216.3	218.5	221.1	223.9	226.4
Other	62.8	70.4	65.7	65.9	68.6	81.3	70.1	71.7
Contributions for social insurance	79.9	82.1	81.1	81.7	82.4	83.2	84.2	85.0
Federal grants-in-aid	225.0	231.1	228.7	226.9	231.4	237.4	241.1	245.4
Current expenditures	960.1	997.9	983.0	992.5	1,003.6	1,012.6	1,023.2	1,037.4
Consumption expenditures	758.8	789.1	776.7	784.7	793.9	801.2	810.2	822.9
Transfer payments to persons	304.1	317.4	312.6	315.6	318.8	322.5	325.7	329.1
Net interest paid	-77.4	-83.0	-80.7	-82.2	-83.7	-85.3	-87.0	-88.8
Interest paid	63.3	63.9	63.6	63.8	64.0	64.2	64.3	64.5
Less: Interest received by government	140.6	146.9	144.3	146.0	147.7	149.4	151.4	153.3
Less: Dividends received by government	14.8	16.1	15.7	16.0	16.0	16.6	16.7	17.0
Subsidies less current surplus of government enterprises	-10.6	-9.5	-9.9	-9.6	-9.4	-9.1	-9.0	-8.8
Subsidies	.4	.4	.4	.4	.4	.4	.4	.4
Less: Current surplus of government enterprises	10.9	9.9	10.3	10.0	9.8	9.5	9.4	9.2
Less: Wage accruals less disbursements	0	0	0	0	0	0	0	0
Current surplus or deficit (-), national income and product accounts	134.1	150.2	140.2	141.3	148.7	170.5	169.7	.....
Social insurance funds	68.1	67.6	67.5	67.7	67.4	67.9	67.8	68.0
Other	66.0	82.5	72.7	73.6	81.3	102.6	101.9	.....

Table 3.7.—Government Consumption Expenditures and Gross Investment by Type

[Billions of dollars]

Table with columns for years 1997, 1998, and 1999, subdivided into quarterly data for 1998 and 1999. Rows include Government consumption expenditures and gross investment, Federal, National defense, Nondefense, and State and local.

Table 3.8.—Real Government Consumption Expenditures and Real Gross Investment by Type

[Billions of chained (1992) dollars]

Table with columns for years 1997, 1998, and 1999, subdivided into quarterly data for 1998 and 1999. Rows include Government consumption expenditures and gross investment, Federal, National defense, Nondefense, and State and local.

1. Gross government investment consists of general government and government enterprise expenditures for fixed assets; inventory investment is included in government consumption expenditures.
2. Consumption expenditures for durable goods excludes expenditures classified as investment, except for goods transferred to foreign countries by the Federal Government.
3. Compensation of government employees engaged in new force-account construction and related expenditures for goods and services are classified as investment in structures.
4. Consumption of fixed capital, or depreciation, is included in government consumption expenditures as a partial measure of the value of the services of general government fixed assets.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines, excluding the lines in the addenda.
Chain-type quantity indexes for the series in this table appear in table 7.11. See footnotes to table 3.7.

4. Foreign Transactions

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

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Receipts from the rest of the world	1,230.9	1,228.1	1,243.6	1,220.2	1,201.2	1,247.5	1,237.0	.....
Exports of goods and services ...	965.4	959.0	973.3	949.6	936.2	976.8	962.7	972.9
Goods ¹	688.3	680.8	694.5	668.8	663.3	696.6	677.7	683.1
Durable	483.0	487.4	495.4	474.3	476.6	503.3	491.7	494.3
Nondurable	205.3	193.4	199.2	194.5	186.6	193.3	186.0	188.8
Services ¹	277.1	278.2	278.8	280.8	272.9	280.2	285.0	289.8
Receipts of factor income	265.5	269.2	270.3	270.6	265.0	270.7	274.3	.....
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0
Payments to the rest of the world	1,230.9	1,228.1	1,243.6	1,220.2	1,201.2	1,247.5	1,237.0	.....
Imports of goods and services ...	1,058.8	1,110.2	1,097.1	1,108.9	1,101.7	1,133.0	1,159.6	1,198.6
Goods ¹	888.3	932.4	920.9	931.8	924.7	952.2	975.2	1,009.6
Durable	589.5	637.6	625.6	634.1	630.1	660.6	678.4	693.7
Nondurable	298.8	294.8	295.2	297.7	294.6	291.6	296.7	315.9
Services ¹	170.4	177.8	176.2	177.1	177.0	180.8	184.5	189.0
Payments of factor income	273.5	289.6	285.1	289.3	292.1	291.9	294.6	.....
Transfer payments (net)	39.5	41.0	37.0	36.8	39.1	51.0	37.5	38.8
From persons (net)	18.9	19.9	19.2	19.9	20.0	20.6	20.2	20.6
From government (net)	12.7	13.2	9.9	9.0	11.2	22.6	9.9	10.7
From business	8.0	7.9	7.9	7.9	8.0	7.8	7.4	7.5
Net foreign investment	-140.9	-212.6	-175.6	-214.8	-231.6	-228.3	-254.7	.....

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment are reclassified from goods to services.

Table 4.2.—Real Exports and Imports of Goods and Services and Receipts and Payments of Factor Income

[Billions of chained (1992) dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Exports of goods and services	970.0	984.7	991.9	972.1	965.3	1,009.6	996.5	1,007.6
Goods ¹	726.5	742.6	748.5	726.3	727.3	768.4	751.2	760.0
Durable	554.5	573.3	577.9	556.2	562.9	596.4	584.6	591.2
Nondurable	180.8	179.7	181.1	179.3	174.9	183.5	178.1	180.4
Services ¹	247.0	246.4	247.8	248.8	242.1	247.0	249.6	252.0
Receipts of factor income	238.0	239.5	241.0	241.0	235.7	240.4	242.8	.....
Imports of goods and services	1,106.1	1,222.9	1,190.4	1,217.3	1,224.3	1,259.6	1,300.1	1,330.6
Goods ¹	945.7	1,054.4	1,021.0	1,048.8	1,056.3	1,091.7	1,127.6	1,158.4
Durable	667.7	752.8	726.9	745.5	749.8	789.1	813.3	841.5
Nondurable	280.3	305.4	297.6	306.7	309.9	307.6	319.3	322.8
Services ¹	161.8	171.2	171.3	171.0	170.8	171.6	176.5	177.0
Payments of factor income	240.7	252.7	249.6	252.8	254.6	253.9	255.3	.....

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment are reclassified from goods to services.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. Chain-type quantity indexes for the series in this table appear in table 7.9.

Table 4.3.—Exports and Imports of Goods and Services by Type of Product

[Billions of dollars]

Table with columns for years 1997, 1998, 1998 (I-IV), and 1999 (I-II). Rows include Exports of goods and services, Exports of goods, Imports of goods and services, and Imports of goods.

Table 4.4.—Real Exports and Imports of Goods and Services by Type of Product

[Billions of chained (1992) dollars]

Table with columns for years 1997, 1998, 1998 (I-IV), and 1999 (I-II). Rows include Exports of goods and services, Exports of goods, Imports of goods and services, and Imports of goods.

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment are reclassified from goods to services.

2. Includes parts of foods, feeds, and beverages; of nondurable industrial supplies and materials; and of nondurable nonautomotive consumer goods.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line following the detail for exports is the difference between the aggregate "exports of goods and services" and the sum of the detailed lines for exports of goods and export of services. The residual line following the detail for imports is the difference between the aggregate "imports of goods and services" and the detailed lines for imports of goods and imports of services.

Chain-type quantity indexes for the series in this table appear in table 7.10. See footnotes to table 4.3.

Table 5.10.—Change in Business Inventories by Industry Group

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Change in business inventories	67.4	59.3	95.5	39.2	57.0	45.7	39.5	19.6
Farm	4.3	6.7	5.0	7.7	7.7	6.3	3.1	3.2
Nonfarm	63.1	52.7	90.5	31.5	49.3	39.3	36.4	16.3
Change in book value ¹	52.1	33.2	56.3	21.2	32.0	23.3	19.4	36.5
Inventory valuation adjustment ²	11.0	19.5	34.3	10.3	17.3	16.0	17.1	-20.2
Manufacturing	21.4	20.9	31.8	25.1	20.1	6.5	-3.3	-2.9
Durable goods	12.5	14.5	21.9	19.9	12.3	3.9	-1.8	-4.4
Nondurable goods	8.9	6.4	9.9	5.3	7.7	2.6	-1.5	1.6
Wholesale trade	23.3	20.1	28.1	7.9	30.5	14.1	9.7	9.3
Durable goods	13.8	13.9	25.8	1.6	15.5	12.5	7.9	4.9
Nondurable goods	9.5	6.3	2.3	6.2	15.0	1.5	1.7	4.4
Merchant wholesalers	19.6	18.2	26.0	4.8	29.2	12.5	9.1	8.2
Durable goods	11.4	12.1	23.3	-1	13.8	11.4	7.0	2.8
Nondurable goods	8.2	6.0	2.7	5.0	15.4	1.1	2.2	5.4
Nonmerchant wholesalers	3.8	2.0	2.0	3.0	1.3	1.6	.5	1.1
Durable goods	2.4	1.8	2.4	1.8	1.7	1.1	.9	2.1
Nondurable goods	1.4	.2	-.4	1.2	-.4	.5	-.4	-1.0
Retail trade	7.3	3.0	18.3	-12.7	-5.5	11.7	17.1	1.1
Durable goods	5.1	-2.9	1.8	-17.8	-8.2	12.5	6.9	-2.3
Motor vehicle dealers ³	1.3	-6.4	-4.1	-15.3	-10.0	3.7	1.3	-6.5
Other ³	3.9	3.5	5.9	-2.5	1.8	8.7	5.5	4.2
Nondurable goods	2.2	5.9	16.5	5.1	2.7	-7	10.3	3.4
Other	11.0	8.7	12.3	11.2	4.3	7.0	12.9	8.8
Durable goods	2.2	-.2	.4	.8	-.1	-1.9	3.4	1.7
Nondurable goods	8.8	8.9	11.9	10.4	4.4	9.0	9.5	7.1

1. Beginning with 1982, this series is derived from the Census Bureau series "current cost inventories." For earlier periods, it is derived from the Census Bureau "book value inventories" series. The series differ in the treatment of inventories reported on a last-in, first-out (LIFO) basis: The series prior to 1982 is a mix of LIFO and non-LIFO inventories; the series beginning with 1982 is entirely on a non-LIFO basis.

2. Beginning with 1973, the inventory valuation adjustment (IVA) shown in this table differs from the IVA that adjusts business incomes. The IVA in this table reflects the mix of methods (first-in, first-out; last-in, first-out; etc.) underlying inventories derived primarily from Census Bureau statistics (see footnote 1). This mix differs from that underlying business income derived primarily from Internal Revenue Service statistics. Prior to 1973, the two IVA's are the same because information required for separate estimates is not available.

3. Prior to 1981, inventories of auto and home supply stores are included in motor vehicle dealers. Beginning with 1981, these inventories are included in "other durable goods."

Table 5.11.—Real Change in Business Inventories by Industry Group

[Billions of chained (1992) dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Change in business inventories	63.2	57.4	91.4	38.2	55.7	44.2	38.7	19.4
Farm	4.3	7.6	5.3	8.7	9.1	7.2	3.6	3.8
Nonfarm	58.8	50.1	85.9	29.9	47.0	37.5	35.1	15.8
Manufacturing	20.1	19.9	30.2	23.9	19.2	6.2	-3.3	-2.7
Durable goods	12.0	14.0	21.0	19.1	12.0	3.8	-1.7	-4.4
Nondurable goods	8.1	5.9	9.2	4.9	7.2	2.4	-1.6	1.5
Wholesale trade	22.0	19.5	27.0	7.6	29.6	13.7	9.4	9.1
Durable goods	13.3	13.5	25.1	1.6	15.2	12.3	7.8	4.8
Nondurable goods	8.7	6.0	2.3	5.9	14.3	1.5	1.7	4.2
Merchant wholesalers	18.5	17.5	24.8	4.7	28.3	12.2	8.9	8.0
Nondurable goods	11.0	11.8	22.6	-2	13.5	11.2	6.9	2.8
Nonmerchant wholesalers	3.6	2.0	2.1	3.0	1.3	1.5	.5	1.1
Durable goods	2.3	1.7	2.4	1.8	1.7	1.1	.9	2.1
Nondurable goods	1.2	.2	-.3	1.2	-.4	.4	-.4	-.9
Retail trade	6.8	2.8	17.3	-11.9	-5.3	10.9	16.1	1.1
Durable goods	4.7	-2.8	1.6	-16.3	-7.7	11.4	6.3	-2.1
Motor vehicle dealers	1.1	-5.8	-3.7	-13.8	-9.1	3.3	1.2	-5.9
Other	3.6	3.2	5.5	-2.3	1.7	8.1	5.2	3.9
Nondurable goods	2.1	5.7	16.1	4.9	2.6	-7	9.9	3.3
Other	9.9	8.1	11.5	10.4	4.0	6.6	12.3	8.2
Durable goods	1.9	-.2	.4	.7	-.1	-1.7	3.0	1.5
Nondurable goods	8.1	8.6	11.5	10.0	4.3	8.8	9.5	6.9
Residual	0	-1.0	-1.2	-1.5	-1.3	-.8	.1	-.3

NOTE.—Chained (1992) dollar series for real change in business inventories are calculated as the period-to-period change in chained-dollar end-of-period inventories. Quarterly changes in end-of-period inventories are stated at annual rates. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines.

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

[Billions of dollars]

	Seasonally adjusted quarterly totals					
	1998				1999	
	I	II	III	IV	I	II
Inventories ¹	1,363.6	1,366.5	1,369.1	1,372.7	1,388.0	1,404.1
Farm	110.8	108.9	103.9	104.6	111.7	114.2
Nonfarm	1,252.8	1,257.6	1,265.2	1,268.1	1,276.3	1,289.9
Durable goods	721.5	720.0	721.8	724.6	727.4	730.5
Nondurable goods	531.3	537.6	543.4	543.5	548.9	559.4
Manufacturing	466.1	469.1	471.1	467.5	465.3	467.9
Durable goods	292.1	295.4	296.1	293.9	292.7	292.4
Nondurable goods	174.0	173.7	175.0	173.6	172.6	175.5
Wholesale trade	324.8	326.0	332.0	334.8	336.9	340.2
Durable goods	206.2	205.6	208.4	210.8	212.5	214.3
Nondurable goods	118.6	120.4	123.6	124.0	124.4	125.9
Merchant wholesalers	280.2	280.7	286.7	289.5	291.0	293.5
Durable goods	178.7	177.9	180.4	182.6	184.1	185.3
Nondurable goods	101.4	102.8	106.3	106.9	107.0	108.2
Nonmerchant wholesalers	44.6	45.2	45.4	45.3	45.9	46.7
Durable goods	27.4	27.7	28.0	28.2	28.4	29.0
Nondurable goods	17.2	17.5	17.3	17.1	17.5	17.7
Retail trade	325.3	323.6	323.0	326.6	330.8	332.9
Durable goods	175.8	171.3	169.8	173.1	174.3	174.7
Motor vehicle dealers	86.9	83.2	81.2	82.3	81.8	80.6
Other	88.8	88.1	88.6	90.9	92.5	94.1
Nondurable goods	149.5	152.3	153.2	153.5	156.5	158.2
Other	136.6	138.9	139.1	139.2	143.4	148.9
Durable goods	47.4	47.6	47.5	46.8	48.0	49.2
Nondurable goods	89.2	91.3	91.6	92.4	95.4	99.7
Final sales of domestic business ²	582.3	590.6	596.0	607.8	617.3	625.1
Final sales of goods and structures of domestic business ²	312.5	315.2	316.9	325.7	331.3	335.0
Ratio of inventories to final sales of domestic business						
Inventories to final sales	2.34	2.31	2.30	2.26	2.25	2.25
Nonfarm inventories to final sales	2.15	2.13	2.12	2.09	2.07	2.06
Nonfarm inventories to final sales of goods and structures	4.01	3.99	3.99	3.89	3.85	3.85

1. Inventories are as of the end of the quarter. The quarter-to-quarter change in inventories calculated from current-dollar inventories in this table is not the current-dollar change in business inventories (CBI) component of GDP. The former is the difference between two inventory stocks, each valued at their respective end-of-quarter prices. The latter is the change in the physical volume of inventories valued at average prices of the quarter. In addition, changes calculated from this table are at quarterly rates; whereas, CBI 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 of general government and includes a small amount of final sales by farm.

Table 5.13.—Real Inventories and Real Domestic Final Sales of Business by Industry Group

[Billions of chained (1992) dollars]

	Seasonally adjusted quarterly totals					
	1998				1999	
	I	II	III	IV	I	II
Inventories ¹	1,300.3	1,309.9	1,323.8	1,334.8	1,344.5	1,349.4
Farm	110.9	113.1	115.3	117.1	118.0	119.0
Nonfarm	1,188.9	1,196.4	1,208.1	1,217.5	1,226.3	1,230.2
Durable goods	684.2	685.3	689.9	696.4	700.3	700.3
Nondurable goods	504.6	511.0	518.1	521.1	525.9	529.8
Manufacturing	442.8	448.7	453.5	455.1	454.3	453.6
Durable goods	281.1	285.9	288.9	289.8	289.4	288.3
Nondurable goods	161.8	163.0	164.8	165.4	165.0	165.4
Wholesale trade	311.6	313.5	320.9	324.3	326.7	329.0
Durable goods	200.8	201.2	205.0	208.1	210.0	211.2
Nondurable goods	111.2	112.6	116.2	116.6	117.0	118.1
Merchant wholesalers	267.5	268.7	275.7	278.8	281.0	283.0
Durable goods	173.6	173.6	177.0	179.8	181.5	182.2
Nondurable goods	94.1	95.3	99.0	99.2	99.8	101.0
Nonmerchant wholesalers	44.1	44.8	45.2	45.5	45.7	45.9
Durable goods	27.1	27.6	28.0	28.3	28.5	29.0
Nondurable goods	17.0	17.3	17.2	17.3	17.2	17.0
Retail trade	307.3	304.3	302.9	305.7	309.7	310.0
Durable goods	161.6	157.5	155.6	158.4	160.0	159.5
Motor vehicle dealers	78.7	75.3	73.0	73.8	74.1	72.6
Other	82.9	82.3	82.8	84.8	86.1	87.1
Nondurable goods	145.3	146.6	147.2	147.1	149.5	150.3
Other	127.3	129.9	130.9	132.5	135.6	137.6
Durable goods	41.0	41.2	41.2	40.8	41.5	41.9
Nondurable goods	86.4	88.9	90.0	92.2	94.5	96.3
Residual .....	.4	-.2	-.6	-.8	-.6	-.7
Final sales of domestic business ²	521.6	528.4	532.2	542.1	549.0	554.0
Final sales of goods and structures of domestic business ²	294.0	296.5	298.0	306.6	311.7	314.3
Ratio of inventories to final sales of domestic business						
Inventories to final sales	2.49	2.48	2.49	2.46	2.45	2.44
Nonfarm inventories to final sales	2.28	2.26	2.27	2.25	2.23	2.22
Nonfarm inventories to final sales of goods and structures	4.04	4.03	4.05	3.97	3.93	3.91

1. Inventories are as of the end of the quarter. Quarter-to-quarter changes calculated from this table are at quarterly rates, whereas, the change in the 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 of general government and includes a small amount of final sales by farm.

NOTE.—Chained (1992) dollar inventory series are calculated as the product of the chain-type quantity index and the average of the end-of-year fixed-weighted inventories for 1991 and 1992, divided by 100. Chained (1992) dollar final sales series are calculated as the product of the chain-type index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines for inventories.

6. Income and Employment by Industry

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

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
National income without capital consumption adjustment	6,598.0	6,928.6	6,817.1	6,882.3	6,963.3	7,051.9	7,185.8	.....
Domestic industries	6,606.0	6,949.3	6,832.2	6,901.3	6,990.6	7,073.3	7,206.3	.....
Private industries	5,728.5	6,043.0	5,937.2	5,999.1	6,080.4	6,155.5	6,274.1	.....
Agriculture, forestry, and fishing	106.0	104.2	99.9	102.0	100.9	114.0	102.8	.....
Mining	52.5	50.6	54.9	51.2	49.0	47.4	46.5	.....
Construction	305.1	331.1	320.1	326.7	334.3	343.1	350.6	.....
Manufacturing	1,151.0	1,168.7	1,170.9	1,169.3	1,170.3	1,164.1	1,181.1	.....
Durable goods	659.4	684.2	678.8	680.2	682.7	695.2	691.1	.....
Nondurable goods	491.6	484.4	492.1	489.1	487.6	468.9	490.0	.....
Transportation and public utilities	480.9	500.8	497.3	495.1	503.9	506.9	515.5	.....
Transportation	208.0	216.2	213.7	214.9	217.2	219.1	219.7	.....
Communications	139.3	149.3	148.5	147.3	150.8	150.4	156.9	.....
Electric, gas, and sanitary services	133.6	135.3	135.0	132.9	136.0	137.4	138.9	.....
Wholesale trade	384.2	409.2	400.9	408.5	414.0	413.5	420.4	.....
Retail trade	543.2	580.0	567.0	576.5	584.4	592.3	606.2	.....
Finance, insurance, and real estate	1,192.0	1,273.5	1,245.4	1,264.4	1,281.8	1,302.4	1,339.2	.....
Services	1,513.6	1,624.9	1,580.6	1,605.4	1,641.6	1,671.7	1,711.9	.....
Government	877.5	906.3	895.0	902.2	910.2	917.8	932.2	.....
Rest of the world	-8.0	-20.4	-14.8	-18.8	-27.0	-21.2	-20.3	.....

NOTE.— Estimates in this table are based on the 1987 Standard Industrial Classification.

Table 6.16C.—Corporate Profits by Industry Group

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Corporate profits with inventory valuation and capital consumption adjustments	817.9	824.6	829.2	820.6	827.0	821.7	868.8	.....
Domestic industries	718.9	729.0	730.6	723.3	737.0	724.9	767.4	.....
Financial	124.7	130.3	131.3	130.1	129.5	130.1	143.5	.....
Nonfinancial	594.2	598.7	599.3	593.2	607.5	594.8	623.8	.....
Rest of the world	99.0	95.7	98.6	97.3	89.9	96.8	101.4	.....
Receipts from the rest of the world	149.5	145.8	146.1	146.0	140.5	150.6	161.5	.....
Less: Payments to the rest of the world	50.4	50.1	47.5	48.7	50.5	53.8	60.1	.....
Corporate profits with inventory valuation adjustment	741.2	732.3	744.3	731.3	732.1	721.5	764.2	.....
Domestic industries	642.2	636.6	645.8	633.9	642.2	624.7	662.8	.....
Financial	130.0	134.2	136.3	134.4	133.2	133.0	146.2	.....
Federal Reserve banks	23.3	24.6	24.5	24.4	24.7	24.6	24.4	.....
Other	106.6	109.7	111.8	110.0	108.5	108.4	121.8	.....
Nonfinancial	512.3	502.4	509.4	499.5	509.0	491.7	516.6	.....
Manufacturing	214.4	192.8	197.1	194.6	195.0	184.5	195.5	.....
Durable goods	107.3	108.3	100.8	104.5	109.4	118.7	112.7	.....
Primary metal industries	5.6	5.4	6.3	5.7	4.9	4.8	1.2	.....
Fabricated metal products	15.5	15.0	12.6	15.5	17.5	14.6	16.5	.....
Industrial machinery and equipment	27.6	29.2	23.2	28.5	30.4	34.5	32.7	.....
Electronic and other electric equipment	24.8	21.8	21.9	19.8	20.5	25.0	24.6	.....
Motor vehicles and equipment	3.8	5.8	6.2	4.9	4.6	7.3	7.9	.....
Other	30.0	31.2	30.7	30.1	31.5	32.4	29.7	.....
Nondurable goods	107.1	84.5	96.2	90.2	85.6	65.8	82.9	.....
Food and kindred products	22.7	17.9	20.6	21.4	22.0	7.5	18.4	.....
Chemicals and allied products	28.1	21.1	27.0	18.9	18.4	20.0	24.8	.....
Petroleum and coal products	18.0	8.4	10.9	10.0	7.2	5.4	2.3	.....
Other	38.3	37.1	37.8	39.8	38.0	32.9	37.4	.....
Transportation and public utilities	88.4	90.4	91.7	87.5	92.7	89.7	94.1	.....
Transportation	17.6	17.7	17.3	17.5	18.5	17.7	16.5	.....
Communications	31.2	33.3	34.1	32.5	34.8	31.9	37.1	.....
Electric, gas, and sanitary services	39.7	39.3	40.3	37.5	39.5	40.0	40.5	.....
Wholesale trade	49.8	51.3	51.5	53.5	53.9	46.3	50.0	.....
Retail trade	61.2	67.2	67.4	67.4	67.1	66.8	73.0	.....
Other	98.5	100.7	101.8	96.5	100.2	104.4	103.9	.....
Rest of the world	99.0	95.7	98.6	97.3	89.9	96.8	101.4	.....

NOTE.— Estimates in this table are based on the 1987 Standard Industrial Classification.

Table 7.6.—Chain-Type Quantity and Price Indexes for Private Fixed Investment by Type

[Index numbers, 1992=100]

	1997	1998	Seasonally adjusted					
			1998				1999	
			I	II	III	IV	I	II
Chain-type quantity indexes								
Private fixed investment	145.25	161.82	156.36	161.36	162.23	167.35	171.56	175.33
Nonresidential	154.04	172.21	167.04	172.15	171.84	177.79	181.44	186.15
Structures	120.09	120.00	120.06	119.36	119.42	121.16	122.85	122.49
Nonresidential buildings, including farm	132.99	133.35	132.62	132.32	132.58	135.90	139.47	137.58
Utilities	83.31	85.65	84.77	85.64	86.08	86.12	87.66	90.04
Mining exploration, shafts, and wells	134.77	125.35	134.72	127.70	123.57	115.40	103.15	99.65
Other structures	70.12	69.81	68.64	67.01	70.27	73.33	71.89	87.12
Producers' durable equipment	170.04	198.16	190.08	198.43	197.91	206.20	210.92	218.57
Information processing and related equipment	222.13	289.24	263.41	280.84	297.80	314.91	334.06	359.50
Computers and peripheral equipment ¹	488.82	800.44	664.79	754.21	843.02	939.75	1,030.61	1,124.15
Other	140.28	156.49	151.52	154.79	158.26	161.38	167.33	178.44
Industrial equipment	140.93	148.53	147.28	148.36	148.98	149.49	146.84	147.65
Transportation and related equipment	162.83	188.02	185.27	194.89	176.07	195.83	192.93	201.60
Other	142.95	155.99	152.09	157.63	159.20	155.04	163.07	161.22
Residential	125.36	138.34	132.34	137.05	140.31	143.68	148.93	150.79
Structures	125.33	138.43	132.34	137.10	140.43	143.84	149.09	150.91
Single family	117.72	131.29	124.67	129.88	133.54	137.05	143.30	142.27
Multifamily	154.04	162.96	169.09	158.07	158.70	165.96	180.12	178.03
Other structures	131.79	144.85	137.71	144.15	147.42	150.12	152.69	159.05
Producers' durable equipment	126.88	135.09	132.40	135.23	135.42	137.33	142.44	146.17
Chain-type price indexes								
Private fixed investment	104.45	103.20	103.81	103.33	102.91	102.76	102.56	102.48
Nonresidential	100.15	97.71	98.90	98.12	97.21	96.61	96.12	95.75
Structures	118.22	121.58	120.58	121.49	121.85	122.40	122.67	123.36
Nonresidential buildings, including farm	117.79	121.90	120.29	121.38	122.38	123.53	124.06	124.97
Utilities	116.62	117.60	117.13	117.36	117.91	117.99	117.35	117.54
Mining exploration, shafts, and wells	126.85	127.66	131.00	131.83	126.05	121.77	121.10	120.04
Other structures	115.51	118.16	117.66	117.60	118.43	118.95	119.24	120.37
Producers' durable equipment	93.88	89.82	91.57	90.35	89.13	88.23	87.56	86.93
Information processing and related equipment	69.31	60.33	64.12	61.49	58.89	56.81	55.21	54.05
Computers and peripheral equipment ¹	37.75	27.21	31.23	28.40	25.65	23.57	21.99	20.92
Other	99.14	97.99	98.58	98.04	97.79	97.56	97.50	97.31
Industrial equipment	110.12	110.79	110.52	110.77	110.80	111.07	111.31	111.20
Transportation and related equipment	108.35	108.08	107.99	107.91	108.06	108.33	108.89	109.01
Other	109.15	110.25	109.84	109.97	110.33	110.88	111.12	111.21
Residential	115.96	118.42	117.21	117.71	118.77	120.00	120.66	121.48
Structures	116.29	118.82	117.58	118.10	119.17	120.45	121.15	122.01
Single family	119.90	122.40	121.04	121.45	122.68	124.42	125.21	126.02
Multifamily	112.20	114.51	113.25	113.62	114.78	116.40	117.14	117.90
Other structures	112.11	114.71	113.59	114.27	115.14	115.82	116.39	117.32
Producers' durable equipment	104.03	103.68	103.92	103.41	103.92	103.45	102.72	102.01

1. Includes new computers and peripheral equipment only.

Table 7.9.—Chain-Type Quantity and Price Indexes for Exports and Imports of Goods and Services and for Receipts and Payments of Factor Income

[Index numbers, 1992=100]

	1997	1998	Seasonally adjusted					
			1998				1999	
			I	II	III	IV	I	II
Chain-type quantity indexes								
Exports of goods and services	151.70	154.00	155.12	152.03	150.96	157.89	155.85	157.59
Goods ¹	161.92	165.52	166.82	161.87	162.10	171.27	167.43	169.40
Durable	184.30	190.56	192.06	184.87	187.09	198.20	194.31	196.49
Nondurable	122.31	121.60	122.56	121.32	118.34	124.17	120.49	122.08
Services ¹	129.48	129.20	129.91	130.46	126.93	129.48	130.84	132.12
Receipts of factor income	172.59	173.71	174.77	174.79	170.96	174.30	176.10	176.10
Imports of goods and services	165.35	182.81	177.95	181.97	183.02	188.30	194.35	198.91
Goods ¹	173.56	193.53	187.38	192.49	193.87	200.36	206.95	212.60
Durable	192.73	217.30	209.81	215.18	216.42	227.78	234.75	242.91
Nondurable	141.26	153.94	149.97	154.59	156.18	155.03	160.94	162.69
Services ¹	130.39	137.93	138.03	137.82	137.60	138.29	142.20	142.65
Payments of factor income	189.82	199.28	196.82	199.34	200.76	200.21	201.31	201.31
Chain-type price indexes								
Exports of goods and services	99.53	97.39	98.13	97.68	96.98	96.75	96.61	96.55
Goods ¹	94.75	91.67	92.78	92.07	91.18	90.64	90.20	89.87
Durable	87.10	84.98	85.69	85.23	84.64	84.36	84.07	83.59
Nondurable	113.58	107.67	109.99	108.54	106.75	105.39	104.51	104.69
Services ¹	112.18	112.89	112.52	112.84	112.73	113.46	114.20	114.99
Receipts of factor income	111.56	112.37	112.16	112.27	112.42	112.64	112.94	112.94
Imports of goods and services	95.72	90.69	92.05	90.98	89.87	89.84	89.09	89.97
Goods ¹	93.94	88.33	90.07	88.72	87.42	87.11	86.37	87.04
Durable	88.29	84.67	86.02	85.01	83.98	83.66	83.37	82.38
Nondurable	106.63	96.31	98.99	96.82	94.86	94.59	92.71	97.63
Services ¹	105.33	103.83	102.85	103.52	103.63	105.32	104.50	106.73
Payments of factor income	113.61	114.59	114.23	114.46	114.71	114.97	115.38	115.38

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services. Beginning with 1986, repairs and alterations of equipment are reclassified from goods to services.

Table 7.14.—Chain-Type Quantity and Price Indexes for Gross Domestic Product by Sector

[Index numbers, 1992=100]

	1997	1998	Seasonally adjusted					
			1998				1999	
			I	II	III	IV	I	II
Chain-type quantity indexes								
Gross domestic product	116.42	120.94	119.54	120.09	121.17	122.95	124.26	124.97
Business ¹	118.91	124.10	122.53	123.11	124.33	126.42	127.94	128.76
Nonfarm ¹	119.02	124.23	122.66	123.25	124.45	126.57	128.10	128.90
Nonfarm less housing	119.95	125.61	124.02	124.56	125.77	128.08	129.65	130.43
Housing	111.29	113.01	111.60	112.58	113.64	114.22	115.50	116.45
Farm	112.04	114.75	113.12	113.40	116.17	116.30	116.19	119.05
Households and institutions	115.20	117.82	117.06	117.43	118.04	118.77	119.32	119.83
Private households	101.12	98.50	97.46	98.19	98.78	99.56	100.47	101.07
Nonprofit institutions	115.74	118.57	117.82	118.17	118.78	119.51	120.05	120.55
General government ²	100.66	101.61	101.10	101.44	101.84	102.07	102.39	102.44
Federal	85.80	84.53	84.71	84.51	84.55	84.36	83.97	83.41
State and local	108.83	111.02	110.12	110.76	111.37	111.84	112.55	112.94
Chain-type price indexes								
Gross domestic product	111.57	112.71	112.33	112.57	112.85	113.08	113.53	113.98
Business ¹	110.89	111.76	111.52	111.66	111.86	111.99	112.30	112.69
Nonfarm ¹	111.06	112.08	111.83	111.96	112.21	112.33	112.72	113.17
Nonfarm less housing	110.54	111.28	111.16	111.19	111.37	111.39	111.75	112.18
Housing	115.66	119.26	117.76	118.79	119.75	120.75	121.48	122.17
Farm	99.93	90.29	91.17	92.03	88.09	89.85	84.31	80.04
Households and institutions	112.42	115.74	113.59	115.33	116.54	117.49	118.62	119.61
Private households	117.56	121.63	120.13	121.10	122.21	123.09	123.79	124.86
Nonprofit institutions	112.24	115.53	113.36	115.13	116.34	117.29	118.43	119.42
General government ²	116.12	118.54	117.80	118.19	118.75	119.43	120.83	121.51
Federal	119.48	121.53	121.38	121.25	121.47	122.02	125.23	125.43
State and local	114.57	117.14	116.16	116.77	117.46	118.19	118.85	119.72

1. Gross domestic business product equals gross domestic product less gross product of households and institutions and of general government. Gross nonfarm product equals gross domestic business product less gross farm product.

2. Equals compensation of general government employees plus general government consumption of fixed capital.

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

[Dollars]

Current-dollar cost and profit per unit of real gross domestic product ¹	1.063	1.061	1.061	1.061	1.062	1.060	1.061
Consumption of fixed capital	.100	.099	.099	.100	.099	.099	.098
Net domestic product	.963	.962	.962	.962	.962	.962	.963
Indirect business tax and nontax liability plus business transfer payments less subsidies	.105	.105	.105	.104	.104	.107	.104
Domestic income	.857	.857	.858	.857	.858	.855	.859
Compensation of employees	.691	.699	.697	.699	.699	.700	.700
Corporate profits with inventory valuation and capital consumption adjustments	.143	.136	.139	.136	.138	.133	.137
Profits tax liability	.041	.037	.037	.037	.037	.035	.036
Profits after tax with inventory valuation and capital consumption adjustments	.102	.100	.102	.099	.100	.098	.101
Net interest	.023	.022	.022	.022	.022	.022	.022

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

Table 7.16.—Implicit Price Deflators for Inventories of Business by Industry Group

[Index numbers, 1992=100]

	Seasonally adjusted					
	1998				1999	
	I	II	III	IV	I	II
Inventories ¹	104.86	104.33	103.42	102.84	103.24	104.05
Farm	99.90	96.34	90.08	89.34	94.62	95.97
Nonfarm	105.37	105.12	104.72	104.15	104.08	104.85
Durable goods	105.45	105.06	104.63	104.05	103.87	104.31
Nondurable goods	105.29	105.21	104.87	104.31	104.38	105.58
Manufacturing	105.28	104.54	103.88	102.73	102.44	103.16
Durable goods	103.93	103.34	102.51	101.40	101.14	101.40
Nondurable goods	107.53	106.53	106.17	104.95	104.61	106.12
Wholesale	104.23	103.98	103.46	103.23	103.12	103.41
Durable goods	102.68	102.21	101.68	101.31	101.17	101.45
Nondurable goods	106.70	106.85	106.37	106.37	106.32	106.64
Merchant wholesalers	104.74	104.49	103.97	103.86	103.57	103.71
Durable goods	102.94	102.47	101.93	101.56	101.41	101.69
Nondurable goods	107.74	107.88	107.39	107.76	107.21	107.09
Nonmerchant wholesalers	101.12	100.89	100.44	99.40	100.42	101.66
Durable goods	101.00	100.52	100.04	99.71	99.57	99.87
Nondurable goods	101.08	101.26	100.86	98.65	101.57	104.41
Retail trade	105.87	106.36	106.61	106.86	106.80	107.39
Durable goods	108.79	108.78	109.14	109.29	108.94	109.53
Motor vehicle dealers	110.42	110.62	111.32	111.44	110.42	110.94
Other	107.14	106.95	107.00	107.17	107.40	108.06
Nondurable goods	102.88	103.90	104.05	104.40	104.67	105.25
Other	107.33	106.97	106.26	105.01	105.72	108.18
Durable goods	115.55	115.50	115.25	114.70	115.60	117.40
Nondurable goods	103.23	102.72	101.80	100.25	100.86	103.60

1. Implicit price deflators are as of the end of the quarter and are consistent with the inventory stocks shown in tables 5.12 and 5.13.

Table 7.17.—Chain-Type Quantity Indexes for Gross Domestic Product by Major Type of Product

[Index numbers, 1992=100]

	1997	1998	Seasonally adjusted					
			1998				1999	
			I	II	III	IV	I	II
Gross domestic product	116.42	120.94	119.54	120.09	121.17	122.95	124.26	124.97
Final sales of domestic product	115.49	120.10	118.20	119.54	120.36	122.31	123.70	124.67
Change in business inventories								
Goods	123.56	129.75	129.29	127.95	129.04	132.74	134.05	134.72
Final sales	120.99	127.47	125.51	126.52	126.83	131.02	132.56	134.03
Change in business inventories								
Durable goods	142.91	154.56	153.95	150.48	152.58	161.25	161.64	162.07
Final sales	137.89	150.26	147.05	148.46	148.90	156.64	158.18	160.43
Change in business inventories								
Nondurable goods	110.51	113.24	112.85	112.86	113.31	113.95	115.80	116.61
Final sales	109.42	112.08	110.92	111.67	111.89	113.83	115.35	116.34
Change in business inventories								
Services	111.36	114.82	113.01	114.55	115.51	116.20	117.00	117.87
Structures	119.55	124.35	122.03	123.37	125.25	126.74	131.37	131.05
Addenda:								
Motor vehicle output	127.05	131.34	130.82	126.99	123.27	144.28	137.00	139.96
Gross domestic product less motor vehicle output	116.06	120.58	119.15	119.85	121.09	122.23	123.83	124.46

Table 7.18.—Chain-Type Quantity Indexes for Auto Output

[Index numbers, 1992=100]

	1997	1998	Seasonally adjusted					
			1998				1999	
			I	II	III	IV	I	II
Auto output	98.92	94.19	95.91	87.97	91.64	101.23	89.31	94.84
Final sales	98.12	96.44	95.55	97.46	93.58	99.17	91.59	101.73
Personal consumption expenditures	105.24	110.29	106.90	108.92	107.68	117.66	117.09	119.08
New autos	95.62	100.86	97.93	104.40	96.43	104.69	103.69	109.09
Net purchases of used autos	124.47	129.17	124.86	118.13	130.15	143.54	143.81	139.02
Producers' durable equipment	125.32	122.22	123.90	127.06	113.54	124.38	121.38	130.10
New autos	127.54	125.10	126.51	129.83	115.24	128.83	126.05	134.54
Net purchases of used autos	128.69	127.18	128.18	131.70	115.82	133.02	130.58	138.62
Net exports								
Exports	110.27	104.75	109.74	104.74	92.99	111.51	101.35	111.48
Imports	139.33	153.07	148.67	150.41	144.57	168.63	180.99	169.17
Gross government investment	89.31	93.91	79.51	96.67	100.29	99.18	87.30	80.95
Change in business inventories of new and used autos								
New								
Used								
Addenda:								
Domestic output of new autos ¹	110.36	104.93	105.39	97.38	105.25	111.68	104.95	103.90
Sales of imported new autos ²	106.63	118.40	115.47	121.68	108.48	127.97	127.99	137.23

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 gross government investment.

Table 7.19.—Chain-Type Quantity Indexes for Truck Output

[Index numbers, 1992=100]

Truck output¹	167.41	184.68	180.93	183.04	168.66	206.08	205.35	204.76
Final sales	166.62	190.43	180.63	198.82	178.98	203.29	202.44	200.69
Personal consumption expenditures	130.57	152.77	140.51	155.09	145.52	169.97	167.09	165.59
Producers' durable equipment	209.96	236.65	229.67	243.87	225.78	247.28	259.72	269.87
Net exports								
Exports	184.82	176.17	203.99	201.28	148.59	150.80	147.33	149.34
Imports	134.35	125.77	132.89	115.33	122.43	132.45	154.71	182.48
Gross government investment	122.69	116.49	106.46	130.04	98.50	130.95	113.82	92.19
Change in business inventories								

1. Includes new trucks only.

Table 8.2.—Contributions to Percent Change in Real Gross Domestic Product

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Percent change at annual rate:								
Gross domestic product	3.9	3.9	5.5	1.8	3.7	6.0	4.3	2.3
Percentage points at annual rates:								
Personal consumption expenditures	2.31	3.32	4.09	4.09	2.78	3.48	4.56	2.73
Durable goods .....	.56	.82	1.23	.91	.20	1.90	1.09	.48
Nondurable goods .....	.49	.77	1.41	1.01	.42	.84	1.77	.59
Services	1.26	1.73	1.40	2.14	2.15	.74	1.70	1.67
Gross private domestic investment	1.65	1.51	4.07	-75	1.22	1.42	1.31	.52
Fixed investment	1.18	1.58	2.82	1.95	.33	1.95	1.58	1.38
Nonresidential	1.08	1.15	2.21	1.35	-.08	1.52	.91	1.15
Structures .....	.20	0	-.15	-.07	.01	.17	.15	-.03
Producers' durable equipment	.88	1.15	2.36	1.42	-.09	1.35	.76	1.18
Residential .....	.10	.43	.60	.60	.41	.43	.66	.23
Change in business inventories .....	.47	-.06	1.22	-2.66	.89	-.53	-.27	-.86
Net exports of goods and services	-.27	-1.13	-2.24	-2.08	-.62	.52	-2.23	-.75
Exports	1.43	.19	-.33	-.92	-.32	2.02	-.58	.49
Goods	1.21	.19	-.29	-.98	.04	1.76	-.68	.36
Services .....	.22	-.01	-.04	.06	-.36	.26	.10	.13
Imports	-1.71	-1.32	-1.94	-1.18	-.30	-1.50	-1.65	-1.24
Goods	-1.51	-1.20	-1.75	-1.19	-.32	-1.46	-1.42	-1.22
Services	-.20	-.12	-.19	.01	.01	-.04	-.23	-.03
Government consumption expenditures and gross investment	.24	.18	-.34	.64	.27	.60	.70	-.21
Federal	-.11	-.06	-.57	.44	-.09	.44	-.08	-.19
National defense	-.15	-.10	-.84	.38	.17	.06	-.23	-.13
Nondefense .....	.04	.04	.26	.06	-.26	.38	.14	-.07
State and local .....	.35	.24	.24	.20	.35	.16	.78	-.01

Table 8.3.—Selected Per Capita Product and Income Series in Current and Chained Dollars

[Dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Current dollars:								
Gross domestic product	30,278	31,492	31,132	31,277	31,561	31,995	32,381	32,617
Gross national product	30,248	31,416	31,077	31,207	31,461	31,917	32,307	32,596
Personal income	25,325	26,368	26,007	26,242	26,470	26,749	27,017	27,296
Disposable personal income	21,633	22,304	22,046	22,192	22,373	22,604	22,811	23,034
Personal consumption expenditures	20,508	21,490	21,078	21,394	21,612	21,873	22,243	22,550
Durable goods	2,512	2,681	2,618	2,668	2,657	2,781	2,835	2,852
Nondurable goods	5,975	6,151	6,064	6,134	6,173	6,233	6,382	6,496
Services	12,021	12,658	12,396	12,593	12,782	12,859	13,026	13,201
Chained (1992) dollars:								
Gross domestic product	27,138	27,943	27,718	27,786	27,970	28,297	28,525	28,621
Gross national product	27,125	27,891	27,683	27,739	27,897	28,243	28,476	28,572
Disposable personal income	19,349	19,790	19,632	19,719	19,829	19,980	20,101	20,173
Personal consumption expenditures	18,342	19,068	18,770	19,010	19,155	19,334	19,601	19,749
Durable goods	2,496	2,727	2,637	2,703	2,712	2,856	2,937	2,970
Nondurable goods	5,548	5,713	5,649	5,710	5,726	5,768	5,885	5,915
Services	10,309	10,655	10,506	10,623	10,738	10,751	10,833	10,919
Population (mid-period, thousands)	267,880	270,258	269,309	269,867	270,523	271,331	272,029	272,656

Table 8.4.—Auto Output

[Billions of dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Auto output	134.7	128.0	130.4	118.1	126.2	137.4	119.4	125.9
Final sales	134.8	131.4	130.1	132.5	127.8	135.3	122.8	135.9
Personal consumption expenditures	143.5	149.1	144.2	146.9	145.5	159.8	156.7	159.5
New autos	86.2	90.3	87.7	93.3	86.5	93.7	92.4	96.9
Net purchases of used autos	57.3	58.8	56.5	53.6	59.0	66.0	64.3	62.6
Producers' durable equipment	45.7	44.8	45.8	46.7	41.7	45.2	44.8	47.5
New autos	79.9	77.9	78.8	80.7	71.9	80.2	78.1	83.1
Net purchases of used autos	-34.2	-33.1	-33.0	-34.0	-30.2	-35.1	-33.4	-35.6
Net exports	-56.4	-64.6	-61.7	-63.3	-61.7	-71.9	-80.6	-73.0
Exports	16.8	16.0	16.7	16.0	14.2	17.2	15.6	17.2
Imports	73.1	80.7	78.5	79.3	75.9	89.1	96.3	90.2
Gross government investment	2.0	2.1	1.8	2.2	2.3	2.3	2.0	1.9
Change in business inventories of new and used autos	-1	-3.4	.4	-14.4	-1.7	2.0	-3.4	-10.0
New .....	.2	-2	1.8	-17.4	6.1	8.8	4.6	-6.0
Used	-3	-3.2	-1.4	3.0	-7.8	-6.7	-8.1	-4.0
Addenda:								
Domestic output of new autos ¹	120.0	114.1	114.8	104.8	115.6	121.1	113.5	112.0
Sales of imported new autos ²	63.1	69.6	67.9	71.4	63.9	75.2	74.9	80.1

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 gross government investment.

Table 8.5.—Real Auto Output

[Billions of chained (1992) dollars]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II
Auto output	120.2	114.5	116.6	106.9	111.4	123.0	108.5	115.3
Final sales	119.8	117.7	116.6	119.0	114.2	121.1	111.8	124.2
Personal consumption expenditures	123.7	129.7	125.7	128.1	126.6	138.3	137.7	140.0
New autos	78.5	82.8	80.4	85.7	79.2	86.0	85.1	89.6
Net purchases of used autos	44.1	45.8	44.3	41.9	46.1	50.9	51.0	49.3
Producers' durable equipment	44.2	43.1	43.7	44.8	40.0	43.9	42.8	45.9
New autos	72.8	71.4	72.2	74.1	65.8	73.6	72.0	76.8
Net purchases of used autos	-28.1	-27.8	-28.0	-28.8	-25.3	-29.1	-28.5	-30.3
Net exports	-49.8	-57.0	-54.3	-55.8	-54.7	-63.4	-70.7	-63.7
Exports	15.7	14.9	15.7	14.9	13.3	15.9	14.5	15.9
Imports	65.5	72.0	69.9	70.7	68.0	79.3	85.1	79.6
Gross government investment	1.8	1.9	1.6	2.0	2.0	2.0	1.8	1.6
Change in business inventories of new and used autos .....	.4	-3.4	-1	-12.3	-3.0	1.9	-3.4	-9.3
New .....	.7	-4	1.3	-15.8	4.5	8.5	4.6	-5.5
Used	-2	-2.7	-1.2	2.6	-6.5	-5.6	-6.9	-3.4
Residual .....	.4	.6	.2	1.0	.3	.1	0	.9
Addenda:								
Domestic output of new autos ¹	110.3	104.9	105.3	97.3	105.2	111.6	104.9	103.8
Sales of imported new autos ²	57.5	63.8	62.3	65.6	58.5	69.0	69.0	74.0

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 gross government investment.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines, excluding the lines in the addenda.

Chain-type quantity indexes for the series in this table appear in table 7.18.

Table 8.6.—Truck Output

[Billions of dollars]

Truck output ¹	158.9	173.8	169.9	171.5	158.6	195.1	194.6	194.8
Final sales	155.6	176.3	166.9	183.3	165.6	189.3	188.8	187.9
Personal consumption expenditures	69.2	80.4	74.0	81.4	76.6	89.6	88.2	87.6
Producers' durable equipment	82.3	91.9	88.8	94.2	87.5	97.0	102.0	106.4
Net exports	-4.9	-4.5	-3.6	-1.7	-5.8	-6.9	-9.8	-13.0
Exports	10.9	10.5	12.2	12.0	8.9	9.0	8.9	9.1
Imports	15.8	15.0	15.8	13.8	14.7	15.9	18.7	22.1
Gross government investment	9.0	8.5	7.7	9.4	7.2	9.7	8.4	6.8
Change in business inventories	3.3	-2.5	3.0	-11.7	-6.9	5.8	5.8	7.0

1. Includes new trucks only.

Table 8.7.—Real Truck Output

[Billions of chained (1992) dollars]

Truck output ¹	140.2	154.6	151.5	153.3	141.2	172.6	172.0	171.5
Final sales	137.3	156.9	148.9	163.9	147.5	167.5	166.8	165.4
Personal consumption expenditures	59.8	70.0	64.4	71.1	66.7	77.9	76.6	75.9
Producers' durable equipment	73.7	83.1	80.6	85.6	79.2	86.8	91.2	94.7
Net exports	-4.0	-3.6	-2.8	-1.1	-4.8	-5.7	-8.3	-11.1
Exports	10.3	9.8	11.3	11.2	8.3	8.4	8.2	8.3
Imports	14.3	13.4	14.2	12.3	13.0	14.1	16.5	19.4
Gross government investment	8.1	7.7	7.0	8.6	6.5	8.6	7.5	6.1
Change in business inventories	2.8	-2.2	2.5	-10.2	-6.0	4.9	4.9	5.8
Residual	-2	-4	-1	-7	-5	.1	.1	.1

1. Includes new trucks only.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines.

Chain-type quantity indexes for the series in this table appear in table 7.19.

Table B.4.—Personal Consumption Expenditures by Type of Expenditure

Table with columns: Billions of dollars (1995, 1996, 1997) and Billions of chained (1992) dollars (1995, 1996, 1997). Rows include categories like Personal consumption expenditures, Food and tobacco, Clothing, accessories, and jewelry, Personal care, Housing, Household operation, Medical care, Education and research, Religious and welfare activities, Foreign travel and other, net, and Residual.

1. Consists of purchases (including tips) of meals and beverages from retail, service, and amusement establishments, hotels, dining and buffet cars, schools, school fraternities, institutions, clubs, and industrial lunchrooms. Includes meals and beverages consumed both on- and off-premise.
2. Includes luggage.
3. Consists of watch, clock, and jewelry repairs, costume and dress suit rental, and miscellaneous personal services.
4. Consists of rent for space and for heating and plumbing facilities, water heaters, lighting fixtures, kitchen cabinets, linoleum, storm windows and doors, window screens, and screen doors, but excludes rent for appliances and furniture and purchases of fuel and electricity.
5. Consists of space rent (see footnote 4) and rent for appliances, furnishings, and furniture.
6. Consists of transient hotels, motels, clubs, schools, and other group housing.
7. Consists of refrigerators and freezers, cooking ranges, dishwashers, laundry equipment, stoves, room air conditioners, sewing machines, vacuum cleaners, and other appliances.
8. Includes such house furnishings as floor coverings, comforters, quilts, blankets, pillows, picture frames, mirrors, art products, portable lamps, and clocks. Also includes writing equipment and hand, power, and garden tools.
9. Consists largely of textile house furnishings, including piece goods allocated to house furnishing use. Also includes lamp shades, brooms, and brushes.
10. Consists of maintenance services for appliances and house furnishings, moving and warehouse expenses, postage and express charges, premiums for fire and theft insurance on personal property less benefits and dividends, and miscellaneous household operation services.
11. Excludes drug preparations and related products dispensed by physicians, hospitals, and other medical services.
12. Consists of osteopathic physicians, chiropractors, private duty nurses, chiropractors, podiatrists, and others providing health and allied services, not elsewhere classified.
13. Consists of (1) current expenditures (including consumption of fixed capital) of nonprofit hospitals and nursing homes, and (2) payments by patients to proprietary and government hospitals and nursing homes.
14. Consists of (1) premiums, less benefits and dividends, for health, hospitalization, and accidental death and dismemberment insurance provided by commercial insurance carriers, and (2) administrative expenses (including consumption of fixed capital) of nonprofit and self-insured health plans.
15. Consists of premiums, less benefits and dividends, for income loss insurance.
16. Consists of premiums, less benefits and dividends, for privately administered workers' compensation.
17. Consists of (1) operating expenses of life insurance carriers and private noninsured pension plans, and (2) premiums, less benefits and dividends, of fraternal benefit societies. Excludes expenses allocated by commercial carriers to accident and health insurance.
18. Consists of current expenditures (including consumption of fixed capital) of trade unions and professional associations, employment agency fees, money order fees, spending for classified advertisements, tax return preparation services, and other personal business services.

19. Consists of premiums, less benefits and dividends, for motor vehicle insurance.
20. Consists of baggage charges, coastal and inland waterway fares, travel agents' fees, and airport bus fares.
21. Consists of admissions to professional and amateur athletic events and to racetracks.
22. Consists of dues and fees excluding insurance premiums.
23. Consists of billiard parlors; bowling alleys; dancing, riding, shooting, skating, and swimming places; amusement devices and parks; golf courses; sightseeing buses and guides; private flying operations; casino gambling; and other commercial participant amusements.
24. Consists of net receipts of lotteries and expenditures for purchases of pets and pet care services, cable TV, film processing, photographic studios, sporting and recreation camps, video cassette rentals, and recreational services, not elsewhere classified.
25. For private institutions, equals current expenditures (including consumption of fixed capital) less receipts—such as those from meals, rooms, and entertainments—accounted for separately in consumer expenditures, and less expenditures for research and development financed under contracts or grants. For government institutions, equals student payments of tuition.
26. For private institutions, equals current expenditures (including consumption of fixed capital) less receipts—such as those from meals, rooms, and entertainments—accounted for separately in consumer expenditures. For government institutions, equals student payments of tuition. Excludes child day care services, which are included in religious and welfare activities.
27. Consists of (1) fees paid to commercial, business, trade, and correspondence schools and for educational services, not elsewhere classified, and (2) current expenditures (including consumption of fixed capital) by research organizations and foundations for education and research.
28. For nonprofit institutions, equals current expenditures (including consumption of fixed capital) of religious, social welfare, foreign relief, and political organizations, museums, libraries, and foundations. The expenditures are net of receipts—such as those from meals, rooms, and entertainments—accounted for separately in consumer expenditures, and excludes relief payments within the United States and expenditures by foundations for education and research. For proprietary and government institutions, equals receipts from users.
29. Beginning with 1981, includes U.S. students' expenditures abroad; these expenditures were \$0.3 billion in 1981.
30. Beginning with 1981, includes nonresidents' student and medical care expenditures in the United States; student expenditures were \$2.2 billion and medical expenditures were \$0.4 billion in 1981.
NOTE.—Consumer durable goods are designated (d.), nondurable goods (n.d.), and services (s.).
Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines.

Table B.5.—Private Purchases of Structures by Type

	Billions of dollars			Billions of chained (1992) dollars		
	1995	1996	1997	1995	1996	1997
Private purchases of structures	478.8	521.2	560.1	430.5	458.4	478.4
Nonresidential	201.3	216.9	240.2	180.7	189.7	203.2
New	200.9	216.6	238.9	180.3	189.4	202.0
Nonresidential buildings, excluding farm	140.8	157.1	173.3	126.1	137.7	147.2
Industrial	32.5	32.7	31.4	29.1	28.6	26.7
Commercial	70.8	78.8	87.0	63.4	69.0	73.8
Office buildings ¹	29.8	32.4	38.2	26.7	28.4	32.4
Other ²	41.0	46.3	48.8	36.7	40.5	41.4
Religious	4.2	4.4	5.7	3.8	3.9	4.9
Educational	6.2	7.7	9.5	5.6	6.7	8.1
Hospital and institutional	12.5	13.1	15.3	11.2	11.5	13.0
Other ³	14.5	20.5	24.4	13.0	18.0	20.7
Utilities	33.9	31.7	33.5	30.6	27.8	28.7
Railroads	3.5	4.4	5.1	3.1	3.7	4.1
Telecommunications	11.0	11.7	11.5	10.1	10.2	9.9
Electric light and power	12.3	9.8	11.1	11.0	8.7	9.7
Gas	6.2	4.8	4.8	5.6	4.3	4.2
Petroleum pipelines .....	.9	1.0	1.0	.8	.9	.8
Farm	3.0	3.8	4.0	2.7	3.3	3.4
Mining exploration, shafts, and wells	16.3	18.1	22.7	14.4	15.3	17.9
Petroleum and natural gas	14.8	16.5	20.8	13.1	13.8	16.3
Other	1.5	1.6	1.9	1.3	1.4	1.6
Other ⁴	6.9	5.8	5.4	6.3	5.1	4.6
Brokers' commissions on sale of structures	1.6	1.8	2.0	1.5	1.7	1.8
Net purchases of used structures	-1.3	-1.5	-7	-1.1	-1.3	-6
Residential	277.5	304.3	319.9	249.8	268.6	275.1
New	246.7	269.7	282.7	220.6	236.0	240.4
New housing units	174.2	192.1	200.4	152.9	165.3	167.7
Permanent site	162.9	179.4	187.1	143.4	154.9	156.9
Single-family structures	145.0	159.1	164.4	126.8	136.6	137.2
Multifamily structures	17.9	20.3	22.6	16.9	18.7	20.2
Mobile homes	11.3	12.6	13.3	9.5	10.3	10.7
Improvements	72.0	77.0	81.5	67.3	70.2	72.0
Other ⁵ .....	.5	.6	.8	.4	.5	.7
Brokers' commissions on sale of structures	32.1	36.4	39.7	30.3	34.2	37.1
Net purchases of used structures	-1.3	-1.8	-2.5	-1.1	-1.5	-2.0
Residual				-1	0	-5

1. Consists of office buildings, except those constructed at industrial sites and those constructed by utilities for their own use.

2. Consists of stores, restaurants, garages, service stations, warehouses, mobile structures, and other buildings used for commercial purposes.

3. Consists of hotels and motels, buildings used primarily for social and recreational activities, and buildings not elsewhere classified, such as passenger terminals, greenhouses, and animal hospitals.

4. Consists primarily of streets, dams and reservoirs, sewer and water facilities, parks, and airfields.

5. Consists primarily of dormitories and fraternity and sorority houses.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines.

Table B.6.—Private Purchases of Producers' Durable Equipment by Type

	Billions of dollars			Billions of chained (1992) dollars		
	1995	1996	1997	1995	1996	1997
Private purchases of producers' durable equipment	533.7	578.6	628.5	538.7	597.1	668.5
Nonresidential equipment	526.4	571.0	620.5	531.7	589.8	660.9
Information processing and related equipment	173.0	189.4	206.6	201.5	245.4	298.0
Office, computing, and accounting machinery	73.4	83.0	90.3	107.1	154.1	212.7
Computers and peripheral equipment ¹	64.9	74.4	81.1	100.8	151.3	214.8
Other	8.5	8.6	9.2	8.2	8.4	9.0
Communication equipment	59.1	64.1	71.1	61.9	68.5	76.5
Instruments	22.8	24.5	26.1	21.6	22.8	24.3
Photocopy and related equipment	17.7	17.7	19.1	16.8	16.4	17.6
Industrial equipment	123.8	131.7	138.6	115.4	120.5	125.9
Fabricated metal products	11.8	12.9	13.4	11.1	11.8	12.0
Engines and turbines	4.2	4.7	3.8	4.0	4.3	3.4
Metalworking machinery	28.3	29.7	32.7	26.0	26.8	29.3
Special industry machinery, n.e.c.	32.5	33.5	34.0	30.2	30.5	30.7
General industrial, including materials handling, equipment	26.0	28.6	30.3	24.2	26.2	27.4
Electrical transmission, distribution, and industrial apparatus	20.9	22.2	24.4	19.9	20.9	23.0
Transportation and related equipment	126.2	137.2	152.0	119.4	127.6	140.3
Trucks, buses, and truck trailers	63.6	71.3	79.9	56.9	63.4	71.5
Autos	41.6	44.8	45.7	42.7	44.7	44.2
Aircraft	13.4	13.0	17.9	12.2	11.5	15.6
Ships and boats	1.8	2.3	2.4	1.7	2.1	2.2
Railroad equipment	5.8	5.8	6.1	5.2	5.1	5.4
Other equipment	108.2	117.1	128.3	101.4	107.8	116.9
Furniture and fixtures	28.2	29.7	33.7	26.2	27.0	30.1
Tractors	10.4	10.8	11.7	9.8	10.1	10.8
Agricultural machinery, except tractors	10.8	11.5	12.3	10.0	10.4	11.0
Construction machinery, except tractors	13.4	15.8	17.6	12.4	14.2	15.6
Mining and oilfield machinery	1.9	1.9	2.3	1.7	1.8	2.0
Service industry machinery	14.0	14.9	15.1	13.1	13.7	13.7
Electrical equipment, n.e.c.	11.7	12.9	14.0	11.3	12.5	13.8
Other	17.7	19.6	21.7	16.7	18.1	19.9
Less: Sale of equipment scrap, excluding autos	4.7	4.4	5.0	3.5	3.6	4.0
Residential equipment	7.3	7.6	8.0	7.0	7.3	7.7
Residual				-9.4	-29.1	-59.0
Addenda:						
Private purchases of producers' durable equipment	533.7	578.6	628.5			
Less: Dealers' margin on used equipment	6.1	6.6	6.8			
Net purchases of used equipment						
from government	1.0	1.2	1.2			
Plus: Net sales of used equipment	37.8	39.5	39.9			
Net exports of used equipment .....	.5	.4	.6			
Sale of equipment scrap	4.8	4.5	5.1			
Equals: Private purchases of new equipment	569.8	615.2	666.0			

1. Includes new computers and peripheral equipment only.

NOTE.—Chained (1992) dollar series are calculated as the product of the chain-type quantity index and the 1992 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates are usually not additive. The residual line is the difference between the first line and the sum of the most detailed lines. n.e.c. Not elsewhere classified.

Table B.10.—Farm Sector Output, Gross Product, and National Income

	Billions of dollars			Billions of chained (1992) dollars		
	1995	1996	1997	1995	1996	1997
Farm output	196.7	222.1	225.3	190.7	195.7	208.3
Cash receipts from farm marketings	194.1	201.7	207.2	188.8	177.3	191.0
Crops	107.2	108.7	110.6	97.1	87.1	96.0
Livestock	87.0	93.0	96.5	91.3	90.6	95.1
Farm housing	5.9	6.1	6.3	5.2	5.1	5.0
Farm products consumed on farms .....	.5	.4	.5	.5	.4	.4
Other farm income	5.5	6.3	7.1	5.0	5.3	6.2
Change in farm inventories	-9.3	7.6	4.3	-11.0	7.1	4.3
Crops	-9.6	8.8	5.1	-9.2	6.5	4.2
Livestock .....	.2	-1.1	-7	.3	-1.3	-8
Less: Intermediate goods and services						
purchased	124.4	130.5	135.1	118.5	116.9	118.2
Intermediate goods and services, other than rent	109.9	113.5	119.6	104.0	100.7	103.6
Rent paid to nonoperator landlords	14.5	17.0	15.5	14.5	16.4	14.6
Equals: Gross farm product	72.3	91.6	90.2	72.0	78.6	90.3
Less: Consumption of fixed capital	24.8	25.8	26.6	22.8	23.2	23.7
Equals: Net farm product	47.5	65.9	63.6	49.0	55.2	66.6
Less: Indirect business tax and nontax liability	5.1	5.1	5.5			
Plus: Subsidies to operators	6.1	6.1	6.2			
Equals: Farm national income	48.4	66.9	64.4			
Compensation of employees	15.7	16.5	16.9			
Wage and salary accruals	13.3	14.2	14.4			
Supplements to wages and salaries	2.4	2.3	2.5			
Proprietors' income and corporate profits with IVA and CCAAdj	23.3	40.6	37.3			
Proprietors' income	22.4	38.9	35.5			
Corporate profits .....	.8	1.7	1.8			
Net interest	9.5	9.8	10.2			

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

Table B.11.—Housing Sector Output, Gross Product, and National Income

	Billions of dollars			Billions of chained (1992) dollars		
	1995	1996	1997	1995	1996	1997
Housing output ¹	723.1	758.4	799.8	663.9	675.8	692.6
Nonfarm housing	717.2	752.3	793.5	658.7	670.7	687.6
Owner-occupied	532.4	559.1	590.3	487.4	496.0	508.9
Tenant-occupied	184.8	193.2	203.2	171.4	174.7	178.7
Farm housing	5.9	6.1	6.3	5.2	5.1	5.0
Less: Intermediate goods and services consumed	88.5	91.1	95.3	82.1	82.7	83.8
Equals: Gross housing product	634.6	667.2	704.5	581.8	593.0	608.7
Nonfarm housing	629.6	662.1	699.1	577.4	588.7	604.5
Owner-occupied	463.0	486.4	513.4	423.3	430.5	441.9
Tenant-occupied	166.5	175.6	185.8	154.2	158.3	162.6
Farm housing	5.0	5.2	5.3	4.4	4.4	4.2
Less: Consumption of fixed capital	115.9	119.6	126.2	103.7	104.6	107.2
Capital consumption allowances	59.7	63.0	67.1			
Less: CCAAdj	-56.2	-56.5	-59.1			
Equals: Net housing product	518.7	547.7	578.3	478.3	488.7	501.7
Less: Indirect business tax and nontax liability plus business transfer payments ..	116.0	119.9	123.5			
Plus: Subsidies less current surplus of government enterprises	20.8	21.9	22.3			
Equals: Housing national income	423.5	449.6	477.1			
Compensation of employees	8.1	8.5	9.1			
Proprietors' income with IVA and CCAAdj ...	25.0	26.5	27.9			
Rental income of persons with CCAAdj	105.2	119.7	127.7			
Corporate profits with IVA and CCAAdj	5.0	5.2	5.5			
Net interest	280.1	289.7	306.9			

1. Equals personal consumption expenditures for housing less expenditures for other housing as shown in table B.4.

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

Table C.1.—Historical Measures of Real Gross Domestic Product, Real Gross National Product, and Real Gross Domestic Purchases—Continued
 [Quarterly estimates are seasonally adjusted at annual rates]

Year and quarter	Billions of chained (1992) dollars			Percent change from preceding period		Chain-type price indexes		Implicit price deflators		Percent change from preceding period			
	Gross domestic product	Final sales of domestic product	Gross national product	Gross domestic product	Final sales of domestic product	Gross domestic product	Gross domestic purchases	Gross domestic product	Gross national product	Chain-type price index		Implicit price deflators	
										Gross domestic product	Gross domestic purchases	Gross domestic product	Gross national product
1988: I	5,785.3	5,774.2	5,802.3	2.4	6.2	84.69	84.81	84.67	84.69	2.9	3.0	2.7	2.8
II	5,844.0	5,840.1	5,857.5	4.1	4.6	85.56	85.68	85.56	85.59	4.2	4.2	4.3	4.3
III	5,878.7	5,869.2	5,889.4	2.4	2.0	86.67	86.58	86.66	86.69	5.3	4.3	5.2	5.2
IV	5,952.8	5,937.0	5,964.9	5.1	4.7	87.46	87.44	87.44	87.47	3.7	4.0	3.7	3.7
1989: I	6,011.0	5,970.0	6,023.1	4.0	2.2	88.44	88.47	88.45	88.48	4.5	4.8	4.7	4.7
II	6,055.6	6,010.9	6,065.5	3.0	2.8	89.40	89.52	89.39	89.42	4.4	4.8	4.3	4.3
III	6,088.0	6,063.1	6,101.8	2.2	3.5	90.13	90.14	90.13	90.16	3.3	2.8	3.3	3.3
IV	6,093.5	6,070.8	6,112.3	.4	.5	90.91	90.98	90.88	90.91	3.5	3.8	3.4	3.4
1990: I	6,152.6	6,144.6	6,172.8	3.9	5.0	92.01	92.17	92.00	92.04	4.9	5.4	5.0	5.1
II	6,171.6	6,127.5	6,188.0	1.2	-1.1	93.20	93.14	93.18	93.21	5.2	4.2	5.2	5.2
III	6,142.1	6,126.6	6,155.7	-1.9	-1	94.19	94.32	94.14	94.17	4.3	5.2	4.2	4.2
IV	6,079.0	6,108.1	6,111.3	-4.0	-1.2	95.14	95.68	95.11	95.13	4.1	5.9	4.2	4.2
1991: I	6,047.5	6,065.4	6,074.3	-2.1	-2.8	96.26	96.42	96.27	96.29	4.8	3.1	5.0	4.9
II	6,074.7	6,095.9	6,086.4	1.8	2.0	97.02	96.95	97.00	97.01	3.2	2.2	3.1	3.1
III	6,090.1	6,085.4	6,099.2	1.0	-7	97.70	97.58	97.70	97.71	-2.8	2.6	2.9	2.9
IV	6,105.3	6,083.8	6,119.5	1.0	-1	98.30	98.27	98.31	98.32	2.5	2.9	2.5	2.5
1992: I	6,175.7	6,175.8	6,192.0	4.7	6.2	99.14	99.04	99.13	99.13	3.4	3.2	3.4	3.4
II	6,214.2	6,203.8	6,225.2	2.5	1.8	99.81	99.76	99.79	99.79	2.8	2.9	2.7	2.7
III	6,260.7	6,249.5	6,270.3	3.0	3.0	100.17	100.28	100.17	100.17	1.4	2.1	1.5	1.5
IV	6,327.1	6,320.7	6,334.6	4.3	4.6	100.88	100.92	100.88	100.88	2.8	2.6	2.9	2.9
1993: I	6,327.9	6,297.3	6,351.3	.1	-1.5	101.85	101.71	101.84	101.84	3.9	3.2	3.9	3.8
II	6,359.9	6,344.9	6,375.9	2.0	3.1	102.38	102.28	102.35	102.34	2.1	2.3	2.0	2.0
III	6,393.5	6,379.3	6,415.3	2.1	2.2	102.83	102.64	102.83	102.83	1.8	1.4	1.9	1.9
IV	6,476.9	6,453.8	6,489.7	5.3	4.8	103.52	103.28	103.51	103.50	2.7	2.5	2.7	2.6
1994: I	6,524.5	6,473.0	6,540.5	3.0	1.2	104.16	103.80	104.13	104.14	2.5	2.0	2.4	2.5
II	6,600.3	6,526.7	6,609.3	4.7	3.4	104.74	104.46	104.71	104.71	2.2	2.6	2.2	2.2
III	6,629.5	6,580.4	6,635.6	1.8	3.3	105.39	105.24	105.39	105.38	2.5	3.0	2.6	2.6
IV	6,688.6	6,624.8	6,691.2	3.6	2.7	106.07	105.88	106.09	106.06	2.6	2.5	2.7	2.6
1995: I	6,717.5	6,661.8	6,735.9	1.7	2.2	106.74	106.47	106.75	106.73	2.5	2.2	2.5	2.6
II	6,724.2	6,700.0	6,746.3	.4	2.3	107.26	107.11	107.24	107.22	2.0	2.4	1.8	1.8
III	6,779.5	6,761.7	6,788.9	3.3	3.7	107.76	107.52	107.75	107.72	1.9	1.6	1.9	1.9
IV	6,825.8	6,803.3	6,846.8	2.8	2.5	108.30	107.99	108.29	108.26	2.0	1.8	2.0	2.0
1996: I	6,882.0	6,863.6	6,902.1	3.3	3.6	108.90	108.56	108.91	108.88	2.2	2.1	2.3	2.3
II	6,983.9	6,954.7	6,999.0	6.1	5.4	109.28	108.94	109.24	109.21	1.4	1.4	1.2	1.2
III	7,020.0	6,970.3	7,027.1	2.1	.9	109.77	109.34	109.74	109.70	1.8	1.5	1.8	1.8
IV	7,093.1	7,057.9	7,105.3	4.2	5.1	110.21	109.90	110.23	110.19	1.6	2.1	1.8	1.8
1997: I	7,166.7	7,108.1	7,167.8	4.2	2.9	110.97	110.51	111.00	110.95	2.8	2.2	2.8	2.8
II	7,236.5	7,155.5	7,239.3	4.0	2.7	111.45	110.76	111.43	111.37	1.7	.9	1.6	1.5
III	7,311.2	7,256.3	7,307.0	4.2	5.8	111.77	111.06	111.76	111.70	1.2	1.1	1.2	1.2
IV	7,364.6	7,294.8	7,350.7	3.0	2.1	112.09	111.34	112.08	112.03	1.1	1.0	1.2	1.2
1998: I	7,464.7	7,372.5	7,455.2	5.5	4.3	112.33	111.29	112.32	112.26	.9	-.2	.8	.8
II	7,498.6	7,456.4	7,485.9	1.8	4.6	112.57	111.42	112.56	112.50	.9	.4	.9	.9
III	7,566.5	7,507.6	7,546.7	3.7	2.8	112.85	111.60	112.84	112.78	1.0	.7	1.0	1.0
IV	7,677.7	7,628.9	7,663.3	6.0	6.6	113.08	111.84	113.07	113.01	.8	.9	.8	.8
1999: I	7,759.6	7,715.4	7,746.3	4.3	4.6	113.53	112.18	113.52	113.45	1.6	1.2	1.6	1.6
II	7,803.6	7,776.0	.....	2.3	3.2	113.98	112.76	113.97	.....	1.6	2.1	1.6	.....

Table C.5.—Price Index for Gross Domestic Purchases
[Average annual percent change, based on chain-type price indexes (1992=100)]

Table with 26 columns (Terminal year 1972-1997) and 26 rows (Initial year 1972-1997) showing price index data.

Table C.6.—Real Final Sales of Domestic Product
[Average annual percent change, based on chain-type quantity indexes (1992=100)]

Table with 26 columns (Terminal year 1972-1997) and 26 rows (Initial year 1972-1997) showing real final sales data.

Table C.7.—Real Disposable Personal Income
[Average annual percent change, based on chained (1992) dollar estimates]

Table with 26 columns (Terminal year 1972-1997) and 26 rows (Initial year 1972-1997) showing real disposable personal income data.

D. Domestic Perspectives

This table presents data collected from other government agencies and private organizations, as noted. Quarterly data are shown in the middle month of the quarter.

Table D.1.—Domestic Perspectives

	1997	1998	1998								1999					
			May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June
Consumer and producer prices, (monthly data seasonally adjusted) ¹																
Consumer price index for all urban consumers, 1982=100:																
All items	160.5	163.0	162.9	163.0	163.3	163.5	163.6	163.9	164.2	164.4	164.6	164.7	165.0	166.2	166.2	166.2
Less food and energy	169.5	173.4	173.3	173.5	173.8	174.2	174.5	174.8	175.0	175.6	175.7	175.8	176.0	176.7	176.9	177.0
Services	179.4	184.2	183.8	184.1	184.5	184.8	185.2	185.5	186.0	186.3	186.5	186.9	187.5	188.1	188.3	188.5
Producer price index, 1982=100:																
Finished goods	131.8	130.6	130.6	130.4	130.7	130.3	130.6	131.0	130.7	131.3	131.7	131.1	131.6	132.2	132.4	132.3
Less food and energy	142.4	143.7	143.5	143.4	143.7	143.7	144.1	144.3	144.4	145.9	145.6	145.7	145.7	145.8	145.9	145.6
Finished consumer goods	130.2	128.9	128.9	128.7	129.1	128.6	128.8	129.3	128.9	129.7	130.2	129.5	130.1	130.9	131.1	131.2
Capital equipment	138.2	137.5	137.5	137.3	137.4	137.2	137.6	137.7	137.8	137.7	137.6	137.7	137.6	137.6	137.9	137.5
Intermediate materials	125.6	123.0	123.6	123.2	123.2	122.8	122.4	122.2	121.9	121.1	121.1	120.7	121.2	121.9	122.1	122.6
Crude materials	111.1	96.7	100.0	97.3	97.4	93.3	91.6	93.9	93.8	90.4	90.9	88.8	89.5	90.7	95.7	97.0
Money, interest rates, and stock prices																
Money stock (monthly and quarterly data seasonally adjusted): ²																
Percent change:																
M1			-0.36	-0.04	-0.22	-0.30	0.23	0.53	0.80	0.40	-0.22	0.15	0.86	0.58	-0.33	-0.33
M2 .....			.47	.57	.42	.61	1.03	.97	.89	.84	.55	.47	.23	.74	.39	.35
Ratio:																
Gross domestic product to M1	7.583	7.886	7.820			7.949			7.982			8.043			8.050	
Personal income to M2	1.726	1.688	1.697	1.692	1.692	1.689	1.676	1.668	1.668	1.653	1.654	1.654	1.655	1.650	1.649	1.655
Interest rates (percent, not seasonally adjusted): ²																
Federal funds rate	5.46	5.35	5.49	5.56	5.54	5.55	5.51	5.07	4.83	4.68	4.63	4.76	4.81	4.74	4.74	4.76
Discount rate on new 91-day Treasury bills	5.07	4.81	5.03	4.99	4.96	4.94	4.74	4.08	4.44	4.42	4.34	4.45	4.48	4.28	4.51	4.59
Yield on new high-grade corporate bonds	7.40	6.44	6.63	6.43	6.35	6.34	6.27	6.21	6.42	6.13	6.14	6.33	6.52	6.58	6.86	7.21
10-Year U.S. Treasury bonds	6.35	5.26	5.65	5.50	5.46	5.34	4.81	4.53	4.83	4.65	4.72	5.00	5.23	5.18	5.54	5.90
Yield on municipal bonds, 20-bond average	5.52	5.09	5.20	5.12	5.14	5.10	4.99	4.93	5.03	4.98	5.01	5.03	5.10	5.08	5.18	5.37
Mortgage commitment rate	7.60	6.94	7.14	7.00	6.95	6.92	6.72	6.71	6.87	6.72	6.79	6.81	7.04	6.92	7.15	7.55
Average prime rate charged by banks	8.44	8.35	8.50	8.50	8.50	8.50	8.49	8.12	7.89	7.75	7.75	7.75	7.75	7.75	7.75	7.75
Index of stock prices (not seasonally adjusted): ³																
500 common stocks, 1941-43=10	872.72	1,084.31	1,108.42	1,108.39	1,156.58	1,074.62	1,020.64	1,032.47	1,144.43	1,190.05	1,248.77	1,246.58	1,281.66	1,334.76	1,332.07	1,322.55
Labor markets (thousands, monthly and quarterly data seasonally adjusted, unless otherwise noted) ¹																
Civilian labor force	136,297	137,673	137,369	137,498	137,407	137,481	138,081	138,116	138,193	138,547	139,347	139,271	138,816	139,091	139,019	139,408
Labor force participation rates (percent):																
Males 20 and over	77.0	76.8	76.8	76.7	76.8	76.5	76.8	76.7	76.8	76.8	77.1	77.0	76.7	76.7	76.5	76.7
Females 20 and over	60.5	60.4	60.4	60.4	60.2	60.4	60.4	60.4	60.4	60.6	60.9	60.8	60.6	60.8	60.7	61.0
16-19 years of age	51.6	52.8	52.4	53.0	52.3	52.6	53.5	53.1	52.4	52.9	52.4	53.2	52.1	51.9	52.1	51.1
Civilian employment	129,558	131,463	131,300	131,253	131,176	131,264	131,818	131,858	132,113	132,526	133,396	133,144	133,033	133,069	133,224	133,432
Ratio, civilian employment to working-age population (percent)	63.8	64.1	64.1	64.0	63.9	63.9	64.1	64.0	64.1	64.2	64.5	64.4	64.3	64.2	64.2	64.3
Persons engaged in nonagricultural activities	126,159	128,085	127,979	127,890	127,753	127,772	128,348	128,300	128,765	129,304	130,097	129,817	129,752	129,685	129,929	130,078
Employees on nonagricultural payrolls	122,690	125,826	125,478	125,689	125,808	126,170	126,361	126,567	126,841	127,186	127,378	127,730	127,813	128,134	128,129	128,397
Goods-producing industries	24,962	25,347	25,379	25,381	25,240	25,344	25,333	25,306	25,298	25,354	25,315	25,329	25,285	25,288	25,196	25,184
Services-producing industries	97,727	100,480	100,099	100,308	100,568	100,826	101,028	101,261	101,543	101,832	102,063	102,401	102,528	102,846	102,933	103,213
Average weekly hours, manufacturing	42.0	41.7	41.8	41.8	41.7	41.7	41.6	41.7	41.7	41.7	41.6	41.6	41.5	41.6	41.7	41.7
Average weekly overtime hours, manufacturing (hours)	4.8	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.3	4.6	4.7
Number of persons unemployed	6,739	6,210	6,039	6,245	6,231	6,217	6,263	6,258	6,080	6,021	5,950	6,127	5,783	6,022	5,795	5,975
Unemployment rates (percent):																
Total	4.9	4.5	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2	4.3
15 weeks and over	1.5	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.0	1.0	1.1	1.2
Average duration of unemployment (weeks)	15.8	14.5	14.7	14.1	14.3	13.7	14.3	14.1	14.4	14.1	13.4	13.8	13.5	13.1	13.4	14.5
Nonfarm business sector, 1992=100:																
Output per hour of all persons	104.9	107.2	106.6			107.3			108.5			109.4				
Unit labor costs	108.9	111.1	111.1			111.5			111.4			111.6				
Hourly compensation	114.3	119.1	118.5			119.7			120.9			122.1				

See footnotes at the end of the table.

Table D.1.—Domestic Perspectives—Continued

	1997	1998	1998									1999					
			May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	
Construction (monthly data seasonally adjusted at annual rates) ⁴																	
Total new private construction put in place (billions of dollars)	475.1	520.1	510.9	525.3	525.2	523.7	524.3	528.7	534.7	541.6	543.5	548.7	555.4	549.0	546.8	550.0	
Residential	265.9	294.3	288.0	291.9	297.3	297.3	299.8	302.1	306.3	310.3	315.8	318.5	323.1	322.3	322.8	322.0	
Nonresidential	167.6	181.9	178.3	185.2	182.2	182.5	181.6	184.8	186.6	190.0	185.8	189.0	189.3	184.7	182.5	183.7	
Housing starts (thousands of units):																	
Total	1,474	1,617	1,541	1,626	1,719	1,615	1,576	1,698	1,654	1,750	1,820	1,752	1,746	1,577	1,665	1,571	
1-unit structures	1,134	1,271	1,221	1,274	1,306	1,264	1,251	1,298	1,375	1,383	1,393	1,380	1,394	1,260	1,395	1,274	
New 1-family houses sold (thousands of units)	804	886	893	909	883	836	861	903	985	958	908	909	885	940	901	929	
Manufacturing and trade, inventories and sales (millions of dollars, monthly data seasonally adjusted) ⁴																	
Inventories:																	
Total manufacturing and trade	1,052,717	1,087,417	1,069,568	1,070,515	1,070,875	1,074,870	1,080,866	1,083,366	1,087,970	1,087,417	1,086,911	1,090,474	1,095,766	1,097,779	1,101,165	.....
Manufacturing	456,133	466,798	465,729	466,701	467,636	468,445	468,552	471,031	471,000	466,798	464,873	464,198	463,578	463,194	463,960	.....
Merchant wholesalers	273,003	286,962	277,746	277,518	277,466	280,591	284,128	283,776	285,716	286,962	285,906	287,768	288,432	288,882	289,644	.....
Retail trade	323,581	333,657	326,093	326,296	325,773	325,834	328,186	328,559	331,254	333,657	336,132	338,508	343,756	345,703	347,562	.....
Sales:																	
Total manufacturing and trade	8,995,737	9,309,551	770,842	774,639	773,762	772,454	779,478	781,447	785,777	793,488	792,110	801,136	809,887	810,005	819,521	.....
Manufacturing	3,929,419	4,052,248	333,622	335,110	335,380	336,445	340,481	340,133	341,423	344,088	341,670	343,724	349,065	347,568	350,856	.....
Merchant wholesalers	2,500,109	2,561,448	212,644	213,904	214,229	211,713	213,856	213,429	214,891	217,403	215,441	218,413	221,796	222,267	225,500	.....
Retail trade	2,566,209	2,695,855	224,576	225,625	224,153	224,296	225,141	227,855	229,463	231,997	234,999	238,999	239,026	240,170	243,165	.....
Industrial production indexes and capacity utilization rates (monthly data seasonally adjusted) ²																	
Industrial production indexes, 1992=100:																	
Total	126.8	131.3	131.9	130.6	130.5	132.4	131.9	132.4	132.2	132.3	132.3	132.5	133.3	133.7	134.0	134.2	
By industry:																	
Durable manufactures	147.1	157.5	157.2	154.8	154.4	159.8	159.6	161.2	161.0	161.5	161.4	161.7	163.1	164.2	165.2	165.9	
Nondurable manufactures	111.3	111.9	113.0	112.0	112.1	111.3	110.6	110.9	111.6	111.7	111.3	111.9	111.7	111.8	111.6	111.3	
By market category:																	
Consumer goods	114.1	115.2	116.8	115.1	114.0	116.1	114.8	115.2	114.8	114.9	115.2	115.3	115.3	115.6	115.6	115.6	
Capacity utilization rates (percent):																	
Total industry	82.9	81.8	82.6	81.5	81.1	82.0	81.3	81.3	80.8	80.7	80.3	80.2	80.5	80.5	80.4	80.3	
Manufacturing	82.0	80.8	81.6	80.2	79.8	80.7	80.1	80.3	80.1	80.0	79.5	79.5	79.5	79.6	79.6	79.4	
Credit market borrowing (billions of dollars, quarterly data seasonally adjusted at annual rates) ²																	
All sectors, by instrument:																	
Total	1,431.5	2,027.5	1,983.1	.....	.....	1,871.1	.....	.....	2,349.1	.....	.....	2,224.9	.....	.....	.....	.....
Open market paper	184.1	193.1	113.1	.....	.....	232.7	.....	.....	83.0	.....	.....	161.9	.....	.....	.....	.....
U.S. government securities	235.9	418.3	342.5	.....	.....	425.1	.....	.....	708.5	.....	.....	445.7	.....	.....	.....	.....
Municipal securities	71.4	96.8	100.1	.....	.....	83.6	.....	.....	87.0	.....	.....	67.9	.....	.....	.....	.....
Corporate and foreign bonds	346.5	437.5	641.9	.....	.....	221.6	.....	.....	364.6	.....	.....	645.7	.....	.....	.....	.....
Bank loans, n.e.c.	128.2	145.9	172.5	.....	.....	192.3	.....	.....	135.9	.....	.....	46.2	.....	.....	.....	.....
Other loans and advances	99.8	159.0	106.1	.....	.....	153.4	.....	.....	266.3	.....	.....	160.1	.....	.....	.....	.....
Mortgages	313.1	509.2	440.5	.....	.....	480.7	.....	.....	639.7	.....	.....	571.1	.....	.....	.....	.....
Consumer credit	52.5	67.6	66.3	.....	.....	81.7	.....	.....	64.1	.....	.....	126.2	.....	.....	.....	.....

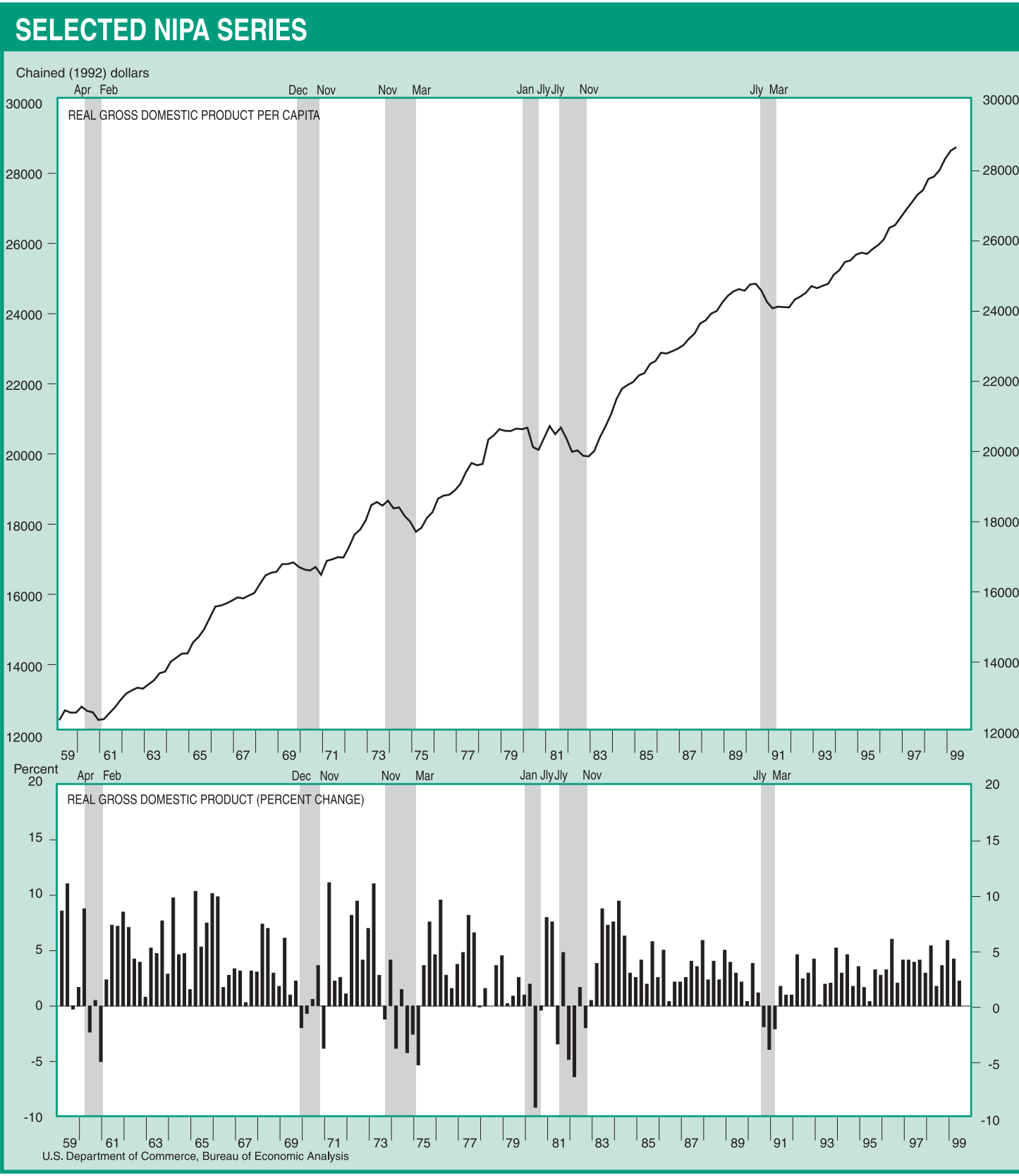
Sources:

1. Bureau of Labor Statistics.
2. Federal Reserve Board.

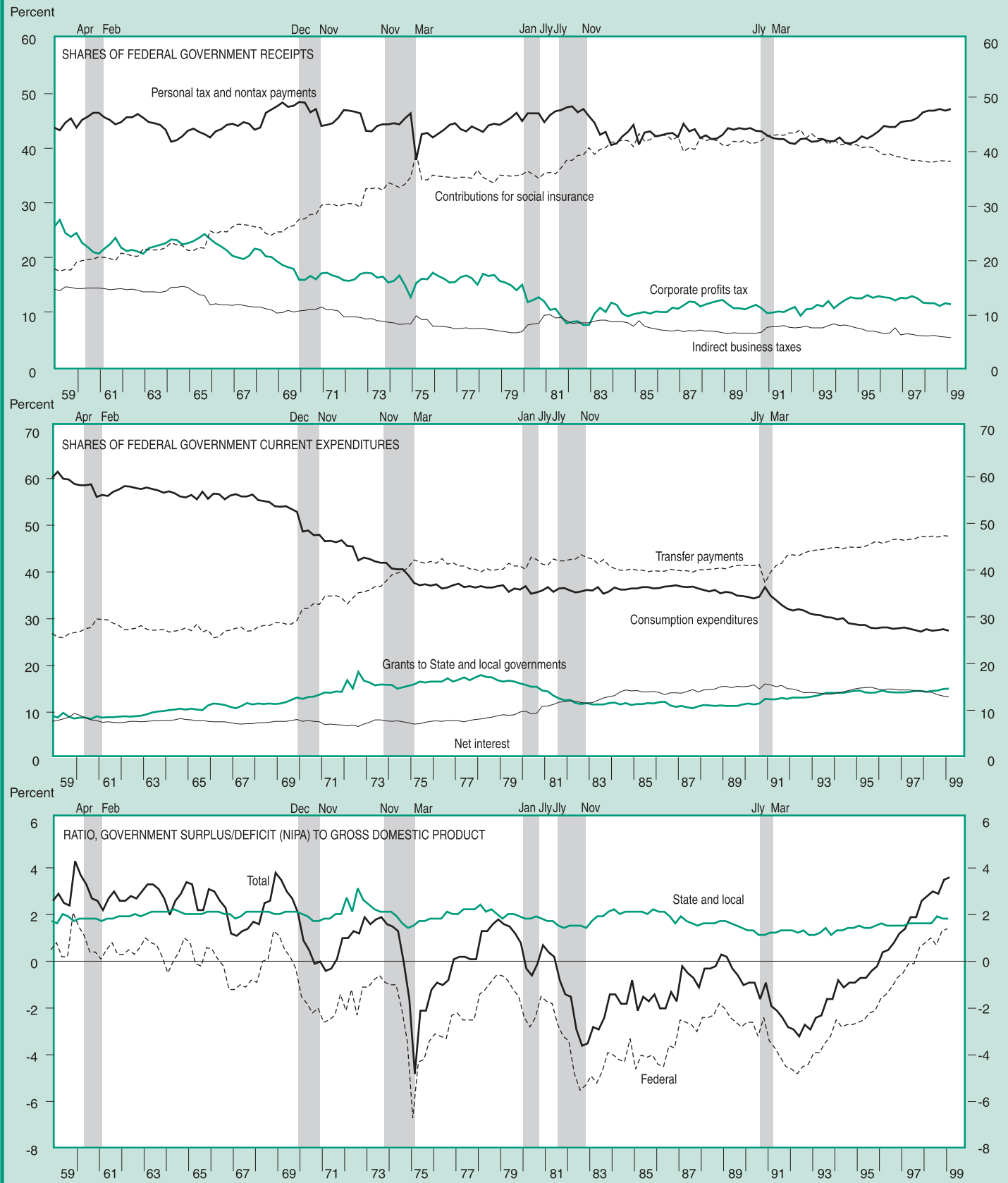
3. Standard and Poor's, Inc.
4. Bureau of the Census.
n.e.c. Not elsewhere classified.

E. Charts

Percent changes shown in this section are based on quarter-to-quarter changes and are expressed at seasonally adjusted annual rates; likewise, levels of series are expressed at seasonally adjusted annual rates as appropriate.

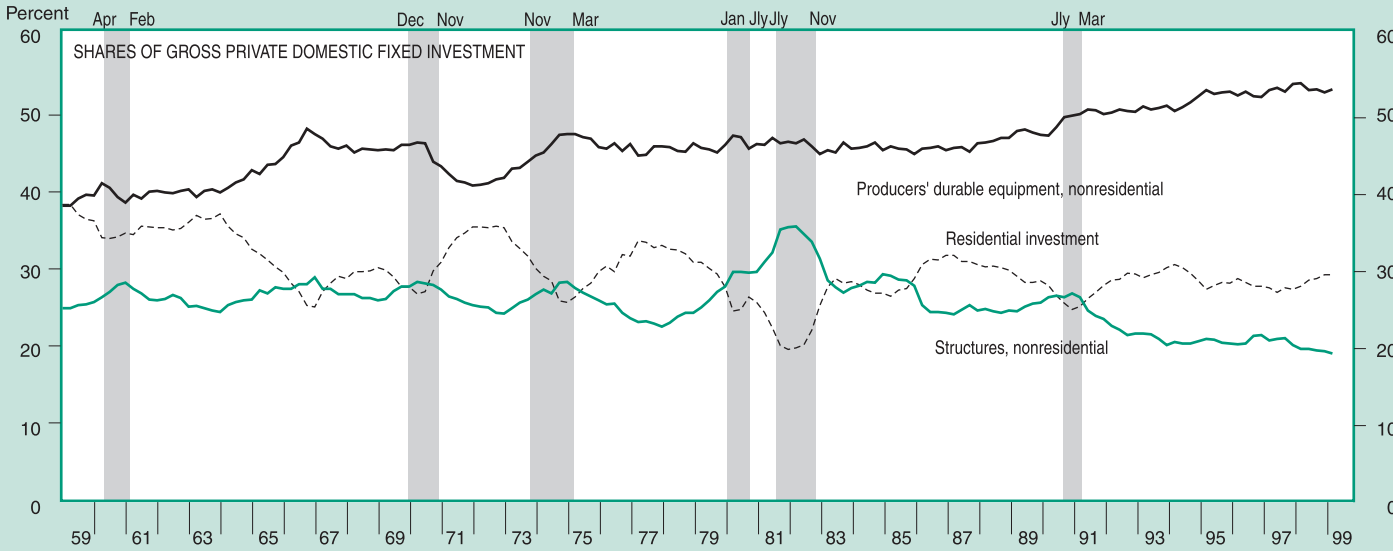
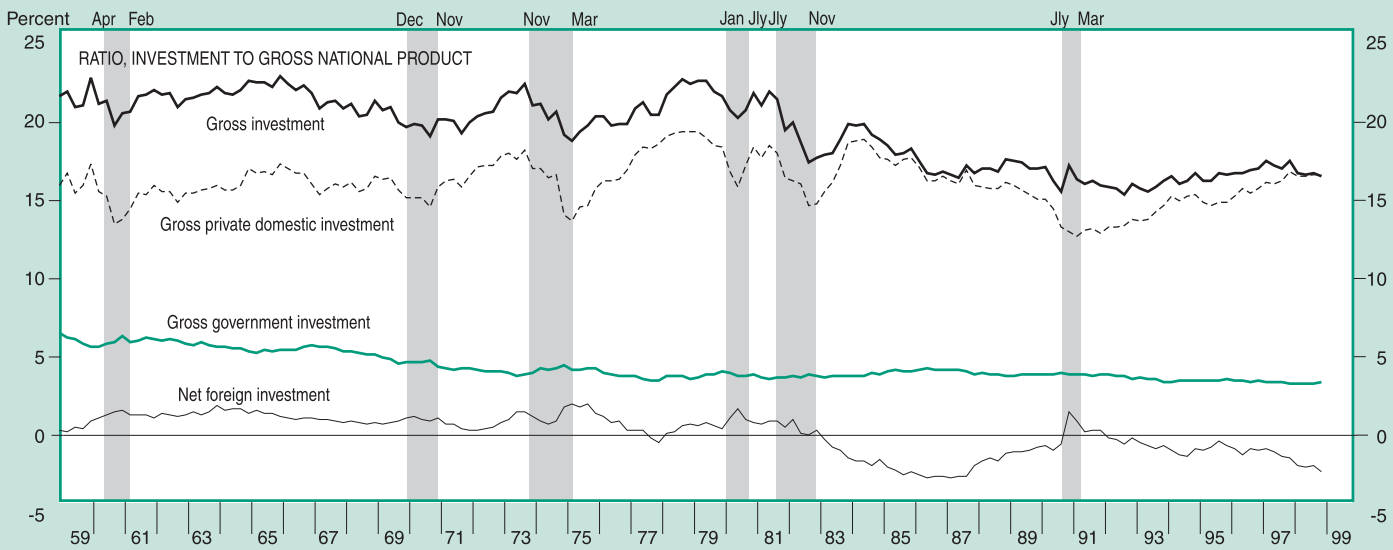
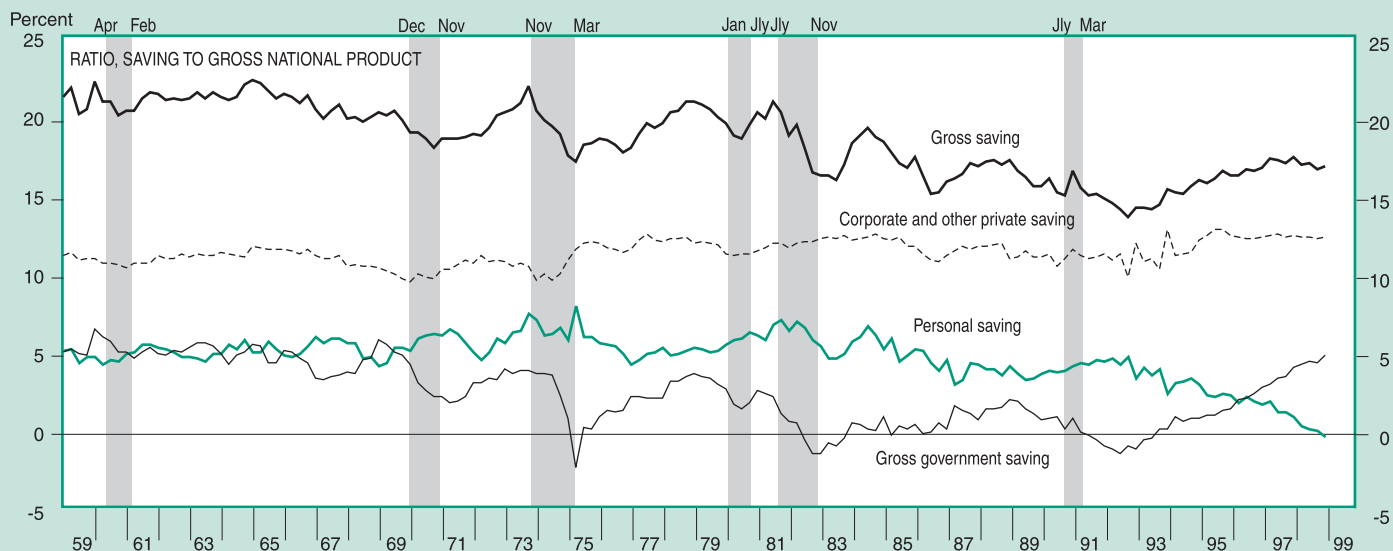


SELECTED NIPA SERIES



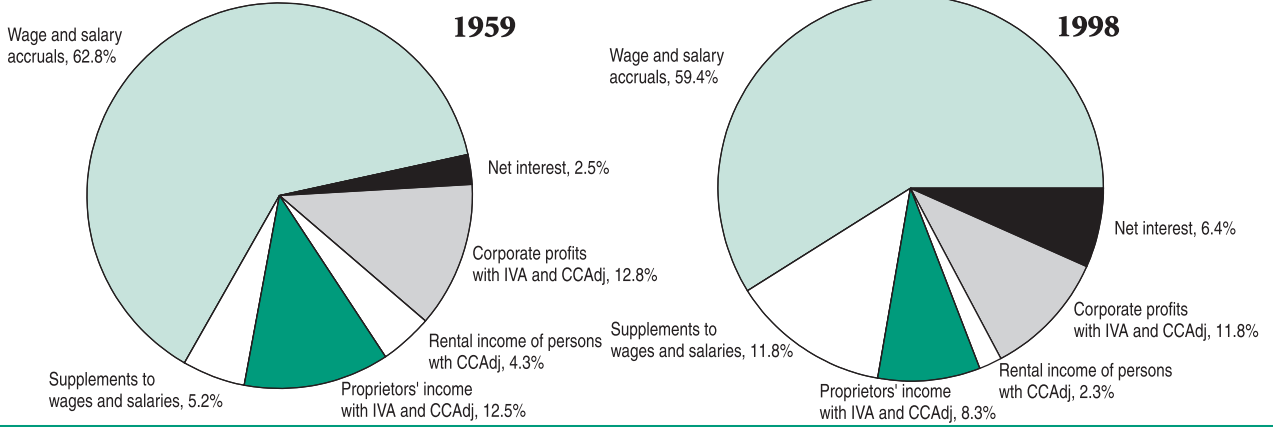
U.S. Department of Commerce, Bureau of Economic Analysis

SELECTED NIPA SERIES

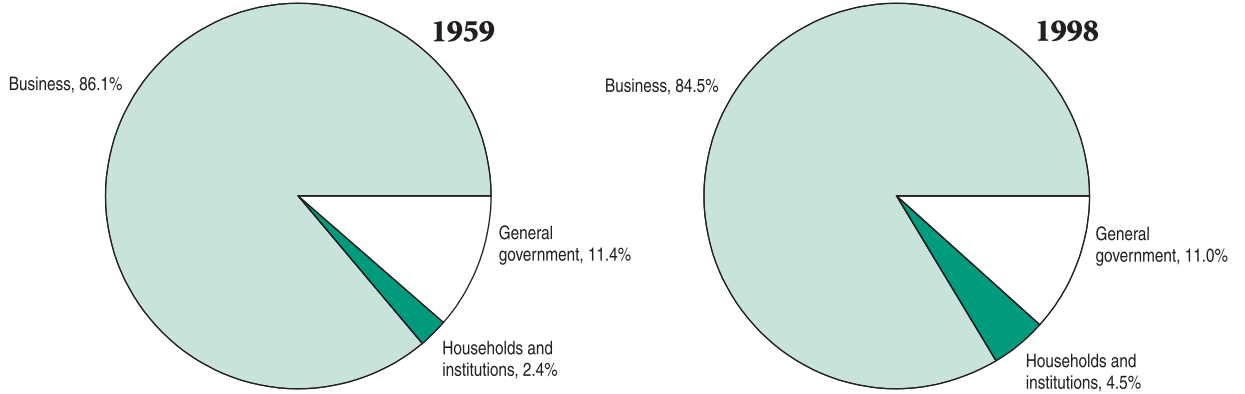


SELECTED NIPA SERIES

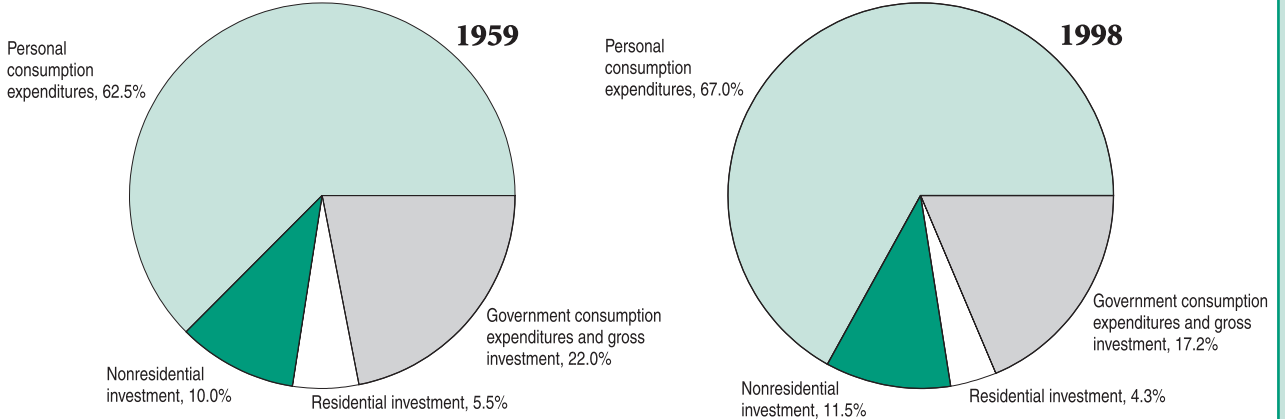
SHARES OF NATIONAL INCOME



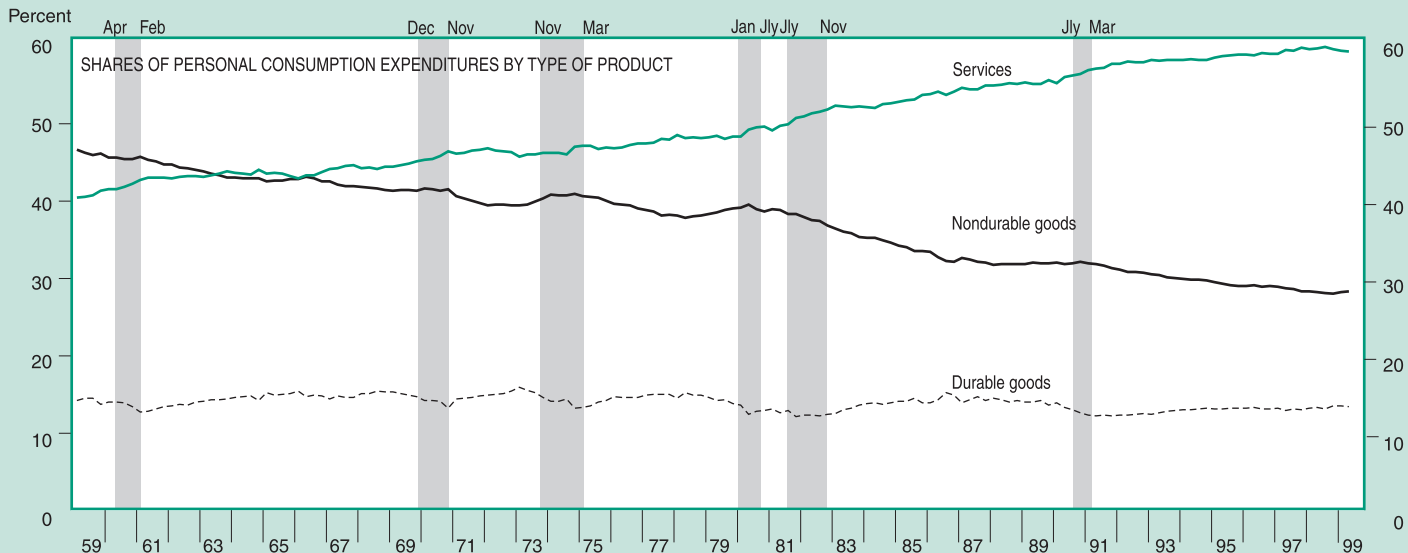
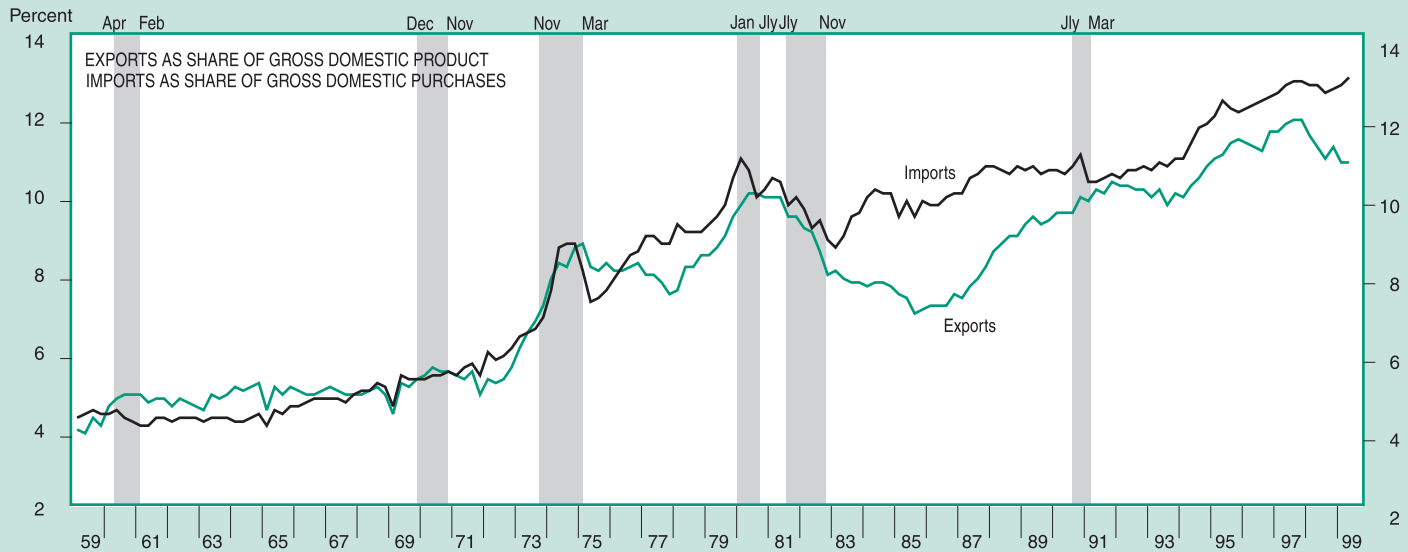
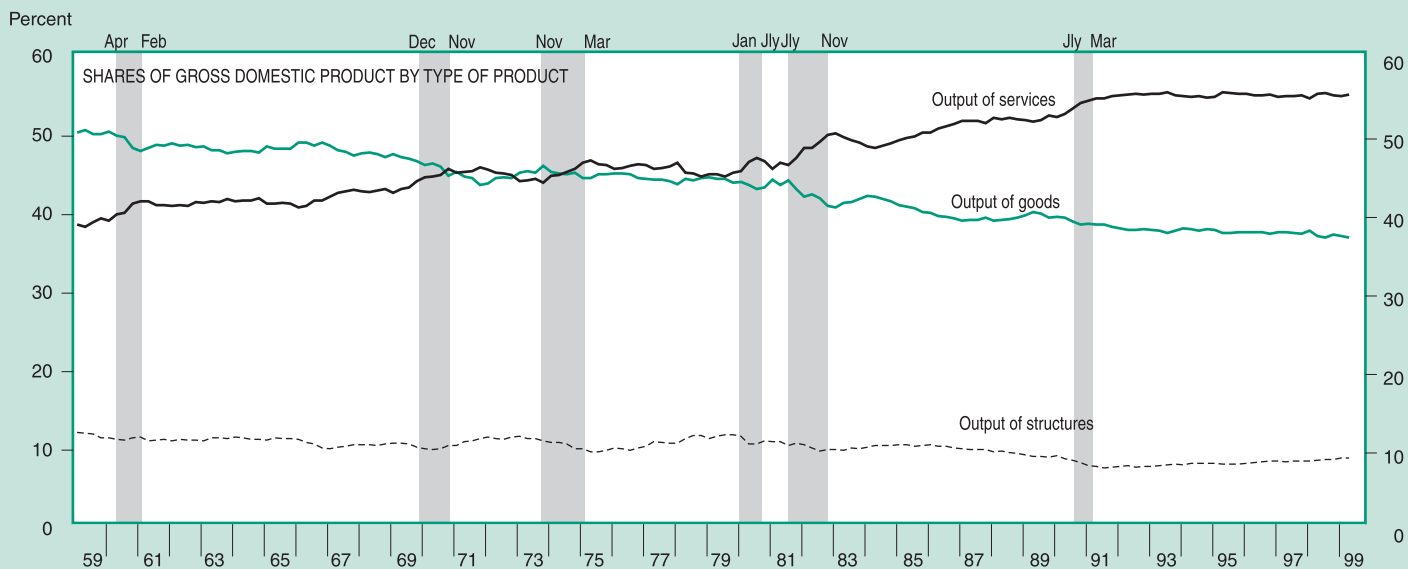
SHARES OF GROSS DOMESTIC PRODUCT BY SECTOR



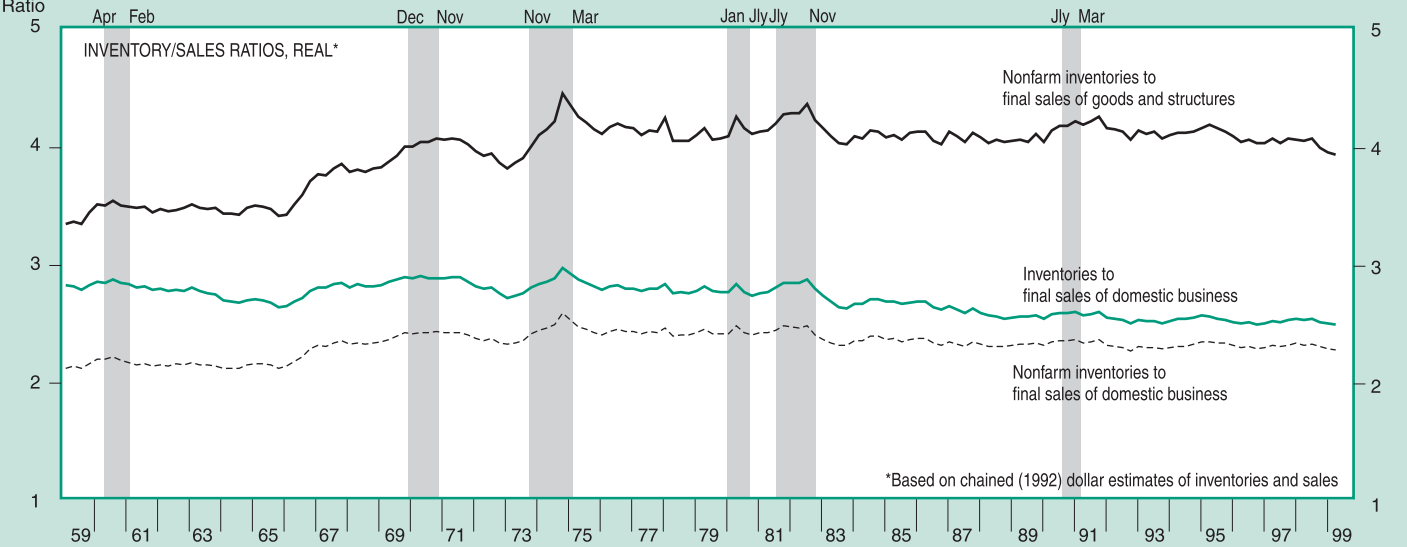
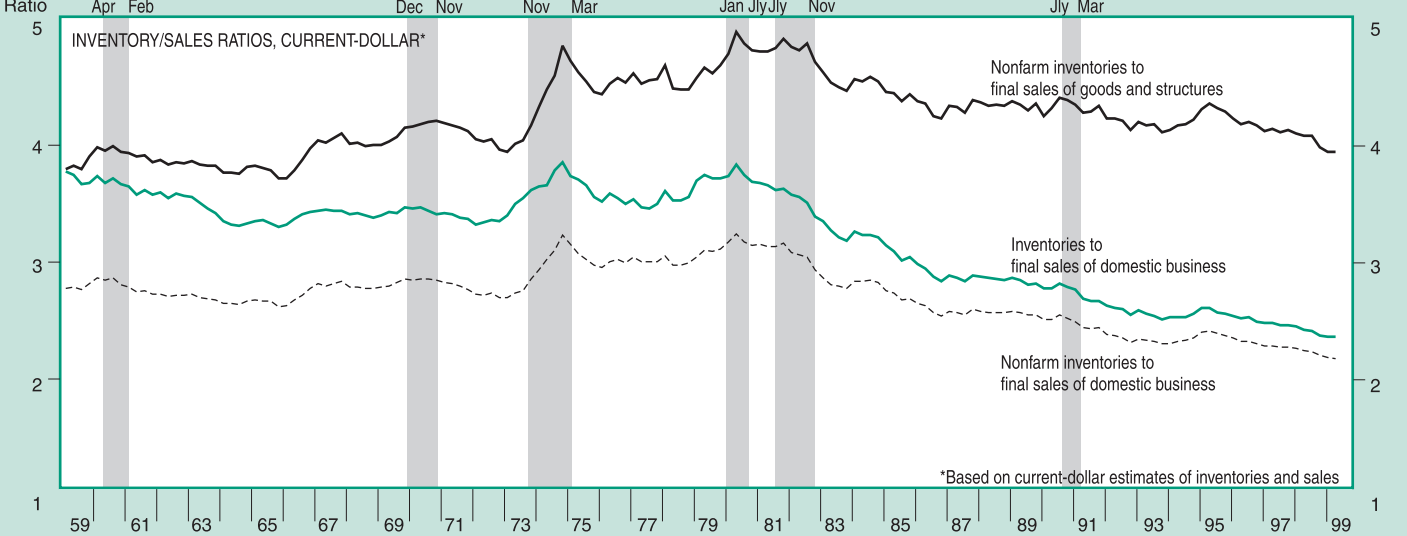
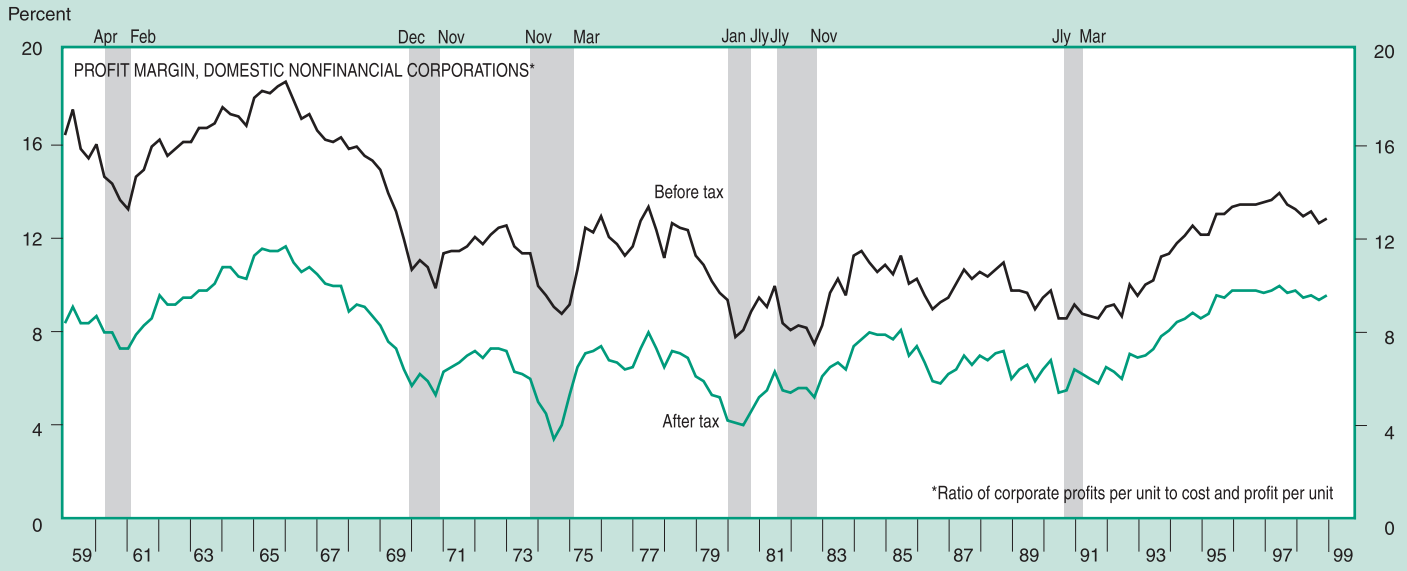
SHARES OF GROSS DOMESTIC PURCHASES



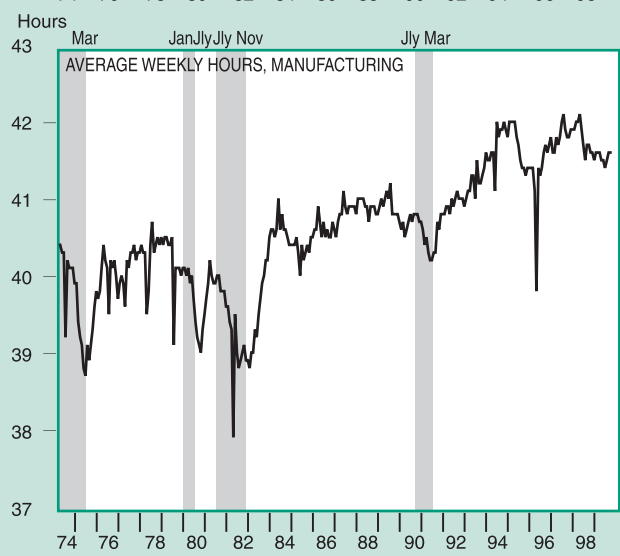
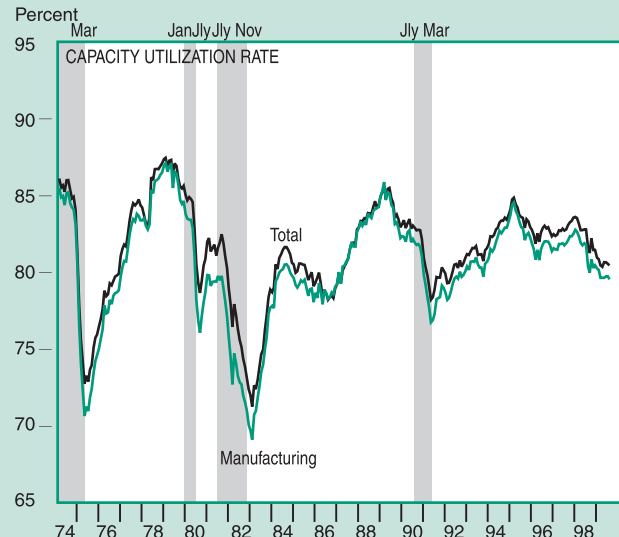
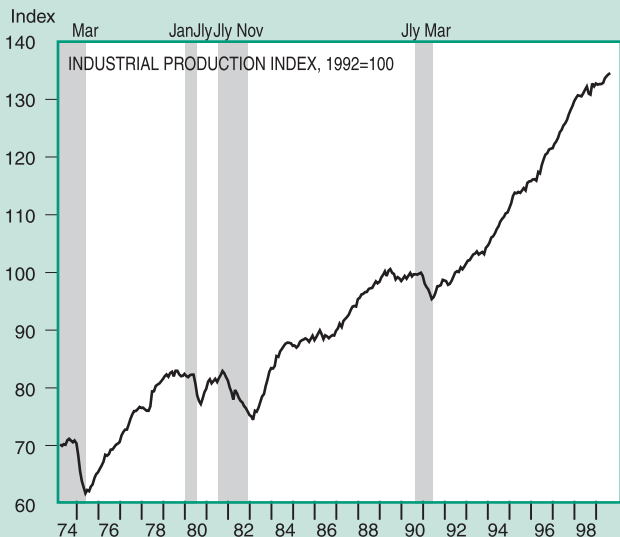
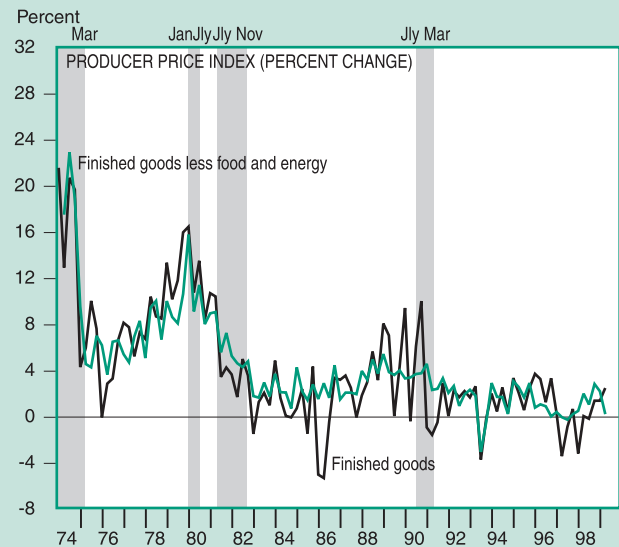
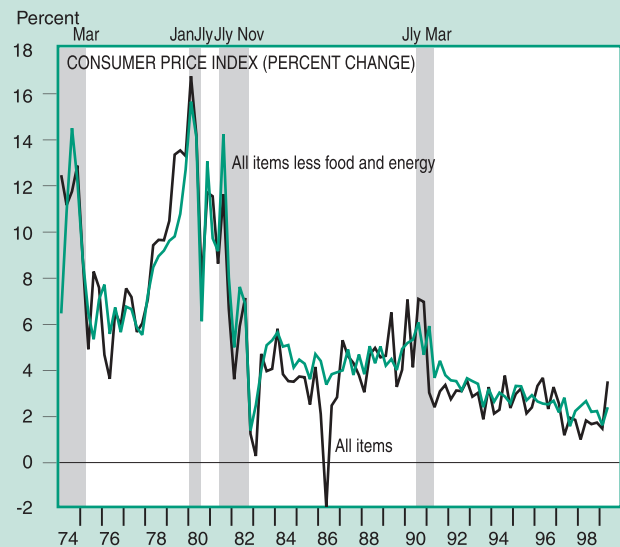
SELECTED NIPA SERIES



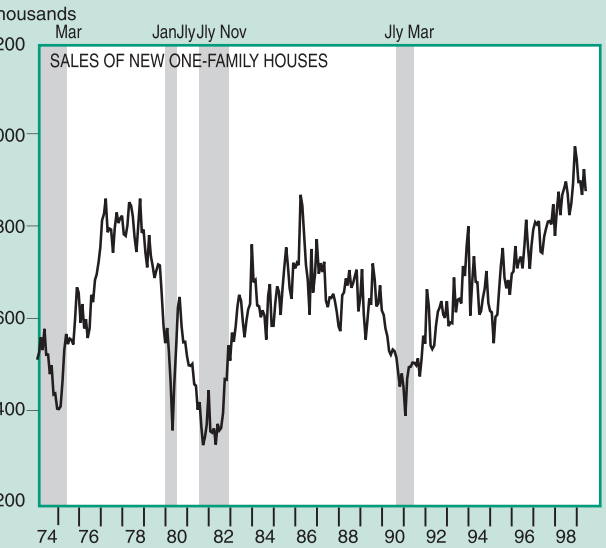
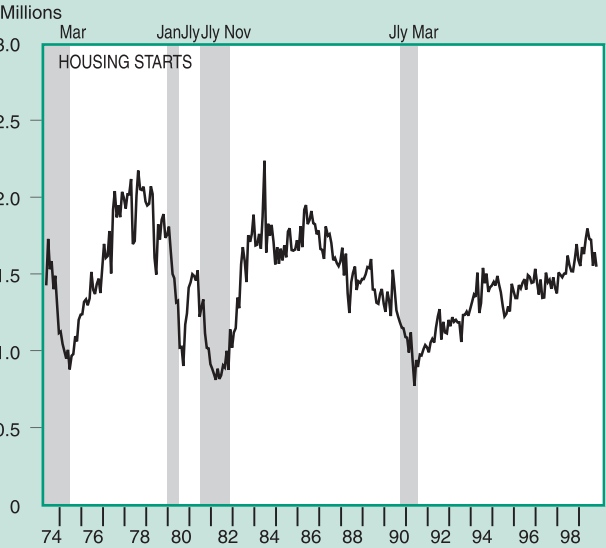
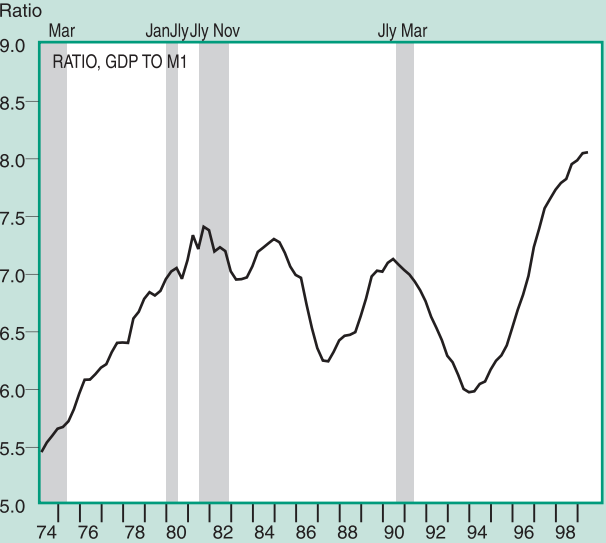
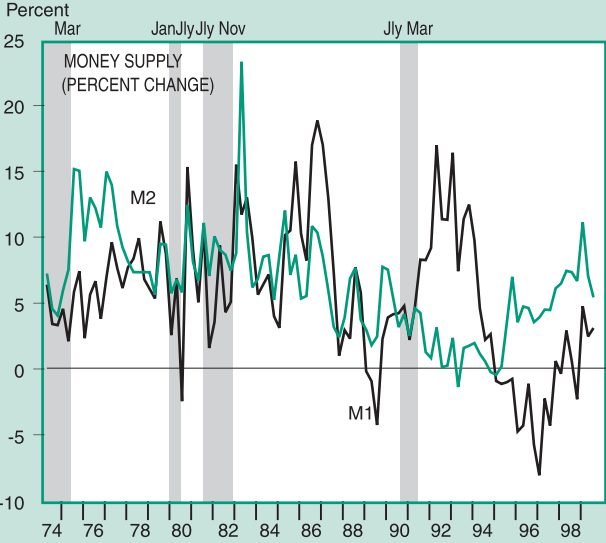
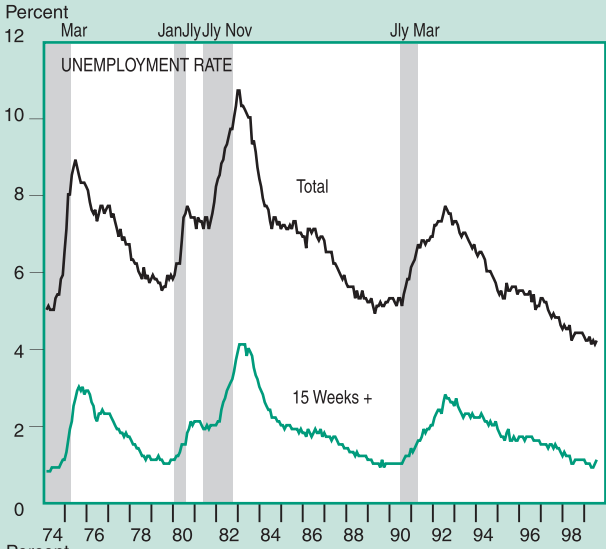
SELECTED NIPA SERIES



OTHER INDICATORS OF THE DOMESTIC ECONOMY



OTHER INDICATORS OF THE DOMESTIC ECONOMY



International Data

F. Transactions Tables

Table F.1 includes the most recent estimates of U.S. international trade in goods and services; the estimates were released on July 20, 1999 and include “preliminary” estimates for May 1999 and “revised” estimates for April 1999. The sources for the other tables in this section are as noted.

Table F.1.—U.S. International Transactions in Goods and Services

(Millions of dollars; monthly estimates seasonally adjusted)

	1997	1998	1998								1999					
			Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr. ^r	May ^p
Exports of goods and services	938,543	933,907	78,040	77,126	76,723	75,824	76,227	77,234	79,617	79,126	78,161	77,903	77,139	77,054	78,224	77,605
Goods	679,715	670,246	55,330	54,853	55,015	54,164	54,624	55,472	57,193	56,926	56,005	55,263	54,704	54,326	55,269	54,629
Foods, feeds, and beverages	51,507	46,397	3,811	3,788	3,867	3,718	3,668	3,316	4,018	3,866	3,992	3,641	3,602	3,559	3,741	3,712
Industrial supplies and materials	158,226	148,266	12,437	12,464	12,030	11,865	12,127	12,021	12,371	12,483	11,832	11,269	11,383	11,430	11,606	11,654
Capital goods, except automotive	294,549	299,612	24,090	23,995	24,659	24,942	24,329	25,480	26,117	25,696	25,470	25,619	24,895	24,900	25,085	24,852
Automotive vehicles, engines, and parts	74,029	73,157	6,334	5,995	5,814	5,073	5,872	6,115	6,156	6,341	6,186	6,049	5,969	5,845	6,174	6,045
Consumer goods (nonfood), except automotive	77,366	79,261	6,554	6,518	6,717	6,706	6,690	6,687	6,620	6,647	6,530	6,573	6,805	6,517	6,737	6,455
Other goods	33,505	35,444	2,763	2,848	2,833	2,832	3,256	2,798	3,119	3,500	3,181	3,066	3,163	3,113	2,919	3,020
Adjustments ¹	-9,468	-11,892	-660	-754	-905	-973	-1,320	-946	-1,208	-1,608	-1,186	-953	-1,113	-1,038	-994	-1,108
Services	258,828	263,661	22,710	22,273	21,708	21,660	21,603	21,762	22,424	22,200	22,156	22,640	22,435	22,728	22,955	22,976
Travel	73,301	71,250	6,370	6,050	5,840	5,662	5,718	5,769	5,953	5,904	6,081	5,966	6,005	6,111	6,242	6,168
Passenger fares	20,789	19,996	1,812	1,731	1,642	1,653	1,682	1,717	1,627	1,626	1,590	1,622	1,638	1,680	1,721	1,716
Other transportation	27,006	25,518	2,136	2,112	2,020	2,094	2,137	2,108	2,253	2,197	2,125	2,138	2,223	2,253	2,258	2,263
Royalties and license fees	33,781	36,808	2,992	3,002	3,008	2,966	2,999	3,064	3,266	3,314	3,314	3,171	3,144	3,139	3,172	3,203
Other private services	85,566	92,116	7,771	7,682	7,843	7,778	7,719	7,781	7,821	7,672	7,747	7,914	8,055	8,167	8,170	8,156
Transfers under U.S. military agency sales contracts ²	17,561	17,155	1,564	1,633	1,292	1,441	1,282	1,256	1,435	1,417	1,229	1,760	1,302	1,310	1,325	1,404
U.S. Government miscellaneous services	824	818	65	63	63	66	66	67	69	70	70	69	68	68	67	66
Imports of goods and services	1,043,273	1,098,189	91,257	92,027	90,566	90,513	92,086	92,409	93,975	93,789	92,402	94,172	95,682	96,001	96,815	98,941
Goods	876,366	917,178	76,190	77,089	75,419	75,230	76,914	77,084	78,183	78,464	77,064	78,612	79,876	80,006	80,603	82,839
Foods, feeds, and beverages	39,694	41,243	3,394	3,407	3,529	3,476	3,418	3,420	3,432	3,445	3,515	3,528	3,516	3,384	3,548	3,633
Industrial supplies and materials	213,767	200,140	17,265	17,481	16,687	16,592	16,876	16,508	16,549	16,241	15,289	15,537	15,388	16,037	16,965	17,779
Capital goods, except automotive	253,282	269,557	22,110	22,916	22,266	22,294	22,321	22,431	22,948	23,132	22,466	23,082	23,645	23,038	23,279	24,198
Automotive vehicles, engines, and parts	139,812	149,054	12,136	12,411	11,792	11,030	12,291	12,752	13,045	13,377	13,887	13,989	14,306	14,611	13,706	14,522
Consumer goods (nonfood), except automotive	193,811	216,515	18,138	17,980	18,134	18,321	18,102	18,295	18,402	18,470	18,362	18,911	19,447	18,925	19,351	18,983
Other goods	29,338	35,387	2,822	2,603	2,652	3,155	3,207	3,130	3,217	3,278	3,278	3,393	3,364	3,784	3,483	3,518
Adjustments ¹	6,662	5,282	325	291	358	361	699	549	592	522	267	171	213	226	271	207
Services	166,907	181,011	15,067	14,938	15,147	15,283	15,172	15,325	15,792	15,325	15,338	15,560	15,806	15,995	16,212	16,102
Travel	52,051	56,105	4,779	4,643	4,746	4,696	4,640	4,734	4,832	4,602	4,697	4,823	4,855	4,950	5,043	4,923
Passenger fares	18,138	19,797	1,680	1,631	1,647	1,730	1,669	1,686	1,771	1,695	1,659	1,696	1,730	1,760	1,775	1,732
Other transportation	28,959	30,457	2,531	2,522	2,537	2,564	2,598	2,538	2,760	2,588	2,501	2,498	2,616	2,650	2,681	2,683
Royalties and license fees	9,390	11,292	893	894	907	926	889	906	950	974	999	1,034	1,053	1,064	1,068	1,067
Other private services	43,909	47,670	3,954	4,010	4,050	4,046	4,026	4,091	4,108	4,082	4,086	4,097	4,133	4,148	4,181	4,219
Direct defense expenditures ²	11,698	12,841	1,012	1,017	1,032	1,072	1,093	1,111	1,120	1,135	1,151	1,175	1,185	1,190	1,223	1,237
U.S. Government miscellaneous services	2,762	2,849	218	221	228	249	257	259	251	249	245	237	234	233	241	241
Memoranda:																
Balance on goods	-196,652	-246,932	-20,860	-22,236	-20,404	-21,066	-22,291	-21,611	-20,990	-21,539	-21,059	-23,350	-25,173	-25,681	-25,334	-28,209
Balance on services	91,921	82,650	7,643	7,335	6,561	6,377	6,431	6,437	6,632	6,875	6,818	7,080	6,629	6,733	6,743	6,874
Balance on goods and services	-104,731	-164,282	-13,217	-14,901	-13,843	-14,689	-15,860	-15,174	-14,358	-14,664	-14,241	-16,270	-18,544	-18,948	-18,591	-21,335

^p Preliminary.

^r 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.

Table F.2.—U.S. International Transactions

[Millions of dollars]

Line	(Credits +; debits -) ¹	1997 ^r	1998 ^r	Not seasonally adjusted				Seasonally adjusted			
				1998			1999	1998			1999
				II ^r	III ^r	IV ^r	I ^p	II ^r	III ^r	IV ^r	I ^p
Current account											
1	Exports of goods and services and income receipts	1,197,206	1,192,231	299,641	288,254	303,581	293,888	298,463	291,493	299,985	296,227
2	Exports of goods and services	938,543	933,907	232,905	226,261	241,003	229,309	231,889	229,284	236,904	232,095
3	Goods, balance of payments basis ²	679,715	670,246	168,021	157,386	174,468	163,344	165,198	164,259	170,124	164,292
4	Services ³	258,828	263,661	64,884	68,875	66,535	65,965	66,691	65,025	66,780	67,803
5	Transfers under U.S. military agency sales contracts ⁴	17,561	17,155	4,489	3,979	4,081	4,372	4,489	3,979	4,081	4,372
6	Travel	73,301	71,250	18,119	20,354	17,125	15,758	18,260	17,149	17,938	18,082
7	Passenger fares	20,789	19,996	5,000	5,733	4,682	4,596	5,185	5,052	4,843	4,940
8	Other transportation	27,006	25,518	6,261	6,367	6,689	6,473	6,268	6,339	6,575	6,614
9	Royalties and license fees ⁵	33,781	36,808	8,716	8,866	10,571	9,231	9,002	9,029	9,894	9,454
10	Other private services ⁵	85,566	92,116	22,108	23,377	23,178	25,330	23,296	23,278	23,240	24,136
11	U.S. Government miscellaneous services	824	818	191	199	209	205	191	199	209	205
12	Income receipts	258,663	258,324	66,736	61,993	62,578	64,579	66,574	62,209	63,081	64,132
13	Income receipts on U.S.-owned assets abroad	256,861	256,467	66,273	62,113	64,109	66,111	61,744	61,744	62,617	63,662
14	Direct investment receipts	115,795	102,846	27,095	22,779	25,168	27,329	26,744	23,124	25,639	26,961
15	Other private receipts	137,507	150,001	38,412	37,744	36,019	35,814	38,412	37,744	36,019	35,814
16	U.S. Government receipts	3,559	3,620	766	1,005	926	966	955	876	959	887
17	Compensation of employees	1,802	1,857	463	465	465	470	463	465	464	470
18	Exports of goods and services and income payments	-1,298,705	-1,368,718	-341,493	-351,539	-351,384	-343,266	-340,977	-344,182	-348,180	-354,712
19	Imports of goods and services	-1,043,273	-1,098,189	-273,914	-282,050	-283,536	-275,023	-273,500	-275,000	-280,166	-285,856
20	Goods, balance of payments basis ²	-876,366	-917,178	-227,633	-232,395	-239,118	-230,903	-228,698	-229,228	-233,711	-238,495
21	Services ³	-166,907	-181,011	-46,281	-49,655	-44,418	-44,120	-45,152	-45,780	-46,455	-47,361
22	Direct defense expenditures	-11,698	-12,841	-3,061	-3,276	-3,406	-3,550	-3,061	-3,276	-3,406	-3,550
23	Travel	-52,051	-56,105	-15,193	-17,234	-12,016	-12,356	-14,168	-14,070	-14,131	-14,628
24	Passenger fares	-18,138	-19,797	-5,325	-5,722	-4,518	-4,756	-4,958	-5,085	-5,125	-5,186
25	Other transportation	-28,959	-30,457	-7,533	-7,820	-7,957	-7,591	-7,500	-7,000	-7,849	-7,764
26	Royalties and license fees ⁵	-9,390	-11,292	-2,587	-2,685	-3,081	-3,138	-2,694	-2,721	-2,923	-3,151
27	Other private services ⁵	-43,909	-47,670	-11,915	-12,153	-12,695	-12,025	-12,014	-12,163	-12,276	-12,378
28	U.S. Government miscellaneous services	-2,762	-2,849	-667	-765	-745	-704	-667	-765	-745	-704
29	Income payments	-255,432	-270,529	-67,579	-69,489	-67,848	-68,243	-67,127	-69,174	-68,014	-68,856
30	Income payments on foreign-owned assets in the United States	-248,676	-263,423	-65,898	-67,631	-65,907	-66,510	-65,376	-67,381	-66,188	-66,992
31	Direct investment payments	-46,575	-43,441	-11,089	-11,540	-10,800	-11,955	-10,567	-11,290	-11,081	-12,437
32	Other private payments	-114,051	-128,863	-31,849	-33,314	-32,408	-31,891	-31,849	-33,314	-32,408	-31,891
33	U.S. Government payments	-88,500	-91,119	-22,960	-22,777	-22,699	-22,664	-22,960	-22,777	-22,699	-22,664
34	Compensation of employees	-6,756	-7,106	-1,681	-1,858	-1,941	-1,733	-1,793	-1,826	-1,826	-1,864
35	Unilateral current transfers, net	-41,966	-44,075	-9,494	-10,607	-13,831	-10,193	-9,886	-10,787	-13,474	-10,098
36	U.S. Government grants ⁴	-12,386	-13,057	-2,168	-2,807	-5,742	-2,135	-2,168	-2,807	-5,742	-2,135
37	U.S. Government pensions and other transfers	-4,239	-4,350	-919	-865	-1,541	-892	-1,095	-1,106	-1,071	-1,104
38	Private remittances and other transfers ⁶	-25,341	-26,668	-6,407	-6,935	-6,548	-7,166	-6,623	-6,874	-6,661	-6,859
Capital and financial account											
Capital account											
39	Capital account transactions, net	292	617	160	148	166	170	160	148	166	170
Financial account											
40	U.S.-owned assets abroad, net (increase/financial outflow (-))	-465,296	-292,818	-121,852	-63,492	-44,586	6,168	-120,517	-62,097	-50,607	9,227
41	U.S. official reserve assets, net	-1,010	-6,784	-1,945	-2,026	-2,369	4,068	-1,945	-2,026	-2,369	4,068
42	Gold ⁷										
43	Special drawing rights	-350	-149	72	188	-227	563	72	188	-227	563
44	Reserve position in the International Monetary Fund	-3,575	-5,118	-1,031	-2,078	-1,924	3	-1,031	-2,078	-1,924	3
45	Foreign currencies	2,915	-1,517	-986	-136	-218	3,502	-986	-136	-218	3,502
46	U.S. Government assets, other than official reserve assets, net	68	-429	-483	185	-50	147	-483	185	-50	147
47	U.S. credits and other long-term assets	-5,417	-4,676	-1,156	-1,285	-1,043	-1,336	-1,156	-1,285	-1,043	-1,336
48	Repayments on U.S. credits and other long-term assets ⁸	5,438	4,102	699	1,332	938	1,574	699	1,332	938	1,574
49	U.S. foreign currency holdings and U.S. short-term assets, net	47	145	-26	138	55	-91	-26	138	55	-91
50	U.S. private assets, net	-464,354	-285,605	-119,424	-61,651	-42,167	1,953	-118,089	-60,256	-48,188	5,012
51	Direct investment	-109,955	-132,829	-44,507	-22,981	-24,752	-41,356	-43,172	-21,586	-30,773	-38,297
52	Foreign securities	-89,174	-102,817	-32,886	14,994	-70,809	8,488	-32,886	14,994	-70,809	8,488
53	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	-120,403	-25,041	-14,327	-20,320	16,202	-405	-14,327	-20,320	16,202	-405
54	U.S. claims reported by U.S. banks, not included elsewhere	-144,822	-24,918	-27,704	-33,344	37,192	35,226	-27,704	-33,344	37,192	35,226
55	Foreign-owned assets in the United States, net (increase/financial inflow(+))	751,661	502,637	163,275	94,776	147,893	74,634	162,466	93,547	149,805	74,870
56	Foreign official assets in the United States, net	18,119	-21,684	-10,551	-46,489	24,352	8,568	-10,551	-46,489	24,352	8,568
57	U.S. Government securities	-2,161	-3,625	-20,064	-30,905	33,398	9,409	-20,064	-30,905	33,398	9,409
58	U.S. Treasury securities ⁹	-6,690	-9,957	-20,318	-32,811	31,836	3,416	-20,318	-32,811	31,836	3,416
59	Other ¹⁰	4,529	6,332	254	1,906	1,562	5,993	254	1,906	1,562	5,993
60	Other U.S. Government liabilities ¹¹	-1,798	-3,113	-807	-224	-1,054	-1,605	-807	-224	-1,054	-1,605
61	U.S. liabilities reported by U.S. banks, not included elsewhere	22,286	-11,469	9,488	-12,866	-7,133	666	9,488	-12,866	-7,133	666
62	Other foreign official assets ¹²	-208	-3,477	832	-2,494	-859	98	832	-2,494	-859	98
63	Other foreign assets in the United States, net	733,542	524,321	173,826	141,265	123,541	66,066	173,017	140,036	125,453	66,302
64	Direct investment	109,264	193,375	21,755	26,135	118,593	18,893	20,946	24,906	120,505	19,129
65	U.S. Treasury securities	146,433	46,155	25,759	-1,438	24,391	-11,434	25,759	-1,438	24,391	-11,434
66	U.S. securities other than U.S. Treasury securities	196,258	218,026	71,785	20,103	49,328	59,507	71,785	20,103	49,328	59,507
67	U.S. currency	24,782	16,622	2,349	7,277	6,250	2,440	2,349	7,277	6,250	2,440
68	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	107,779	9,412	18,040	11,875	-53,210	11,205	18,040	11,875	-53,210	11,205
69	U.S. liabilities reported by U.S. banks, not included elsewhere	149,026	40,731	34,138	77,313	-21,811	-14,545	34,138	77,313	-21,811	-14,545
70	Statistical discrepancy (sum of above items with sign reversed)	-143,192	10,126	9,763	42,460	-41,839	-21,401	10,291	31,878	-37,695	-15,684
70a	Of which seasonal adjustment discrepancy							528	-10,582	4,144	5,717
Memoranda:											
71	Balance on goods (lines 3 and 20)	-196,651	-246,932	-59,612	-75,009	-64,650	-67,559	-63,500	-64,969	-63,587	-74,203
72	Balance on services (lines 4 and 21)	91,921	82,650	18,603	19,220	21,845	21,539	19,245	20,325	20,442	20,442
73	Balance on goods and services (lines 2 and 19)	-104,730	-164,282	-41,009	-55,789	-42,805	-46,020	-44,755	-44,644	-43,145	-53,761
74	Balance on income (lines 12 and 29)	3,231	-12,205	-843	-7,496	-5,270	-3,664	-553	-6,965	-4,933	-4,724
75	Unilateral current transfers, net (line 35)	-41,966	-44,075	-9,494	-10,607	-13,831	-10,193	-9,886	-10,787	-13,474	-10,098
76	Balance on current account (lines 1, 18, and 35 or lines 73, 74, and 75) ¹³	-143,466	-220,562	-51,346	-73,892	-61,634	-59,571	-52,400	-63,476	-61,669	-68,583

^r Revised.^p Preliminary.

1. Credits, +; Exports of goods and services and income receipts; unilateral current transfers to the United States; capital account transactions receipts; financial inflows-increase in foreign-owned assets (U.S. liabilities) or decrease in U.S.-owned assets (U.S. claims).

Debits, -: Imports of goods and services and income payments; unilateral current transfers to foreigners; capital account transactions payments; financial outflows-decrease in foreign-owned assets (U.S. liabilities) or increase in U.S.-owned assets (U.S. liabilities) or increase in U.S.-owned assets (U.S. claims).

2. Excludes exports of goods under U.S. military agency sales contracts identified in Census export documents, excludes imports of goods under direct defense expenditures identified in Census import documents, and reflects various other adjustments (for valuation, coverage, and timing) of Census statistics to balance of payments basis; see table 2 in "U.S. International Transactions, First Quarter 1999" in the July 1999 Survey.

3. Includes some goods: Mainly military equipment in line 5; major equipment, other materials, supplies, and petroleum products purchased abroad by U.S. military agencies in line 22; and fuels purchased by airline and steamship operators in lines 8 and 25.

Table F.3.—U.S. International Transactions, by Area
[Millions of dollars]

Line	(Credits +; debits -) ¹	Western Europe			European Union ¹⁴			United Kingdom			European Union (6) ¹⁵		
		1998		1999	1998		1999	1998		1999	1998		1999
		III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p
Current account													
1	Exports of goods and services and income receipts	89,819	94,935	94,198	80,915	85,414	85,569	25,258	26,094	26,586	42,812	45,575	44,970
2	Exports of goods and services	62,578	66,358	64,752	56,853	59,656	59,193	16,331	16,208	16,438	31,327	33,500	32,532
3	Goods, balance of payments basis ²	37,191	41,089	41,287	34,161	36,961	38,499	9,302	8,741	9,809	19,831	22,443	22,381
4	Services ³	25,387	25,269	23,465	22,692	22,695	20,694	7,029	7,467	6,629	11,496	11,057	10,151
5	Transfers under U.S. military agency sales contracts ⁴	1,159	1,313	1,186	691	916	601	98	102	122	224	403	172
6	Travel	6,702	5,653	4,791	6,139	5,180	4,404	2,079	1,964	1,602	3,076	2,317	2,031
7	Passenger fares	1,958	1,651	1,470	1,890	1,609	1,415	588	587	489	1,033	814	728
8	Other transportation	1,945	1,966	1,879	1,651	1,658	1,584	422	427	406	805	791	746
9	Royalties and license fees ⁵	4,547	5,552	4,760	4,300	5,267	4,515	830	1,275	941	2,555	2,931	2,628
10	Other private services ⁵	9,041	9,095	9,344	7,992	8,031	8,145	3,002	3,104	3,060	3,789	3,782	3,832
11	U.S. Government miscellaneous services	35	39	35	29	34	30	10	8	9	14	19	14
12	Income receipts	27,241	28,577	29,446	24,062	25,758	26,376	8,927	9,886	10,148	11,485	12,075	12,438
13	Income receipts on U.S.-owned assets abroad	27,204	28,542	29,409	24,028	25,726	26,342	8,910	9,871	10,131	11,470	12,060	12,423
14	Direct investment receipts	10,997	13,104	13,821	9,318	11,607	12,065	1,998	3,402	3,638	5,944	6,458	6,692
15	Other private receipts	15,924	15,209	15,296	14,471	13,908	14,028	6,912	6,446	6,493	5,371	5,432	5,567
16	U.S. Government receipts	283	229	292	239	211	249	.....	23	.....	155	170	164
17	Compensation of employees	37	35	37	34	32	34	17	15	17	15	15	15
18	Imports of goods and services and income payments	-103,147	-102,986	-100,228	-94,238	-93,187	-91,455	-32,941	-32,036	-31,997	-47,102	-47,866	-46,630
19	Imports of goods and services	-69,850	-70,370	-66,119	-62,773	-63,252	-60,175	-15,007	-14,786	-14,350	-36,535	-38,117	-35,841
20	Goods, balance of payments basis ²	-48,533	-52,311	-48,566	-44,029	-47,386	-44,717	-8,579	-9,024	-8,823	-27,377	-30,237	-28,096
21	Services ³	-21,317	-18,059	-17,553	-18,744	-15,866	-15,458	-6,428	-5,762	-5,527	-9,158	-7,880	-7,745
22	Direct defense expenditures	-1,729	-1,819	-1,840	-1,463	-1,627	-1,590	-210	-157	-150	-1,157	-1,370	-1,340
23	Travel	-6,345	-3,431	-3,540	-5,637	-3,078	-3,235	-1,535	-1,098	-831	-2,794	-1,478	-1,595
24	Passenger fares	-3,111	-2,042	-2,103	-2,811	-1,838	-1,904	-1,158	-749	-804	-1,159	-783	-777
25	Other transportation	-2,908	-2,919	-2,657	-2,353	-2,325	-2,150	-632	-632	-570	-1,164	-1,153	-1,047
26	Royalties and license fees ⁵	-1,727	-1,982	-2,022	-1,496	-1,757	-1,788	-494	-660	-581	-827	-905	-1,004
27	Other private services ⁵	-5,207	-5,580	-5,118	-4,736	-4,992	-4,558	-2,377	-2,443	-2,278	-1,867	-2,000	-1,804
28	U.S. Government miscellaneous services	-290	-286	-273	-248	-249	-233	-22	-23	-23	-190	-191	-178
29	Income payments	-33,297	-32,616	-34,109	-31,465	-29,935	-31,280	-17,934	-17,250	-17,647	-10,567	-9,749	-10,789
30	Income payments on foreign-owned assets in the United States	-33,228	-32,531	-34,022	-31,407	-29,867	-31,210	-17,915	-17,229	-17,626	-10,533	-9,709	-10,747
31	Direct investment payments	-6,786	-6,837	-6,573	-7,017	-6,093	-7,794	-2,023	-1,703	-2,512	-4,016	-3,423	-4,284
32	Other private payments	-16,559	-15,928	-15,698	-15,242	-14,662	-14,318	-10,728	-10,351	-9,947	-3,759	-3,519	-3,700
33	U.S. Government payments	-9,883	-9,766	-9,751	-9,148	-9,112	-9,098	-5,164	-5,175	-5,167	-2,758	-2,767	-2,763
34	Compensation of employees	-69	-85	-87	-58	-68	-70	-19	-21	-21	-34	-40	-42
35	Unilateral current transfers, net	-91	-95	16	169	176	308	335	350	398	60	56	136
36	U.S. Government grants ⁴	-143	-114	-147	-5	.....	-300	.....	-46	.....	-48	.....	-173
37	U.S. Government pensions and other transfers	-346	-367	-334	-314	-286	-300	-46	-48	-48	-187	-158	-173
38	Private remittances and other transfers ⁶	398	386	497	488	462	608	381	398	446	247	214	309
Capital and financial account													
Capital account													
39	Capital account transactions, net	37	38	38	33	34	35	11	12	12	16	15	17
Financial account													
40	U.S.-owned assets abroad, net (increase/financial outflow (-))	-30,805	-53,421	10,078	-9,845	-55,148	10,815	-6,567	-43,262	24,226	-6,788	-17,257	-6,675
41	U.S. official reserve assets, net	-50	-2,386	5,502	-3	5,156	-1,972	(*)	(*)	(*)	(*)	5,156	(*)
42	Gold ⁷	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
43	Special drawing rights	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
44	Reserve position in the International Monetary Fund	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
45	Foreign currencies	-50	-2,386	5,502	-3	5,156	-1,972	(*)	(*)	(*)	(*)	-3	5,156
46	U.S. Government assets, other than official reserve assets, net	272	205	172	182	150	118	-4	132	-5	10	16	(*)
47	U.S. credits and other long-term assets	-76	-50	-90	-31	-28	-74	(*)	(*)	(*)	(*)	(*)	(*)
48	Repayments on U.S. credits and other long-term assets ⁸	277	236	264	203	165	195	(*)	130	(*)	(*)	(*)	(*)
49	U.S. foreign currency holdings and U.S. short-term assets, net	71	19	-2	10	13	-3	-4	2	-5	10	16	(*)
50	U.S. private assets, net	-31,027	-51,240	4,404	-10,024	-60,454	12,669	-6,563	-43,394	24,231	-6,795	-22,429	-6,675
51	Direct investment	-9,993	-12,914	-18,419	-7,729	-11,233	-16,321	-3,634	-6,831	-1,898	-4,108	-3,147	-10,105
52	Foreign securities	8,507	-68,487	21,521	5,704	-66,779	20,685	-1,533	-43,315	17,708	3,276	-22,149	3,127
53	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	-14,797	18,408	(*)	-14,013	17,540	(*)	-13,067	16,384	(*)	-2,696	-165	(*)
54	U.S. claims reported by U.S. banks, not included elsewhere	-14,744	11,753	1,302	6,014	18	8,305	11,671	-9,632	8,421	-3,267	3,032	303
55	Foreign-owned assets in the United States, net (increase/financial inflow (+))	96,246	92,316	49,459	106,033	81,332	53,730	60,358	28,407	19,096	35,403	55,719	40,191
56	Foreign official assets in the United States, net	-3,574	7,820	-4,464	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
57	U.S. Government securities	(17)	(17)	(17)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
58	U.S. Treasury securities ⁹	(17)	(17)	(17)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
59	Other ¹⁰	(17)	(17)	(17)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
60	Other U.S. Government liabilities ¹¹	-103	-425	-435	137	-226	-54	78	-96	-116	51	-127	65
61	U.S. liabilities reported by U.S. banks, not included elsewhere	(17)	(17)	(17)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
62	Other foreign official assets ¹²	(17)	(17)	(17)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
63	Other foreign assets in the United States, net	99,820	84,496	53,923	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
64	Direct investment	14,823	116,144	15,990	15,025	111,043	15,525	-8,476	65,672	1,534	19,671	42,915	12,226
65	U.S. Treasury securities	(17)	(17)	(17)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)	(18)
66	U.S. securities other than U.S. Treasury securities	38,353	40,315	46,285	36,255	43,577	43,059	21,539	35,093	27,739	13,658	6,895	12,632
67	U.S. currency .....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
68	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	3,891	-42,850	.....	17,734	-41,958	.....	12,676	-39,870	.....	5,406	-1,926	.....
69	U.S. liabilities reported by U.S. banks, not included elsewhere	(17)	(17)	(17)	18 36,882	18 -31,104	18 -4,800	18 34,541	18 -32,392	18 -10,061	18 -3,383	18 7,962	18 15,268
70	Statistical discrepancy (sum of above items with sign reversed)	-52,059	-30,787	-53,561	-83,067	-18,621	-59,002	-46,454	20,435	-38,321	-24,401	-36,242	-32,009
Memoranda:													
71	Balance on goods (lines 3 and 20)	-11,342	-11,222	-7,279	-9,868	-10,425	-6,218	723	-283	986	-7,546	-7,794	-5,715
72	Balance on services (lines 4 and 21)	4,070	7,210	5,912	3,948	6,829	5,236	601	1,705	1,102	2,338	3,177	2,406
73	Balance on goods and services (lines 2 and 19)	-7,272	-4,012	-1,367	-5,920	-3,596	-982	1,324	1,422	2,088	-5,208	-4,617	-3,309
74	Balance on income (lines 12 and 29)	-6,056	-4,039	-4,663	-7,403	-4,177	-4,904	-9,007	-7,364	-7,499	918	2,326	1,649
75	Unilateral current transfers, net (line 35)	-91	-95	16	169	176	308	335	350	398	60	56	136
76	Balance on current account (lines 1, 18, and 35 or lines 73, 74, and 75) ¹³	-13,											

Table F.3.—U.S. International Transactions, by Area—Continued

[Millions of dollars]

Line	(Credits +; debits -) ¹	Eastern Europe			Canada			Latin America and Other Western Hemisphere			Japan		
		1998		1999	1998		1999	1998		1999	1998		1999
		III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p
Current account													
1	Exports of goods and services and income receipts	2,971	2,572	2,631	44,979	49,765	50,056	62,478	63,178	58,375	23,888	23,260	25,240
2	Exports of goods and services	2,655	2,387	2,175	40,575	44,938	45,245	47,030	48,933	43,548	22,296	21,355	22,861
3	Goods, balance of payments basis ²	1,655	1,412	1,213	35,892	40,437	40,070	34,410	36,363	32,125	14,042	13,690	14,432
4	Services ³	1,000	975	962	4,683	4,501	5,175	12,620	12,570	11,423	8,254	7,665	8,429
5	Transfers under U.S. military agency sales contracts ⁴	88	107	72	18	14	29	87	210	160	145	66	494
6	Travel	362	324	258	1,297	1,219	1,668	5,447	5,107	4,295	2,776	2,107	2,360
7	Passenger fares	38	38	40	343	319	414	1,598	1,371	1,247	1,050	802	915
8	Other transportation	64	65	66	563	585	591	860	933	831	726	775	760
9	Royalties and license fees ⁵	73	74	75	406	451	417	604	790	627	1,433	1,729	1,552
10	Other private services ⁵	369	355	439	2,031	1,892	2,035	3,994	4,117	4,227	2,110	2,173	2,335
11	U.S. Government miscellaneous services	6	12	12	25	21	21	30	42	36	14	13	13
12	Income receipts	316	185	456	4,404	4,827	4,811	15,448	14,245	14,827	1,592	1,905	2,379
13	Income receipts on U.S.-owned assets abroad	314	183	454	4,385	4,806	4,791	15,413	14,212	14,790	1,589	1,902	2,376
14	Direct investment receipts	-252	-304	-80	1,553	2,026	2,015	3,711	3,213	4,404	303	580	990
15	Other private receipts	493	456	488	2,832	2,780	2,776	11,599	10,889	10,778	1,276	1,265	1,379
16	U.S. Government receipts	73	31	46				103	110	108	10	57	7
17	Compensation of employees	2	2	2	19	21	20	35	33	37	3	3	3
18	Imports of goods and services and income payments	-4,267	-3,730	-3,280	-49,207	-51,230	-53,137	-59,391	-59,348	-58,260	-42,488	-45,176	-43,529
19	Imports of goods and services	-3,807	-3,323	-2,869	-46,737	-49,456	-50,673	-44,836	-46,027	-45,812	-33,540	-35,680	-35,123
20	Goods, balance of payments basis ²	-2,874	-2,744	-2,402	-41,779	-46,000	-47,684	-36,492	-37,796	-37,327	-29,837	-31,734	-31,098
21	Services ³	-933	-579	-467	-4,958	-3,456	-2,989	-8,344	-8,231	-8,485	-3,703	-3,946	-4,025
22	Direct defense expenditures	-51	-42	-45	-16	-22	-18	-98	-93	-105	-339	-303	-325
23	Travel	-518	-214	-149	-2,457	-987	-863	-4,157	-4,045	-3,965	-639	-664	-778
24	Passenger fares	-149	-78	-58	-200	-121	-115	-746	-713	-856	-213	-219	-204
25	Other transportation	-46	-45	-41	-710	-724	-724	-590	-615	-639	-1,067	-1,116	-1,073
26	Royalties and license fees ⁵	-1	-2	-1	-116	-112	-120	-66	-66	-69	-543	-656	-664
27	Other private services ⁵	-152	-155	-155	-1,403	-1,443	-1,099	-2,559	-2,573	-2,729	-865	-961	-949
28	U.S. Government miscellaneous services	-16	-43	-18	-56	-47	-50	-138	-126	-122	-37	-27	-32
29	Income payments	-460	-407	-411	-2,470	-1,774	-2,464	-14,555	-13,321	-12,808	-8,948	-9,946	-8,406
30	Income payments on foreign-owned assets in the United States	-446	-388	-392	-2,399	-1,693	-2,385	-12,948	-11,733	-11,430	-8,935	-9,474	-8,383
31	Direct investment payments	-4	-2	-2	-1,106	-344	-1,020	-435	-88	-269	-1,684	-1,654	-468
32	Other private payments	-156	-92	-97	-1,092	-1,161	-1,177	-9,553	-8,982	-8,502	-2,347	-2,909	-3,011
33	U.S. Government payments	-286	-294	-293	-201	-188	-188	-2,960	-2,663	-2,659	-4,904	-4,911	-4,904
34	Compensation of employees	-14	-19	-19	-71	-81	-79	-1,607	-1,588	-1,378	-13	-22	-23
35	Unilateral current transfers, net	-1,007	-769	-739	-163	-140	-173	-3,218	-3,367	-3,325	-59	-32	-181
36	U.S. Government grants ⁴	-656	-392	-317				-284	-474	-382			
37	U.S. Government pensions and other transfers	-10	-10	-9	-120	-118	-125	-175	-201	-148	-25	-25	-22
38	Private remittances and other transfers ⁶	-341	-367	-413	-43	-22	-48	-2,759	-2,692	-2,795	-34	-7	-159
Capital and financial account													
Capital account													
39	Capital account transactions, net	5	5	6	16	11	28	66	72	62	6	6	6
Financial account													
40	U.S.-owned assets abroad, net (increase/financial outflow (-))	1,573	-1,040	-1,583	-9,449	-9,242	6,253	-11,743	21,426	8,792	-5,540	6,152	-7,579
41	U.S. official reserve assets, net	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	-86	2,168	-2,000
42	Gold ⁷	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)
43	Special drawing rights	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)
44	Reserve position in the International Monetary Fund	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)
45	Foreign currencies	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	(⁽)	-86	2,168	-2,000
46	U.S. Government assets, other than official reserve assets, net	72	-9	-10	(⁽)	(⁽)	(⁽)	-32	-79	160	2	-23	11
47	U.S. credits and other long-term assets	-273	-19	-164	(⁽)	(⁽)	(⁽)	-445	-608	(⁽)	(⁽)	(⁽)	(⁽)
48	Repayments on U.S. credits and other long-term assets ⁸	267	16	160	(⁽)	(⁽)	(⁽)	417	398	769	(⁽)	(⁽)	(⁽)
49	U.S. foreign currency holdings and U.S. short-term assets, net	66	-6	-6	(⁽)	(⁽)	(⁽)	-4	8	-1	2	-23	11
50	U.S. private assets, net	101	-1,031	-1,573	-9,449	-9,242	6,253	-11,711	21,505	8,632	-5,456	4,007	-5,590
51	Direct investment	-173	-9	-253	-2,204	-1,008	-2,190	-4,047	-4,138	-7,115	-438	-326	-988
52	Foreign securities	420	-868	-120	3,750	-3,328	-705	-4,824	-584	-482	3,662	1,863	-10,476
53	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	278	-7	(⁽)	4,328	1,690	(⁽)	-8,733	-1,628	1,300	-452	-2,073	(⁽)
54	U.S. claims reported by U.S. banks, not included elsewhere	976	-147	-1,200	-15,323	-6,596	9,148	5,893	27,855	14,929	-8,228	4,543	5,874
55	Foreign-owned assets in the United States, net (increase/financial inflow (+))	-2,090	1,336	2,920	9,746	-806	7,454	-22,674	-23,968	4,743	24,975	54,357	-18,359
56	Foreign official assets in the United States, net	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	-3,227	3,112	2,903	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
57	U.S. Government securities	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	-3,177	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
58	U.S. Treasury securities ⁹	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
59	Other ¹⁰	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
60	Other U.S. Government liabilities ¹¹	10	149	59	-1	-5	7	-2	-7	-13	102	-78	-481
61	U.S. liabilities reported by U.S. banks, not included elsewhere	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
62	Other foreign official assets ¹²	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
63	Other foreign assets in the United States, net	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	12,973	-3,918	4,551	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
64	Direct investment	-2	-9	-6	10,142	-1,080	1,901	-817	-1,120	301	1,353	2,634	-1,144
65	U.S. Treasury securities	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)	(⁽¹⁸⁾)
66	U.S. securities other than U.S. Treasury securities	209	1	15	574	-1,655	2,241	-10,751	1,653	9,053	-888	6,102	-1,636
67	U.S. currency												
68	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	10	-225	(⁽¹⁸⁾)	1,325	-1,906	(⁽¹⁷⁾)	10,646	-6,684	4,500	-2,478	1,389	(⁽¹⁸⁾)
69	U.S. liabilities reported by U.S. banks, not included elsewhere	⁽¹⁸⁾ -2,317	⁽¹⁸⁾ 1,420	⁽¹⁸⁾ 2,852	(⁽¹⁷⁾)	(⁽¹⁷⁾)	(⁽¹⁷⁾)	⁽¹⁸⁾ -21,750	⁽¹⁸⁾ -17,810	⁽¹⁸⁾ -9,098	⁽¹⁸⁾ 26,886	⁽¹⁸⁾ 44,310	⁽¹⁸⁾ -15,098
70	Statistical discrepancy (sum of above items with sign reversed)	2,815	1,626	45	4,078	11,642	-10,481	34,482	2,007	-10,027	-782	-38,567	44,402
Memoranda:													
71	Balance on goods (lines 3 and 20)	-1,219	-1,332	-1,189	-5,887	-5,563	-7,614	-2,082	-1,433	-5,202	-15,795	-18,044	-16,666
72	Balance on services (lines 4 and 21)	67	396	495	-275	1,045	2,186	4,276	4,339	2,938	4,551	3,719	4,404
73	Balance on income and services (lines 2 and 19)	-1,152	-936	-694	-6,162	-4,518	-5,428	2,194	2,906	-2,264	-11,244	-14,325	-12,262
74	Balance on income (lines 12 and 29												

Table F.3.—U.S. International Transactions, by Area—Continued

[Millions of dollars]

Line	(Credits +; debits -) ¹	Australia			Other countries in Asia and Africa			International organizations and unallocated ¹⁶		
		1998		1999	1998		1999	1998		1999
		III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p	III ^r	IV ^r	I ^p
Current account										
1	Exports of goods and services and income receipts	5,350	5,213	4,898	51,380	56,876	50,974	7,389	7,782	7,516
2	Exports of goods and services	4,174	4,173	3,729	45,818	51,643	45,791	1,135	1,216	1,208
3	Goods, balance of payments basis ²	2,918	2,902	2,543	31,278	38,575	31,674			
4	Services ³	1,256	1,271	1,186	14,540	13,068	14,117	1,135	1,216	1,208
5	Transfers under U.S. military agency sales contracts ⁴	43	44	52	2,439	2,327	2,379			
6	Travel	404	408	342	3,366	2,307	2,044			
7	Passenger fares	153	123	122	593	378	388			
8	Other transportation	83	86	83	1,985	2,143	2,128	141	136	135
9	Royalties and license fees ⁵	190	205	178	1,135	1,205	1,123	478	565	499
10	Other private services ⁵	382	402	408	4,934	4,629	5,968	516	515	574
11	U.S. Government miscellaneous services	1	3	1	88	79	87			
12	Income receipts	1,176	1,040	1,169	5,562	5,233	5,183	6,254	6,566	6,308
13	Income receipts on U.S.-owned assets abroad	1,174	1,038	1,167	5,546	5,217	5,166	5,903	6,213	5,956
14	Direct investment receipts	467	353	444	2,643	2,510	2,391	3,357	3,686	3,344
15	Other private receipts	707	685	723	2,578	2,435	2,478	2,335	2,300	2,396
16	U.S. Government receipts				325	272	297	211	227	216
17	Compensation of employees	2	2	2	16	16	17	351	353	352
18	Imports of goods and services and income payments	-2,561	-2,563	-2,344	-87,791	-83,204	-79,339	-2,687	-3,147	-2,789
19	Imports of goods and services	-2,151	-2,154	-1,887	-80,534	-75,971	-71,950	-595	-555	-590
20	Goods, balance of payments basis ²	-1,315	-1,360	-1,093	-71,565	-67,173	-62,733			
21	Services ³	-836	-794	-794	-8,969	-8,798	-9,217	-595	-555	-590
22	Direct defense expenditures	-7	-9	-13	-1,036	-1,118	-1,204			
23	Travel	-386	-283	-296	-2,732	-2,392	-2,765			
24	Passenger fares	-143	-175	-169	-1,160	-1,170	-1,251			
25	Other transportation	-53	-55	-51	-2,109	-2,159	-2,095	-337	-324	-311
26	Royalties and license fees ⁵	-6	-8	-8	-67	-75	-71	-169	-180	-183
27	Other private services ⁵	-224	-253	-245	-1,655	-1,679	-1,634	-88	-51	-96
28	U.S. Government miscellaneous services	-17	-11	-12	-210	-205	-197	-1		
29	Income payments	-410	-409	-457	-7,257	-7,233	-7,389	-2,092	-2,592	-2,199
30	Income payments on foreign-owned assets in the United States	-408	-407	-455	-7,175	-7,089	-7,244	-2,092	-2,592	-2,199
31	Direct investment payments	-187	-132	-184	-85	60	-80	-1,253	-1,803	-1,351
32	Other private payments	-160	-149	-146	-2,611	-2,399	-2,413	-836	-788	-847
33	U.S. Government payments	-61	-126	-125	-4,479	-4,750	-4,743	-3	-1	-1
34	Compensation of employees	-2	-2	-2	-82	-144	-145			
35	Unilateral current transfers, net	-38	-29	-39	-3,707	-6,629	-3,412	-2,324	-2,770	-2,340
36	U.S. Government grants ⁴				-1,526	-4,539	-1,064	-198	-223	-225
37	U.S. Government pensions and other transfers	-9	-10	-9	-98	-124	-121	-82	-686	-124
38	Private remittances and other transfers ⁶	-29	-19	-30	-2,083	-1,966	-2,227	-2,044	-1,861	-1,991
Capital and financial account										
Capital account										
39	Capital account transactions, net	1	1	2	17	33	28			
Financial account										
40	U.S.-owned assets abroad, net (increase/financial outflow (-))	-1,839	1,095	-1,518	1,532	-4,620	-2,653	-7,221	-4,936	-5,622
41	U.S. official reserve assets, net	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	-1,890	-2,151	566
42	Gold ⁷	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
43	Special drawing rights	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	188	-227	563
44	Reserve position in the International Monetary Fund	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	-2,078	-1,924	3
45	Foreign currencies	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)	(⁷)
46	U.S. Government assets, other than official reserve assets, net	(⁷)	(⁷)	(⁷)	162	123	81	-291	-267	-267
47	U.S. credits and other long-term assets	(⁷)	(⁷)	(⁷)	-206	-222	-207	-291	-267	-267
48	Repayments on U.S. credits and other long-term assets ⁸	(⁷)	(⁷)	(⁷)	365	288	381	(⁷)	(⁷)	(⁷)
49	U.S. foreign currency holdings and U.S. short-term assets, net	(⁷)	(⁷)	(⁷)	3	57	-93	(⁷)	(⁷)	(⁷)
50	U.S. private assets, net	-1,839	1,095	-1,518	1,370	-4,743	-2,734	-5,040	-2,518	-5,921
51	Direct investment	-601	1,370	-2,113	-2,784	-4,241	-7,095	-2,741	-3,486	-3,183
52	Foreign securities	-401	427	-82	3,804	862	-1,217	76	-694	49
53	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	-513	-725	(⁷)	-386	492	(⁷)	-45	45	-1,705
54	U.S. claims reported by U.S. banks, not included elsewhere	-324	23	677	736	-1,856	5,578	-2,330	1,617	-1,082
55	Foreign-owned assets in the United States, net (increase/financial inflow (+))	-3,406	2,032	901	-16,054	17,089	15,376	8,033	5,537	12,140
56	Foreign official assets in the United States, net	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)		2	
57	U.S. Government securities	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)			
58	U.S. Treasury securities ⁹	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)			
59	Other ¹⁰	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)			
60	Other U.S. Government liabilities ¹¹	-2	15	8	-228	-705	-750		2	
61	U.S. liabilities reported by U.S. banks, not included elsewhere	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)
62	Other foreign official assets ¹²	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)
63	Other foreign assets in the United States, net	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	8,033	5,535	12,140
64	Direct investment	-472	328	202	-15	535	452	1,123	1,161	1,197
65	U.S. Treasury securities	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)	(¹⁸)
66	U.S. securities other than U.S. Treasury securities	6	981	42	-7,245	1,956	3,655	-155	-25	-148
67	U.S. currency							7,277	6,250	2,440
68	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	97	-64		-1,665	-2,907		49	37	6,705
69	U.S. liabilities reported by U.S. banks, not included elsewhere	¹⁸ -3,035	¹⁸ 772	¹⁸ 649	¹⁸ -6,901	¹⁸ 18,210	¹⁸ 12,019	¹⁸ -261	¹⁸ -1,888	¹⁸ 1,946
70	Statistical discrepancy (sum of above items with sign reversed)	2,493	-5,749	-1,900	54,623	20,455	19,026	-3,190	-2,466	-8,905
Memoranda:										
71	Balance on goods (lines 3 and 20)	1,603	1,542	1,450	-40,287	-28,598	-31,059			
72	Balance on services (lines 4 and 21)	420	477	392	5,571	4,270	4,900	540	661	618
73	Balance on goods and services (lines 2 and 19)	2,023	2,019	1,842	-34,716	-24,328	-26,159	540	661	618
74	Balance on income (lines 12 and 29)	766	631	712	-1,695	-2,000	-2,206	4,162	3,974	4,109
75	Unilateral current transfers, net (line 35)	-38	-29	-39	-3,707	-6,629	-3,412	-2,324	-2,770	-2,340
76	Balance on current account (lines 1, 18, and 35 or lines 73, 74, and 75) ¹³	2,751	2,621	2,515	-40,118	-32,957	-31,777	2,378	1,865	2,387

14. The "European Union" includes the "European Union (6)," United Kingdom, Denmark, Ireland, Greece, Spain, and Portugal. Beginning with the first quarter of 1995, the "European Union" also includes Austria, Finland, and Sweden.

15. The "European Union (6)" includes Belgium, France, Germany (includes the former German Democratic Republic (East Germany) beginning in the fourth quarter of 1990), Italy, Luxembourg, Netherlands, European Atomic Energy Community, European Coal and Steel Community, and European Investment Bank.

16. Includes, as part of international and unallocated, the estimated direct investment in foreign affiliates engaged in international shipping, in operating oil and gas drilling equipment internationally, and in petroleum trading. Also includes taxes withheld, current-cost adjustments associated with U.S. and foreign direct investment; small trans-

actions in business services that are not reported by country; and net U.S. currency flows, for which geographic source data are not available.

17. Details not shown separately; see totals in lines 56 and 63.

18. Details not shown separately are included in line 69.

NOTE.—The data in tables F.2 and F.3 are from tables 1 and 10 in "U.S. International Transactions, First Quarter 1999" in the July 1999 issue of the SURVEY OF CURRENT BUSINESS, which presents the most recent estimates from the balance of payments accounts.

Table F.4.—Private Service Transactions

[Millions of dollars]

Line		1997	1998	Seasonally adjusted					
				1997	1998				1999
					IV	I	II	III		IV	I^{P}
1	Exports of private services	240,443	245,688	61,144	60,341	62,011	60,847	62,490	63,226
2	Travel (table F.2, line 6)	73,301	71,250	18,107	17,903	18,260	17,149	17,938	18,082
3	Passenger fares (table F.2, line 7)	20,789	19,996	5,259	4,916	5,185	5,052	4,843	4,940
4	Other transportation (table F.2, line 8)	27,006	25,518	6,855	6,338	6,268	6,339	6,575	6,614
5	Freight	11,789	11,178	3,052	2,872	2,769	2,684	2,852	2,845
6	Port services	15,217	14,340	3,802	3,465	3,498	3,654	3,722	3,769
7	Royalties and license fees (table F.2, line 9)	33,781	36,808	8,488	8,882	9,002	9,029	9,894	9,454
8	Affiliated	25,024	26,761	6,188	6,504	6,542	6,491	7,223	6,757
9	U.S. parents' receipts	23,221	24,712	5,708	5,963	6,066	6,091	6,591	6,114
10	U.S. affiliates' receipts	1,803	2,049	480	541	476	400	632	643
11	Unaffiliated	8,757	10,047	2,300	2,378	2,460	2,538	2,671	2,697
12	Industrial processes ¹	3,552	4,138	926	973	1,018	1,053	1,094	1,093
13	Other ²	5,205	5,909	1,374	1,405	1,442	1,485	1,578	1,604
14	Other private services (table F.2, line 10)	85,566	92,116	22,435	22,302	23,296	23,278	23,240	24,136
15	Affiliated services	27,272	28,321	7,012	6,987	7,114	7,184	7,036	7,502
16	U.S. parents' receipts	17,271	18,212	4,574	4,608	4,631	4,411	4,561	4,681
17	U.S. affiliates' receipts	10,001	10,109	2,438	2,379	2,483	2,773	2,475	2,821
18	Unaffiliated services	58,294	63,795	15,423	15,315	16,182	16,094	16,204	16,634
19	Education	8,343	8,964	2,194	2,160	2,251	2,310	2,243	2,312
20	Financial services	11,539	13,698	3,301	3,132	3,778	3,419	3,369	3,350
21	Insurance, net	2,485	2,842	644	683	696	717	746	794
22	Premiums received	6,133	6,985	1,594	1,657	1,722	1,780	1,826	1,860
23	Losses paid	3,648	4,143	950	1,026	1,026	1,063	1,080	1,066
24	Telecommunications	3,949	3,689	1,032	955	926	900	908	882
25	Business, professional, and technical services	22,467	24,338	5,790	5,858	6,017	6,164	6,299	6,544
26	Other unaffiliated services ³	9,511	10,264	2,463	2,527	2,513	2,583	2,640	2,752
27	Imports of private services	152,447	165,321	39,151	39,858	41,424	41,739	42,304	43,107
28	Travel (table F.2, line 23)	52,051	56,105	13,155	13,736	14,168	14,070	14,131	14,628
29	Passenger fares (table F.2, line 24)	18,138	19,797	4,523	4,629	4,958	5,085	5,125	5,186
30	Other transportation (table F.2, line 25)	28,959	30,457	7,400	7,321	7,590	7,700	7,849	7,764
31	Freight	17,654	19,412	4,457	4,548	4,858	4,999	5,006	4,989
32	Port services	11,305	11,048	2,943	2,773	2,732	2,701	2,843	2,875
33	Royalties and license fees (table F.2, line 26)	9,390	11,292	2,535	2,955	2,694	2,721	2,923	3,151
34	Affiliated	6,967	8,374	1,911	2,017	2,050	2,037	2,271	2,489
35	U.S. parents' payments	989	1,169	298	290	273	298	308	319
36	U.S. affiliates' payments	5,978	7,205	1,613	1,727	1,777	1,739	1,963	2,170
37	Unaffiliated	2,423	2,919	624	938	644	684	652	662
38	Industrial processes ¹	1,418	1,546	363	372	382	392	401	408
39	Other ²	1,006	1,372	261	567	262	292	252	254
40	Other private services (table F.2, line 27)	43,909	47,670	11,538	11,217	12,014	12,163	12,276	12,378
41	Affiliated services	17,728	19,095	4,670	4,267	4,856	4,974	4,998	5,083
42	U.S. parents' payments	8,927	9,730	2,346	2,288	2,424	2,453	2,565	2,614
43	U.S. affiliates' payments	8,801	9,365	2,324	1,979	2,432	2,521	2,433	2,469
44	Unaffiliated services	26,181	28,575	6,868	6,950	7,158	7,189	7,278	7,295
45	Education	1,395	1,538	358	356	380	401	401	404
46	Financial services	3,563	3,771	872	927	1,010	932	902	827
47	Insurance, net	6,002	6,908	1,672	1,702	1,717	1,736	1,753	1,816
48	Premiums paid	15,233	18,581	4,078	4,329	4,572	4,770	4,910	4,998
49	Losses recovered	9,231	11,673	2,407	2,627	2,855	3,034	3,157	3,183
50	Telecommunications	8,351	8,125	2,139	2,050	2,032	2,014	2,029	2,024
51	Business, professional, and technical services	6,358	7,684	1,683	1,786	1,884	1,968	2,045	2,103
52	Other unaffiliated services ³	511	549	144	129	135	138	148	122
Memoranda:									
53	Balance on goods (table F.2, line 71)	-196,651	-246,932	-50,650	-54,876	-63,500	-64,969	-63,587	-74,203
54	Balance on private services (line 1 minus line 27)	87,996	80,367	21,993	20,483	20,587	19,108	20,186	20,119
55	Balance on goods and private services (lines 53 and 54)	-108,655	-166,565	-28,657	-34,393	-42,913	-45,861	-43,401	-54,084

^P Preliminary.^R Revised.

1. Patented techniques, processes, and formulas and other intangible property rights that are used in goods production.

2. Copyrights, trademarks, franchises, rights to broadcast live events, and other intangible property rights.

3. Other unaffiliated services receipts (exports) include mainly expenditures of foreign govern-

ments and international organizations in the United States. Payments (imports) include mainly wages of foreign residents temporarily employed in the United States and Canadian and Mexican commuters in U.S. border areas.

NOTE.—The data in table F.4 are from table 3 in "U.S. International Transactions, First Quarter 1999" in the July 1999 issue of the SURVEY OF CURRENT BUSINESS, which presents the most recent estimates from the balance of payments accounts.

G. Investment Tables

Table G.1.—International Investment Position of the United States at Yearend, 1997 and 1998

[Millions of dollars]

Line	Type of investment	Position, 1997 ^r	Changes in position in 1998 (decrease (-))				Total (a+b+c+d)	Position, 1998 ^r
			Attributable to:					
			Financial flows	Valuation adjustments				
				Price changes	Exchange rate changes ¹	Other changes ²		
		(a)	(b)	(c)	(d)			
1	Net international investment position of the United States:							
2	With direct investment positions at current cost (line 3 less line 24) ...	-968,208	-209,819	-167,585	45,380	61,064	-270,960	-1,239,168
	With direct investment positions at market value (line 4 less line 25) ...	-1,066,262	-209,819	-319,300	56,282	1,633	-471,204	-1,537,466
	U.S.-owned assets abroad:							
3	With direct investment positions at current cost (lines 5+10+15)	4,508,626	292,818	101,041	43,704	-15,293	422,270	4,930,896
4	With direct investment positions at market value (lines 5+10+16)	5,288,892	292,818	315,522	54,584	-3,833	659,091	5,947,983
5	U.S. official reserve assets	134,836	6,784	-628	5,024	-10	11,170	146,006
6	Gold	75,929		³ -628		⁴ -10	-638	75,291
7	Special drawing rights	10,027	149		427		576	10,603
8	Reserve position in the International Monetary Fund	18,071	5,118		922		6,040	24,111
9	Foreign currencies	30,809	1,517		3,675		5,192	36,001
10	U.S. Government assets, other than official reserve assets	81,960	429		-5	-2	422	82,382
11	U.S. credits and other long-term assets ⁵	79,607	574			-2	572	80,179
12	Repayable in dollars	79,273	602			-1	601	79,874
13	Other ⁶	334	-28			-1	-29	305
14	U.S. foreign currency holdings and U.S. short-term assets	2,353	-145		-5		-150	2,203
	U.S. private assets:							
15	With direct investment at current cost (lines 17+19+22+23)	4,291,830	285,605	101,669	38,685	-15,281	410,678	4,702,508
16	With direct investment at market value (lines 18+19+22+23)	5,072,096	285,605	316,150	49,565	-3,821	647,499	5,719,595
	Direct investment abroad:							
17	At current cost	1,004,228	132,829	2,892	1,957	-18,465	119,213	1,123,441
18	At market value	1,784,494	132,829	217,373	12,837	-7,005	356,034	2,140,528
19	Foreign securities	1,739,400	102,817	98,777	27,962		229,556	1,968,956
20	Bonds	538,400	25,064	18,441	-20,079		23,426	561,826
21	Corporate stocks	1,201,000	77,753	80,336	48,041		206,130	1,407,130
22	U.S. claims on unaffiliated foreigners reported by U.S. nonbanking concerns	562,396	25,041		5,610	3,175	33,826	596,222
23	U.S. claims reported by U.S. banks, not included elsewhere	985,806	24,918		3,156	9	28,083	1,013,889
	Foreign-owned assets in the United States:							
24	With direct investment at current cost (lines 26+33)	5,476,834	502,637	268,626	-1,676	-76,357	693,230	6,170,064
25	With direct investment at market value (lines 26+34)	6,355,154	502,637	634,822	-1,698	-5,466	1,130,295	7,485,449
26	Foreign official assets in the United States	835,709	-21,684	22,437		-409	344	836,053
27	U.S. Government securities	614,530	-3,625	9,344			5,719	620,249
28	U.S. Treasury securities	589,792	-9,957	9,152			-805	588,987
29	Other	24,738	6,332	192			6,524	31,262
30	Other U.S. Government liabilities ⁷	21,459	-3,113				-3,113	18,346
31	U.S. liabilities reported by U.S. banks, not included elsewhere	135,384	-11,469				-11,469	123,915
32	Other foreign official assets	64,336	-3,477	13,093		-409	9,207	73,543
	Other foreign assets:							
33	With direct investment at current cost (lines 35+37+38+39+42+43)	4,641,125	524,321	246,189	-1,676	-75,948	692,886	5,334,011
34	With direct investment at market value (lines 36+37+38+39+42+43)	5,519,445	524,321	612,385	-1,698	-5,057	1,129,951	6,649,396
	Direct investment in the United States:							
35	At current cost	764,045	193,375	-3,877	22	-74,848	114,672	878,717
36	At market value	1,642,365	193,375	362,319		-3,957	551,737	2,194,102
37	U.S. Treasury securities	662,228	46,155	18,961			65,116	727,344
38	U.S. currency	211,628	16,622				16,622	228,250
39	U.S. securities other than U.S. Treasury securities	1,578,694	218,026	231,105	-6,005		443,126	2,021,820
40	Corporate and other bonds	715,196	170,539	21,019	-6,005		185,553	900,749
41	Corporate stocks	863,498	47,487	210,086			257,573	1,121,071
42	U.S. liabilities to unaffiliated foreigners reported by U.S. nonbanking concerns	453,555	9,412		-1,080	-1,100	7,232	460,787
43	U.S. liabilities reported by U.S. banks, not included elsewhere	970,975	40,731		5,387		46,118	1,017,093

^r Preliminary.^r Revised.

1. Represents gains or losses on foreign-currency-denominated assets due to their revaluation at current exchange rates.

2. Includes changes in coverage, statistical discrepancies, and other adjustments to the value of assets.

3. Reflects changes in the value of the official gold stock due to fluctuations in the market price of gold.

4. Reflects changes in gold stock from U.S. Treasury sales of gold medallions and commemorative and bullion coins; also reflects replenishment through open market purchases. These demonetizations/monetizations are not included in international transactions capital flows.

5. Also includes paid-in capital subscriptions to international financial institutions and outstanding amounts of miscellaneous claims that have been settled through international agreements to be payable to the U.S. Government over periods in excess of 1 year. Excludes World War I debts that are not being serviced.

6. Includes indebtedness that the borrower may contractually, or at its option, repay with its currency, with a third country's currency, or by delivery of materials or transfer of services.

7. Primarily U.S. Government liabilities associated with military sales contracts and other transactions arranged with or through foreign official agencies.

NOTE.—The data in this table are from table 1 in "International Investment Position of the United States at Yearend 1998" in the July 1999 issue of the SURVEY.

Table G.2.—U.S. Direct Investment Abroad: Selected Items, by Country and by Industry of Foreign Affiliate, 1996–98

[Millions of dollars]

	Direct investment position on a historical-cost basis			Capital outflows (inflows (-))			Income		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
All countries, all industries	795,195	865,531	980,565	84,426	99,517	121,644	93,594	103,892	90,242
By country									
Canada	89,592	96,031	103,908	7,181	7,493	10,259	9,258	10,548	8,104
Europe	389,378	420,108	489,539	40,148	51,698	74,538	44,286	48,757	49,308
<i>Of which:</i>									
France	35,200	35,800	39,188	4,463	2,543	2,895	3,224	2,575	2,450
Germany	41,281	38,490	42,853	1,956	1,627	2,025	3,797	3,339	4,787
Netherlands	54,118	64,361	79,386	6,308	14,327	14,996	9,632	12,370	12,594
United Kingdom	134,559	153,108	178,648	16,421	22,411	34,428	12,220	13,126	11,582
Latin America and Other Western Hemisphere	155,925	178,505	196,655	18,138	21,966	18,020	17,762	21,408	16,908
<i>Of which:</i>									
Brazil	29,105	35,091	37,802	4,159	6,514	3,790	4,172	4,675	3,037
Mexico	19,351	24,181	25,877	2,405	5,646	2,533	2,721	3,905	3,177
Africa	8,162	11,157	13,491	1,678	3,371	2,712	1,801	1,954	1,719
Middle East	8,294	8,803	10,599	467	601	2,062	1,412	1,328	757
Asia and Pacific	139,548	146,610	161,797	15,363	13,693	13,471	18,795	19,513	12,623
<i>Of which:</i>									
Australia	30,006	29,910	33,676	3,787	2,393	3,659	2,851	3,598	1,898
Japan	34,578	33,725	38,153	-280	-371	3,844	3,475	3,516	2,179
International	4,295	4,317	4,578	1,451	694	582	278	383	823
By industry									
Petroleum	75,232	82,212	91,113	6,239	9,603	9,780	12,082	11,823	8,059
Manufacturing	270,288	280,332	304,690	24,325	28,097	26,680	34,342	38,283	31,416
Food and kindred products	31,024	32,465	33,871	2,095	3,806	1,670	4,452	4,910	4,262
Chemicals and allied products	74,858	77,112	83,589	5,796	7,210	7,072	9,529	10,050	9,930
Primary and fabricated metals	16,309	15,924	17,098	6,064	444	1,109	1,358	1,406	1,278
Industrial machinery and equipment	30,336	32,293	34,755	2,752	4,381	2,810	4,637	5,669	4,213
Electronic and other electric equipment	31,832	31,624	34,531	3,440	2,992	2,670	4,280	4,700	2,763
Transportation equipment	32,092	34,907	35,615	708	4,419	1,692	3,409	5,048	2,385
Other manufacturing	53,837	56,006	65,231	3,470	4,845	9,658	6,677	6,500	6,586
Wholesale trade	67,125	64,432	75,188	6,498	846	9,130	9,068	9,538	10,794
Depository institutions	36,807	40,169	42,029	2,448	3,036	1,253	3,329	3,374	577
Finance, (except depository institutions), insurance, and real estate	254,739	293,116	337,600	31,601	41,388	44,445	28,938	31,912	30,702
Services	37,850	42,342	52,514	3,511	4,557	10,867	3,627	5,533	4,722
Other industries	53,155	62,925	77,432	9,804	11,990	19,490	2,209	3,429	3,972

NOTE.—In this table, unlike in the international transactions accounts, income and capital outflows are shown without a current-cost adjustment, and income is shown net of withholding taxes. In addition, unlike in the international investment position, the direct investment position is valued at historical cost.

Table G.3.—Selected Financial and Operating Data for Nonbank Foreign Affiliates of U.S. Companies, by Country and by Industry of Foreign Affiliate, 1997

	Number of affiliates	Millions of dollars			Thousands of employees
		Total assets	Sales	Net income	
All countries, all industries	22,871	3,397,262	2,356,416	155,267	8,018.0
By country					
Canada	2,073	294,943	274,205	13,654	941.9
Europe	11,209	1,914,373	1,214,194	77,854	3,333.9
<i>Of which:</i>					
France	1,297	144,057	130,883	3,424	483.7
Germany	1,424	213,029	234,508	7,531	627.4
Italy	783	66,091	74,035	2,311	205.5
Netherlands	1,104	179,751	130,053	17,014	169.4
Switzerland	545	93,348	67,620	9,155	L
United Kingdom	2,532	923,207	337,907	18,020	977.2
Latin America and Other Western Hemisphere	3,583	458,889	268,912	30,849	1,629.2
<i>Of which:</i>					
Brazil	461	79,240	67,380	4,934	340.8
Mexico	874	83,500	88,063	8,488	793.0
Africa	559	40,602	29,150	2,653	186.6
Middle East	355	39,411	24,950	2,603	77.4
Asia and Pacific	4,977	628,118	536,462	26,231	1,835.8
<i>Of which:</i>					
Australia	904	96,250	68,519	3,899	304.2
Japan	990	266,028	205,072	5,925	396.7
International	115	20,926	8,545	1,422	13.2
By industry					
Petroleum	1,622	295,313	360,452	19,778	226.1
Manufacturing	8,528	884,113	1,086,129	61,660	4,592.9
Food and kindred products	789	112,875	127,710	8,810	598.0
Chemicals and allied products	2,065	220,923	207,988	17,900	622.4
Primary and fabricated metals	760	47,209	44,679	2,043	244.7
Industrial machinery and equipment	1,090	123,273	178,257	9,033	634.1
Electronic and other electric equipment	908	84,525	110,625	6,905	774.5
Transportation equipment	530	131,550	244,199	6,198	724.2
Other manufacturing	2,386	163,757	172,671	10,772	995.0
Wholesale trade	5,045	223,451	422,285	15,218	588.0
Finance, (except depository institutions), insurance, and real estate	3,115	1,498,127	135,331	42,922	218.8
Services	2,873	154,234	128,639	6,843	988.9
Other industries	1,688	342,025	223,580	8,846	1,403.3

NOTES.—The data in this table are from "U.S. Multinational Companies: Operations in 1997" in the July 1999 issue of the SURVEY OF CURRENT BUSINESS.

Size ranges are given in employment cells that are suppressed. The size range is L—50,000–99,999.

Table G.4.—Foreign Direct Investment in the United States: Selected Items, by Country of Foreign Parent and by Industry of Affiliate, 1996–98

[Millions of dollars]

	Direct investment position on a historical-cost basis			Capital inflows (outflows (-))			Income		
	1996	1997	1998	1996	1997	1998	1996	1997	1998
All countries, all industries	598,021	693,207	811,756	84,455	105,488	188,960	30,407	42,115	38,015
By country									
Canada	54,836	69,866	74,840	8,590	15,399	11,859	3,190	3,361	3,010
Europe	370,843	432,622	539,906	55,989	70,508	167,655	23,724	31,380	27,635
<i>Of which:</i>									
France	43,253	49,503	62,167	7,244	10,993	12,308	2,405	3,183	3,137
Germany	61,096	71,289	95,045	19,616	12,919	42,145	2,509	3,294	4,392
Netherlands	75,349	89,570	96,904	12,262	13,658	7,018	5,271	7,103	5,920
United Kingdom	121,582	131,315	151,335	14,404	11,234	69,968	10,374	11,440	7,815
Latin America and Other Western Hemisphere	28,002	33,546	32,210	1,990	3,993	278	1,383	1,752	1,494
<i>Of which:</i>									
Brazil	697	742	609	-64	64	-132	45	44	82
Mexico	1,641	3,315	4,029	-47	330	864	1	171	270
Africa	994	1,465	884	-101	435	-572	-136	-352	-89
Middle East	5,812	6,593	7,831	496	791	967	118	617	475
Asia and Pacific	137,533	149,115	156,085	17,493	14,361	8,773	2,129	5,356	5,489
<i>Of which:</i>									
Australia	14,968	14,703	14,755	5,321	2,254	2,034	492	214	672
Japan	116,144	125,131	132,569	13,337	9,275	7,101	2,939	5,780	5,187
By industry									
Petroleum	43,483	42,085	53,254	8,852	2,805	57,355	4,160	4,555	1,443
Manufacturing	245,662	273,122	329,346	37,538	36,086	87,454	15,694	18,628	20,696
Food and kindred products	28,088	26,710	18,112	1,981	-903	-5,020	1,819	1,532	1,056
Chemicals and allied products	79,515	88,831	101,351	8,081	13,746	10,325	5,014	5,556	6,190
Primary and fabricated metals	18,576	23,366	22,512	5,397	4,258	1,041	1,024	1,572	1,744
Machinery	39,093	46,636	59,260	2,868	7,573	18,475	1,166	2,805	2,718
Other manufacturing	80,390	87,580	128,112	19,211	11,411	62,632	6,671	7,162	8,988
Wholesale trade	73,506	87,630	96,261	7,974	14,729	11,004	2,256	3,972	5,247
Retail trade	13,765	16,718	18,778	2,708	2,622	1,946	509	487	579
Depository institutions	31,264	38,118	44,785	138	6,800	5,684	2,867	3,930	3,067
Finance, except depository institutions	37,531	43,413	50,858	6,186	7,140	5,812	855	1,979	-718
Insurance	56,124	70,492	80,378	6,747	12,097	6,817	2,382	4,681	4,019
Real estate	35,169	40,060	44,436	2,535	4,675	3,284	-59	789	948
Services	29,391	38,521	50,252	4,214	7,862	10,744	-14	916	1,358
Other industries	32,126	43,049	43,409	7,562	10,673	-1,139	1,757	2,178	1,376

NOTE.—In this table, unlike in the international transactions accounts, income and capital inflows are shown without a current-cost adjustment, and income is shown net of withholding taxes. In addition, unlike in the international investment position, the direct investment position is valued at historical cost.

Table G.5.—Selected Financial and Operating Data of Nonbank U.S. Affiliates of Foreign Companies by Country of Ultimate Beneficial Owner and by Industry of Affiliate, 1997

	Number of affiliates	Millions of dollars				Thousands of employees	Millions of dollars	
		Total assets	Sales	Net income	Gross product		U.S. exports of goods shipped by affiliates	U.S. imports of goods shipped to affiliates
All countries, all industries	9,474	3,034,404	1,717,240	42,547	384,883	5,164.3	140,924	261,482
By country								
Canada	945	309,080	139,409	3,693	34,464	601.6	7,787	14,356
Europe	4,071	1,809,319	940,672	31,107	245,919	3,213.9	62,392	94,512
<i>Of which:</i>								
France	513	322,270	135,414	2,959	35,863	411.2	14,032	12,936
Germany	1,011	302,740	194,492	5,071	46,171	657.6	13,973	32,032
Netherlands	302	260,034	124,109	5,508	33,750	391.4	4,592	10,191
Switzerland	404	339,896	110,077	2,986	25,637	352.1	6,233	7,127
United Kingdom	929	454,081	258,845	12,119	78,550	983.2	14,543	15,363
Latin America and Other Western Hemisphere	632	59,833	53,469	2,522	13,545	168.1	5,308	9,622
Africa	41	11,969	11,222	326	2,843	22.4	855	634
Middle East	307	28,841	25,246	1,151	7,295	92.7	814	5,534
Asia and Pacific	3,373	687,245	523,479	918	73,667	1,012.6	62,709	135,739
<i>Of which:</i>								
Australia	135	55,514	26,132	-101	5,207	80.1	1,410	1,501
Japan	2,587	582,570	446,422	2,701	62,345	812.4	52,883	120,357
United States	105	128,117	23,742	2,829	7,151	52.9	1,058	1,084
By industry ¹								
Manufacturing	2,846	680,260	667,576	18,826	188,477	2,227.0	70,053	99,304
<i>Of which:</i>								
Food	214	43,894	47,082	183	10,953	152.7	2,620	2,675
Chemicals	339	190,326	141,744	4,280	40,906	389.4	15,259	16,019
Primary and fabricated metals	373	67,516	65,075	1,744	16,510	219.4	5,133	8,329
Machinery	359	47,246	56,680	1,390	16,607	260.8	10,357	8,267
Computers and electronic products	333	53,182	73,413	-257	15,658	239.6	13,092	20,612
Electrical equipment, appliances, and components	104	22,574	26,203	631	7,537	129.5	3,430	3,421
Transportation equipment	260	49,211	72,607	2,060	13,554	207.9	7,631	18,203
Wholesale trade	1,708	293,144	530,141	3,889	51,856	538.5	63,231	155,716
Retail trade	210	49,802	96,624	1,197	25,009	688.7	1,951	3,973
Information	236	144,497	80,845	2,445	27,120	293.4	888	374
Finance (except depository institutions) and insurance	570	1,534,492	175,822	11,220	26,331	219.8	(^D)	(^D)
Real estate and rental and leasing	1,935	116,679	20,813	204	9,084	47.0	(^D)	(^D)
Professional, scientific, and technical services	301	17,299	15,972	-570	5,981	82.6	361	567
Other industries	1,668	198,229	129,448	5,337	51,025	1,067.3	4,332	1,255

^D Suppressed to avoid disclosure of data of individual companies.

1. The industry classification system used to classify the data for U.S. affiliates is based on the North American Industry Classification System. Prior to 1997, the affiliate data were classified

using an industry classification system based on the Standard Industrial Classification system.

NOTE.—The data in this table are from "Foreign Direct Investment in the United States: Preliminary Results from the 1997 Benchmark Survey" in this issue of the SURVEY.

H. International Perspectives

Quarterly data in this table are shown in the middle month of the quarter.

Table H.1.—International Perspectives

	1997	1998	1998									1999				
			Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Exchange rates per U.S. dollar (not seasonally adjusted) ¹																
Canada (Can./US\$)	1.3849	1.4836	1.4298	1.4452	1.4655	1.4869	1.5346	1.5218	1.5452	1.5404	1.5433	1.5194	1.4977	1.5176	1.4881	1.4611
European Monetary Union (US\$/Euro) ²												1.1591	1.1203	1.0886	1.0701	1.0630
France (FFr/US\$) ²	5.8393	5.8995	6.0782	5.9528	6.0118	6.0280	5.9912	5.6969	5.4925	5.6422	5.5981					
Germany (DM/US\$) ²	1.7348	1.7597	1.8132	1.7753	1.7928	1.7976	1.7869	1.6990	1.6381	1.6827	1.6698					
Italy (L/US\$) ²	17.0381	17.3685	17.9124	17.5079	17.6632	17.7242	17.6301	16.7892	16.2096	16.6491	16.5323					
Japan (¥/US\$)	1.2106	1.3099	1.3175	1.3490	1.4033	1.4079	1.4468	1.3448	1.2105	1.2029	1.1707	1.1329	1.1667	1.1947	1.1977	1.2200
Mexico (Peso/US\$)	7.9177	9.1520	8.5017	8.5848	8.9200	8.8990	9.3712	10.2192	10.1594	9.9680	9.9070	10.1280	10.0060	9.7320	9.4300	9.3950
United Kingdom (US\$/£)	1.6376	1.6573	1.6723	1.6382	1.6504	1.6437	1.6342	1.6823	1.6944	1.6611	1.6708	1.6498	1.6276	1.6213	1.6089	1.6154
Addendum: Exchange value of the U.S. dollar ² ..	104.47	116.25	114.13	115.16	117.87	118.17	120.14	118.85	115.46	115.34	114.56	114.68	116.37	117.80	117.15	116.91
Unemployment rates (percent, monthly data seasonally adjusted)																
Canada	9.2	8.3	8.4	8.4	8.4	8.4	8.3	8.3	8.0	8.0	8.0	7.8	7.8	7.8	8.3	8.1
France	12.5	11.8	11.9	11.9	11.8	11.7	11.9	11.8	11.7	11.6	11.5	11.5	11.4	11.4	11.3	11.4
Germany	11.5	11.1	11.3	11.2	11.0	10.9	10.9	10.8	10.7	10.7	10.7	10.6	10.6	10.6	10.6	10.5
Italy	12.3	12.3		12.4			12.4				12.4		12.1			
Japan	3.4	4.1	4.1	4.1	4.2	4.1	4.3	4.3	4.3	4.4	4.4	4.4	4.6	4.8	4.8	4.6
Mexico	3.7	3.2	3.1	3.2	3.4	3.2	3.0	3.3	3.1	2.6	2.6	2.8	3.2	2.7	2.7	2.4
United Kingdom	5.5	4.7	4.7	4.7	4.7	4.6	4.6	4.6	4.6	4.6	4.6	4.5	4.6	4.5	4.5	4.5
Addendum: United States	4.9	4.5	4.3	4.4	4.5	4.5	4.5	4.5	4.5	4.4	4.3	4.3	4.4	4.2	4.3	4.2
Consumer prices (monthly data seasonally adjusted, 1995=100)																
Canada	103.22	104.25	103.93	104.31	104.41	104.41	104.41	104.21	104.60	104.60	104.31	104.50	104.69	105.08	105.65	105.94
France	103.23	104.01	104.22	104.22	104.33	104.02	104.02	104.02	104.02	103.91	104.02	103.70	104.02	104.43	104.64	104.64
Germany	103.34	104.30	104.11	104.41	104.51	104.81	104.61	104.41	104.21	104.21	104.31	104.11	104.31	104.41	104.81	104.81
Italy	106.13	108.22	108.00	108.20	108.30	108.30	108.40	108.40	108.60	108.80	108.80	108.90	109.10	109.30	109.60	109.80
Japan	101.84	102.50	102.59	102.89	102.49	101.89	101.79	102.59	103.29	103.19	102.79	102.29	101.89	101.99	102.49	102.49
Mexico	162.09	187.91	182.36	183.81	185.99	187.78	189.58	192.66	195.42	198.88	203.73	208.88	211.68	213.65	215.63	216.89
United Kingdom	105.66	109.27	109.08	109.69	109.62	109.35	109.82	110.29	110.36	110.29	110.29	109.62	109.82	110.09	110.83	111.1
Addendum: United States	105.34	106.97	106.64	106.84	106.97	107.10	107.23	107.36	107.62	107.62	107.56	107.82	107.95	108.28	109.07	109.07
Real gross domestic product (percent change from preceding quarter, quarterly data seasonally adjusted at annual rates)																
Canada	4.0	3.1		1.1			2.6				4.8			4.2		
France	2.3	3.2		3.6			1.5				2.9					
Germany	1.8	2.3		0			1.8				-6			1.8		
Italy	1.4	1.3		1.4			2.5				-1.0			.7		
Japan	1.4	-2.8		-2.9			-1.2				-3.2			7.9		
Mexico	6.8	4.8		7.2			3.1				-4.3			3.6		
United Kingdom	3.5	2.1		1.2			1.1				.3			.2		
Addendum: United States	3.9	3.9		1.8			3.7				6.0			4.3		2.3

See footnotes at the end of the table.

Table H.1.—International Perspectives—Continued

	1997	1998	1998									1999				
			Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May
Short-term, 3-month, interest rates (percent, not seasonally adjusted)																
Canada	3.53	5.04	4.88	5.00	5.00	5.02	5.15	5.59	5.27	5.13	4.99	4.99	5.02	5.00	4.71	4.58
France	3.46	3.56	3.63	3.61	3.57	3.56	3.56	3.54	3.56	3.59	3.32	.....	.....	.....	.....	.....
Germany	3.33	3.54	3.63	3.63	3.56	3.54	3.50	3.49	3.57	3.63	3.38	.....	.....	.....	.....	.....
Italy	6.88	4.99	5.23	5.11	5.12	4.88	4.89	4.97	4.53	3.95	3.38	.....	.....	.....	.....	.....
Japan .....	.60	.72	.70	.59	.58	.74	.73	.55	.61	.63	.62	.69	.58	.20	.19	.08
Mexico	21.27	26.11	19.47	18.85	20.99	21.82	25.22	41.03	37.49	34.30	34.35	32.27	28.72	23.86	21.05	21.02
United Kingdom	6.83	7.33	7.44	7.41	7.62	7.70	7.66	7.37	7.13	6.88	6.37	5.79	5.42	5.29	5.23	5.25
Addendum:																
United States	5.07	4.81	5.00	5.03	4.99	4.96	4.94	4.74	4.08	4.44	4.42	4.34	4.45	4.48	4.28	4.51
Long-term interest rates, government bond yields (percent, not seasonally adjusted)																
Canada	6.47	5.45	5.50	5.52	5.45	5.46	5.65	5.39	5.17	5.39	5.07	5.13	5.26	5.34	5.26	5.51
France	5.67	4.82	5.12	5.05	4.95	4.91	4.61	4.39	4.51	4.43	4.41	4.13	4.42	4.39	4.25	4.45
Germany	5.66	4.58	4.90	5.00	4.80	4.70	4.40	4.10	4.10	4.10	3.90	3.70	3.85	4.04	3.85	4.01
Italy	6.86	4.88	5.15	5.21	5.08	4.97	4.79	4.53	4.49	4.38	4.00	3.92	4.05	4.27	4.11	4.28
Japan	2.37	1.54	1.87	1.66	1.54	1.68	1.50	1.10	.88	.98	1.49	1.91	2.12	1.82	1.56	1.33
United Kingdom	7.04	5.52	5.79	5.83	5.73	5.75	5.54	5.12	5.00	4.91	4.50	4.29	4.45	4.66	4.59	4.91
Addendum:																
United States	6.35	5.26	5.64	5.65	5.50	5.46	5.34	4.81	4.53	4.83	4.65	4.72	5.00	5.23	5.18	5.54
Share price indices (not seasonally adjusted, 1995=100)																
Canada	145.70	152.40	172.90	171.20	166.20	156.30	124.70	126.60	140.00	143.10	146.30	151.80	142.40	148.80	158.20	154.30
France	147.01	192.24	201.10	209.39	215.58	220.70	204.84	183.34	171.01	190.90	193.39	210.44	210.06	211.54	220.92	225.11
Germany	154.73	197.73	209.27	213.63	222.25	231.41	209.62	186.52	171.38	188.86	186.88	199.85	195.26	191.41	200.13	200.70
Italy	137.74	220.53	249.47	243.46	235.73	250.81	234.95	199.94	188.79	213.89	224.01	241.37	236.94	248.62	251.95	247.42
Japan	101.03	85.36	88.51	87.94	86.28	91.30	85.30	78.62	74.15	80.59	80.25	78.31	79.78	87.18	96.31	96.25
Mexico	200.17	191.13	229.73	204.11	192.97	191.27	134.81	160.85	183.61	169.86	178.87	178.34	191.98	222.15	243.96	246.81
United Kingdom	128.26	150.50	157.20	161.18	160.38	161.89	150.50	140.42	136.64	148.92	150.07	157.29	159.40	162.89	169.18	168.18
Addendum:																
United States	156.81	189.00	198.54	197.31	195.69	201.40	185.18	173.98	175.68	193.80	197.85	204.51	202.20	207.35	215.61	218.31

1. All exchange rates are from the Board of Governors of the Federal Reserve System.

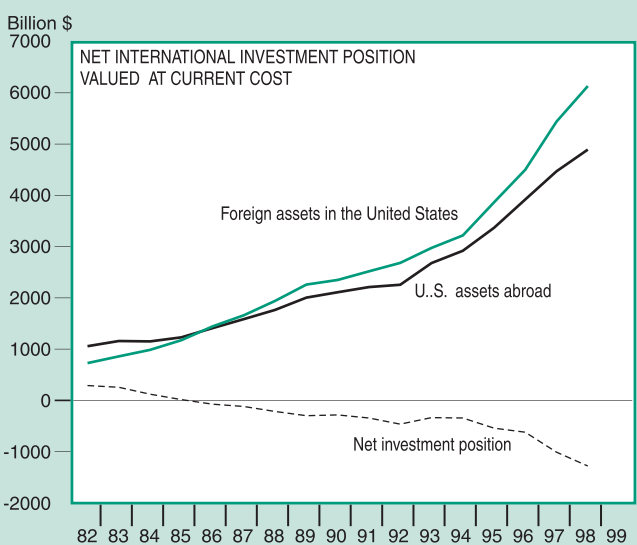
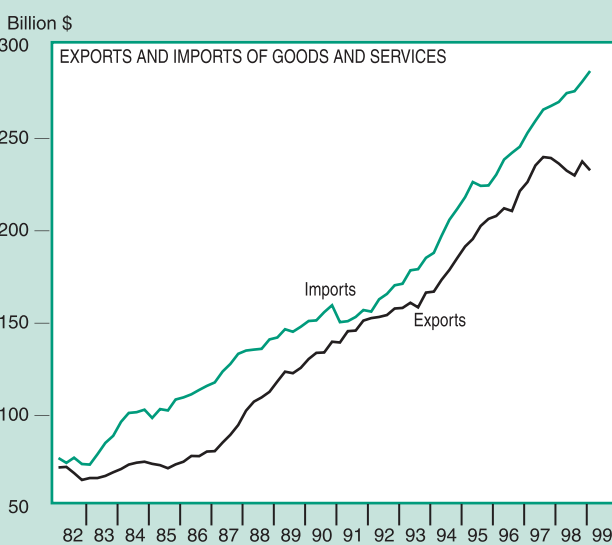
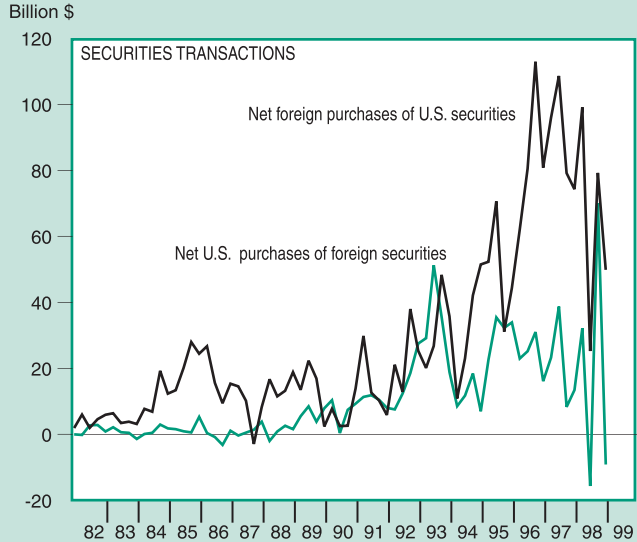
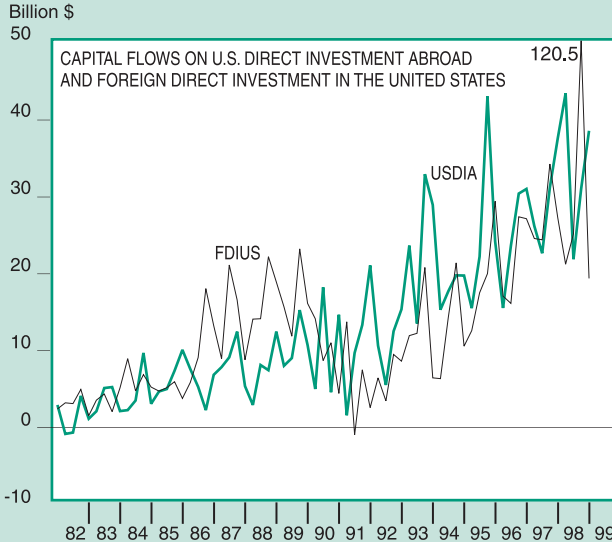
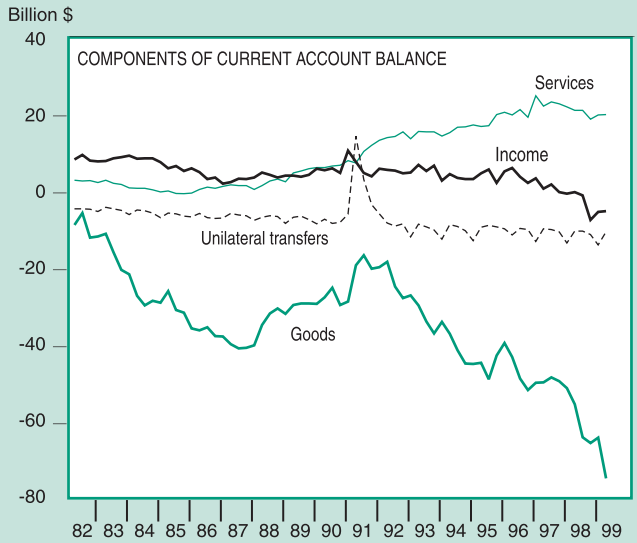
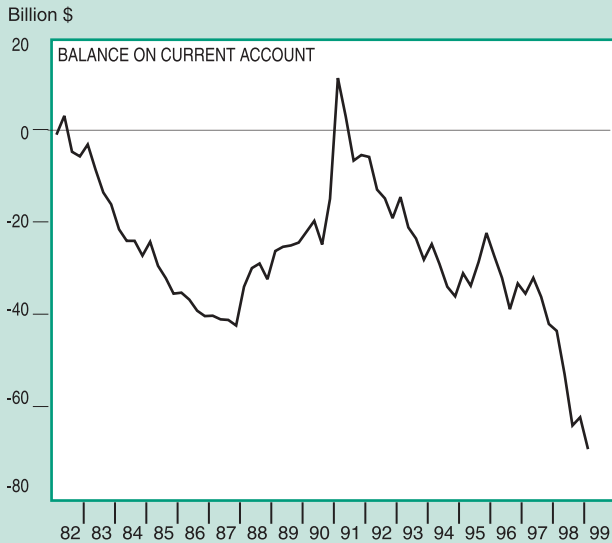
2. As of January 1, 1999, the euro is reported in place of the individual euro-area currencies. These currency rates can be derived from the euro rate by using the following conversion rates: 1 euro = 6.55957 French francs, 1.95583 German marks, and 1936.27 Italian lire. In previous issues of the SURVEY, this rate was incorrectly labeled "Euro/US\$" but the values shown were those for "US\$/Euro." The rate shown for the United States is an index of the weighted average of the foreign exchange value of the U.S. dollar against the currencies of a broad group of major U.S. trading partners, January 1997=100. For more information on the exchange rate indexes, see "New

Summary Measures of the Foreign Exchange Value of the Dollar," *Federal Reserve Bulletin*, vol. 84 (October 1998), pp. 811-18.

NOTE.—U.S. interest rates, unemployment rates, and GDP growth rates are from the Federal Reserve, the Bureau of Labor Statistics, and BEA, respectively. All other data (including U.S. consumer prices and U.S. share prices, both of which have been rebased to 1995 to facilitate comparison) are © OECD, July 1999, *OECD Main Economic Indicators* and are reproduced with permission of the OECD.

I. Charts

THE U.S. IN THE INTERNATIONAL ECONOMY



Regional Data

J. State and Regional Tables

The tables in this section include the most recent estimates of State personal income and gross state product. The sources of these estimates are noted.

The quarterly and annual State personal income estimates and the gross state product estimates are available on diskettes or CD-ROM. For information on State personal income, E-mail reis.remd@bea.doc.gov; 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. For information on gross state product, E-mail gspread@bea.doc.gov; write to the Regional Economic Analysis Division, BE-61, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230; or call 202-606-5340.

Table J.1.—Quarterly Personal Income for States and Regions

Area name	Millions of dollars, seasonally adjusted at annual rates													Percent change ¹			
	1996				1997				1998				1999	1998:I-1998:II	1998:II-1998:III	1998:III-1998:IV	1998:IV-1999:I
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I				
United States	6,267,885	6,371,958	6,458,511	6,534,057	6,650,207	6,726,629	6,807,506	6,898,259	7,016,041	7,108,060	7,199,440	7,309,162	7,400,243	1.3	1.3	1.5	1.2
New England	375,964	382,128	387,175	392,892	399,830	403,744	408,242	415,615	419,963	426,088	433,011	440,347	446,549	1.5	1.6	1.7	1.4
Connecticut	108,427	110,288	111,745	113,155	115,126	116,357	117,455	119,755	121,057	122,052	123,950	126,664	128,717	8.1	1.6	2.2	1.6
Maine	25,372	25,736	26,119	26,510	26,877	27,112	27,267	27,715	27,895	28,406	28,936	29,271	29,784	1.9	1.9	1.2	1.8
Massachusetts	175,689	176,781	181,199	184,323	187,831	189,367	191,863	194,969	197,207	200,905	204,031	206,866	209,776	1.9	1.6	1.4	1.4
New Hampshire	30,048	30,420	30,824	31,241	31,755	32,233	32,759	33,436	33,646	34,124	34,937	35,796	36,035	1.4	2.4	2.5	1.7
Rhode Island	23,637	23,964	24,166	24,501	24,886	25,223	25,372	25,877	26,152	26,370	26,762	27,172	27,485	8.1	1.5	1.5	1.2
Vermont	12,793	12,939	13,123	13,163	13,354	13,452	13,524	13,864	14,037	14,230	14,394	14,578	14,751	1.4	1.2	1.3	1.2
Mideast	1,221,939	1,239,455	1,252,383	1,267,238	1,287,567	1,293,436	1,309,439	1,325,328	1,345,232	1,364,051	1,380,603	1,399,923	1,410,187	1.4	1.2	1.1	1.5
Delaware	19,197	19,511	19,851	20,333	20,631	20,639	21,094	21,422	21,892	22,118	22,225	22,736	22,791	1.1	1.0	0.8	1.0
District of Columbia	18,335	18,239	18,523	18,754	18,760	18,805	19,028	19,085	19,191	19,408	19,687	19,817	20,132	1.1	1.4	1.7	1.6
Maryland	135,394	137,126	138,965	140,786	143,770	145,016	146,589	148,983	150,778	153,116	155,299	157,464	159,887	1.6	1.4	1.4	1.5
New Jersey	242,314	246,523	248,881	251,807	257,066	258,617	261,795	265,466	270,299	273,177	278,572	280,078	284,222	1.1	2.0	1.5	1.5
New York	518,146	524,129	528,376	534,908	543,350	543,675	551,780	556,901	565,642	575,201	581,019	581,208	591,037	1.7	1.0	0.5	1.7
Pennsylvania	286,553	293,927	297,767	300,651	303,989	306,686	309,153	313,471	317,430	321,031	323,801	328,561	332,119	1.1	1.1	0	1.1
Great Lakes	1,033,181	1,049,582	1,063,248	1,072,178	1,089,113	1,102,312	1,112,380	1,126,771	1,143,432	1,155,114	1,163,136	1,185,908	1,195,478	1.0	1.0	2.0	0.8
Illinois	309,028	313,062	317,189	320,562	325,749	330,416	333,657	338,040	342,467	346,688	350,023	356,961	359,353	1.2	1.0	2.0	0.7
Indiana	126,763	128,944	130,774	131,798	133,919	135,408	136,348	138,619	140,635	142,285	143,902	146,627	147,324	1.2	1.1	1.9	0.5
Michigan	228,900	233,068	235,053	237,261	240,467	243,025	245,370	247,430	253,117	254,683	253,375	258,980	261,651	6.8	-5.2	2.2	1.0
Ohio	252,328	253,354	260,082	261,262	266,151	269,084	271,385	275,181	278,627	280,966	283,518	288,569	291,226	8.1	9.1	1.8	0.9
Wisconsin	116,163	118,155	120,149	121,295	122,827	124,378	125,620	127,501	128,587	130,512	132,318	134,771	135,924	1.5	1.4	1.9	0.9
Plains	416,306	423,462	429,560	433,543	438,635	444,771	449,351	454,161	460,014	466,078	470,605	482,185	484,036	1.3	1.0	2.5	0.4
Iowa	61,472	62,498	63,462	63,605	64,874	65,808	66,185	67,105	67,104	67,630	68,745	71,199	71,070	1.1	1.3	3.6	-2.2
Kansas	57,549	58,248	59,124	59,836	61,007	62,081	62,782	63,581	64,435	65,385	65,973	67,625	68,058	1.5	9.9	2.5	0.6
Minnesota	114,468	116,728	118,543	119,432	120,365	122,372	123,869	125,434	128,013	129,951	130,696	134,286	134,863	1.5	6.6	2.7	0.4
Missouri	118,769	120,583	122,068	123,618	126,067	127,093	128,381	129,637	130,660	132,228	133,834	135,080	136,370	1.2	1.2	9.9	1.0
Nebraska	36,673	37,445	37,902	38,590	38,487	39,037	39,412	39,604	40,140	40,620	41,349	42,538	42,356	1.7	1.3	2.9	-4.4
North Dakota	12,663	12,922	13,200	13,146	12,646	12,838	12,986	13,072	13,623	13,680	13,758	14,358	14,261	4.0	6.4	4.4	-7.7
South Dakota	14,691	15,038	15,261	15,314	15,190	15,541	15,736	15,729	16,019	16,185	16,250	17,099	17,057	1.0	4.4	5.2	-2.2
Southeast	1,367,907	1,393,553	1,415,101	1,429,465	1,458,318	1,472,319	1,488,852	1,509,533	1,535,161	1,557,124	1,580,149	1,601,518	1,623,020	1.4	1.5	1.4	1.3
Alabama	83,232	84,745	85,973	86,565	88,240	88,927	89,599	90,626	91,987	92,976	94,041	95,265	96,128	1.1	1.1	1.3	0.9
Arkansas	45,801	47,079	47,667	47,918	48,531	49,268	49,623	50,338	50,874	51,403	51,790	52,984	53,235	1.0	8.8	2.3	0.5
Florida	335,919	341,341	346,885	351,079	357,463	361,282	366,450	370,723	377,760	383,881	389,957	395,019	401,636	1.6	1.6	1.3	1.7
Georgia	162,657	167,047	170,153	171,965	175,822	177,615	179,751	182,310	186,808	189,851	193,919	196,882	199,947	1.6	2.1	1.5	1.6
Kentucky	73,226	75,116	76,480	77,127	79,087	80,058	80,819	81,777	83,283	84,440	85,430	86,183	86,947	1.4	1.2	9.9	0.9
Louisiana	83,501	84,805	85,722	86,371	87,638	88,570	89,247	90,811	91,958	93,334	93,822	94,605	95,565	1.5	1.5	8.8	1.0
Mississippi	46,148	47,018	47,664	47,770	48,597	49,213	49,609	50,330	51,250	51,828	52,680	53,374	53,807	1.1	1.6	1.3	0.8
North Carolina	156,451	160,466	162,860	164,941	169,449	171,121	172,593	175,453	178,542	180,852	183,188	185,561	188,281	1.3	1.3	1.3	1.5
South Carolina	71,665	73,021	74,197	74,858	76,523	77,139	78,010	79,071	79,995	81,170	82,960	84,033	85,501	1.5	2.2	1.3	1.7
Tennessee	113,292	114,972	116,688	117,838	120,173	120,999	122,280	124,284	125,583	127,546	129,172	130,676	132,686	1.6	1.3	1.2	1.5
Virginia	163,021	165,170	167,591	169,623	173,146	174,227	176,798	179,473	182,445	184,931	187,900	191,467	193,940	1.4	1.6	1.9	1.1
West Virginia	32,496	32,776	33,220	33,411	33,649	33,900	34,066	34,337	34,676	34,911	35,290	35,469	35,796	1.7	1.1	1.5	0.9
Southwest	599,717	609,936	619,199	628,208	643,609	655,242	666,522	676,461	692,740	702,120	713,181	723,371	733,102	1.4	1.6	1.4	1.3
Arizona	91,202	92,667	94,349	95,347	97,748	99,234	100,914	102,744	104,765	106,967	109,091	111,522	112,691	2.1	2.0	2.2	1.0
New Mexico	31,354	31,711	32,005	32,233	32,780	33,202	33,404	33,689	34,239	34,543	34,800	35,431	35,845	9.9	7.7	1.8	1.2
Oklahoma	62,456	63,496	64,260	64,788	66,453	67,024	67,623	68,676	69,562	70,257	70,847	71,211	71,852	1.0	8.8	1.5	0.9
Texas	414,706	422,062	428,586	435,840	446,628	455,782	464,580	471,352	484,174	490,352	498,443	505,206	512,713	1.3	1.7	1.4	1.5
Rocky Mountain	181,968	185,700	188,606	191,273	194,734	198,098	201,433	204,128	209,209	211,736	214,437	219,191	221,802	1.2	1.3	2.2	1.2
Colorado	94,993	96,947	98,644	100,356	101,986	104,199	106,206	108,182	111,925	113,255	114,793	117,823	118,947	1.2	1.4	2.6	1.0
Idaho	22,895	23,412	23,613	23,751	24,167	24,524	24,894	25,017	25,426	25,622	26,076	26,480	26,987	8.8	1.8	1.5	1.9
Montana	16,241	16,457	16,648	16,836	17,007	17,182	17,349	17,565	17,547	17,786	17,728	18,246	18,351	1.4	-3.3	2.9	0.6
Utah	37,718	3															

Table J.2.—Annual Personal Income and Disposable Personal Income for States and Regions

Area name	Personal income					Disposable personal income				
	Millions of dollars			Percent change		Millions of dollars			Percent change	
	1996	1997	1998	1996-97	1997-98	1996	1997	1998	1996-97	1997-98
United States	6,408,103	6,770,650	7,158,176	5.7	5.7	5,518,569	5,782,712	6,061,088	4.8	4.8
New England	384,540	406,858	429,852	5.8	5.7	323,239	338,425	353,824	4.7	4.6
Connecticut	110,904	117,173	123,431	5.7	5.3	91,503	95,453	99,259	4.3	4.0
Maine	25,934	27,243	28,620	5.0	5.1	22,772	23,671	24,650	3.9	4.1
Massachusetts	179,998	191,008	202,252	6.1	5.9	149,777	157,389	164,889	5.1	4.8
New Hampshire	30,633	32,546	34,626	6.2	6.4	26,831	28,254	29,849	5.3	5.6
Rhode Island	24,067	25,340	26,614	5.3	5.0	21,022	21,942	22,878	4.4	4.3
Vermont	13,004	13,549	14,309	4.2	5.6	11,333	11,717	12,299	3.4	5.0
Mideast	1,245,254	1,303,943	1,369,952	4.7	5.1	1,057,756	1,096,946	1,140,195	3.7	3.9
Delaware	19,723	20,946	22,258	6.2	6.3	16,796	17,699	18,647	5.4	5.4
District of Columbia	18,463	18,919	19,526	2.5	3.2	15,623	15,851	16,100	1.5	1.6
Maryland	138,068	146,090	154,164	5.8	5.5	117,094	122,434	128,282	4.6	4.8
New Jersey	247,381	260,736	275,531	5.4	5.7	210,191	219,885	229,892	4.6	4.6
New York	526,990	548,927	575,768	4.3	4.9	442,273	456,565	472,647	3.2	3.5
Pennsylvania	295,230	308,325	322,706	4.4	4.7	255,779	264,511	274,626	3.4	3.8
Great Lakes	1,054,547	1,107,644	1,161,898	5.0	4.9	902,103	939,326	977,559	4.1	4.1
Illinois	314,960	331,966	349,029	5.4	5.1	268,434	280,280	292,419	4.4	4.3
Indiana	129,570	136,073	143,362	5.0	5.4	111,656	116,414	121,876	4.3	4.7
Michigan	233,571	244,073	255,039	4.5	4.5	199,607	206,608	214,329	3.5	3.7
Ohio	257,506	270,450	282,920	5.0	4.6	221,394	230,780	239,089	4.2	3.6
Wisconsin	118,940	125,081	131,547	5.2	5.2	101,011	105,244	109,846	4.2	4.4
Plains	425,718	446,730	469,721	4.9	5.1	367,001	381,713	398,925	4.0	4.5
Iowa	62,759	65,993	68,720	5.2	4.1	54,824	57,253	59,222	4.4	3.4
Kansas	58,690	62,363	65,854	6.3	5.6	50,703	53,488	56,057	5.5	4.8
Minnesota	117,293	123,010	130,737	4.9	6.3	97,774	101,468	107,358	3.8	5.8
Missouri	121,265	127,795	132,955	5.4	4.0	105,529	110,307	113,948	4.5	3.3
Nebraska	37,652	39,135	41,212	3.9	5.3	32,903	33,827	35,446	2.8	4.8
North Dakota	12,983	12,885	13,855	-8	7.5	11,620	11,389	12,230	-2.0	7.4
South Dakota	15,076	15,549	16,388	3.1	5.4	13,649	13,982	14,665	2.4	4.9
Southeast	1,401,506	1,482,256	1,568,488	5.8	5.8	1,225,384	1,286,377	1,350,586	5.0	5.0
Alabama	85,128	89,348	93,567	5.0	4.7	75,473	78,809	82,148	4.4	4.2
Arkansas	47,116	49,442	51,763	4.9	4.7	41,791	43,686	45,394	4.5	3.9
Florida	343,806	363,980	386,654	5.9	6.2	298,933	313,790	330,157	5.0	5.2
Georgia	167,956	178,875	191,865	6.5	7.3	145,199	153,506	163,232	5.7	6.3
Kentucky	75,612	80,435	84,834	6.4	5.5	65,938	69,749	73,168	5.8	4.9
Louisiana	85,099	89,067	93,430	4.7	4.9	76,061	78,903	82,179	3.7	4.2
Mississippi	47,150	49,437	52,283	4.9	5.8	42,827	44,697	47,079	4.4	5.3
North Carolina	161,179	172,154	182,036	6.8	5.7	139,842	148,266	155,290	6.0	4.7
South Carolina	73,435	77,686	82,039	5.8	5.6	64,545	67,858	71,340	5.1	5.1
Tennessee	115,697	121,934	128,244	5.4	5.2	102,991	107,789	112,656	4.7	4.5
Virginia	166,351	175,911	186,686	5.7	6.1	142,308	149,103	156,916	4.8	5.2
West Virginia	32,976	33,988	35,087	3.1	3.2	29,476	30,222	31,026	2.5	2.7
Southwest	614,265	660,458	707,853	7.5	7.2	543,363	581,106	618,773	6.9	6.5
Arizona	93,391	100,160	108,087	7.2	7.9	81,041	86,119	92,333	6.3	7.2
New Mexico	31,826	33,269	34,753	4.5	4.5	28,249	29,307	30,524	3.7	4.2
Oklahoma	63,750	67,444	70,469	5.8	4.5	56,059	58,974	61,218	5.2	3.8
Texas	425,298	459,585	494,544	8.1	7.6	378,015	406,707	434,698	7.6	6.9
Rocky Mountain	186,887	199,598	213,643	6.8	7.0	160,565	170,034	180,610	5.9	6.2
Colorado	97,735	105,143	114,449	7.6	8.9	83,250	88,686	95,810	6.5	8.0
Idaho	23,418	24,651	25,901	5.3	5.1	20,420	21,347	22,275	4.5	4.3
Montana	16,546	17,276	17,827	4.4	3.2	14,546	15,064	15,434	3.6	2.5
Utah	38,856	41,681	44,297	7.3	6.3	33,433	35,657	37,627	6.7	5.5
Wyoming	10,333	10,847	11,169	5.0	3.0	8,915	9,281	9,463	4.1	2.0
Far West	1,095,386	1,163,164	1,236,770	6.2	6.3	939,159	988,785	1,040,616	5.3	5.2
Alaska	14,713	15,222	15,823	3.5	3.9	12,567	12,926	13,349	2.9	3.3
California	798,580	846,839	900,900	6.0	6.4	682,968	717,988	755,232	5.1	5.2
Hawaii	29,784	30,514	31,268	2.5	2.5	25,911	26,398	26,843	1.9	1.7
Nevada	41,412	44,510	47,795	7.5	7.4	35,342	37,654	40,107	6.5	6.5
Oregon	73,156	77,579	81,310	6.0	4.8	62,206	65,177	67,866	4.8	4.1
Washington	137,741	148,500	159,674	7.8	7.5	120,166	128,640	137,220	7.1	6.7

NOTE.—The personal income level shown for the United States is derived as the sum of the State estimates. It differs from the national income and product accounts (NIPA's) because of differences in coverage, in the methodologies used to prepare the estimates, and in the timing of the availability of source data. In particular, it differs from the NIPA estimate because, by defini-

tion, it omits the earnings of Federal civilian and military personnel stationed abroad and of U.S. residents employed abroad temporarily by private U.S. firms.

Source: Tables 1 and 2 in "State Personal Income, First Quarter 1999" in this issue of the SURVEY.

Table J.3.—Per Capita Personal Income and Per Capita Disposable Personal Income for States and Regions

Area name	Per capita personal income ¹				Per capita disposable personal income ¹			
	Dollars			Rank in U.S.	Dollars			Rank in U.S.
	1996	1997	1998	1998	1996	1997	1998	1998
United States	24,164	25,288	26,482	.....	20,810	21,598	22,424	.....
New England	28,872	30,427	32,007	.....	24,269	25,309	26,346	.....
Connecticut	33,979	35,863	37,700	1	28,035	29,215	30,317	1
Maine	20,948	21,937	23,002	36	18,394	19,061	19,811	35
Massachusetts	29,591	31,239	32,902	3	24,623	25,740	26,824	3
New Hampshire	26,418	27,766	29,219	7	23,140	24,104	25,188	5
Rhode Island	24,356	25,667	26,924	15	21,274	22,225	23,145	11
Vermont	22,179	23,017	24,217	30	19,328	19,905	20,815	28
Midwest	27,978	29,252	30,652	.....	23,765	24,609	25,512	.....
Delaware	27,125	28,493	29,932	6	23,100	24,076	25,077	6
District of Columbia	34,213	35,704	37,325	.....	28,950	29,914	30,776	.....
Maryland	27,298	28,674	30,023	5	23,151	24,031	24,983	7
New Jersey	30,892	32,356	33,953	2	26,248	27,286	28,329	2
New York	29,015	30,250	31,679	4	24,378	25,160	26,005	4
Pennsylvania	24,533	25,670	26,889	16	21,255	22,022	22,883	15
Great Lakes	24,055	25,158	26,290	.....	20,578	21,335	22,119	.....
Illinois	26,393	27,688	28,976	8	22,494	23,377	24,277	8
Indiana	22,234	23,202	24,302	29	19,160	19,849	20,660	32
Michigan	23,996	24,956	25,979	18	20,507	21,126	21,832	20
Ohio	23,054	24,163	25,239	21	19,821	20,618	21,329	23
Wisconsin	22,987	24,048	25,184	22	19,521	20,235	21,029	26
Plains	23,039	24,034	25,126	.....	19,861	20,536	21,339	.....
Iowa	22,032	23,120	24,007	32	19,246	20,058	20,689	30
Kansas	22,707	23,972	25,049	24	19,617	20,561	21,322	24
Minnesota	25,235	26,243	27,667	11	21,035	21,647	22,719	16
Missouri	22,586	23,629	24,447	28	19,656	20,395	20,952	27
Nebraska	22,847	23,818	24,786	26	19,965	20,415	21,318	25
North Dakota	20,197	20,103	21,708	38	18,077	17,768	19,162	38
South Dakota	20,450	21,076	22,201	37	18,513	18,952	19,866	34
Southeast	21,787	22,751	23,793	.....	19,049	19,744	20,488	.....
Alabama	19,838	20,672	21,500	40	17,588	18,234	18,876	39
Arkansas	18,808	19,595	20,393	46	16,682	17,314	17,884	46
Florida	23,834	24,799	25,922	19	20,723	21,379	22,134	18
Georgia	22,900	23,882	25,106	23	19,798	20,495	21,359	22
Kentucky	19,475	20,570	21,551	39	16,983	17,837	18,587	42
Louisiana	19,609	20,458	21,385	42	17,526	18,123	18,810	40
Mississippi	17,398	18,098	18,998	50	15,803	16,363	17,107	50
North Carolina	22,053	23,168	24,122	31	19,134	19,953	20,578	33
South Carolina	19,651	20,508	21,387	41	17,272	17,913	18,598	41
Tennessee	21,800	22,699	23,615	33	19,406	20,066	20,745	29
Virginia	24,950	26,109	27,489	13	21,344	22,130	23,105	13
West Virginia	18,116	18,724	19,373	49	16,193	16,649	17,131	49
Southwest	21,577	22,787	23,985	.....	19,086	20,049	20,967	.....
Arizona	21,071	21,998	23,152	35	18,284	18,914	19,777	36
New Mexico	18,634	19,298	20,008	48	16,540	17,000	17,574	47
Oklahoma	19,342	20,305	21,056	45	17,008	17,755	18,292	43
Texas	22,345	23,707	25,028	25	19,861	20,980	21,999	19
Rocky Mountain	22,304	23,414	24,668	.....	19,163	19,946	20,854	.....
Colorado	25,627	27,015	28,821	9	21,829	22,787	24,128	9
Idaho	19,741	20,392	21,080	44	17,214	17,658	18,129	44
Montana	18,872	19,660	20,247	47	16,591	17,143	17,530	48
Utah	19,214	20,185	21,096	43	16,533	17,267	17,920	45
Wyoming	21,524	22,596	23,225	34	18,570	19,333	19,678	37
Far West	24,969	26,127	27,367	.....	21,408	22,210	23,027	.....
Alaska	24,310	24,969	25,771	20	20,765	21,203	21,741	21
California	25,142	26,314	27,579	12	21,503	22,310	23,119	12
Hawaii	25,086	25,598	26,210	17	21,824	22,145	22,500	17
Nevada	25,877	26,514	27,360	14	22,084	22,431	22,959	14
Oregon	22,894	23,920	24,775	27	19,467	20,096	20,678	31
Washington	24,958	26,451	28,066	10	21,774	22,914	24,119	10

1. Per capita personal income and per capita disposable personal income were computed using midyear population estimates from the Bureau of the Census.

NOTE.—The personal income level shown for the United States is derived as the sum of the State estimates. It differs from the national income and product accounts (NIPA's) because of differences in coverage, in the methodologies used to prepare the estimates, and in the timing

of the availability of source data. In particular, it differs from the NIPA estimate because, by definition, it omits the earnings of Federal civilian and military personnel stationed abroad and of U.S. residents employed abroad temporarily by private U.S. firms.

Source: Tables 1 and 2 in "State Personal Income, First Quarter 1999" in this issue of the SURVEY.

Table J.4.—Gross State Product for States and Regions by Industry, 1997

[Millions of dollars]

State and region	Rank of total gross state product	Total gross state product	Agriculture, forestry, and fishing	Mining	Construction	Manufacturing	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government
United States		8,103,234	131,745	120,515	328,806	1,378,869	676,313	562,755	712,890	1,570,308	1,656,849	964,184
New England		466,857	3,445	310	15,771	76,656	29,998	32,219	38,059	116,542	109,730	44,128
Connecticut	21	134,565	899	36	4,351	22,510	8,011	9,373	9,862	38,988	29,184	11,350
Maine	42	30,156	460	19	1,356	5,153	2,250	1,848	3,459	5,779	5,800	4,033
Massachusetts	11	221,009	1,284	156	7,161	32,394	13,924	16,133	17,510	53,708	58,449	20,291
New Hampshire	39	38,106	263	45	1,282	9,521	2,671	2,410	3,348	8,377	7,004	3,186
Rhode Island	44	27,806	210	15	959	4,347	1,911	1,537	2,385	6,941	6,092	3,410
Vermont	50	15,214	329	39	663	2,731	1,231	918	1,494	2,749	3,202	1,858
Mideast		1,523,401	8,905	2,737	51,564	204,283	122,778	99,738	112,108	392,621	344,626	184,041
Delaware	41	31,585	273	5	1,038	6,108	1,545	1,192	1,842	12,348	4,482	2,753
District of Columbia		52,372	16	13	481	1,308	2,710	588	1,314	9,531	16,969	19,441
Maryland	16	153,797	1,304	116	7,835	13,230	11,457	9,716	13,254	34,137	36,268	26,479
New Jersey	8	294,055	1,502	186	10,414	41,062	28,256	27,283	21,293	68,841	64,380	30,838
New York	2	651,652	2,689	480	18,505	74,446	49,335	40,277	44,440	203,219	148,253	70,007
Pennsylvania	6	339,940	3,121	1,935	13,291	68,129	29,476	20,683	29,965	64,544	74,274	34,523
Great Lakes		1,295,671	17,478	4,860	54,174	316,788	100,547	94,731	115,023	217,559	242,173	132,337
Illinois	4	393,532	5,110	1,268	16,385	71,671	35,807	30,972	31,881	79,466	82,375	38,597
Indiana	15	161,701	2,883	846	7,845	50,155	12,369	10,036	14,807	21,351	25,676	15,732
Michigan	9	272,607	2,698	1,246	11,052	70,234	18,230	20,831	25,735	41,850	51,635	29,095
Ohio	7	320,506	3,947	1,210	12,515	83,850	23,955	23,338	29,669	50,967	57,798	33,256
Wisconsin	19	147,325	2,840	290	6,378	40,878	10,186	9,553	12,930	23,924	24,690	15,657
Plains		538,494	21,360	3,164	23,831	102,629	49,367	42,281	48,237	85,150	99,193	63,280
Iowa	29	80,479	5,612	193	3,287	19,617	6,177	5,701	6,579	11,889	12,327	9,096
Kansas	31	71,737	2,933	1,021	3,040	12,784	7,608	5,822	7,039	9,432	12,298	9,759
Minnesota	18	149,394	3,631	679	6,693	28,271	11,485	12,568	13,004	27,515	29,839	15,710
Missouri	17	152,100	2,855	453	7,146	31,195	15,521	11,564	14,033	22,615	29,825	16,892
Nebraska	36	48,812	3,506	125	2,088	6,681	5,394	3,839	4,148	7,429	8,663	6,939
North Dakota	49	15,786	1,072	451	784	1,389	1,629	1,463	1,523	2,128	2,908	2,438
South Dakota	46	20,186	1,751	241	793	2,692	1,554	1,324	1,911	4,141	3,332	2,447
Southeast		1,763,114	31,716	32,479	76,652	315,895	157,072	121,470	171,379	286,834	333,401	236,216
Alabama	25	103,109	2,145	1,600	4,304	22,115	9,172	6,687	10,535	13,657	17,155	15,738
Arkansas	32	58,479	2,775	606	2,333	14,006	6,129	3,689	6,170	6,929	8,862	6,980
Florida	5	380,607	6,691	1,027	17,876	29,108	33,388	28,533	42,487	83,763	91,196	46,538
Georgia	10	229,473	4,066	1,002	8,910	40,035	25,274	20,947	20,587	37,774	42,441	28,439
Kentucky	26	100,076	2,723	2,659	4,101	27,360	8,087	6,014	9,033	11,646	15,217	13,239
Louisiana	23	124,350	1,292	19,797	5,395	19,566	11,037	7,078	10,232	16,068	20,127	13,758
Mississippi	33	58,314	1,659	540	2,355	13,198	5,865	3,383	5,985	6,898	9,725	8,705
North Carolina	12	218,888	5,118	298	9,643	57,971	16,578	14,328	19,427	33,045	34,351	28,130
South Carolina	28	93,259	1,280	215	4,500	23,289	7,057	5,619	9,955	12,894	14,626	13,824
Tennessee	20	146,999	1,745	480	6,012	31,281	11,759	11,299	16,267	21,233	29,856	17,067
Virginia	13	211,331	1,961	1,102	9,439	31,282	18,056	11,839	17,278	38,537	43,411	38,426
West Virginia	38	38,228	261	3,154	1,785	6,684	4,672	2,053	3,423	4,391	6,434	5,371
Southwest		844,766	13,481	52,354	37,222	133,678	84,895	60,142	76,363	126,830	157,507	102,294
Arizona	24	121,239	1,934	1,300	6,937	17,815	9,047	8,095	12,574	23,531	24,974	15,031
New Mexico	37	45,242	897	3,271	2,046	7,887	3,280	1,981	4,137	6,207	7,791	7,745
Oklahoma	30	76,642	2,085	4,087	2,377	13,015	7,523	4,697	7,664	9,587	13,514	12,090
Texas	3	601,643	8,565	43,695	25,861	94,961	65,044	45,369	51,987	87,505	111,227	67,428
Rocky Mountain		247,372	5,924	11,026	13,354	31,372	25,517	15,282	24,137	39,172	48,933	32,656
Colorado	22	126,084	2,147	2,708	6,910	14,480	13,762	8,223	12,229	21,885	27,850	15,891
Idaho	43	29,149	1,730	273	1,669	5,809	2,492	1,838	2,961	3,644	4,860	3,873
Montana	47	19,160	1,019	880	965	1,486	2,241	1,241	1,956	2,593	3,773	3,005
Utah	35	55,417	612	1,654	3,132	8,601	4,709	3,383	5,791	9,119	10,735	7,682
Wyoming	48	17,561	416	5,512	679	996	2,312	595	1,201	1,930	1,715	2,205
Far West		1,423,561	29,436	13,585	56,236	197,569	106,140	96,892	127,584	305,601	321,285	169,233
Alaska	45	24,494	314	5,169	1,007	1,134	3,822	713	1,673	2,795	3,029	4,838
California	1	1,033,016	21,633	6,381	34,883	146,173	72,301	71,177	91,300	237,282	236,925	114,962
Hawaii	40	38,024	463	26	1,640	1,213	3,904	1,493	4,332	8,503	8,413	8,036
Nevada	34	57,407	427	1,568	4,978	2,608	4,333	2,809	5,553	10,773	18,670	5,688
Oregon	27	98,367	2,473	124	5,173	24,666	6,943	7,727	8,175	14,903	17,030	11,154
Washington	14	172,253	4,127	317	8,555	21,776	14,837	12,974	16,550	31,344	37,219	24,554

NOTE.—Totals shown for the United States differ from the national income and product account estimates of gross domestic product (GDP) because GSP is derived from gross domestic income, which differs from GDP by the statistical discrepancy. In addition, GSP excludes and GDP includes the compensation of Federal civilian and military personnel stationed abroad and government consumption of fixed capital for military structures located abroad and for military equipment except domestically located office equipment. GSP and GDP also have different revision

schedules.

Source: Tables 6 and 7 in "Gross State Product by Industry, 1995–97" in the June 1999 issue of the SURVEY OF CURRENT BUSINESS.

K. Local Area Table

Table K.1.—Personal Income and Per Capita Personal Income by Metropolitan Area, 1995–97

Area name	Personal income				Per capita personal income ¹				Area name	Personal income				Per capita personal income ¹			
	Millions of dollars			Percent change 1996–97	Dollars			Rank in U.S.		Millions of dollars			Percent change 1996–97	Dollars			Rank in U.S.
	1995	1996	1997		1995	1996	1997			1995	1996	1997		1995	1996	1997	
United States²	6,059,091	6,408,103	6,770,650	5.7	23,059	24,164	25,288		Colorado Springs, CO	9,748	10,514	11,270	7.2	20,978	22,263	23,493	131
Metropolitan portion	5,137,433	5,430,631	5,747,454	5.8	24,470	25,623	26,840		Columbia, MO	2,618	2,779	2,915	4.9	21,232	22,106	22,797	152
Nonmetropolitan portion	921,658	977,472	1,023,196	4.7	17,449	18,359	19,089		Columbia, SC	10,429	11,121	11,820	6.3	21,259	22,344	23,435	134
Consolidated Metropolitan Statistical Areas									Columbus, GA-AL	5,021	5,331	5,700	6.9	18,468	19,624	20,929	232
Chicago-Gary-Kenosha, IL-IN-WI	235,526	248,253	262,357	5.7	27,296	28,555	29,981		Columbus, OH	33,904	35,336	37,471	6.0	23,706	24,502	25,728	75
Cincinnati-Hamilton, OH-KY-IN	44,660	47,149	50,006	6.1	23,427	24,574	25,855		Corpus Christi, TX	6,830	7,235	7,639	5.6	18,045	18,933	19,781	269
Cleveland-Akron, OH	71,327	74,337	77,920	4.8	24,499	25,495	26,733		Cumberland, MD-WV	1,715	1,788	1,874	4.8	17,027	17,857	18,919	291
Dallas-Fort Worth, TX	113,904	123,121	134,293	9.1	25,612	27,023	28,709		Dallas, TX	80,161	86,962	95,191	9.5	27,081	28,637	30,481	22
Denver-Boulder-Greeley, CO	60,179	64,674	69,800	7.9	27,024	28,483	30,499		Danville, VA	1,928	1,987	2,082	4.8	17,609	18,193	19,126	288
Detroit-Ann Arbor-Flint, MI	139,276	143,074	149,232	4.3	25,889	26,374	27,019		Davenport-Moline-Rock Island, IA-IL	7,632	8,056	8,541	6.0	21,359	22,561	23,906	123
Houston-Galveston-Brazoria, TX	105,523	112,366	121,775	8.4	25,408	26,566	28,225		Dayton-Springfield, OH	21,960	22,576	23,685	4.9	22,918	23,607	24,877	96
Los Angeles-Riverside-Orange County, CA	355,870	373,755	393,604	5.3	23,321	24,318	25,313		Daytona Beach, FL	8,300	8,864	9,341	5.4	18,492	19,489	20,187	256
Miami-Fort Lauderdale, FL	78,661	83,186	86,917	4.5	22,619	23,459	24,131		Decatur, AL	2,764	2,874	3,003	4.5	19,814	20,458	21,202	216
Milwaukee-Racine, WI	41,484	43,512	45,898	5.5	25,230	26,433	27,899		Decatur, IL	2,512	2,665	2,753	3.3	21,629	23,126	24,107	117
New York-No. New Jersey-Long Island, NY-NJ-CT-PA	619,350	654,862	688,267	5.1	31,352	33,031	34,560		Denver, CO*	50,303	54,103	58,471	8.1	27,553	29,055	30,743	20
Philadelphia-Wilmington-Atlantic City, PA-NJ-DE-MD	158,253	166,947	175,008	4.8	26,493	27,936	29,292		Des Moines, IA	10,522	11,167	11,830	5.9	24,883	26,102	27,403	45
Portland-Salem, OR-WA	47,988	52,031	55,815	7.3	23,697	25,100	26,396		Detroit, MI*	115,080	118,194	123,417	4.4	26,009	26,506	27,619	44
Sacramento-Yolo, CA	37,445	39,292	41,621	5.9	23,326	24,099	25,138		Dothan, AL	2,492	2,559	2,668	4.3	18,589	19,073	19,869	267
San Francisco-Oakland-San Jose, CA	200,245	215,995	232,660	7.9	30,562	32,571	34,634		Dubuque, IA	2,308	2,507	2,550	1.7	19,094	20,611	21,776	239
Seattle-Tacoma-Bremerton, WA	86,045	92,306	100,810	9.2	26,363	27,855	29,839		Duluth-Superior, MN-WI	1,832	1,931	2,016	4.4	20,746	21,849	22,874	149
Washington-Baltimore, DC-MD-VA-WV	202,626	213,221	225,524	5.8	28,601	29,838	31,265		Dutchess County, NY*	6,404	6,776	7,144	5.4	24,522	25,805	27,085	54
Metropolitan Statistical Areas³									Eau Claire, WI	2,720	2,878	3,035	5.5	19,132	20,155	21,154	219
Abilene, TX	2,300	2,424	2,566	5.9	18,800	20,014	21,202	216	El Paso, TX	9,431	9,895	10,504	6.2	14,037	14,600	15,216	312
Akron, OH*	15,555	16,229	17,079	5.2	22,856	23,700	24,849	99	Elkhart-Goshen, IN	3,781	3,873	3,998	3.2	22,718	22,969	23,423	135
Albany, GA	2,163	2,296	2,381	3.7	18,586	19,617	20,207	255	Elmira, NY	1,825	1,906	1,968	3.3	19,423	20,459	21,312	210
Albany-Schenectady-Troy, NY	20,787	21,444	22,217	3.6	23,606	24,429	25,275	83	Enid, OK	1,091	1,143	1,222	6.9	19,088	20,092	21,474	205
Albuquerque, NM	14,064	14,759	15,466	4.8	21,324	22,089	22,937	146	Erie, PA	5,670	5,925	6,140	3.6	20,326	21,285	22,120	179
Alexandria, LA	2,389	2,456	2,532	3.1	18,861	19,447	20,007	262	Eugene-Springfield, OR	6,117	6,544	6,920	5.7	20,201	21,358	22,231	173
Allentown-Bethlehem-Easton, PA	14,328	15,045	15,835	5.3	23,438	24,551	25,762	73	Evansville-Henderson, IN-KY	6,290	6,643	6,942	4.5	21,906	23,051	24,010	121
Altoona, PA	2,453	2,578	2,677	3.8	18,597	19,644	20,482	246	Fargo-Moorhead, ND-MN	3,315	3,608	3,746	3.8	20,264	21,876	22,466	166
Amarillo, TX	4,171	4,343	4,576	5.4	20,457	21,112	22,051	180	Fayetteville, NC	5,209	5,461	5,742	5.1	18,314	19,240	20,219	253
Anchorage, AK	6,989	7,162	7,475	4.4	27,845	28,690	29,765	28	Fayetteville-Springdale-Rogers, AR	5,053	5,413	5,799	7.1	19,923	20,704	21,655	198
Ann Arbor, MI*	14,369	14,989	15,941	6.4	27,573	28,266	29,579	29	Flagstaff, AZ-UT	1,939	2,076	2,178	4.9	16,663	17,585	18,184	298
Annisston, AL	2,024	2,110	2,210	4.7	17,350	18,098	18,855	292	Flint, MI*	9,827	9,891	9,875	-2	22,647	22,720	22,685	158
Appleton-Oshkosh-Neenah, WI	7,601	8,047	8,530	6.0	22,655	23,718	24,957	91	Florence, AL	2,544	2,636	2,715	3.0	18,729	19,295	19,800	268
Asheville, NC	4,363	4,604	4,898	6.4	21,083	21,971	23,158	140	Florence, SC	2,280	2,426	2,566	5.8	18,617	19,697	20,622	242
Athens, GA	2,588	2,788	2,936	5.3	19,232	20,428	21,256	214	Fort Collins-Loveland, CO	4,810	5,259	5,613	6.7	22,174	23,750	24,852	98
Atlanta, GA	87,823	95,356	102,678	7.7	25,603	26,993	28,253	36	Fort Lauderdale, FL*	36,123	38,534	40,743	5.7	25,561	26,752	27,661	43
Atlantic-Cape May, NJ*	8,999	9,431	9,722	3.1	27,188	28,339	29,833	33	Fort Myers-Cape Coral, FL	8,749	9,303	9,863	6.0	23,372	24,510	25,668	78
Augusta-Aiken, GA-SC	8,763	9,086	9,476	4.3	19,398	20,106	20,821	236	Fort Pierce-Port St. Lucie, FL	6,681	7,211	7,607	5.5	23,804	25,209	26,135	68
Austin-San Marcos, TX	22,572	24,580	27,194	10.6	22,524	23,665	25,420	84	Fort Smith, AR-OK	3,403	3,563	3,772	5.9	18,061	18,648	19,570	280
Bakersfield, CA	10,544	11,004	11,449	4.0	17,201	17,801	18,319	297	Fort Walton Beach, FL	3,176	3,511	3,736	6.4	19,453	21,200	22,274	171
Baltimore, MD*	61,948	65,177	68,758	5.5	25,157	26,399	27,720	41	Fort Wayne, IN	10,859	11,288	11,896	5.3	23,072	23,805	24,891	94
Bangor, ME (NECMA)	2,683	2,994	3,282	4.8	18,582	19,418	20,425	248	Fort Worth-Arlington, TX*	33,743	36,159	39,102	8.1	22,689	23,798	25,150	88
Barnstable-Yarmouth, MA (NECMA)	5,415	5,815	6,190	6.4	27,199	28,758	30,199	25	Fresno, CA	15,106	15,850	16,367	3.3	17,959	18,573	19,858	290
Baton Rouge, LA	11,776	12,331	12,786	3.7	20,956	21,786	22,408	168	Gadsden, AL	1,814	1,884	1,984	3.3	17,465	18,341	19,126	288
Beaumont-Port Arthur, TX	7,276	7,505	8,034	7.0	19,413	20,062	21,453	207	Gainesville, FL	3,876	4,095	4,313	5.3	19,871	20,844	21,822	189
Bellingham, WA	2,920	3,151	3,309	5.0	19,589	20,694	21,438	208	Galveston-Texas City, TX*	5,014	5,269	5,514	4.6	21,164	21,986	22,737	155
Benton Harbor, MI	3,366	3,451	3,647	5.7	20,839	21,415	22,689	157	Gary, IN*	13,326	13,943	14,689	5.4	21,363	22,460	23,593	128
Bergen-Passaic, NJ*	44,162	46,207	49,111	6.3	33,425	34,795	36,769	5	Glens Falls, NY	2,317	2,410	2,484	3.1	19,961	19,754	20,386	250
Billings, MT	2,634	2,729	2,851	4.5	21,162	21,737	22,647	159	Goldensboro, NC	1,866	1,971	2,085	5.8	16,877	17,640	18,611	295
Biloxi-Gulfport-Pascagoula, MS	6,006	6,266	6,614	5.6	17,594	18,350	19,211	287	Grand Forks, ND-MN	1,854	1,985	1,991	-3	17,854	19,206	19,657	275
Binghamton, NY	5,208	5,357	5,542	3.5	20,251	21,147	22,123	177	Grand Junction, CO	1,998	2,125	2,276	7.1	18,853	19,644	20,593	243
Birmingham, AL	20,268	21,363	22,445	5.1	22,640	23,858	24,898	93	Grand Rapids-Muskegon-Holland, MI	22,907	24,185	25,653	6.1	22,857	23,812	24,960	90
Bismarck, ND	1,789	1,906	1,972	3.5	20,103	21,151	21,711	192	Great Falls, MT	1,602	1,659	1,710	3.1	19,824	20,538	21,630	199
Bloomington, IN	2,135	2,269	2,369	4.4	18,544	19,587	20,316	251	Greeley, CO*	2,715	2,930	3,117	6.4	18,355	19,369	20,038	260
Bloomington-Normal, IL	3,181	3,373	3,545	5.1	22,944	24,172	25,200	87									

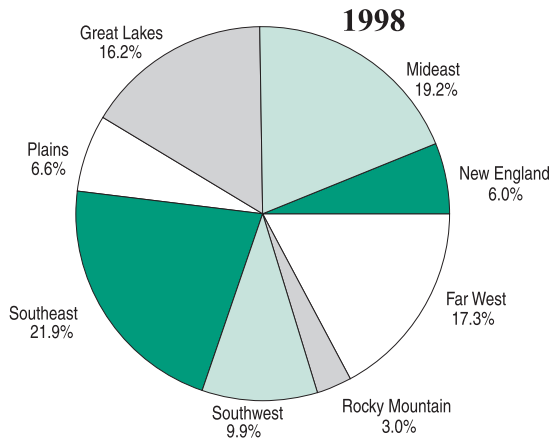
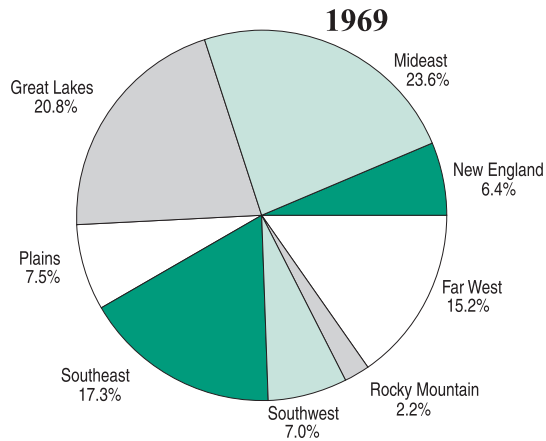
Table K.1.—Personal Income and Per Capita Personal Income by Metropolitan Area, 1995–97—Continued

Personal income				Per capita personal income ¹				Area name	Personal income				Per capita personal income ¹				
Millions of dollars			Percent change	Dollars			Rank in U.S.		Millions of dollars			Percent change	Dollars			Rank in U.S.	
1995	1996	1997	1996-97	1995	1996	1997	1997		1995	1996	1997	1996-97	1995	1996	1997	1997	
Jonesboro, AR	1,328	1,404	1,487	5.9	17,867	18,581	19,456	283	Raleigh-Durham-Chapel Hill, NC	24,621	26,671	29,107	9.1	24,798	26,301	27,711	42
Joplin, MO	2,717	2,872	3,065	6.7	18,924	19,724	20,817	237	Rapid City, SD	1,720	1,770	1,852	4.6	19,760	20,383	21,270	212
Kalamazoo-Battle Creek, MI	9,639	10,057	10,438	3.8	21,820	22,693	23,481	132	Reading, PA	8,339	8,761	9,220	5.2	23,813	24,893	26,051	69
Kankakee, IL*	2,007	2,124	2,211	4.1	19,823	20,925	21,677	194	Redding, CA	3,095	3,202	3,341	4.3	19,283	19,843	20,539	244
Kansas City, MO-KS	40,847	43,133	45,714	6.0	24,233	25,450	26,627	59	Reno, NV	8,064	8,747	9,262	5.9	27,761	29,284	30,214	24
Kenosha, WI*	2,936	3,073	3,302	7.5	21,082	21,743	23,124	142	Richland-Kennewick-Pasco, WA	3,681	3,780	3,876	2.5	20,650	21,120	21,417	209
Killeen-Temple, TX	4,819	5,074	5,348	5.4	16,563	17,059	17,861	303	Richmond-Petersburg, VA	23,575	24,857	26,312	5.9	25,429	26,553	27,797	40
Knoxville, TN	13,738	14,260	14,888	4.4	21,482	22,004	22,745	154	Riverside-San Bernardino, CA*	54,153	56,769	59,748	5.2	18,335	18,949	19,604	278
Kokomo, IN	2,370	2,336	2,412	3.3	23,780	23,287	24,061	119	Roanoke, VA	5,476	5,730	5,977	4.3	24,003	25,085	26,182	66
La Crosse, WI-MN	2,509	2,643	2,770	4.8	20,812	21,812	22,815	150	Rochester, MN	2,752	2,945	3,119	5.9	24,466	26,044	27,233	51
Lafayette, LA	6,424	6,911	7,453	7.8	17,627	18,783	20,031	261	Rochester, NY	26,383	27,410	28,374	3.5	24,310	25,247	26,170	67
Lafayette, IN	3,291	3,393	3,582	5.6	19,386	19,841	20,800	235	Rockford, IL	7,839	8,165	8,528	4.4	22,432	23,128	24,024	120
Lake Charles, LA	3,359	3,547	3,747	5.6	19,109	19,906	20,981	234	Rocky Mount, NC	2,618	2,809	2,937	4.6	18,414	19,554	20,214	254
Lakeland-Winter Haven, FL	8,133	8,643	9,207	6.5	18,699	19,649	20,625	241	Sacramento, CA*	34,184	35,985	38,101	6.1	23,452	24,236	25,335	85
Lancaster, PA	10,107	10,726	11,205	4.5	22,600	23,816	24,694	102	Saginaw-Bay City-Midland, MI	8,840	9,103	9,485	4.2	21,969	22,604	23,570	129
Lansing-East Lansing, MI	9,541	9,835	10,208	3.2	21,026	21,907	22,691	156	St. Cloud, MN	2,888	3,081	3,164	2.7	18,230	19,285	19,627	277
Laredo, TX	1,993	2,156	2,357	9.2	11,696	12,332	12,999	314	St. Joseph, MO	1,855	1,947	2,035	4.5	19,056	20,059	20,939	230
Las Cruces, NM	2,254	2,370	2,482	4.7	14,194	14,564	14,923	313	St. Louis, MO-IL	63,014	65,847	69,547	5.6	24,785	25,824	27,177	53
Las Vegas, NV-AZ	26,458	29,423	31,876	8.3	23,245	24,575	25,250	86	Salem, OR*	6,055	6,471	6,796	5.0	19,362	20,310	20,927	233
Lawrence, KS	1,603	1,695	1,820	7.4	18,161	18,896	19,976	264	Salinas, CA	8,357	8,631	9,227	6.9	24,394	24,890	25,747	74
Lawton, OK	1,882	1,932	1,993	3.2	16,323	16,801	17,487	304	Salt Lake City-Ogden, UT	24,016	25,953	27,849	7.3	19,802	21,121	22,264	172
Lewiston-Auburn, ME (NECMA)	1,979	2,067	2,120	2.6	19,292	20,329	20,939	230	San Angelo, TX	1,930	2,027	2,146	5.9	19,053	19,898	20,968	228
Lexington, KY	9,650	10,275	11,033	7.4	22,237	23,374	24,838	100	San Antonio, TX	29,796	31,526	33,716	6.9	20,474	21,276	22,379	169
Lima, OH	3,069	3,129	3,248	3.8	19,744	20,142	20,997	227	San Diego, CA	60,432	63,908	67,998	6.4	22,882	23,903	24,965	89
Lincoln, NE	5,058	5,429	5,752	5.9	22,081	23,482	24,602	106	San Francisco, CA*	60,217	64,159	68,671	7.0	36,668	38,813	41,128	1
Little Rock-North Little Rock, AR	11,717	12,446	13,089	5.2	21,629	22,726	23,707	125	San Jose, CA*	50,602	55,607	61,345	10.3	32,289	34,880	37,856	4
Longview-Marshall, TX	3,852	4,105	4,374	6.6	18,941	19,939	21,025	224	San Luis Obispo-Atascadero-Paso Robles, CA	4,575	4,897	5,223	6.7	20,244	21,412	22,568	162
Los Angeles-Long Beach, CA*	213,656	223,742	234,469	4.8	23,662	24,706	25,719	76	Santa Barbara-Santa Maria-Lompoc, CA	9,685	10,197	10,760	5.5	25,401	26,675	27,839	39
Louisville, KY-IN	22,950	24,043	25,353	5.4	23,317	24,307	25,493	80	Santa Cruz-Watsonville, CA	6,117	6,535	7,010	7.3	26,059	27,733	29,406	30
Lubbock, TX	4,571	4,853	5,085	4.7	19,757	20,980	22,032	181	Santa Fe, NM	3,351	3,495	3,680	5.3	24,765	25,507	26,319	64
Lynchburg, VA	4,087	4,261	4,462	4.8	20,037	20,729	21,543	202	Santa Rosa, CA*	10,632	11,447	12,439	8.7	25,636	27,295	29,188	32
Macon, GA	6,183	6,583	6,884	4.6	20,039	21,114	21,770	190	Sarasota-Bradenton, FL	15,134	16,109	17,020	5.7	28,918	30,460	31,792	16
Madison, WI	10,339	10,958	11,550	5.4	25,254	26,379	27,361	47	Savannah, GA	5,884	6,280	6,544	4.2	21,109	22,363	23,054	143
Mansfield, OH	3,328	3,456	3,619	4.7	18,993	19,719	20,673	240	Scranton-Wilkes-Barre-Hazleton, PA	12,754	13,309	13,770	3.5	20,199	21,228	22,177	176
McAllen-Edinburg-Mission, TX	5,265	5,660	6,018	7.0	11,044	11,548	12,005	316	Seattle-Bellevue-Everett, WA*	63,953	68,967	76,064	10.3	39,088	39,916	33,373	13
Medford-Ashland, OR	3,325	3,553	3,744	5.4	20,109	21,120	22,933	187	Sharon, VA	2,227	2,342	2,435	4.0	18,256	19,162	19,950	265
Melbourne-Titusville-Palm Bay, FL	9,265	9,765	10,342	5.9	20,609	21,531	22,505	164	Sheboygan, WI	2,437	2,539	2,637	3.9	22,456	23,215	24,009	122
Memphis, TN-AR-MS	25,271	26,569	28,043	5.5	23,746	24,725	25,905	71	Sherman-Denison, TX	1,869	2,017	2,135	5.9	19,069	20,144	21,006	226
Merced, CA	2,987	3,269	3,394	3.8	15,546	17,113	17,485	305	Shreveport-Bossier City, LA	7,554	7,782	8,064	3.6	19,953	20,532	21,259	213
Miami, FL*	42,538	44,653	46,174	3.4	20,605	21,207	21,688	193	Sioux City, IA-NE	2,456	2,646	2,830	3.2	20,436	21,905	22,633	160
Middlesex-Somerset-Hunterdon, NJ*	34,966	37,105	39,514	6.5	32,461	34,027	35,734	8	Sioux Falls, SD	3,669	3,955	4,203	6.3	23,417	24,797	26,030	70
Milwaukee-Waukesha, WI*	37,232	39,023	41,131	5.4	25,492	26,695	28,176	37	South Bend, IN	5,697	5,841	6,074	4.0	22,214	22,693	23,537	130
Minneapolis-St. Paul, MN-WI	74,448	79,350	84,193	6.1	27,315	28,739	30,123	26	Spokane, WA	8,219	8,604	9,037	5.0	20,478	21,300	22,293	170
Missoula, MT	1,734	1,831	1,910	4.3	19,950	20,735	21,496	204	Springfield, IL	4,536	4,814	5,031	4.5	22,339	23,616	24,679	103
Mobile, AL	9,498	10,064	10,604	5.4	18,415	19,327	20,119	257	Springfield, MO	6,019	6,328	6,686	5.7	20,481	21,314	22,206	175
Modesto, CA	7,310	7,762	8,238	6.1	17,879	18,768	19,650	276	Springfield, MA (NECMA)	13,307	13,812	14,496	5.0	22,461	23,397	24,576	107
Monmouth-Ocean, NJ*	29,420	31,048	32,680	5.3	28,000	29,148	30,725	23	State College, PA	2,499	2,651	2,793	5.4	19,185	20,070	21,128	223
Monroe, LA	2,706	2,856	2,899	1.5	18,474	19,466	19,273	271	Steubenville-Weirton, OH-WV	2,492	2,561	2,564	1	17,887	18,539	18,794	293
Montgomery, AL	6,549	6,872	7,185	4.6	20,867	21,716	22,498	165	Stonkton-Lodi, CA	9,764	10,252	10,854	5.9	18,646	19,286	20,092	259
Muncie, IN	2,389	2,438	2,527	3.7	20,131	20,635	21,185	203	Sumter, SC	1,624	1,719	1,800	4.7	15,225	16,070	16,883	309
Myrtle Beach, SC	3,056	3,326	3,591	8.0	19,380	20,301	21,186	218	Syracuse, NY	15,978	16,411	16,949	3.3	21,363	22,069	22,952	145
Naples, FL	5,934	6,503	6,969	7.2	32,836	35,001	36,210	7	Tacoma, WA*	13,372	14,130	14,973	6.0	20,658	21,551	22,511	163
Nashville, TN	27,528	28,986	31,057	7.1	25,205	25,995	27,324	48	Tallahassee, FL	5,111	5,419	5,730	5.7	19,902	21,002	22,032	181
Nassau-Suffolk, NY*	84,441	89,022	92,861	4.3	31,890	33,542	34,902	10	Tampa-St. Petersburg-Clearwater, FL	48,799	51,926	55,356	6.6	22,440	23,654	24,879	95
New Haven-Bridgeport-Stamford-Danbury-Waterbury, CT*	58,754	62,869	66,562	5.9	36,233	38,727	40,928	2	Terre Haute, IN	2,771	2,829	2,895	2.3	18,513	18,914	19,988	282
New London-Norwich, CT (NECMA)	6,552	6,840	7,084	3.6	26,270	27,441	28,466	35	Texarkana, TX-Texarkana, AR	2,212	2,336	2,469	5.7	18,035	18,918	19,590	263
New Orleans, LA	27,906	28,837	30,281	5.0	21,293	22,038	23,148	141	Toledo, OH	13,881	14,291	14,850	3.9	22,727	23,422	24,315	113
New York, NY*	268,292	284,422	298,085	4.8	31,189	32,991	34,459	11	Topeka, KS	3,728	3,896	4,027	3.4	22,637	23,852	24,364	112
Newark, NJ*	61,710	64,847	68,094	5.0	31,906	33,455	35,038	9	Trenton, NJ*	10,696	11,169	12,070	8.1	32,483	33,893	36,598	6
Newburgh, NY-PA*	7,682	8,028	8,314	3.6	21,446	22,198	22,753	153	Tucson, AZ	14,616	15,627	16,409	5.0	19,375	20,375	21,068	221
Norfolk-Virginia Beach-Newport News, VA-NC	31,034	32,448	33,958	4.7	20,255	21,125	21,983	184	Tulsa, OK	16,334	17,309	18,511	6.9	21,921	22,956	24,206	114
Oakland, CA*	62,115	66,771	71,260	6.7	28,061	29,846	31,338	18	Tuscaloosa, AL	2,992	3,127	3,299	5.5	18,884	19,692	20,514	245
Ocala, FL	4,052	4,358	4,652	6.7	17,986	18,930	19,723	271	Tyler, TX	3,425	3,685	3,943	7.0	21,209	22,432	23,696	126
Odessa-Midland, TX	5,063	5,366	5,887	9.7	21,414	22,488	24,386										

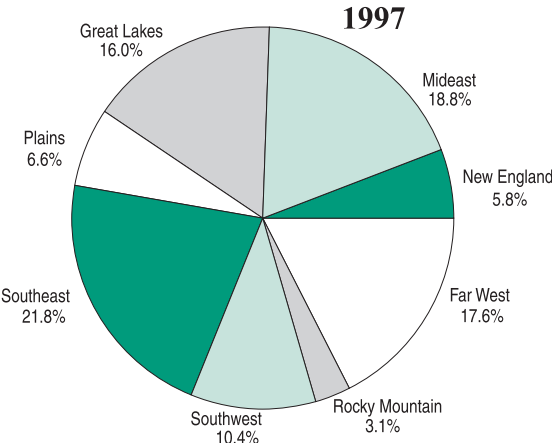
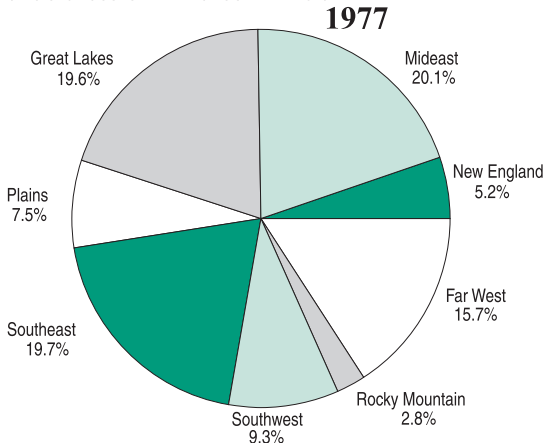
L. Charts

SELECTED REGIONAL ESTIMATES

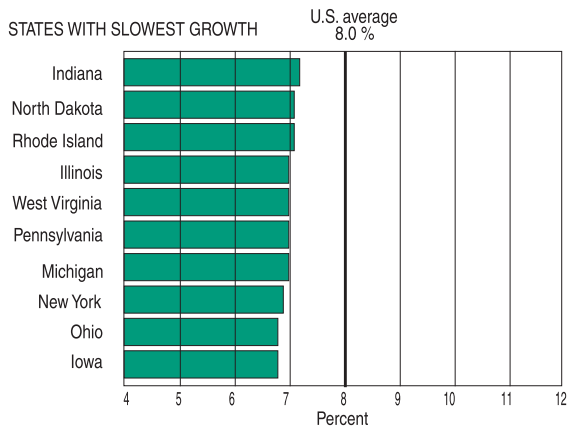
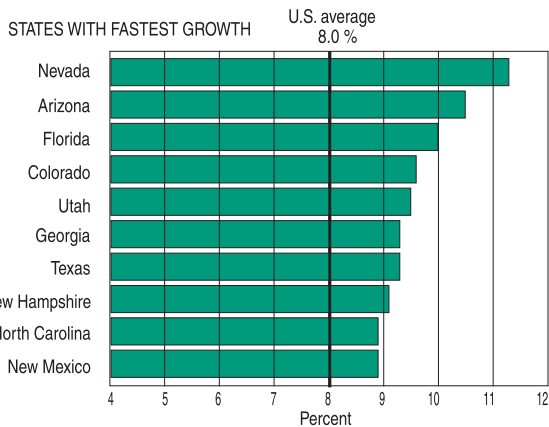
SHARES OF U.S. PERSONAL INCOME BY REGION



SHARES OF U.S. GROSS STATE PRODUCT BY REGION

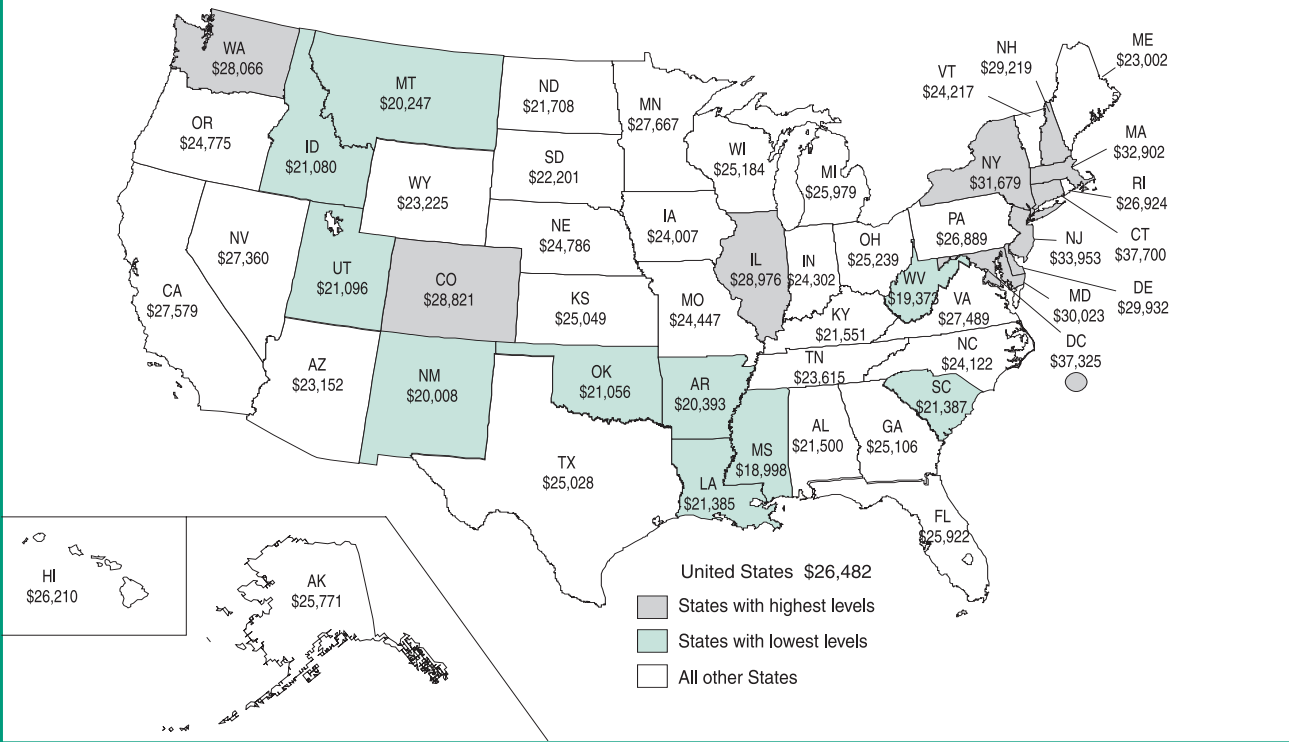


AVERAGE ANNUAL GROWTH RATE OF PERSONAL INCOME, 1969-98

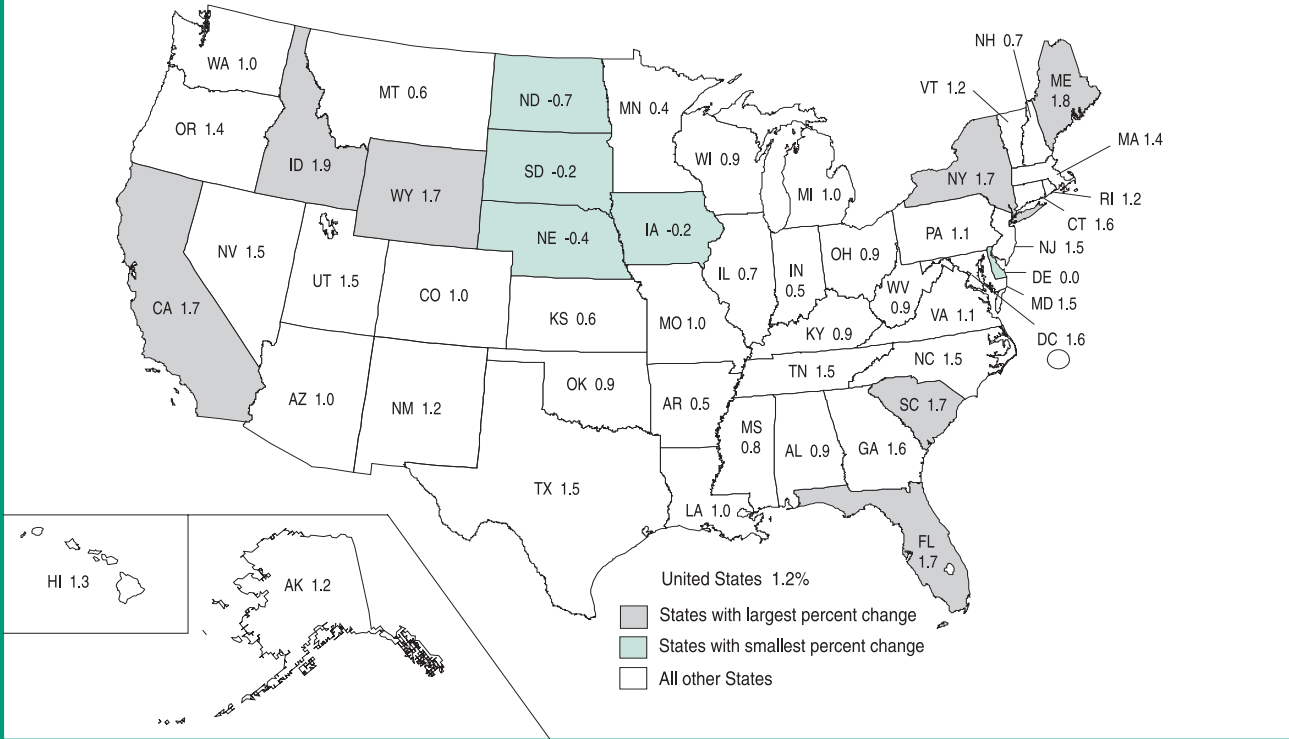


SELECTED REGIONAL ESTIMATES

PER CAPITA PERSONAL INCOME, 1998



PERSONAL INCOME: PERCENT CHANGE, 1998:IV-1999:1



Appendix A

Additional Information About BEA's NIPA Estimates

Statistical Conventions

Changes in current-dollar GDP measure changes in the market value of goods and services produced in the economy in a particular period. For many purposes, it is necessary to decompose these changes into quantity and price components. To compute the quantity indexes, changes in the quantities of individual goods and services are weighted by their prices. (Quantity changes for GDP are often referred to as changes in "real GDP.") For the price indexes, changes in the prices for individual goods and services are weighted by quantities produced. (In practice, the current-dollar value and price indexes for most GDP components are determined largely using data from Federal Government surveys, and the real values of these components are calculated by deflation at the most detailed level for which all the required data are available.)

The annual changes in quantities and prices are calculated using a Fisher formula that incorporates weights from 2 adjacent years. (Similar formulas are used to calculate the quarterly indexes for the most recent quarters, called the "tail" period, and for the indexes for the other quarters, called the "historical period.") For example, the 1996–97 annual percent change in real GDP uses prices for 1996 and 1997 as weights, and the 1996–97 annual percent change in price uses quantities for 1996 and 1997 as weights. These annual changes are "chained" (multiplied) together to form time series of quantity and price. Because the Fisher formula allows for the effects of changes in relative prices and in the composition of output over time, the resulting quantity or price changes are not affected by the substitution bias that is associated with changes in quantities and prices calculated using a fixed-weighted formula. The Fisher formula also produces changes in quantities and prices that are not affected by the choice of base periods. In addition, because the changes in quantities and prices calculated in this way are symmetric, the product of a quantity index and the corresponding price index is generally equal to the current-dollar index.

In addition, BEA prepares measures of real GDP and its components in a dollar-denominated form, designated "*chained (1992) dollar estimates*." These estimates are computed by multiplying the 1992 current-dollar value of GDP, or of a GDP component, by the corresponding quantity index number. For example, if a current-dollar GDP component equaled \$100 in 1992 and if real output for this component increased by 10 percent in 1993, then the "chained (1992) dollar" value of this component in 1993 would be \$110 (\$100 × 1.10). Note that percentage changes in the chained

(1992) dollar estimates and the percentage changes calculated from the quantity indexes are identical, except for small differences due to rounding.

Because of the formula used for calculating real GDP, the chained (1992) dollar estimates for detailed GDP components *do not add* to the chained-dollar value of GDP or to any intermediate aggregates. A "*residual*" line is shown as the difference between GDP and the sum of the most detailed components shown in each table. The residual generally is small close to the base period but tends to become larger as one moves further from it. NIPA table 8.2 provides accurate measures of the contributions of the major components to the percentage change in real GDP for all periods.

BEA also publishes the "implicit price deflator" (IPD), which is calculated as the ratio of current-dollar value to the corresponding chained-dollar value, multiplied by 100; the values of the IPD and of the corresponding "chain-type" price index are very close.

For quarters and months, the estimates are presented at annual rates, which show the value that would be registered if the rate of activity measured for a quarter or a month were maintained for a full year. Annual rates are used so that time periods of different lengths—for example, quarters and years—may be compared easily. These annual rates are determined simply by multiplying the estimated rate of activity by 4 (for quarterly data) or 12 (for monthly data).

Percent changes in the estimates are also expressed at annual rates. Calculating these *changes* requires a variant of the compound interest formula:

$$r = \left[\left(\frac{X_t}{X_o} \right)^{m/n} - 1 \right] \times 100,$$

where r is the percent change at an annual rate;
 X_t is the level of activity in the later period;
 X_o is the level of activity in the earlier period;
 m is the yearly periodicity of the data (for example, 1 for annual data, 4 for quarterly, or 12 for monthly); and
 n is the number of periods between the earlier and later periods (that is, $t - o$).

Quarterly and monthly NIPA estimates are seasonally adjusted, if necessary. Seasonal adjustment removes from the time series the average impact of variations that normally occur at about the same time and in about the same magnitude each year—for example, weather, holidays, and tax payment dates. After seasonal adjustment, cyclical and other short-term changes in the economy stand out more clearly.

Reconciliation Tables

Table 1.—Reconciliation of Changes in BEA-Derived Compensation Per Hour with BLS Average Hourly Earnings

[Percent change from preceding period]

	1997	1998	Seasonally adjusted at annual rates					
			1998				1999	
			I	II	III	IV	I	II ^P
BEA-derived compensation per hour of all persons in the nonfarm business sector (less housing)¹	3.5	4.2	4.7	4.1	3.9	4.0	4.4	5.6
<i>Less:</i> Contribution of supplements to wages and salaries per hour	-.5	-.3	-.2	-.3	-.2	-.6	.2	-.1
<i>Plus:</i> Contribution of wages and salaries per hour of persons in housing and in nonprofit institutions	-.2	-.2	-.2	.1	.1	-.2	-.1	.1
<i>Less:</i> Contribution of wages and salaries per hour of persons in government enterprises, unpaid family workers, and self-employed	-.1	0	.1	-.3	.1	-.1	-.5	.1
Equals: BEA-derived wages and salaries per hour of all employees in the private nonfarm sector	4.0	4.4	4.6	4.8	4.1	4.5	4.6	5.6
<i>Less:</i> Contribution of wages and salaries per hour of nonproduction workers in manufacturing .....	.2	-.2	.4	.4	.2	0	.2	.4
<i>Less:</i> Other differences ² .....	.1	.4	-.4	0	.1	1.3	.4	1.7
Equals: BLS average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls	3.7	4.2	4.6	4.3	3.7	3.2	4.0	3.5
Addendum: BLS estimates of compensation per hour in the nonfarm business sector ³	3.5	4.2	4.6	3.9	4.1	3.8	4.4	5.1

^P Preliminary.

1. Includes BLS data on compensation and hours of nonfarm proprietors and hours worked of unpaid family workers.

2. Includes BEA use of non-BLS data and differences in detailed weighting. Annual estimates also include differences in BEA and BLS benchmark procedures; quarterly estimates also include

differences in seasonal adjustment procedures.

3. These estimates differ from the BEA-derived estimates (first line) because the BLS estimates include compensation and hours of tenant-occupied housing.

NOTE.—This table incorporates the March 1998 benchmark of the BLS current establishment survey.

Table 2.—Relation of Net Exports of Goods and Services and Net Receipts of Factor Income in the NIPA's to Balance on Goods, Services, and Income in the BPA's

[Billions of dollars]

	Line	1997	1998	Seasonally adjusted at annual rates					
				1997	1998				1999
					IV	I	II	III	
Exports of goods, services, and income, BPA's	1	1,197.2	1,192.2	1,215.5	1,209.2	1,193.9	1,166.0	1,199.9	1,184.9
<i>Less:</i> Gold, BPA's	2	5.7	5.5	3.4	5.3	4.4	5.2	7.1	2.9
Statistical differences ¹	3	18.4	18.4	16.7	18.0	28.2	19.3	8.2	8.2
Other items	4	.8	.8	.8	.7	.6	.8	1.2	.9
<i>Plus:</i> Adjustment for grossing of parent/affiliate interest payments	5	4.5	5.0	5.2	4.1	4.9	5.2	5.7	4.7
Adjustment for U.S. territories and Puerto Rico	6	37.0	38.0	37.9	37.0	37.2	37.4	40.5	41.1
Services furnished without payment by financial intermediaries except life insurance carriers and private noninsured pension plans	7	17.1	17.6	17.3	17.3	17.6	17.8	17.9	18.2
Equals: Exports of goods and services and receipts of factor income, NIPA's	8	1,230.9	1,228.1	1,254.9	1,243.6	1,220.2	1,201.2	1,247.5	1,237.0
Imports of goods, services, and income, BPA's	9	1,298.7	1,368.7	1,329.3	1,341.5	1,363.9	1,376.7	1,392.7	1,418.8
<i>Less:</i> Gold, BPA's	10	6.6	6.5	3.8	6.7	5.5	7.3	6.6	3.2
Statistical differences ¹	11	4.4	10.7	-.3	-1.8	8.2	23.1	13.6	13.6
Other items	12	0	0	0	0	0	0	0	0
<i>Plus:</i> Gold, NIPA's	13	-3.5	-2.9	-3.3	-3.2	-3.0	-2.8	-2.9	-2.1
Adjustment for grossing of parent/affiliate interest payments	14	4.5	5.0	5.2	4.1	4.9	5.2	5.7	4.7
Adjustment for U.S. territories and Puerto Rico	15	26.5	28.6	28.3	27.4	28.5	27.1	31.6	31.3
Imputed interest paid to rest of world	16	17.1	17.6	17.3	17.3	17.6	17.8	17.9	18.2
Equals: Imports of goods and services and payments of factor income, NIPA's	17	1,332.3	1,399.8	1,373.3	1,382.2	1,398.2	1,393.7	1,424.9	1,454.2
Balance on goods, services, and income, BPA's (1-9)	18	-101.5	-176.5	-113.8	-132.3	-170.0	-210.7	-192.8	-233.9
<i>Less:</i> Gold (2-10+13)	19	-4.4	-3.9	-3.7	-4.6	-4.1	-4.9	-2.4	-2.4
Statistical differences (3-11) ¹	20	14.0	7.7	17.0	19.8	20.0	-3.8	-5.4	-5.4
Other items (4-12)	21	.8	.8	.8	.7	.6	.8	1.2	.9
<i>Plus:</i> Adjustment for U.S. territories and Puerto Rico (6-15)	22	10.5	9.4	9.6	9.6	8.7	10.3	8.9	9.8
Equals: Net exports of goods and services and net receipts of factor income, NIPA's (8-17)	23	-101.4	-171.7	-118.4	-138.6	-178.0	-192.5	-177.4	-217.2

1. Consists of statistical revisions in the BPA's that have not yet been incorporated into the NIPA's (1997:1-1999:1).

BPA's Balance of payments accounts
NIPA's National income and product accounts

Appendix B

Suggested Reading

Mid-Decade Strategic Plan

BEA has published the following articles in the SURVEY OF CURRENT BUSINESS on the development and implementation of its strategic plan for improving the accuracy, reliability, and relevance of the national, regional, and international accounts.

“Mid-Decade Strategic Review of BEA’s Economic Accounts: Maintaining and Improving Their Performance” (February 1995)

“Mid-Decade Strategic Review of BEA’s Economic Accounts: An Update” (April 1995)

“BEA’s Mid-Decade Strategic Plan: A Progress Report” (June 1996)

Mid-Decade Strategic Review of BEA’s Economic Accounts: Background Papers (1995) presents seven background papers that evaluate the state of the U.S. economic accounts and that identify the problems and the prospects for improving the accounts.

Methodology

BEA has published a wealth of information about the methodology used to prepare its national, regional, and international estimates.

National

National income and product accounts (NIPA’s)

NIPA Methodology Papers: This series documents the conceptual framework of the NIPA’s and the methodology used to prepare the estimates.

An Introduction to National Economic Accounting (NIPA Methodology Paper No. 1, 1985) [Also appeared in the March 1985 issue of the SURVEY]

Corporate Profits: Profits Before Tax, Profits Tax Liability, and Dividends (NIPA Methodology Paper No. 2, 1985)

Foreign Transactions (NIPA Methodology Paper No. 3, 1987) [Revised version forthcoming]

GNP: An Overview of Source Data and Estimating Methods (NIPA Methodology Paper No. 4, 1987) [Largely superseded by “A Guide to the NIPA’s” (March 1998 SURVEY)]

Government Transactions (NIPA Methodology Paper No. 5, 1988)

Personal Consumption Expenditures (NIPA Methodology Paper No. 6, 1990)

The methodologies described in these papers are subject to periodic improvements that are typically introduced as part of the annual and comprehensive revisions of the NIPA’s; these improvements are

described in the SURVEY articles that cover these revisions.

“Annual Revision of the U.S. National Income and Product Accounts”: This series of SURVEY articles, the latest of which was published in the August 1998 issue, describes the annual NIPA revisions and the improvements in methodology.

“A Preview of the 1999 Comprehensive Revision of the National Income and Product Accounts: Definitional and Classificational Changes” (August 1999) is the first in a series of SURVEY articles that describe the upcoming comprehensive revision of the NIPA’s.

“A Guide to the NIPA’s” (March 1998 SURVEY) provides the definitions of the major NIPA aggregates and components; discusses the measures of real output and prices; explains how production is classified and how the NIPA’s are presented; describes the statistical conventions that are used; and lists the principal source data and methods used to prepare the estimates of gross domestic product (GDP).

Information on the sources and methods used to prepare the national estimates of personal income, which provide the basis for the State estimates of personal income, can be found in *State Personal Income, 1929–93* (1995).

“Gross Domestic Product as a Measure of U.S. Production” (August 1991 SURVEY) briefly explains the difference between GDP and gross national product.

“BEA’s Chain Indexes, Time Series, and Measures of Long-Term Economic Growth” (May 1997) is the most recent in a series of SURVEY articles that describe the conceptual basis for the chain-type measures of real output and prices used in the NIPA’s.

“Reliability of the Quarterly and Annual Estimates of GDP and Gross Domestic Income” (December 1998 SURVEY) evaluates the reliability of these estimates by examining the record of revisions to them.

Availability

Most of the items listed here are available on BEA’s Web site at <www.bea.doc.gov>. In addition, see the *BEA Catalog of Products* for the availability of printed publications. The *Catalog* is available on BEA’s Web site; a printed copy can be obtained by writing to the Public Information Office, BE-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230, or by calling 202-606-9900.

Wealth and related estimates

“Improved Estimates of Fixed Reproducible Tangible Wealth, 1929–95” (May 1997 SURVEY) describes the most recent comprehensive revision of the estimates of fixed reproducible tangible wealth.

Gross product by industry

“Improved Estimates of Gross Product by Industry, 1959–94” (August 1996 SURVEY) describes the most recent comprehensive revision of the estimates of gross product by industry.

“Gross Product by Industry, 1947–96” (November 1997 SURVEY) and “Gross Product by Industry, 1995–97” (November 1998 SURVEY) present the most recent revisions to the estimates of gross product by industry and briefly describe changes in methodology.

Input-output accounts

“Benchmark Input-Output Accounts for the U.S. Economy, 1992” (November 1997 SURVEY) describes the preparation of the 1992 input-output accounts and the concepts and methods underlying the U.S. input-output accounts.

Satellite accounts

Satellite accounts that extend the analytical capacity of the national accounts by focusing on a particular aspect of activity are presented in the following SURVEY articles.

“Integrated Economic and Environmental Satellite Accounts” and “Accounting for Mineral Resources: Issues and BEA’s Initial Estimates” (April 1994)

“A Satellite Account for Research and Development” (November 1994)

“U.S. Transportation Satellite Accounts for 1992” (April 1998)

“U.S. Travel and Tourism Satellite Accounts for 1992” (July 1998)

*International**Balance of payments accounts (BPA’s)*

The Balance of Payments of the United States: Concepts, Data Sources, and Estimating Procedures (1990) describes the methodologies used in preparing the estimates in the BPA’s and of the international investment position of the United States. These methodologies are subject to periodic improvements that are typically introduced as part of the annual revisions of the BPA’s.

“U.S. International Transactions, Revised Estimates”: This series of SURVEY articles, the latest of which was published in the July 1999 issue, describes the annual BPA revisions and the improvements in methodology.

Direct investment

International Direct Investment: Studies by the Bureau of Economic Analysis (1999) presents a collection of previously published studies on U.S. direct investment abroad and foreign direct investment in the United States. In addition, it includes the following guides to BEA’s statistics and methodologies used to prepare the estimates.

“Methodology for U.S. Direct Investment Abroad” (*U.S. Direct Investment Abroad: 1994 Benchmark Survey, Final Results* (1998))

“A Guide to BEA Statistics on U.S. Multinational Companies” (March 1995 SURVEY)

“Methodology for Foreign Direct Investment in the United States” (*Foreign Direct Investment in the United States: 1992 Benchmark Survey, Final Results* (1995))

“A Guide to BEA Statistics on Foreign Direct Investment in the United States” (February 1990 SURVEY)

Surveys of international services

U.S. International Transactions in Private Services: A Guide to the Surveys Conducted by the Bureau of Economic Analysis (1998) provides information on the 11 surveys that BEA conducts on these transactions—including classifications, definitions, release schedules, and methods used to prepare the estimates—and samples of the survey forms.

*Regional**Personal income*

State Personal Income, 1929–97 (1999) includes a description of the methodology used to prepare the estimates of State personal income. [Also available on the CD-ROM *State Personal Income, 1929–97*]

Local Area Personal Income, 1969–92 (1994) includes a description of the methodology used to prepare the estimates of local area personal income. [Also available on the CD-ROM *Regional Economic Information System, 1969–97*]

Gross state product

“Comprehensive Revision of Gross State Product by Industry, 1977–94” (June 1997 SURVEY) summarizes the sources and methods for BEA’s estimates of gross state product.

“Gross State Product by Industry, 1977–96” (June 1998 SURVEY) and “Gross State Product by Industry, 1995–97” (June 1999 SURVEY) present the most recent revisions to the estimates of gross state product by industry and briefly describe changes in methodology. 