

Bureau of Economic Analysis

Survey of Current Business

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January 1994

Special in this issue

34. Characteristics of Foreign-Owned U.S. Manufacturing Establishments

Foreign-owned U.S. manufacturing plants tend to be much larger than their U.S.-owned counterparts, and they tend to have somewhat higher capital intensity, wage rates, and labor productivity. The difference in plant size appears to be due to foreign ownership per se, but the other differences appear to be largely due to the nature of the industries in which foreign investment is concentrated. These conclusions are based on newly available data for 1989—that were derived by linking BEA enterprise-level data on foreign direct investment in the United States with establishment-level data from the Census Bureau's annual survey of manufactures.

Regular features

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U.S. economic activity surged in the fourth quarter of 1993: The 5.9-percent increase in real GDP was double the third-quarter increase. At 2.1 percent, inflation remained moderate.

29. Personal Income by State and Region, Third Quarter 1993

Floods in the Midwest, drought in the Southeast, and declines in Federal farm subsidy payments lowered farm income, as personal income slowed in the third quarter. Still, personal income in 37 States increased faster than prices.

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LOOKING AHEAD

Gross Product of U.S. Multinational Companies. An article presenting estimates of gross product of U.S. multinational companies (MNC's) for 1977–91 will appear in the February SURVEY; estimates will be provided for both U.S. parent companies and their foreign affiliates. The article will discuss trends in MNC gross product and examine the structure of MNC output.

User's Guide. An updated "User's Guide to BEA Information" will appear in the February SURVEY. The guide contains descriptions of BEA's programs, products, and services as well as order information and forms.

THE BUSINESS SITUATION

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

REAL GROSS domestic product (GDP) increased 5.9 percent in the fourth quarter of 1993 after increasing 2.9 percent in the third quarter, according to the advance estimate of the national income and product accounts (NIPA's) (chart 1).¹ The acceleration reflected a sharp step-up in the production of goods and a smaller—but still sizable—step-up in the production of structures. The production of services increased less in the fourth quarter than in the third (table 1).

In the aftermath of floods in the Midwest and drought in the Southeast, farm inventories were adjusted down \$7.5 billion in the third quarter and \$2.5 billion in the fourth.² Quarter-to-quarter growth of GDP reflects quarter-to-quarter differences in the adjustments, namely -\$7.5 billion in the third quarter, +\$5.0 billion in the fourth quarter, and +\$2.5 billion in the first quarter of 1994. These constant-dollar amounts translate into effects on GDP growth rates as follows: -0.6 percentage point in the third quarter, +0.4 percentage point in the fourth quarter, and +0.2 percentage point in the first quarter of 1994.

Real gross domestic purchases increased 6.5 percent in the fourth quarter after increasing 3.7 percent in the third (table 2). The acceleration was more than accounted for by investment. Inventory investment (that is, change in business inventories) turned up; farm inventories more than accounted for the upturn. Nonresidential fixed investment and residential investment both stepped up sharply. The nonresidential step-up was mainly accounted for by producers' durable equipment; the residential step-up, by single-family construction.

Exports and imports are the link between goods and services produced in the United States (GDP) and goods and services purchased by U.S. residents (gross domestic purchases). Exports—

goods and services produced in the United States but not purchased by U.S. residents—posted a strong increase in the fourth quarter after decreasing slightly in the third. Imports—goods and services purchased by U.S. residents but not produced in the United States—increased much more in the fourth quarter than in the third.

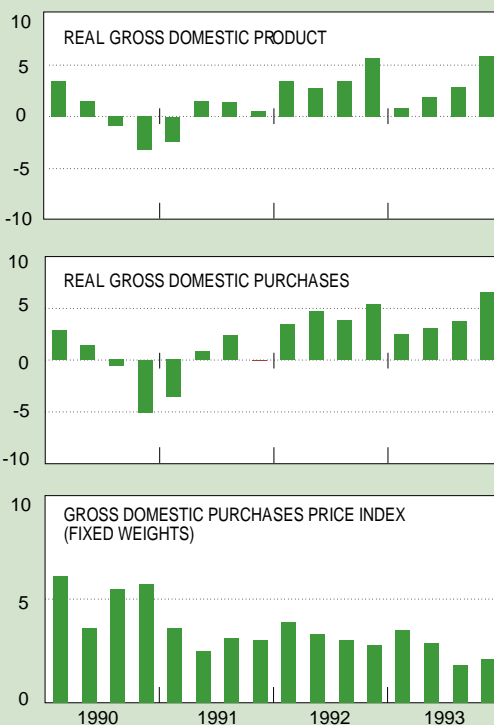
The fixed-weighted price index for gross domestic purchases increased 2.1 percent in the fourth quarter after increasing 1.8 percent in the third. The fixed-weighted price index for GDP increased 2.2 percent after increasing 2.1 percent.

Motor vehicles.—A fourth-quarter jump in motor vehicle output followed two quarters of

CHART 1

Selected Measures: Change From Preceding Quarter

Percent



Note—Percent change at annual rate from preceding quarter; based on seasonally adjusted estimates.

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

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

2. The Bureau of Economic Analysis does not attempt to quantify the total impact of disasters, but it does adjust for the effects of disasters when these effects are not adequately captured in the source data. For more information, see "Impact of the 1993 Floods and Drought," *SURVEY OF CURRENT BUSINESS* 73 (September 1993): 2.

decrease. A jump in sales continued a seven-quarter pattern of alternating increases and decreases. Inventories increased after two quarters of decrease.

Output increased 48.0 percent in the fourth quarter after falling 18.6 percent in the third (table 3). The increase was evenly split between autos and trucks.

Table 1.—Real Gross Domestic Product, by Major Type of Product: Change From Preceding Period

[Quarterly changes are at seasonally adjusted annual rates]

	Billions of 1987 dollars						Percent					
	1992	1993	1993				1992	1993	1993			
			I	II	III	IV			I	II	III	IV
Gross domestic product	124.9	146.4	9.9	23.9	36.2	73.8	2.6	2.9	0.8	1.9	2.9	5.9
Goods	59.2	75.6	2.5	8.9	5.8	46.1	3.0	3.8	.5	1.7	1.1	9.2
Motor vehicles	18.9	15.4	6.6	-2.6	-10.2	19.9	11.1	8.2	13.9	-4.9	-18.6	48.0
Other	40.3	60.2	-4.1	11.5	16.0	26.2	2.3	3.3	-9	2.5	3.5	5.7
Services	38.8	51.5	8.8	12.2	19.2	8.8	1.6	2.0	1.4	1.9	3.0	1.4
Structures	26.8	19.3	-1.5	2.8	11.1	19.0	6.4	4.3	-1.3	2.5	10.1	17.3
Addendum: Gross farm product	9.2	-5.7	-1.5	-2.0	-8.7	6.1	13.1	-7.2	-7.3	-9.8	-38.4	41.4

NOTE.—Most series are found in table 1.4 of the "Selected NIPA Tables"; gross farm product is found in table 1.8. Output of motor vehicles is the sum of auto output and truck output from tables 8.4 and 8.6, respectively.

Table 2.—Real Gross Domestic Product, Real Gross Domestic Purchases, and Real Final Sales to Domestic Purchasers: Change From Preceding Period

[Quarterly changes are at seasonally adjusted annual rates]

	Billions of 1987 dollars						Percent					
	1992	1993	1993				1992	1993	1993			
			I	II	III	IV			I	II	III	IV
Gross domestic product	124.9	146.4	9.9	23.9	36.2	73.8	2.6	2.9	0.8	1.9	2.9	5.9
Less: Exports of goods and services	34.6	18.4	-3.6	5.2	-1.3	20.6	6.4	3.2	-2.4	3.6	-9	14.7
Plus: Imports of goods and services	49.1	64.1	17.6	20.5	9.8	29.9	8.7	10.5	11.6	13.3	6.0	18.8
Equals: Gross domestic purchases	139.4	192.0	31.0	39.3	47.2	83.1	2.9	3.8	2.5	3.1	3.7	6.5
Less: Change in business inventories	14.9	8.9	20.6	-16.3	-6.5	6.2	.....	.....	.....	.....	.....	.....
Farm	3.6	-9.7	-1.2	-4.1	-8.8	6.2	.....	.....	.....	.....	.....	.....
Nonfarm	11.3	18.6	21.8	-12.2	2.3	0	.....	.....	.....	.....	.....	.....
Equals: Final sales to domestic purchasers	124.5	183.2	10.4	55.5	53.8	76.9	2.5	3.7	.8	4.4	4.2	6.0
Personal consumption expenditures	83.2	110.7	6.6	28.9	36.9	34.3	2.6	3.3	.8	3.4	4.4	4.0
Nonresidential fixed investment	14.7	62.1	18.6	22.0	10.5	29.0	2.9	11.7	14.4	16.6	7.4	21.0
Residential investment	27.6	17.1	.8	-5.2	5.9	15.1	16.3	8.7	1.5	-9.5	11.9	31.7
Government purchases	-1.1	-6.6	-15.6	9.8	.6	-1.6	-1	-7	-6.4	4.3	.3	-7

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

Table 3.—Motor Vehicle Output, Sales, and Inventories: Change From Preceding Period

[Quarterly changes are at seasonally adjusted annual rates]

	Billions of 1987 dollars						Percent					
	1992	1993	1993				1992	1993	1993			
			I	II	III	IV			I	II	III	IV
Output	18.9	15.4	6.6	-2.6	-10.2	19.9	11.1	8.2	13.9	-4.9	-18.6	48.0
Autos	7.9	3.4	2.4	.9	-9.9	10.2	7.2	2.9	8.2	3.0	-28.4	41.1
Trucks	11.0	12.0	4.2	-3.5	-3	9.7	18.2	16.8	22.9	-15.7	-1.5	58.1
Final sales	16.6	12.7	-6.4	14.1	-7.7	11.6	9.7	6.7	-12.3	32.9	-14.2	25.6
Autos	7.9	-6	-5.6	7.2	-4.9	1.0	7.2	-5	-17.5	27.8	-15.2	3.5
Trucks	8.7	13.3	-8	6.9	-2.8	10.6	14.1	18.9	-4.0	40.8	-12.7	63.2
Change in business inventories	2.3	2.6	12.9	-16.7	-2.5	8.3	.....	.....	.....	.....	.....	.....
Autos	0	4.0	8.0	-6.3	-5.1	9.2	.....	.....	.....	.....	.....	.....
Trucks	2.3	-1.4	4.9	-10.4	2.6	-9	.....	.....	.....	.....	.....	.....

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

Sales increased 25.6 percent in the fourth quarter after dropping 14.2 percent in the third. The increase was mostly accounted for by truck sales, which jumped 63.2 percent after decreasing 12.7 percent. Light domestic trucks accounted for the jump, according to data on unit sales; sales of minivans, sport-utility vehicles, and full-size pickups were very strong. Auto sales increased 3.5 percent after dropping 15.2 percent; the increase was more than accounted for by domestic models, according to the unit sales data.

Most of the fourth-quarter increase in motor vehicle sales was accounted for by sales to consumers, which increased 26.9 percent after decreasing 6.2 percent. The increase in consumer sales was consistent with improvement in fac-

tors that underlie total consumer spending: Real disposable personal income increased 5.2 percent after increasing 1.6 percent. The Index of Consumer Sentiment (prepared by the University of Michigan's Survey Research Center) increased to its highest level in three quarters. The unemployment rate fell to 6.5 percent, its lowest level in 11 quarters. In addition, the increase in sales may have reflected falling interest rates on auto loans; commercial bank interest rates on 48-month loans fell to 7.6 percent in the fourth quarter from 8.0 percent in the third.

The fourth-quarter increase in motor vehicle inventories was more than accounted for by autos; in units, the inventory-sales ratio for new domestic autos decreased slightly to 2.5—just

Fourth-Quarter 1993 Advance GDP Estimate: Source Data and Assumptions

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

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

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

Residential investment: Construction put in place (2) and 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: Merchandise exports and merchandise imports (2);

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

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

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

Table A.—Summary of Major Data Assumptions for Advance Estimates, 1993:IV

[Billions of dollars, seasonally adjusted at annual rates]

	1993					
	July	August	September	October	November	December
Fixed investment:						
Nonresidential structures:						
Buildings, utilities, and farm:						
Value of new nonresidential construction put in place	129.9	131.9	133.1	135.8	137.3	137.8
Producers' durable equipment:						
Manufacturers' shipments of complete civilian aircraft less exports	5.7	11.1	6.3	1.8	1.4	6.8
Residential structures:						
Value of new residential construction put in place:						
1-unit structures	129.5	131.8	134.7	139.4	145.2	150.6
2-or-more-unit structures	11.6	11.2	11.1	10.5	11.1	11.6
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	18.1	23.9	19.0	12.8	48.3	-22.8
Net exports:						
Exports of merchandise:						
U.S. exports of merchandise, excluding gold, balance-of-payments basis	431.7	439.6	444.8	457.5	458.9	463.5
Imports of merchandise:						
U.S. imports of merchandise, excluding gold, balance-of-payments basis	570.1	576.8	593.8	612.0	598.4	608.0
Net merchandise trade (exports less imports)	-138.4	-137.2	-149.0	-154.6	-139.5	-144.5
Government purchases:						
State and local:						
Structures:						
Value of new construction put in place	115.2	113.7	119.9	116.1	120.4	116.5

above the traditional industry target of 2.4— from 2.6 in the third quarter. Truck inventories decreased slightly in the fourth quarter after increasing in the third.

The NIPA's in 1993.—From 1992 to 1993, real GDP increased 2.9 percent, up from the 2.6-percent increase from 1991 to 1992. The 1993 increase was the largest since 1988, but it was relatively modest for a period of economic recovery.

The small acceleration in GDP in 1993 reflected step-ups in the production of both goods and services; the production of structures increased less in 1993 than in 1992. The step-up in the production of goods was accounted for by durable goods other than motor vehicles. About half of the step-up in the production of services was accounted for by brokerage services. The slowdown in structures was more than accounted for by residential construction; nonresidential construction increased slightly in 1993 after decreasing in 1992.

Gross domestic purchases increased 3.8 percent in 1993 after increasing 2.9 percent in 1992. The pickup was accounted for by personal consumption expenditures and by nonresidential fixed investment; inventory investment and residential investment increased less than in 1992, and government purchases decreased more than in 1992.

Personal consumption expenditures increased more in 1993 than in 1992—3.3 percent, compared with 2.6 percent. A slowing in the rate of growth of real disposable personal income from 2.9 percent to 1.9 percent mainly reflected bonus payments that typically would have been paid in early 1993 but that were instead paid in late 1992.³ Saving financed at least part of the 1993 increase in expenditures; for example, personal saving as a percent of disposable personal income fell to 4.0 percent in 1993 from 5.3 percent in 1992.

Nonresidential fixed investment increased 11.7 percent after increasing 2.9 percent. The pickup was consistent with pickups in final sales and in corporate profits. Real final sales of domestic product increased 2.8 percent after increasing 2.3 percent. Corporate profits are not yet available for the fourth quarter of 1993; however, in the first three quarters of the year, profits (in current dollars) averaged 14.3 percent more than in the first three quarters of 1992.

Inventory investment increased \$8.9 billion after increasing \$14.9 billion. The slowdown was

more than accounted for by the effects of the floods and drought on farm inventories. Non-farm inventory investment increased more than in 1992; however, the ratio of nonfarm inventories to final sales of domestic product changed little from 1992 to 1993.

Residential investment increased 8.7 percent after increasing 16.3 percent. The slowdown occurred despite a drop in the mortgage commitment rate from 8.4 percent to 7.3 percent; it reflected, at least in part, accelerating house prices and slower income growth.

Government purchases decreased 0.7 percent after decreasing 0.1 percent. Federal nondefense purchases increased much less in 1993 than in 1992. In both years, defense purchases decreased substantially, and State and local government purchases increased modestly.

Exports slowed to a 3.2-percent increase from a 6.4-percent increase; imports, in contrast, stepped up to a 10.5-percent increase from an 8.7-percent increase. Both services and merchandise contributed to the slowdown in exports; much of the merchandise slowdown was accounted for by foods, feeds, and beverages and by industrial supplies and materials. Both services and merchandise contributed to the step-up in imports; much of the merchandise step-up was accounted for by nonautomotive capital goods.

Prices

The fixed-weighted price index for gross domestic purchases increased 2.1 percent in the fourth quarter after increasing 1.8 percent in the third (table 4). Prices of gross domestic purchases less food and energy, which may be viewed as a measure of the underlying inflation rate in the U.S. economy, increased 2.0 percent after increasing 2.3 percent (chart 2).

Prices of personal consumption expenditures (PCE) increased 2.7 percent after increasing 1.4 percent. The step-up was spread across PCE categories. Food prices increased 3.9 percent after increasing 0.3 percent; much of the step-up reflected upturns in the prices of meat, fish, and fresh fruits and vegetables. Energy prices increased 1.1 percent after decreasing 4.2 percent. The price of gasoline and oil turned up, reflecting an increase in the Federal excise tax on gasoline that became effective October 1, 1993; in contrast, the price of fuel oil and coal decreased more than in the third quarter, and the price of electricity and gas turned down. The price of "other" PCE increased 2.6 percent after increasing 2.0 percent; much of the step-up was accounted for by the

3. See "Annual Revision of the U.S. National Income and Product Accounts," SURVEY 73 (August 1993): 28.

prices of furniture and household equipment and of housing services.

Prices of nonresidential fixed investment increased 1.3 percent after increasing 1.9 percent. Prices of nonresidential structures increased at about the same rate in both quarters. Prices of producers' durable equipment changed little after a small increase; prices of industrial, transportation, and "other" equipment slowed, and prices of information processing equipment decreased at the same rate as in the third quarter. Prices of

residential investment increased 2.8 percent after increasing 4.6 percent.

Prices of government purchases changed little after increasing 2.5 percent. Prices paid by the Federal Government decreased 0.6 percent after increasing 3.3 percent. Much of the third-quarter increase reflected retirement incentives ("buyouts") offered to civilian employees of the Defense Department; these buyouts are treated in the NIPA's as a one-time change in the price of employee services purchased by the Federal Government. Prices paid by State and local governments increased 0.7 percent after increasing 1.8 percent; the slowdown was accounted for by durable goods and by services (including employee compensation).

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

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

	1993			
	I	II	III	IV
Gross domestic product	4.3	2.8	2.1	2.2
Less: Exports of goods and services	1.5	2.8	.6	1.0
Plus: Imports of goods and services	-4.7	3.8	-2.7	.3
Equals: Gross domestic purchases	3.5	2.9	1.8	2.1
Less: Change in business inventories .....	.....	.....	.....	.....
Equals: Final sales to domestic purchasers	3.5	2.9	1.8	2.1
Personal consumption expenditures	3.4	2.9	1.4	2.7
Food	2.6	2.3	.3	3.9
Energy	1.5	-1.5	-4.2	1.1
Other personal consumption expenditures	3.7	3.4	2.0	2.6
Nonresidential fixed investment	1.6	2.5	1.9	1.3
Structures	2.5	3.8	3.4	3.3
Producers' durable equipment	1.2	1.8	1.0	.1
Residential investment	3.5	5.0	4.6	2.8
Government purchases	5.0	2.6	2.5	.1
Addenda:				
Merchandise imports	-5.3	4.1	-3.4	.6
Petroleum and products	-28.8	16.1	-36.6	-24.9
Other merchandise	-2.6	3.0	.5	3.2

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

The price index for GDP, which measures prices paid for goods and services produced in the United States, increased 2.2 percent after increasing 2.1 percent. This index differs from the price index for gross domestic purchases because it includes prices of exports and excludes prices of imports. Prices of exports increased 1.0 percent after increasing 0.6 percent; prices of imports increased 0.3 percent after decreasing 2.7 percent.

Personal income

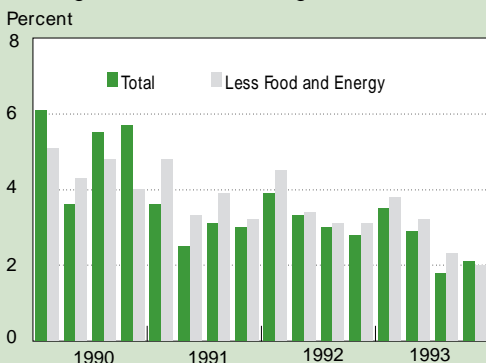
Real disposable personal income (DPI) increased 5.2 percent in the fourth quarter after increasing 1.6 percent in the third (chart 3). The acceleration was more than accounted for by a pickup in current-dollar DPI, which increased 7.6 percent after increasing 2.7 percent. The personal saving rate—saving as a percentage of current-dollar DPI—increased 0.3 percentage point, to 4.1 percent.

Personal income increased \$97.1 billion in the fourth quarter after increasing \$39.5 billion in the third (table 5). Flood and drought adjustments reduced personal income by about \$3 billion in the fourth quarter and about \$12 billion in the third.

Most of the step-up in personal income was accounted for by farm proprietors' income, which increased \$27.6 billion after decreasing \$22.2 billion. Federal subsidy payments to farm proprietors increased \$14.5 billion after decreasing \$11.0 billion; the increase reflected flood- and drought-related payments, Conservation Reserve Program payments, and deficiency payments. (Conservation Reserve Program payments and deficiency payments compensate farmers who remove land from production; deficiency payments are made when the market price of a crop is, or is projected to be, below the Federal target price.) Adjust-

CHART 2

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



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

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

ments for the floods and drought reduced farm proprietors' income \$3.2 billion in the fourth quarter after reducing it \$9.3 billion in the third. Excluding subsidies and the adjustments for the effects of the floods and drought, farm proprietors' income increased \$7.0 billion in the fourth quarter after decreasing \$1.9 billion in the third; crop prices and crop production both contributed to the upswing.

Table 5.—Personal Income and Its Disposition

[Billions of dollars; seasonally adjusted at annual rates]

	Level	Change from preceding quarter			
		1993			
		I	II	III	IV
	1993: IV				
Wage and salary disbursements	3,149.2	-121.5	108.4	32.7	33.8
Commodity-producing industries	779.0	-42.6	24.4	4.3	9.6
Manufacturing	587.5	-42.3	20.6	1.2	6.0
Other	191.5	-3	3.8	3.1	3.6
Distributive industries	719.2	-27.0	26.2	5.3	4.8
Service industries	1,055.5	-61.8	55.6	16.6	16.7
Government	595.5	9.9	2.2	6.5	2.7
Other labor income	362.9	7.0	8.1	8.1	8.2
Proprietors' income with IVA and CCAAdj	462.4	12.9	-4.7	-16.9	39.9
Farm	52.4	8.1	-8.7	-22.2	27.6
Nonfarm	410.1	4.8	4.0	5.2	12.5
Rental income of persons with CCAAdj	17.9	8.7	5.2	1.0	4.2
Personal dividend income	159.4	4.7	.8	1.2	.4
Personal interest income	699.2	.9	-2.3	2.6	3.5
Transfer payments to persons	927.9	17.0	11.1	13.0	9.4
Less: Personal contributions for social insurance	269.2	3.3	7.9	2.3	2.4
Personal income	5,509.8	-73.6	118.5	39.5	97.1
Less: Personal tax and nontax payments	699.1	-13.6	23.9	8.0	10.1
Equals: Disposable personal income	4,810.7	-60.1	94.7	31.5	87.0
Less: Personal outlays	4,615.5	41.8	63.9	60.4	71.5
Equals: Personal saving	195.2	-101.8	30.8	-29.0	15.5
Addenda: Special factors in personal income:					
In wages and salaries:					
Federal Government and Postal Service pay adjustments	6.4	-2.0	1.6	-1.0	
Profit sharing and bonus pay (including accelerated bonuses)	-164.6	79.8	0	.4	
In farm proprietors' income:					
Agricultural subsidy payments	8.3	-7.4	-11.0	14.5	
Uninsured losses to residential and business property and crop losses due to Midwest floods and Southeast drought ¹	0	0	-9.3	6.1	
In nonfarm proprietors' income:					
Uninsured losses to business property due to Midwest floods ¹	0	0	-7	.7	
In rental income of persons with CCAAdj:					
Uninsured losses to nonfarm residential and business property due to Midwest floods ¹	0	0	-1.9	1.9	
In transfer payments to persons:					
Social security retroactive payments	-1.1	0	0	1.1	
Cost-of-living increases in Federal transfer payments	10.8	0	0	0	
Emergency unemployment compensation payments	-2	-8	.2	-3.0	
Midwest floods	0	0	.3	-1	
In personal contributions for social insurance:					
Social security rate and base changes and increase in premium for supplementary medical insurance	3.9	0	0	0	

NOTE.—Most dollar levels are found in table 2.1 of the "Selected NIPA Tables."

IVA Inventory valuation adjustment

CCAAdj Capital consumption adjustment

1. These adjustments, prepared by BEA, reflect the effects of disasters that are not adequately captured in the source data; they are not estimates of the total impact of the disasters.

Nonfarm proprietors' income increased \$12.5 billion after increasing \$5.2 billion. The acceleration reflected pickups in construction and real estate.

Wage and salary disbursements increased \$33.8 billion after increasing \$32.7 billion. Wages and salaries in private industries increased more than in the third quarter; the step-up was concentrated in manufacturing industries. Government wages and salaries increased less than in the third quarter.

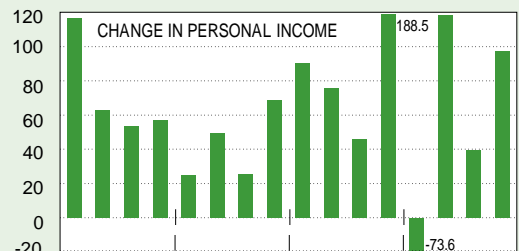
Rental income of persons increased \$4.2 billion after increasing \$1.0 billion. In the third quarter, rental income was reduced \$1.9 billion by a flood adjustment for uninsured losses of nonfarm residential property. Excluding this adjustment, rental income increased \$2.3 billion after increasing \$2.9 billion.

Transfer payments increased \$9.4 billion after increasing \$13.0 billion. Retroactive social security payments to recent retirees accounted for \$1.1 billion of the fourth-quarter increase. Emergency

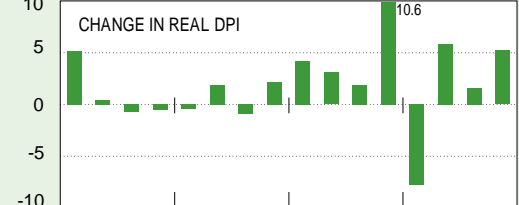
CHART 3

Selected Personal Income and Saving Measures

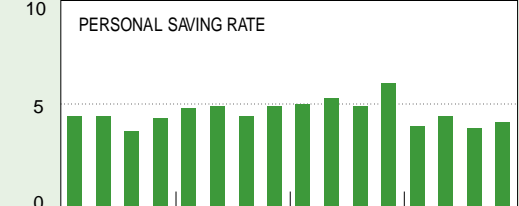
Billions \$



Percent



Percent




Based on Seasonally Adjusted Annual Rates

Note—Changes are from preceding quarter.

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

unemployment benefits decreased \$3.0 billion in the fourth quarter.

Other labor income, personal dividend income, and personal interest income increased about as much in the fourth quarter as in the third. Personal contributions for so-

cial insurance, which are subtracted in the derivation of the personal income total, also increased about the same amount in both quarters. Personal tax and nontax payments increased \$10.1 billion after increasing \$8.0 billion. 

NATIONAL INCOME AND PRODUCT ACCOUNTS

Selected NIPA Tables

New estimates in this issue: "Advance" estimates for the fourth quarter of 1993.

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

Tables containing the estimates for 1929-88 are available in the two-volume set *National Income and Product Accounts of the United States*; see [inside back cover](#) for order information. For 1989, the estimates for most series are in the July 1992 SURVEY OF CURRENT BUSINESS; the estimates for series in tables 3.15-3.20 and 9.1-9.6 are in the September 1992 SURVEY. For 1990-92, the estimates for most series are in the August 1993 SURVEY; the estimates for series in tables 1.15, 1.16, 3.15-3.20, 7.15, and 9.1-9.6 are in the September 1993 SURVEY. The September 1993 issue also contains quantity and price indexes and their associated percent changes beginning with 1988, as well as summary NIPA series back to 1929. NIPA tables are also available, most beginning with 1929, on diskettes or magnetic tape. For more information on the presentation of the estimates, see "A Look at How BEA Presents the NIPA's" in the February 1993 SURVEY.

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

Table 1.1.—Gross Domestic Product

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Gross domestic product	6,038.5	6,374.0	6,059.5	6,194.4	6,261.6	6,327.6	6,395.9	6,510.8
Personal consumption expenditures	4,139.9	4,390.6	4,157.1	4,256.2	4,296.2	4,359.9	4,419.1	4,487.4
Durable goods	497.3	537.7	500.9	516.6	515.3	531.6	541.9	561.9
Nondurable goods	1,300.9	1,350.2	1,305.7	1,331.7	1,335.3	1,344.8	1,352.4	1,368.4
Services	2,341.6	2,502.7	2,350.5	2,407.9	2,445.5	2,483.4	2,524.8	2,557.2
Gross private domestic investment	796.5	892.0	802.2	833.3	874.1	874.1	884.0	935.8
Fixed investment	789.1	875.2	792.5	821.3	839.5	861.0	876.3	924.1
Nonresidential	565.5	622.9	569.2	579.5	594.7	619.1	624.9	653.0
Structures	172.6	178.6	170.8	171.1	172.4	177.6	179.1	185.2
Producers' durable equipment	392.9	444.4	398.4	408.3	422.2	441.6	445.8	467.8
Residential	223.6	252.3	223.3	241.8	244.9	241.9	251.3	271.1
Change in business inventories	7.3	16.8	9.7	12.0	34.6	13.1	7.7	11.7
Nonfarm	2.3	23.1	4.4	9.5	33.0	16.8	22.6	19.9
Farm	5.0	-6.3	5.3	2.4	1.5	-3.7	-14.9	-8.2
Net exports of goods and services	-29.6	-65.7	-38.8	-38.8	-48.3	-65.1	-71.9	-77.7
Exports	640.5	660.1	641.1	654.7	651.3	660.0	653.2	675.8
Imports	670.1	725.8	679.9	693.5	699.6	725.0	725.1	753.5
Government purchases	1,131.8	1,157.1	1,139.1	1,143.8	1,139.7	1,158.6	1,164.8	1,165.3
Federal	448.8	443.4	452.8	452.4	442.7	447.5	443.6	439.7
National defense	313.8	303.6	316.7	315.7	304.8	307.6	301.9	300.0
Nondefense	135.0	139.8	136.1	136.7	137.9	140.0	141.7	139.7
State and local	683.0	713.7	686.2	691.4	697.0	711.1	721.2	725.6

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

Table 1.2.—Gross Domestic Product in Constant Dollars

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Gross domestic product	4,986.3	5,132.7	4,998.2	5,068.3	5,078.2	5,102.1	5,138.3	5,212.1
Personal consumption expenditures	3,341.8	3,452.5	3,350.9	3,397.2	3,403.8	3,432.7	3,469.6	3,503.9
Durable goods	456.6	489.7	459.0	473.4	471.9	484.2	493.1	509.9
Nondurable goods	1,062.9	1,088.1	1,062.9	1,081.8	1,076.0	1,083.1	1,093.0	1,100.1
Services	1,822.3	1,874.7	1,829.0	1,842.0	1,855.9	1,865.4	1,883.5	1,893.9
Gross private domestic investment	732.9	820.9	739.6	763.0	803.0	803.6	813.4	863.6
Fixed investment	726.4	805.5	730.0	754.3	773.7	790.6	806.9	851.0
Nonresidential	529.2	591.3	533.8	543.7	562.3	584.3	594.8	623.8
Structures	150.6	151.4	148.8	148.0	148.2	151.1	151.2	155.1
Producers' durable equipment	378.6	439.9	385.1	395.7	414.1	433.2	443.6	468.7
Residential	197.1	214.2	196.2	210.6	211.4	206.2	212.1	227.2
Change in business inventories	6.5	15.4	9.6	8.7	29.3	13.0	6.5	12.7
Nonfarm	2.7	21.3	5.8	7.5	29.3	17.1	19.4	19.4
Farm	3.8	-5.9	3.8	1.2	0	-4.1	-12.9	-6.7
Net exports of goods and services	-33.6	-79.3	-42.5	-38.8	-59.9	-75.2	-86.3	-95.6
Exports	578.0	596.4	579.3	591.6	588.0	593.2	591.9	612.5
Imports	611.6	675.7	621.8	630.3	647.9	668.4	678.2	708.1
Government purchases	945.2	938.6	950.2	946.9	931.3	941.1	941.7	940.1
Federal	373.0	355.1	377.0	373.7	357.6	359.4	353.7	349.8
National defense	261.2	242.7	264.4	261.3	246.0	246.4	240.1	238.2
Nondefense	111.8	112.5	112.5	112.4	111.5	113.0	113.7	111.6
State and local	572.2	583.4	573.2	573.2	573.7	581.6	588.0	590.4

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

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

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Gross domestic product	6,038.5	6,374.0	6,059.5	6,194.4	6,261.6	6,327.6	6,395.9	6,510.8
Final sales of domestic product	6,031.2	6,357.2	6,049.9	6,182.5	6,227.1	6,314.5	6,388.2	6,499.0
Change in business inventories	7.3	16.8	9.7	12.0	34.6	13.1	7.7	11.7
Goods ¹	2,312.8	2,419.9	2,318.3	2,377.6	2,397.4	2,408.1	2,409.4	2,464.7
Final sales	2,305.5	2,403.1	2,308.6	2,365.6	2,362.9	2,395.0	2,401.7	2,452.9
Change in business inventories	7.3	16.8	9.7	12.0	34.6	13.1	7.7	11.7
Durable goods	977.9	1,047.7	984.1	1,007.1	1,018.6	1,040.5	1,047.7	1,083.8
Final sales	975.8	1,034.6	978.4	1,008.3	1,003.5	1,037.8	1,032.9	1,064.3
Change in business inventories	2.0	13.0	5.7	-1.2	15.0	2.7	14.8	19.5
Nondurable goods	1,334.9	1,372.2	1,334.2	1,370.5	1,378.9	1,367.5	1,361.6	1,380.9
Final sales	1,329.6	1,368.5	1,330.2	1,357.3	1,359.3	1,357.1	1,368.8	1,388.6
Change in business inventories	5.3	3.8	4.0	13.2	19.5	10.4	-7.2	-7.7
Services ¹	3,221.1	3,409.5	3,239.3	3,296.1	3,341.8	3,388.1	3,437.8	3,470.3
Structures	504.6	544.6	501.9	520.8	522.4	531.5	548.7	575.8

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

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

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

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Gross domestic product	4,986.3	5,132.7	4,998.2	5,068.3	5,078.2	5,102.1	5,138.3	5,212.1
Final sales of domestic product	4,979.8	5,117.3	4,988.6	5,059.6	5,048.9	5,089.1	5,131.8	5,199.4
Change in business inventories	6.5	15.4	9.6	8.7	29.3	13.0	6.5	12.7
Goods ¹	2,005.7	2,081.3	2,011.0	2,057.7	2,060.2	2,069.1	2,074.9	2,121.0
Final sales	1,999.2	2,065.9	2,001.4	2,049.0	2,030.9	2,056.1	2,068.5	2,108.3
Change in business inventories	6.5	15.4	9.6	8.7	29.3	13.0	6.5	12.7
Durable goods	914.0	980.4	921.5	941.8	951.2	968.9	982.5	1,019.0
Final sales	911.7	968.1	915.2	942.6	938.2	964.9	968.7	1,000.7
Change in business inventories	2.4	12.3	6.3	-8	13.0	3.9	13.9	18.3
Nondurable goods	1,091.7	1,100.9	1,089.5	1,116.0	1,109.0	1,100.2	1,092.4	1,102.0
Final sales	1,087.6	1,097.8	1,086.2	1,106.4	1,092.7	1,091.1	1,099.8	1,107.6
Change in business inventories	4.1	3.1	3.3	9.6	16.3	9.1	-7.4	-5.6
Services ¹	2,534.7	2,586.2	2,544.8	2,556.5	2,565.3	2,577.5	2,596.7	2,605.5
Structures	445.8	465.1	442.3	454.2	452.7	455.5	466.6	485.6

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

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

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

[Billions of dollars]

Gross domestic product	6,038.5	6,374.0	6,059.5	6,194.4	6,261.6	6,327.6	6,395.9	6,510.8
Less: Exports of goods and services	640.5	660.1	641.1	654.7	651.3	660.0	653.2	675.8
Plus: Imports of goods and services	670.1	725.8	679.9	693.5	699.6	725.0	725.1	753.5
Equals: Gross domestic purchases ¹	6,068.2	6,439.7	6,098.3	6,233.2	6,309.9	6,392.7	6,467.8	6,588.5
Less: Change in business inventories	7.3	16.8	9.7	12.0	34.6	13.1	7.7	11.7
Equals: Final sales to domestic purchasers ²	6,060.8	6,422.9	6,088.6	6,221.2	6,275.4	6,379.5	6,460.1	6,576.7

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

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

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

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

[Billions of 1987 dollars]

Gross domestic product	4,986.3	5,132.7	4,998.2	5,068.3	5,078.2	5,102.1	5,138.3	5,212.1
Less: Exports of goods and services	578.0	596.4	579.3	591.6	588.0	593.2	591.9	612.5
Plus: Imports of goods and services	611.6	675.7	621.8	630.3	647.9	668.4	678.2	708.1
Equals: Gross domestic purchases ¹	5,019.9	5,211.9	5,040.7	5,107.1	5,138.1	5,177.4	5,224.6	5,307.7
Less: Change in business inventories	6.5	15.4	9.6	8.7	29.3	13.0	6.5	12.7
Equals: Final sales to domestic purchasers ²	5,013.4	5,196.6	5,031.1	5,098.4	5,108.8	5,164.3	5,218.1	5,295.0

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

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

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

Table 1.7.—Gross Domestic Product by Sector

[Billions of dollars]

Gross domestic product	6,038.5	6,374.0	6,059.5	6,194.4	6,261.6	6,327.6	6,395.9	6,510.8
Business	5,114.4	5,400.6	5,130.2	5,254.4	5,303.0	5,359.0	5,416.6	5,523.7
Nonfarm	5,006.4	5,301.0	5,028.8	5,138.7	5,184.7	5,263.7	5,330.1	5,425.4
Nonfarm less housing	4,505.4	4,785.2	4,499.2	4,639.6	4,674.0	4,751.0	4,812.8	4,903.1
Housing	501.0	515.8	529.5	499.1	510.8	512.7	517.4	522.3
Farm	84.4	81.3	85.8	83.6	83.8	83.3	73.2	85.0
Statistical discrepancy	23.6	18.2	15.7	32.1	34.4	12.0	13.3	13.3
Households and institutions	267.0	286.3	269.6	275.7	280.3	284.7	288.1	292.3
Private households	10.1	11.1	10.3	10.6	10.8	11.0	11.3	11.5
Nonprofit institutions	256.9	275.2	259.2	265.2	269.5	273.7	276.8	280.8
General government	657.1	687.1	659.8	664.3	678.4	683.9	691.2	694.7
Federal	199.8	207.0	200.0	198.7	206.2	206.2	208.3	207.1
State and local	457.3	480.1	459.7	465.6	472.1	477.7	483.0	487.6
Addendum:								
Gross domestic business product less housing	4,608.9							

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

[Billions of 1987 dollars]

Gross domestic product	4,986.3	5,132.7	4,998.2	5,068.3	5,078.2	5,102.1	5,138.3	5,212.1
Business	4,267.6	4,404.3	4,277.9	4,346.2	4,353.9	4,374.1	4,408.4	4,480.8
Nonfarm	4,168.4	4,315.5	4,182.6	4,240.0	4,247.4	4,288.1	4,330.1	4,396.4
Nonfarm less housing	3,769.3	3,910.2	3,782.9	3,839.3	3,844.8	3,883.7	3,924.0	3,988.3
Housing	399.1	405.3	399.6	400.7	402.6	404.4	406.1	408.1
Farm	79.6	73.9	82.2	79.7	78.2	76.2	67.5	73.6
Statistical discrepancy	19.7	14.9	13.1	26.5	28.3	9.8	10.8	10.8
Households and institutions	209.1	217.0	210.3	212.4	213.5	216.8	218.4	219.5
Private households	8.8	9.3	8.9	9.0	9.2	9.3	9.4	9.5
Nonprofit institutions	200.4	207.7	201.4	203.4	204.3	207.5	209.0	210.0
General government	509.5	511.3	510.0	509.8	510.8	511.3	511.5	511.8
Federal	150.5	147.4	150.1	148.8	148.8	147.8	146.9	146.0
State and local	359.0	363.9	360.0	361.0	362.0	363.4	364.5	365.8
Addendum:								
Gross domestic business product less housing	3,864.9							

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

	[Billions of dollars]							
	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Gross domestic product	6,038.5	6,374.0	6,059.5	6,194.4	6,261.6	6,327.6	6,395.9	6,510.8
Plus: Receipts of factor income from the rest of the world ¹	129.2	.....	127.3	122.3	122.8	131.9	135.1	.....
Less: Payments of factor income to the rest of the world ²	121.9	.....	119.5	124.8	122.4	132.3	128.7	.....
Equals: Gross national product	6,045.8	.....	6,067.3	6,191.9	6,262.1	6,327.1	6,402.3	.....
Less: Consumption of fixed capital	657.9	671.2	714.6	648.0	663.2	663.3	679.7	678.7
Capital consumption allowances	605.7	630.0	633.7	612.1	622.3	624.8	636.3	636.4
Less: Capital consumption adjustment	-52.1	-41.2	-80.9	-36.0	-40.9	-38.4	-43.4	-42.2
Equals: Net national product	5,387.9	.....	5,352.8	5,543.9	5,598.8	5,663.9	5,722.6	.....
Less: Indirect business tax and nontax liability	502.8	530.5	504.8	515.7	515.6	526.2	532.4	547.9
Business transfer payments	27.6	28.0	27.8	28.1	27.0	27.8	28.4	28.8
Statistical discrepancy	23.6	.....	15.7	32.1	34.4	12.0	13.3	.....
Plus: Subsidies less current surplus of government enterprises	2.7	7.2	-3.7	7.7	17.1	6.1	-5.3	10.7
Equals: National income	4,836.6	.....	4,800.8	4,975.8	5,038.9	5,104.0	5,143.2	.....
Less: Corporate profits with inventory valuation and capital consumption adjustments	407.2	.....	367.5	439.5	432.1	458.1	468.5	.....
Net interest	442.0	.....	440.1	447.7	450.1	443.2	444.6	.....
Contributions for social insurance	555.6	585.3	556.6	564.6	568.9	585.9	590.5	596.0
Wage accruals less disbursements	-20.0	20.0	0	-80.0	80.0	0	0	0
Plus: Personal interest income	694.3	695.8	692.2	694.5	695.4	693.1	695.7	699.2
Personal dividend income	140.4	158.3	144.9	152.3	157.0	157.8	159.0	159.4
Government transfer payments to persons	836.8	889.7	844.3	855.4	873.0	883.7	896.4	905.6
Business transfer payments to persons	21.6	21.9	21.8	22.0	21.4	21.8	22.1	22.3
Equals: Personal income	5,144.9	5,387.6	5,139.8	5,328.3	5,254.7	5,373.2	5,412.7	5,509.8
Addenda:								
Net domestic product	5,380.7	5,702.8	5,344.9	5,546.4	5,598.4	5,664.3	5,716.2	5,832.1
Domestic income	4,829.4	.....	4,793.0	4,978.3	5,038.4	5,104.5	5,136.8	.....
Gross national income	6,022.2	.....	6,051.7	6,159.9	6,227.6	6,315.2	6,389.0	.....

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

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

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

	[Billions of 1987 dollars]							
	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Gross domestic product	4,986.3	5,132.7	4,998.2	5,068.3	5,078.2	5,102.1	5,138.3	5,212.1
Plus: Receipts of factor income from the rest of the world ¹	105.5	.....	103.7	98.9	98.3	105.0	107.1	.....
Less: Payments of factor income to the rest of the world ²	97.7	.....	95.5	98.8	95.8	103.0	99.6	.....
Equals: Gross national product	4,994.0	.....	5,006.4	5,068.4	5,080.7	5,104.1	5,145.8	.....
Less: Consumption of fixed capital	595.0	598.6	643.7	584.0	595.0	592.5	604.4	602.6
Equals: Net national product	4,399.0	.....	4,362.7	4,484.4	4,485.8	4,511.6	4,541.4	.....
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises	402.0	417.3	403.7	409.3	411.6	414.9	419.1	423.6
Statistical discrepancy	19.7	.....	13.1	26.5	28.3	9.8	10.8	.....
Equals: National income	3,977.3	.....	3,946.0	4,048.6	4,045.9	4,087.0	4,111.4	.....
Addenda:								
Net domestic product	4,391.2	4,534.0	4,354.5	4,484.4	4,483.3	4,509.6	4,533.8	4,609.5
Domestic income	3,969.5	.....	3,937.7	4,048.5	4,043.4	4,085.0	4,103.9	.....
Gross national income	4,974.3	.....	4,993.3	5,041.9	5,052.5	5,094.3	5,135.0	.....

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

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

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

[Billions of 1987 dollars]								
Gross national product	4,994.0	.....	5,006.4	5,068.4	5,080.7	5,104.1	5,145.8	.....
Less: Exports of goods and services and receipts of factor income from the rest of the world	683.5	.....	683.0	690.4	686.4	698.1	699.0	.....
Plus: Command-basis exports of goods and services and receipts of factor income ¹	692.9	.....	689.5	692.4	700.4	712.5	718.1	.....
Equals: Command-basis gross national product	5,003.4	.....	5,012.9	5,070.3	5,094.8	5,118.4	5,164.9	.....
Addendum:								
Terms of trade ²	102.1	.....	101.0	100.3	102.0	102.1	102.7	.....

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

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

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

Table 1.14.—National Income by Type of Income

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
National income	4,836.6		4,800.8	4,975.8	5,038.9	5,104.0	5,143.2	
Compensation of employees	3,582.0	3,772.1	3,603.6	3,658.6	3,705.1	3,750.6	3,793.9	3,839.0
Wages and salaries	2,953.1	3,100.4	2,970.7	3,015.8	3,054.3	3,082.7	3,115.4	3,149.2
Government	567.5	589.7	569.7	574.2	584.1	586.3	592.8	595.5
Other	2,385.6	2,510.7	2,401.0	2,441.6	2,470.2	2,496.3	2,522.6	2,553.7
Supplements to wages and salaries								
Employer contributions for social insurance ..	306.3	321.0	306.9	311.3	312.2	321.4	323.8	326.8
Other labor income	322.7	350.7	326.0	331.5	338.5	346.6	354.7	362.9
Proprietors' income with IVA and CCAAdj	414.3	442.1	408.1	431.2	444.1	439.4	422.5	462.4
Farm	43.7	45.0	36.8	47.6	55.7	47.0	24.8	52.4
Proprietors' income with IVA	51.2	52.1	44.9	54.8	62.8	54.1	32.1	59.4
CCAAdj	-7.5	-7.1	-8.2	-7.2	-7.1	-7.1	-7.3	-7.0
Nonfarm	370.6	397.1	371.3	383.6	388.4	392.4	397.6	410.1
Proprietors' income	358.0	385.2	359.4	362.2	376.4	380.3	385.4	398.7
IVA	-5	-1.0	-8	7.8	-1.6	-1.2	-4	-9
CCAAdj	13.1	13.0	12.7	13.7	13.7	13.3	12.7	12.3
Rental income of persons with CCAAdj	-8.9	13.0	-18.5	-1.2	7.5	12.7	13.7	17.9
Rental income of persons ..	57.4	75.4	75.7	57.4	71.3	73.2	77.2	80.0
CCAAdj	-66.3	-62.5	-94.2	-58.6	-63.8	-60.4	-63.5	-62.1
Corporate profits with IVA and CCAAdj	407.2		367.5	439.5	432.1	458.1	468.5	
Corporate profits with IVA ..	390.1		350.1	414.8	407.0	433.4	444.8	
Profits before tax	395.4		357.9	409.9	419.8	445.6	443.8	
Profits tax liability	146.3		130.1	155.0	160.9	173.3	169.5	
Profits after tax	249.1		227.8	254.9	258.9	272.3	274.3	
Dividends	150.5	169.0	155.2	162.9	167.5	168.5	169.7	170.4
Undistributed profits	98.6		72.7	92.0	91.4	103.9	104.6	
IVA	-5.3	-7.8	-7.8	4.9	-12.7	-12.2	1.0	-7.2
CCAAdj	17.1	24.3	17.4	24.7	25.1	24.7	23.8	23.6
Net interest	442.0		440.1	447.7	450.1	443.2	444.6	
Addenda:								
Corporate profits after tax with IVA and CCAAdj	260.9		237.4	284.5	271.2	284.8	299.1	
Net cash flow with IVA and CAdj	507.0		492.5	518.2	505.9	521.5	543.3	
Undistributed profits with IVA and CCAAdj ..	110.4		82.3	121.7	103.7	116.3	129.3	
Consumption of fixed capital	396.6	408.9	410.3	396.5	402.2	405.2	414.0	414.1
Less: IVA	-5.3	-7.8	-7.8	4.9	-12.7	-12.2	1.0	-7.2
Equals: Net cash flow	512.3		500.3	513.2	518.7	533.7	542.3	

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

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
			Billions of dollars					
Gross domestic product of corporate business	3,571.7		3,558.4	3,668.8	3,678.4	3,759.2	3,803.8	
Consumption of fixed capital ..	396.6	408.9	410.3	396.5	402.2	405.2	414.0	414.1
Net domestic product	3,175.1		3,148.1	3,272.3	3,276.2	3,354.0	3,389.8	
Indirect business tax and nontax liability plus business transfer payments less subsidies ..	359.6	378.7	361.0	368.3	365.1	377.2	380.4	392.3
Domestic income	2,815.5		2,787.2	2,904.0	2,911.1	2,976.8	3,009.4	
Compensation of employees	2,337.4	2,460.1	2,351.8	2,390.3	2,408.2	2,448.7	2,475.7	2,507.9
Wages and salaries ..	1,940.9	2,038.3	1,952.4	1,983.9	2,002.8	2,029.0	2,048.7	2,072.8
Supplements to wages and salaries	396.5	421.8	399.4	406.3	405.3	419.7	427.0	435.1
Corporate profits with IVA and CCAAdj	344.9	401.9	306.0	384.8	373.0	400.0	405.8	
Profits before tax	333.2	385.4	296.4	355.2	360.7	387.5	381.1	
Profits tax liability ..	146.3	171.7	130.1	155.0	160.9	173.3	169.5	
Profits after tax	186.9	213.8	166.3	200.2	199.8	214.3	211.6	
Dividends	127.3	153.8	128.4	147.4	156.7	152.9	152.5	
Undistributed profits	59.6	60.0	37.9	52.8	43.2	61.4	59.1	
IVA	-5.3	-7.8	-7.8	4.9	-12.7	-12.2	1.0	-7.2
CCAAdj	17.1	24.3	17.4	24.7	25.1	24.7	23.8	23.6
Net interest	133.2		129.4	128.9	129.9	128.1	127.9	
Gross domestic product of financial corporate business ..	328.3		294.2	337.2	346.7	363.3	371.6	
Gross domestic product of nonfinancial corporate business ..	3,243.4		3,264.2	3,331.6	3,331.7	3,395.9	3,432.2	
Consumption of fixed capital ..	352.7	362.3	366.1	351.7	356.8	359.0	367.0	366.3
Net domestic product	2,890.7		2,898.2	2,979.9	2,975.0	3,036.8	3,065.1	
Indirect business tax and nontax liability plus business transfer payments less subsidies ..	327.7	345.5	329.1	336.0	333.0	344.0	347.0	357.9
Domestic income	2,563.1		2,569.0	2,643.9	2,642.0	2,692.8	2,718.1	
Compensation of employees	2,149.5	2,255.4	2,162.7	2,195.9	2,215.0	2,244.7	2,267.1	2,294.9
Wages and salaries ..	1,782.4	1,866.2	1,792.9	1,820.0	1,840.3	1,857.3	1,873.3	1,893.9
Supplements to wages and salaries	367.0	389.2	369.8	375.9	374.7	387.4	393.8	400.9
Corporate profits with IVA and CCAAdj	278.3	314.8	272.7	314.1	292.1	315.0	318.2	
Profits before tax	255.1	286.8	251.8	273.2	268.4	291.2	281.8	
Profits tax liability ..	98.2	114.9	95.3	105.8	106.4	117.6	112.5	
Profits after tax	156.9	171.8	156.5	167.4	162.0	173.6	169.3	
Dividends	105.2	125.3	105.9	120.7	125.4	125.4	124.0	
Undistributed profits	51.7	46.5	50.5	46.7	34.6	48.2	45.3	
IVA	-5.3	-7.8	-7.8	4.9	-12.7	-12.2	1.0	-7.2
CCAAdj	28.5	35.9	28.8	36.0	36.4	36.0	35.4	35.7
Net interest	135.3		133.6	133.9	134.9	133.1	132.8	
			Billions of 1987 dollars					
Gross domestic product of nonfinancial corporate business ..	2,822.3		2,839.8	2,887.4	2,867.5	2,916.6	2,948.9	
Consumption of fixed capital ..	318.4	324.3	329.3	317.2	321.0	321.4	327.9	326.7
Net domestic product	2,503.9		2,510.5	2,570.1	2,546.5	2,595.2	2,620.9	
Indirect business tax and nontax liability plus business transfer payments less subsidies ..	258.7	270.2	260.5	264.5	265.7	268.4	271.6	275.1
Domestic income	2,245.2		2,250.0	2,305.7	2,280.8	2,326.8	2,349.3	

Table 2.1.—Personal Income and Its Disposition

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Personal income	5,144.9	5,387.6	5,139.8	5,328.3	5,254.7	5,373.2	5,412.7	5,509.8
Wage and salary disbursements	2,973.1	3,080.4	2,970.7	3,095.8	2,974.3	3,082.7	3,115.4	3,149.2
Commodity-producing industries	756.5	763.6	751.6	783.3	740.7	765.1	769.4	779.0
Manufacturing	577.6	577.2	573.3	602.0	559.7	580.3	581.5	587.5
Distributive industries	682.0	706.4	682.5	709.9	682.9	709.1	714.4	719.2
Service industries	967.0	1,020.8	966.8	1,028.4	966.6	1,022.2	1,038.8	1,055.5
Government	567.5	589.7	569.7	574.2	584.1	586.3	592.8	595.5
Other labor income	322.7	350.7	326.0	331.5	338.5	346.6	354.7	362.9
Proprietors' income with inventory valuation and capital consumption adjustments	414.3	442.1	408.1	431.2	444.1	439.4	422.5	462.4
Farm	43.7	45.0	36.8	47.6	55.7	47.0	24.8	52.4
Nonfarm	370.6	397.1	371.3	383.6	388.4	392.4	397.6	410.1
Rental income of persons with capital consumption adjustment	-8.9	13.0	-18.5	-1.2	7.5	12.7	13.7	17.9
Personal dividend income	140.4	158.3	144.9	152.3	157.0	157.8	159.0	159.4
Personal interest income	694.3	695.8	692.2	694.5	695.4	693.1	695.7	699.2
Transfer payments to persons	858.4	911.6	866.1	877.4	894.4	905.5	918.5	927.9
Old-age, survivors, disability, and health insurance benefits	413.9	438.2	416.6	420.8	433.1	435.0	439.4	445.4
Government unemployment insurance benefits	39.2	34.0	39.7	37.8	34.5	34.4	35.1	32.0
Veterans benefits	19.3	20.0	18.8	19.0	20.0	20.2	20.1	19.7
Government employees retirement benefits	108.3	115.4	108.4	110.2	112.8	114.6	116.4	117.9
Other transfer payments	277.7	303.9	282.7	289.7	294.0	301.3	307.5	312.9
Aid to families with dependent children	23.3	23.9	23.5	23.5	23.6	24.1	24.0	24.0
Other	254.4	280.0	259.2	266.2	270.4	277.2	283.5	289.0
Less: Personal contributions for social insurance	249.3	264.3	249.8	253.3	256.6	264.5	266.8	269.2
Less: Personal tax and nontax payments	644.8	681.6	642.8	670.7	657.1	681.0	689.0	699.1
Equals: Disposable personal income	4,500.2	4,706.0	4,497.0	4,657.6	4,597.5	4,692.2	4,723.7	4,810.7
Less: Personal outlays	4,261.5	4,515.7	4,277.3	4,377.9	4,419.7	4,483.6	4,544.0	4,615.5
Personal consumption expenditures	4,139.9	4,390.6	4,157.1	4,256.2	4,296.2	4,359.9	4,419.1	4,487.4
Interest paid by persons	111.1	114.0	110.5	111.3	112.5	112.7	114.1	116.7
Personal transfer payments to rest of the world (net)	10.4	11.0	9.7	10.5	11.0	11.0	10.8	11.4
Equals: Personal saving	238.7	190.3	219.6	279.7	177.9	208.7	179.7	195.2
Addenda:								
Disposable personal income:								
Total, billions of 1987 dollars	3,632.5	3,700.5	3,624.8	3,717.6	3,642.6	3,694.4	3,708.7	3,756.4
Per capita:								
Current dollars	17,615	18,222	17,577	18,153	17,876	18,196	18,265	18,549
1987 dollars	14,219	14,329	14,169	14,490	14,163	14,326	14,341	14,484
Population (mid-period, millions)	255.5	258.3	255.8	256.6	257.2	257.9	258.6	259.3
Personal saving as percentage of disposable personal income	5.3	4.0	4.9	6.0	3.9	4.4	3.8	4.1

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

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Personal consumption expenditures	4,139.9	4,390.6	4,157.1	4,256.2	4,296.2	4,359.9	4,419.1	4,487.4
Durable goods	497.3	537.7	500.9	516.6	515.3	531.6	541.9	561.9
Motor vehicles and parts	204.3	222.4	203.4	213.7	211.7	220.8	221.7	235.4
Furniture and household equipment	194.5	211.7	196.5	202.7	203.3	208.6	214.0	220.9
Other	98.5	103.6	101.0	100.2	100.3	102.2	106.2	105.6
Nondurable goods	1,300.9	1,350.2	1,305.7	1,331.7	1,335.3	1,344.8	1,352.4	1,368.4
Food	633.7	658.3	631.7	647.6	648.2	654.1	660.0	671.1
Clothing and shoes	228.2	237.1	230.7	236.1	233.1	235.2	238.2	241.9
Gasoline and oil	103.4	103.6	105.8	105.2	106.0	103.6	102.4	102.5
Fuel oil and coal	13.8	15.1	13.9	13.9	15.1	14.9	15.4	15.0
Other	321.8	336.1	323.6	328.9	332.9	337.2	336.4	337.8
Services	2,341.6	2,502.7	2,350.5	2,407.9	2,445.5	2,483.4	2,524.8	2,557.2
Housing	600.0	627.7	602.5	609.2	617.6	625.1	631.1	636.9
Household operation	234.4	251.0	230.3	245.0	245.7	246.7	255.2	256.3
Electricity and gas	105.8	113.2	106.0	111.0	111.1	109.8	116.4	115.6
Other household operation	128.7	137.7	124.3	134.0	134.5	136.9	138.7	140.7
Transportation	155.4	170.2	153.0	162.4	166.3	169.1	170.9	174.4
Medical care	628.4	680.6	634.9	646.9	662.2	675.4	686.9	698.0
Other	723.5	773.3	729.7	744.3	753.8	767.1	780.7	791.6

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

(Billions of 1987 dollars)

	1992	1993	1994	1995	1996	1997	1998	1999
Personal consumption expenditures	3,341.8	3,452.5	3,350.9	3,397.2	3,403.8	3,432.7	3,469.6	3,503.9
Durable goods	456.6	489.7	459.0	473.4	471.9	484.2	493.1	509.9
Motor vehicles and parts	182.3	191.7	180.6	188.6	185.7	191.3	189.9	199.9
Furniture and household equipment	194.8	216.3	197.1	204.2	206.5	212.4	219.4	227.0
Other	79.5	81.7	81.3	80.6	79.7	80.6	83.7	83.0
Nondurable goods	1,062.9	1,088.1	1,062.9	1,081.8	1,076.0	1,083.1	1,093.0	1,100.1
Food	520.5	531.2	518.2	529.3	526.7	528.6	532.6	536.9
Clothing and shoes	193.7	199.2	195.4	200.0	194.8	197.8	200.6	203.7
Gasoline and oil	83.9	84.9	84.7	84.4	83.9	84.1	86.2	85.3
Fuel oil and coal	11.9	13.0	11.7	11.9	12.9	12.6	13.2	13.2
Other	252.9	259.8	252.7	256.2	257.7	259.9	260.4	261.1
Services	1,822.3	1,874.7	1,829.0	1,842.0	1,855.9	1,865.4	1,883.5	1,893.9
Housing	484.2	492.0	485.1	486.7	488.8	490.7	493.3	495.0
Household operation	211.7	218.7	213.6	216.6	217.9	215.6	220.8	220.8
Electricity and gas	95.3	99.0	95.3	98.5	99.1	96.2	100.6	100.1
Other household operation	116.4	119.8	118.3	118.1	118.8	119.4	120.2	120.7
Transportation	122.7	126.3	125.0	123.7	124.5	126.1	126.5	128.3
Medical care	449.2	463.2	450.4	453.2	458.0	461.1	465.1	468.6
Other	554.4	574.5	554.9	561.7	566.8	571.8	577.9	581.4

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

Table 3.2.—Federal Government Receipts and Expenditures

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Receipts	1,183.0		1,169.1	1,221.1	1,218.4	1,268.0	1,275.9	.....
Personal tax and nontax receipts	490.8	521.2	489.5	511.8	502.1	520.7	527.1	535.0
Income taxes	478.0	506.7	476.7	498.3	489.1	506.0	512.7	519.0
Estate and gift taxes	11.3	13.0	11.4	12.1	11.6	13.2	12.8	14.5
Nontaxes	1.4	1.5	1.4	1.4	1.5	1.5	1.5	1.5
Corporate profits tax accruals	120.2		107.0	127.1	132.4	142.4	139.3	.....
Federal Reserve banks	16.8		16.2	15.8	15.7	15.3	15.1	.....
Other	103.5		90.8	111.3	116.7	127.2	124.2	.....
Indirect business tax and nontax accruals	81.3	87.4	81.1	83.5	81.5	86.2	86.7	95.2
Excise taxes	46.8	50.3	46.8	46.5	47.4	48.5	48.8	56.6
Customs duties	18.3	19.9	18.7	19.1	18.8	20.4	20.0	20.3
Nontaxes	16.2	17.2	15.7	18.0	15.3	17.3	17.8	18.3
Contributions for social insurance	490.7	517.9	491.4	498.7	502.3	518.7	522.8	527.6
Expenditures	1,459.3	1,493.4	1,459.8	1,485.3	1,481.9	1,490.6	1,488.5	1,512.5
Purchases	448.8	443.4	452.8	452.4	442.7	447.5	443.6	439.7
National defense	313.8	303.6	316.7	315.7	304.8	307.6	301.9	300.0
Nondefense	135.0	139.8	136.1	136.7	137.9	140.0	141.7	139.7
Transfer payments (net)	624.5	650.0	624.4	641.7	642.0	645.6	652.8	659.7
To persons	608.2	635.8	611.6	617.1	628.9	632.7	639.1	642.5
To rest of the world (net) ...	16.3	14.2	12.8	24.6	13.1	12.9	13.7	17.2
Grants-in-aid to State and local governments	171.4	185.8	173.7	176.7	176.1	182.8	188.6	195.8
Net interest paid	187.1	180.6	187.4	181.3	178.3	182.5	182.2	179.3
Interest paid	219.9	217.5	221.1	216.4	214.1	219.0	219.9	217.2
To persons and business	178.7	174.7	179.8	175.0	172.4	176.9	176.7	172.8
To rest of the world (net) ..	41.2	42.8	41.4	41.4	41.6	42.1	43.2	44.3
Less: Interest received by government	32.8	37.0	33.7	35.1	35.7	36.5	37.7	37.9
Subsidies less current surplus of government enterprises ..	27.5	33.6	21.4	33.2	42.9	32.3	21.4	38.0
Subsidies	31.7	36.2	25.5	36.1	43.7	35.9	24.8	40.4
Less: Current surplus of government enterprises ..	4.1	2.6	4.1	2.9	.8	3.6	3.4	2.4
Less: Wage accruals less disbursements	0	0	0	0	0	0	0	0
Surplus or deficit (-), national income and product accounts	-276.3		-290.7	-264.2	-263.5	-222.6	-212.7	.....
Social insurance funds	32.2	41.7	31.3	36.4	30.2	45.2	44.7	46.9
Other	-308.5		-322.0	-300.6	-293.7	-267.8	-257.4	.....

Table 3.3.—State and Local Government Receipts and Expenditures

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Receipts	837.8		839.0	861.6	860.2	881.0	894.2	.....
Personal tax and nontax receipts	154.0	160.3	153.3	158.8	155.0	160.3	162.0	164.1
Income taxes	116.7	120.8	115.7	120.8	116.4	121.0	122.1	123.6
Nontaxes	18.3	19.7	18.5	18.8	19.2	19.5	19.8	20.2
Other	19.0	19.9	19.1	19.2	19.5	19.8	20.0	20.3
Corporate profits tax accruals	26.0		23.1	27.9	28.5	30.8	30.1	.....
Indirect business tax and nontax accruals	421.5	443.1	423.7	432.2	434.1	440.0	445.7	452.6
Sales taxes	200.8	211.6	201.9	205.7	206.5	209.3	212.8	217.7
Property taxes	177.7	186.9	178.9	181.4	183.9	186.5	187.9	189.3
Other	43.0	44.6	42.9	45.1	43.6	44.3	45.0	45.6
Contributions for social insurance	64.9	67.4	65.2	65.9	66.5	67.2	67.7	68.3
Federal grants-in-aid	171.4	185.8	173.7	176.7	176.1	182.8	188.6	195.8
Expenditures	830.6	885.2	837.8	848.0	859.4	880.0	895.9	905.5
Purchases	683.0	713.7	686.2	691.4	697.0	711.1	721.2	725.6
Compensation of employees	457.3	480.1	459.7	465.6	472.1	477.7	483.0	487.6
Other	225.7	233.6	226.5	225.7	224.9	233.4	238.3	237.9
Transfer payments to persons	228.6	253.9	232.8	238.4	244.1	251.0	257.2	263.1
Net interest paid	-46.0	-45.3	-45.9	-45.7	-45.5	-45.3	-45.2	-45.0
Interest paid	66.1	68.7	66.5	67.1	67.7	68.4	69.0	69.6
Less: Interest received by government	112.1	113.9	112.3	112.8	113.2	113.7	114.2	114.6
Less: Dividends received by government	10.2	10.7	10.3	10.5	10.5	10.7	10.8	10.9
Subsidies less current surplus of government enterprises ..	-24.8	-26.5	-25.1	-25.5	-25.8	-26.2	-26.7	-27.3
Subsidies .....	.4	.5	.4	.4	.4	.5	.5	.5
Less: Current surplus of government enterprises ..	25.2	26.9	25.6	25.9	26.2	26.6	27.1	27.7
Less: Wage accruals less disbursements	0	0	0	0	0	0	0	0
Surplus or deficit (-), national income and product accounts	7.2		1.2	13.5	.8	1.1	-1.7	.....
Social insurance funds	59.4	58.6	59.5	59.6	59.0	58.9	58.5	58.0
Other	-52.2		-58.3	-46.0	-58.2	-57.8	-60.2	.....

Table 3.7B.—Government Purchases by Type

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Government purchases	1,131.8	1,157.1	1,139.1	1,143.8	1,139.7	1,158.6	1,164.8	1,165.3
Federal	448.8	443.4	452.8	452.4	442.7	447.5	443.6	439.7
National defense	313.8	303.6	316.7	315.7	304.8	307.6	301.9	300.0
Durable goods	79.0	70.8	80.1	78.9	74.4	75.3	67.4	66.2
Nondurable goods	10.3	9.4	11.2	9.8	9.0	10.2	9.3	9.3
Services	218.9	218.0	220.2	221.0	216.4	217.0	219.4	219.4
Compensation of employees	135.7	137.0	135.6	133.7	137.2	136.4	137.9	136.5
Military	90.7	91.0	90.7	89.2	91.5	91.2	90.7	90.5
Civilian	45.0	46.0	44.9	44.5	45.7	45.2	47.2	46.0
Other services	83.2	81.0	84.6	87.3	79.1	80.6	81.5	82.9
Structures	5.6	5.2	5.3	6.0	5.0	5.0	5.8	5.0
Nondefense	135.0	139.8	136.1	136.7	137.9	140.0	141.7	139.7
Durable goods	7.1	7.4	6.6	7.4	7.3	7.9	7.3	6.9
Nondurable goods	8.6	7.4	9.2	9.3	7.8	7.6	7.3	7.0
Commodity Credit Corporation inventory change	-7	-1	-4	0	-4	-3	-2	.6
Other nondurables	9.2	7.5	9.5	9.3	8.1	7.9	7.5	6.3
Services	109.0	114.2	110.2	109.7	112.2	114.3	116.1	114.3
Compensation of employees	64.1	69.9	64.5	65.0	69.0	69.8	70.4	70.6
Other services	44.9	44.3	45.7	44.7	43.2	44.6	45.7	43.7
Structures	10.3	10.8	10.2	10.3	10.5	10.1	11.0	11.5
State and local	683.0	713.7	686.2	691.4	697.0	711.1	721.2	725.6
Durable goods	37.6	39.3	37.9	38.2	38.7	39.2	39.7	39.8
Nondurable goods	60.2	62.2	61.1	60.7	61.7	63.0	62.3	62.0
Services	485.3	506.6	487.5	493.5	499.6	504.4	509.9	512.8
Compensation of employees	457.3	480.1	459.7	465.6	472.1	477.7	483.0	487.6
Other services	28.0	26.5	27.8	27.9	27.5	26.6	26.9	25.1
Structures	99.8	105.5	99.8	99.0	97.1	104.5	109.4	111.0

Table 3.10.—National Defense Purchases

[Billions of dollars]

National defense purchases	313.8	303.6	316.7	315.7	304.8	307.6	301.9	300.0
Durable goods	79.0	70.8	80.1	78.9	74.4	75.3	67.4	66.2
Military equipment	73.2	66.6	73.7	72.6	70.5	70.5	63.1	62.4
Aircraft	22.7	20.9	22.5	21.9	20.8	22.5	20.1	20.4
Missiles	14.3	12.3	14.8	14.2	13.5	12.9	11.6	11.2
Ships	12.1	10.7	12.0	11.6	11.1	11.3	10.0	10.3
Vehicles	3.8	3.0	4.1	3.9	4.2	3.2	2.3	2.1
Electronic equipment	6.6	6.4	6.9	7.1	6.6	6.8	6.4	5.9
Other	13.6	13.3	13.4	14.0	14.2	13.9	12.6	12.5
Other durable goods	5.8	4.2	6.4	6.3	3.9	4.8	4.3	3.9
Nondurable goods	10.3	9.4	11.2	9.8	9.0	10.2	9.3	9.3
Petroleum products	3.5	3.2	4.0	3.0	3.4	3.3	2.9	2.9
Ammunition	3.4	3.6	3.7	3.6	3.5	4.0	3.1	3.9
Other nondurable goods	3.4	2.7	3.5	3.2	2.5	2.7	2.9	2.5
Services	218.9	218.0	220.2	221.0	216.4	217.0	219.4	219.4
Compensation of employees	135.7	137.0	135.6	133.7	137.2	136.4	137.9	136.5
Military	90.7	91.0	90.7	89.2	91.5	91.2	90.7	90.5
Civilian	45.0	46.0	44.9	44.5	45.7	45.2	47.2	46.0
Other services	83.2	81.0	84.6	87.3	79.1	80.6	81.5	82.9
Contractual research and development	26.5	26.6	26.3	27.5	27.2	26.6	25.5	27.1
Installation support ¹	23.4	23.4	23.2	24.3	22.1	21.9	24.9	24.7
Weapons support ²	10.0	8.9	10.0	10.0	9.1	9.6	9.1	7.9
Personnel support ³	13.3	12.8	13.5	13.4	11.6	12.2	13.3	14.0
Transportation of material	5.8	5.2	6.7	6.1	5.0	5.3	5.6	5.0
Travel of persons	6.2	6.3	7.5	7.2	6.3	6.4	6.5	6.0
Other	-2.0	-2.2	-2.5	-1.1	-2.2	-1.5	-3.3	-1.7
Structures	5.6	5.2	5.3	6.0	5.0	5.0	5.8	5.0
Military facilities	3.5	3.2	3.4	3.8	3.0	3.0	3.6	3.0
Other	2.1	2.1	1.9	2.2	2.0	2.1	2.2	2.0

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

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

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

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

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Government purchases	945.2	938.6	950.2	946.9	931.3	941.1	941.7	940.1
Federal	373.0	355.1	377.0	373.7	357.6	359.4	353.7	349.8
National defense	261.2	242.7	264.4	261.3	246.0	246.4	240.1	238.2
Durable goods	73.2	63.8	74.6	72.6	67.2	67.4	60.9	59.5
Nondurable goods	9.4	8.7	10.4	8.6	8.3	9.2	8.7	8.7
Services	173.6	165.7	174.6	174.7	166.1	165.5	165.4	165.6
Compensation of employees	100.9	96.0	100.2	99.0	97.7	96.4	95.3	94.4
Military	66.4	63.5	65.9	65.4	64.4	63.8	63.1	62.5
Civilian	34.5	32.5	34.3	33.7	33.3	32.7	32.2	31.9
Other services	72.7	69.7	74.4	75.7	68.4	69.0	70.1	71.2
Structures	5.0	4.5	4.8	5.3	4.4	4.4	5.0	4.3
Nondefense	111.8	112.5	112.5	112.4	111.5	113.0	113.7	111.6
Durable goods	7.5	8.1	7.0	7.9	7.8	8.4	8.1	7.9
Nondurable goods	7.9	6.7	8.2	8.4	7.2	6.9	6.4	6.1
Commodity Credit Corporation inventory change	-4	-1	-4	0	-2	-2	-3	.4
Other nondurables	8.3	6.7	8.6	8.4	7.4	7.1	6.7	5.6
Services	87.4	88.5	88.4	87.2	87.3	88.9	89.8	87.8
Compensation of employees	49.6	51.4	49.8	49.8	51.0	51.4	51.6	51.5
Other services	37.8	37.1	38.5	37.4	36.3	37.4	38.2	36.3
Structures	9.0	9.2	8.9	8.9	9.1	8.7	9.4	9.8
State and local	572.2	583.4	573.2	573.2	573.7	581.6	588.0	590.4
Durable goods	33.3	34.1	33.4	33.6	33.8	34.0	34.3	34.5
Nondurable goods	52.1	53.5	52.4	52.7	53.0	53.4	53.8	54.0
Services	395.8	402.6	396.7	398.2	400.1	401.9	403.4	404.9
Compensation of employees	359.0	363.9	360.0	361.0	362.0	363.4	364.5	365.8
Other services	36.7	38.6	36.7	37.3	38.1	38.4	38.9	39.1
Structures	91.1	93.2	90.8	88.6	86.9	92.4	96.5	96.9

Table 3.11.—National Defense Purchases in Constant Dollars

[Billions of 1987 dollars]

National defense purchases	261.2	242.7	264.4	261.3	246.0	246.4	240.1	238.2
Durable goods	73.2	63.8	74.6	72.6	67.2	67.4	60.9	59.5
Military equipment	67.1	59.0	67.9	66.3	62.9	62.1	55.9	54.9
Aircraft	20.2	17.5	20.1	19.0	17.7	18.8	16.6	17.1
Missiles	15.3	12.8	16.0	15.7	14.1	13.2	12.4	11.4
Ships	10.3	8.9	10.2	9.8	9.3	9.5	8.3	8.6
Vehicles	3.4	2.5	3.7	3.4	3.6	2.6	2.0	1.7
Electronic equipment	6.1	5.9	6.3	6.5	6.0	6.2	5.9	5.4
Other	11.8	11.3	11.6	11.9	12.1	11.8	10.8	10.6
Other durable goods	6.1	4.8	6.8	6.4	4.4	5.3	5.0	4.7
Nondurable goods	9.4	8.7	10.4	8.6	8.3	9.2	8.7	8.7
Petroleum products	2.9	2.8	3.1	2.4	2.7	2.9	2.9	2.6
Ammunition	3.5	3.6	4.2	3.3	3.4	3.9	3.1	3.9
Other nondurable goods	3.0	2.4	3.2	2.9	2.2	2.4	2.7	2.2
Services	173.6	165.7	174.6	174.7	166.1	165.5	165.4	165.6
Compensation of employees	100.9	96.0	100.2	99.0	97.7	96.4	95.3	94.4
Military	66.4	63.5	65.9	65.4	64.4	63.8	63.1	62.5
Civilian	34.5	32.5	34.3	33.7	33.3	32.7	32.2	31.9
Other services	72.7	69.7	74.4	75.7	68.4	69.0	70.1	71.2
Contractual research and development	23.6	23.4	23.3	24.1	23.8	23.4	22.4	24.1
Installation support ¹	20.6	20.2	20.2	21.2	19.4	19.1	21.4	21.1
Weapons support ²	8.4	7.2	8.3	8.2	7.4	7.8	7.4	6.4
Personnel support ³	10.0	9.6	10.1	9.9	8.7	9.1	10.0	10.4
Transportation of material	6.1	5.4	7.5	6.6	5.3	5.4	5.8	5.3
Travel of persons	5.6	5.4	6.9	6.4	5.4	5.5	5.6	5.1
Other	-1.6	-1.6	-1.9	-8	-1.6	-1.1	-2.5	-1.3
Structures	5.0	4.5	4.8	5.3	4.4	4.4	5.0	4.3
Military facilities	3.3	2.9	3.2	3.5	2.8	2.8	3.3	2.8

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

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Receipts from rest of the world	769.7		768.4	777.0	774.1	791.8	788.3	
Exports of goods and services	640.5	660.1	641.1	654.7	651.3	660.0	653.2	675.8
Merchandise ¹	448.7	459.5	447.5	462.0	453.2	458.6	452.2	473.7
Durable	300.8	313.1	298.5	311.1	306.9	314.0	307.4	324.0
Nondurable	147.9	146.4	149.0	150.9	146.3	144.6	144.8	149.7
Services ¹	191.7	200.6	193.6	192.8	198.0	201.3	200.9	202.1
Receipts of factor income ²	129.2		127.3	122.3	122.8	131.9	135.1	
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0
Payments to rest of the world	769.7		768.4	777.0	774.1	791.8	788.3	
Imports of goods and services	670.1	725.8	679.9	693.5	699.6	725.0	725.1	753.5
Merchandise ¹	544.5	593.0	557.3	564.7	569.6	592.6	591.9	618.1
Durable	346.3	385.8	351.4	359.7	368.8	379.5	384.5	410.3
Nondurable	198.2	207.2	205.9	205.1	200.7	213.1	207.3	207.8
Services ¹	125.6	132.8	122.6	128.7	130.0	132.4	133.3	135.3
Payments of factor income ³	121.9		119.5	124.8	122.4	132.3	128.7	
Transfer payments (net)	32.7	31.4	28.5	41.2	29.7	29.9	30.9	35.1
From persons (net)	10.4	11.0	9.7	10.5	11.0	11.0	10.8	11.4
From government (net)	16.3	14.2	12.8	24.6	13.1	12.9	13.7	17.2
From business	6.0	6.1	5.9	6.1	5.6	6.0	6.3	6.5
Net foreign investment	-55.1		-59.4	-82.4	-77.6	-95.4	-96.4	

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

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

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

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

(Billions of 1987 dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Exports of goods and services	578.0	596.4	579.3	591.6	588.0	593.2	591.9	612.5
Merchandise ¹	422.7	438.2	423.0	437.3	430.2	434.5	434.1	454.1
Durable	288.0	304.9	287.4	300.0	296.5	302.4	302.2	318.4
Nondurable	134.7	133.3	135.6	137.3	133.7	132.1	131.9	135.6
Services ¹	155.4	158.2	156.3	154.3	157.8	158.6	157.8	158.5
Receipts of factor income²	105.5		103.7	98.9	98.3	105.0	107.1	
Imports of goods and services	611.6	675.7	621.8	630.3	647.9	668.4	678.2	708.1
Merchandise ¹	511.9	572.3	521.6	530.3	545.9	565.7	574.9	602.8
Durable	332.5	379.9	338.4	348.0	360.5	372.1	381.0	405.9
Nondurable	179.4	192.5	183.2	182.4	185.5	193.6	193.9	196.9
Services ¹	99.7	103.3	100.1	100.0	102.0	102.7	103.3	105.3
Payments of factor income³	97.7		95.5	98.8	95.8	103.0	99.6	

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

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

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

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

(Billions of dollars)

	1992	1993	1994	1995	1996	1997	1998
Exports of merchandise	448.7	459.5	447.5	462.0	453.2	458.6	452.2
Foods, feeds, and beverages	40.3	40.2	40.9	41.9	40.8	39.6	38.9
Industrial supplies and materials	105.2	103.0	106.4	104.9	103.0	103.0	102.4
Durable goods	36.9	37.5	37.9	37.2	37.2	37.6	38.1
Nondurable goods	68.4	65.4	68.5	67.7	65.8	65.4	64.2
Capital goods, except automotive	176.9	182.0	173.3	182.0	177.8	183.3	178.5
Civilian aircraft, engines, and parts	37.7	32.1	33.4	37.1	33.1	36.4	27.1
Computers, peripherals, and parts	28.8	29.1	28.8	30.0	28.8	28.0	29.6
Other	110.4	120.9	111.1	114.9	115.9	118.8	121.9
Automotive vehicles, engines, and parts	47.1	51.9	47.8	50.9	51.2	51.3	48.4
Consumer goods, except automotive	50.4	53.4	51.0	53.3	51.5	52.2	54.2
Durable goods	25.6	27.2	25.4	26.5	26.3	27.2	27.5
Nondurable goods	24.8	26.2	25.5	26.8	25.2	25.1	26.7
Other	28.9	28.9	28.1	28.9	28.8	29.3	29.9
Durable goods	14.5	14.5	14.1	14.5	14.4	14.6	14.9
Nondurable goods	14.5	14.5	14.1	14.5	14.4	14.6	14.9
Imports of merchandise	544.5	593.0	557.3	564.7	569.6	592.6	591.9
Foods, feeds, and beverages	27.9	28.1	28.1	27.6	27.4	27.5	28.3
Industrial supplies and materials, except petroleum and products	82.3	89.6	82.7	84.2	86.4	87.3	89.0
Durable goods	39.5	43.8	39.4	40.3	41.7	41.1	43.3
Nondurable goods	42.8	45.7	43.3	43.9	44.8	46.2	45.7
Petroleum and products	51.6	51.4	57.2	54.9	51.0	57.3	50.2
Capital goods, except automotive	134.2	154.1	137.8	141.8	142.6	150.7	152.6
Civilian aircraft, engines, and parts	12.6	11.0	12.3	13.0	10.5	11.8	10.5
Computers, peripherals, and parts	31.8	38.3	33.6	34.6	35.9	37.2	39.0
Other	89.8	102.9	91.9	94.2	96.2	101.7	103.1
Automotive vehicles, engines, and parts	91.8	102.5	91.8	95.1	100.5	102.1	100.1
Consumer goods, except automotive	123.0	134.9	126.7	128.5	128.9	132.9	137.6
Durable goods	63.9	70.1	65.9	65.2	67.7	68.2	71.5
Nondurable goods	59.1	64.8	60.9	61.3	61.2	64.7	66.2
Other	33.8	34.5	33.0	34.8	32.7	34.8	33.9
Durable goods	16.9	17.2	16.5	17.4	16.4	17.4	17.0
Nondurable goods	16.9	17.2	16.5	17.4	16.4	17.4	17.0
Addenda:							
Exports of agricultural products ¹	44.0	43.2	44.7	45.5	43.4	43.1	42.4
Exports of nonagricultural products	404.7	416.2	402.9	416.4	409.9	415.5	409.8
Imports of nonpetroleum products	492.9	541.6	500.1	509.9	518.5	535.3	541.7

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

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

(Billions of 1987 dollars)

	1992	1993	1994	1995	1996	1997	1998
Exports of merchandise	422.7	438.2	423.0	437.3	430.2	434.5	434.1
Foods, feeds, and beverages	35.7	35.2	36.9	37.7	36.4	35.2	33.7
Industrial supplies and materials	97.5	94.8	97.7	96.6	94.7	94.0	94.3
Durable goods	32.1	31.0	32.7	31.9	31.1	30.6	31.4
Nondurable goods	65.4	63.8	65.0	64.7	63.6	63.4	63.0
Capital goods, except automotive	178.4	191.3	177.0	186.8	184.3	189.5	190.5
Civilian aircraft, engines, and parts	30.9	25.5	27.3	30.0	26.6	29.0	21.6
Computers, peripherals, and parts	51.0	60.3	52.5	56.4	55.9	57.0	62.5
Other	96.6	105.4	97.2	100.5	101.8	103.4	106.3
Automotive vehicles, engines, and parts	41.9	45.9	42.6	45.1	45.3	45.3	42.8
Consumer goods, except automotive	43.5	45.7	44.0	45.5	44.1	44.9	46.5
Durable goods	22.7	24.1	22.7	23.4	23.2	24.1	24.4
Nondurable goods	20.8	21.7	21.3	22.2	21.0	20.8	22.1
Other	25.6	25.4	24.9	25.5	25.4	25.7	26.3
Durable goods	12.8	12.7	12.5	12.8	12.7	12.8	13.1
Nondurable goods	12.8	12.7	12.4	12.8	12.7	12.8	13.1
Imports of merchandise	511.9	572.3	521.6	530.3	545.9	565.7	574.9
Foods, feeds, and beverages	26.0	25.8	26.4	25.6	26.1	25.6	25.7
Industrial supplies and materials, except petroleum and products	72.0	78.6	72.2	73.3	75.3	76.0	78.8
Durable goods	34.1	37.6	33.6	34.8	35.3	34.9	37.6
Nondurable goods	37.9	41.0	38.6	38.5	40.0	41.1	41.1
Petroleum and products	51.2	56.3	53.1	52.8	53.4	57.8	56.7
Capital goods, except automotive	148.4	179.3	153.8	160.0	165.3	175.8	181.4
Civilian aircraft, engines, and parts	10.3	8.8	10.0	10.5	8.5	9.4	8.4
Computers, peripherals, and parts	59.7	82.8	64.2	68.2	73.1	79.0	85.8
Other	78.3	87.8	79.5	81.3	83.8	87.4	87.2
Automotive vehicles, engines, and parts	79.7	87.4	79.5	81.9	87.0	87.4	85.3
Consumer goods, except automotive	105.2	115.3	108.0	106.7	110.2	113.0	117.8
Durable goods	55.6	60.7	57.1	56.2	58.6	58.9	62.0
Nondurable goods	49.6	54.5	50.9	50.5	51.6	54.1	55.8
Other	29.5	29.7	28.7	30.1	28.5	30.0	29.3
Durable goods	14.7	14.9	14.3	15.0	14.2	15.0	14.6
Nondurable goods	14.7	14.9	14.3	15.0	14.2	15.0	14.6
Addenda:							
Exports of agricultural products ¹	39.7	38.2	40.8	41.1	38.7	38.8	37.3
Exports of nonagricultural products	382.9	400.1	382.2	396.1	391.5	395.7	396.8
Imports of nonpetroleum products	460.8	516.0	468.5	477.6	492.5	507.9	518.2

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

Table 5.1.—Gross Saving and Investment

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Gross saving	717.8		727.0	718.8	762.0	766.7	774.3	
Gross private saving	986.9		1,016.5	969.4	1,024.8	988.3	988.7	
Personal saving	238.7	190.3	219.6	279.7	177.9	208.7	179.7	195.2
Undistributed corporate profits with inventory valuation and capital consumption adjustments	110.4		82.3	121.7	103.7	116.3	129.3	
Undistributed profits	98.6		72.7	92.0	91.4	103.9	104.6	
Inventory valuation adjustment	-5.3	-7.8	-7.8	4.9	-12.7	-12.2	1.0	-7.2
Capital consumption adjustment	17.1	24.3	17.4	24.7	25.1	24.7	23.8	23.6
Corporate consumption of fixed capital	396.6	408.9	410.3	396.5	402.2	405.2	414.0	414.1
Noncorporate consumption of fixed capital	261.3	262.3	304.3	251.5	261.0	258.1	265.7	264.5
Wage accruals less disbursements	-20.0	20.0	0	-80.0	80.0	0	0	0
Government surplus or deficit (-), national income and product accounts	-269.1		-289.5	-250.6	-262.8	-221.5	-214.4	
Federal	-276.3		-290.7	-264.2	-263.5	-222.6	-212.7	
State and local	7.2		1.2	13.5	.8	1.1	-1.7	
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0
Gross investment	741.4		742.7	750.9	796.5	778.7	787.6	
Gross private domestic investment	796.5	892.0	802.2	833.3	874.1	874.1	884.0	935.8
Net foreign investment	-55.1		-59.4	-82.4	-77.6	-95.4	-96.4	
Statistical discrepancy	23.6		15.7	32.1	34.4	12.0	13.3	

Table 5.4.—Fixed Investment by Type

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Fixed investment	789.1	875.2	792.5	821.3	839.5	861.0	876.3	924.1
Nonresidential	565.5	622.9	569.2	579.5	594.7	619.1	624.9	653.0
Structures	172.6	178.6	170.8	171.1	172.4	177.6	179.1	185.2
Nonresidential buildings, including farm	114.6	119.3	111.6	111.9	114.8	117.1	119.6	125.5
Utilities	35.8	36.4	36.1	36.9	35.1	36.6	36.6	37.2
Mining exploration, shafts, and wells	12.4	13.8	12.3	12.6	12.8	14.0	14.4	13.9
Other structures	9.8	9.2	10.8	9.7	9.7	9.8	8.6	8.6
Producers' durable equipment	392.9	444.4	398.4	408.3	422.2	441.6	445.8	467.8
Information processing and related equipment	135.5	152.3	139.2	139.7	142.7	147.0	154.6	164.8
Computers and peripheral equipment ¹	39.8	48.2	40.7	40.7	45.8	46.1	49.5	51.5
Other	95.7	104.1	98.5	98.9	96.9	100.9	105.1	113.3
Industrial equipment	87.2	97.9	88.1	91.2	92.4	95.9	98.7	104.4
Transportation and related equipment	90.7	104.4	91.1	96.1	101.3	110.1	101.9	104.1
Other	79.5	89.9	80.1	81.3	85.8	88.5	90.6	94.4
Residential	223.6	252.3	223.3	241.8	244.9	241.9	251.3	271.1
Structures	216.3	244.5	215.9	234.3	237.3	234.2	243.4	263.0
Single family	116.5	133.8	115.9	124.3	132.4	127.5	131.1	144.3
Multifamily	13.1	10.8	12.7	11.7	10.3	10.3	11.4	11.2
Other structures	86.7	99.9	87.3	98.3	94.6	96.4	100.9	107.6
Producers' durable equipment	7.3	7.8	7.4	7.5	7.5	7.6	7.9	8.1

1. Includes new computers and peripheral equipment only.

Table 5.5.—Fixed Investment by Type in Constant Dollars

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Fixed investment	726.4	805.5	730.0	754.3	773.7	790.6	806.9	851.1
Nonresidential	529.2	591.3	533.8	543.7	562.3	584.3	594.8	623.0
Structures	150.6	151.4	148.8	148.0	148.2	151.1	151.2	155.0
Nonresidential buildings, including farm	100.8	101.7	97.9	97.5	99.3	100.5	101.5	103.0
Utilities	30.9	30.4	31.1	31.6	29.9	30.6	30.5	30.6
Mining exploration, shafts, and wells	10.0	11.2	10.0	10.3	10.4	11.4	11.7	11.7
Other structures	8.9	8.1	9.8	8.6	8.6	8.7	7.5	7.7
Producers' durable equipment	378.6	439.9	385.1	395.7	414.1	433.2	443.6	466.0
Information processing and related equipment	159.9	195.7	166.0	168.5	178.6	186.8	200.9	216.0
Computers and peripheral equipment ¹	71.2	100.7	74.9	77.2	89.5	94.5	105.1	113.3
Other	88.7	95.0	91.1	91.3	89.0	92.3	95.9	102.0
Industrial equipment	72.7	80.2	72.8	75.7	76.7	78.8	80.5	83.0
Transportation and related equipment	77.7	87.9	77.8	82.1	85.7	92.8	85.7	87.0
Other	68.3	76.1	68.5	69.4	73.2	74.9	76.5	79.0
Residential	197.1	214.2	196.2	210.6	211.4	206.2	212.1	227.1
Structures	190.1	206.8	189.1	203.3	204.1	198.9	204.6	219.0
Single family	102.7	113.1	101.7	107.9	113.9	108.7	110.0	119.0
Multifamily	11.8	9.4	11.4	10.4	9.1	9.0	9.8	9.9
Other structures	75.6	84.4	76.0	85.0	81.1	81.2	84.8	90.1
Producers' durable equipment	7.0	7.4	7.1	7.2	7.3	7.3	7.5	7.7

1. Includes new computers and peripheral equipment only.

Table 5.10.—Change in Business Inventories by Industry

(Billions of dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Change in business inventories	7.3	16.8	9.7	12.0	34.6	13.1	7.7	11.7
Farm	5.0	-6.3	5.3	2.4	1.5	-3.7	-14.9	-8.2
Nonfarm	2.3	23.1	4.4	9.5	33.0	16.8	22.6	19.9
Change in book value	8.8	34.2	10.8	3.3	51.7	34.8	21.9	28.2
Inventory valuation adjustment	-6.4	-11.1	-6.3	6.2	-18.7	-18.0	.7	-8.3
Manufacturing	-6.0	1.2	7.1	-14.2	-1.8	4.2	2.9	-5
Durable goods	-10.6	-2	-2.6	-17.0	-5.5	.4	2.6	1.5
Nondurable goods	4.6	1.5	9.7	2.8	3.7	3.9	2	-2.0
Wholesale trade	6.1	3.4	2.3	13.5	.7	6.8	7.7	-1.8
Durable goods	3.9	1.9	6.8	3.8	-3.2	.6	7.0	3.3
Nondurable goods	2.2	1.5	-4.5	9.7	3.9	6.3	.7	-5.1
Merchant wholesalers	6.3	2.9	1.5	15.0	-.3	6.1	10.0	-4.1
Durable goods	4.4	1.5	5.7	5.5	-3.7	1.8	6.2	1.6
Nondurable goods	1.8	1.4	-4.1	9.5	3.5	4.2	3.7	-5.7
Nonmerchant wholesalers	-2	5	.8	-1.5	.9	.8	-2.2	2.3
Durable goods	-5	.4	1.1	-1.7	.5	-1.3	.8	1.7
Nondurable goods .....	.3	0	-4	.2	.4	2.0	-3.0	.6
Retail trade	6.5	12.6	4.8	10.5	27.6	3.0	5.3	14.7
Durable goods	4.8	8.1	.3	6.5	21.9	.4	-4	10.3
Automotive	-7	3.3	-6.3	-1.9	19.0	-6	-8.4	3.2
Other	5.5	4.8	6.7	8.4	2.9	1.0	8.0	7.2
Nondurable goods	1.6	4.6	4.4	4.0	5.8	2.6	5.7	4.4
Other	-4.3	5.9	-9.8	-2	6.5	2.8	6.7	7.5
Durable goods	3.8	3.3	1.1	5.5	1.9	1.4	5.6	4.3
Nondurable goods	-8.1	2.6	-10.9	-5.8	4.6	1.4	1.1	3.2

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

(Billions of dollars)

	Seasonally adjusted quarterly totals					
	1992		1993			
	III	IV	I	II	III	IV
Inventories¹	1,098.7	1,099.0	1,119.5	1,119.6	31,130.9	1,133.4
Farm	94.9	95.1	99.1	95.4	95.1	91.9
Nonfarm	1,003.8	1,003.9	1,020.4	1,024.2	31,035.8	1,041.5
Durable goods	580.2	580.9	590.7	592.1	3,600.3	606.5
Nondurable goods	423.5	423.0	429.7	432.2	3,435.5	435.0
Manufacturing	406.8	400.9	402.0	402.4	407.0	405.3
Durable goods	256.5	251.0	250.8	250.7	254.2	252.9
Nondurable goods	150.3	149.9	151.2	151.7	152.8	152.5
Wholesale trade	244.9	247.9	249.6	251.3	3,254.6	255.3
Durable goods	154.2	155.4	155.9	156.6	3,159.1	160.7
Nondurable goods	90.7	92.5	93.7	94.7	3,95.5	94.6
Merchant wholesalers	217.7	221.4	222.6	224.1	227.6	228.1
Durable goods	137.7	139.4	139.5	140.5	142.5	143.6
Nondurable goods	80.0	82.0	83.1	83.7	85.0	84.5
Nonmerchant wholesalers	27.2	26.5	27.0	27.2	3,27.0	27.2
Durable goods	16.5	16.0	16.4	16.1	3,16.6	17.1
Nondurable goods	10.7	10.4	10.6	11.1	3,10.4	10.1
Retail trade	266.4	269.5	280.1	281.2	282.7	286.9
Durable goods	126.7	129.4	137.0	138.0	138.2	142.0
Automotive	62.3	62.5	68.2	69.3	66.9	68.3
Other	64.4	67.0	68.7	68.7	71.3	73.8
Nondurable goods	139.7	140.1	143.1	143.3	144.5	144.8
Other	85.7	85.6	88.7	89.3	91.5	94.0
Final sales of domestic business²	426.7	436.9	439.0	445.5	450.7	459.3
Final sales of goods and structures of domestic business²	234.2	240.5	240.4	243.9	245.9	252.4
Ratio of inventories to final sales of domestic business						
Inventories to final sales	2.57	2.52	2.55	2.51	3,2.51	2.47
Nonfarm inventories to final sales	2.35	2.30	2.32	2.30	3,2.30	2.27
Nonfarm inventories to final sales of goods and structures	4.29	4.17	4.24	4.20	3,4.21	4.13

1. Inventories are as of the end of the quarter.

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

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

(Billions of 1987 dollars)

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Change in business inventories	6.5	15.4	9.6	8.7	29.3	13.0	6.5	12.7
Farm	3.8	-5.9	3.8	1.2	0	-4.1	-12.9	-6.7
Nonfarm	2.7	21.3	5.8	7.5	29.3	17.1	19.4	19.4
Manufacturing	-4.7	2.1	7.4	-12.5	-.8	5.0	3.1	1.2
Durable goods	-8.9	.6	-1.2	-15.1	-4.6	1.4	2.8	2.7
Nondurable goods	4.2	1.5	8.6	2.6	3.8	3.6	.3	-1.5
Wholesale trade	5.4	3.1	3.3	10.7	.7	6.6	6.4	-1.4
Durable goods	3.6	1.8	6.3	3.4	-2.8	.6	6.3	3.1
Nondurable goods	1.8	1.3	-3.0	7.3	3.6	6.1	.1	-4.5
Merchant wholesalers	5.6	2.7	1.5	12.8	-.1	5.9	8.5	-3.7
Durable goods	4.0	1.4	5.2	5.0	-3.3	1.7	5.6	1.4
Nondurable goods	1.6	1.3	-3.7	7.7	3.2	4.2	2.9	-5.1
Nonmerchant wholesalers	-2	.4	1.8	-2.1	.8	.7	-2.1	2.3
Durable goods	-4	.4	1.1	-1.6	.4	-1.2	.8	1.7
Nondurable goods .....	.3	0	.7	-.4	.4	1.8	-2.8	.6
Retail trade	5.9	11.2	4.2	9.7	24.0	3.0	4.8	13.1
Durable goods	4.3	7.1	.2	5.9	18.9	.8	-.1	8.8
Automotive	-6	2.9	-5.6	-1.7	16.6	-.5	-7.1	2.7
Other	4.9	4.1	5.9	7.6	2.3	1.2	7.0	6.1
Nondurable goods	1.6	4.2	4.0	3.8	5.1	2.3	4.9	4.4
Other	-3.9	4.8	-9.0	-.4	5.4	2.4	5.0	6.4
Durable goods	3.4	2.8	1.0	4.9	1.6	1.2	4.8	3.6
Nondurable goods	-7.3	2.0	-10.0	-5.3	3.8	1.2	.2	2.8

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

(Billions of 1987 dollars)

	Seasonally adjusted quarterly totals					
	1992		1993			
	III	IV	I	II	III	IV
Inventories¹	983.1	985.3	992.6	995.9	997.5	1,000.6
Farm	87.8	88.1	88.1	87.1	83.9	82.2
Nonfarm	895.3	897.2	904.5	908.8	913.6	918.4
Durable goods	525.5	525.3	528.6	529.6	533.0	537.6
Nondurable goods	369.8	371.8	375.9	379.2	380.6	380.9
Manufacturing	369.0	365.9	365.7	366.9	367.7	368.0
Durable goods	235.7	231.9	230.7	231.1	231.8	232.5
Nondurable goods	133.3	134.0	135.0	135.8	135.9	135.5
Wholesale trade	215.1	217.7	217.9	219.6	221.2	220.8
Durable goods	137.7	138.5	137.8	138.0	139.5	140.3
Nondurable goods	77.4	79.2	80.1	81.6	81.6	80.5
Merchant wholesalers	190.6	193.8	193.8	195.3	197.4	196.5
Durable goods	122.7	124.0	123.1	123.6	125.0	125.3
Nondurable goods	67.9	69.8	70.6	71.7	72.4	71.1
Nonmerchant wholesalers	24.5	23.9	24.2	24.3	23.8	24.4
Durable goods	15.0	14.6	14.7	14.4	14.6	15.0
Nondurable goods	9.5	9.4	9.5	9.9	9.2	9.4
Retail trade	234.0	236.4	242.4	243.2	244.4	247.6
Durable goods	113.7	115.2	119.9	120.1	120.1	122.3
Automotive	56.9	56.5	60.6	60.5	58.7	59.4
Other	56.8	58.7	59.3	59.6	61.4	62.9
Nondurable goods	120.2	121.2	122.5	123.0	124.2	125.3
Other	77.2	77.1	78.5	79.1	80.3	81.9
Final sales of domestic business²	355.7	361.5	360.4	363.4	366.8	372.3
Final sales of goods and structures of domestic business²	203.6	208.6	207.0	209.3	211.3	216.2
Ratio of inventories to final sales of domestic business						
Inventories to final sales	2.76	2.73	2.75	2.74	2.72	2.69
Nonfarm inventories to final sales	2.52	2.48	2.51	2.50	2.49	2.47
Nonfarm inventories to final sales of goods and structures	4.40	4.30	4.37	4.34	4.32	4.25

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

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

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

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
National income without capital consumption adjustment	4,880.3		4,873.1	5,003.2	5,071.1	5,133.6	5,177.6	
Domestic industries	4,873.0		4,865.3	5,005.7	5,070.7	5,134.1	5,171.2	
Private industries	4,138.5		4,127.7	4,262.0	4,313.3	4,372.8	4,401.9	
Agriculture, forestry, and fisheries	100.9		94.4	104.3	112.5	106.7	84.2	
Mining	38.5		38.0	40.1	40.2	39.3	39.6	
Construction	212.8		213.1	218.1	219.3	224.7	231.6	
Manufacturing	895.3		900.5	919.0	909.6	925.8	922.5	
Durable goods	501.7		503.1	518.8	507.6	518.0	520.8	
Nondurable goods	393.6		397.4	400.2	401.9	407.7	401.8	
Transportation and public utilities	356.1		355.3	361.4	369.0	370.7	378.4	
Transportation	151.0		151.7	154.4	157.4	158.9	164.4	
Communications	103.7		103.8	106.4	105.4	108.2	108.5	
Electric, gas, and sanitary services	101.5		99.9	100.6	106.2	103.6	105.6	
Wholesale trade	283.6		286.4	297.8	288.2	299.8	297.4	
Retail trade	416.7		412.5	428.7	432.2	441.1	449.1	
Finance, insurance, and real estate	748.9		733.0	768.3	801.2	805.9	818.2	
Services	1,085.8		1,094.6	1,124.4	1,141.1	1,158.9	1,180.7	
Government	734.5		737.5	743.8	757.4	761.3	769.2	
Rest of the world	7.3		7.8	-2.5	.4	-5	6.4	

Table 6.16C.—Corporate Profits by Industry

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Corporate profits with inventory valuation and capital consumption adjustments	407.2		367.5	439.5	432.1	458.1	468.5	
Domestic industries	344.9	401.9	306.0	384.8	373.0	400.0	405.8	
Financial	66.7	87.1	33.2	70.7	81.0	85.0	87.6	
Nonfinancial	278.3	314.8	272.7	314.1	292.1	315.0	318.2	
Rest of the world	62.3		61.5	54.7	59.0	58.1	62.7	
Receipts from the rest of the world	65.2		65.4	60.5	66.7	71.4	74.0	
Less: Payments to the rest of the world	3.0		3.8	5.8	7.7	13.3	11.3	
Corporate profits with inventory valuation adjustment	390.1		350.1	414.8	407.0	433.4	444.8	
Domestic industries	327.8	377.7	288.6	360.1	348.0	375.3	382.1	
Financial	78.1	98.7	44.6	82.0	92.3	96.4	99.3	
Federal Reserve banks	17.8	16.1	17.1	16.7	16.6	16.2	16.0	
Other	60.3	82.5	27.5	65.3	75.7	80.2	83.3	
Nonfinancial	249.8	279.0	244.0	278.1	255.7	278.9	282.8	
Manufacturing	115.5	128.5	119.3	128.0	118.9	132.5	126.7	
Durable goods	48.3	58.0	49.9	58.0	48.0	58.4	59.9	
Primary metal industries .....	.6	1.2	.3	0	-.5	2.5	1.1	
Fabricated metal products	7.4	6.4	8.0	6.6	5.5	6.9	6.3	
Industrial machinery and equipment	6.6	7.5	6.5	7.8	5.7	6.2	8.8	
Electronic and other electric equipment	12.1	14.3	12.2	17.6	14.9	12.1	14.4	
Motor vehicles and equipment	3.5	7.6	2.4	4.9	3.1	10.0	8.1	
Other	18.1	21.1	20.5	21.0	19.4	20.7	21.3	
Nondurable goods	67.2	70.5	69.4	70.0	70.9	74.2	66.8	
Food and kindred products	17.0	15.6	18.5	15.2	18.0	14.8	14.6	
Chemicals and allied products	15.7	16.2	15.0	17.7	18.4	16.3	14.6	
Petroleum and coal products	6.1	11.1	6.7	5.0	7.2	13.5	12.0	
Other	28.5	27.6	29.2	32.1	27.3	29.5	25.6	
Transportation and public utilities	52.0	57.3	48.7	50.4	53.3	53.9	59.0	
Wholesale and retail trade	46.3	53.4	41.3	57.7	46.0	55.4	55.1	
Other	36.0	39.8	34.6	42.0	37.5	37.2	42.1	
Rest of the world	62.3		61.5	54.7	59.0	58.1	62.7	

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted						1992	1993	Seasonally adjusted														
			1992			1993					1992			1993											
			III	IV	I	II	III	IV			III	IV	I	II	III	IV									
Gross domestic product:																									
Current dollars	133.0	140.4	133.5	136.4	137.9	139.4	140.9	143.4																	
Quantity indexes:																									
Fixed 1987 weights	109.8	113.1	110.1	111.6	111.9	112.4	113.2	114.8																	
Chain-type annual weights	109.5	109.8	111.3	111.4	111.9	112.5	112.5																		
Benchmark-years weights	109.4	109.7	111.1	111.2	111.7	112.3																			
Price indexes:																									
Fixed 1987 weights	122.1	125.9	122.5	123.5	124.8	125.6	126.3	127.0																	
Chain-type annual weights	121.5	121.8	122.6	123.8	124.7	125.3																			
Benchmark-years weights	121.7	122.0	122.9	124.1	124.9	125.6																			
Implicit price deflator	121.1	124.2	121.2	122.2	123.3	124.0	124.5	124.9																	
Personal consumption expenditures:																									
Current dollars	135.6	143.9	136.2	139.4	140.8	142.8	144.8	147.0																	
Quantity indexes:																									
Fixed 1987 weights	109.5	113.1	109.8	111.3	111.5	112.5	113.7	114.8																	
Chain-type annual weights	109.0	109.3	110.7	110.9	111.7	112.8																			
Benchmark-years weights	109.1	109.4	110.8	110.9	111.8	112.9																			
Price indexes:																									
Fixed 1987 weights	124.9	128.7	125.5	126.5	127.5	128.4	128.9	129.7																	
Chain-type annual weights	124.4	124.9	125.8	126.8	127.7	128.2																			
Benchmark-years weights	124.5	125.0	125.9	127.0	127.9	128.3																			
Implicit price deflator	123.9	127.2	124.1	125.3	126.2	127.0	127.4	128.1																	
Durable goods:																									
Current dollars	123.2	133.2	124.1	128.0	127.6	131.7	134.2	139.2																	
Quantity indexes:																									
Fixed 1987 weights	113.1	121.3	113.7	117.3	116.9	119.9	122.1	126.3																	
Chain-type annual weights	111.6	112.2	115.5	114.8	117.7	119.5																			
Benchmark-years weights	111.8	112.4	115.7	115.0	117.9	119.8																			
Price indexes:																									
Fixed 1987 weights	111.5	113.8	111.8	112.1	112.6	113.5	114.1	114.9																	
Chain-type annual weights	110.4	110.5	110.8	111.2	112.0	112.5																			
Benchmark-years weights	110.2	110.4	110.7	111.1	111.9	112.4																			
Implicit price deflator	108.9	109.8	109.1	109.1	109.2	109.8	109.9	110.2																	
Nondurable goods:																									
Current dollars	128.7	133.5	129.1	131.7	132.1	133.0	133.8	135.3																	
Quantity indexes:																									
Fixed 1987 weights	105.1	107.6	105.1	107.0	106.4	107.1	108.1	108.8																	
Chain-type annual weights	104.9	104.9	106.7	106.1	106.8	107.7																			
Benchmark-years weights	104.9	104.9	106.7	106.1	106.8	107.7																			
Price indexes:																									
Fixed 1987 weights	123.0	124.9	123.4	123.8	124.9	125.0	124.5	125.2																	
Chain-type annual weights	122.7	123.1	123.5	124.5	124.6	124.2																			
Benchmark-years weights	122.7	123.1	123.5	124.5	124.7	124.3																			
Implicit price deflator	122.4	124.1	122.8	123.1	124.1	124.2	123.7	124.4																	
Services:																									
Current dollars	143.0	152.8	143.5	147.1	149.4	151.7	154.2	156.2																	
Quantity indexes:																									
Fixed 1987 weights	111.3	114.5	111.7	112.5	113.3	113.9	115.0	115.7																	
Chain-type annual weights	111.0	111.3	112.0	112.8	113.4	114.4																			
Benchmark-years weights	111.0	111.4	112.1	112.9	113.5	114.5																			
Price indexes:																									
Fixed 1987 weights	129.5	134.6	130.1	131.6	132.8	134.2	135.2	136.2																	
Chain-type annual weights	128.9	129.5	130.9	132.1	133.5	134.5																			
Benchmark-years weights	129.1	129.8	131.2	132.4	133.8	134.7																			
Implicit price deflator	128.5	133.5	128.5	130.7	131.8	133.1	134.0	135.0																	
Gross private domestic investment:																									
Current dollars	106.3	119.0	107.1	111.2	116.7	116.7	118.0	124.9																	
Quantity indexes:																									
Fixed 1987 weights	97.8	109.6	98.7	101.8	107.2	107.2	108.6	115.3																	
Chain-type annual weights	96.2	96.7	99.9	104.4	104.1	104.6																			
Benchmark-years weights	96.5	97.2	100.4	104.9	104.6	105.1																			
Price indexes:																									
Fixed 1987 weights																									
Chain-type annual weights																									
Benchmark-years weights																									
Implicit price deflator																									
Fixed investment:																									
Current dollars	109.1	121.1	109.6	113.6	116.1	119.1	121.2	127.8																	
Quantity indexes:																									
Fixed 1987 weights	100.5	111.4	101.0	104.3	107.0	109.3	111.6																		

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted						
			1992		1993				
			III	IV	I	II	III	IV	
Government purchases:									
Current dollars	128.4	131.3	129.2	129.8	129.3	131.4	132.1	132.2	
Quantity indexes:									
Fixed 1987 weights	107.2	106.5	107.8	107.4	105.6	106.8	106.8	106.7	
Chain-type annual weights	107.0	.....	107.4	107.2	105.6	106.6	106.6	.....
Benchmark-years weights	106.9	.....	107.3	107.1	105.4	106.5	106.5	.....
Price indexes:									
Fixed 1987 weights	120.6	124.2	121.0	121.7	123.2	124.0	124.8	124.8	
Chain-type annual weights	120.0	.....	120.3	121.0	122.4	123.2	123.9	.....
Benchmark-years weights	120.2	.....	120.5	121.3	122.6	123.5	124.2	.....
Implicit price deflator	119.7	123.3	119.9	120.8	122.4	123.1	123.7	123.9	
Federal:									
Current dollars	116.6	115.2	117.6	117.5	115.0	116.3	115.2	114.2	
Quantity indexes:									
Fixed 1987 weights	96.9	92.3	97.9	97.1	92.9	93.4	91.9	90.9	
Chain-type annual weights	96.6	.....	97.3	96.8	92.9	93.4	91.9	.....
Benchmark-years weights	96.3	.....	97.0	96.5	92.7	93.2	91.6	.....
Price indexes:									
Fixed 1987 weights	121.8	126.1	122.2	122.8	125.1	125.8	126.8	126.6	
Chain-type annual weights	120.7	.....	121.0	121.5	123.6	124.3	125.4	.....
Benchmark-years weights	121.0	.....	121.4	122.0	124.1	124.8	125.9	.....
Implicit price deflator	120.3	124.8	120.1	121.1	123.8	124.5	125.4	125.7	
National defense:									
Current dollars	107.4	103.9	108.4	108.1	104.4	105.3	103.4	102.7	
Quantity indexes:									
Fixed 1987 weights	89.4	83.1	90.5	89.5	84.2	84.4	82.2	81.6	
Chain-type annual weights	88.6	.....	89.2	88.5	83.8	84.0	81.6	.....
Benchmark-years weights	88.7	.....	89.3	88.6	83.9	84.1	81.8	.....
Price indexes:									
Fixed 1987 weights	122.3	127.1	122.8	123.5	125.9	126.8	127.9	127.7	
Chain-type annual weights	121.2	.....	121.6	122.2	124.4	125.3	126.6	.....
Benchmark-years weights	121.2	.....	121.6	122.2	124.5	125.4	126.6	.....
Implicit price deflator	120.1	125.1	119.8	120.8	123.9	124.8	125.7	126.0	
Nondefense:									
Current dollars	145.4	150.5	146.6	147.2	148.4	150.7	152.5	150.4	
Quantity indexes:									
Fixed 1987 weights	120.4	121.1	121.2	121.1	120.1	121.7	122.4	120.2	
Chain-type annual weights	122.1	.....	123.0	122.9	121.8	123.5	124.4	.....
Benchmark-years weights	120.7	.....	121.5	121.5	120.4	122.0	122.9	.....
Price indexes:									
Fixed 1987 weights	120.2	122.9	120.3	120.9	122.5	122.5	123.4	123.2	
Chain-type annual weights	119.1	.....	119.2	119.7	121.6	121.8	122.5	.....
Benchmark-years weights	120.5	.....	120.6	121.2	123.0	123.3	124.0	.....
Implicit price deflator	120.8	124.3	121.0	121.6	123.6	123.9	124.6	125.1	
State and local:									
Current dollars	137.5	143.7	138.2	139.2	140.4	143.2	145.2	146.1	
Quantity indexes:									
Fixed 1987 weights	115.2	117.5	115.4	115.4	115.5	117.1	118.4	118.9	
Chain-type annual weights	115.0	.....	115.2	115.3	115.4	116.8	118.0	.....
Benchmark-years weights	115.1	.....	115.3	115.3	115.4	116.9	118.1	.....
Price indexes:									
Fixed 1987 weights	119.6	122.8	120.0	120.9	121.8	122.7	123.2	123.4	
Chain-type annual weights	119.6	.....	119.9	120.8	121.7	122.6	123.1	.....
Benchmark-years weights	119.5	.....	119.9	120.7	121.6	122.5	123.0	.....
Implicit price deflator	119.4	122.3	119.7	120.6	121.5	122.3	122.7	122.9	

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

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted						
			1992		1993				
			III	IV	I	II	III	IV	
Gross domestic product:									
Current dollars	133.0	140.4	133.5	136.4	137.9	139.4	140.9	143.4	
Quantity indexes:									
Fixed 1987 weights	109.8	113.1	110.1	111.6	111.9	112.4	113.2	114.8	
Chain-type annual weights	109.5	.....	109.8	111.3	111.4	111.9	112.5	.....
Benchmark-years weights	109.4	.....	109.7	111.1	111.2	111.7	112.3	.....
Price indexes:									
Fixed 1987 weights	122.1	125.9	122.5	123.5	124.8	125.6	126.3	127.0	
Chain-type annual weights	121.5	.....	121.8	122.6	123.8	124.7	125.3	.....
Benchmark-years weights	121.7	.....	122.0	122.9	124.1	124.9	125.6	.....
Implicit price deflator	121.1	124.2	121.2	122.2	123.3	124.0	124.5	124.9	
Final sales of domestic product¹:									
Current dollars	133.6	140.8	134.0	137.0	138.0	139.9	141.5	144.0	
Quantity indexes:									
Fixed 1987 weights	110.3	113.4	110.5	112.1	111.9	112.7	113.7	115.2	
Chain-type annual weights	109.9	.....	110.1	111.6	111.3	112.2	112.9	.....
Benchmark-years weights	109.9	.....	110.0	111.5	111.2	112.1	112.8	.....
Price indexes:									
Fixed 1987 weights	122.2	126.0	122.6	123.6	124.9	125.7	126.4	127.1	
Chain-type annual weights	121.6	.....	121.9	122.7	123.9	124.7	125.4	.....
Benchmark-years weights	121.7	.....	122.1	122.9	124.2	125.0	125.6	.....
Implicit price deflator	121.1	124.2	121.3	122.2	123.3	124.1	124.5	125.0	
Gross domestic purchases²:									
Current dollars	129.6	137.5	130.2	133.1	134.7	136.5	138.1	140.7	
Quantity indexes:									
Fixed 1987 weights	107.2	111.3	107.6	109.1	109.7	110.6	111.6	113.3	
Chain-type annual weights	106.7	.....	107.0	108.4	108.9	109.6	110.4	.....
Benchmark-years weights	106.7	.....	107.1	108.5	108.9	109.7	110.5	.....
Price indexes:									
Fixed 1987 weights	122.0	125.5	122.5	123.4	124.4	125.3	125.9	126.5	
Chain-type annual weights	121.5	.....	121.9	122.8	123.8	124.6	125.2	.....
Benchmark-years weights	121.5	.....	121.9	122.8	123.8	124.6	125.2	.....
Implicit price deflator	120.9	123.6	121.0	122.1	122.8	123.5	123.8	124.1	
Final sales to domestic purchasers³:									
Current dollars	130.2	137.9	130.7	133.6	134.8	137.0	138.7	141.2	
Quantity indexes:									
Fixed 1987 weights	107.7	111.6	108.0	109.5	109.7	110.9	112.1	113.7	
Chain-type annual weights	107.1	.....	107.4	108.7	108.8	109.9	110.8	.....
Benchmark-years weights	107.2	.....	107.5	108.9	108.9	110.0	111.0	.....
Price indexes:									
Fixed 1987 weights	122.1	125.6	122.6	123.4	124.5	125.4	126.0	126.6	
Chain-type annual weights	121.6	.....	122.0	122.8	123.8	124.7	125.2	.....
Benchmark-years weights	121.5	.....	122.0	122.8	123.8	124.7	125.2	.....
Implicit price deflator	120.9	123.6	121.0	122.0	122.8	123.5	123.8	124.2	

1. Equals GDP less change in business inventories.

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

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

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

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			
			III	IV	I	II	III	IV
Gross national product:								
Current dollars	133.0		133.5	136.3	137.8	139.2	140.9	
Quantity indexes:								
Fixed 1987 weights	109.9		110.2	111.5	111.8	112.3	113.2	
Chain-type annual weights	109.6		109.8	111.2	111.3	111.8	112.5	
Benchmark-years weights	109.5		109.7	111.0	111.2	111.7	112.4	
Price indexes:								
Fixed 1987 weights	122.1		122.5	123.4	124.7	125.6	126.2	
Chain-type annual weights	121.4		121.7	122.5	123.8	124.6	125.2	
Benchmark-years weights	121.6		122.0	122.8	124.0	124.9	125.5	
Implicit price deflator	121.1		121.2	122.2	123.3	124.0	124.4	
Less: Exports of goods and services and receipts of factor income:								
Current dollars	163.1		163.8	165.7	165.0	168.8	168.1	
Quantity index, fixed 1987 weights ..	145.7		145.6	147.2	146.3	148.9	149.0	
Plus: Command-basis exports of goods and services and receipts of factor income:								
Current dollars	176.0		176.2	179.9	178.9	181.3	179.5	
Quantity index, fixed 1987 weights ..	147.8		147.0	147.7	149.4	152.0	153.2	
Equals: Command-basis gross national product:								
Current dollars	133.0		133.5	136.3	137.8	139.2	140.9	
Quantity index, fixed 1987 weights ..	110.1		110.3	111.6	112.1	112.6	113.7	

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

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

[Index numbers, 1987=100]

Personal consumption expenditures	124.9	128.7	125.5	126.5	127.5	128.4	128.9	129.7
Durable goods	111.5	113.8	111.8	112.1	112.6	113.5	114.1	114.9
Motor vehicles and parts	112.2	115.8	112.7	113.3	113.9	115.3	116.6	117.5
Furniture and household equipment ..	104.0	104.3	103.8	104.2	103.9	104.2	104.3	105.0
Other	124.2	126.8	124.7	124.3	126.1	127.2	126.8	127.1
Nondurable goods	123.0	124.9	123.4	123.8	124.9	125.0	124.5	125.2
Food	122.0	124.4	122.2	122.7	123.5	124.2	124.3	125.5
Clothing and shoes	117.9	119.2	118.2	118.2	119.8	119.0	118.9	119.0
Gasoline and oil	123.3	122.1	124.8	124.7	126.3	123.1	118.8	120.2
Fuel oil and coal	116.5	116.0	118.5	117.3	116.2	117.4	116.5	113.7
Other	128.8	131.6	129.6	130.3	131.4	132.2	131.5	131.5
Services	129.5	134.6	130.1	131.6	132.8	134.2	135.2	136.2
Housing	124.1	127.8	124.4	125.4	126.5	127.6	128.1	128.9
Household operation	112.5	115.5	112.9	113.9	113.5	115.3	116.4	116.9
Electricity and gas	111.0	114.5	111.4	112.7	112.2	114.2	115.8	115.6
Other household operation	113.8	116.4	114.2	114.9	114.6	116.2	116.9	118.1
Transportation	128.3	135.5	127.8	131.9	134.4	134.9	136.0	136.8
Medical care	140.9	148.5	142.0	144.0	145.9	147.9	149.3	150.7
Other	132.2	137.1	133.2	134.4	135.4	136.6	137.6	138.8
Addenda:								
Price indexes for personal consumption expenditures:								
Chain-type annual weights	124.4		124.9	125.8	126.8	127.7	128.2	
Benchmark-years weights	124.5		125.0	125.9	127.0	127.9	128.3	

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

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			
			III	IV	I	II	III	IV
Fixed investment	112.0	114.7	112.4	112.8	113.5	114.4	115.2	115.7
Nonresidential	111.4	113.3	111.7	112.0	112.4	113.1	113.6	114.0
Structures	114.6	117.8	114.8	115.6	116.3	117.4	118.4	119.3
Nonresidential buildings, including								
farm	113.7	117.2	114.0	114.8	115.6	116.5	117.8	118.8
Utilities	115.6	119.3	115.8	116.4	117.3	119.4	119.8	120.8
Mining exploration, shafts, and wells	123.5	123.3	122.9	123.1	122.9	123.6	123.3	123.5
Other structures	110.7	113.6	110.8	112.6	112.3	113.7	113.6	114.9
Producers' durable equipment	109.7	110.9	110.1	110.1	110.4	110.9	111.2	111.2
Information processing and related equipment	93.1	92.3	92.9	92.8	92.7	92.3	92.1	91.9
Computers and peripheral equipment ¹	59.6	53.0	58.3	57.0	55.7	53.6	52.2	50.3
Other	107.9	109.6	108.2	108.5	109.0	109.5	109.7	110.3
Industrial equipment	120.2	122.5	121.4	120.9	121.1	122.3	123.2	123.4
Transportation and related equipment	116.8	119.2	117.1	117.3	118.4	119.1	119.6	119.6
Other	117.1	119.1	117.7	118.0	118.2	119.1	119.4	119.6
Residential	113.4	117.7	113.8	114.8	115.8	117.2	118.5	119.3
Structures	113.6	118.0	114.0	115.0	116.1	117.5	118.8	119.7
Single family	113.4	118.3	113.9	115.2	116.2	117.3	119.2	120.6
Multifamily	111.3	115.6	111.5	112.5	113.5	114.6	116.4	117.7
Other structures	114.7	118.4	114.9	115.7	116.7	118.7	119.1	119.0
Producers' durable equipment	104.9	105.5	105.2	104.9	104.5	105.4	105.9	106.3
Addenda:								
Price indexes for fixed investment:								
Chain-type annual weights	111.0		111.2	111.5	112.0	112.7	113.3	
Benchmark-years weights	110.3		110.6	110.9	111.4	112.1	112.7	

1. Includes new computers and peripheral equipment only.

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

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

[Index numbers, 1987=100]

Exports of goods and services	113.7	115.5	113.9	114.3	114.7	115.5	115.7	116.0
Merchandise ¹	109.6	110.4	109.7	109.7	110.0	110.5	110.5	111.9
Durable	109.3	110.8	109.4	109.8	110.3	111.1	110.8	111.0
Nondurable	110.2	109.9	110.1	109.5	109.4	109.3	110.0	110.7
Services ¹	123.7	127.6	124.0	125.5	126.2	127.7	128.2	128.3
Receipts of factor income ²	122.5		122.7	123.7	124.9	125.6	126.1	
Imports of goods and services	115.1	114.9	116.3	115.9	114.5	115.6	114.8	114.9
Merchandise ¹	112.1	112.0	113.1	113.1	111.6	112.7	111.8	111.9
Durable	112.8	114.3	113.3	113.5	113.3	114.1	114.3	115.3
Nondurable	110.7	108.0	112.7	112.4	108.6	110.3	107.3	106.0
Services ¹	128.9	128.0	130.4	128.3	127.5	128.2	128.3	127.9
Payments of factor income ³	125.0		125.3	126.6	127.9	128.9	129.6	
Addenda:								
Price indexes for exports of goods and services:								
Chain-type annual weights	112.9		113.0	113.2	113.4	114.1	114.1	
Benchmark-years weights	112.3		112.4	112.6	112.9	113.5	113.5	
Price indexes for imports of goods and services:								
Chain-type annual weights	113.4		114.4	114.1	112.5	113.4	112.5	
Benchmark-years weights	112.3		113.3	113.0	111.5	112.4	111.5	

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

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

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

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

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			
			III	IV	I	II	III	IV
Exports of merchandise	109.6	110.4	109.7	109.7	110.0	110.5	110.5	110.9
Foods, feeds, and beverages	114.5	116.4	112.6	111.7	113.1	113.1	118.2	121.0
Industrial supplies and materials	108.3	109.2	109.4	108.8	109.1	110.4	109.1	108.3
Durable goods	116.5	125.2	118.2	118.7	122.3	127.5	126.2	124.9
Nondurable goods	104.6	101.9	105.4	104.4	103.1	102.6	101.3	100.8
Capital goods, except automotive	105.8	105.9	105.7	105.8	105.8	106.0	105.7	106.2
Civilian aircraft, engines, and parts ...	122.1	125.6	122.4	123.5	124.6	125.4	125.1	127.2
Computers, peripherals, and parts	58.9	52.1	57.4	56.3	54.9	52.7	51.2	49.7
Other	116.5	118.0	116.7	117.0	117.1	117.9	118.1	118.8
Automotive vehicles, engines, and parts	112.3	113.2	112.3	113.0	113.3	113.3	113.1	113.4
Consumer goods, except automotive	118.0	119.9	117.8	118.8	119.6	119.7	119.7	120.4
Durable goods	114.5	115.0	113.8	115.0	115.4	114.9	114.8	115.1
Nondurable goods	120.9	124.1	121.4	122.1	123.3	123.9	124.1	125.0
Other	113.0	113.9	113.0	113.4	113.4	114.1	113.8	114.3
Durable goods	113.0	113.9	113.0	113.4	113.4	114.1	113.8	114.3
Nondurable goods	113.0	113.9	113.0	113.4	113.4	114.1	113.8	114.3
Imports of merchandise	112.1	112.0	113.1	113.1	111.6	112.7	111.8	111.9
Foods, feeds, and beverages	108.1	108.1	106.3	107.2	105.7	106.6	108.8	111.3
Industrial supplies and materials, except petroleum and products	114.2	114.2	114.6	114.4	114.8	115.0	113.4	113.7
Durable goods	115.3	116.7	116.2	114.7	117.6	117.4	115.5	116.4
Nondurable goods	113.1	111.6	113.0	114.0	111.9	112.4	111.1	110.9
Petroleum and products	100.8	91.4	107.7	104.0	95.5	99.1	88.5	82.3
Capital goods, except automotive	107.3	108.1	108.1	108.0	106.9	107.7	108.6	109.0
Civilian aircraft, engines, and parts ...	122.2	125.6	122.4	123.5	124.6	125.4	125.2	127.2
Computers, peripherals, and parts	61.4	55.6	60.6	59.0	57.8	56.3	55.0	53.3
Other	116.5	118.4	117.6	117.8	116.5	117.8	119.3	120.1
Automotive vehicles, engines, and parts	114.8	116.9	114.9	115.9	115.1	116.5	117.0	119.1
Consumer goods, except automotive	118.3	119.4	119.0	119.8	118.8	119.7	119.5	119.6
Durable goods	116.9	118.4	117.5	117.9	117.9	118.7	118.4	118.6
Nondurable goods	120.1	120.6	120.8	122.3	119.8	120.9	120.8	120.8
Other	114.7	115.9	115.0	115.8	114.8	115.8	116.0	116.9
Durable goods	114.7	115.9	115.0	115.8	114.8	115.8	116.0	116.9
Nondurable goods	114.7	115.9	115.0	115.8	114.8	115.8	116.0	116.9
Addenda:								
Exports of agricultural products ¹	111.5	113.5	110.3	109.8	111.1	110.5	115.0	117.3
Exports of nonagricultural products ...	109.4	110.1	109.6	109.7	109.8	110.5	109.9	110.0
Imports of nonpetroleum products	113.4	114.4	113.7	114.2	113.4	114.3	114.4	115.3

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

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			
			III	IV	I	II	III	IV
Government purchases	120.6	124.2	121.0	121.7	123.2	124.0	124.8	124.8
Federal	121.8	126.1	122.2	122.8	125.1	125.8	126.8	126.6
National defense	122.3	127.1	122.8	123.5	125.9	126.8	127.9	127.7
Durable goods	113.7	117.7	113.6	115.3	117.1	117.9	117.9	117.8
Nondurable goods	115.6	113.1	118.5	117.8	113.0	115.9	112.6	111.0
Services	127.1	132.8	127.8	128.0	131.2	132.1	134.0	133.8
Compensation of employees	134.6	142.9	135.4	135.1	140.6	141.7	144.7	144.7
Military	136.6	143.6	137.6	136.6	142.3	143.3	143.9	145.0
Civilian	130.6	141.5	130.8	132.0	137.1	138.3	146.5	144.1
Other services	116.4	118.4	117.1	117.8	117.8	118.5	118.8	118.4
Structures	114.0	117.7	113.2	116.2	117.2	117.4	117.3	118.7
Nondefense	120.2	122.9	120.3	120.9	122.5	122.5	123.4	123.2
Durable goods	101.2	93.2	101.7	96.9	94.0	94.0	94.1	90.6
Nondurable goods .....	.....	.....	.....	.....	.....	.....	.....	.....
Commodity Credit Corporation inventory change .....	.....	.....	.....	.....	.....	.....	.....	.....
Other nondurables	107.9	105.6	108.4	106.0	106.0	106.3	106.0	104.1
Services	124.5	128.8	124.5	125.5	128.0	128.3	129.3	129.7
Compensation of employees	129.3	136.1	129.4	130.6	135.2	135.7	136.4	137.0
Other services	117.9	118.8	117.8	118.4	118.1	118.1	119.3	119.7
Structures	113.7	116.5	113.9	114.8	115.1	116.2	116.8	117.7
State and local	119.6	122.8	120.0	120.9	121.8	122.7	123.2	123.4
Durable goods	113.2	115.4	113.5	113.6	114.5	115.4	115.8	115.7
Nondurable goods	115.4	116.1	116.6	114.9	116.2	117.9	115.6	114.5
Services	122.6	126.0	122.9	124.0	125.0	125.7	126.6	126.8
Compensation of employees	127.5	132.1	127.9	129.2	130.6	131.6	132.7	133.5
Other services	69.3	59.5	68.5	67.0	63.9	60.3	60.1	53.5
Structures	109.5	113.1	109.9	111.6	111.5	113.0	113.3	114.5
Addenda:								
Price indexes for government purchases:								
Chain-type annual weights	120.0	.....	120.3	121.0	122.4	123.2	123.9	.....
Benchmark-years weights	120.2	.....	120.5	121.3	122.6	123.5	124.2	.....
Price indexes for Federal national defense purchases:								
Chain-type annual weights	121.2	.....	121.6	122.2	124.4	125.3	126.6	.....
Benchmark-years weights	121.2	.....	121.6	122.2	124.5	125.4	126.6	.....
Price indexes for Federal nondefense purchases:								
Chain-type annual weights	119.1	.....	119.2	119.7	121.6	121.8	122.5	.....
Benchmark-years weights	120.5	.....	120.6	121.2	123.0	123.3	124.0	.....
Price indexes for State and local purchases:								
Chain-type annual weights	119.6	.....	119.9	120.8	121.7	122.6	123.1	.....
Benchmark-years weights	119.5	.....	119.9	120.7	121.6	122.5	123.0	.....

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			
			III	IV	I	II	III	IV
National defense purchases ...	122.3	127.1	122.8	123.5	125.9	126.8	127.9	127.7
Durable goods	113.7	117.7	113.6	115.3	117.1	117.9	117.9	117.8
Military equipment	114.4	118.8	114.4	116.2	118.2	119.1	119.0	119.0
Aircraft	118.4	125.7	118.5	121.8	124.8	125.3	127.0	125.7
Missiles	98.6	98.4	98.4	97.4	99.1	99.9	96.8	98.0
Ships	118.4	121.7	118.3	119.2	120.7	121.4	122.7	122.1
Vehicles	120.9	128.5	121.0	124.1	126.0	130.8	126.9	130.1
Electronic equipment	109.2	109.8	109.5	109.6	109.7	109.6	109.6	110.1
Other	116.6	118.1	116.5	117.9	118.2	118.2	117.9	118.3
Other durable goods	106.5	105.9	106.3	106.3	106.3	106.2	105.8	105.5
Nondurable goods	115.6	113.1	118.5	117.8	113.0	115.9	112.6	111.0
Petroleum products	119.7	112.5	130.1	124.2	111.1	119.7	110.8	108.4
Ammunition	108.5	111.3	106.7	111.5	111.3	111.1	112.6	110.1
Other nondurable goods	117.9	115.5	117.0	116.8	116.7	116.2	114.3	114.6
Services	127.1	132.8	127.8	128.0	131.2	132.1	134.0	133.8
Compensation of employees	134.6	142.9	135.4	135.1	140.6	141.7	144.7	144.7
Military	136.6	143.6	137.6	136.6	142.3	143.3	143.9	145.0
Civilian	130.6	141.5	130.8	132.0	137.1	138.3	146.5	144.1
Other services	116.4	118.4	117.1	117.8	117.8	118.5	118.8	118.4
Contractual research and development	111.9	113.1	112.3	113.5	113.8	113.6	113.2	111.7
Installation support ¹	113.5	115.6	114.5	114.5	113.8	115.4	116.8	116.6
Weapons support ²	120.5	124.1	121.1	122.1	123.1	124.0	124.4	125.0
Personnel support ³	134.7	135.9	136.6	136.8	134.9	136.4	136.0	136.5
Transportation of material	104.6	105.0	104.1	104.5	104.9	104.8	105.8	104.5
Travel of persons	110.6	116.2	108.5	111.3	115.6	115.6	116.2	117.4
Other .....	.....	.....	.....	.....	.....	.....	.....	.....
Structures	114.0	117.7	113.2	116.2	117.2	117.4	117.3	118.7
Military facilities	106.1	108.3	104.4	107.5	108.1	108.0	107.7	109.4
Other	128.6	134.9	129.4	132.2	133.9	134.8	135.0	135.9
Addenda:								
Price indexes for national defense purchases:								
Chain-type annual weights	121.2	.....	121.6	122.2	124.4	125.3	126.6	.....
Benchmark-years weights	121.2	.....	121.6	122.2	124.5	125.4	126.6	.....

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

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

[Index numbers, 1987=100]

Gross domestic product	121.1	124.2	121.2	122.2	123.3	124.0	124.5	124.9
Plus: Receipts of factor income from the rest of the world ¹	122.5	.....	122.7	123.7	124.9	125.6	126.1	.....
Less: Payments of factor income to the rest of the world ²	124.8	.....	125.1	126.3	127.7	128.4	129.2	.....
Equals: Gross national product	121.1	.....	121.2	122.2	123.3	124.0	124.4	.....
Less: Consumption of fixed capital	110.6	112.1	111.0	111.0	111.5	111.9	112.5	112.6
Equals: Net national product	122.5	.....	122.7	123.6	124.8	125.5	126.0	.....
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises	131.3	132.1	132.9	131.0	127.7	132.1	135.1	133.6
Statistical discrepancy	119.8	.....	119.9	120.9	121.8	122.5	122.9	.....
Equals: National income	121.6	.....	121.7	122.9	124.5	124.9	125.1	.....
Addenda:								
Net domestic product	122.5	125.8	122.7	123.7	124.9	125.6	126.1	126.5
Domestic income	121.7	.....	121.7	123.0	124.6	125.0	125.2	.....

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

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

[Index numbers, 1987=100]

	1992	1993	Seasonally adjusted					
			1992		1993			
			III	IV	I	II	III	IV
Gross domestic product	121.1	124.2	121.2	122.2	123.3	124.0	124.5	124.9
Business	119.8	122.6	119.9	120.9	121.8	122.5	122.9	123.3
Nonfarm	120.1	122.8	120.2	121.2	122.1	122.8	123.1	123.4
Nonfarm less housing	119.5	122.4	118.9	120.8	121.6	122.3	122.7	122.9
Housing	125.5	127.3	132.5	124.5	126.9	126.8	127.4	128.0
Farm	106.1	110.1	104.3	104.9	107.1	109.3	108.3	115.5
Statistical discrepancy	119.8	122.6	119.9	120.9	121.8	122.5	122.9	123.3
Households and institutions	127.7	131.9	128.2	129.8	131.3	131.3	131.9	133.2
Private households	115.7	119.4	116.4	117.4	117.9	118.7	120.0	121.1
Nonprofit institutions	128.2	132.5	128.7	130.4	131.9	131.9	132.4	133.7
General government	129.0	134.4	129.4	130.3	132.8	133.8	135.1	135.8
Federal	132.8	140.4	133.3	133.5	138.6	139.5	141.8	141.9
State and local	127.4	131.9	127.7	129.0	130.4	131.4	132.5	133.3
Addendum:								
Gross domestic business product less housing	119.3	.....	.....	.....	.....	.....	.....	.....

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

[Dollars]

Current-dollar cost and profit per unit of constant-dollar gross domestic product¹ ..	1.149	.....	1.149	1.154	1.162	1.164	1.164	.....
Consumption of fixed capital .....	.125	.....	.129	.122	.124	.123	.124	.....
Net domestic product	1.024	.....	1.021	1.032	1.037	1.041	1.039	.....
Indirect business tax and nontax liability plus business transfer payments less subsidies .....	.116	.....	.116	.116	.116	.118	.118	.....
Domestic income .....	.908	.....	.905	.916	.921	.923	.922	.....
Compensation of employees .....	.762	.....	.762	.761	.772	.770	.769	.....
Corporate profits with inventory valuation and capital consumption adjustments .....	.099	.....	.096	.109	.102	.108	.108	.....
Profits tax liability .....	.035	.....	.034	.037	.037	.040	.038	.....
Profits after tax with inventory valuation and capital consumption adjustments .....	.064	.....	.062	.072	.065	.068	.070	.....
Net interest .....	.048	.....	.047	.046	.047	.046	.045	.....

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

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

[Percent]

	1992	1993	Seasonally adjusted at annual rates						
			1992		1993				
			III	IV	I	II	III	IV	
Nondefense:									
Current dollars	9.4	3.6	5.8	1.8	3.6	6.2	4.9	-5.5	
Quantity indexes:									
Fixed 1987 weights	6.2	.6	4.4	-4	-3.2	5.5	2.5	-7.2	
Chain-type annual weights	6.2		4.5	-1	-3.5	5.5	2.9		
Benchmark-years weights	6.2		4.6	-1	-3.5	5.5	2.9		
Price indexes:									
Fixed 1987 weights	3.1	2.3	1.2	1.9	5.7	0	2.9	-7	
Chain-type annual weights	3.1		.9	1.9	6.3	.8	2.3		
Benchmark-years weights	3.1		1.1	1.9	6.3	.8	2.3		
State and local:									
Current dollars	4.5	4.5	3.0	3.1	3.3	8.3	5.8	2.5	
Quantity indexes:									
Fixed 1987 weights	2.2	2.0	1.2	0	.3	5.6	4.5	1.6	
Chain-type annual weights	2.1		1.2	.1	.4	5.2	4.2		
Benchmark-years weights	2.1		1.2	.1	.4	5.2	4.2		
Price indexes:									
Fixed 1987 weights	2.5	2.6	1.7	2.9	3.0	2.9	1.8	.7	
Chain-type annual weights	2.4		1.8	2.9	2.9	3.0	1.6		
Benchmark-years weights	2.4		1.8	2.9	2.9	3.0	1.6		
Addenda:									
Final sales of domestic product:									
Current dollars	5.2	5.4	4.9	9.1	2.9	5.7	4.8	7.1	
Quantity indexes:									
Fixed 1987 weights	2.3	2.8	3.7	5.8	-8	3.2	3.4	5.4	
Chain-type annual weights	2.0		3.4	5.6	-1.1	3.0	2.7		
Benchmark-years weights	2.1		3.4	5.5	-1.1	3.0	2.7		
Price indexes:									
Fixed 1987 weights	3.3	3.1	2.5	3.2	4.3	2.8	2.1	2.2	
Chain-type annual weights	3.1		2.0	2.7	4.1	2.7	2.1		
Benchmark-years weights	3.2		2.3	2.8	4.1	2.7	2.1		
Gross domestic purchases:									
Current dollars	5.7	6.1	4.9	9.1	5.0	5.4	4.8	7.7	
Quantity indexes:									
Fixed 1987 weights	2.9	3.8	3.8	5.4	2.5	3.1	3.7	6.5	
Chain-type annual weights	2.5		3.0	5.1	1.7	2.7	3.0		
Benchmark-years weights	2.7		3.3	5.1	1.7	2.7	3.0		
Price indexes:									
Fixed 1987 weights	3.3	2.9	3.0	2.8	3.5	2.9	1.8	2.1	
Chain-type annual weights	3.1		2.7	2.7	3.4	2.8	1.7		
Benchmark-years weights	3.2		2.8	2.7	3.4	2.8	1.7		
Final sales to domestic purchasers:									
Current dollars	5.4	6.0	5.2	9.0	3.5	6.8	5.2	7.4	
Quantity indexes:									
Fixed 1987 weights	2.5	3.7	4.0	5.5	.8	4.4	4.2	6.0	
Chain-type annual weights	2.2		3.4	5.2	.3	4.0	3.5		
Benchmark-years weights	2.4		3.6	5.2	.3	4.0	3.5		
Price indexes:									
Fixed 1987 weights	3.3	2.9	3.0	2.8	3.5	2.9	1.8	2.1	
Chain-type annual weights	3.1		2.7	2.7	3.3	2.8	1.7		
Benchmark-years weights	3.2		2.8	2.7	3.3	2.8	1.7		
Gross national product:									
Current dollars	5.4		4.8	8.5	4.6	4.2	4.8		
Quantity indexes:									
Fixed 1987 weights	2.5		3.6	5.0	1.0	1.9	3.3		
Chain-type annual weights	2.2		3.2	4.9	.6	1.7	2.7		
Benchmark-years weights	2.3		3.3	4.8	.6	1.7	2.7		
Price indexes:									
Fixed 1987 weights	3.3		2.5	3.1	4.3	2.8	2.1		
Chain-type annual weights	3.1		2.0	2.7	4.1	2.7	2.1		
Benchmark-years weights	3.2		2.2	2.8	4.1	2.7	2.1		
Command-basis gross national product:									
Quantity index, fixed 1987 weights ..	2.7		3.6	4.7	1.9	1.9	3.7		
Disposable personal income:									
Current dollars	6.4	4.6	3.4	15.1	-5.1	8.5	2.7	7.6	
1987 dollars	2.9	1.9	1.9	10.6	-7.8	5.8	1.6	5.2	

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

[Dollars]

	1992	1993	Seasonally adjusted at annual rates						
			1992		1993				
			III	IV	I	II	III	IV	
Current dollars:									
Gross domestic product	23,637	24,681	23,685	24,143	24,346	24,538	24,732	25,105	
Gross national product	23,665		23,716	24,134	24,347	24,536	24,756		
Personal income ..	20,139	20,861	20,090	20,767	20,430	20,837	20,930	21,245	
Disposable personal income	17,615	18,222	17,577	18,153	17,876	18,196	18,265	18,549	
Personal consumption expenditures ...	16,205	17,001	16,249	16,589	16,704	16,907	17,088	17,303	
Durable goods	1,947	2,082	1,958	2,013	2,004	2,062	2,095	2,166	
Nondurable goods	5,092	5,228	5,104	5,190	5,192	5,215	5,229	5,276	
Services	9,166	9,691	9,187	9,385	9,508	9,631	9,763	9,860	
Constant (1987) dollars:									
Gross domestic product	19,518	19,874	19,537	19,754	19,744	19,786	19,869	20,097	
Gross national product	19,548		19,569	19,755	19,754	19,793	19,898		
Disposable personal income	14,219	14,329	14,169	14,490	14,163	14,326	14,341	14,484	
Personal consumption expenditures ...	13,081	13,369	13,098	13,241	13,234	13,312	13,416	13,511	
Durable goods	1,787	1,896	1,794	1,845	1,835	1,878	1,907	1,966	
Nondurable goods	4,161	4,213	4,154	4,216	4,184	4,200	4,226	4,242	
Services	7,133	7,259	7,149	7,179	7,216	7,234	7,283	7,303	
Population (mid-period, thousands)	255,472	258,256	255,836	256,569	257,197	257,872	258,612	259,343	

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

Table 8.3.—Auto Output

[Billions of dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Auto output	133.2	142.1	133.0	136.4	142.8	145.9	134.6	145.1
Final sales	133.5	137.3	132.4	137.2	131.4	140.8	137.0	139.9
Personal consumption expenditures ..	126.7	134.2	125.4	130.9	127.7	133.6	135.4	140.3
Producers' durable equipment	37.6	38.8	36.9	37.1	36.9	42.2	38.9	37.3
Net purchases of used autos	39.5	43.0	39.5	40.6	40.9	43.3	45.2	42.5
New autos	87.3	91.3	85.8	90.3	86.8	90.3	90.2	97.8
Net purchases of used autos	24.6	27.9	24.9	25.6	24.9	30.4	28.5	27.7
Net exports	-32.8	-37.8	-32.1	-32.6	-35.3	-37.0	-39.3	-39.5
Exports	14.3	14.4	15.2	15.9	14.5	14.9	13.2	15.1
Imports	47.0	52.2	47.4	48.4	49.8	51.8	52.5	54.6
Government purchases	2.0	2.0	2.2	1.8	2.1	2.0	2.0	1.8
Change in business inventories of new and used autos	-3	4.8	.6	-8	11.4	5.0	-2.4	5.2
New .....	.3	3.3	1.0	-7	12.0	1.6	-3.4	3.1
Used	-6	1.5	-4	-1	-7	3.5	1.0	2.1
Addenda:								
Domestic output of new autos ¹	104.1	110.7	103.1	108.0	114.6	111.9	99.3	116.8
Sales of imported new autos ²	60.1	64.1	60.1	60.5	59.6	65.5	69.6	61.8

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

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

Table 8.4.—Auto Output in Constant Dollars

[Billions of 1987 dollars]

	1992	1993	Seasonally adjusted at annual rates					
			1992		1993			
			III	IV	I	II	III	IV
Auto output	117.4	120.8	116.8	120.1	122.5	123.4	113.5	123.7
Final sales	117.8	117.2	116.2	119.6	114.0	121.2	116.3	117.3
Personal consumption expenditures ..	113.9	115.4	112.0	115.8	112.2	115.5	115.4	118.6
Producers' durable equipment	32.8	34.5	32.3	32.7	32.6	37.5	34.6	33.1
Net purchases of used autos	36.0	36.0	35.7	35.9	35.7	36.6	37.2	34.3
New autos	77.9	79.5	76.3	79.9	76.5	78.9	78.2	84.2
Net purchases of used autos	22.7	23.6	22.6	22.8	21.9	26.0	23.9	22.8
Net exports	-30.5	-34.4	-30.0	-30.4	-32.6	-33.5	-35.4	-35.8
Exports	12.7	12.7	13.5	14.1	12.8	13.1	11.6	13.3
Imports	43.3	47.1	43.5	44.5	45.5	46.6	47.0	49.2
Government purchases	1.7	1.7	1.9	1.5	1.8	1.7	1.7	1.5
Change in business inventories of new and used autos	-4	3.6	.6	.5	8.5	2.2	-2.9	6.3
New .....	.1	2.3	1.0	.6	9.1	-.7	-3.7	4.6
Used	-6	1.2	-4	-1	-6	3.0	.8	1.7
Addenda:								
Domestic output of new autos ¹	92.8	96.2	91.8	96.8	99.9	96.5	85.8	102.6
Sales of imported new autos ²	53.6	55.9	53.5	53.6	52.5	57.3	60.4	53.2

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

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

Table 8.5.—Truck Output

[Billions of dollars]

	1992	1993	1992	1993	1992	1993	1992	1993
Truck output ¹	83.3	101.2	81.4	93.7	100.0	97.0	98.0	109.8
Final sales	82.2	101.8	82.3	92.0	92.4	102.0	99.9	112.8
Personal consumption expenditures ..	43.3	52.5	44.2	47.8	49.7	52.0	50.0	58.2
Producers' durable equipment	37.1	48.9	37.8	41.1	45.3	48.2	48.6	53.3
Net exports	-5.1	-5.5	-4.8	-4.6	-6.7	-6.4	-4.8	-4.1
Exports	5.6	5.8	5.4	6.0	5.2	5.7	5.4	6.9
Imports	10.7	11.3	10.2	10.7	11.9	12.1	10.2	11.1
Government purchases	6.9	5.9	5.1	7.7	4.1	8.2	6.0	5.4
Change in business inventories	1.2	-5	-9	1.7	7.7	-5.0	-1.9	-3.0

1. Includes new trucks only.

Table 8.6.—Truck Output in Constant Dollars

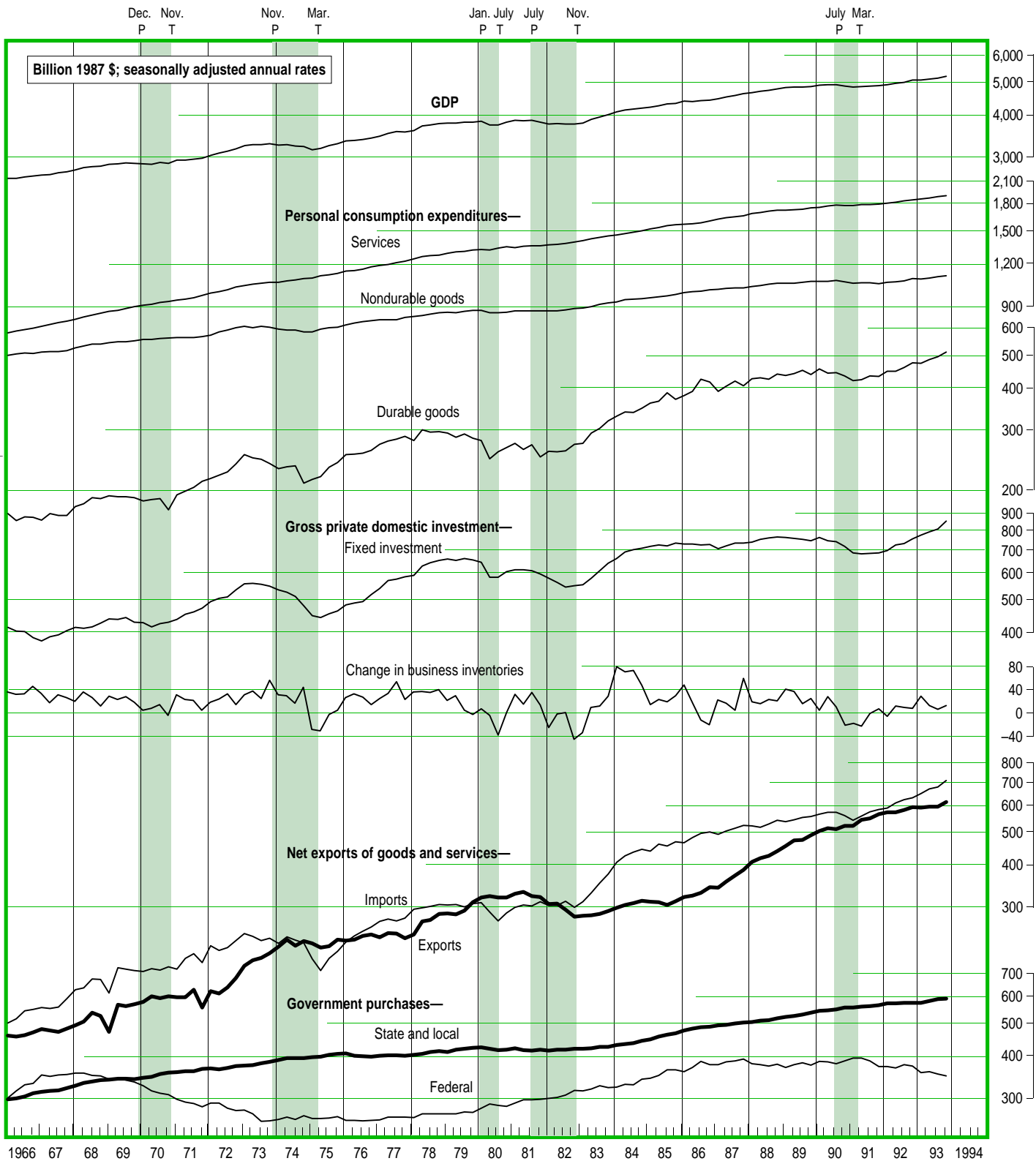
[Billions of 1987 dollars]

	1992	1993	1992	1993	1992	1993	1992	1993
Truck output ¹	71.4	83.4	69.3	79.5	83.7	80.2	79.9	89.6
Final sales	70.4	83.7	70.1	78.1	77.3	84.2	81.4	92.0
Personal consumption expenditures ..	37.1	43.4	37.6	40.7	42.0	43.3	40.9	47.3
Producers' durable equipment	31.8	40.1	32.2	34.8	37.6	39.6	39.5	43.6
Net exports	-4.4	-4.6	-4.1	-3.9	-5.7	-5.4	-4.0	-3.3
Exports	4.8	4.8	4.6	5.1	4.4	4.6	4.4	5.7
Imports	9.1	9.4	8.6	9.1	10.1	10.0	8.4	9.0
Government purchases	5.9	4.9	4.4	6.6	3.4	6.7	4.9	4.4
Change in business inventories	1.0	-4	-8	1.4	6.3	-4.1	-1.5	-2.4

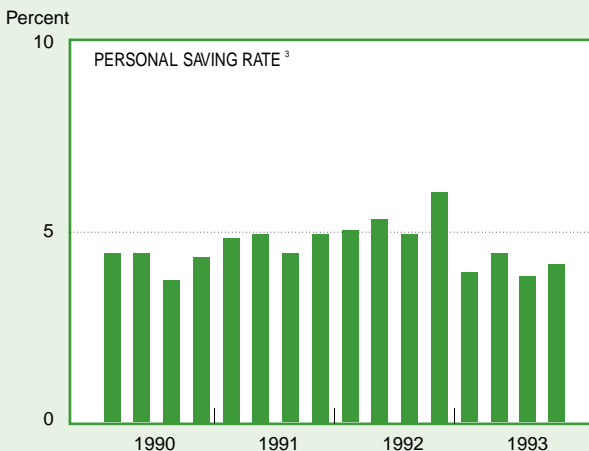
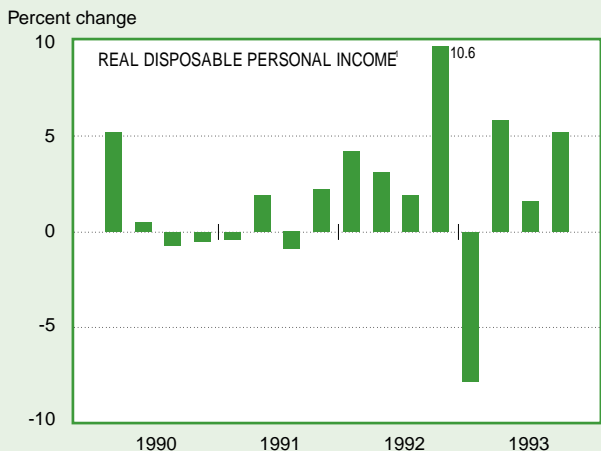
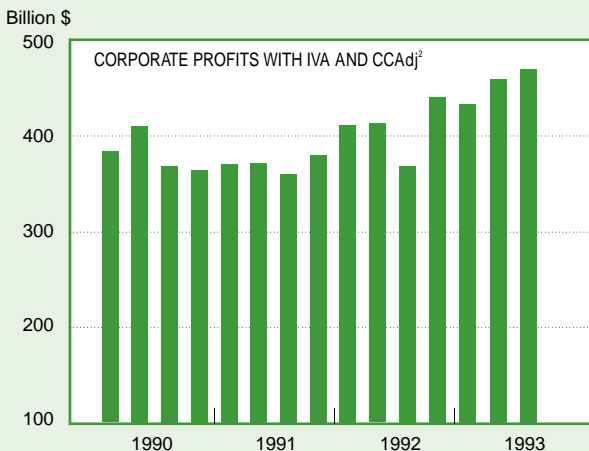
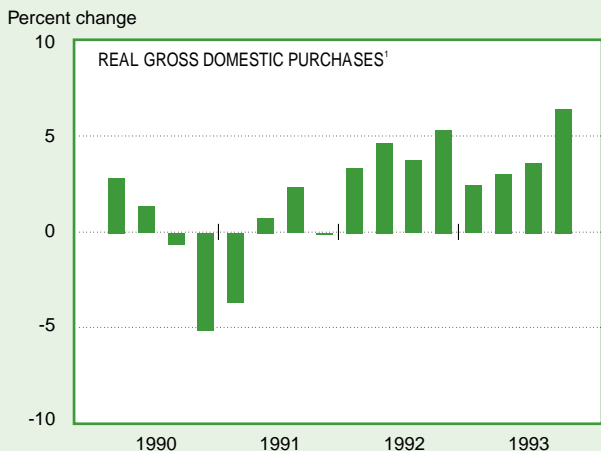
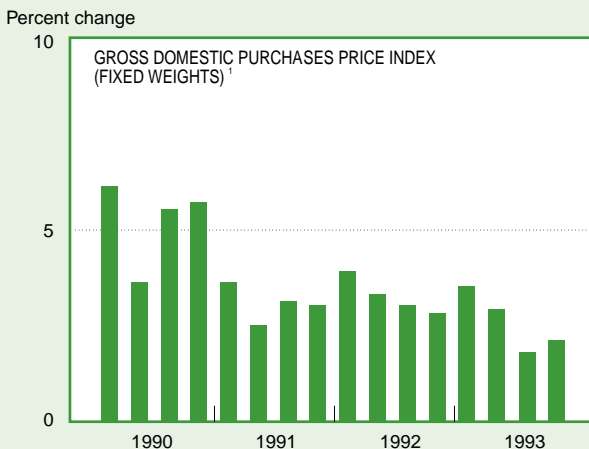
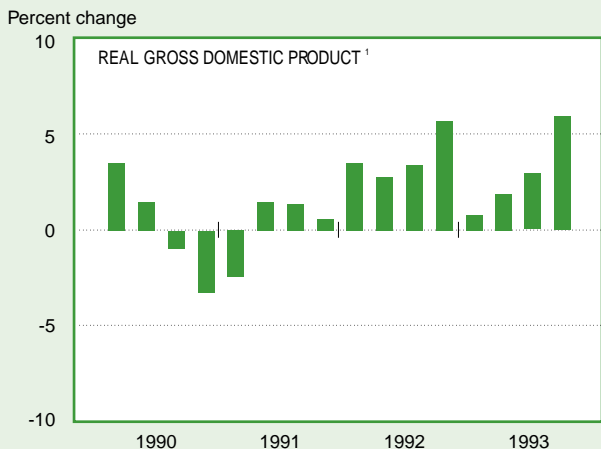
1. Includes new trucks only.

NIPA Charts

REAL GDP AND ITS COMPONENTS: TRENDS AND CYCLES



SELECTED SERIES: RECENT QUARTERS



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

Personal Income by State and Region, Third Quarter 1993

This article was written by Howard L. Friedenberg and Duke D. Tran. The estimates of State personal income were prepared by the Regional Economic Measurement Division.

PERSONAL INCOME in the Nation increased a modest 0.7 percent in the third quarter of 1993 after increasing 2.3 percent in the second.¹ The slowdown was partly attributable to reductions in farm proprietors' income that resulted from lower farm subsidy payments and from floods in the Midwest and drought in the Southeast, which caused crop damage and uninsured losses to farm residential and business property. In addition, the floods affected other components of personal income: Nonfarm proprietors' income was reduced by uninsured losses

to nonfarm business property, and rental income of persons was reduced by uninsured losses to nonfarm residential property.

The large second-quarter increase in personal income mostly reflected the continued effect of the payment of bonuses in the fourth quarter of 1992 that typically would have been paid in the first quarter of 1993. As a result of the accelerated bonus payments, personal income jumped in the fourth quarter, plummeted in the first, and rebounded sharply in the second.

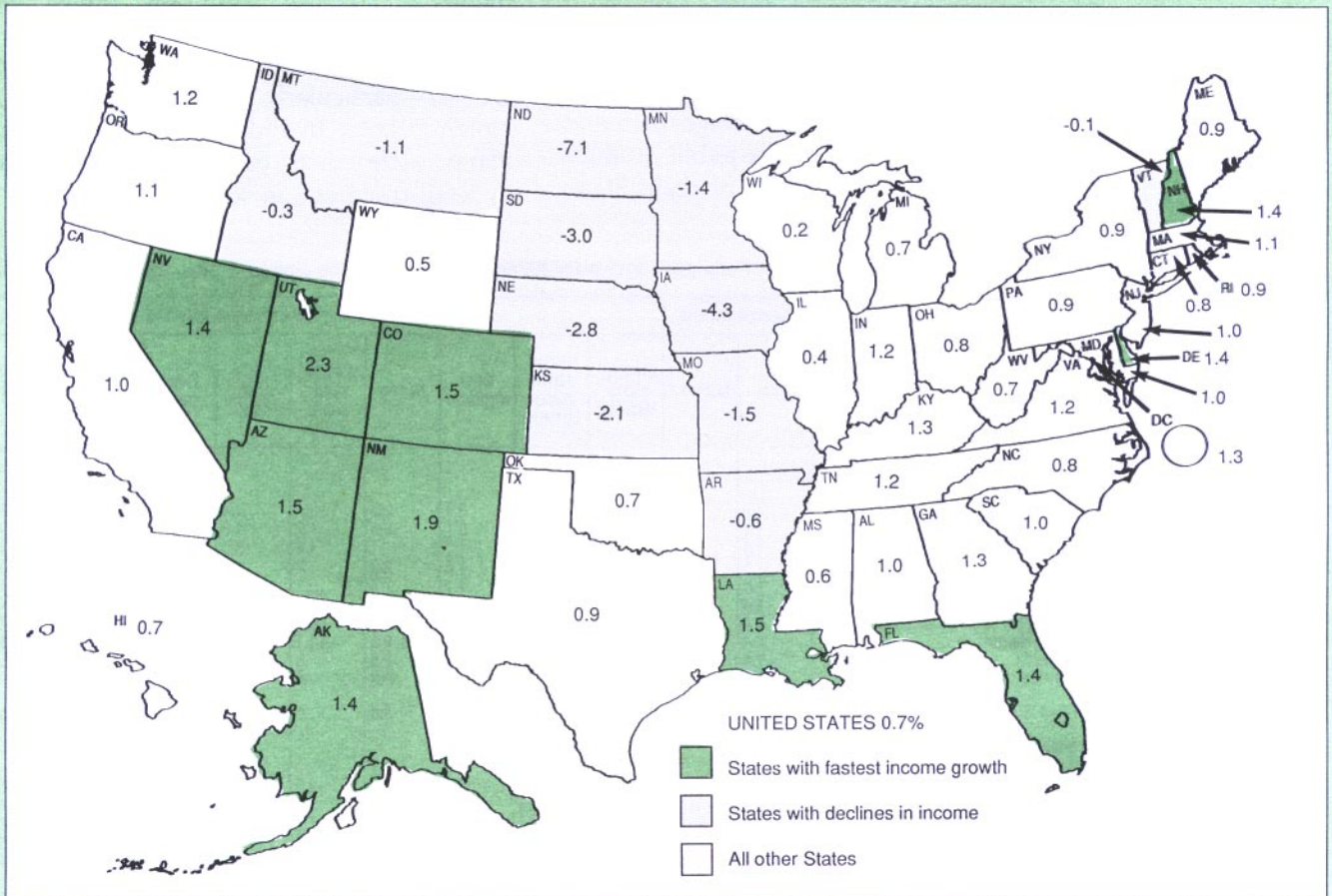
In the third quarter, the 0.7-percent increase in personal income exceeded the 0.4-percent

1. In this article, percent changes are not at annual rates.

1. In this article, percent changes are not at annual rates.

CHART 1

Total Personal Income: Percent Change, 1993:II – 1993:III



increase in U.S. prices (measured by the fixed-weighted price index for personal consumption expenditures). The increase in U.S. prices was the smallest since the second quarter of 1986.

By State, personal income in the third quarter increased in 39 States and declined in 11 States. In all of the 39 States except Illinois and Wisconsin, the increase in personal income exceeded the 0.4-percent increase in U.S. prices.

The remainder of this article focuses on the States with the fastest growth in personal income and on the States with declines in personal income. These two groups of States accounted for relatively small shares of the Nation's total personal income, with the first group accounting for about 12 percent and the second, for about 8 percent. **Tables 1 and 2** at the end of the article contain the quarterly estimates of total and non-farm State personal income, beginning with the first quarter of 1990.

States with the fastest income growth

Increases in personal income in 10 States were at least twice the U.S. average (**table A**). These States comprise six western States, two southern States, and two eastern States (**chart 1**).

In Utah, New Mexico, Arizona, Colorado, Alaska, and Nevada, personal income growth was boosted by average or above-average increases in payrolls in the transportation-public utilities group and in retail trade. In all of these States

except Alaska, personal income was boosted by average or above-average increases in payrolls in both the finance-insurance-real estate group and services. In addition, payroll increases were well above average in durables and nondurables manufacturing in Utah, New Mexico, and Colorado, in construction in Utah, New Mexico, and Alaska, and in mining in New Mexico.

In Louisiana, Florida, Delaware, and New Hampshire, personal income growth was boosted by above-average increases in payrolls in durables manufacturing and in government.

States with declines in income

In 11 States, declines in personal income ranged from 0.1 percent in Vermont to 7.1 percent in North Dakota. These States comprise the seven Plains States and Idaho, Arkansas, Montana, and Vermont.

In North Dakota, Iowa, South Dakota, Nebraska, Kansas, Missouri, and Minnesota, personal income was reduced by crop damage and uninsured property losses resulting from the floods and by lower farm subsidy payments. Damage from the floods reduced farm income—particularly in Minnesota, Missouri, and Iowa—and slowed nonfarm income growth—particularly in Missouri, Iowa, and North Dakota. In addition, in most of the Plains States, increases in payrolls were below average in retail trade and in services.

Table A.—Percent Change in Personal Income for Selected States and the United States, 1993:II-1993:III

Rank		Personal income		Wage and salary disbursements (payrolls)									
		Total	Nonfarm	Durables manufacturing	Nondurables manufacturing	Construction	Mining	Transportation and public utilities	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services	Government
	States with fastest growth in total personal income:												
1	Utah	2.3	2.5	3.9	3.3	3.6	2.2	3.4	1.4	1.6	5.6	3.1	2.7
2	New Mexico	1.9	2.4	5.3	7.1	6.1	6.5	1.2	1.8	1.8	3.1	2.9	2.8
3	Arizona	1.5	1.7	-3	.2	1.6	.1	1.4	3.0	1.9	-2.0	2.4	2.5
4	Louisiana	1.5	1.9	3.6	2.2	1.3	2.0	.2	1.6	.9	1.2	1.3	5.0
5	Colorado	1.5	1.8	3.1	4.9	1.1	.7	2.2	1.5	.9	3.2	2.4	1.3
6	Alaska	1.4	1.4	.5	2.7	6.6	1.7	.7	-.5	2.9	1.7	1.4	.5
7	Delaware	1.4	1.6	6.8	.1	1.0	2.8	1.0	.5	1.5	2.6	1.7	2.0
8	New Hampshire	1.4	1.4	2.0	.7	2.1	-9.3	-1.1	1.3	-1.1	1.7	1.5	4.2
9	Nevada	1.4	1.4	.5	-4.8	.5	2.5	.8	.5	1.6	3.7	1.5	.6
10	Florida	1.4	1.5	2.7	.4	1.2	-6.9	.3	1.5	1.4	1.8	2.0	1.3
	United States	.7	1.2	.1	.4	1.8	1.5	.7	.8	.8	1.9	1.5	1.1
	States with declines in total personal income:												
40	Vermont	-1	0	-6.5	1.3	-2.9	-10.7	-2.9	-.5	.1	.9	.6	.4
41	Idaho	-3	.9	-1.3	1.3	-1.1	-8	.7	1.3	1.0	1.5	1.4	1.5
42	Arkansas	-6	1.2	-6	1.4	2.6	2.0	1.2	.8	1.4	2.2	1.8	.1
43	Montana	-1.1	1.2	-2.4	1.8	-1.6	-4	-4	1.2	1.2	1.4	2.8	2.3
44	Minnesota	-1.4	1.2	1.0	-8	1.6	-1.5	.6	.9	.8	3.2	2.4	1.8
45	Missouri	-1.5	.3	-1.8	1.3	1.7	-4	1.4	.7	.5	1.4	1.0	1.1
46	Kansas	-2.1	1.0	1.9	2.0	2.6	.4	1.2	1.4	.3	2.1	1.8	.4
47	Nebraska	-2.8	1.3	4.9	3.1	3.5	4.4	.4	-1.0	.4	2.0	.7	2.5
48	South Dakota	-3.0	1.0	.9	3.4	2.7	2.3	1.4	.9	1.7	2.9	1.0	1.9
49	Iowa	-4.3	.4	.8	-1.1	5.9	4.6	1.4	2.9	.4	2.2	.8	2.0
50	North Dakota	-7.1	.9	3.9	2.0	1.9	6.5	1.1	1.5	2.0	2.3	1.8	2.0

In Idaho, Arkansas, and Montana, personal income was reduced by lower farm subsidy payments and by payroll declines in durables manufacturing. In addition, in Idaho and Montana, payrolls declined in construction and in mining.

In Vermont, changes in payrolls were below average in all major nonfarm industries except nondurables manufacturing.

Data Availability

Quarterly estimates for the years 1969–89 are available from the Regional Economic Information System, Regional Economic Measurement Division, BE-55, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230, or call (202) 606–5360.


Tables 1 and 2 follow. 

Table 1.—Total Personal Income, States and Regions

[Millions of dollars, seasonally adjusted at annual rates]

State and region	1990				1991				1992				1993			Percent change	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I ^r	II ^r	III ^{p3}	1993:II-1993:III	1992:III-1993:III
United States¹	4,570,006	4,631,917	4,683,970	4,742,587	4,764,545	4,815,371	4,842,334	4,911,942	5,002,853	5,079,491	5,124,684	5,315,440	5,241,308	5,359,978	5,399,494	.7	5.4
New England	287,590	290,753	293,410	293,640	293,750	295,655	295,680	299,245	302,617	306,754	310,222	320,614	312,640	320,602	323,615	.9	4.3
Connecticut	82,015	83,235	84,330	84,914	83,863	84,596	84,409	85,514	86,304	87,798	89,365	92,675	89,753	91,688	92,389	.8	3.4
Maine	20,679	20,929	21,080	20,973	21,180	21,172	21,285	21,533	21,844	22,204	22,488	22,905	22,733	23,189	23,405	.9	4.1
Massachusetts	133,579	134,866	135,971	135,786	136,197	137,044	136,837	138,399	139,977	141,528	142,455	147,352	143,826	147,973	149,539	1.1	5.0
New Hampshire	22,889	23,092	23,272	23,223	23,534	23,745	23,884	24,247	24,489	24,770	25,080	26,061	25,291	26,001	26,366	1.4	5.1
Rhode Island	18,615	18,772	18,877	18,859	19,031	19,065	19,161	19,336	19,572	19,804	20,038	20,569	20,081	20,543	20,722	.9	3.4
Vermont	9,812	9,858	9,879	9,885	9,946	10,033	10,103	10,215	10,430	10,649	10,796	11,051	10,956	11,208	11,194	-1.1	3.7
Mideast	930,013	943,909	956,505	961,804	962,588	972,690	975,521	988,505	1,004,710	1,018,028	1,032,443	1,072,339	1,037,073	1,069,185	1,079,550	1.0	4.6
Delaware	13,923	14,067	14,303	14,363	14,563	14,634	14,704	14,891	14,901	15,206	15,334	15,763	15,513	16,046	16,272	1.4	6.1
District of Columbia	14,178	14,355	14,579	14,742	14,728	14,869	14,928	15,096	15,301	15,484	15,679	15,895	16,026	16,175	16,387	1.3	4.5
Maryland	103,585	105,069	106,487	106,855	107,990	108,907	109,061	110,224	111,416	113,079	114,441	117,522	116,558	119,140	120,322	1.0	5.1
New Jersey	190,081	193,061	195,256	196,373	194,714	196,696	197,366	199,765	200,178	207,195	210,128	218,806	211,975	218,804	221,013	1.0	5.2
New York	390,690	396,167	401,330	402,999	402,709	407,608	408,092	413,357	424,554	424,841	431,203	451,407	429,602	444,671	448,818	.9	4.1
Pennsylvania	217,557	221,190	224,549	226,472	227,884	229,976	231,371	235,170	238,430	242,223	245,658	252,946	247,899	254,350	256,738	.9	4.5
Great Lakes	758,972	768,614	776,658	784,524	786,696	793,336	800,219	812,184	827,150	841,521	849,494	878,933	870,942	886,680	892,105	.6	5.0
Illinois	229,276	231,641	233,719	237,441	236,747	239,224	240,493	243,203	248,654	252,791	256,089	265,071	262,126	266,489	267,452	.4	4.4
Indiana	92,374	92,694	94,013	94,889	95,483	96,300	97,108	99,050	101,179	103,130	104,608	107,902	107,915	109,653	110,948	1.2	6.1
Michigan	167,565	169,902	172,235	172,514	173,035	175,201	176,437	179,169	181,120	184,738	185,084	191,910	189,799	194,159	195,432	.7	5.6
Ohio	185,459	189,048	190,384	192,183	193,248	193,469	196,160	199,299	202,896	206,005	207,631	214,546	212,395	215,876	217,523	.8	4.9
Wisconsin	84,297	85,329	86,307	87,497	88,182	89,142	90,021	91,464	93,301	94,857	96,082	99,505	98,708	100,502	100,749	.2	4.8
Plains	307,534	308,895	308,291	319,391	318,322	322,670	321,996	330,896	337,889	340,683	342,878	358,165	357,716	360,587	352,254	-2.3	2.7
Iowa	47,578	46,457	46,194	47,762	48,463	48,484	48,159	49,285	51,670	51,417	51,653	53,671	55,781	54,237	51,916	-4.3	5.1
Kansas	43,314	43,714	43,851	45,805	44,517	45,429	45,105	47,056	47,501	48,372	48,295	51,062	49,895	51,000	49,946	-2.1	3.4
Minnesota	80,939	82,161	82,287	83,911	83,860	84,864	85,332	87,009	89,266	89,858	91,500	95,425	94,881	95,753	94,432	-1.4	3.2
Missouri	88,010	89,030	89,833	91,332	92,389	93,328	94,075	95,921	97,037	98,146	98,730	101,939	100,833	103,059	101,526	-1.5	2.8
Nebraska	27,602	27,310	26,883	27,973	28,401	29,060	28,626	28,890	30,076	30,176	30,058	31,442	32,184	32,112	31,217	-2.8	3.9
North Dakota	9,401	9,506	9,852	11,173	9,580	9,972	9,547	10,996	10,451	10,733	10,642	11,911	11,269	11,556	10,730	-7.1	8.8
South Dakota	10,691	10,717	10,490	11,436	11,113	11,535	11,151	11,739	11,889	11,982	12,001	12,716	12,873	12,870	12,486	-3.0	4.0
Southeast	962,833	975,611	988,104	997,121	1,012,437	1,023,149	1,032,219	1,045,510	1,069,265	1,086,795	1,087,300	1,135,950	1,132,150	1,158,174	1,171,042	1.1	7.7
Alabama	58,822	59,957	60,451	61,520	62,864	63,320	63,975	64,938	66,503	67,389	68,488	70,502	70,468	71,553	72,300	1.0	5.6
Arkansas	32,387	32,578	32,618	33,181	34,288	34,512	34,575	35,269	36,975	37,667	37,574	39,051	39,327	39,666	39,425	-6.4	4.9
Florida ²	238,046	241,960	245,284	246,860	250,111	251,638	252,323	253,897	258,790	262,614	263,668	276,642	274,454	281,879	285,704	1.4	12.6
Georgia	108,697	110,053	111,813	112,553	114,075	115,869	116,988	118,642	121,344	123,477	125,078	129,311	128,160	132,507	134,247	1.3	7.3
Kentucky	54,342	54,931	55,661	56,755	56,963	58,075	59,112	60,200	61,691	62,639	63,355	65,359	64,753	66,170	67,028	1.3	5.8
Louisiana ²	58,830	59,634	60,450	61,410	62,833	63,503	64,200	65,301	66,897	68,011	67,501	69,812	70,328	71,423	72,471	1.5	7.4
Mississippi	31,941	32,280	32,544	33,067	33,794	34,160	34,340	35,080	36,208	36,663	36,888	37,983	38,767	39,130	39,372	.6	6.7
North Carolina	107,415	108,714	109,914	109,721	111,282	113,170	115,614	116,810	119,446	121,712	123,338	127,299	126,910	130,072	131,074	.8	5.8
South Carolina	51,450	52,569	53,238	54,493	54,993	55,212	55,936	56,927	57,859	58,608	60,055	59,990	61,354	61,938	61,938	1.0	5.7
Tennessee	76,281	76,830	78,080	78,780	80,110	81,093	81,953	83,721	85,805	87,601	88,686	92,243	91,609	93,583	94,709	1.2	6.8
Virginia	120,468	121,671	123,261	124,378	126,031	127,138	127,972	129,121	131,541	133,622	135,692	139,157	138,815	141,704	143,434	1.2	5.7
West Virginia	24,154	24,436	24,790	25,175	25,595	25,871	26,135	26,587	27,136	27,541	27,924	28,536	28,568	29,133	29,340	.7	5.1
Southwest	403,063	410,025	416,293	422,901	427,728	433,662	436,082	444,431	454,078	462,587	468,047	485,403	482,404	493,539	498,566	1.0	6.5
Arizona	58,359	59,053	59,969	60,502	61,542	62,069	62,179	63,032	64,521	65,666	66,593	68,764	68,689	70,554	71,591	1.5	7.5
New Mexico	21,104	21,315	21,714	22,268	22,628	22,909	23,047	23,433	24,008	24,424	24,762	25,242	25,704	26,236	26,723	1.9	7.9
Oklahoma	46,577	47,198	47,840	49,289	48,858	49,604	49,533	50,830	51,723	52,536	52,794	54,336	54,032	55,072	55,439	.7	5.0
Texas	277,023	282,459	286,769	290,843	294,701	299,800	301,324	307,136	313,826	319,960	323,899	337,061	333,980	341,678	344,813	.9	6.5
Rocky Mountain	117,566	119,960	121,252	125,642	126,086	128,962	129,722	133,804	135,197	137,982	139,799	145,252	144,967	148,256	149,885	1.1	7.2
Colorado	60,403	61,630	62,482	64,235	64,739	66,106	66,634	68,405	69,323	70,854	71,992	74,445	74,406	76,217	77,330	1.5	7.4
Idaho	14,855	15,175	15,169	15,825	15,693	16,156	16,204	16,817	17,037	17,427	17,620	18,452	18,320	18,747	18,692	-3.1	6.1
Montana	11,463	11,598	11,470	12,662	12,180	12,530	12,431	13,498	12,937	13,251	13,203	14,197	13,892	14,243	14,088	-1.1	6.7
Utah	23,548	24,086	24,593	25,150	25,524	26,066	26,297	26,794	27,536	27,953	28,461	29,361					

Table 2.—Nonfarm Personal Income, States and Regions

[Millions of dollars, seasonally adjusted at annual rates]

State and region	1990				1991				1992				1993			Percent change	
	I	II	III	IV	I	II	III	IV	I	II	III	IV	I*	II*	III#2	1993:II-1993:III	1992:III-1993:III
United States	4,512,502	4,582,305	4,645,876	4,689,197	4,717,842	4,762,871	4,803,506	4,865,490	4,948,464	5,026,445	5,081,861	5,260,442	5,178,293	5,305,560	5,367,129	1.2	5.6
New England	286,729	289,930	292,641	292,881	292,907	294,760	294,848	298,456	301,698	305,787	309,295	319,702	311,745	319,663	322,686	.9	4.3
Connecticut	81,778	83,010	84,116	84,705	83,624	84,349	84,184	85,303	86,069	87,554	89,126	92,441	89,514	91,425	92,141	.8	3.4
Maine	20,473	20,738	20,900	20,788	21,006	20,986	21,112	21,364	21,665	22,012	22,303	22,712	22,540	22,992	23,193	.9	4.0
Massachusetts	133,381	134,673	135,789	135,607	135,967	136,798	136,605	138,175	139,742	141,276	142,214	147,113	143,604	147,740	149,304	1.1	5.0
New Hampshire	22,840	23,042	23,227	23,176	23,481	23,689	23,833	24,199	24,429	24,709	25,021	26,005	25,232	25,943	26,306	1.4	5.1
New York	18,576	18,735	18,844	18,825	18,991	19,023	19,123	19,300	19,532	19,764	19,999	20,531	20,042	20,505	20,686	.9	3.4
Vermont	9,681	9,731	9,765	9,780	9,838	9,915	9,993	10,116	10,261	10,472	10,632	10,901	10,813	11,057	11,055	0	4.0
Mideast	926,986	940,971	953,835	959,209	960,999	969,984	973,108	986,152	1,001,656	1,014,922	1,029,556	1,069,501	1,034,067	1,066,330	1,076,938	1.0	4.6
Delaware	13,745	13,901	14,147	14,220	14,406	14,460	14,550	14,740	14,736	15,047	15,189	15,608	15,349	15,887	16,135	1.6	6.2
District of Columbia	14,178	14,355	14,579	14,742	14,728	14,869	14,928	15,096	15,301	15,484	15,679	15,895	16,026	16,175	16,387	1.3	4.5
Maryland	103,119	104,625	106,076	106,460	107,582	108,452	108,655	109,833	110,941	112,611	113,978	117,060	115,579	118,700	119,907	1.0	5.2
New Jersey	189,802	192,778	195,011	196,120	194,441	196,396	197,088	199,507	203,824	206,880	209,843	218,524	211,707	218,542	220,756	1.0	5.2
New York	389,626	395,022	400,483	402,192	401,861	406,702	407,287	412,572	419,609	423,901	430,333	450,548	428,624	443,775	448,036	1.0	4.1
Pennsylvania	216,450	220,104	223,539	225,475	227,080	229,104	230,602	234,405	237,246	241,001	244,534	251,866	246,781	253,251	255,719	1.0	4.6
Great Lakes	750,597	762,771	772,891	779,369	782,641	788,937	797,695	809,189	820,924	836,079	844,889	873,752	861,887	880,539	888,966	1.0	5.2
Illinois	226,542	230,187	233,175	236,198	235,836	238,062	240,167	242,743	246,615	251,113	254,786	263,478	258,831	264,610	266,997	.9	4.8
Indiana	91,036	91,858	93,539	94,159	95,071	95,894	97,049	98,947	100,185	102,362	103,954	107,219	106,288	108,810	110,297	1.4	6.1
Michigan	166,426	169,022	171,555	171,679	172,163	174,258	175,722	178,393	180,198	183,805	184,314	191,076	188,582	193,083	194,704	.8	5.6
Ohio	184,186	188,049	189,840	191,221	192,589	192,788	195,732	198,760	201,829	205,042	206,744	213,645	210,979	214,813	216,672	.9	4.8
Wisconsin	82,408	83,655	84,982	86,111	87,002	87,935	89,024	90,346	92,097	93,757	95,090	98,333	97,207	99,222	100,296	1.1	5.5
Plains	293,408	298,555	302,414	305,959	309,125	312,325	316,112	320,452	325,931	330,460	334,793	344,889	341,606	348,848	351,681	.8	5.0
Iowa	43,601	44,224	44,989	45,609	46,148	46,630	47,104	47,762	48,542	49,292	49,828	51,207	50,877	51,915	52,126	.4	4.6
Kansas	41,872	42,541	43,129	43,365	43,684	44,012	44,669	45,257	46,259	46,941	47,361	48,899	48,352	49,351	49,525	1.0	5.3
Minnesota	78,096	79,919	80,849	81,741	82,189	83,172	84,169	85,391	87,293	88,412	90,241	93,487	92,200	94,043	95,195	1.2	5.5
Missouri	87,140	88,388	89,386	90,341	91,702	92,677	93,670	95,061	96,124	97,211	98,100	100,801	99,695	102,047	102,404	.3	4.4
Nebraska	24,586	25,106	25,382	25,926	26,169	26,389	26,776	27,007	27,352	27,904	28,218	28,987	28,724	29,394	29,788	1.3	5.6
North Dakota	8,799	8,916	9,039	9,188	9,267	9,347	9,444	9,558	9,731	9,868	10,050	10,275	10,364	10,510	10,602	.9	5.5
South Dakota	9,315	9,461	9,642	9,791	9,966	10,098	10,279	10,415	10,630	10,832	10,995	11,233	11,392	11,589	11,710	1.0	6.5
Southeast	950,421	964,449	978,590	986,407	998,895	1,008,847	1,019,996	1,033,587	1,054,388	1,071,976	1,076,262	1,123,074	1,116,822	1,144,262	1,160,628	1.4	7.8
Alabama	57,962	58,973	59,663	60,531	61,526	62,046	62,795	63,852	65,378	66,321	67,558	69,395	69,886	70,631	71,499	1.2	5.8
Arkansas	30,864	31,316	31,870	32,230	32,753	33,058	33,646	34,316	35,179	35,819	36,224	37,645	37,144	37,806	38,247	1.2	5.6
Florida ¹	236,675	240,048	243,066	244,547	247,357	248,530	249,464	251,273	255,531	259,630	252,107	274,326	272,080	279,270	283,344	1.5	12.4
Georgia	107,395	108,828	110,811	111,426	112,595	114,205	115,502	117,164	119,736	121,751	123,601	127,682	126,404	130,933	133,111	1.7	7.7
Kentucky	53,192	53,878	54,755	55,663	55,841	56,919	58,107	59,190	60,379	61,382	62,071	64,011	63,412	64,943	65,860	1.4	6.1
Louisiana ¹	58,117	59,049	60,092	61,023	62,093	62,829	63,765	64,852	66,028	67,027	67,354	69,237	69,294	70,626	71,946	1.9	6.8
Mississippi	31,218	31,694	32,172	32,554	33,037	33,391	33,863	34,468	35,299	35,774	36,309	37,206	37,565	38,223	38,862	1.7	7.0
North Carolina	106,155	106,539	107,952	107,784	109,003	110,591	113,131	114,627	117,082	119,324	121,514	125,183	124,343	127,667	129,434	1.4	6.5
South Carolina	51,098	52,260	53,006	53,402	54,076	54,342	54,845	55,552	56,550	57,480	58,317	59,680	59,568	61,023	61,770	1.2	5.9
Tennessee	75,818	76,415	77,758	78,317	79,622	80,618	81,560	83,243	85,196	86,968	88,209	91,620	90,882	92,950	94,227	1.4	6.8
Virginia	119,849	121,089	122,721	123,822	125,459	126,513	127,244	128,582	130,962	133,036	135,141	138,615	138,253	141,133	143,065	1.4	5.9
West Virginia	24,077	24,361	24,726	25,108	25,533	25,804	26,074	26,529	27,067	27,464	27,858	28,473	28,493	29,057	29,263	.7	5.0
Southwest	397,624	404,888	412,465	416,624	422,555	427,392	432,135	439,286	448,550	456,306	463,582	478,893	475,460	486,700	494,008	1.5	6.6
Arizona	57,632	58,367	59,319	59,844	60,766	61,165	61,484	62,374	63,832	64,987	65,982	68,136	67,749	69,795	70,954	1.7	7.5
New Mexico	20,745	21,011	21,420	21,769	22,234	22,443	22,715	23,063	23,538	23,934	24,368	24,770	25,195	25,698	26,324	2.4	8.0
Oklahoma	45,674	46,337	47,052	47,693	48,274	48,524	49,022	49,735	50,662	51,422	52,017	53,069	53,050	53,960	54,593	1.2	5.0
Texas	273,574	279,173	284,674	287,318	291,482	295,260	298,914	304,124	310,519	315,963	321,214	332,919	329,465	337,248	342,137	1.4	6.5
Rocky Mountain	115,042	117,372	119,486	121,730	123,895	125,896	127,729	130,208	132,870	135,372	137,678	141,412	142,389	145,338	147,920	1.8	7.4
Colorado	59,526	60,769	61,843	63,021	64,065	65,166	66,020	67,367	68,551	70,039	71,281	73,307	73,502	75,296	76,687	1.8	7.6
Idaho	13,860	14,095	14,354	14,644	14,940	15,178	15,487	15,806	16,219	16,557	16,828	17,303	17,470	17,817	17,979	.9	6.8
Montana	11,197	11,334	11,500	11,644	11,850	11,948	12,193	12,435	12,681	12,888	13,040	13,261	13,566	13,771	13,973	1.2	6.9
Utah	23,290	23,833	24,377	24,851	25,301	25,787	26,079</										

Characteristics of Foreign-Owned U.S. Manufacturing Establishments

By Ned G. Howenstine and William J. Zeile

THIS ARTICLE examines the characteristics of foreign-owned U.S. manufacturing establishments on the basis of newly released data from a joint project of the Bureau of Economic Analysis (BEA) and the Bureau of the Census. The data greatly expand the establishment-level information available on the manufacturing operations of U.S. affiliates of foreign companies.¹ Because the establishment data provide more detailed and more precise information on the industrial composition of affiliates' operations than BEA's enterprise data (see the box on page 35), they can significantly enhance and extend the analysis of key questions about foreign direct investment in the United States (FDIUS), such as whether foreign-owned plants account for significant shares of total U.S. production in specific manufacturing industries and whether the wage rates and productivity of foreign-owned U.S. plants differ from those of U.S.-owned plants.

The new data on foreign-owned manufacturing establishments indicate the following:

- The average plant size, or scale, of foreign-owned establishments is much larger than that of U.S.-owned establishments, mostly reflecting the tendency for foreign-owned establishments to be larger than U.S.-owned establishments within specific industries. Less important is the tendency of foreign-owned establishments to be concentrated in industries with larger-than-average plant size.
- The capital intensity of foreign-owned establishments is higher than that of U.S.-

owned establishments, almost entirely reflecting foreign-owned establishments' relatively greater concentration in the industries that are the most capital intensive; the overall effect of within-industry differences is negligible. In many industries, the capital intensity of foreign-owned establishments differs from that of U.S.-owned establishments, but there is no systematic tendency for this difference to be in one direction or the other.

- The hourly wages paid to production workers are higher for foreign-owned establishments than for U.S.-owned establishments. Foreign-owned establishments tend to be in higher wage industries, and their production is more concentrated in large plants, which generally have higher wage rates than small plants. Foreign ownership per se does not appear to influence wage rates.
- The labor productivity of foreign-owned establishments is higher than that of U.S.-owned establishments, largely reflecting the tendency for foreign-owned establishments to be concentrated in industries in which

Acknowledgments

The Census Bureau's Industry Division, under the direction of John P. Govoni, and the Special Surveys Branch of BEA's International Investment Division, under the direction of Ralph Kozlow, performed the link of the two agencies' data. Programming for the link project was provided by Rohini A. Shah, of the Census Bureau's Industry Division; Robert S. Taylor, of the Census Bureau's Center for Economic Studies; and Colin B. Brown and Christopher W. Cavaney, of BEA's Computer Systems and Services Division. Dale P. Shannon, of the Research Branch of BEA's International Investment Division, provided statistical assistance for the article. S. Lael Brainard, of the Sloan School of Management, Massachusetts Institute of Technology, provided helpful comments on an earlier draft.

1. A U.S. affiliate is a U.S. business enterprise that is owned 10 percent or more, directly or indirectly, by a foreign person. "Person" is broadly defined to include 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). The data are not adjusted for percentage of foreign ownership. Thus, for example, the employment data shown here include all employees at the manufacturing establishments of each U.S. affiliate, even though the foreign investor may own as little as 10 percent of the affiliate. However, most affiliates are majority owned; based on BEA data, U.S. affiliates that are majority owned (that is, affiliates that are owned more than 50 percent by direct investors) accounted for 85 percent of all manufacturing employment by U.S. affiliates.

productivity is high. There are also within-industry differences in productivity, but they appear to be attributable largely to factors that have frequently been found to influence productivity—namely, plant size, capital intensity, and employee skill level—rather than to foreign ownership per se.

The new data on foreign-owned manufacturing establishments, which cover 1989 and 1990, were released last fall as part of an ongoing effort to augment and improve U.S. Government data on FDIUS. The data were obtained by linking BEA enterprise, or company, data on FDIUS with more detailed Census Bureau establishment, or plant, data for all U.S. companies.² For the linked establishments (hereafter referred to as “foreign-owned establishments”), data from the Census Bureau’s annual survey of manufactures (ASM) were then extracted.

2. A parallel project has linked BEA’s FDIUS data to Bureau of Labor Statistics (BLS) data on all U.S. businesses. The initial results of that link, released in 1992 by BLS, provided data for 1989 and 1990 on the number, employment, and payroll of foreign-owned establishments for both manufacturing and nonmanufacturing industries. In October 1993, BLS released information on the occupational structure of foreign-owned manufacturing establishments in 1989. Data from the two link projects differ, particularly at the most detailed industry levels, because of differences in coverage, classification, timing, and definitions. Both projects were authorized by Congress under the Foreign Direct Investment and International Financial Data Improvements Act of 1990.

The new data on foreign-owned manufacturing establishments cover most of the ASM items, including value added, shipments, employment, total employee compensation, employee benefits, hourly wage rates of production workers, cost of materials and energy used, inventories by stage of fabrication, and expenditures for new plant and equipment. Data are also included on the number of foreign-owned establishments. Totals for 1989 and 1990 for each of these items are shown in table 1. The data are also available by highly detailed industry, by State, and by country of investor. Summary data for 1990 appear in tables 2–13; data by detailed industry for 1990 covering selected items for foreign-owned and all U.S. establishments are shown in table 14, at the end of the article. (The box on page 51 provides information on the availability of the data in full detail for 1989 and 1990.)

The new ASM data update and extend the link project’s initial results, published in 1992, which were for 1987—a benchmark, or census, year for both BEA and the Census Bureau. The 1987 data covered both manufacturing and nonmanufacturing establishments, but presented fewer measures of their operations than are available from the new ASM-based series.³ Later this year,

3. For summary data for 1987, see “Foreign Direct Investment in the United States: Establishment Data for 1987,” SURVEY OF CURRENT BUSINESS

Establishment and Enterprise Data for U.S. Affiliates Compared

The establishment data presented in this article complement BEA’s enterprise data for U.S. affiliates. BEA’s enterprise data are needed for analyzing the overall significance of, and trends in, direct investment and for compiling the U.S. international transactions accounts, the international investment position of the United States, and the U.S. national income and product accounts. The data on positions and transactions between U.S. affiliates and their foreign parents used in compiling the national and international accounts exist only at the enterprise level. Analyses of some topics, such as profits and taxes, are meaningful only at that level. Furthermore, balance sheets and income statements containing the critical, nonduplicative financial and operating data needed for examining these topics exist only at the enterprise level.

The establishment data facilitate analysis of the activities and importance of foreign-owned U.S. companies in specific industries because they provide more detailed and more precise information on the industrial composition of U.S. affiliates’ operations than BEA’s enterprise data. Whereas BEA’s enterprise data classify each company, however diversified, in a single industry, the establishment data permit each plant or location of a company to be classified separately. Furthermore, the

level of industry classification can be much more detailed for individual establishments than is appropriate for consolidated enterprises, whose operations may span many narrowly defined industries. As a result, foreign-owned establishments can be classified into 459 manufacturing industries, whereas BEA’s foreign-owned enterprises can be classified into only 55 manufacturing industries.

The establishment data also provide more detailed State-by-industry data than are available from the enterprise data, and the ASM data introduced in this article include the first available State-level measures of manufacturing production (value added) by foreign-owned firms.

Finally, the establishment-level data for foreign-owned and U.S.-owned companies presented in this article are closely comparable because they are from the same source. In contrast, the enterprise-level data for foreign-owned U.S. companies collected by BEA are frequently not comparable, except at highly aggregated levels, with data for all U.S. companies collected by other Government agencies. Because the other agencies’ data are collected for different purposes, they often differ significantly in concept, definitions, consolidation, and industry classification from BEA’s data for foreign-owned companies.

BEA and the Census Bureau will publish ASM data for foreign-owned manufacturing establishments for 1991 and for 1988.

This article analyzes the operations of foreign-owned manufacturing establishments on the basis of the 1990 ASM data. Although the data are for the year 1990, most of the findings probably also apply to more recent years, because both the overall level and the industry and country composition of foreign direct investment in U.S. manufacturing have changed little since then.⁴

72 (October 1992): 44-78. For a slightly expanded version of that article, see Office of the Chief Economist, Economics and Statistics Administration, U.S. Department of Commerce, *Foreign Direct Investment in the United States: An Update* (Washington, DC: U.S. Government Printing Office, June 1993). The detailed 1987 data are available in a separate volume (see *inside back cover* for order information).

4. Although foreign direct investment in manufacturing grew rapidly between 1987 and 1990, data from BEA's enterprise surveys indicate that there was little growth in the industry in 1991 and 1992. According to BEA's annual survey of FDIUS, total manufacturing employment of U.S. affiliates in 1991 was almost the same as that in 1990, and changes in the composition of employment among subindustries of manufacturing and among investing countries were small. Moreover, data from BEA's latest survey of U.S. businesses acquired or established by foreign direct investors indicate that in 1992, new investment in manufacturing was at the lowest level in 8 years and was less than one-half that in 1991. In the May 1993 SURVEY, see "U.S. Affiliates

The remainder of this article consists of two sections and a technical note. The first section provides an overview of the operations of foreign-owned manufacturing establishments by industry, country, and State. The second compares the following key aspects of the operations of foreign-owned establishments with those of U.S.-owned establishments: Plant size, capital intensity, employee compensation, hourly wage rates of production workers, and labor productivity. The technical note describes the statistical decomposition method used in the article to separate industry-mix effects from within-industry differences and discusses how the estimation of data for foreign-owned establishments and the inclusion of residual industries, which cover establishments not elsewhere classified, affect the findings of the article.

Overview of Operations

In 1990, there were 11,900 foreign-owned manufacturing establishments in the United States. They employed 2 million workers and had shipments of \$418 billion. Their value added, an approximate measure of production, was \$177 billion, 13 percent of the value added by all U.S. manufacturing establishments (*table 2*).⁵

More than one-half of the value added by foreign-owned manufacturing establishments in 1990 was accounted for by four Standard Industrial Classification (SIC) two-digit industries: Chemicals and allied products (\$49 billion), food and kindred products (\$20 billion), electronic and other electric equipment (\$17 billion), and industrial machinery and equipment (\$14 billion). Production in the chemicals industry alone accounted for more than one-fourth of the value added by foreign-owned manufacturing establishments.

Among SIC two-digit industries, the share of total U.S. production accounted for by foreign-owned establishments was largest in chemicals (32 percent), followed by stone, clay, and glass products (25 percent) and primary metals (19 percent). The share was less than 5 percent in four industries: Apparel and other textile products, lumber and wood products, furniture and fixtures, and transportation equipment.

of Foreign Companies: Operations in 1991" and "U.S. Business Enterprises Acquired or Established by Foreign Direct Investors in 1992."

5. Value added measured by the Census Bureau's ASM differs from BEA's national income and product accounts measure of gross product because it includes purchased services but excludes indirect taxes and because it reflects inventory change valued at book value rather than at replacement cost.

Table 1.—Data for Foreign-Owned Manufacturing Establishments, 1989 and 1990

[Millions of dollars, except as noted]

	1989	1990
Number of establishments	10,458	11,934
Value added by manufacture	161,929.2	177,360.7
Value of shipments	371,911.9	417,539.4
Employment and employee compensation:		
Total employment (number of employees)	1,815,311	2,004,235
Production workers (number)	1,082,983	1,188,140
Other workers (number)	732,328	816,095
Production worker hours (millions of hours)	2,203.2	2,411.7
Employee compensation, total	67,769.1	78,128.8
Payroll	55,562.5	63,495.9
Production worker wages	26,616.4	30,304.8
Other workers	28,946.1	33,191.1
Benefits	12,206.6	14,632.9
Legally required	4,751.2	5,591.4
Other	7,455.4	9,041.5
Production worker wages per hour (dollars)	12.08	12.57
Expenditures for new plant and equipment:		
Total	16,070.6	19,748.4
Buildings and other structures	2,799.6	3,246.5
Machinery and equipment	13,271.0	16,502.0
Materials:		
Cost of materials, total	211,706.8	241,548.4
Of which:		
Purchased fuels and electric energy	8,993.6	10,106.3
Fuels	3,697.4	4,238.1
Electric energy	5,296.1	5,868.2
Quantity of electric energy used (billion kWh)	121,950.3	135,204.9
Inventories:		
End of year, total	49,926.9	55,487.3
Finished products	20,151.9	23,167.3
Work-in-process	12,954.2	13,650.3
Materials, supplies, fuels, etc.	16,820.9	18,669.7
Beginning of year, total	47,212.3	53,768.3
Finished products	18,701.2	21,736.4
Work-in-process	12,424.6	13,635.7
Materials, supplies, fuels, etc.	16,077.4	18,396.2

kWh Kilowatthours

Within a given two-digit industry, the shares for the component subindustries may vary considerably. In transportation equipment, for example, where foreign-owned establishments' share of value added was just under 5 percent, shares for SIC three-digit subindustries ranged from less than 1 percent for "guided missiles, space vehicles, and parts" to 12 percent for railroad equipment. The share for motor vehicles and equipment was 8 percent.

At the SIC four-digit level, foreign-owned establishments had operations in 429 of the 459 manufacturing industries. They accounted for less than 5 percent of total industry production in 149 industries and for more than 30 percent in 45 industries (table 3). Of the latter group, 13 industries were in chemicals, 6 in stone, clay, and glass products, and 6 in electronic and other electric equipment.

In nine industries, foreign-owned establishments accounted for more than one-half of total U.S. production. Their shares were highest in three chemicals industries: Inorganic pigments (71 percent), biological products except diagnostic (69 percent), and noncellulosic organic fibers (67 percent) (table 14). Among the industries outside chemicals, the share was highest in hydraulic cement (62 percent).

By country

In 1990, more than 80 percent of the employment, shipments, and value added by all foreign-

owned manufacturing establishments were accounted for by establishments with ultimate beneficial owners (UBO's) in seven countries: Canada, France, Germany, Japan, the Netherlands, Switzerland, and the United Kingdom (table 4).⁶ The establishments of these seven countries accounted for 86 percent of the value added by all foreign-owned manufacturing establishments and for 11 percent of the value added by all U.S. manufacturing establishments.

6. 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 and that, therefore, ultimately derives the benefits from owning or controlling the U.S. affiliate.

Table 3.—Distribution of Manufacturing Industries According to Foreign-Owned Establishments' Share of Value Added, 1990

Percentage of an industry's value added accounted for by foreign-owned establishments	Number of industries
0 ¹	30
Less than 5.0 ²	119
5.0-9.9	89
10.0-14.9	73
15.0-19.9	43
20.0-24.9	33
25.0-29.9	27
30.0-34.9	10
35.0-39.9	13
40.0-44.9	6
45.0-49.9	7
50.0 or more	9

1. Industries with no foreign-owned establishments.
 2. Includes three industries for which value added by foreign-owned establishments was negative in 1990.
 NOTE.—The distribution is across the 459 industries defined at the four-digit level of the Standard Industrial Classification.

Table 2.—Selected Data for Foreign-Owned Manufacturing Establishments, by Industry, 1990

SIC code	Industry	Foreign-owned establishments				Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of establishments	Number of employees	Millions of dollars		Employment	Value added	Shipments
Value added	Shipments							
	Manufacturing	11,934	2,004,235	177,360.7	417,539.4	10.6	13.4	14.5
20	Food and kindred products	983	159,386	19,501.2	46,842.8	10.8	13.8	12.2
21	Tobacco products	5	H	(D)	(D)	(D)	(D)	(D)
22	Textile mill products	183	47,363	2,283.1	5,693.6	7.5	8.6	8.6
23	Apparel and other textile products	116	23,085	850.2	1,727.5	2.3	2.6	2.7
24	Lumber and wood products	184	17,043	842.5	2,304.0	2.5	2.9	3.1
25	Furniture and fixtures	83	J	(D)	(D)	(D)	(D)	(D)
26	Paper and allied products	328	48,644	4,709.2	11,395.2	7.7	7.9	8.7
27	Printing and publishing	834	103,983	10,408.8	16,499.9	6.8	10.1	10.5
28	Chemicals and allied products	1,520	242,392	48,835.7	87,678.9	28.4	31.9	30.4
29	Petroleum and coal products	319	25,638	4,106.8	46,372.6	22.9	15.1	26.9
30	Rubber and miscellaneous plastics products	658	120,951	8,757.9	17,790.6	13.9	17.6	17.5
31	Leather and leather products	29	6,362	287.3	608.1	5.4	6.3	6.2
32	Stone, clay, and glass products	1,421	105,578	8,450.2	16,407.5	20.7	24.8	25.9
33	Primary metal industries	402	119,087	10,297.6	31,902.9	16.7	19.3	21.8
34	Fabricated metal products	593	93,300	6,350.2	13,973.6	6.5	7.9	8.6
35	Industrial machinery and equipment	945	191,440	13,561.7	31,010.6	10.2	10.3	12.1
36	Electronic and other electric equipment	760	228,237	16,703.2	34,601.8	15.2	15.6	17.8
37	Transportation equipment	274	104,147	7,170.6	28,834.9	5.9	4.9	7.8
38	Instruments and related products	467	121,520	9,722.1	15,840.7	12.8	11.9	12.8
39	Miscellaneous manufacturing industries	128	26,087	1,929.3	3,553.2	6.8	9.6	9.6
	Administrative and auxiliary	1,702	200,064	n.a.	n.a.	15.9	n.a.	n.a.

D Suppressed to avoid disclosure of data of individual companies.
 n.a. Not available.

A—0 to 19; B—20 to 99; C—100 to 249; E—250 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.
 NOTE.—Size ranges are given in employment cells that are suppressed. The size ranges are:
 SIC Standard Industrial Classification

Among establishments of individual investing countries, British-owned establishments accounted for the largest share of production by foreign-owned manufacturing establishments (23 percent), followed by Canadian-owned establishments (15 percent) and Japanese-owned establishments (13 percent). The share of total U.S. manufacturing production accounted for by British-owned establishments was 3 percent.

British-owned establishments also accounted for the largest share of production by foreign-owned establishments in 10 of the 20 SIC two-

digit manufacturing industries. Among these 10 industries, their share of total U.S. manufacturing production was largest in tobacco products, petroleum and coal products, food and kindred products, and instruments and related products (table 5).

Japanese-owned establishments accounted for the largest share of production by foreign-owned establishments in four industries: Primary metals, industrial machinery and equipment, electronic and other electric equipment, and transportation equipment. Their share of total U.S.

Table 4.—Selected Data for Foreign-Owned Manufacturing Establishments, by Country of UBO, 1990

Country	Number of establishments	Number of employees	Millions of dollars		Share of all-countries total (percent)			
			Value added	Value of shipments	Number of establishments	Number of employees	Value added	Value of shipments
All countries	11,934	2,004,235	177,360.7	417,539.4	100.0	100.0	100.0	100.0
Canada	1,538	269,362	26,869.2	58,983.3	12.9	13.4	15.1	14.1
Europe	8,007	1,297,424	115,466.1	251,039.0	67.1	64.7	65.1	60.1
Austria	27	5,035	417.1	816.2	.2	.3	.2	.2
Belgium	95	14,633	1,626.7	4,975.5	.8	.7	.9	1.2
Denmark	39	7,159	377.4	916.6	.3	.4	.2	.2
Finland	123	18,112	1,194.5	2,891.2	1.0	.9	.7	.7
France	1,217	178,324	15,390.3	36,168.0	10.2	8.9	8.7	8.7
Germany	1,045	229,007	20,442.5	40,568.9	8.8	11.4	11.5	9.7
Ireland	243	26,534	2,090.1	5,227.6	2.0	1.3	1.2	1.3
Italy	141	17,307	1,260.1	3,755.4	1.2	.9	.7	.9
Liechtenstein	9	917	50.9	120.7	.1	(*)	(*)	(*)
Luxembourg	25	5,003	307.2	664.3	.2	.2	.2	.2
Netherlands	618	123,424	11,648.1	34,800.9	5.2	6.2	6.6	8.3
Norway	53	5,771	463.9	933.8	.4	.3	.3	.2
Spain	20	399	26.5	65.7	.2	(*)	(*)	(*)
Sweden	347	73,818	4,969.9	10,760.5	2.9	3.7	2.8	2.6
Switzerland	697	133,934	14,829.4	27,440.4	5.8	6.7	8.4	6.6
United Kingdom	3,291	456,618	40,325.9	80,610.2	27.6	22.8	22.7	19.3
Other	17	1,429	45.5	323.0	.1	.1	(*)	.1
Latin America and Other Western Hemisphere	238	56,017	4,624.6	14,068.4	2.0	2.8	2.6	3.4
South and Central America	143	38,737	3,614.5	11,999.7	1.2	1.9	2.0	2.9
Brazil	9	358	22.9	77.3	.1	(*)	(*)	(*)
Mexico	64	J	(D)	(D)	.5	.5-1.2	(D)	(D)
Panama	35	J	(D)	(D)	.3	.5-1.2	(D)	(D)
Venezuela	31	6,684	1,123.1	7,532.0	.3	.3	.6	1.8
Other	4	174	15.5	27.4	0	(*)	(*)	(*)
Other Western Hemisphere	95	17,280	1,010.1	2,068.7	.8	.9	.6	.5
Africa	46	6,869	475.1	1,374.4	.4	.3	.3	.3
Middle East	67	I	(D)	(D)	.6	.2-5	(D)	(D)
Asia and Pacific	2,005	362,948	29,384.5	83,833.6	16.8	18.1	16.6	20.1
Australia	497	36,448	3,785.0	10,446.8	4.2	1.8	2.1	2.5
Hong Kong	3	C	(D)	(D)	(*)	(*)	(D)	(D)
Japan	1,356	291,415	22,814.6	65,760.0	11.4	14.5	12.9	15.7
Korea, Republic of	20	3,988	253.8	1,145.0	.2	.2	.1	.3
Malaysia	1	C	(D)	(D)	(*)	(*)	(D)	(D)
New Zealand	51	17,489	1,352.6	3,549.5	.4	.9	.8	.9
Philippines	13	H	(D)	(D)	.1	.1-2	(D)	(D)
Singapore	8	1,184	106.1	283.2	.1	.1	.1	.1
Taiwan	37	5,840	501.1	1,327.6	.3	.3	.3	.3
Other	19	G	(D)	(D)	.2	0-1	(D)	(D)
United States	33	H	(D)	(D)	.3	.2	(D)	(D)
Addenda:								
European Communities (12) ¹	6,735	L	(D)	(D)	56.4	2.5-5.0	(D)	(D)
OPEC ²	77	J	(D)	(D)	.6	.5-1.2	(D)	(D)

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

* Less than 0.05 percent.

1. The European Communities (12) comprises Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, and the United Kingdom.

2. OPEC is the Organization of Petroleum Exporting Countries. Through 1992, its members were Algeria, Ecuador, Gabon, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Qatar, Saudi Arabia, the United Arab Emirates, and Venezuela.

NOTES.—The columns for number of establishments and for number of employees cover both

operating establishments and administrative and auxiliary establishments; the other columns cover operating establishments only.

Size ranges are given in employment cells that are suppressed. The size ranges are: A—0 to 19; B—20 to 99; C—100 to 249; E—250 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.

UBO Ultimate beneficial owner

manufacturing production was largest in primary metals and in electronic and other electric equipment.

Table 6 presents, for each of the seven major investing countries, ratios of the country's share of U.S. value added in each SIC two-digit industry to the country's share of value added in manufacturing as a whole. These ratios can be interpreted as indexes of relative intensity of investment by a country, taking into account both the size of the industry and the overall level of manufacturing production by the country's U.S. establishments.

Because these ratios allow for variations in both industry size and production levels, the ratios, unlike simple distributions of value added, can be compared across countries as well as among industries. A value greater than 1.0 indicates that production by the investing country's establishments was more intense in the given industry than in manufacturing as a whole. For example, Japanese-owned establishments accounted for 1.7 percent of total U.S. manufacturing production but for 3.5 percent of U.S. production in rubber products; thus, the value of the index for

Table 5.—Value Added in Manufacturing Industries by All U.S. Establishments and by Foreign-Owned Establishments of Major Investing Countries, 1990

SIC code	Industry	All U.S. establishments	Foreign-owned establishments by country of UBO								U.S.-owned establishments	
			All countries	Canada	France	Germany	Netherlands	Switzerland	United Kingdom	Japan		Other countries
Millions of dollars												
	Manufacturing	1,326,361.7	177,360.7	26,869.2	15,390.3	20,442.5	11,648.1	14,829.4	40,325.9	22,814.6	25,040.8	1,149,001.0
20	Food and kindred products	140,972.8	19,501.2	2,108.1	1,175.4	445.6	2,949.6	3,913.7	5,821.8	786.0	2,301.0	121,471.6
21	Tobacco products	22,561.3	(^D)	0	0	(^D)	0	0	(^D)	0	0	(^D)
22	Textile mill products	26,541.6	2,283.1	507.6	195.2	264.9	37.7	48.1	693.1	246.9	289.8	24,258.5
23	Apparel and other textile products	33,034.0	850.2	(^D)	(^D)	129.4	(^D)	0	186.8	(^D)	(^D)	32,183.8
24	Lumber and wood products	28,597.2	842.5	(^D)	18.0	62.0	(^D)	(^D)	281.2	76.1	(^D)	27,754.7
25	Furniture and fixtures	21,644.7	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)
26	Paper and allied products	59,823.3	4,709.2	749.8	129.7	119.1	(^D)	68.7	885.9	477.4	(^D)	55,114.1
27	Printing and publishing	103,179.0	10,408.8	3,143.4	465.6	1,248.1	(^D)	(^D)	2,856.1	386.4	1,670.8	92,770.2
28	Chemicals and allied products	153,032.4	48,835.7	(^D)	2,944.8	9,316.9	5,034.2	6,477.8	8,760.1	2,438.7	(^D)	104,196.7
29	Petroleum and coal products	27,214.1	4,106.8	1,032.1	(^D)	(^D)	(^D)	(^D)	1,952.4	(^D)	(^D)	23,107.3
30	Rubber and miscellaneous plastics products	49,889.0	8,757.9	996.1	2,153.6	1,124.9	465.5	117.8	1,731.5	1,722.4	446.1	41,131.1
31	Leather and leather products	4,586.6	287.3	(^D)	(^D)	0	(^D)	(^D)	(^D)	0	(^D)	4,299.3
32	Stone, clay, and glass products	34,140.2	8,450.2	154.5	2,256.9	610.6	174.1	515.2	1,747.3	774.7	2,216.8	25,690.0
33	Primary metal industries	53,366.6	10,297.6	1,522.7	1,342.3	655.5	62.9	378.2	956.9	3,874.2	1,505.0	43,069.0
34	Fabricated metal products	79,951.9	6,350.2	877.0	(^D)	685.9	(^D)	231.0	1,917.2	426.4	962.3	73,601.7
35	Industrial machinery and equipment	132,165.8	13,561.7	501.8	799.3	1,739.4	187.9	689.8	2,612.0	2,947.5	4,084.0	118,604.1
36	Electronic and other electric equipment	106,983.9	16,703.2	2,399.1	901.9	2,273.6	(^D)	714.8	2,549.6	4,333.1	(^D)	90,280.7
37	Transportation equipment	146,916.3	7,170.6	801.0	723.5	330.2	26.9	(^D)	1,131.1	3,183.2	(^D)	139,745.7
38	Instruments and related products	81,665.6	9,722.1	1,355.6	390.6	1,271.3	(^D)	1,068.3	3,314.9	780.1	(^D)	71,943.5
39	Miscellaneous manufacturing industries	20,095.6	1,929.3	64.6	279.6	(^D)	(^D)	(^D)	612.4	235.1	577.4	18,166.3
Percent of all U.S. establishments												
	Manufacturing	100.0	13.4	2.0	1.2	1.5	0.9	1.1	3.0	1.7	1.9	86.6
20	Food and kindred products	100.0	13.8	1.5	.8	.3	2.1	2.8	4.1	.6	1.6	86.2
21	Tobacco products	100.0	(^D)	0	0	(^D)	0	0	(^D)	0	0	(^D)
22	Textile mill products	100.0	8.6	1.9	.7	1.0	.1	.2	2.6	.9	1.1	91.4
23	Apparel and other textile products	100.0	2.6	(^D)	(^D)	.4	(^D)	0	.6	(^D)	(^D)	97.4
24	Lumber and wood products	100.0	2.9	(^D)	.1	.2	(^D)	(^D)	1.0	.3	(^D)	97.1
25	Furniture and fixtures	100.0	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)	(^D)
26	Paper and allied products	100.0	7.9	1.3	.2	.2	(^D)	.1	1.5	.8	(^D)	92.1
27	Printing and publishing	100.0	10.1	3.0	.5	1.2	(^D)	(^D)	2.8	.4	1.6	89.9
28	Chemicals and allied products	100.0	31.9	(^D)	1.9	6.1	3.3	4.2	5.7	1.6	(^D)	68.1
29	Petroleum and coal products	100.0	15.1	3.8	(^D)	(^D)	(^D)	(^D)	7.2	(^D)	(^D)	84.9
30	Rubber and miscellaneous plastics products	100.0	17.6	2.0	4.3	2.3	.9	.2	3.5	3.5	.9	82.4
31	Leather and leather products	100.0	6.3	(^D)	(^D)	0	(^D)	(^D)	(^D)	0	(^D)	93.7
32	Stone, clay, and glass products	100.0	24.8	.5	6.6	1.8	.5	1.5	5.1	2.3	6.5	75.2
33	Primary metal industries	100.0	19.3	2.9	2.5	1.2	.1	.7	1.8	7.3	2.8	80.7
34	Fabricated metal products	100.0	7.9	1.1	(^D)	.9	(^D)	.3	2.4	.5	1.2	92.1
35	Industrial machinery and equipment	100.0	10.3	.4	.6	1.3	.1	.5	2.0	2.2	3.1	89.7
36	Electronic and other electric equipment	100.0	15.6	2.2	.8	2.1	(^D)	.7	2.4	4.1	(^D)	84.4
37	Transportation equipment	100.0	4.9	.5	.5	.2	(^D)	(^D)	.8	2.2	(^D)	95.1
38	Instruments and related products	100.0	11.9	1.7	.5	1.6	(^D)	1.3	4.1	1.0	(^D)	88.1
39	Miscellaneous manufacturing industries	100.0	9.6	.3	1.4	(^D)	(^D)	(^D)	3.0	1.2	2.9	90.4
Addendum:												
Total number of industries in which the UBO country's establishments have the highest share of value added among investing countries												
				2	3	0	0	0	10	4	1	

* Less than 0.05 percent.
^D Suppressed to avoid disclosure of data of individual companies.
 UBO Ultimate beneficial owner
 SIC Standard Industrial Classification

Japanese-owned establishments in rubber products was 2.0, indicating a relatively high intensity of investment in the industry.

In the table, France stands out because of the relatively high intensity of its investment in stone, clay, and glass products: In 1990, French-owned establishments' share of U.S. production in this industry was nearly six times as large as their share in total manufacturing. France also shows relatively intense investment in the rubber products industry, where French-owned establishments' share of production was nearly four times as large as their share in total manufacturing.

Japan shows relatively intense investment in the primary metals industry; Japanese-owned establishments' share of production in this industry was more than four times as large as that in total manufacturing. In contrast, their share of production in transportation equipment was only slightly higher than their share in total manufacturing.

Germany shows relatively intense investment in chemicals, as do Switzerland and the Netherlands. The establishments of each of these three countries had shares of production in chemicals that were nearly four times as large as their shares in total manufacturing.

By State

The States with the largest production by foreign-owned manufacturing establishments were California, Texas, New Jersey, North Carolina, Ohio,

and New York (table 7). These six States accounted for 41 percent of the total production by foreign-owned manufacturing establishments in the United States. By two-digit industry, California accounted for a particularly large share of the production in electronic and other electric equipment (23 percent), and New York accounted for a very large share in printing and publishing (26 percent) (table 8). Texas, New Jersey, and North Carolina together accounted for nearly 40 percent of the production by foreign-owned establishments in chemicals, and Ohio accounted for nearly 20 percent in transportation equipment.

Among two-digit industries, chemicals accounted for the largest share of production by foreign-owned manufacturing establishments in 20 States, and food products accounted for the largest share in 11 States. The chemicals industry accounted for more than one-half of foreign-owned production in five States: Delaware, West Virginia, New Jersey, Texas, and Virginia.

The States in which foreign-owned establishments accounted for the largest share of manufacturing production were Delaware (37 percent), West Virginia (36 percent), New Jersey (24 percent), Georgia (19 percent), South Carolina (19 percent), and North Carolina (19 percent). In several of these States, foreign-owned establishments accounted for very large shares of chemicals production—74 percent in Delaware, 56 percent in West Virginia, 47 percent in New Jersey, and 60 percent in North Carolina (table 9). In North Carolina, foreign-owned establishments also accounted for large shares of production

Table 6.—Index of Relative Intensity of Production in Manufacturing for All Foreign-Owned Establishments and for Establishments of Major Investing Countries, 1990

SIC code	Industry	All countries	Canada	France	Germany	Netherlands	Switzerland	United Kingdom	Japan	Other countries
	Manufacturing	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
20	Food and kindred products	1.034	.738	.719	.205	2.382	2.483	1.358	.324	.865
21	Tobacco products	(^P)	0	0	(^P)	0	0	(^P)	0	0
22	Textile mill products .....	.643	.944	.634	.648	.162	.162	.859	.541	.578
23	Apparel and other textile products .....	.192	(^P)	(^P)	.254	(^P)	0	.186	(^P)	(^P)
24	Lumber and wood products .....	.220	(^P)	.054	.141	(^P)	(^P)	.323	.155	(^P)
25	Furniture and fixtures	(^P)	(^P)	(^P)	(^P)	(^P)	(^P)	(^P)	(^P)	(^P)
26	Paper and allied products .....	.589	.619	.187	.129	(^P)	.103	.487	.464	(^P)
27	Printing and publishing .....	.754	1.504	.389	.785	(^P)	(^P)	.910	.218	.858
28	Chemicals and allied products	2.386	(^P)	1.658	3.950	3.746	3.786	1.883	.926	(^P)
29	Petroleum and coal products	1.129	1.872	(^P)	(^P)	(^P)	(^P)	2.360	(^P)	(^P)
30	Rubber and miscellaneous plastics products	1.313	.986	3.720	1.463	1.062	.211	1.142	2.007	.474
31	Leather and leather products .....	.468	(^P)	(^P)	0	(^P)	(^P)	(^P)	0	(^P)
32	Stone, clay, and glass products	1.851	.223	5.697	1.160	.581	1.350	1.683	1.319	3.439
33	Primary metal industries	1.443	1.408	2.168	.797	.134	.634	.590	4.220	1.494
34	Fabricated metal products .....	.594	.541	(^P)	.557	(^P)	.258	.789	.310	.638
35	Industrial machinery and equipment .....	.767	.187	.521	.854	.162	.467	.650	1.297	1.637
36	Electronic and other electric equipment	1.168	1.107	.727	1.379	(^P)	.598	.784	2.355	(^P)
37	Transportation equipment .....	.365	.269	.424	.146	(^P)	(^P)	.253	1.260	(^P)
38	Instruments and related products .....	.890	.819	.412	1.010	(^P)	1.170	1.335	.555	(^P)
39	Miscellaneous manufacturing industries .....	.718	.159	1.199	(^P)	(^P)	(^P)	1.002	.680	1.522

^P Suppressed to avoid disclosure of data of individual companies.

NOTE.—The index is the share of total U.S. value added in the given manufacturing industry accounted for by establishments of the given UBO country divided by the share of total U.S. value added in total manufacturing accounted for by establishments of the UBO country. This

index is similar in form to the export index of revealed comparative advantage introduced in Bela Balassa, "Trade Liberalization and 'Revealed' Comparative Advantage," *Manchester School* 33 (May 1965): 99-123.

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in both the electronics and the instruments industries (40 percent in each). In South Carolina, foreign-owned establishments accounted for more than 50 percent of the State's production in the rubber products industry.

Comparison of Foreign-Owned and U.S.-Owned Establishments

This section compares the operations of foreign-owned manufacturing establishments with those

of U.S.-owned ones in terms of plant size (or scale), capital intensity, compensation per employee, production-worker wage rates, and labor productivity.⁷ The section also examines whether differences between the hourly wage rates of production workers in foreign-owned and U.S.-owned establishments reflect differences in their

7. The analysis in this section is based on data for operating establishments only. Data for administrative and auxiliary establishments are not available by detailed industry for either foreign-owned or all U.S. establishments.

Table 7.—Selected Data for Foreign-Owned Manufacturing Establishments, by State, 1990

State	Foreign-owned establishments				Foreign-owned establishments as a percentage of all U.S. establishments		
	Number of establishments	Number of employees	Millions of dollars		Number of employees	Value added	Shipments
			Value added	Shipments			
Total	11,934	2,004,235	177,360.7	417,539.4	10.6	13.4	14.5
Alabama	185	33,678	3,019.5	6,661.1	9.2	14.1	13.7
Alaska	24	3,092	182.8	658.6	22.7	13.1	17.9
Arizona	115	10,998	747.2	2,002.9	6.1	6.3	8.8
Arkansas	106	17,881	1,225.5	3,262.6	8.2	9.8	10.7
California	1,361	205,024	18,533.9	42,051.9	9.7	12.4	14.3
Colorado	119	10,964	1,019.5	2,342.8	6.1	7.4	8.5
Connecticut	194	34,571	2,650.5	4,407.9	10.0	11.1	11.0
Delaware	69	30,386	1,658.0	4,339.9	46.2	36.7	33.6
District of Columbia	13	215	17.4	37.4	1.5	1.1	1.7
Florida	504	44,688	3,091.7	7,342.6	9.0	10.4	12.1
Georgia	491	70,347	6,926.8	13,730.2	12.5	19.2	16.3
Hawaii	30	2,087	275.7	1,218.0	10.1	17.7	29.0
Idaho	25	3,414	269.4	509.8	5.6	6.9	5.6
Illinois	649	110,468	8,684.1	25,260.4	11.0	12.3	16.1
Indiana	317	86,378	7,683.9	16,766.2	14.0	17.1	17.0
Iowa	106	22,359	1,863.0	3,631.8	9.7	9.6	7.9
Kansas	89	13,547	1,144.2	2,902.8	7.1	8.8	8.0
Kentucky	184	42,508	3,790.1	10,006.8	15.2	16.0	18.6
Louisiana	127	17,136	4,179.7	18,892.9	10.0	18.5	28.7
Maine	59	7,384	554.9	1,406.8	7.2	9.4	11.3
Maryland	196	27,941	2,232.4	4,859.0	13.2	14.2	15.8
Massachusetts	313	57,078	4,900.7	8,828.3	10.8	14.0	13.8
Michigan	396	70,914	5,300.0	14,368.9	7.8	8.2	9.4
Minnesota	174	31,983	1,813.5	4,009.6	8.1	7.0	7.3
Mississippi	110	13,706	1,109.5	2,582.0	5.9	8.7	8.5
Missouri	268	36,928	3,635.1	7,388.7	8.7	12.0	11.0
Montana	15	943	77.3	794.4	4.7	6.5	19.7
Nebraska	54	8,022	956.7	1,960.4	8.1	12.8	9.6
Nevada	27	1,501	123.6	244.7	5.9	8.4	8.4
New Hampshire	91	11,915	690.1	1,375.0	12.9	12.4	14.1
New Jersey	590	98,905	11,023.0	19,989.2	15.8	24.4	22.8
New Mexico	34	2,640	183.6	369.7	6.6	8.2	6.7
New York	650	104,499	9,528.6	18,845.2	9.1	11.1	12.2
North Carolina	483	110,447	10,682.9	21,147.8	13.3	18.5	18.2
North Dakota	7	F	(P)	(P)	(P)	(P)	(P)
Ohio	644	118,364	9,888.5	26,449.0	10.9	12.3	14.9
Oklahoma	103	15,842	1,339.5	4,256.8	9.5	11.3	15.2
Oregon	119	15,269	1,071.7	3,313.9	7.1	8.1	10.7
Pennsylvania	667	119,688	9,511.1	20,216.7	11.9	14.8	14.8
Rhode Island	51	6,628	390.4	909.7	6.6	7.6	9.3
South Carolina	229	59,626	3,996.1	9,724.6	16.2	19.0	20.8
South Dakota	21	2,947	141.6	338.2	9.9	8.7	7.5
Tennessee	308	72,779	5,252.6	14,102.1	14.4	17.4	20.9
Texas	783	101,890	12,849.7	35,184.0	10.8	15.4	16.7
Utah	51	7,049	588.7	1,302.2	6.9	9.6	9.3
Vermont	26	3,657	224.7	490.1	8.3	7.0	8.8
Virginia	242	47,873	4,555.3	8,465.5	11.3	14.0	13.9
Washington	197	22,979	1,867.1	5,454.6	6.3	7.5	8.1
West Virginia	61	18,047	2,291.7	4,489.5	22.0	36.1	34.7
Wisconsin	249	46,016	3,551.0	8,520.9	8.4	9.6	10.3
Wyoming	8	C	(P)	(P)	(P)	(P)	(P)

P Suppressed to avoid disclosure of data of individual companies.

Size ranges are given in employment cells that are suppressed. The size ranges are: A—0 to 19; B—20 to 99; C—100 to 249; E—250 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.

NOTES.—The columns for number of establishments and for number of employees cover both operating establishments and administrative and auxiliary establishments; the other columns cover operating establishments only.

Table 8.—Value Added by Foreign-Owned Manufacturing Establishments, State by Selected Industry, 1990

[Millions of dollars]

State	Total	Selected industries													
		Food and kindred products	Textile mill products	Paper and allied products	Printing and publishing	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastics products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Instruments and related products
SIC code		20	22	26	27	28	29	30	32	33	34	35	36	37	38
Total	177,360.7	19,501.2	2,283.1	4,709.2	10,408.8	48,835.7	4,106.8	8,757.9	8,450.2	10,297.6	6,350.2	13,561.7	16,703.2	7,170.6	9,722.1
Alabama	3,019.5	(P)	103.1	348.4	18.6	896.6	(P)	634.0	183.4	(P)	(P)	96.1	248.3	(P)	(P)
Alaska	182.8	(P)	0	(P)	0	(P)	0	0	0	0	(P)	0	0	0	0
Arizona	747.2	43.2	0	0	(P)	20.6	0	52.7	159.0	147.6	68.1	107.2	(P)	(P)	(P)
Arkansas	1,225.5	170.1	0	36.1	(P)	81.8	(P)	(P)	48.7	56.7	149.7	214.8	214.5	54.6	(P)
California	18,533.9	2,471.0	(P)	344.6	936.4	3,430.1	(P)	376.5	1,008.0	475.7	608.6	1,880.0	3,920.9	880.1	1,936.5
Colorado	1,019.5	210.3	0	(P)	140.5	107.8	(P)	(P)	85.1	(P)	(P)	100.6	64.1	0	57.1
Connecticut	2,650.5	163.2	32.3	15.8	141.4	973.5	10.6	18.8	80.2	207.4	122.7	206.6	102.0	(P)	248.0
Delaware	1,658.0	(P)	0	0	0	1,316.3	(P)	(P)	(P)	(P)	(P)	(P)	0	0	(P)
District of Columbia	17.4	0	0	0	(P)	0	0	(P)	(P)	0	0	0	0	0	0
Florida	3,091.7	645.4	0	(P)	164.5	225.5	(P)	72.0	400.2	84.3	78.8	300.4	497.4	147.3	128.7
Georgia	6,926.8	550.3	(P)	355.5	144.0	1,026.2	(P)	145.6	407.3	208.1	111.8	241.2	823.1	10.1	262.7
Hawaii	275.7	(P)	0	(P)	(P)	(P)	(P)	(P)	(P)	(P)	0	0	0	(P)	0
Idaho	269.4	125.4	0	0	(P)	6.3	0	0	(P)	0	0	(P)	(P)	0	0
Illinois	8,684.1	1,435.7	0	220.8	801.2	1,660.1	149.7	645.5	327.5	572.8	310.4	880.2	790.5	(P)	489.1
Indiana	7,683.9	1,025.4	(P)	(P)	330.3	893.5	3.6	534.8	(P)	1,758.2	335.8	780.9	634.5	224.8	654.7
Iowa	1,863.0	360.3	0	42.2	125.9	209.7	(P)	371.9	76.0	(P)	(P)	254.0	(P)	(P)	(P)
Kansas	1,144.2	195.6	0	(P)	172.6	128.3	(P)	(P)	124.6	(P)	13.3	87.9	(P)	(P)	(P)
Kentucky	3,790.1	527.9	(P)	(P)	95.3	739.1	(P)	(P)	168.8	814.6	146.0	189.1	85.4	(P)	0
Louisiana	4,179.7	261.2	(P)	(P)	(P)	1,855.7	(P)	10.7	38.3	0	(P)	(P)	(P)	(P)	0
Maine	554.9	95.8	0	265.6	(P)	(P)	(P)	43.7	(P)	(P)	12.2	23.8	(P)	(P)	0
Maryland	2,232.4	460.3	(P)	(P)	220.0	570.2	(P)	89.6	183.1	(P)	44.8	99.1	195.4	(P)	117.8
Massachusetts	4,900.7	218.3	111.9	141.1	501.6	446.5	(P)	151.1	(P)	201.0	276.5	827.5	530.2	78.0	504.8
Michigan	5,300.0	550.5	0	83.6	255.7	837.1	(P)	261.8	231.1	690.9	368.9	649.1	292.1	713.5	206.9
Minnesota	1,813.5	421.1	(P)	(P)	179.1	91.5	(P)	86.7	70.7	(P)	(P)	213.7	266.1	(P)	101.2
Mississippi	1,109.5	39.4	0	(P)	(P)	363.7	(P)	115.4	95.7	35.0	133.4	(P)	(P)	(P)	42.7
Missouri	3,635.1	900.9	(P)	102.5	81.9	1,108.7	(P)	63.3	187.3	307.2	200.8	161.3	149.5	(P)	129.6
Montana	77.3	(P)	0	0	0	(P)	(P)	(P)	(P)	(P)	(P)	0	0	0	0
Nebraska	956.7	363.8	0	0	(P)	401.1	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)	(P)
Nevada	123.6	43.3	0	(P)	0	(P)	0	(P)	32.6	19.5	0	0	0	0	(P)
New Hampshire	690.1	35.7	(P)	40.1	46.7	(P)	(P)	96.7	27.9	(P)	(P)	209.8	64.5	0	76.9
New Jersey	11,023.0	1,156.4	(P)	177.1	419.8	6,726.3	76.6	209.6	232.3	255.2	178.3	340.5	357.5	33.8	787.7
New Mexico	183.6	(P)	0	0	(P)	(P)	(P)	209.6	18.4	0	0	(P)	0	0	(P)
New York	9,528.6	1,069.9	52.9	182.0	2,707.7	1,813.4	(P)	495.7	293.1	373.8	332.1	595.3	798.2	136.2	441.2
North Carolina	10,682.9	290.1	489.5	141.4	160.2	4,886.5	(P)	562.4	295.7	160.9	235.7	525.6	1,894.0	191.3	528.2
North Dakota	(P)	(P)	0	0	(P)	0	0	0	0	0	0	0	0	(P)	0
Ohio	9,888.5	1,148.6	(P)	229.1	395.3	1,609.1	(P)	541.0	479.2	1,035.5	491.1	617.0	619.0	1,338.6	535.4
Oklahoma	1,339.5	89.0	0	(P)	47.6	195.5	(P)	430.0	123.6	(P)	102.3	87.4	(P)	(P)	61.1
Oregon	1,071.7	169.8	(P)	(P)	(P)	117.5	(P)	10.7	36.4	84.7	(P)	203.6	168.7	(P)	(P)
Pennsylvania	9,511.1	1,065.3	95.7	388.4	794.3	1,505.4	(P)	214.4	511.8	526.7	510.7	971.0	765.4	628.4	868.5
Rhode Island	390.4	(P)	(P)	0	45.5	(P)	(P)	38.4	(P)	(P)	15.9	21.7	46.8	0	83.5
South Carolina	3,996.1	273.7	328.7	(P)	37.5	1,017.6	(P)	771.1	174.3	(P)	85.8	558.6	389.1	(P)	(P)
South Dakota	141.6	73.7	0	0	(P)	(P)	0	(P)	(P)	0	(P)	32.1	(P)	0	0
Tennessee	5,252.6	228.0	155.0	88.5	144.3	1,585.5	(P)	375.2	227.7	213.6	267.4	551.9	392.7	564.2	188.2
Texas	12,849.7	509.1	0	40.0	303.0	7,594.0	458.5	315.0	625.4	505.3	330.6	477.2	1,114.6	84.3	381.9
Utah	588.7	25.1	(P)	0	(P)	20.2	0	0	24.1	(P)	(P)	(P)	32.6	(P)	(P)
Vermont	224.7	(P)	0	(P)	(P)	38.8	0	(P)	(P)	(P)	0	30.4	(P)	(P)	0
Virginia	4,555.3	281.1	(P)	(P)	173.0	2,361.0	0	304.8	192.5	(P)	33.0	295.8	282.2	201.0	80.3
Washington	1,867.1	406.1	(P)	250.1	31.9	134.3	(P)	47.6	153.7	71.3	(P)	23.8	177.2	(P)	(P)
West Virginia	2,291.7	0	0	(P)	(P)	1,435.2	(P)	(P)	84.9	485.6	109.8	(P)	(P)	(P)	(P)
Wisconsin	3,551.0	1,038.2	(P)	379.1	262.0	243.5	0	165.5	(P)	136.3	166.4	579.0	236.1	0	221.6
Wyoming	(P)	(P)	0	0	0	(P)	0	0	(P)	0	0	0	0	0	0

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

NOTE.—Administrative and auxiliary establishments are excluded.

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Table 9.—Value Added by Foreign-Owned Manufacturing Establishments as a Percentage of That by All U.S. Manufacturing Establishments, State by Selected Industry, 1990

State	Total	Selected industries													
		Food and kindred products	Textile mill products	Paper and allied products	Printing and publishing	Chemicals and allied products	Petroleum and coal products	Rubber and miscellaneous plastics products	Stone, clay, and glass products	Primary metal industries	Fabricated metal products	Industrial machinery and equipment	Electronic and other electric equipment	Transportation equipment	Instruments and related products
		20	22	26	27	28	29	30	32	33	34	35	36	37	38
Total	13.4	13.8	8.6	7.9	10.1	31.9	15.1	17.6	24.8	19.3	7.9	10.3	15.6	4.9	11.9
Alabama	14.1	(D)	6.5	11.0	2.7	43.6	(D)	52.5	39.4	(D)	(D)	7.2	26.1	(D)	(D)
Alaska	13.1	(D)	0	(D)	0	(D)	0	0	0	0	(D)	0	0	0	0
Arizona	6.3	5.9	0	0	(D)	3.9	0	23.5	45.3	22.1	19.0	13.3	(D)	(D)	(D)
Arkansas	9.8	7.0	0	2.2	(D)	11.3	(D)	(D)	20.8	13.0	14.3	23.2	21.1	10.2	(D)
California	12.4	13.5	(D)	11.5	7.9	49.8	(D)	8.2	27.2	23.5	7.9	10.1	21.6	3.8	12.9
Colorado	7.4	8.1	0	(D)	9.5	41.4	(D)	(D)	23.0	(D)	(D)	6.3	7.0	0	2.4
Connecticut	11.1	18.5	14.6	1.4	8.8	41.7	(D)	3.6	25.3	26.4	5.2	7.3	5.8	(D)	11.8
Delaware	36.7	(D)	0	0	0	74.4	(D)	(D)	(D)	(D)	(D)	(D)	0	0	(D)
District of Columbia	1.1	0	0	0	(D)	0	n.a.	(D)	(D)	(D)	0	0	0	0	0
Florida	10.4	14.6	0	(D)	4.8	8	(D)	8.0	35.2	31.5	5.8	19.6	11.1	6.3	4.4
Georgia	19.2	12.3	(D)	10.1	8.2	34.9	(D)	13.0	37.4	17.4	10.9	16.0	32.8	0.2	41.1
Hawaii	17.7	(D)	0	(D)	(D)	(D)	(D)	(D)	(D)	(D)	0	0	0	(D)	0
Idaho	6.9	13.4	0	0	(D)	1.2	0	0	0	0	0	(D)	(D)	0	0
Illinois	12.3	14.2	0	8.3	11.0	20.4	15.2	18.3	25.0	17.2	5.1	8.4	11.4	(D)	20.1
Indiana	17.1	28.7	(D)	(D)	16.2	13.5	0.6	22.9	(D)	28.3	10.9	19.7	19.7	3.5	36.8
Iowa	9.6	7.2	0	10.5	10.0	10.5	(D)	43.7	21.4	(D)	(D)	6.4	(D)	(D)	(D)
Kansas	8.8	9.5	0	(D)	9.4	9.1	(D)	(D)	30.9	(D)	3.7	6.7	(D)	(D)	(D)
Kentucky	16.0	27.8	(D)	(D)	6.4	29.2	(D)	(D)	28.7	57.8	13.6	8.4	4.8	(D)	0
Louisiana	18.5	14.7	(D)	(D)	(D)	19.8	(D)	5.1	17.4	0	(D)	(D)	(D)	(D)	0
Maine	9.4	25.9	0	14.8	(D)	(D)	(D)	18.6	(D)	(D)	6.2	10.5	(D)	(D)	0
Maryland	14.2	19.9	(D)	(D)	12.1	28.3	(D)	20.1	45.1	(D)	7.1	10.6	27.3	(D)	5.5
Massachusetts	14.0	13.0	15.2	9.9	13.6	29.4	(D)	9.9	(D)	22.5	12.5	16.0	10.5	4.6	8.7
Michigan	8.2	10.6	0	4.8	8.9	17.5	(D)	9.4	17.8	24.7	5.8	8.4	22.1	3.3	15.2
Minnesota	7.0	11.4	(D)	(D)	6.3	9.0	(D)	10.6	8.0	(D)	(D)	4.8	15.0	(D)	4.8
Mississippi	8.7	3.5	0	(D)	(D)	35.6	(D)	18.1	30.6	9.6	20.6	(D)	(D)	(D)	44.7
Missouri	12.0	19.3	(D)	9.5	3.6	25.5	(D)	7.8	25.1	36.1	9.0	9.9	8.2	(D)	18.1
Montana	6.5	(D)	0	0	0	(D)	(D)	(D)	(D)	(D)	(D)	0	0	0	0
Nebraska	12.8	13.6	0	0	(D)	72.3	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
Nevada	8.4	27.9	0	(D)	0	(D)	0	(D)	24.4	22.3	0	0	0	0	(D)
New Hampshire	12.4	9.7	(D)	10.6	8.4	(D)	(D)	27.2	20.5	(D)	(D)	24.3	10.2	0	8.3
New Jersey	24.4	25.2	(D)	11.5	9.4	46.7	10.4	12.6	19.2	23.8	7.7	13.2	12.5	4.6	22.3
New Mexico	8.2	(D)	0	0	(D)	(D)	(D)	(D)	16.0	0	0	(D)	(D)	0	(D)
New York	11.1	17.5	7.0	8.1	16.3	24.5	(D)	25.7	19.3	20.7	9.6	7.5	10.6	2.8	3.1
North Carolina	18.5	8.8	6.6	6.7	11.6	59.2	(D)	23.8	21.0	22.5	14.1	11.6	41.1	14.9	45.7
North Dakota	(D)	(D)	0	0	(D)	0	0	0	0	0	0	0	0	(D)	0
Ohio	12.3	16.4	(D)	10.0	9.4	21.6	(D)	12.6	16.1	14.5	5.8	6.4	10.5	9.2	28.5
Oklahoma	11.3	9.6	0	(D)	7.7	42.7	(D)	37.2	18.3	(D)	10.3	4.4	(D)	(D)	10.7
Oregon	8.1	9.3	(D)	(D)	(D)	37.5	(D)	3.7	14.9	10.0	(D)	15.9	20.2	(D)	(D)
Pennsylvania	14.8	14.1	11.2	12.2	13.5	21.0	(D)	9.9	18.0	9.4	9.9	16.4	15.8	16.8	30.6
Rhode Island	7.6	(D)	(D)	0	13.4	(D)	(D)	16.6	(D)	(D)	2.5	8.1	11.3	0	15.0
South Carolina	19.0	31.2	9.1	(D)	7.1	22.3	(D)	52.0	23.7	(D)	8.8	27.0	32.6	(D)	(D)
South Dakota	8.7	17.6	0	0	(D)	(D)	0	(D)	(D)	0	(D)	10.7	(D)	0	0
Tennessee	17.4	6.0	18.3	5.4	7.5	31.0	(D)	22.4	27.4	17.8	15.2	22.6	21.7	29.3	26.2
Texas	15.4	6.2	0	1.8	7.5	36.9	5.3	11.2	30.4	23.6	8.8	7.4	14.4	1.4	9.0
Utah	9.6	4.2	(D)	0	(D)	9.1	0	0	14.9	(D)	(D)	(D)	10.5	(D)	(D)
Vermont	7.0	(D)	0	(D)	(D)	(D)	0	(D)	(D)	(D)	0	15.4	(D)	(D)	0
Virginia	14.0	10.0	(D)	(D)	8.0	54.3	0	23.3	28.0	(D)	3.5	20.3	17.3	6.6	4.8
Washington	7.5	18.2	(D)	13.6	3.0	8.8	(D)	12.3	29.2	6.1	(D)	1.7	31.1	(D)	(D)
West Virginia	36.1	0	0	(D)	(D)	55.9	(D)	(D)	19.1	42.1	30.7	(D)	(D)	0	(D)
Wisconsin	9.6	21.3	(D)	7.8	10.5	15.1	0	12.5	(D)	11.3	5.3	8.0	8.0	(D)	11.4
Wyoming	(D)	(D)	n.a.	n.a.	0	(D)	0	(D)	(D)	0	0	0	0	0	0

(D) Suppressed to avoid disclosure of data of individual companies.
n.a. Not applicable.

NOTE.—Administrative and auxiliary establishments are excluded.
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plant scale and capital intensity or whether they can be attributed to foreign ownership per se. Finally, it examines whether differences between the productivity of foreign-owned and U.S.-owned establishments reflect differences in their plant scale, capital intensity, or employee skill levels or whether they can be attributed to foreign ownership per se.

Plant scale

For total manufacturing, average plant scale (measured as value added per establishment) of foreign-owned establishments was much larger than that of U.S.-owned establishments—\$17.3 million, compared with \$3.2 million, or a difference of \$14.1 million.⁸ A statistical decomposition of the difference indicated that 60 percent of it was attributable to a tendency in some industries for the plant scale of foreign-owned establishments to be larger than that of U.S.-owned establishments, while only 27 percent was attributable to a tendency for foreign-owned establishments to be concentrated in industries with above-average plant scale.⁹ (The method used to decompose the difference in plant scale is described in the technical note.)

The importance of the within-industry differences can be seen by examining the distribution of industries on the basis of the relative plant scale of foreign-owned and U.S.-owned establishments. As the following tabulation indicates, the average plant scale of foreign-owned establishments was more than 10 percent larger than that of U.S.-owned establishments in 277 of the 312 industries with 6 or more foreign-owned establishments (hereafter referred to as “the 312 industries”). In 98 of these 277 industries, plant scale of foreign-owned establishments was more than four times as large. Moreover, there were only 20 industries in which the average plant scale of foreign-owned establishments was more

than 10 percent smaller than that of U.S.-owned establishments.¹⁰

Plant scale of foreign-owned establishments relative to that of U.S.-owned establishments	Number of industries
All industries	312
At least 30 percent smaller	8
Between 10 and 30 percent smaller	12
Within 10 percent smaller or larger	15
Between 10 and 30 percent larger	12
At least 30 percent larger	265

Plant scale of foreign-owned establishments may be larger, on average, than that of U.S.-owned establishments at least partly because the income and other benefits that normally accrue to large plants may be sought out to offset the inherent disadvantages foreign investors tend to face when investing in the United States and when subsequently operating their U.S. businesses. Foreign investors may be unfamiliar with the language and the general business environment in the United States, and their investments must, at least to some extent, be managed from a distance. Many of the added costs a foreign investor incurs when making a new U.S. investment and subsequently operating a business here tend to be fixed, and foreign investors may tend to concentrate their investments in relatively large establishments as a means of spreading these costs over a larger volume of output. In some cases, such a strategy may also benefit foreign direct investors by simplifying the organizational structure, reducing the number of units that must be managed, and lowering the number of local business environments to which they must become acclimated.

Most industries with direct investment have both large foreign-owned and large U.S.-owned plants. However, in many of these industries, there are substantial numbers of small U.S.-owned plants but relatively few small foreign-owned plants. This pattern can be seen in “motor vehicles and car bodies” manufacturing (SIC 3711), which includes both car and truck manufacturing. In 1990, the average plant scale of foreign-owned establishments in the industry was over 60 percent larger than that of U.S.-owned establishments. Of the 406 plants in the industry, 385 were U.S. owned and 21 were foreign owned. Both groups had a number of large plants: 52 of the U.S.-owned plants and 11

8. Because the number of manufacturing establishments is not shown in the Census Bureau's ASM publications, average plant scale for U.S.-owned establishments was computed using the total value added from the ASM and the number of U.S. manufacturing establishments shown in the Census Bureau's *County Business Patterns, 1990: United States* (Washington DC: U.S. Government Printing Office, 1992). Because the *County Business Patterns* and ASM data are closely comparable, use of *County Business Patterns* establishment counts is unlikely to have significantly affected the findings of the article.

9. The remaining difference was attributable to the interaction of the within-industry differences and industry-mix effects.

In industries with only a few foreign-owned establishments, value added per establishment and the other measures for foreign-owned establishments discussed in this section may be so affected by the special circumstances of individual establishments that they are not representative of foreign-owned establishments generally. Because of this possibility, the decomposition was limited to the 312 four-digit industries with at least 6 foreign-owned establishments. For these industries, value added per establishment was \$17.3 million for foreign-owned establishments and \$3.6 million for U.S.-owned establishments, a difference of \$13.7 million.

10. Across the 312 industries, the mean difference between the foreign-owned and U.S.-owned plant scale measures was \$11.0 million. Unlike the differences cited in the text and in footnote 9, which were computed using a method that gave heavier weight to the larger industries, this figure was computed without regard to industry size; a statistical test indicated that it was statistically significant at the 1-percent confidence level.

of the foreign-owned plants had at least 1,000 employees. However, there were many small U.S.-owned plants but few small foreign-owned plants in the industry: Over three-fourths of the U.S.-owned plants, but less than one-fifth of the foreign-owned plants, had fewer than 100 employees.

Capital intensity

For total manufacturing, capital intensity (indirectly measured as the non-employee-compensation share of value added) was higher for foreign-owned establishments than for U.S.-owned establishments—61 percent, compared with 55 percent.¹¹ Virtually all of this difference was attributable to industry-mix effects; within-industry differences were negligible.¹²

Although the capital intensity of foreign-owned establishments was not systematically higher or lower than that of U.S.-owned establishments within specific industries,¹³ in a large number of industries, as the following tabulation indicates, the capital intensity of foreign-owned establishments differed substantially from that of U.S.-owned establishments. On the one hand, the capital intensity of foreign-owned establishments was more than 10 percent higher than that of U.S.-owned establishments in 98 of the 312 industries. On the other hand, it was more than 10 percent lower in 85 industries.

Capital intensity of foreign-owned establishments relative to that of U.S.-owned establishments	Number of industries
All industries	312
At least 30 percent lower	26
Between 10 and 30 percent lower	59
Within 10 percent lower or higher	129
Between 10 and 30 percent higher	67
At least 30 percent higher	31

Compensation per employee

For total manufacturing, compensation per employee of foreign-owned establishments was \$5,300 higher than that of U.S.-owned establishments—\$38,300, compared with \$33,000. About 60 percent of this difference was attributable

to industry-mix effects, and 30 percent to within-industry differences.¹⁴

Although industry-mix effects dominate, within-industry differences are nonetheless significant. The positive contribution of these differences can be seen from the following tabulation. It shows that compensation per employee of foreign-owned establishments was more than 10 percent higher than that of U.S.-owned establishments in 131 of the 312 industries, whereas it was more than 10 percent lower in only 28 industries.¹⁵

Compensation per employee of foreign-owned establishments relative to that of U.S.-owned establishments	Number of industries
All industries	312
At least 30 percent lower	3
Between 10 and 30 percent lower	25
Within 10 percent lower or higher	153
Between 10 and 30 percent higher	107
At least 30 percent higher	24

Compensation per employee may have been higher for foreign-owned establishments than for other establishments in the same industry because the occupational mix was weighted more heavily toward relatively high-skilled occupations, perhaps reflecting the use of different technologies.¹⁶ In addition, foreign-owned establishments may have paid higher wage rates at a given skill level than U.S.-owned establishments because, for example, they have a greater tendency to be located in high-wage areas.

14. The remaining difference was attributable to the interaction of the within-industry differences and industry-mix effects. The decomposition was based on data for the 312 industries. For these industries, the difference in compensation per employee was \$4,600, somewhat smaller than the difference for manufacturing as a whole.

In "FDIUS: Establishment Data for 1987," differences between foreign-owned and U.S.-owned establishments were examined using payroll per employee, which is a somewhat narrower measure than total employee compensation. (Payroll excludes employee benefits, whereas total employee compensation includes them.) Data on total employee compensation were not available from the 1987 link data.

Within-industry differences were somewhat less important in explaining the overall difference in compensation per employee in the 1990 data than in explaining the overall difference in payroll per employee in the 1987 data. This result appears to largely reflect a narrowing of within-industry differences in payroll per employee between 1987 and 1990. In light of the 1990 data, within-industry differences in benefits per employee appear to be larger than within-industry differences in payroll per employee.

15. Across the 312 industries, the mean difference between foreign-owned and U.S.-owned establishments' compensation per employee was \$2,500. A statistical test indicated that this difference was significant at the 1-percent confidence level.

16. As noted in footnote 2, BLS has released information on the occupational structure of foreign-owned manufacturing establishments for 1989. Based on this information, BLS concluded that while the distribution of occupations in foreign-owned manufacturing establishments in the United States was little different from that in all U.S. manufacturing establishments at the overall manufacturing level, there were major differences in the distribution of occupations within individual industries, at least at the SIC two-digit level.

11. The data needed to measure capital intensity directly are not available.

12. This statement is based on a decomposition similar to that used for plant scale (see technical note). The decomposition was based on data for the 312 industries. For these industries, the capital intensity measures for both foreign-owned and U.S.-owned establishments were almost the same as the corresponding measures for manufacturing as a whole.

13. Across the 312 industries, the mean difference between the foreign-owned and U.S.-owned capital-intensity measures was negligible.

Table 10.—Relative Plant Scale and Capital Intensity: Averages for Industries Grouped by the Wage Rates of Foreign-Owned Establishments Relative to Those of U.S.-Owned Establishments, 1990

Range of relative wage rates (percent) ¹	Number of industries	Percent	
		Relative plant scale ²	Relative capital intensity ³
All industries	312	376	102
At least 30 percent lower	2	118	147
Between 10 and 30 percent lower	41	226	95
Within 10 percent lower or higher	156	336	102
Between 10 and 30 percent higher	88	448	104
At least 30 percent higher	25	634	103
Addendum: Coefficient of correlation between the measure in the column and the relative wage rate ratio for the 312 industries .....		.336*	.0348

*Statistically significant at the 1-percent confidence level.

1. Relative wage rates are foreign-owned establishments' wage rates divided by U.S.-owned establishments' wage rates times 100.

2. Relative plant scale is foreign-owned establishments' value added per establishment divided by the corresponding measure for U.S.-owned establishments times 100. This column shows the unweighted averages of the relative scale measure for industries in the groups defined by the relative wage rates shown in the stub.

3. Relative capital intensity is foreign-owned establishments' non-employee-compensation share of value added divided by the corresponding measure for U.S.-owned establishments times 100. This column shows the unweighted averages of the relative capital intensity measure for industries in the groups defined by the relative wage rates shown in the stub.

Production-worker wage rates

In examining differences in employee compensation between foreign-owned and U.S.-owned establishments, differences in occupational mix can be partly controlled for by comparing the wages of production workers only. Restricting the comparison in this way eliminates variations in the ratio of production workers to other workers as a source of differences in rates of pay; in addition, production workers probably constitute a more homogeneous group than other workers, who may represent a wide variety of occupational groups (for example, sales and clerical as well as professional and managerial employees).

For total manufacturing, the average hourly wage rate (excluding benefits) of production workers was \$12.57 for foreign-owned establishments and \$11.04 for U.S.-owned establishments, a difference of \$1.53. About 70 percent of this difference was attributable to industry-

Table 11.—Production Worker Hourly Wage Rates for Foreign-Owned and U.S.-Owned Establishments, Selected Industries in Which Wage Rates of Foreign-Owned Establishments Were Relatively Low or High, 1990

SIC code	Industry	Wages per hour (dollars)		Relative wage rate (percent) ¹	Addendum: Relative plant scale (percent) ²
		Foreign-owned establishments	U.S.-owned establishments		
Industries in which foreign-owned establishments had relatively low hourly wage rates:					
3647	Vehicular lighting equipment	10.38	15.85	65	109
3694	Engine electrical equipment	8.30	11.86	70	127
3721	Aircraft	12.07	17.17	70	26
2711	Newspapers	8.93	12.52	71	96
3714	Motor vehicle parts and accessories	11.60	16.14	72	148
3624	Carbon and graphite products	10.53	14.27	74	113
3592	Carburetors, pistons, rings, valves	11.56	14.83	78	170
2431	Millwork	7.96	9.92	80	385
3711	Motor vehicles and car bodies	16.74	20.84	80	161
3661	Telephone and telegraph apparatus	12.07	14.93	81	297
3663	Radio and television communications equipment	9.94	12.10	82	175
2095	Roasted coffee	10.76	13.01	83	162
2631	Paperboard mills	14.03	16.88	83	76
2296	Tire cord and fabrics	8.43	10.12	83	39
3255	Clay refractories	10.70	12.77	84	225
3531	Construction machinery	12.88	15.26	84	219
3951	Pens and mechanical pencils	8.32	9.86	84	222
Industries in which foreign-owned establishments had relatively high hourly wage rates:					
3532	Mining machinery	13.05	10.39	126	360
2064	Candy and other confectionery products	12.00	9.54	126	357
3251	Brick and structural clay tile	10.40	8.22	127	165
3082	Unsupported plastics profile shapes	11.87	9.36	127	439
2851	Paints and allied products	14.35	11.27	127	416
3398	Metal heat treating	13.73	10.75	128	431
2045	Prepared flour mixes and doughs	13.48	10.55	128	503
2836	Biological products except diagnostic	10.21	7.98	128	1,026
2325	Men's and boys' trousers and slacks	8.27	6.39	130	120
3651	Household audio and video equipment	10.40	7.97	130	1,474
2833	Medicinals and botanicals	21.43	16.41	131	98
3087	Custom compound purchased resins	12.24	9.31	131	187
2085	Distilled and blended liquors	15.89	11.92	133	187
3295	Minerals, ground or treated	13.59	10.16	134	324
3965	Fasteners, buttons, needles, and pins	9.63	7.15	135	831
2816	Inorganic pigments	17.01	12.54	136	703
3291	Abrasive products	14.84	10.70	139	817
3645	Residential lighting fixtures	10.49	7.51	140	606
3596	Scales and balances, except laboratory	11.25	7.87	143	686
3088	Plastics plumbing fixtures	13.10	7.53	174	1,032

1. Hourly wage rate for foreign-owned establishments divided by hourly wage rate for U.S.-owned establishments times 100.

2. Value added per establishment for foreign-owned establishments divided by value added per establishment for U.S.-owned establishments times 100.

NOTE.—The list of industries in this table excludes industries for which the data for foreign-owned establishments are suppressed. It also excludes residual industries, which cover establishments not elsewhere classified.

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mix effects, and 20 percent was attributable to within-industry differences.¹⁷

Although industry-mix effects dominate, the first two columns of table 10 show that within-industry differences are nonetheless significant. Hourly wages of production workers were more than 10 percent higher in foreign-owned establishments than in U.S.-owned establishments in 113 of the 312 industries, whereas they were at least 10 percent lower in only 43 industries.¹⁸

Data for selected industries in which the wage rates of foreign-owned establishments differed substantially from those of U.S.-owned establishments are shown in table 11. Five of the industries in which wage rates of foreign-owned establishments were substantially lower than those of U.S.-owned establishments are motor-vehicle related: Vehicular lighting equipment; engine electrical equipment; motor vehicle parts and accessories; carburetors, pistons, rings, and valves; and motor vehicles and car bodies. The lower wage rates in these industries may have resulted because many of the foreign-owned establishments were established recently—within the last decade—and thus have a workforce with less accumulated job tenure than is typical of U.S.-owned establishments. They may also reflect lower rates of unionization among foreign-owned establishments and differences in plant location.

Plant scale.—The within-industry differences in wage rates partly reflect differences in plant scale. Across the 312 industries, the ratio of the wage rates of foreign-owned establishments to those of U.S.-owned establishments is significantly correlated with the ratio of their average plant scales. In table 10, the relative plant-scale ratio for foreign- and U.S.-owned establishments increases steadily as the ratio of their wage rates increases: The average ratio is 118 percent for the 2 industries in which the wage rates are at least 30 percent lower for foreign-owned establishments than for U.S.-owned establishments, and it is 634 percent for the 25 industries in which the wage rates are at least 30 percent higher for foreign-owned establishments. This pattern is consistent with other research that shows that

production-worker wages tend to be higher at larger plants.¹⁹

This pattern is further illustrated in table 11. Average plant scale of foreign-owned establishments was more than three times higher than that of U.S.-owned establishments in 15 of the 20 industries in which wage rates of foreign-owned establishments were substantially higher than those of U.S.-owned establishments. In contrast, it was more than three times that of U.S.-owned establishments in only 1 of the 17 industries in which wage rates of foreign-owned establishments were substantially lower than those of U.S.-owned establishments; in 4 of the 17 industries, average plant scale of foreign-owned establishments was smaller than that of U.S.-owned establishments.

Capital intensity.—Differences between the hourly wage rates of foreign-owned and U.S.-owned establishments were not associated with differences in their capital intensity. In table 10, no discernible relationship between the relative wage and capital-intensity measures is evident. Furthermore, a statistical test indicated that the relative wage and capital-intensity measures were not significantly correlated.

Effect of foreign-ownership.—Differences between the hourly wage rates of foreign-owned and U.S.-owned establishments do not appear to be the result of foreign ownership per se. A regression that controlled for the effects of plant scale and capital intensity on wage rates and that incorporated a variable for foreign ownership indicated that there is no statistically significant relationship between foreign ownership and wage rates.²⁰

19. See, for example, Steve J. Davis and John Haltiwanger, "Wage Dispersion Between and Within U.S. Manufacturing Plants, 1963–1986," *Brookings Papers on Economic Activity*, Special Issue (1991): 115–80.

20. A linear regression equation was estimated in which there were 624 observations (consisting of separate observations for foreign-owned and U.S.-owned establishments for each of the 312 industries). This estimation yielded the following:

$$W = 10.42 + 0.07SC + 0.59CI - 0.09FDMY$$

$$(11.35) \quad (0.90) \quad (-0.43)$$

$$R^2 = 0.21,$$

$$F = 54.7$$

where W is hourly wages, SC is plant scale, CI is capital intensity, and $FDMY$ is a dummy variable for foreign ownership. The t -statistics for the independent variables, which appear in parentheses, indicate that the coefficient of the scale variable was significant at the 1-percent confidence level and that the coefficients of both the capital intensity variable and the foreign-ownership dummy variable were insignificant.

17. The remaining difference was attributable to the interaction of the within-industry differences and industry-mix effects. The decomposition was based on data for the 312 industries. For these industries, the hourly wage rate for foreign-owned establishments was \$1.26 higher than that for U.S.-owned establishments—\$12.69, compared with \$11.43.

18. Across the 312 industries, the mean difference between foreign-owned and U.S.-owned establishments' hourly wage rates was \$0.63. A statistical test indicated that this difference was significant at the 1-percent confidence level.

Labor productivity

For total manufacturing, labor productivity (measured as value added per production-worker hour) of foreign-owned establishments was significantly higher than that of U.S.-owned establishments—\$74 per hour, compared with \$52 per hour.²¹ About 70 percent of the difference was attributable to industry-mix effects, and 20 percent to within-industry differences.²²

Examination of the distribution of industries on the basis of the relative productivity of foreign- and U.S.-owned establishments confirms that, although industry-mix effects dominate, within-industry differences are nonetheless im-

portant. In a significant number of industries, the productivity of foreign-owned establishments was higher than that of U.S.-owned establishments: It was more than 10 percent higher in 153 of the 312 industries (table 12). In considerably fewer industries, the productivity of foreign-owned establishments was relatively low: It was at least 10 percent lower in only 70 industries.²³ In 89 industries, foreign-owned establishments' productivity was roughly equal to (within 10 percent of) that of U.S.-owned establishments.

Studies of productivity frequently indicate that plant scale, capital intensity, and employee skill level strongly influence productivity. The following discussion examines the extent to which these conventional factors explain the differences between the productivity of foreign-owned and U.S.-owned establishments.

Plant scale.—Differences between the productivity of foreign-owned and U.S.-owned establishments were highly correlated across industries with differences in plant scale (table 12). This pattern can be seen by comparing the industries in which foreign-owned establishments' productivity was relatively low with the industries in which it was relatively high. In the 18 "lower productivity" industries, the average plant scale of foreign-owned establishments was only about 36 percent larger than that of U.S.-owned establishments. In contrast, in the 92 "higher productivity" industries, the average plant scale of foreign-owned establishments was more than six times that of U.S.-owned establishments.

This pattern is further illustrated in table 13, which shows selected lower and higher productivity industries. In 7 of the 11 lower productivity industries, the average plant scale of foreign-owned establishments was smaller than that of U.S.-owned establishments. In contrast, in all but 2 of the 23 higher productivity industries, the average plant scale of foreign-owned establishments was at least twice as large as that of U.S.-owned establishments.

Capital intensity.—As discussed earlier, even though the capital intensity of foreign-owned establishments was not systematically higher or lower than that of U.S.-owned establishments within individual industries, the differences in the capital intensity of the two groups of establishments were sizable in a large number

21. Productivity can be measured in a variety of ways; the measure used here—value added per production-worker hour—is a commonly used measure of labor productivity and can be easily calculated from the data. Studies of productivity sometimes use total output (shipments plus inventory change) instead of value added in the numerator. However, when total output is used as a measure of production, the inputs to which output is related typically include not only labor employed within the establishment but also capital and the inputs that the establishment purchases from others (for example, materials or business services); data on some of these inputs are not available from the ASM. Furthermore, in attempting to determine whether foreign-owned establishments differ from U.S.-owned establishments, value added may be the preferred measure because it reflects only the production by the establishments themselves, whereas total output reflects, in addition to the establishments' own production, the value of inputs purchased from others.

22. The remaining difference was attributable to the interaction of the industry-mix effects and within-industry differences. The decomposition was performed for the 312 industries. For these industries, value added per production-worker hour was \$75 for foreign-owned establishments and \$55 for U.S.-owned establishments.

Table 12.—Relative Plant Scale, Capital Intensity, and Employee Skill Level: Averages for Industries Grouped by the Productivity of Foreign-Owned Establishments Relative to That of U.S.-Owned Establishments, 1990

Range of relative productivity (percent) ¹	Number of industries	Percent		
		Relative plant scale ²	Relative capital intensity ³	Relative employee skill level ⁴
All industries	312	376	102	109
At least 30 percent lower	18	136	58	103
Between 10 and 30 percent lower	52	208	85	98
Within 10 percent lower or higher	89	288	96	106
Between 10 and 30 percent higher	61	373	108	111
At least 30 percent higher	92	604	121	118
Addendum:				
Coefficient of correlation between the measure in the column and the relative productivity ratio for the 312 industries .....		.50*	.64*	.39*

* Statistically significant at the 1-percent confidence level.

1. Relative productivity is foreign-owned establishments' value added per production worker hour divided by the corresponding measure for U.S.-owned establishments times 100.

2. Relative plant scale is foreign-owned establishments' value added per establishment divided by the corresponding measure for U.S.-owned establishments times 100. This column shows the unweighted averages of the relative scale measure for industries in the groups defined by the relative productivity measure shown in the stub.

3. Relative capital intensity is foreign-owned establishments' non-employee-compensation share of value added divided by the corresponding measure for U.S.-owned establishments times 100. This column shows the unweighted averages of the relative capital intensity measure for industries in the groups defined by the relative productivity measure shown in the stub.

4. Relative employee skill level is foreign-owned establishments' compensation per employee divided by the corresponding measure for U.S.-owned establishments times 100. This column shows the unweighted averages of the relative employee skill level measure for industries in the groups defined by the relative productivity measure shown in the stub.

23. Across the 312 industries, the mean difference between the foreign-owned and U.S.-owned productivity measures was \$8.19 per hour. A statistical test indicated that this difference was significant at the 1-percent confidence level.

of industries. As table 12 indicates, these differences are highly correlated with differences in productivity. Like the case of plant scale, as the productivity of foreign-owned establishments increases in relation to that of U.S.-owned establishments, the relative capital intensity of foreign-owned establishments also increases. The correlation between capital intensity and productivity reflects the tendency for additional capital to allow increased production when combined with a given amount of labor.

The correlation between differences in productivity and differences in capital intensity of foreign-owned and U.S.-owned establishments is particularly evident when the capital intensities of the two groups of establishments in lower and higher productivity industries are compared. In the lower productivity industries, the average capital intensity of foreign-owned establishments was only 58 percent of that of U.S.-owned

establishments. In contrast, in the higher productivity industries, the average capital intensity of foreign-owned establishments exceeded that of U.S.-owned establishments by 21 percent. The data shown in table 13 for selected lower and higher productivity industries further illustrate this pattern. In all of the lower productivity industries, foreign-owned establishments were less capital intensive than U.S.-owned establishments, whereas in all but one of the higher productivity industries, foreign-owned establishments were more capital intensive.

Employee skill level.—Differences in productivity of foreign-owned and U.S.-owned establishments were correlated with differences in the skill level of their employees (measured as compensation per employee); however, the correlation was not as high as the correlation for plant scale and

Table 13.—Productivity, Plant Scale, Capital Intensity, and Employee Skill Level of Foreign-Owned and U.S.-Owned Establishments, Selected Industries in Which the Productivity of Foreign-Owned Establishments Was Relatively Low or High, 1990

SIC code	Industry	Foreign-owned establishments				U.S.-owned establishments				Foreign-owned establishments relative to U.S.-owned establishments (percent)			
		Productivity (dollars) ¹	Plant scale (millions of dollars) ²	Capital intensity (percent) ³	Employee skill level (dollars) ⁴	Productivity (dollars) ¹	Plant scale (millions of dollars) ²	Capital intensity (percent) ³	Employee skill level (dollars) ⁴	Productivity	Plant scale	Capital intensity	Employee skill level
Industries in which foreign-owned establishments had relatively low productivity:													
2296	Tire cord and fabrics	20.1	13.4	28	23,786	66.2	34.3	73	28,535	30	39	38	83
3721	Aircraft	30.8	30.5	12	43,176	76.8	115.6	31	48,834	40	26	41	88
3844	X-ray apparatus and tubes	56.3	15.6	36	45,010	119.8	18.7	67	44,245	47	83	53	102
2911	Petroleum refining	123.8	61.0	67	56,727	248.2	69.5	85	55,053	50	88	79	103
3295	Minerals, ground or treated	37.8	6.6	28	49,584	75.0	2.0	75	26,492	50	324	37	187
2833	Medicinals and botanicals	105.6	10.4	61	48,543	200.4	10.6	81	46,583	53	98	76	104
3724	Aircraft engines and engine parts	43.7	10.9	33	41,474	82.7	27.9	50	47,121	53	39	66	88
3692	Primary batteries, dry and wet	28.8	7.2	31	26,222	51.4	9.8	61	30,728	56	73	52	85
3711	Motor vehicles and car bodies	62.0	151.6	52	47,037	104.3	94.3	66	60,373	59	161	80	78
3643	Current-carrying wiring devices	29.1	10.8	31	30,621	43.7	6.2	53	28,840	67	173	60	106
3524	Lawn and garden equipment	43.8	48.6	65	24,195	63.7	9.7	67	29,451	69	502	96	82
Industries in which foreign-owned establishments had relatively high productivity:													
3555	Printing trades machinery	92.2	23.8	68	34,815	59.5	3.3	36	41,234	155	722	188	84
2033	Canned fruits and vegetables	82.7	35.5	79	27,591	52.3	9.1	70	26,491	158	389	113	104
3291	Abrasive products	85.0	28.0	58	48,695	53.1	3.4	54	34,351	160	817	107	142
3563	Air and gas compressors	104.0	17.0	55	45,572	62.9	7.3	44	39,642	165	234	125	115
2096	Potato chips and similar snacks	114.0	32.1	76	36,432	66.0	8.0	69	26,683	173	400	110	137
3594	Fluid power pumps and motors	86.9	15.1	56	40,044	49.4	5.6	37	39,663	176	269	149	101
3567	Industrial furnaces and ovens	66.8	4.4	46	39,474	37.0	2.4	30	32,519	180	181	153	121
2035	Pickles, sauces, and salad dressings	163.0	35.7	86	35,742	89.7	7.4	79	28,091	182	483	109	127
2041	Flour and other grain mill products	107.6	17.8	76	42,475	57.5	3.0	62	35,627	187	585	123	119
2834	Pharmaceutical preparations	417.4	153.6	78	54,215	220.7	33.7	80	43,629	189	456	98	124
3873	Watches, clocks, watchcases, and parts	75.5	17.6	69	30,140	38.9	2.8	55	28,879	194	625	125	104
3398	Metal heat treating	74.4	7.8	54	40,478	38.0	1.8	46	33,270	196	431	118	122
2034	Dehydrated fruits, vegetables, soups	84.1	33.5	78	30,788	42.0	6.2	59	27,299	200	542	132	113
2241	Narrow fabric mills	42.0	12.9	68	25,025	20.9	2.3	42	21,377	201	562	161	117
2836	Biological products except diagnostic	129.2	23.3	66	37,209	64.3	2.3	55	36,677	201	1,026	120	101
2032	Canned specialties	161.2	30.5	86	31,089	80.1	15.7	77	30,766	201	194	112	101
2045	Prepared flour mixes and doughs	144.0	37.0	84	36,583	68.5	7.4	68	31,615	210	503	123	116
2731	Book publishing	689.4	34.4	80	36,563	291.4	3.8	73	37,424	237	912	110	98
3088	Plastics plumbing fixtures	88.6	22.8	73	35,482	35.1	2.2	52	23,809	252	1,032	140	149
3821	Laboratory apparatus and furniture	134.0	25.6	55	45,506	52.8	3.7	43	34,375	254	692	128	132
3743	Railroad equipment	112.6	25.1	62	37,331	41.4	9.2	34	39,208	272	274	182	95
2816	Inorganic pigments	257.2	54.8	84	49,606	93.9	7.8	71	39,586	274	703	119	125
2411	Logging	87.1	8.0	80	33,712	31.5	.3	51	24,895	276	2,352	156	135

1. Value added per production worker hour.
 2. Value added per establishment.
 3. Non-employee-compensation share of value added.
 4. Compensation per employee.

NOTE.—The industries with relatively low productivity for foreign-owned establishments shown in this table are the industries in which the productivity of foreign-owned establishments was at least 30 percent lower than that

of U.S.-owned establishments and that (1) had at least six foreign-owned establishments, (2) were not suppressed for foreign-owned establishments, and (3) were not residual industries (see "Technical Note" in the article). The industries with relatively high productivity for foreign-owned establishments shown in this table are the industries in which the productivity of foreign-owned establishments was a least 50 percent higher than that of U.S.-owned establishments and that (1) had at least six foreign-owned establishments, (2) were not suppressed for foreign-owned establishments, and (3) were not residual industries (see "Technical Note").

SIC Standard Industrial Classification

for capital intensity.²⁴ In the lower productivity industries, the employee skill level of foreign-owned and U.S.-owned establishments was about the same, whereas in the higher productivity industries, the employee skill level of foreign-owned establishments was 18 percent higher than that of U.S.-owned establishments. Table 13 further illustrates the relationship between productivity and employee skill level. In 10 of the 11 lower productivity industries, the employee skill level of foreign-owned establishments was roughly equal to, or lower than, that of U.S.-owned establishments. In contrast, in 15 of the 23 higher productivity industries, the employee skill level of foreign-owned establishments was substantially higher than that of U.S.-owned establishments.

Combined effects.—The prior discussion showed that, when taken separately, differences in the plant scale, capital intensity, and employee skill level of foreign-owned and U.S.-owned establishments are each associated with differences in productivity. To determine whether a particular factor still independently contributes to the differences in productivity once the influence of each of the other factors is taken into account, the measures of relative plant scale, capital intensity, and employee skill level were included as independent variables in a multiple regression equation in which the relative productivity measure was the dependent variable. In addition to testing for the independent contribution of each of the three factors, the regression also provides an indication of their combined importance. The results confirmed that, even after allowing for the influence of the other measures, the relative plant scale, capital intensity, and employee skill level measures were each significantly correlated with the differences in productivity.²⁵ Furthermore, over 60 percent of the variation in the relative

productivity measure could be accounted for by the combined variation in these three factors.

Effect of foreign ownership.—One additional statistical check was made to test directly whether foreign ownership per se was associated with higher productivity levels. This check involved estimating a multiple regression equation that controlled for the effects on productivity levels of plant scale, capital intensity, and employee skill level and that included a variable for foreign ownership. The test indicated that there was no correlation between productivity and foreign ownership per se.²⁶ Thus, any influence of foreign ownership on productivity appears to be mainly indirect: The plant scale, capital intensity, and employee skill level of foreign-owned establishments differ from those of U.S.-owned establishments, and it is largely because of these differences that the productivity for foreign-owned establishments is higher.

Technical Note

This note describes the statistical decomposition method used in the article and discusses how the findings of the article are affected by the estimation of data for foreign-owned establishments and by the inclusion in the SIC of residual industries, which cover establishments not elsewhere classified.

Statistical decomposition

The differences between foreign-owned and U.S.-owned establishments in average plant scale, capital intensity, compensation per employee, wages per production-worker hour, and productivity were decomposed statistically into industry-mix,

26. A linear regression was estimated in which there were 624 observations (there were separate observations for foreign-owned and U.S.-owned establishments for each of the 312 industries). This estimation yielded the following:

$$PR = -133.81 + .19SC + 219.10CI + .0024ES - .15FDMY$$

(1.83) (19.95) (10.99) (-.04)

$$R^2 = .54,$$

$$F = 188.41$$

where *PR*, *SC*, *CI*, and *ES* are the measures of productivity, plant scale, capital intensity, and employee skill level, respectively, and *FDMY* is a dummy variable for foreign ownership. The *t*-statistics for the independent variables, which are shown in parentheses, indicate that the coefficients of both the capital intensity and employee skill level variables were significant at the 1-percent confidence level, that the coefficient of the scale variable was significant at the 10-percent confidence level, and that the coefficient of the foreign-ownership dummy was insignificant. To rule out the possibility that the regression results were influenced by errors in the measurement of capital intensity through the use of a proxy variable, tests controlling for this potential errors-in-variables problem using "instrumental variables" were conducted; the results of the tests suggested that such errors probably were not a problem.

24. The compensation-per-employee measure of employee skill level (sometimes termed "human capital intensity") reflects both occupational structure and the accumulation of skills within occupations.

25. Using the 312 industries as the observations, the estimation yielded the following:

$$RPR = -.89 + .02RSC + .01RCI + .01RES$$

(4.90) (15.67) (9.10)

$$R^2 = .61,$$

$$F = 163.7$$

where *RPR*, *RSC*, *RCI*, and *RES* are the measures of relative productivity, plant scale, capital intensity, and employee skill level, respectively. The *t*-statistics for the independent variables, which appear in parentheses, indicate that the coefficients for all of the variables were statistically significant at the 1-percent confidence level. The coefficients of correlation between the independent variables were as follows: Plant scale and capital intensity, 0.32; plant scale and employee skill level, 0.33; capital intensity and employee skill level, 0.04.

within-industry, and interaction effects. The decomposition for a given measure begins with expressing the measure as a weighted average of values for individual industries. For plant scale, for example, average plant scale (value added per establishment) may be expressed as a weighted average of the average plant scales in individual industries, with the weight for any given industry being the industry's share in the total number of establishments. Thus, the average plant scale for U.S.-owned establishments can be expressed as

$$p = \sum_{i=1}^{312} s_i p_i,$$

and the average plant scale of foreign-owned establishments can be expressed as

$$p^a = \sum_{i=1}^{312} s_i^a p_i^a,$$

where p is average plant scale (value added per establishment) for the 312 industries (see footnote 9), p_i is plant scale for industry i , and s_i is the share of the i th industry in the total number of establishments for the 312 industries. (Variables with the superscript a denote data for foreign-owned establishments, and variables without a superscript denote data for U.S.-owned establishments.) The difference between average plant scales of the two groups of establishments can then be decomposed algebraically as

$$p^a - p = \sum_{i=1}^{312} p_i (s_i^a - s_i) + \sum_{i=1}^{312} s_i (p_i^a - p_i) + \sum_{i=1}^{312} (p_i^a - p_i) (s_i^a - s_i).$$

The first term on the right side of the equation measures the effects of differences in industry mix; it is the difference in plant scale that would have resulted if, in each industry, plant scale were the same for foreign-owned establishments as for U.S.-owned establishments but if the differences in the distribution of the establishments by industry were as observed. The second term on the right side measures the effects of within-industry differences in plant scale; it is the difference in plant scale that would have resulted if foreign-owned establishments had the same distribution by industry as U.S.-owned establishments but if the differences in plant scale that existed in each industry were as observed. The third term reflects the interaction between these two effects.

A decomposition similar to this one was carried out for each of the other measures discussed in the article.

Estimation of nonsample establishments

Data were estimated for foreign-owned establishments that were not selected for the 1990 ASM, which covered only a sample of all manufacturing establishments. For manufacturing as a whole, 17 percent of the shipments of foreign-owned establishments was estimated in 1990. Data for the nonsample foreign-owned establishments were estimated using industry-average relationships between employment and payroll, on the one hand, and the other items covered by the ASM, on the other. (Employment and payroll for all foreign-owned establishments were obtained from the Census Bureau's Standard Statistical Establishment List.) Because industry-average relationships were used as the basis for estimation, actual differences between foreign-owned and U.S.-owned establishments may not be the same as those observed in the data; in particular, both the total and the within-industry differences may be larger. To check this possibility, the productivity of foreign-owned and U.S.-owned establishments was compared using data only for those foreign-owned establishments that were reported in the ASM. This comparison indicated that both the total productivity difference and the within-industry difference are larger when only these data are used than when both the reported and estimated data are used. However, the significance of this result is difficult to assess because the foreign-owned establishments included in the ASM sample were much larger, on average, than the nonsample establishments, and, as discussed

Data Availability

This article presents summary data for foreign-owned U.S. manufacturing establishments. Publications presenting more detailed data for 1989 and 1990 are available from the Superintendent of Documents (see inside back cover for order information). The data are also available on diskettes at a cost of \$20 each. For the 1989 data, specify BEA Accession Number 50-93-40-789, and for the 1990 data, Accession Number 50-93-40-790. Send your order, along with a check or money order payable to "Bureau of Economic Analysis," to Public Information Office Order Desk, BE-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230. To place an order using MasterCard or VISA, call (202) 606-9827. For further information about the link project, call (202) 606-9893.

in the previous section, productivity tends to be higher in larger establishments.

Residual industries

The SIC includes some three- and four-digit industries that cover establishments not elsewhere classified. (An SIC code with the digit "9" appearing as the third or fourth digit usually designates such an industry.) These residual industries usually do not consist of homogeneous activity groups. For example, SIC 3699 ("Electrical machinery, equipment, and supplies, not elsewhere classified") includes, among other things, establishments that manufacture electric Christmas tree lights and establishments that manufacture particle accelerators. Because of this heterogeneity, the activities of foreign-owned and U.S.-owned establishments that are classified in such industries may differ significantly. These differences could, in turn, cause the within-industry differences that were observed in the data to be larger than if comparisons had been based only on industries in which activities were

more homogeneous. To determine whether this was the case, the residual industries were excluded from the data, and the comparisons of the hourly wage rate and the productivity of foreign-owned and U.S.-owned establishments were repeated. Two different checks were made: In the first, only the 15 three-digit residual industries were excluded; in the second, both the three- and four-digit residual industries (a total of 53 industries) were excluded. In both the hourly wage rate and the productivity comparisons, excluding the residual industries had little effect on the results. Specifically, both the overall differences between foreign-owned and U.S.-owned establishments and the relative importance of the industry-mix effects and within-industry differences were nearly the same as those reported in the article. In addition, the distributions of foreign-owned and U.S.-owned establishments in terms of relative hourly wage rates and productivity were little changed from those discussed in the article.


Table 14 follows. 

Table 14.—Employment, Value Added by Manufacture, and Value of Shipments of Foreign-Owned and All U.S. Establishments, by Detailed Industry, 1990

SIC code	Industry	Foreign-owned establishments			All U.S. establishments			Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of employees	Thousands of dollars		Number of employees ¹	Thousands of dollars		Employment	Value added by manufacture	Value of shipments
			Value added by manufacture	Value of shipments		Value added by manufacture ¹	Value of shipments ²			
	Manufacturing³	2,004,235	177,360,745	417,539,353	18,840,300	1,326,361,700	2,873,501,600	10.6	13.4	14.5
20	Food and kindred products	159,386	19,501,177	46,842,783	1,469,900	140,972,800	384,009,000	10.8	13.8	12.2
21	Tobacco products	H	(D)	(D)	40,900	22,561,300	29,922,400	(D)	(D)	(D)
22	Textile mill products	47,363	2,283,123	5,693,627	632,500	26,541,600	65,951,400	7.5	8.6	8.6
23	Apparel and other textile products	23,085	850,240	1,727,481	992,900	33,034,000	64,413,600	2.3	2.6	2.7
24	Lumber and wood products	17,043	842,486	2,304,003	682,900	28,597,200	74,287,200	2.5	2.9	3.1
25	Furniture and fixtures	J	(D)	(D)	499,200	21,644,700	41,682,000	(D)	(D)	(D)
26	Paper and allied products	48,644	4,709,223	11,395,189	628,100	59,823,300	131,444,600	7.7	7.9	8.7
27	Printing and publishing	103,983	10,408,807	16,499,934	1,538,100	103,179,000	157,059,500	6.8	10.1	10.5
28	Chemicals and allied products	242,392	48,835,701	87,678,890	853,300	153,032,400	288,183,700	28.4	31.9	30.4
29	Petroleum and coal products	25,638	4,106,797	46,372,551	111,900	27,214,100	172,588,600	22.9	15.1	26.9
30	Rubber and miscellaneous plastics products	120,951	8,757,922	17,790,551	870,100	49,889,000	101,398,200	13.9	17.6	17.5
31	Leather and leather products	6,362	287,251	608,138	117,400	4,586,600	9,887,300	5.4	6.3	6.2
32	Stone, clay, and glass products	105,578	8,450,211	16,407,454	509,100	34,140,200	63,468,000	20.7	24.8	25.9
33	Primary metal industries	119,087	10,297,630	31,902,909	711,900	53,366,600	146,052,000	16.7	19.3	21.8
34	Fabricated metal products	93,300	6,350,246	13,973,579	1,438,700	79,951,900	163,052,800	6.5	7.9	8.6
35	Industrial machinery and equipment	191,440	13,561,697	31,010,583	1,876,700	132,165,800	256,344,700	10.2	10.3	12.1
36	Electronic and other electric equipment	228,237	16,703,246	34,601,773	1,497,400	106,983,900	194,847,900	15.2	15.6	17.8
37	Transportation equipment	104,147	7,170,588	28,834,909	1,773,700	146,916,300	367,926,700	5.9	4.9	7.8
38	Instruments and related products	121,520	9,722,110	15,840,686	948,600	81,665,600	123,776,700	12.8	11.9	12.8
39	Miscellaneous manufacturing industries	26,087	1,929,276	3,553,235	386,300	20,095,600	37,205,200	6.8	9.6	9.6
	Administrative and auxiliary	200,064	n.a.	n.a.	1,260,900	n.a.	n.a.	15.9	n.a.	n.a.
20	Food and kindred products	159,386	19,501,177	46,842,783	1,469,900	140,972,800	384,009,000	10.8	13.8	12.2
201	Meat products	16,050	642,258	2,911,450	376,900	18,434,500	90,776,500	4.3	3.5	3.2
2011	Meat packing plants	3,864	172,550	1,124,837	118,400	6,666,500	51,069,200	3.3	2.6	2.2
2013	Sausages and other prepared meats	2,968	199,018	845,454	81,700	5,315,700	18,779,700	3.6	3.7	4.5
2015	Poultry slaughtering and processing	9,218	270,690	941,159	176,800	6,452,300	20,927,600	5.2	4.2	4.5
202	Dairy products	18,410	2,121,659	6,845,546	139,000	13,233,700	50,962,400	13.2	16.0	13.4
2021	Creamery butter	B	(D)	(D)	1,600	207,500	1,307,500	(D)	(D)	(D)
2022	Cheese, natural and processed	4,804	390,614	1,886,501	34,900	2,850,600	16,155,800	13.8	13.7	11.7
2023	Dry, condensed, evaporated products	1,420	468,861	908,179	12,100	2,670,200	6,135,300	11.7	17.6	14.8
2024	Ice cream and frozen desserts	H	(D)	(D)	20,700	1,725,500	4,660,200	(D)	(D)	(D)
2026	Fluid milk	8,724	823,911	3,183,337	69,600	5,779,900	22,703,600	12.5	14.3	14.0
203	Preserved fruits and vegetables	27,181	3,362,382	6,918,243	218,200	20,418,900	44,494,500	12.5	16.5	15.5
2032	Canned specialties	931	213,440	389,181	23,900	3,272,300	6,322,300	3.9	6.5	6.2
2033	Canned fruits and vegetables	9,641	1,278,306	2,935,885	68,000	6,405,200	14,697,900	14.2	20.1	20.1
2034	Dehydrated fruits, vegetables, soups	2,345	334,656	591,218	14,100	1,124,900	2,453,700	16.6	29.8	24.1
2035	Pickles, sauces, and salad dressings	1,525	392,483	621,680	21,200	2,984,500	5,749,800	7.2	13.2	10.8
2037	Frozen fruits and vegetables	5,768	353,619	1,037,316	46,200	2,921,600	7,473,600	12.5	12.1	13.9
2038	Frozen specialties, nec	6,971	789,878	1,342,963	44,700	3,710,400	7,797,000	15.6	21.3	17.2
204	Grain mill products	15,180	2,877,809	6,796,558	102,700	19,294,700	46,538,000	14.8	14.9	14.6
2041	Flour and other grain mill products	1,312	231,559	726,735	12,300	1,251,300	5,624,700	10.7	18.5	12.9
2043	Cereal breakfast foods	0	0	0	16,100	6,325,300	8,704,600	0	0	0
2044	Rice milling	C	(D)	(D)	4,300	592,500	1,771,700	(D)	(D)	(D)
2045	Prepared flour mixes and doughs	2,499	554,763	937,758	12,000	1,496,700	3,155,500	20.8	37.1	29.7
2046	Wet corn milling	H	(D)	(D)	9,300	2,867,700	6,696,400	(D)	(D)	(D)
2047	Dog and cat food	G	(D)	(D)	12,900	3,842,200	7,015,000	(D)	(D)	(D)
2048	Prepared feeds, nec	5,123	475,527	2,159,666	35,800	2,919,000	13,570,200	14.3	16.3	15.9
205	Bakery products	26,951	2,769,836	4,310,139	207,900	15,971,100	26,121,300	13.0	17.3	16.5
2051	Bread, cake, and related products	14,359	1,074,725	1,683,037	149,000	10,475,500	17,019,200	9.6	10.3	9.9
2052	Cookies and crackers	12,276	1,676,510	2,592,481	48,700	4,823,100	7,803,500	25.2	34.8	33.2
2053	Frozen bakery products, except bread	316	18,601	34,621	10,200	672,400	1,298,600	3.1	2.8	2.7
206	Sugar and confectionery products	14,715	1,527,756	3,862,402	92,300	9,474,600	21,044,500	15.9	16.1	18.4
2061	Raw cane sugar	F	(D)	(D)	6,100	502,000	1,295,600	(D)	(D)	(D)
2062	Cane sugar refining	G	(D)	(D)	4,900	659,700	3,075,300	(D)	(D)	(D)
2063	Beet sugar	G	(D)	(D)	7,600	828,800	2,133,900	(D)	(D)	(D)
2064	Candy and other confectionery products	7,746	621,196	1,231,407	49,200	4,354,900	7,991,800	15.7	14.3	15.4
2066	Chocolate and cocoa products	G	(D)	(D)	11,300	1,418,100	3,061,300	(D)	(D)	(D)
2067	Chewing gum	F	(D)	(D)	4,400	725,200	1,113,700	(D)	(D)	(D)
2068	Salted and roasted nuts and seeds	C	(D)	(D)	8,900	985,900	2,373,000	(D)	(D)	(D)
207	Fats and oils	6,163	973,226	4,445,591	29,300	4,118,200	19,499,200	21.0	23.6	22.8
2074	Cottonseed oil mills	E	(D)	(D)	2,800	185,000	850,500	(D)	(D)	(D)
2075	Soybean oil mills	G	(D)	(D)	6,900	1,519,000	10,966,300	(D)	(D)	(D)
2076	Vegetable oil mills, nec	184	27,225	179,793	700	98,600	490,400	26.3	27.6	36.7
2077	Animal and marine fats and oils	C	(D)	(D)	8,600	715,400	1,776,200	(D)	(D)	(D)
2079	Edible fats and oils, nec	3,706	565,481	1,739,181	10,300	1,600,300	5,415,800	36.0	35.3	32.1
208	Beverages	14,504	2,561,436	5,052,651	146,200	25,033,900	52,198,000	9.9	10.2	9.7
2082	Malt beverages	G	(D)	(D)	32,600	8,192,800	15,186,200	(D)	(D)	(D)
2083	Malt	E	(D)	(D)	1,400	170,800	700,400	(D)	(D)	(D)
2084	Wines, brandy, and brandy spirits	2,496	397,667	722,462	14,400	1,810,100	3,657,800	17.3	22.0	19.8
2085	Distilled and blended liquors	3,357	924,787	1,625,637	7,400	1,888,300	3,473,500	45.4	49.0	46.8
2086	Bottled and canned soft drinks	5,151	511,608	1,345,438	82,400	9,075,100	23,847,500	6.3	5.6	5.6
2087	Flavoring extracts and syrups, nec	764	263,015	371,437	8,100	3,896,900	5,332,500	9.4	6.7	7.0
209	Miscellaneous food and kindred products	20,232	2,664,815	5,700,203	157,300	14,993,300	32,374,500	12.9	17.8	17.6
2091	Canned and cured fish and seafoods	1,192	63,249	267,432	7,100	303,200	998,200	16.8	20.9	26.8
2092	Fresh or frozen prepared fish	6,764	353,240	1,443,721	40,500	1,776,900	6,087,700	16.7	19.9	23.7
2095	Roasted coffee	2,322	592,348	1,200,431	11,200	3,581,800	6,622,700	20.7	16.5	18.1
2096	Potato chips and similar snacks	2,139	320,787	518,688	32,300	2,906,300	6,062,100	6.6	11.0	8.6
2097	Manufactured ice	B	(D)	(D)	4,400	238,000	326,700	(D)	(D)	(D)
2098	Macaroni and spaghetti	C	(D)	(D)	6,200	728,700	1,229,600	(D)	(D)	(D)
2099	Food preparations, nec	7,574	1,307,414	2,219,343	55,700	5,458,300	11,047,600	13.6	24.0	20.1
21	Tobacco products	H	(D)	(D)	40,900	22,561,300	29,922,400	(D)	(D)	(D)
211	Cigarettes	G	(D)	(D)	27,800	20,628,300	25,522,400	(D)	(D)	(D)
2111	Cigarettes	G	(D)	(D)	27,800	20,628,300	25,522,400	(D)	(D)	(D)
212	Cigars	0	0	0	2,300	137,000	229,800	0	0	0
2121	Cigars	0	0	0	2,300	137,000	229,800	0	0	0
213	Chewing and smoking tobacco	C	(D)	(D)	3,200	1,105,900	1,473,800	(D)	(D)	(D)
2131	Chewing and smoking tobacco	C	(D)	(D)	3,200	1,105,900	1,473,800	(D)	(D)	(D)
214	Tobacco stemming and redrying	F	(D)	(D)	7,600	690,000	2,696,500	(D)	(D)	(D)
2141	Tobacco stemming and redrying	F	(D)	(D)	7,600	690,000	2,696,500	(D)	(D)	(D)
22	Textile mill products	47,363	2,283,123	5,693,627	632,500	26,541,600	65,951,400	7.5	8.6	8.6
22										

Table 14.—Employment, Value Added by Manufacture, and Value of Shipments of Foreign-Owned and All U.S. Establishments, by Detailed Industry, 1990—Continued

SIC code	Industry	Foreign-owned establishments			All U.S. establishments			Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of employees	Thousands of dollars		Number of employees ¹	Thousands of dollars		Employment	Value added by manufacture	Value of shipments
			Value added by manufacture	Value of shipments		Value added by manufacture ¹	Value of shipments ²			
2221	Broadwoven fabric mills, manmade fiber and silk	10,405	538,937	1,076,324	85,300	3,619,300	8,577,900	12.2	14.9	12.5
223	Broadwoven fabric mills, wool	357	23,336	41,728	15,700	674,600	1,798,300	2.3	3.5	2.3
2231	Broadwoven fabric mills, wool	357	23,336	41,728	15,700	674,600	1,798,300	2.3	3.5	2.3
224	Narrow fabric mills	983	77,334	107,476	17,000	671,400	1,259,700	5.8	11.5	8.5
2241	Narrow fabric mills	983	77,334	107,476	17,000	671,400	1,259,700	5.8	11.5	8.5
225	Knitting mills	8,331	290,206	701,556	197,900	6,791,100	14,596,500	4.2	4.3	4.8
2251	Women's hosiery, except socks	E	(D)	(D)	23,400	911,200	1,620,700	(D)	(D)	(D)
2252	Hosiery, nec	G	(D)	(D)	38,600	1,062,000	2,277,900	(D)	(D)	(D)
2253	Knit outerwear mills	1,378	35,918	67,356	63,600	1,783,200	3,456,400	2.2	2.0	1.9
2254	Knit underwear mills	G	(D)	(D)	15,400	596,500	1,105,000	(D)	(D)	(D)
2257	Weft knit fabric mills	842	32,153	102,668	30,700	1,370,000	3,588,700	2.7	2.3	2.9
2258	Lace and warp knit fabric mills	G	(D)	(D)	22,300	931,600	2,298,300	(D)	(D)	(D)
2259	Knitting mills, nec	0	0	0	3,900	136,500	249,300	0	0	0
226	Textile finishing, except wool	H	(D)	(D)	49,400	2,365,700	6,303,800	(D)	(D)	(D)
2261	Finishing plants, cotton	1,341	59,665	113,369	14,900	812,300	1,594,800	9.0	7.3	7.1
2262	Finishing plants, manmade	E	(D)	(D)	22,300	1,109,700	3,400,900	(D)	(D)	(D)
2269	Finishing plants, nec	1,489	74,144	189,153	12,200	443,600	1,308,100	12.2	16.7	14.5
227	Carpets and rugs	3,310	179,830	661,636	51,800	2,917,300	10,038,400	6.4	6.2	6.6
2273	Carpets and rugs	3,310	179,830	661,636	51,800	2,917,300	10,038,400	6.4	6.2	6.6
228	Yarn and thread mills	10,800	394,793	996,732	100,700	3,753,100	10,574,600	10.7	10.5	9.4
2281	Yarn spinning mills	6,693	246,816	619,148	75,000	2,654,500	7,259,200	8.9	9.3	8.5
2282	Throwing and winding mills	F	(D)	(D)	18,500	769,300	2,521,000	(D)	(D)	(D)
2284	Thread mills	H	(D)	(D)	7,100	329,300	794,500	(D)	(D)	(D)
229	Miscellaneous textile goods	7,828	520,049	1,524,095	52,200	3,292,000	7,477,800	15.0	15.8	20.4
2295	Coated fabrics, not rubberized	E	(D)	(D)	8,900	578,600	1,361,800	(D)	(D)	(D)
2296	Tire cord and fabrics	2,849	94,050	443,174	5,100	334,300	981,600	55.9	28.1	45.1
2297	Nonwoven fabrics	2,329	214,792	669,364	16,900	1,306,900	2,851,000	13.8	16.4	23.5
2298	Cordage and twine	G	(D)	(D)	7,000	248,800	636,900	(D)	(D)	(D)
2299	Textile goods, nec	1,199	118,688	203,167	14,400	823,400	1,646,500	8.3	14.4	12.3
23	Apparel and other textile products	23,085	850,240	1,727,481	992,900	33,034,000	64,413,600	2.3	2.6	2.7
231	Men's and boys' suits and coats	4,262	148,603	234,577	48,400	1,500,800	2,622,400	8.8	9.9	8.9
2311	Men's and boys' suits and coats	4,262	148,603	234,577	48,400	1,500,800	2,622,400	8.8	9.9	8.9
232	Men's and boys' furnishings	7,982	264,990	548,727	258,800	8,051,400	14,872,900	3.1	3.3	3.7
2321	Men's and boys' shirts	H	(D)	(D)	69,700	2,197,700	4,242,600	(D)	(D)	(D)
2322	Men's and boys' underwear and nightwear	G	(D)	(D)	15,300	381,700	724,900	(D)	(D)	(D)
2323	Men's and boys' neckwear	B	(D)	(D)	7,400	268,500	499,900	(D)	(D)	(D)
2325	Men's and boys' trousers and slacks	1,813	67,229	163,467	81,700	3,016,700	5,657,300	2.2	2.2	2.9
2326	Men's and boys' work clothing	C	(D)	(D)	31,500	846,300	1,461,700	(D)	(D)	(D)
2329	Men's and boys' clothing, nec	F	(D)	(D)	53,300	1,340,600	2,286,600	(D)	(D)	(D)
233	Women's and misses' outerwear	1,950	60,636	111,089	318,200	10,192,400	19,338,700	.6	.6	.6
2331	Women's and misses' blouses and shirts	C	(D)	(D)	64,400	1,954,900	3,733,000	(D)	(D)	(D)
2335	Women's, junior's, and misses' dresses	F	(D)	(D)	106,400	3,346,800	5,914,500	(D)	(D)	(D)
2337	Women's and misses' suits and coats	1,004	36,450	77,062	45,900	1,979,000	4,162,800	2.2	1.8	1.9
2339	Women's and misses' outerwear, nec	C	(D)	(D)	101,500	5,281,400	5,528,400	(D)	(D)	(D)
234	Women's and children's undergarments	G	(D)	(D)	60,300	1,859,000	3,424,300	(D)	(D)	(D)
2341	Women's and children's underwear	G	(D)	(D)	48,700	1,298,400	2,337,400	(D)	(D)	(D)
2342	Bras, girdles, and allied garments	E	(D)	(D)	11,600	560,600	1,086,900	(D)	(D)	(D)
235	Hats, caps, and millinery	0	0	0	16,500	424,300	736,600	0	0	0
2353	Hats, caps, and millinery	0	0	0	16,500	424,300	736,600	0	0	0
236	Girls' and children's outerwear	F	(D)	(D)	60,800	2,045,700	3,697,800	(D)	(D)	(D)
2361	Girls' and children's dresses and blouses	E	(D)	(D)	29,000	903,800	1,724,500	(D)	(D)	(D)
2369	Girls' and children's outerwear, nec	C	(D)	(D)	31,900	1,141,900	1,973,200	(D)	(D)	(D)
237	Fur goods	0	0	0	2,200	103,600	378,700	0	0	0
2371	Fur goods	0	0	0	2,200	103,600	378,700	0	0	0
238	Miscellaneous apparel and accessories	C	(D)	(D)	38,300	1,237,900	2,256,400	(D)	(D)	(D)
2381	Fabric dress and work gloves	C	(D)	(D)	5,200	212,400	340,800	(D)	(D)	(D)
2384	Robes and dressing gowns	0	0	0	3,900	119,700	306,300	0	0	0
2385	Waterproof outerwear	0	0	0	4,500	113,000	219,300	0	0	0
2386	Leather and sheep-lined clothing	0	0	0	2,200	73,000	166,600	0	0	0
2387	Apparel belts	0	0	0	11,100	386,100	673,400	0	0	0
2389	Apparel and accessories, nec	0	0	0	11,500	333,800	550,100	0	0	0
239	Miscellaneous fabricated textile products	6,515	273,047	620,649	189,300	7,618,800	17,085,900	3.4	3.6	3.6
2391	Curtains and draperies	F	(D)	(D)	23,400	685,400	1,499,200	(D)	(D)	(D)
2392	Housefurnishings, nec	2,638	86,198	214,278	44,800	1,967,300	4,871,900	5.9	4.4	4.4
2393	Textile bags	360	12,369	29,131	5,700	230,000	513,000	6.3	5.4	5.7
2394	Canvas and related products	C	(D)	(D)	17,300	531,100	1,134,900	(D)	(D)	(D)
2395	Pleating and stitching	0	0	0	14,200	388,100	742,700	0	0	0
2396	Automotive and apparel trimmings	F	(D)	(D)	47,100	2,267,400	5,104,800	(D)	(D)	(D)
2397	Schiffli machine embroideries	C	(D)	(D)	5,900	172,900	309,200	(D)	(D)	(D)
2399	Fabricated textile products, nec	1,586	110,416	206,322	31,100	1,376,600	2,910,300	5.1	8.0	7.1
24	Lumber and wood products	17,043	842,486	2,304,003	682,900	28,597,200	74,287,200	2.5	2.9	3.1
241	Logging	721	119,353	382,586	83,400	4,313,200	12,229,000	.9	2.8	3.1
2411	Logging	721	119,353	382,586	83,400	4,313,200	12,229,000	.9	2.8	3.1
242	Sawmills and planing mills	2,706	143,504	431,743	170,800	7,174,500	19,934,900	1.6	2.0	2.2
2421	Sawmills and planing mills, general	2,071	122,196	378,485	138,900	6,184,300	17,923,000	1.5	2.0	2.1
2426	Hardwood dimension and flooring mills	F	(D)	(D)	29,300	908,800	1,800,500	(D)	(D)	(D)
2429	Special product sawmills, nec	B	(D)	(D)	2,500	81,500	211,300	(D)	(D)	(D)
243	Millwork, plywood and structural members	7,930	339,789	777,564	229,400	9,577,600	23,245,200	3.5	3.5	3.3
2431	Millwork	3,909	168,644	375,646	90,500	3,851,600	9,524,700	4.3	4.4	3.9
2434	Wood kitchen cabinets	G	(D)	(D)	62,800	2,540,100	4,610,000	(D)	(D)	(D)
2435	Hardwood veneer and plywood	1,328	59,420	135,003	18,700	706,600	2,051,700	7.1	8.4	6.6
2436	Softwood veneer and plywood	C	(D)	(D)	35,600	1,669,200	5,030,400	(D)	(D)	(D)
2439	Structural wood members, nec	F	(D)	(D)	21,800	810,100	2,028,400	(D)	(D)	(D)
244	Wood containers	C	(D)	(D)	41,500	1,189,200	2,850,000	(D)	(D)	(D)
2441	Nailed wood boxes and shooks	0	0	0	6,000	191,600	431,300	0	0	0
2448	Wood pallets and skids	C	(D)	(D)	28,300	802,000	1,948,600	(D)	(D)	(D)
2449	Wood containers, nec	0	0	0	7,200	195,600	470,200	0	0	0
245	Wood buildings and mobile homes	G	(D)	(D)	61,400	2,364,800	6,471,000	(D)	(D)	(D)
2451	Mobile homes	B	(D)	(D)	38,800	1,501,600	4,202,500	(D)	(D)	(D)
2452	Prefabricated wood buildings	1,359	48,762	116,306	22,600	863,200	2,268,500	6.0	5.6	5.1
249	Miscellaneous wood products	4,118	178,693	570,338	96,400	3,977,800	9,557,000	4.3	4.5	6.0
2491	Wood preserving	F	(D)	(D)	13,000	696,500	2,642,700	(D)	(D)	(D)
2493	Reconstituted wood products	1,598	95,998	247,272	22,300	1,285,000	3,042,600	7.2	7.5	8.1
2499	Wood products, nec	G	(D)	(D)	61,100	1,996,300	3,871,800	(D)	(D)	(D)
25	Furniture and fixtures	J	(D)	(D)	499,200	21,644,700	41,682,000	(D)	(D)	(D)

Table 14.—Employment, Value Added by Manufacture, and Value of Shipments of Foreign-Owned and All U.S. Establishments, by Detailed Industry, 1990—Continued

SIC code	Industry	Foreign-owned establishments			All U.S. establishments			Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of employees	Thousands of dollars		Number of employees ¹	Thousands of dollars		Employment	Value added by manufacture	Value of shipments
			Value added by manufacture	Value of shipments		Value added by manufacture ¹	Value of shipments ²			
251	Household furniture	9,065	276,284	692,827	274,800	9,878,100	19,912,900	3.3	2.8	3.5
2511	Wood household furniture	2,183	85,549	192,599	130,900	4,399,000	8,302,900	1.7	1.9	2.3
2512	Upholstered household furniture	H	(D)	(D)	83,800	2,809,100	5,815,300	(D)	(D)	(D)
2514	Metal household furniture	B	(D)	(D)	26,500	1,032,400	2,184,100	(D)	(D)	(D)
2515	Mattresses and bedsprings	0	0	0	24,700	1,331,400	2,904,900	0	0	0
2517	Wood television and radio cabinets	G	(D)	(D)	3,300	132,600	246,900	(D)	(D)	(D)
2519	Household furniture, nec	1,577	33,088	148,970	5,700	173,700	458,700	27.7	19.0	32.5
252	Office furniture	3,761	277,062	481,778	74,900	4,719,500	8,030,100	5.0	5.9	6.0
2521	Wood office furniture	F	(D)	(D)	28,200	1,100,800	1,998,800	(D)	(D)	(D)
2522	Office furniture, except wood	H	(D)	(D)	46,700	3,618,700	6,031,400	(D)	(D)	(D)
253	Public building and related furniture	G	(D)	(D)	26,000	1,147,100	3,112,400	(D)	(D)	(D)
2531	Public building and related furniture	F	(D)	(D)	26,000	1,147,100	3,112,400	(D)	(D)	(D)
254	Partitions and fixtures	G	(D)	(D)	72,600	3,409,300	6,193,000	(D)	(D)	(D)
2541	Wood partitions and fixtures	C	(D)	(D)	40,100	1,788,500	3,147,200	(D)	(D)	(D)
2542	Partitions and fixtures, except wood	F	(D)	(D)	32,500	1,620,800	3,045,800	(D)	(D)	(D)
259	Miscellaneous furniture and fixtures	G	(D)	(D)	50,900	2,490,600	4,433,600	(D)	(D)	(D)
2591	Drapery hardware and blinds and shades	G	(D)	(D)	19,000	1,005,100	1,886,300	(D)	(D)	(D)
2599	Furniture and fixtures, nec	C	(D)	(D)	31,900	1,485,600	2,547,300	(D)	(D)	(D)
26	Paper and allied products	48,644	4,709,223	11,395,189	628,100	59,823,300	131,444,600	7.7	7.9	8.7
261	Pulp mills	E	(D)	(D)	16,100	3,416,400	6,239,100	(D)	(D)	(D)
2611	Pulp mills	E	(D)	(D)	16,100	3,416,400	6,239,100	(D)	(D)	(D)
262	Paper mills	10,612	1,458,591	3,553,586	130,100	16,599,800	35,321,800	8.2	8.8	10.1
2621	Paper mills	10,612	1,458,591	3,553,586	130,100	16,599,800	35,321,800	8.2	8.8	10.1
263	Paperboard mills	7,562	1,119,742	2,147,095	53,100	8,123,000	15,919,300	14.2	13.8	13.5
2631	Paperboard mills	7,562	1,119,742	2,147,095	53,100	8,123,000	15,919,300	14.2	13.8	13.5
265	Paperboard containers and boxes	17,531	997,570	3,034,012	200,300	11,082,100	30,510,400	8.8	9.0	9.9
2652	Setup paperboard boxes	344	22,552	42,885	8,800	312,900	565,100	3.9	7.2	7.6
2653	Corrugated and solid fiber boxes	9,976	538,037	1,891,850	110,100	5,901,900	18,572,200	9.1	9.1	10.2
2655	Fiber cans, drums and similar products	G	(D)	(D)	13,300	750,600	1,884,900	(D)	(D)	(D)
2656	Sanitary food containers	C	(D)	(D)	17,500	1,074,400	2,518,700	(D)	(D)	(D)
2657	Folding paperboard boxes	5,477	347,908	873,388	50,700	3,042,400	6,969,400	10.8	11.4	12.5
267	Miscellaneous converted paper products	J	(D)	(D)	228,500	20,602,000	43,454,000	(D)	(D)	(D)
2671	Paper coated and laminated, packaging	1,404	80,606	257,078	16,400	1,133,400	3,026,700	8.6	7.1	8.5
2672	Paper coated and laminated, nec	4,579	443,059	1,185,660	35,000	3,321,000	7,077,800	13.1	13.3	16.8
2673	Bags: plastics, laminated, and coated	1,101	84,592	177,252	37,400	2,625,100	5,494,600	2.9	3.2	3.2
2674	Bags: uncoated paper and multiwall	723	34,172	96,731	16,900	877,100	2,750,100	4.3	3.9	3.5
2675	Die-cut paper and board	G	(D)	(D)	16,800	1,045,700	2,119,000	(D)	(D)	(D)
2676	Sanitary paper products	B	(D)	(D)	39,000	7,896,200	14,709,200	(D)	(D)	(D)
2677	Envelopes	C	(D)	(D)	26,100	1,194,900	2,816,600	(D)	(D)	(D)
2678	Stationery products	B	(D)	(D)	10,100	577,900	1,332,100	(D)	(D)	(D)
2679	Converted paper products, nec	3,354	251,711	504,305	30,700	1,930,700	4,127,900	10.9	13.0	12.2
27	Printing and publishing	103,983	10,408,807	16,499,934	1,538,100	103,179,000	157,059,500	6.8	10.1	10.5
271	Newspapers	19,774	798,449	1,055,891	443,400	26,559,600	34,641,700	4.5	3.0	3.0
2711	Newspapers	19,774	798,449	1,055,891	443,400	26,559,600	34,641,700	4.5	3.0	3.0
272	Periodicals	14,122	1,957,867	3,124,876	115,200	13,847,700	20,396,700	12.3	14.1	15.3
2721	Periodicals	14,122	1,957,867	3,124,876	115,200	13,847,700	20,396,700	12.3	14.1	15.3
273	Books	21,423	3,365,885	4,660,080	122,200	13,320,400	19,449,900	17.5	25.3	24.0
2731	Book publishing	17,407	3,167,853	4,305,984	73,500	10,919,500	15,317,900	23.7	29.0	28.1
2732	Book printing	4,016	198,032	354,096	48,700	2,400,900	4,132,000	8.2	8.2	8.6
274	Miscellaneous publishing	4,732	551,139	650,747	65,200	6,656,200	8,874,700	7.3	8.3	7.3
2741	Miscellaneous publishing	4,732	551,139	650,747	65,200	6,656,200	8,874,700	7.3	8.3	7.3
275	Commercial printing	28,413	2,322,445	4,549,246	580,400	29,001,300	52,903,700	4.9	8.0	8.6
2752	Commercial printing, lithographic	15,041	1,274,879	2,547,334	423,300	21,230,300	38,877,400	3.6	6.0	6.6
2754	Commercial printing, gravure	8,876	732,128	1,473,185	23,900	1,742,000	3,635,900	37.1	42.0	40.5
2759	Commercial printing, nec	4,496	315,438	528,727	133,200	6,029,100	10,390,400	3.4	5.2	5.1
276	Manifold business forms	I	(D)	(D)	50,300	4,038,100	7,807,500	(D)	(D)	(D)
2761	Manifold business forms	I	(D)	(D)	50,300	4,038,100	7,807,500	(D)	(D)	(D)
277	Greeting cards	0	0	0	24,600	2,827,500	3,720,700	0	0	0
2771	Greeting cards	0	0	0	24,600	2,827,500	3,720,700	0	0	0
278	Blankbooks and bookbinding	H	(D)	(D)	70,200	3,218,700	4,549,400	(D)	(D)	(D)
2782	Blankbooks and looseleaf binders	H	(D)	(D)	38,500	2,182,900	3,186,100	(D)	(D)	(D)
2789	Bookbinding and related work	E	(D)	(D)	31,700	1,035,800	1,363,400	(D)	(D)	(D)
279	Printing trade services	2,938	220,906	286,725	66,500	3,709,400	4,715,200	4.4	6.0	6.1
2791	Typesetting	F	(D)	(D)	33,600	1,605,700	1,957,400	(D)	(D)	(D)
2796	Platemaking services	G	(D)	(D)	32,900	2,103,700	2,757,800	(D)	(D)	(D)
28	Chemicals and allied products	242,392	48,835,701	87,678,890	853,300	153,032,400	288,183,700	28.4	31.9	30.4
281	Industrial inorganic chemicals	22,882	4,576,277	7,845,636	100,900	16,099,700	26,690,800	22.7	28.4	29.4
2812	Alkalies and chlorine	E	(D)	(D)	6,800	1,449,900	2,709,800	(D)	(D)	(D)
2813	Industrial gases	H	(D)	(D)	9,000	1,919,200	3,058,100	(D)	(D)	(D)
2816	Inorganic pigments	4,343	1,369,809	2,055,671	8,500	1,930,800	3,203,900	51.1	70.9	64.2
2819	Industrial inorganic chemicals, nec	13,469	2,153,141	4,167,800	76,600	10,799,800	17,719,000	17.6	19.9	23.5
282	Plastics materials and synthetics	54,991	8,854,655	18,797,001	131,600	80,511,200	48,419,800	41.8	43.2	38.8
2821	Plastics materials and resins	14,365	3,446,830	8,244,436	62,400	12,195,300	31,325,800	23.0	28.3	26.3
2822	Synthetic rubber	I	(D)	(D)	11,400	1,706,700	4,210,300	(D)	(D)	(D)
2823	Cellulosic manmade fibers	H	(D)	(D)	9,700	679,000	1,456,700	(D)	(D)	(D)
2824	Organic fibers, noncellulosic	29,307	4,002,359	7,215,738	48,100	5,930,200	11,427,100	60.9	67.5	63.1
283	Drugs	65,378	14,234,655	19,489,079	182,900	38,244,500	53,719,700	35.7	37.2	36.3
2833	Medicinals and botanicals	2,063	259,825	602,462	10,900	2,392,200	4,919,400	18.9	10.9	12.2
2834	Pharmaceutical preparations	51,180	12,591,173	16,760,810	143,800	32,744,700	44,182,300	35.6	38.5	37.9
2835	Diagnostic substances	3,865	476,620	655,862	14,900	1,790,100	2,462,200	25.9	26.6	26.6
2836	Biological products except diagnostic	8,270	907,307	1,469,945	13,300	1,317,400	2,155,800	62.2	68.9	68.2
284	Soap, cleaners, and toilet goods	22,075	5,537,023	9,216,467	126,100	25,007,800	41,437,900	17.5	22.1	22.2
2841	Soap and other detergents	5,439	1,389,093	2,657,805	36,300	7,971,200	15,373,400	15.0	17.4	17.3
2842	Polishes and sanitation goods	H	(D)	(D)	19,600	3,691,400	5,847,900	(D)	(D)	(D)
2843	Surface active agents	H	(D)	(D)	9,100	1,241,000	3,168,300	(D)	(D)	(D)
2844	Toilet preparations	10,436	2,681,808	3,719,110	61,100	12,104,200	17,048,400	17.1	22.2	21.8
285	Paints and allied products	10,833	1,635,949	3,528,421	53,900	6,765,700	14,238,700	20.1	24.2	24.8
2851	Paints and allied products	10,833	1,635,949	3,528,421	53,900	6,765,700	14,238,700	20.1	24.2	24.8
286	Industrial organic chemicals	38,025	9,261,864	19,192,018	125,800	28,813,100	65,695,500	30.2	32.1	29.2
2861	Gum and wood chemicals	F	(D)	(D)	2,500	340,500	642,900	(D)	(D)	(D)
2865	Cyclic crudes and intermediates	I	(D)	(D)	23,000	3,980,100	10,892,600	(D)	(D)	(D)
2869	Industrial organic chemicals, nec	27,762	7,766,996	15,432,739	100,300	24,492,400	54,160,000	27.7	31.7	28.5
287	Agricultural chemicals	10,186	2,623,169	4,815,384	42,800	8,060,000	18,307,400			

Table 14.—Employment, Value Added by Manufacture, and Value of Shipments of Foreign-Owned and All U.S. Establishments, by Detailed Industry, 1990—Continued

SIC code	Industry	Foreign-owned establishments			All U.S. establishments			Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of employees	Thousands of dollars		Number of employees ¹	Thousands of dollars		Employment	Value added by manufacture	Value of shipments
			Value added by manufacture	Value of shipments		Value added by manufacture ¹	Value of shipments ²			
2875	Fertilizers, mixing only	B	(D)	(D)	7,100	552,900	2,018,800	(D)	(D)	(D)
2879	Agricultural chemicals, nec	7,778	2,331,159	3,836,117	17,700	5,142,700	8,538,900	43.9	45.3	44.9
289	Miscellaneous chemical products	18,022	2,112,109	4,794,884	89,200	9,530,600	19,674,000	20.2	22.2	24.4
2891	Adhesives and sealants	5,339	600,694	1,352,921	21,400	2,333,200	5,485,100	24.9	25.7	24.7
2892	Explosives	G	(D)	(D)	13,800	874,400	1,324,600	(D)	(D)	(D)
2893	Printing ink	3,622	408,164	1,291,774	11,400	1,035,700	2,754,400	31.8	39.4	46.9
2895	Carbon black	E	(D)	(D)	1,800	380,000	691,900	(D)	(D)	(D)
2899	Chemical preparations, nec	6,810	863,758	1,786,912	40,900	4,907,200	9,418,000	16.7	17.6	19.0
29	Petroleum and coal products	25,638	4,106,797	46,372,551	111,900	27,214,100	172,588,600	22.9	15.1	26.9
291	Petroleum refining	19,702	3,418,395	44,134,647	71,900	22,822,000	159,411,100	27.4	15.0	27.7
2911	Petroleum refining	19,702	3,418,395	44,134,647	71,900	22,822,000	159,411,100	27.4	15.0	27.7
295	Asphalt paving and roofing materials	3,469	413,016	1,073,158	26,700	2,734,700	7,798,700	13.0	15.1	13.8
2951	Asphalt paving mixtures and blocks	H	(D)	(D)	14,300	1,449,800	4,213,800	(D)	(D)	(D)
2952	Asphalt felts and coatings	F	(D)	(D)	12,400	1,284,900	3,584,900	(D)	(D)	(D)
299	Miscellaneous petroleum and coal products	2,467	275,386	1,164,746	13,200	1,657,400	5,378,700	18.7	16.6	21.7
2992	Lubricating oils and greases	G	(D)	(D)	11,200	1,280,300	4,398,500	(D)	(D)	(D)
2999	Petroleum and coal products, nec	C	(D)	(D)	2,000	377,100	980,200	(D)	(D)	(D)
30	Rubber and miscellaneous plastics products	120,951	8,757,926	17,790,551	870,100	49,889,000	101,398,200	13.9	17.6	17.5
301	Tires and inner tubes	35,511	3,237,878	5,805,548	67,700	6,488,600	11,860,800	52.5	49.9	48.9
3011	Tires and inner tubes	35,511	3,237,878	5,805,548	67,700	6,488,600	11,860,800	52.5	49.9	48.9
302	Rubber and plastics footwear	789	37,710	66,656	10,500	338,700	650,000	7.5	11.1	10.3
3021	Rubber and plastics footwear	789	37,710	66,656	10,500	338,700	650,000	7.5	11.1	10.3
305	Hose and belting and gaskets and packing	10,126	450,334	863,230	56,300	3,143,300	5,570,200	18.0	14.3	15.5
3052	Rubber and plastics hose and belting	2,588	154,716	323,324	23,100	1,380,100	2,574,800	11.2	11.2	12.6
3053	Gaskets, packing and sealing devices	7,538	295,618	539,906	33,200	1,763,300	2,995,400	22.7	16.8	18.0
306	Fabricated rubber products, nec	15,317	970,180	2,148,422	103,000	5,225,400	10,559,200	14.9	18.6	20.3
3061	Mechanical rubber goods	4,617	273,121	470,427	46,300	2,086,300	3,930,200	10.0	13.1	12.0
3069	Fabricated rubber products, nec	10,700	697,059	1,677,995	56,600	3,139,100	6,629,000	18.9	22.2	25.3
308	Miscellaneous plastics products, nec	59,208	4,061,824	8,906,695	632,600	34,692,000	72,758,000	9.4	11.7	12.2
3081	Unsupported plastics film and sheet	9,582	885,377	1,948,224	51,400	4,294,300	9,284,700	18.6	20.6	21.0
3082	Unsupported plastics profile shapes	3,434	171,377	377,308	26,700	1,285,700	2,688,800	12.9	13.4	14.0
3083	Laminated plastics plate and sheet	3,238	240,299	448,093	17,600	1,159,600	2,293,000	18.4	20.7	19.5
3084	Plastics pipe	2,432	199,298	598,688	12,900	807,700	2,616,000	18.9	24.7	22.9
3085	Plastics bottles	1,466	106,544	200,942	28,800	1,626,400	3,728,900	5.1	6.6	5.4
3086	Plastics foam products	6,382	413,715	1,027,385	63,700	3,788,300	8,988,200	10.0	10.9	11.4
3087	Custom compound purchased resins	2,927	233,343	720,485	18,200	1,297,800	3,246,900	16.1	18.0	22.2
3088	Plastics plumbing fixtures	1,588	205,501	301,540	9,100	577,200	965,200	17.5	35.6	31.2
3089	Plastics products, nec	28,159	1,606,010	3,284,030	404,200	19,855,800	38,946,300	7.0	8.1	8.4
31	Leather and leather products	6,362	287,251	608,138	117,400	4,586,600	9,887,300	5.4	6.3	6.2
311	Leather tanning and finishing	G	(D)	(D)	12,100	779,900	2,410,900	(D)	(D)	(D)
3111	Leather tanning and finishing	G	(D)	(D)	12,100	779,900	2,410,900	(D)	(D)	(D)
313	Footwear cut stock	E	(D)	(D)	5,200	196,400	413,300	(D)	(D)	(D)
3131	Footwear cut stock	E	(D)	(D)	5,200	196,400	413,300	(D)	(D)	(D)
314	Footwear, except rubber	3,191	98,155	207,045	62,000	2,120,300	4,232,100	5.1	4.6	4.9
3142	House slippers	0	0	0	4,300	160,700	276,000	0	0	0
3143	Men's footwear, except athletic	H	(D)	(D)	28,500	1,058,600	2,148,800	(D)	(D)	(D)
3144	Women's footwear, except athletic	0	0	0	21,800	682,700	1,393,200	0	0	0
3149	Footwear, except rubber, nec	F	(D)	(D)	7,500	218,200	414,100	(D)	(D)	(D)
315	Leather gloves and mittens	0	0	0	2,800	59,200	154,800	0	0	0
3151	Leather gloves and mittens	0	0	0	2,800	59,200	154,800	0	0	0
316	Luggage	B	(D)	(D)	14,000	618,000	1,169,400	(D)	(D)	(D)
3161	Luggage	B	(D)	(D)	14,000	618,000	1,169,400	(D)	(D)	(D)
317	Handbags and personal leather goods	905	37,599	60,148	12,800	509,600	912,200	7.1	7.4	6.6
3171	Women's handbags and purses	905	37,599	60,148	6,400	319,700	546,900	14.1	11.8	11.0
3172	Personal leather goods, nec	0	0	0	6,500	189,900	365,200	0	0	0
319	Leather goods, nec	C	(D)	(D)	8,600	303,200	594,700	(D)	(D)	(D)
3199	Leather goods, nec	C	(D)	(D)	8,600	303,200	594,700	(D)	(D)	(D)
32	Stone, clay, and glass products	105,578	8,450,211	16,407,454	509,100	34,140,200	63,468,000	20.7	24.8	25.9
321	Flat glass	I	(D)	(D)	14,600	1,394,800	2,279,000	(D)	(D)	(D)
3211	Flat glass	I	(D)	(D)	14,600	1,394,800	2,279,000	(D)	(D)	(D)
322	Glass and glassware, pressed or blown	21,522	1,645,014	2,887,318	72,000	5,342,800	8,918,000	29.9	30.8	32.4
3221	Glass containers	16,391	1,266,761	2,250,907	36,600	2,751,400	4,946,100	44.8	46.0	45.5
3229	Pressed and blown glass, nec	5,131	378,253	636,411	35,400	2,591,400	3,971,900	14.5	14.6	16.0
323	Products of purchased glass	6,953	427,734	907,180	53,900	3,341,500	6,141,300	12.9	12.8	14.8
3231	Products of purchased glass	6,953	427,734	907,180	53,900	3,341,500	6,141,300	12.9	12.8	14.8
324	Cement, hydraulic	10,501	1,353,752	2,702,922	17,600	2,196,800	4,250,700	59.7	61.6	63.6
3241	Cement, hydraulic	10,501	1,353,752	2,702,922	17,600	2,196,800	4,250,700	59.7	61.6	63.6
325	Structural clay products	7,744	415,096	717,904	34,000	1,852,900	3,086,500	22.8	22.4	23.3
3251	Brick and structural clay tile	4,550	223,697	365,407	15,500	753,500	1,168,700	29.4	29.7	31.3
3253	Ceramic wall and floor tile	G	(D)	(D)	9,800	556,600	845,000	(D)	(D)	(D)
3255	Clay refractories	1,546	89,329	195,268	6,500	451,400	922,900	23.8	19.8	21.2
3259	Structural clay products, nec	E	(D)	(D)	2,200	91,300	149,800	(D)	(D)	(D)
326	Pottery and related products	G	(D)	(D)	37,700	1,838,800	2,613,400	(D)	(D)	(D)
3261	Vitreous plumbing fixtures	C	(D)	(D)	9,300	578,000	825,100	(D)	(D)	(D)
3262	Vitreous china table and kitchenware	0	0	0	6,000	278,100	342,000	0	0	0
3263	Semivitreous table and kitchenware	0	0	0	1,200	34,200	44,500	0	0	0
3264	Porcelain electrical supplies	G	(D)	(D)	8,900	539,400	810,000	(D)	(D)	(D)
3269	Pottery products, nec	E	(D)	(D)	12,200	409,100	591,700	(D)	(D)	(D)
327	Concrete, gypsum, and plaster products	33,113	2,227,089	4,875,489	194,600	11,661,600	24,595,000	17.0	19.1	19.8
3271	Concrete block and brick	2,033	140,560	285,310	18,300	1,134,300	2,304,000	11.1	12.4	12.4
3272	Concrete products, nec	10,816	626,350	1,162,562	68,300	3,504,200	6,366,500	15.8	17.9	18.3
3273	Ready-mixed concrete	15,646	1,049,622	2,467,829	91,800	5,633,500	12,829,600	17.0	18.6	19.2
3274	Lime	1,259	106,599	193,846	4,700	422,500	719,800	26.8	25.2	26.9
3275	Gypsum products	3,359	303,958	765,942	11,500	967,000	2,375,100	29.2	31.4	32.2
328	Cut stone and stone products	C	(D)	(D)	13,900	575,300	988,800	(D)	(D)	(D)
3281	Cut stone and stone products	C	(D)	(D)	13,900	575,300	988,800	(D)	(D)	(D)
329	Miscellaneous nonmetallic mineral products	18,413	1,749,413	3,298,011	70,800	5,935,700	10,595,300	26.0	29.5	31.1
3291	Abrasive products	7,997	922,877	1,711,414	24,200	2,130,600	3,898,400	33.0	43.3	43.9
3292	Asbestos products	C	(D)	(D)	3,100	198,700	352,600	(D)	(D)	(D)
3295	Minerals, ground or treated	2,974	204,578	467,005	9,000	848,700	1,499,800	33.0	24.1	31.1
3296	Mineral wool	3,516	303,216	557,928	19,000	1,807,700	3,099,800	18.5	16.8	18.0
3297	Nonclay refractories	3,404	274,990	465,817	8,400	573,400	1,077,600	40.5	48.0	43.2
3299	Nonmetallic mineral products, nec	E	(D)	(D)	7,100	376,600	667,200	(D)	(D)	(D)

Table 14.—Employment, Value Added by Manufacture, and Value of Shipments of Foreign-Owned and All U.S. Establishments, by Detailed Industry, 1990—Continued

SIC code	Industry	Foreign-owned establishments			All U.S. establishments			Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of employees	Thousands of dollars		Number of employees ¹	Thousands of dollars		Employment	Value added by manufacture	Value of shipments
			Value added by manufacture	Value of shipments		Value added by manufacture ¹	Value of shipments ²			
33	Primary metal industries	119,087	10,297,630	31,902,909	711,900	53,366,600	146,052,000	16.7	19.3	21.8
3311	Blast furnace and basic steel products	60,902	5,487,240	14,963,600	258,800	23,766,000	62,121,100	23.5	23.1	24.1
3312	Blast furnaces and steel mills	45,361	4,215,490	11,073,717	188,500	18,283,000	45,950,400	24.1	23.1	24.1
3313	Electrometallurgical products	2,502	225,270	540,250	5,200	431,200	1,180,400	48.1	52.2	45.8
3315	Steel wire and related products	5,762	338,443	833,015	26,700	1,723,400	4,179,700	21.6	19.6	19.9
3316	Cold finishing of steel shapes	3,210	343,536	1,387,426	16,300	1,620,800	5,842,200	19.7	21.2	23.7
3317	Steel pipe and tubes	4,067	364,501	1,129,192	22,100	1,707,700	4,968,500	18.4	21.3	22.7
332	Iron and steel foundries	10,651	650,840	1,172,560	132,500	6,691,500	12,064,500	8.0	9.7	9.7
3321	Gray and ductile iron foundries	3,204	160,093	366,026	81,000	4,111,200	7,825,300	4.0	3.9	4.7
3322	Malleable iron foundries	0	0	0	4,900	196,800	320,600	0	0	0
3324	Steel investment foundries	0	0	0	19,800	1,033,500	1,592,100	(D)	(D)	(D)
3325	Steel foundries, nec	0	0	0	26,700	1,350,000	2,326,500	(D)	(D)	(D)
333	Primary nonferrous metals	9,006	1,096,651	5,122,942	34,700	4,265,800	15,507,100	26.0	25.7	33.0
3331	Primary copper	0	0	0	4,600	918,000	4,201,200	(D)	(D)	(D)
3334	Primary aluminum	0	0	0	19,500	2,205,600	7,033,900	(D)	(D)	(D)
3339	Primary nonferrous metals, nec	3,956	500,755	2,615,331	10,600	1,142,200	4,272,000	37.3	43.8	61.2
334	Secondary nonferrous metals	1,369	127,534	580,769	14,700	1,107,500	6,130,200	9.3	11.5	9.5
3341	Secondary nonferrous metals	1,369	127,534	580,769	14,700	1,107,500	6,130,200	9.3	11.5	9.5
335	Nonferrous rolling and drawing	30,029	2,367,427	8,977,349	157,100	11,832,500	39,330,900	19.1	20.0	22.8
3351	Copper rolling and drawing	2,948	227,006	982,802	21,400	1,679,300	6,880,200	13.8	13.5	14.3
3353	Aluminum sheet, plate, and foil	7,405	609,787	3,765,865	25,100	2,508,500	11,121,500	29.5	24.3	33.9
3354	Aluminum extruded products	0	0	0	30,900	1,466,900	4,850,300	(D)	(D)	(D)
3355	Aluminum rolling and drawing, nec	0	0	0	800	54,600	388,300	(D)	(D)	(D)
3356	Nonferrous rolling and drawing, nec	5,354	450,339	1,140,812	18,600	1,502,500	3,481,200	28.8	30.0	32.8
3357	Nonferrous wiredrawing and insulating	10,026	910,548	2,472,542	60,200	4,620,700	12,609,400	16.7	19.7	19.6
336	Nonferrous foundries (castings)	4,125	215,566	412,845	79,800	3,548,000	7,159,300	5.2	6.1	5.8
3363	Aluminum die-castings	1,051	60,815	109,066	28,800	1,326,600	2,779,500	3.6	4.6	3.9
3364	Nonferrous die-casting except aluminum	1,378	76,771	137,898	13,200	598,200	1,317,900	10.4	12.8	10.5
3365	Aluminum foundries	879	35,879	84,672	23,600	980,700	1,919,100	3.7	3.7	4.4
3366	Copper foundries	440	23,689	44,381	9,000	353,100	677,800	4.9	6.7	6.5
3369	Nonferrous foundries, nec	377	18,412	36,828	5,200	289,500	465,000	7.3	6.4	7.9
339	Miscellaneous primary metal products	3,005	352,372	672,844	34,200	2,155,300	3,738,800	8.8	16.3	18.0
3398	Metal heat treating	619	54,553	70,710	20,500	1,274,000	1,871,700	3.0	4.3	3.8
3399	Primary metal products, nec	2,386	297,819	602,134	13,700	881,300	1,867,100	17.4	33.8	32.3
34	Fabricated metal products	93,300	6,350,246	13,973,579	1,438,700	79,951,900	163,052,800	6.5	7.9	8.6
341	Metal cans and shipping containers	0	0	0	43,100	4,090,500	13,555,700	(D)	(D)	(D)
3411	Metal cans	0	0	0	35,900	3,668,400	12,342,400	(D)	(D)	(D)
3412	Metal barrels, drums, and pails	0	0	0	7,200	422,100	1,213,300	(D)	(D)	(D)
342	Cutlery, handtools, and hardware	7,490	520,445	880,277	139,000	8,504,200	14,666,300	5.4	6.1	6.0
3421	Cutlery	0	0	0	10,900	977,800	1,320,500	(D)	(D)	(D)
3423	Hand and edge tools, nec	0	0	0	40,600	2,392,800	3,966,700	(D)	(D)	(D)
3425	Saw blades and handsaws	199	11,253	19,052	8,700	540,300	916,800	2.3	2.1	2.1
3429	Hardware, nec	5,804	370,289	646,714	78,800	4,593,300	8,462,300	7.4	8.1	7.6
343	Plumbing and heating, except electric	893	43,752	91,560	43,400	3,079,500	5,897,200	2.1	1.4	1.6
3431	Metal sanitary ware	0	0	0	7,700	524,800	980,000	(D)	(D)	(D)
3432	Plumbing fixture fittings and trim	0	0	0	17,300	1,400,100	2,749,900	(D)	(D)	(D)
3433	Heating equipment, except electric	617	34,384	71,294	18,400	1,154,600	2,167,400	3.4	3.0	3.3
344	Fabricated structural metal products	29,974	1,759,842	3,963,428	405,900	19,934,500	44,936,100	7.4	8.8	8.8
3441	Fabricated structural metal	3,542	196,117	456,577	82,700	4,035,500	9,788,100	4.3	4.9	4.7
3442	Metal doors, sash, and trim	5,478	279,379	648,667	72,200	3,053,500	6,981,500	7.6	9.1	9.3
3443	Fabricated plate work (boiler shops)	9,865	623,795	1,146,070	76,100	4,198,500	8,653,700	13.0	14.9	13.2
3444	Sheet metal work	3,743	255,366	718,505	99,100	4,867,400	10,249,100	3.8	5.2	7.0
3446	Architectural metal work	1,796	80,549	142,548	30,000	1,350,800	2,492,900	6.0	6.0	5.7
3448	Prefabricated metal buildings	4,682	264,414	683,464	22,800	1,183,000	2,984,100	20.5	22.4	22.9
3449	Miscellaneous metal work	868	60,222	167,597	23,000	1,245,900	3,786,800	3.8	4.8	4.4
345	Screw machine products, bolts, etc	0	0	0	95,200	5,150,400	8,723,000	(D)	(D)	(D)
3451	Screw machine products	0	0	0	42,400	1,956,000	3,034,400	(D)	(D)	(D)
3452	Bolts, nuts, rivets, and washers	0	0	0	52,800	3,194,400	5,688,600	(D)	(D)	(D)
346	Metal forgings and stampings	12,364	779,611	1,671,569	249,000	13,665,600	29,662,800	5.0	5.7	5.6
3462	Iron and steel forgings	1,026	66,069	141,519	28,400	1,764,900	3,858,800	3.6	3.7	3.7
3463	Nonferrous forgings	0	0	0	7,200	495,200	1,159,100	(D)	(D)	(D)
3465	Automotive stampings	7,486	499,953	998,998	110,600	6,300,200	14,544,500	6.8	7.9	6.9
3466	Crowns and closures	0	0	0	4,400	358,200	720,200	(D)	(D)	(D)
3469	Metal stampings, nec	2,645	140,343	345,992	98,400	4,747,300	9,380,200	2.7	3.0	3.7
347	Metal services, nec	2,818	139,431	300,355	117,400	5,410,300	9,441,900	2.4	2.6	3.2
3471	Plating and polishing	1,766	80,996	150,156	73,200	2,981,000	4,513,300	2.4	2.7	3.3
3479	Metal coating and allied services	1,052	58,435	150,199	44,300	2,429,300	4,928,700	2.4	2.4	3.0
348	Ordnance and accessories, nec	8,880	627,458	875,955	70,500	4,741,100	6,725,100	12.6	13.2	13.0
3482	Small arms ammunition	0	0	0	8,500	535,900	844,100	(D)	(D)	(D)
3483	Ammunition, except for small arms, nec	3,229	224,824	332,965	27,100	1,908,900	3,128,600	11.9	11.8	10.6
3484	Small arms	4,152	311,061	376,861	12,500	859,900	1,108,800	33.2	36.2	34.0
3489	Ordnance and accessories, nec	0	0	0	22,400	1,436,400	1,643,600	(D)	(D)	(D)
349	Miscellaneous fabricated metal products	19,488	1,365,184	2,903,330	275,100	15,375,700	29,444,700	7.1	8.9	9.9
3491	Industrial valves	3,772	308,526	516,548	46,400	3,385,500	5,745,400	8.1	9.1	9.0
3492	Fluid power valves and hose fittings	2,773	163,642	291,756	30,900	1,913,600	3,322,800	9.0	8.6	8.8
3493	Steel springs, except wire	658	41,082	91,764	6,100	286,400	524,700	10.8	14.3	17.5
3494	Valves and pipe fittings, nec	1,961	138,061	218,489	26,000	1,535,800	2,924,000	7.5	9.0	7.5
3495	Wire springs	752	47,549	94,747	20,100	1,843,900	3,741,900	3.7	4.9	5.1
3496	Miscellaneous fabricated wire products	1,127	76,025	177,381	33,200	1,552,100	2,999,700	3.4	4.9	5.9
3497	Metal foil and leaf	2,971	233,451	773,891	10,600	938,400	2,845,800	28.0	24.9	27.2
3498	Fabricated pipe and fittings	1,318	82,758	173,957	21,900	1,027,000	2,333,800	6.0	8.1	7.5
3499	Fabricated metal products, nec	4,156	274,090	564,797	80,000	3,762,300	6,904,600	5.2	7.3	8.2
35	Industrial machinery and equipment	191,440	13,561,697	31,010,583	1,876,700	132,165,800	256,344,700	10.2	10.3	12.1
351	Engines and turbines	16,390	1,112,504	3,116,038	83,200	7,159,000	16,580,900	19.7	15.5	18.8
3511	Turbines and turbine generator sets	0	0	0	21,900	2,259,200	4,356,700	(D)	(D)	(D)
3519	Internal combustion engines, nec	0	0	0	61,300	4,899,800	12,224,200	(D)	(D)	(D)
352	Farm and garden machinery	12,375	835,435	2,111,956	94,100	7,985,000	16,456,200	13.2	10.5	12.8
3523	Farm machinery and equipment	3,120	203,438	402,467	69,600	5,978,500	11,546,200	4.5	3.4	3.5
3524	Lawn and garden equipment	9,255	631,997	1,709,489	24,500	2,006,500	4,910,000	37.8	31.5	34.8
353	Construction and related machinery	27,880	1,598,623	4,021,136	202,700	13,928,000	30,696,600	13.8	11.5	13.1
3531	Construction machinery	11,704	732,113	1,908,758	89,					

Table 14.—Employment, Value Added by Manufacture, and Value of Shipments of Foreign-Owned and All U.S. Establishments, by Detailed Industry, 1990—Continued

SIC code	Industry	Foreign-owned establishments			All U.S. establishments			Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of employees	Thousands of dollars		Number of employees ¹	Thousands of dollars		Employment	Value added by manufacture	Value of shipments
			Value added by manufacture	Value of shipments		Value added by manufacture ¹	Value of shipments ²			
3537	Industrial trucks and tractors	2,383	115,580	291,798	20,100	1,036,700	2,727,500	11.9	11.1	10.7
354	Metalworking machinery	19,092	1,394,423	2,725,415	280,800	16,515,600	27,035,200	6.8	8.4	10.1
3541	Machine tools, metal cutting types	2,062	171,141	443,218	30,300	1,890,300	3,606,800	6.8	9.1	12.3
3542	Machine tools, metal forming types	1,883	96,304	256,698	14,600	853,800	1,652,700	12.9	11.3	15.5
3543	Industrial patterns	F	(D)	(D)	8,100	396,600	534,300	(D)	(D)	(D)
3544	Special dies, tools, jigs and fixtures	2,608	184,990	362,528	119,800	6,525,400	9,487,200	2.2	2.8	3.8
3545	Machine tool accessories	4,849	344,150	518,199	55,200	3,072,400	4,550,400	8.8	11.2	11.4
3546	Power-driven handtools	3,110	230,447	573,896	18,300	1,471,800	2,805,800	17.0	15.7	20.5
3547	Rolling mill machinery	A	(D)	(D)	3,800	173,300	483,400	(D)	(D)	(D)
3548	Welding apparatus	2,678	267,392	407,136	19,200	1,457,000	2,683,600	13.9	18.4	15.2
3549	Metalworking machinery, nec	F	(D)	(D)	11,700	675,100	1,231,100	(D)	(D)	(D)
355	Special industry machinery	24,212	1,734,560	3,800,482	172,300	11,002,600	21,258,400	14.1	15.8	17.9
3552	Textile machinery	G	(D)	(D)	16,000	814,900	1,505,100	(D)	(D)	(D)
3553	Woodworking machinery	B	(D)	(D)	7,800	477,400	936,600	(D)	(D)	(D)
3554	Paper industries machinery	7,475	434,247	1,362,140	20,300	1,118,700	2,770,400	36.8	38.8	49.2
3555	Printing trades machinery	4,104	452,470	794,591	25,000	1,808,200	3,538,200	16.4	25.0	22.5
3556	Food products machinery	4,258	297,397	525,508	19,000	1,266,300	2,260,900	22.4	23.5	23.2
3559	Special industry machinery, nec	6,885	454,441	921,544	84,200	5,517,000	10,247,100	8.2	8.2	9.0
356	General industrial machinery	31,198	2,208,830	4,090,152	260,100	16,811,000	30,338,800	12.0	13.1	13.5
3561	Pumps and pumping equipment	4,196	206,436	459,482	37,400	2,552,800	4,830,300	11.2	8.1	9.5
3562	Ball and roller bearings	10,717	719,562	1,254,013	39,000	2,481,700	4,306,300	27.5	29.0	29.1
3563	Air and gas compressors	1,174	119,325	377,131	24,500	1,759,900	3,806,900	4.8	6.7	9.9
3564	Blowers and fans	3,980	257,166	508,765	27,700	1,619,600	2,850,100	14.4	16.9	17.9
3565	Packaging machinery	2,931	231,718	339,278	23,500	1,735,400	2,762,200	12.5	13.4	12.3
3566	Speed changers, drives, and gears	1,165	84,437	134,194	18,400	1,353,000	2,055,700	6.3	6.2	6.5
3567	Industrial furnaces and ovens	905	66,086	125,897	18,900	902,500	1,766,100	4.8	7.3	7.1
3568	Power transmission equipment, nec	1,225	103,237	153,139	23,700	1,503,300	2,596,500	5.2	6.9	5.9
3569	General industrial machinery, nec	4,905	420,863	738,253	47,000	2,992,800	5,364,700	10.4	14.1	13.8
357	Computer and office equipment	30,831	2,913,058	7,115,958	287,700	31,283,300	64,073,300	10.7	9.3	11.1
3571	Electronic computers	16,459	1,834,287	4,529,638	134,100	19,666,300	39,293,600	12.3	9.3	11.5
3572	Computer storage devices	2,357	203,435	496,052	42,600	4,359,000	8,751,100	5.5	4.7	5.1
3575	Computer terminals	G	(D)	(D)	12,100	728,500	1,790,000	(D)	(D)	(D)
3577	Computer peripheral equipment, nec	5,873	416,633	1,175,119	59,100	3,923,000	9,146,300	9.9	10.6	12.8
3578	Calculating and accounting equipment	F	(D)	(D)	7,400	620,400	1,170,200	(D)	(D)	(D)
3579	Office machines, nec	4,507	323,078	568,349	32,500	1,986,200	3,922,100	13.9	16.3	14.5
358	Refrigeration and service machinery	18,237	1,042,239	2,753,038	186,000	12,158,500	26,218,200	9.8	8.6	10.5
3581	Automatic vending machines	F	(D)	(D)	7,400	338,100	741,700	(D)	(D)	(D)
3582	Commercial laundry equipment	E	(D)	(D)	5,200	240,400	526,600	(D)	(D)	(D)
3585	Refrigeration and heating equipment	12,482	643,108	1,969,831	126,900	8,339,500	19,043,200	9.8	7.7	10.3
3586	Measuring and dispensing pumps	G	(D)	(D)	8,000	519,100	1,029,500	(D)	(D)	(D)
3589	Service industry machinery, nec	2,542	208,850	390,279	38,600	2,721,400	4,877,200	6.6	7.7	8.0
359	Industrial machinery, nec	11,225	722,025	1,276,408	309,600	15,322,800	23,687,100	3.6	4.7	5.4
3592	Carburetors, pistons, rings, valves	3,372	142,034	289,111	20,600	1,045,800	2,042,400	16.4	13.6	14.2
3593	Fluid power cylinders and actuators	1,344	90,006	160,152	20,700	1,195,300	1,981,900	6.5	7.5	8.1
3594	Fluid power pumps and motors	2,171	196,397	320,944	14,900	1,004,100	1,798,600	14.6	19.6	17.8
3596	Scales and balances, except laboratory	1,782	136,089	257,590	6,300	336,400	680,000	28.3	40.5	37.9
3599	Industrial machinery, nec	2,556	157,499	248,611	247,200	11,741,200	17,184,100	1.0	1.3	1.4
36	Electronic and other electric equipment	228,237	16,703,246	34,601,773	1,497,400	106,983,900	194,847,900	15.2	15.6	17.8
361	Electric distribution equipment	15,390	1,075,338	2,305,772	75,100	5,206,700	9,728,600	20.5	20.7	23.7
3612	Transformers, except electronic	I	(D)	(D)	32,800	1,892,300	4,177,800	(D)	(D)	(D)
3613	Switchgear and switchboard apparatus	I	(D)	(D)	42,300	3,314,400	5,550,800	(D)	(D)	(D)
362	Electrical industrial apparatus	22,343	1,426,822	2,588,408	161,900	10,126,800	18,158,700	13.8	14.1	14.3
3621	Motors and generators	11,175	592,403	1,158,605	72,600	4,005,300	7,672,200	15.4	14.8	15.1
3624	Carbon and graphite products	2,338	133,675	256,027	8,600	586,800	1,166,900	27.2	22.8	21.9
3625	Relays and industrial controls	6,485	500,490	832,448	66,000	4,688,400	7,854,200	9.8	10.7	10.6
3629	Electrical industrial apparatus, nec	2,345	200,254	341,328	14,600	846,300	1,465,400	16.1	23.7	23.3
363	Household appliances	19,287	1,131,593	2,666,319	110,500	7,835,900	18,069,000	17.5	14.4	14.8
3631	Household cooking equipment	H	(D)	(D)	19,200	1,138,900	2,994,000	(D)	(D)	(D)
3632	Household refrigerators and freezers	H	(D)	(D)	23,600	1,464,300	3,799,800	(D)	(D)	(D)
3633	Household laundry equipment	G	(D)	(D)	16,100	1,543,100	3,234,400	(D)	(D)	(D)
3634	Electric housewares and fans	H	(D)	(D)	24,900	1,425,000	3,055,900	(D)	(D)	(D)
3635	Household vacuum cleaners	4,270	272,025	483,156	12,400	997,800	1,860,100	34.4	27.3	26.0
3639	Household appliances, nec	H	(D)	(D)	14,200	1,266,900	3,124,900	(D)	(D)	(D)
364	Electric lighting and wiring equipment	15,332	983,402	1,817,322	156,600	10,768,500	19,322,300	9.8	9.1	9.4
3641	Electric lamps	H	(D)	(D)	19,800	1,862,500	2,830,900	(D)	(D)	(D)
3643	Current-carrying wiring devices	2,898	129,383	231,081	44,100	2,642,100	4,404,000	6.6	4.9	5.2
3644	Noncurrent-carrying wiring devices	793	73,858	126,128	22,600	1,919,500	3,346,100	3.5	3.8	3.8
3645	Residential lighting fixtures	1,939	95,361	180,434	17,800	826,000	1,561,300	10.9	11.5	11.6
3646	Commercial lighting fixtures	G	(D)	(D)	23,000	1,609,800	3,208,900	(D)	(D)	(D)
3647	Vehicular lighting equipment	1,611	106,561	201,219	14,900	1,025,100	2,121,700	10.8	10.4	9.5
3648	Lighting equipment, nec	1,697	89,390	194,671	14,500	883,600	1,849,500	11.7	10.1	10.5
365	Household audio and video equipment	19,299	1,664,553	5,924,331	44,700	3,150,000	9,376,700	43.2	52.8	63.2
3651	Household audio and video equipment	13,038	923,399	4,924,250	30,800	1,892,000	7,520,500	42.3	48.8	65.5
3652	Prerecorded records and tapes	6,261	741,154	1,000,081	13,900	1,257,900	1,856,100	45.0	58.9	53.9
366	Communications equipment	36,028	3,279,104	6,524,868	250,400	22,349,700	38,451,700	14.4	14.7	17.0
3661	Telephone and telegraph apparatus	17,726	1,991,593	3,778,517	92,700	9,619,400	17,297,300	14.1	20.7	21.8
3663	Radio and television communications equipment	13,338	953,866	2,140,417	135,400	11,278,000	18,759,300	9.9	8.5	11.4
3669	Communications equipment, nec	4,964	333,645	605,934	22,400	1,452,300	2,395,100	22.2	23.0	25.3
367	Electronic components and accessories	74,588	5,484,636	8,944,169	535,900	37,270,000	60,844,000	13.9	14.7	14.7
3671	Electron tubes	7,508	500,498	1,096,153	23,400	1,317,800	2,570,400	32.1	38.0	42.6
3672	Printed circuit boards	3,325	173,596	316,281	76,700	4,997,200	7,844,100	4.3	3.5	4.0
3674	Semiconductors and related devices	34,660	3,340,139	4,927,774	181,800	17,855,500	25,977,300	19.1	18.7	19.0
3675	Electronic capacitors	6,098	293,898	535,530	19,500	848,500	1,471,600	31.3	34.6	36.4
3676	Electronic resistors	4,549	173,124	317,477	14,400	535,400	862,700	31.6	32.3	36.8
3677	Electronic coils and transformers	550	29,169	41,819	22,800	599,100	1,074,600	2.4	4.9	3.9
3678	Electronic connectors	3,736	311,131	446,049	37,400	2,389,300	3,820,900	10.0	13.0	11.7
3679	Electronic components, nec	14,162	663,081	1,263,086	159,900	8,727,100	17,222,400	8.9	7.6	7.3
369	Miscellaneous electrical equipment and supplies	25,970	1,657,798	3,830,584	162,200	10,276,300	20,897,000	16.0	16.1	18.3
3691	Storage batteries	3,671	268,456	649,835	23,100	1,718,800	3,625,800	15.9	15.6	17.9
3692	Primary batteries, dry and wet	1,690	64,619	161,492	10,600	761,900	1,580,300	15.9	8.5	10.2
3694	Engine electrical equipment	1,606	86,517	239,178	46,100	2,846,700	5,810,500	3.5	3.0	4.1
3695	Magnetic and optical recording media	7,779	534,811	1,726,704	24,000	1,675,600	4,032,100	32.4	31.9	42.8
3699	Electrical equipment and supplies, nec	11,224	703,395	1,053,375	58,400	3,273,300	5,848,300	19.2	21.5	18.0
37	Transportation equipment	104,147	7,170,588	28,834,909	1,773,700	146,916,300	367,926,700	5.9	4.9	7.8
371	Motor vehicles and equipment	73,413	5,436,606	25,011,828	704,400	69,648,700	214,963,800	10.4	7.8	11.6
3711	Motor vehicles and car bodies	32,296	3,183,878	18,123,409	239,500	39,504,400	140,417,000	13.5	8.1	12.9

See footnotes at end of table.

Table 14.—Employment, Value Added by Manufacture, and Value of Shipments of Foreign-Owned and All U.S. Establishments, by Detailed Industry, 1990—Continued

SIC code	Industry	Foreign-owned establishments			All U.S. establishments			Foreign-owned establishments as a percentage of all U.S. establishments		
		Number of employees	Thousands of dollars		Number of employees ¹	Thousands of dollars		Employment	Value added by manufacture	Value of shipments
			Value added by manufacture	Value of shipments		Value added by manufacture ¹	Value of shipments ²			
3713	Truck and bus bodies	G	(D)	(D)	37,200	1,809,300	4,382,200	(D)	(D)	(D)
3714	Motor vehicle parts and accessories	39,230	2,123,952	6,563,321	388,700	26,871,400	64,875,400	10.1	7.9	10.1
3715	Truck trailers	C	(D)	(D)	24,800	869,000	3,122,000	(D)	(D)	(D)
3716	Motor homes	0	0	0	14,100	594,500	2,167,200	0	0	0
372	Aircraft and parts	18,928	985,449	2,223,467	615,700	44,903,200	94,640,200	3.1	2.2	2.3
3721	Aircraft	4,945	243,878	746,741	289,300	20,235,400	51,369,600	1.7	1.2	1.5
3724	Aircraft engines and engine parts	3,013	186,076	397,010	129,000	12,059,100	22,812,800	2.3	1.5	1.7
3728	Aircraft parts and equipment, nec	10,970	555,495	1,079,716	197,500	12,608,700	20,457,900	5.6	4.4	5.3
373	Ship and boat building and repairing	5,993	292,752	590,271	175,200	8,554,700	15,853,700	3.4	3.4	3.7
3731	Ship building and repairing	G	(D)	(D)	121,200	6,362,800	10,855,700	(D)	(D)	(D)
3732	Boat building and repairing	H	(D)	(D)	54,100	2,191,800	4,998,000	(D)	(D)	(D)
374	Railroad equipment	2,312	225,809	339,421	29,500	1,839,200	4,693,600	7.8	12.3	7.2
3743	Railroad equipment	2,312	225,809	339,421	29,500	1,839,200	4,693,600	7.8	12.3	7.2
375	Motorcycles, bicycles, and parts	F	(D)	(D)	9,400	570,800	1,475,800	(D)	(D)	(D)
3751	Motorcycles, bicycles, and parts	F	(D)	(D)	9,400	570,800	1,475,800	(D)	(D)	(D)
376	Guided missiles, space vehicles, parts	G	(D)	(D)	200,300	19,284,300	30,554,100	(D)	(D)	(D)
3761	Guided missiles and space vehicles	0	0	0	156,200	15,782,500	25,082,600	0	0	0
3764	Space propulsion units and parts	0	0	0	29,700	2,412,000	3,755,800	0	0	0
3769	Space vehicle equipment, nec	G	(D)	(D)	14,400	1,089,700	1,715,600	(D)	(D)	(D)
379	Miscellaneous transportation equipment	G	(D)	(D)	39,100	2,115,600	5,745,500	(D)	(D)	(D)
3792	Travel trailers and campers	0	0	0	13,800	622,800	1,657,500	0	0	0
3795	Tanks and tank components	0	0	0	9,300	694,500	1,846,500	0	0	0
3799	Transportation equipment, nec	G	(D)	(D)	16,000	798,300	2,241,500	(D)	(D)	(D)
38	Instruments and related products	121,520	9,722,110	15,840,686	948,600	81,665,600	123,776,700	12.8	11.9	12.8
381	Search and navigation equipment	19,160	1,433,915	2,094,047	313,600	24,931,900	36,733,500	6.1	5.8	5.7
3812	Search and navigation equipment	19,160	1,433,915	2,094,047	313,600	24,931,900	36,733,500	6.1	5.8	5.7
382	Measuring and controlling devices	53,500	3,679,493	6,037,558	283,600	19,629,200	31,455,800	18.9	18.7	19.2
3821	Laboratory apparatus and furniture	3,290	333,003	506,393	17,800	1,209,700	1,916,700	18.5	27.5	26.4
3822	Environmental controls	7,702	404,098	669,225	26,100	1,461,600	2,396,000	29.5	27.6	27.9
3823	Process control instruments	13,410	791,866	1,379,551	54,700	3,764,700	5,924,000	24.5	21.0	23.3
3824	Fluid meters and counting devices	3,130	260,544	440,090	10,400	976,700	1,665,900	30.1	26.7	26.4
3825	Instruments to measure electricity	10,806	744,956	1,125,640	78,400	5,352,400	8,389,700	13.8	13.9	13.4
3826	Analytical instruments	5,648	491,886	822,932	37,800	3,018,700	4,906,100	14.9	16.3	16.8
3827	Optical instruments and lenses	3,027	160,220	299,938	22,000	1,326,700	2,217,700	13.8	12.1	13.5
3829	Measuring and controlling devices, nec	6,487	492,920	793,789	36,300	2,518,700	4,039,700	17.9	19.6	19.7
384	Medical instruments and supplies	29,530	2,573,803	4,262,668	234,700	20,286,300	30,934,200	12.6	12.7	13.8
3841	Surgical and medical instruments	11,597	1,027,510	1,554,613	88,900	7,077,500	10,261,600	13.0	14.5	15.2
3842	Surgical appliances and supplies	7,931	697,442	1,174,739	86,600	7,163,100	11,127,600	9.2	9.7	10.6
3843	Dental equipment and supplies	1,078	77,419	135,006	12,900	890,100	1,364,700	8.4	8.7	9.9
3844	X-ray apparatus and tubes	2,895	202,729	495,358	12,600	1,495,800	2,576,500	23.0	13.6	19.2
3845	Electromedical equipment	6,029	568,703	902,952	33,600	3,659,800	5,603,800	17.9	15.5	16.1
385	Ophthalmic goods	7,861	480,831	633,762	28,000	1,625,600	2,274,700	28.1	29.6	27.9
3851	Ophthalmic goods	7,861	480,831	633,762	28,000	1,625,600	2,274,700	28.1	29.6	27.9
386	Photographic equipment and supplies	9,455	1,360,864	2,400,481	79,300	14,527,200	21,018,200	11.9	9.4	11.4
3861	Photographic equipment and supplies	9,455	1,360,864	2,400,481	79,300	14,527,200	21,018,200	11.9	9.4	11.4
387	Watches, clocks, watchcases, and parts	2,014	193,204	412,170	9,400	665,400	1,360,200	21.4	29.0	30.3
3873	Watches, clocks, watchcases, and parts	2,014	193,204	412,170	9,400	665,400	1,360,200	21.4	29.0	30.3
39	Miscellaneous manufacturing industries	26,087	1,929,276	3,553,235	386,300	20,095,600	37,205,200	6.8	9.6	9.6
391	Jewelry, silverware, and plated ware	1,138	54,025	109,874	49,100	2,590,700	5,754,200	2.3	2.1	1.9
3911	Jewelry, precious metal	E	(D)	(D)	35,600	1,869,400	4,180,100	(D)	(D)	(D)
3914	Silverware and plated ware	B	(D)	(D)	7,300	462,300	751,900	(D)	(D)	(D)
3915	Jewelers' materials and lapidary work	F	(D)	(D)	6,200	259,000	822,200	(D)	(D)	(D)
393	Musical instruments	1,545	79,949	130,485	11,700	547,700	872,900	13.2	14.6	14.9
3931	Musical instruments	1,545	79,949	130,485	11,700	547,700	872,900	13.2	14.6	14.9
394	Toys and sporting goods	10,644	899,270	1,659,072	98,600	5,919,600	11,043,600	10.8	15.2	15.0
3942	Dolls and stuffed toys	E	(D)	(D)	4,900	244,100	380,400	(D)	(D)	(D)
3944	Games, toys, and children's vehicles	H	(D)	(D)	27,900	1,911,800	3,622,900	(D)	(D)	(D)
3949	Sporting and athletic goods, nec	5,842	465,662	883,445	65,800	3,763,600	7,040,200	8.9	12.4	12.5
395	Pens, pencils, office, and art supplies	3,397	219,327	484,349	29,900	1,780,000	3,310,100	11.4	12.3	14.6
3951	Pens and mechanical pencils	1,584	98,523	238,000	9,600	682,400	1,205,800	16.5	14.4	19.8
3952	Lead pencils and art goods	G	(D)	(D)	5,300	407,200	745,900	(D)	(D)	(D)
3953	Marking devices	0	0	0	7,700	295,200	485,600	0	0	0
3955	Carbon paper and inked ribbons	E	(D)	(D)	7,300	395,200	872,700	(D)	(D)	(D)
396	Costume jewelry and notions	2,636	144,693	251,301	28,200	1,363,500	2,222,900	9.3	10.6	11.3
3961	Costume jewelry	0	0	0	19,200	892,400	1,415,700	0	0	0
3965	Fasteners, buttons, needles, and pins	2,636	144,693	251,301	9,000	471,100	807,200	29.3	30.7	31.1
399	Miscellaneous manufactures	6,727	532,012	918,154	168,800	7,894,100	14,001,600	4.0	6.7	6.6
3991	Brooms and brushes	E	(D)	(D)	14,000	731,000	1,221,800	(D)	(D)	(D)
3993	Signs and advertising specialties	G	(D)	(D)	69,500	2,613,800	4,826,500	(D)	(D)	(D)
3995	Burial caskets	0	0	0	10,200	579,800	1,093,500	0	0	0
3996	Hard surface floor coverings, nec	F	(D)	(D)	7,100	793,200	1,377,300	(D)	(D)	(D)
3999	Manufacturing industries, nec	4,248	360,031	560,730	68,000	3,176,200	5,482,400	6.2	11.3	10.2
	Administrative and auxiliary	200,064	n.a.	n.a.	1,260,900	n.a.	n.a.	15.9	n.a.	n.a.

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

n.a. Not available.

1. The data shown in this column are rounded to the nearest 100 employees because they are rounded in this manner in the Census Bureau's 1990 Annual Survey of Manufactures: Statistics for Industry Groups and Industries, from which they were taken.

2. The data shown in this column are rounded to the nearest \$100,000 because they are rounded in this manner in the Census Bureau's 1990 Annual Survey of Manufactures: Statistics for Industry Groups and Industries, from

which they were taken.

3. On this line, the columns for number of employees cover both operating establishments and administrative and auxiliary establishments; the other columns cover operating establishments only.

NOTE.—Size ranges are given in employment cells that are suppressed. The size ranges are: A—0 to 19; B—20 to 99; C—100 to 249; E—250 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.

SIC Standard Industrial Classification

1994 Release Dates for BEA Estimates

<i>Subject</i>	<i>Release Date*</i>	<i>Subject</i>	<i>Release Date*</i>
State Personal Income, 3d quarter 1993	Jan. 20	Composite Indexes of Leading, Coincident, and Lagging Indicators, May 1994.	July 1
Gross Domestic Product, 4th quarter 1993 (advance)	Jan. 28	U.S. International Trade in Goods and Services, May 1994.	† July 19
Personal Income and Outlays, December 1993	Jan. 31	State Personal Income, 1st quarter 1994	July 20
Composite Indexes of Leading, Coincident, and Lagging Indicators, December 1993.	Feb. 2	Gross Domestic Product, 2d quarter 1994 (advance)	July 29
Gross Domestic Product, 4th quarter 1993 (preliminary) .	Mar. 1	Personal Income and Outlays, June 1994	Aug. 1
Personal Income and Outlays, January 1994	Mar. 2	Composite Indexes of Leading, Coincident, and Lagging Indicators, June 1994.	Aug. 3
Merchandise Trade (balance of payments basis), 4th quarter 1993.	Mar. 2	Gross State Product by Industry, 1991	Aug. 4
Composite Indexes of Leading, Coincident, and Lagging Indicators, January 1994.	Mar. 4	U.S. International Trade in Goods and Services, June 1994.	† Aug. 18
Summary of International Transactions, 4th quarter 1993.	Mar. 15	State Per Capita Personal Income, 1993 (revised)	Aug. 23
U.S. International Trade in Goods and Services, January 1994.	† Mar. 22	Gross Domestic Product, 2d quarter 1994 (preliminary) ..	Aug. 26
Gross Domestic Product, 4th quarter 1993 (final)	Mar. 31	Corporate Profits, 2d quarter 1994 (preliminary)	Aug. 26
Corporate Profits, 4th quarter 1993 (preliminary)	Mar. 31	Personal Income and Outlays, July 1994	Aug. 29
Personal Income and Outlays, February 1994	Apr. 1	Composite Indexes of Leading, Coincident, and Lagging Indicators, July 1994.	Aug. 31
Composite Indexes of Leading, Coincident, and Lagging Indicators, February 1994.	Apr. 5	Summary of International Transactions, 2d quarter 1994 .	Sept. 13
U.S. International Trade in Goods and Services, February 1994.	† Apr. 19	U.S. International Trade in Goods and Services, July 1994.	† Sept. 20
State Personal Income, 4th quarter 1993 and Per Capita Personal Income, 1993 (preliminary)	Apr. 27	Gross Domestic Product, 2d quarter 1994 (final)	Sept. 29
Gross Domestic Product, 1st quarter 1994 (advance)	Apr. 28	Corporate Profits, 2d quarter 1994 (revised)	Sept. 29
Corporate Profits, 4th quarter 1993 (revised)	Apr. 28	Personal Income and Outlays, August 1994	Sept. 30
Personal Income and Outlays, March 1994	Apr. 29	Composite Indexes of Leading, Coincident, and Lagging Indicators, August 1994.	Oct. 4
Composite Indexes of Leading, Coincident, and Lagging Indicators, March 1994.	May 3	U.S. International Trade in Goods and Services, August 1994.	† Oct. 19
Metropolitan Area Personal Income, 1992	May 5	State Personal Income, 2d quarter 1994	Oct. 20
U.S. International Trade in Goods and Services, March 1994.	† May 19	Gross Domestic Product, 3d quarter 1994 (advance)	Oct. 28
Gross Domestic Product, 1st quarter 1994 (preliminary) ..	May 27	Personal Income and Outlays, September 1994	Oct. 31
Corporate Profits, 1st quarter 1994 (preliminary)	May 27	Composite Indexes of Leading, Coincident, and Lagging Indicators, September 1994	Nov. 2
Personal Income and Outlays, April 1994	May 31	U.S. International Trade in Goods and Services, September 1994.	† Nov. 18
Composite Indexes of Leading, Coincident, and Lagging Indicators, April 1994.	June 2	Gross Domestic Product, 3d quarter 1994 (preliminary) ..	Nov. 30
Summary of International Transactions, 1st quarter 1994 .	June 15	Corporate Profits, 3d quarter 1994 (preliminary)	Nov. 30
U.S. International Trade in Goods and Services, April 1994.	† June 21	Personal Income and Outlays, October 1994	Dec. 1
Gross Domestic Product, 1st quarter 1994 (final)	June 29	Composite Indexes of Leading, Coincident, and Lagging Indicators, October 1994.	Dec. 2
Corporate Profits, 1st quarter 1994 (revised)	June 29	Summary of International Transactions, 3d quarter 1994 .	Dec. 14
Personal Income and Outlays, May 1994	June 30	U.S. International Trade in Goods and Services, October 1994.	† Dec. 20
		Gross Domestic Product, 3d quarter 1994 (final)	Dec. 22
		Corporate Profits, 3d quarter 1994 (revised)	Dec. 22
		Personal Income and Outlays, November 1994	Dec. 23
		Composite Indexes of Leading, Coincident, and Lagging Indicators, November 1994.	Dec. 29

* These are target dates and are subject to revision.

For further information, call (202) 606-9900, or write to
Public Information Office (BE-53), Bureau of Economic Analysis,
U.S. Department of Commerce, Washington, DC 20230.

† (Tentative title) Joint release by the Bureau of the Census and BEA.

BUSINESS CYCLE INDICATORS

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NOTE.—This section of the SURVEY is prepared by the Business Cycle Indicators Branch.

Series no.	Series title and timing classification	Year	1992		1993											
		1993	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1. COMPOSITE INDEXES																
The Leading Index																
910 ♦	Composite index of leading indicators, 1987=100 (L,L,L)	98.7	98.2	99.2	98.9	99.1	98.4	98.4	98.1	98.1	97.9	98.3	98.6	99.1	99.6	^P 110.3
♦	Percent change from previous month .....	.1	.2	1.0	-.3	.2	-.7	0	-.3	0	-.2	9.4	9.3	5	5	^P 7
♦	Percent change over 3-month span, AR	5.9	3.7	3.7	-3.2	-2.0	-4.0	-1.2	-2.0	9.8	2.1	5.0	9.4	9.7	7.1	.....
Leading index components:																
1 ♦	Average weekly hours, mfg. (L,L,L)	41.4	41.2	41.2	41.4	41.4	41.2	41.5	41.4	41.2	41.4	41.4	41.5	41.6	41.7	^P 41.7
5 ♦	Average weekly initial claims for unemployment insurance, thous. (L,C,L) ¹ ‡	366	373	333	364	343	376	374	390	386	399	378	381	356	334	^P 311
8 ♦	Mfrs.' new orders, consumer goods and materials, bil. 1987\$ (L,L,L)	1,304.00	105.60	110.03	109.30	109.79	107.23	106.72	105.54	106.58	105.35	106.54	99.00	111.39	99.12	^P 114.05
32 ♦	Vendor performance, slower deliveries diffusion index, percent (L,L,L)* §	51.6	51.2	51.7	52.8	53.0	52.5	53.1	51.7	50.2	50.0	51.3	50.9	50.7	50.7	51.7
20 ♦	Contracts and orders for plant and equipment, bil. 1987\$ (L,L,L)	434.13	31.99	36.87	32.95	35.87	33.61	33.68	33.89	37.90	34.73	36.35	35.83	37.72	40.94	^P 40.66
29 ♦	Index of new private housing units authorized by local building permits, 1967=100 (L,L,L)	96.4	90.6	95.4	92.3	91.0	82.5	87.8	89.4	88.9	92.7	99.0	101.4	104.0	109.6	^P 117.7
92 ♦	Change in mfrs.' unfilled orders, durable goods, bil. 1987\$, smoothed (L,L,L) †	-2.86	-3.82	-3.37	-2.70	-2.03	-2.17	-2.53	-3.04	-3.48	-3.40	-3.18	-3.21	-3.06	-2.85	^P -2.69
99 ♦	Change in sensitive materials prices, percent, smoothed (L,L,L) †	-25	-10	-21	-17	-12	-14	-29	-39	-42	-42	-47	-46	-28	-07	.27
19 ♦	Index of stock prices, 500 common stocks, 1941-43=10, NSA (L,L,L)*	451.41	422.84	435.64	435.23	441.70	450.16	443.08	445.25	448.06	447.29	454.13	459.24	463.90	462.89	^P 465.95
106 ♦	Money supply M2, bil. 1987\$ (L,L,L)	2,760.8	2,799.2	2,795.8	2,773.0	2,755.0	2,748.7	2,739.6	2,758.3	2,763.5	2,766.1	2,762.1	2,771.6	2,762.5	2,765.2	^P 2,764.0
83 ♦	Index of consumer expectations, U. of Michigan, 1966:1=100, NSA (L,L,L) © ²	72.8	78.2	89.5	83.4	80.6	75.8	76.4	68.5	70.4	64.7	65.8	66.8	72.5	70.3	78.8
950	Diffusion index of 11 leading indicator components:															
♦	Percent rising over 1-month span	55.7	54.5	77.3	36.4	59.1	9.1	54.5	36.4	54.5	40.9	77.3	63.6	81.8	77.3	^P 77.3
♦	Percent rising over 6-month span	81.8	72.7	72.7	45.5	22.7	31.8	40.9	54.5	72.7	90.9	95.5	.....	.....	.....	.....
The Coincident Index																
920 ♦	Composite index of coincident indicators, 1987=100 (C,C,C)	109.1	107.4	109.5	107.6	107.9	108.1	108.6	108.8	108.9	99.1	108.8	109.6	110.0	110.6	³ 111.0
♦	Percent change from previous month .....	.1	.3	2.0	-1.7	.3	.2	.5	.2	.1	-1	.6	.2	.4	.5	³ 4
♦	Percent change over 3-month span, AR	11.8	1.9	1.9	-5.0	3.8	3.4	3.0	9.1	2.2	2.6	4.5	4.5	3.2	5.2	.....
Coincident index components:																
41 ♦	Employees on nonagricultural payrolls, thous. (C,C,C)	110,171	108,921	109,079	109,235	109,539	109,565	109,820	110,058	110,101	110,338	110,305	110,502	110,664	110,866	^P 111,049
51 ♦	Personal income less transfer payments, bil. 1987\$, AR (C,C,C)	3,519.6	3,484.5	3,689.9	3,441.9	3,449.3	3,471.1	3,517.7	3,524.3	3,511.7	3,499.1	3,542.3	3,544.2	3,560.3	3,577.7	^P 3,595.2
47 ♦	Index of industrial production, 1987=100 (C,C,C)	111.0	108.4	108.9	109.3	109.9	110.1	110.4	110.2	110.5	110.8	111.0	111.4	112.1	113.2	^P 114.0
57 ♦	Manufacturing and trade sales, mil. 1987\$ (C,C,C)	499,767	509,563	509,095	510,542	509,156	507,532	510,649	514,996	511,070	518,303	521,028	523,486	529,079	529,079	.....
951	Diffusion index of 4 coincident indicator components:															
♦	Percent rising over 1-month span	80.2	87.5	100.0	50.0	100.0	62.5	75.0	75.0	62.5	50.0	87.5	100.0	100.0	100.0	³ 100.0
♦	Percent rising over 6-month span	87.5	100.0	100.0	100.0	75.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	.....
The Lagging Index																
930 ♦	Composite index of lagging indicators, 1987=100 (Lg,Lg,Lg)	96.5	96.7	95.6	96.6	96.6	96.4	96.4	96.3	96.3	96.7	96.4	96.5	96.4	96.2	⁴ 96.8
♦	Percent change from previous month .....	.1	.2	-1.1	1.0	0	-2	0	-1	0	9.4	-3	9.1	-1	-2	⁴ 6
♦	Percent change over 3-month span, AR	-4.9	4	-4	3.4	-8	-1.2	-4	1.3	9.4	8	-1.2	-1	-1	1.2	.....
Lagging index components:																
91 ♦	Average duration of unemployment, weeks (Lg,Lg,Lg) ‡ §	18.1	18.1	19.0	18.5	18.2	17.7	17.7	17.8	17.8	17.9	18.3	18.4	18.4	18.9	18.2
77 ♦	Ratio, mfg. and trade inventories to sales in 1987\$ (Lg,Lg,Lg)	1.59	1.56	1.56	1.57	1.57	1.57	1.58	1.58	1.56	1.58	1.55	1.55	1.55	1.54	.....
62 ♦	Change in labor cost per unit of output, mfg., percent, AR, smoothed (Lg,Lg,Lg) † §	-2.7	-1.4	-2	-2.2	-3.7	-4.3	-4.3	-3.7	-3.1	-2.4	-1.8	-9	-1.2	-2.1	^P -2.5
109 ♦	Average prime rate charged by banks, percent, NSA (Lg,Lg,Lg)*	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
101 ♦	Commercial and industrial loans outstanding, mil. 1987\$ (Lg,Lg,Lg)	369,762	374,896	375,465	369,012	369,503	363,038	364,190	365,859	366,923	372,898	372,677	371,937	370,713	370,872	^P 379,516
95 ♦	Ratio, consumer installment credit outstanding to personal income, percent (Lg,Lg,Lg)	14.05	13.46	14.23	14.24	14.18	14.02	13.94	14.00	14.12	14.04	14.13	14.17	14.22	14.22	.....
120 ♦	Change in Consumer Price Index for services, percent, AR, smoothed (Lg,Lg,Lg) †	3.8	3.7	3.9	4.1	4.2	4.2	4.3	4.3	4.2	3.8	3.7	3.5	3.3	3.2	3.3
952	Diffusion index of 7 lagging indicator components:															
♦	Percent rising over 1-month span	51.1	64.3	50.0	64.3	71.4	35.7	71.4	50.0	57.1	64.3	21.4	35.7	35.7	35.7	⁴ 70.0
♦	Percent rising over 6-month span	42.9	50.0	50.0	50.0	35.7	57.1	50.0	35.7	35.7	50.0	50.0	50.0	50.0	50.0	.....
940 ♦	Ratio, coincident index to lagging index, 1987=100 (L,L,L)	113.1	111.1	114.5	111.4	111.7	112.1	112.7	113.0	113.1	112.5	113.5	113.6	114.1	115.0	^P 114.7

NOTE.—The following current high values were reached before November 1992: June 1991—BCI-106 (2,856.4); August 1991—BCI-92 smoothed (-0.90); December 1991—BCI-62 smoothed (3.1) and BCI-77 (1.65); and June 1992—BCI-99 smoothed (0.79).
 See page C-6 for other footnotes.

Series no.	Series title and timing classification	Year	1992		1993											
		1993	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
2. LABOR FORCE, EMPLOYMENT, AND UNEMPLOYMENT																
441	Labor force:															
442	Civilian labor force, thous. §	128,040	'127,287	'127,469	'127,224	'127,400	'127,440	'127,539	'128,075	'128,056	'128,102	'128,334	'128,108	'128,580	'128,662	128,898
	Civilian employment, thous. §	119,306	'117,974	'118,155	'118,178	'118,442	'118,562	'118,585	'119,180	'119,187	'119,370	'119,692	'119,568	'119,941	'120,332	120,661
	Civilian labor force participation rates (percent):															
451	Males 20 years and over §	76.9	77.1	'77.0	76.8	'76.9	76.9	'76.9	77.1	77.0	'77.0	'77.0	76.7	'77.0	'76.8	76.8
452	Females 20 years and over §	58.4	'58.3	'58.4	'58.3	58.2	58.2	'58.2	58.4	58.5	'58.4	58.5	'58.4	58.6	58.7	58.9
453	Both sexes 16-19 years of age §	51.5	51.4	'51.7	'51.4	'51.9	'51.5	'51.8	'52.5	'51.5	'51.8	51.6	'51.2	'51.1	51.2	50.9
	Marginal employment adjustments:															
1 ♦	Average weekly hours, mfg. (L,L,L)	41.4	41.2	41.2	41.4	41.4	41.2	41.5	41.4	41.2	41.4	41.4	41.5	41.6	41.7	<i>P</i> 41.7
21 ♦	Average weekly overtime hours, mfg. (L,C,L)	4.1	3.9	3.9	4.0	4.2	4.0	4.2	4.1	4.0	4.1	4.1	4.1	4.3	4.4	<i>P</i> 4.4
5 ♦	Average weekly initial claims for unemployment insurance, (L,C,L) †, ‡	366	373	333	364	343	376	374	390	386	399	378	381	356	334	311
	Job vacancies:															
46 ♦	Index of help-wanted advertising, 1967=100 (L,L,U)	101	95	95	92	97	96	96	100	97	101	103	101	106	'107	<i>P</i> 110
60	Ratio, help-wanted advertising to unemployed (L,L,U) §	.343	.304	'303	'303	'322	.322	'319	'334	'325	'344	'355	'352	'365	.382	<i>P</i> .397
	Employment:															
48 ♦	Employee hours in nonagricultural establishments, bil. hours, AR (U,C,C)	203.96	202.01	201.86	201.98	202.47	202.33	202.78	205.28	203.57	204.05	204.76	204.06	'205.26	'205.19	205.77
42	Persons engaged in nonagricultural activities, thous. (U,C,C) §	116,232	'114,804	'114,933	'114,996	'115,326	'115,463	'115,514	'116,106	'116,156	'116,327	'116,687	'116,475	'116,920	'117,218	117,565
41 ♦	Employees on nonagricultural payrolls, thous. (C,C,C)	110,171	108,921	109,079	109,235	109,539	109,565	109,820	110,058	110,101	110,338	110,305	110,502	'110,664	'110,866	111,049
963	Diffusion index of employees on private nonagricultural payrolls, 356 industries:															
	Percent rising over 1-month span	54.7	52.0	54.8	58.1	59.7	51.0	53.8	56.9	46.5	57.9	44.4	57.2	'53.9	'56.9	
	Percent rising over 6-month span	57.7	56.6	59.7	58.3	58.3	57.7	49.7	51.1	'52.9	'56.0	'57.9				
40 ♦	Employees in goods-producing industries, thous. (L,C,U)	22,974	22,995	22,985	23,001	23,069	23,016	22,980	23,006	22,941	22,948	22,903	22,886	'22,934	'22,992	23,002
90 ♦	Ratio, civilian employment to population of working age, percent (U,Lg,U) §	61.6	'61.3	'61.4	61.3	61.4	61.4	'61.4	61.7	61.6	61.6	61.6	61.6	61.8	61.9	62.0
	Unemployment:															
37	Number of persons unemployed, thous. (L,Lg,U) ‡ §	8,734	'9,313	'9,314	'9,046	'8,958	'8,878	'8,954	'8,895	'8,869	'8,732	'8,642	'8,540	'8,639	'8,330	8,237
43 ♦	Civilian unemployment rate, percent (L,Lg,U) ‡ §	6.8	7.3	7.3	7.1	7.0	7.0	7.0	6.9	6.9	6.8	6.7	6.7	'6.7	'6.5	6.4
45	Average weekly insured unemployment rate, percent (L,Lg,U) ‡ §	2.6	2.8	2.6	2.6	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.5
91 ♦	Average duration of unemployment, weeks (Lg,Lg,Lg) ‡ §	18.1	'18.1	'19.0	'18.5	'18.2	'17.7	'17.7	'17.8	'17.8	17.9	18.3	'18.4	'18.4	'18.9	18.2
44	Unemployment rate, 15 weeks and over, percent (Lg,Lg,Lg) ‡ §	2.4	'2.6	2.8	2.6	2.5	2.4	2.3	'2.4	'2.4	'2.3	2.3	2.4	2.4	2.3	2.2

3. OUTPUT, PRODUCTION, AND CAPACITY UTILIZATION

55 ♦	Output:															
	Gross domestic product, bil. 1987\$, AR (C,C,C)	5,132.7	5,068.3			5,078.2			5,102.1							<i>P</i> 5,212.1
	Percent change from previous quarter, AR	2.9	5.7			.8			1.9							<i>P</i> 5.9
50	Gross national product, bil. 1987\$, AR (C,C,C)		5,068.4			5,080.7			5,104.1							
49	Value of domestic goods output, bil. 1987\$, AR (C,C,C)	2,081.3	2,057.7			2,060.2			2,069.1							<i>P</i> 2,121.0
	Industrial production indexes, 1987=100:															
47 ♦	Total (C,C,C)	111.0	108.4	108.9	109.3	109.9	110.1	110.4	110.2	110.5	110.8	111.0	111.4	'112.1	113.2	<i>P</i> 114.0
73 ♦	Durable manufactures (C,C,C)	115.9	110.9	111.8	112.9	113.8	114.1	115.0	114.9	114.6	115.4	115.7	'117.0	'118.3	'120.1	<i>P</i> 121.7
74 ♦	Nondurable manufactures (C,L,L)	106.8	106.4	106.0	106.4	106.4	106.6	106.9	106.9	107.2	107.0	107.3	'106.5	'107.0	'107.6	<i>P</i> 107.4
75 ♦	Consumer goods (C,L,C)	108.1	107.1	107.5	107.6	108.5	108.6	108.1	107.3	107.3	107.7	107.8	'107.4	'108.6	'109.6	<i>P</i> 109.8
	Capacity utilization rates (percent):															
124	Total industry (L,C,U)	81.9	80.8	81.0	81.2	81.5	81.6	81.7	81.5	81.5	81.7	81.7	81.9	'82.3	83.0	<i>P</i> 83.5
82 ♦	Manufacturing (L,C,U)	81.1	79.7	79.8	80.3	80.5	80.6	80.7	80.6	80.7	80.8	80.8	'81.0	81.5	'82.3	<i>P</i> 82.7

4. SALES, ORDERS, AND DELIVERIES

57 ♦	Sales:															
59 ♦	Manufacturing and trade sales, mil. 1987\$ (C,C,C)		'499,767	'509,563	509,095	510,542	509,156	507,532	510,649	514,996	'511,070	'518,303	'521,028	'523,486	'529,079	
	Sales of retail stores, mil. 1987\$ (U,L,U)	1,759,475	'142,358	'144,019	143,782	143,076	141,496	143,793	145,047	146,144	146,713	147,577	148,185	'150,294	'150,922	<i>P</i> 152,446
	Orders and deliveries:															
7 ♦	Mfrs.' new orders, durable goods, bil. 1987\$ (L,L,L)	1,381.68	108.07	117.64	114.64	116.99	112.96	112.41	109.67	114.50	111.08	113.68	115.01	'117.97	'120.32	<i>P</i> 122.45
8 ♦	Mfrs.' new orders, consumer goods and materials, bil. 1987\$ (L,L,L)	1,304.00	105.60	110.03	109.30	109.79	107.23	106.72	105.54	106.58	105.35	106.54	'109.00	'111.39	'112.51	<i>P</i> 114.05
	Mfrs.' unfilled orders, durable goods, mil. 1987\$ ♦	363,694	397,769	397,874	397,580	396,886	390,926	386,683	381,879	377,810	376,846	374,775	370,372	'368,404	'366,238	<i>P</i> 363,694
	Change from previous month, bil. 1987\$	-2.85	-5.30	.10	-2.9	-.69	-5.96	-4.24	-4.80	-4.07	-.96	-2.07	-4.40	'-1.97	'-2.17	<i>P</i> -2.54
92 ♦	Change from previous month, bil. 1987\$, smoothed (L,L,L) †	-2.86	-3.82	-3.37	-2.70	-2.03	-2.17	-2.53	-3.04	-3.48	-3.40	-3.18	-3.21	'-3.06	'-2.85	<i>P</i> -2.69
32 ♦	Vendor performance, slower deliveries diffusion index, percent (L,L,L) ‡	51.6	'51.2	51.7	'52.8	'53.0	'52.5	'53.1	51.7	'50.2	'50.0	'51.3	50.9	'50.7	'50.7	51.7

5. FIXED CAPITAL INVESTMENT

12 ♦	Formation of business enterprises:															
13 ♦	Index of net business formation, 1967=100 (L,L,L)	120.8	115.3	119.0	119.3	121.1	121.8	120.8	117.5	120.6	'121.0	'121.2	'119.0	'119.5	'122.0	<i>P</i> 125.2
	Number of new business incorporations (L,L,L)		55,392	61,695	55,689	59,691	61,002	59,648	51,765	60,422	58,341	'57,909				
	Business investment commitments:															
10	Contracts and orders for plant and equipment, bil.\$ (L,L,L)	426.43	31.86	'37.52	32.84	35.91	33.13	33.35	33.17	38.19	33.84	35.60	34.92	'36.55	'39.36	<i>P</i> 39.57
20 ♦	Contracts and orders for plant and equipment, bil. 1987\$ (L,L,L)	434.13	31.99	'36.87	32.95	35.87	33.61	33.68	33.89	37.90	'34.73	'36.35	'35.83	'37.72	'40.94	<i>P</i> 40.66
27 ♦	Mfrs.' new orders, nondefense capital goods, bil. 1987\$ (L,L,L)	394.93	27.52	32.26	29.26	33.09	30.13	31.18	31.08	34.11	31.47	'33.24	32.44	34.52	'37.13	<i>P</i> 37.28
9 ♦	Construction contracts awarded for commercial and industrial buildings, mil. sq.ft.(L,C,U) © ³	537.37	42.49	42.61	36.89	39.88	43.63	45.63	40.75	43.32	48.88	44.52	43.48	47.29	47.39	55.71
11	New capital appropriations, mfg., bil.\$ (U,Lg,U)															
97	Backlog of capital appropriations, mfg., bil.\$ (C,Lg,Lg) ♦															
	Business investment expenditures:															
61	New plant and equipment expenditures by business, bil.\$, AR (C,Lg,Lg) †	584.64	559.24			564.13			579.79			594.11			'600.53	
100 ♦	New plant and equipment expenditures by business, bil. 1987\$, AR (C,Lg,Lg) †	554.84	524.62			533.70			546.97			565.28			'573.42	

NOTE.—The following current high values were reached before November 1992: July 1991—BCI-92 change (6.71); August 1991—BCI-92 smoothed (-0.90); and 3d Q 1991—BCI-11 (33.83).

See page C-6 for other footnotes.

Series no.	Series title and timing classification	Year		1993													
		1992	1993	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
5. FIXED CAPITAL INVESTMENT—Continued																	
69	Business investment expenditures—Continued: Mfrs.' machinery and equipment sales and business construction expenditures, bil.\$, AR (C,Lg,Lg)	464.51	443.25	459.12	442.82	447.24	465.62	448.70	454.96	462.72	442.00	468.37	464.07	470.16	492.10	515.32	
76	Index of industrial production, business equipment, 1987=100 (C,Lg,U)	137.0	129.0	129.6	131.2	131.7	133.4	134.8	135.4	136.1	137.1	137.6	139.4	140.8	142.9	144.9	
	Gross private nonresidential fixed investment, bil. 1987\$, AR:																
86	Total (C,Lg,C)	591.3	543.7			562.3			584.3			594.8			623.8		
87	Structures (Lg,Lg)	151.4	148.0			148.2			151.1			151.2			155.1		
88	Producers' durable equipment (C,Lg,C)	439.9	395.7			414.1			433.2			443.6			468.7		
	Residential construction and investment:																
28	New private housing units started, thous., AR (L,L,L)	1,285	1,226	1,286	1,171	1,180	1,124	1,206	1,248	1,248	1,232	1,328	1,371	1,390	1,450	1,540	
29	Index of new private housing units authorized by local building permits, 1967=100 (L,L,L)	96.4	90.6	95.4	92.3	91.0	82.5	87.8	89.4	88.9	92.7	99.0	101.4	104.0	109.6	117.7	
89	Gross private residential fixed investment, bil. 1987\$, AR (L,L,L)	214.2	210.6			211.4			206.2			212.1			227.2		

6. INVENTORIES AND INVENTORY INVESTMENT

70	Inventories on hand: Mfg. and trade inventories, bil. 1987\$ (Lg,Lg)		794.37	796.10	796.82	799.49	801.86	803.31	804.68	805.35	806.10	806.64	809.45	809.90	812.90	
77	Ratio, mfg. and trade inventories to sales in 1987\$ (Lg,Lg)		1.59	1.56	1.57	1.57	1.57	1.58	1.58	1.56	1.58	1.56	1.55	1.55	1.54	
	Inventory investment:															
30	Change in business inventories, bil. 1987\$, AR (L,L,L)	15.4	8.7			29.3			13.0			6.5			12.7	
31	Change in mfg. and trade inventories, bil.\$, AR (L,L,L)		20.6	26.5	24.9	42.3	52.5	40.6	20.6	3	-7.4	27.9	17.5	27.8	65.0	

7. PRICES

Sensitive commodity prices:																	
	Index of sensitive materials prices, 1987=100	99.67	100.24	100.85	101.40	101.47	100.91	99.80	99.37	99.22	98.94	98.10	98.00	98.75	99.35	100.74	
	Percent change over previous month	-0.1	-1.24	.61	.55	.07	-0.55	-1.10	-0.43	-0.15	-0.28	-0.85	-1.10	.77	.61	1.40	
99	Percent change from previous month, smoothed (L,L,L)†	-2.5	-1.0	-2.1	-1.7	-1.2	-1.4	-2.9	-3.9	-4.2	-4.2	-4.7	-4.6	-2.8	-0.7	.27	
98	Index of producer prices for sensitive crude and intermediate materials, 1987=100 (L,L,L)	161.77	144.17	148.80	154.09	159.15	162.94	161.85	160.98	160.05	159.70	158.56	159.89	163.53	168.28	172.17	
	Cattle hides	180.4	177.4	180.3	187.7	177.5	177.3	170.9	174.3	175.6	179.3	177.9	189.0	185.0	187.0	183.8	
	Lumber and wood products	174.1	151.9	162.0	169.8	177.3	178.5	177.0	172.4	169.5	170.6	172.8	174.8	180.1	184.0		
	Waste paper, news	100.7	100.6	100.4	103.2	110.8	112.2	113.2	107.4	104.9	96.4	93.6	92.5	92.9	94.9		
	Waste paper, mixed, NSA	93.6	86.7	87.0	84.5	86.5	87.5	101.5	103.5	107.4	102.8	80.8	98.3	97.6	79.0		
	Waste paper, corrugated	141.8	145.4	145.5	147.1	143.7	149.7	148.3	144.7	141.0	140.8	137.9	135.5	137.9	138.4		
	Iron and steel scrap	172.7	135.8	142.8	152.1	160.3	159.3	155.5	158.8	171.8	179.3	169.0	169.0	188.6	201.6		
	Copper base scrap	135.8	155.9	155.3	164.9	163.1	151.7	139.6	130.6	135.7	135.8	131.9	125.1	115.6	113.9		
	Aluminum base scrap	129.2	129.4	136.3	141.4	137.5	130.9	123.2	124.7	127.2	133.2	129.3	124.4	125.6	124.1		
	Other nonferrous scrap, n.e.c., NSA	114.2	123.4	124.6	129.8	128.6	125.0	118.4	113.3	113.3	115.0	113.5	109.0	101.7	99.3		
	Sand, gravel, and crushed stone	134.0	131.5	132.1	133.2	132.5	133.1	132.7	132.2	133.2	133.7	133.8	134.4	136.2	136.0		
	Raw cotton	92.2	89.3	92.8	96.9	94.0	95.8	88.7	88.3	84.3	85.4	85.3	90.9	96.1	95.9		
	Domestic apparel wool	56.5	73.7	74.0	66.6	63.1	55.3	52.3	53.0	56.0	54.0	56.8	52.3	53.0	56.8		
23	Index of spot market prices, raw industrial materials, 1987=100, NSA (U,L,L)†	260.4	267.7	266.4	268.7	270.0	266.9	261.5	257.8	257.1	257.2	255.5	253.1	255.6	258.1	263.7	
	Copper scrap, \$ per lb. ©	.703	.793	.834	.906	.888	.811	.717	.684	.696	.694	.660	.600	.567	.578	.640	
	Lead scrap, \$ per lb. ©	.139	.150	.146	.150	.159	.162	.149	.148	.145	.139	.132	.118	.116	.123	.125	
	Steel scrap, \$ per ton ©	115.537	92.262	96.118	97.361	109.991	109.347	105.380	105.030	112.411	118.687	112.130	109.756	127.731	138.657	140.863	
	Tin, \$ per lb., NSA ©	3.494	3.802	3.803	3.901	3.835	3.779	3.738	3.703	3.482	3.395	3.294	3.095	3.189	3.225	3.286	
	Zinc, \$ per lb., NSA ©	4.84	5.20	5.30	5.24	5.35	4.96	5.04	4.94	4.67	4.70	4.51	4.45	4.59	4.66	4.92	
	Burlap, \$ per yd., NSA ©	.247	.245	.245	.245	.245	.245	.245	.245	.245	.245	.240	.241	.247	.256	.265	
	Cotton, \$ per lb. ©	.556	.525	.552	.577	.580	.569	.540	.533	.497	.509	.509	.547	.563	.599	.645	
	Print cloth, \$ per yd., NSA ©	.677	.675	.660	.650	.640	.652	.650	.655	.644	.640	.688	.700	.700	.750	.750	
	Wool tops, \$ per lb., NSA ©	3.339	3.625	3.520	3.400	3.312	3.160	3.000	3.050	3.400	3.400	3.400	3.400	3.450	3.600	3.500	
	Hides, \$ per lb., NSA ©	.799	.795	.812	.801	.800	.816	.814	.805	.774	.762	.792	.805	.815	.808	.798	
	Rosin, \$ per 100 lb. ©	59.248	60.423	59.880	59.642	59.524	59.642	59.761	60.060	60.120	60.120	60.181	60.060	59.356	56.338	56.169	
	Rubber, \$ per lb. ©	.450	.494	.494	.489	.475	.453	.437	.437	.438	.435	.440	.451	.445	.451	.451	
	Tallow, \$ per lb. ©	.147	.160	.149	.147	.146	.152	.158	.152	.147	.149	.150	.144	.140	.137	.144	
Producer Price Indexes:																	
336	Finished goods, 1982=100	124.7	123.8	123.8	124.2	124.7	125.1	125.8	125.8	125.1	125.1	124.3	124.5	124.2	124.2	124.1	
	Percent change over 1-month span	0	-2	0	.3	.4	.3	.6	0	-6	0	-6	.2	-2	0	-1	
	Percent change over 6-month span, AR		1.8	1.9	2.9	3.3	2.1	1.5	-6	-1.0	-2.5	-1.6					
337	Finished goods less food and energy, 1982=100	135.8	134.8	135.0	135.6	135.9	136.2	136.7	136.8	136.3	136.6	135.2	135.3	134.6	135.1	135.4	
	Percent change over 1-month span	0	-2	.1	.4	.2	.2	.4	-1	-4	-2	-1.0	.1	-5	.4	.2	
	Percent change over 6-month span, AR		2.2	2.4	3.3	3.0	1.9	1.5	-1	-1.3	-3.0	-2.5	-1.3				
334	Finished consumer goods, 1982=100	123.0	122.3	122.3	122.6	123.1	123.6	124.4	124.4	123.6	123.5	122.3	122.6	122.4	122.3	122.0	
	Percent change over 1-month span	0	-2	0	.2	.4	.4	.6	0	-6	-1	-1.0	.2	-2	-1	-2	
	Percent change over 6-month span, AR		1.6	1.8	3.0	3.5	2.1	1.5	-1.3	-1.6	-3.2	-3.3	-2.6				
333	Capital equipment, 1982=100	131.4	129.5	129.7	130.4	130.8	131.1	131.3	131.4	131.2	131.7	131.9	131.9	131.4	131.7	132.1	
	Percent change over 1-month span	.2	.2	.2	.5	.3	.2	.2	.1	.2	.4	.2	.0	-.4	.2	.3	
	Percent change over 6-month span, AR		2.0	2.5	3.1	3.0	2.3	2.0	1.7	1.2	.2	.5	1.4				
332	Intermediate materials, supplies, and components, 1982=100	116.2	114.9	114.9	115.3	115.9	116.3	116.6	116.3	116.5	116.4	116.4	116.5	116.4	116.2	116.0	
	Percent change over 1-month span	.1	-.3	0	.3	.5	.3	.3	-.3	.2	-.1	0	.1	-.1	-.2	-.2	
	Percent change over 6-month span, AR		1.0	1.4	2.4	2.5	2.8	1.9	.9	.3	-.3	-.2	-.9				
331	Crude materials for further processing, 1982=100	102.4	102.6	101.5	101.8	101.6	101.8	103.3	105.4	103.7	101.4	101.0	101.6	103.0	103.4	101.1	
	Percent change over 1-month span	0	-.1	-.1	.3	-.2	.2	1.5	2.0	-1.6	-2.2	-.4	.6	1.4	.4	-2.2	
	Percent change over 6-month span, AR		1.4	-2.3	1.2	5.5	4.4	-.8	-1.2	-.4	-.6	-3.8	-5.0				
311	Fixed-weighted price index, gross domestic business product, 1987=100	124.6	122.4			123.5			124.4			125.0			125.6		
	Percent change from previous quarter, AR	3.0	3.2			3.7			2.9			1.9			2.1		
Consumer Price Indexes for all urban consumers:																	
320	All items, 1982-84=100, NSA	144.5	142.0	141.9	142.6	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8	
	Percent change over 1-month span	.2	.2	.1	.5	.3	.1	.4	.1	0	.1	.3	0	.4	.2	.2	
	Percent change over 6-month span, AR		3.6	3.6	3.6	3.4	3.1	2.3	2.1	1.8	1.8	1.9	2.4				
323	All items less food and energy, 1982-84=100	152.2	149.3	149.6	150.3	151.0	151.2	151.8	152.1	152.3	152.5	152.9	153.0	153.4	153.9	154.3	
	Percent change over 1-month span	.3	.3	.2	.5	.5	.1	.4	.2	.1	.1	.3	.1	.3	.3	.3	
	Percent change over 6-month span, AR		4.0														

Series no.	Series title and timing classification	Year	1992		1993											
		1993	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8. PROFITS AND CASH FLOW																
16 ♦	Profits and profit margins:															
18 ♦	Corporate profits after tax, bil.\$, AR (L,L,L)		254.9				258.9				272.3				274.3	
22 ♦	Corporate profits after tax, bil. 1987\$, AR (L,L,L)		216.3				219.2				230.7				232.7	
81 ♦	Ratio, corporate domestic profits after tax to corporate domestic income, percent (L,L,L)		6.9				6.9				7.2				7.0	
26 ♦	Ratio, corporate domestic profits after tax with IVA and CCAadj to corporate domestic income, percent(U,L,L).		7.9				7.3				7.6				7.9	
35	Ratio, implicit price deflator to unit labor cost, all persons, nonfarm business sector, 1982=100 (L,L,L).		104.4				103.9				103.8				104.3	
	Corporate net cash flow, bil. 1987\$, AR (L,L,L)		472.4				477.8				490.2				498.2	
9. WAGES, LABOR COSTS, AND PRODUCTIVITY																
345	Wages and compensation:															
	Index of average hourly compensation, all employees, nonfarm business sector, 1982=100		156.1				157.2				157.9				159.4	
346	Percent change from previous quarter, AR		4.5				2.9				1.7				3.9	
53 ♦	Index of real average hourly compensation, all employees, nonfarm business sector, 1982=100		106.1				105.9				105.5				106.2	
	Percent change from previous quarter, AR		1.3				-8				-1.2				2.7	
63	Wages and salaries in mining, mfg., and construction, bil. 1987\$, AR (C,C,C)	592.4	596.9	660.2	579.6	580.8	578.4	595.3	595.5	592.8	595.2	595.7	597.8	597.3	599.6	P 601.2
	Unit labor costs:															
	Index of unit labor cost, all persons, business sector, 1982=100 (Lg,Lg)		134.8				136.4				137.3				137.4	
62 ♦	Index of labor cost per unit of output, mfg., 1987=100 ¹	108.9	110.6	112.0	109.9	109.5	109.3	109.2	109.2	109.0	109.0	108.9	109.1	108.4	107.8	P 107.7
	Percent change from previous month, AR ¹	-3.7	-13.1	16.3	-20.3	-4.3	-2.2	-1.1	0	-2.2	0	-1.1	2.2	-7.4	-6.4	P -1.1
	Percent change from previous month, AR, smoothed (Lg,Lg)†	-2.7	-1.4	-2	-2.2	-3.7	-4.3	-4.3	-3.7	-3.1	-2.4	-1.8	-9	-1.2	-2.1	P -2.5
370	Productivity:															
	Index of output per hour, all persons, business sector, 1982=100		117.1				116.6				116.6				117.6	
♦	Percent change over 1-quarter span, AR		3.8				-1.6				0			3.6		
358	Percent change over 4-quarter span, AR		1.6				1.4									
	Index of output per hour, all persons, nonfarm business sector, 1982=100		115.3				114.8				114.7				115.9	
10. PERSONAL INCOME AND CONSUMER ATTITUDES																
52	Personal income:															
51 ♦	Personal income, bil. 1987\$, AR (C,C,C)	4,236.4	4,180.8	4,391.8	4,150.7	4,156.1	4,181.2	4,228.2	4,236.5	4,227.9	4,217.8	4,264.0	4,267.1	4,283.7	4,300.5	P 4,322.7
	Personal income less transfer payments, bil. 1987\$, AR (C,C,C)	3,519.6	3,484.5	3,689.9	3,441.9	3,449.3	3,471.1	3,517.7	3,524.3	3,511.7	3,499.1	3,542.3	3,544.2	3,560.3	3,577.7	P 3,595.2
58	Indexes of consumer attitudes:															
83 ♦	Consumer sentiment, U. of Michigan, 1966=100, NSA (L,L,L)⊗ ²	82.8	85.3	91.0	89.3	86.6	85.9	85.6	80.3	81.5	77.0	77.3	77.9	82.7	81.2	88.2
122	Consumer expectations, U. of Michigan, 1966=100, NSA (L,L,L)⊗ ²	72.8	78.2	89.5	83.4	80.6	75.8	76.4	68.5	70.4	64.7	68.8	66.8	72.5	70.3	78.8
123 ♦	Consumer confidence, The Conference Board, 1985=100 (L,L,L)*	65.9	65.6	78.1	76.7	68.5	63.2	67.6	61.9	58.6	59.2	59.3	63.8	60.5	71.9	79.8
	Consumer expectations, The Conference Board, 1985=100 (L,L,L)*	77.4	85.7	103.9	98.0	84.7	77.3	81.1	73.1	69.6	66.8	66.8	72.8	66.7	80.3	91.8
11. SAVING																
290	Gross saving, bil.\$, AR		718.8			762.0					766.7				774.3	
295	Business saving, bil.\$, AR		769.7			766.9					779.6				809.0	
292	Personal saving, bil.\$, AR	190.3				177.9					208.7				179.7	P 195.2
298 ♦	Government surplus or deficit, bil.\$, AR		-250.6			-262.8					-221.5				-214.4	
293 ♦	Personal saving rate, percent	4.0	6.0			3.9					4.4				3.8	P 4.1
12. MONEY, CREDIT, INTEREST RATES, AND STOCK PRICES																
85 ♦	Money:															
102 ♦	Percent change in money supply M1 (L,L,L)* .....	.81	1.30	.74	.64	-.02	.21	.75	2.29	.60	1.12	.84	1.13	.87	.85	.47
105	Percent change in money supply M2 (L,C,U) .....	.13	.13	-.04	-.26	-.33	-.07	.06	.84	.19	.17	.09	.34	.06	.33	.19
106 ♦	Money supply M1, bil. 1987\$ (L,L,L)	848.5	815.9	821.3	822.0	819.2	819.6	822.6	840.1	845.1	853.9	859.0	868.8	872.9	878.2	P 880.3
	Money supply M2, bil. 1987\$ (L,L,L)	2,760.8	2,799.2	2,795.8	2,773.0	2,755.0	2,748.7	2,739.6	2,758.3	2,763.5	2,766.1	2,762.1	2,771.6	2,762.5	2,765.2	P 2,764.0
107	Velocity of money:															
	Ratio, gross domestic product to money supply M1 (C,C,C)	5.912	6.090			6.057					5.963				5.838	P 5.790
108	Ratio, personal income to money supply M2 (C,Lg,C)	1.535	1.498	1.576	1.499	1.511	1.524	1.545	1.536	1.531	1.526	1.544	1.541	1.551	1.554	P 1.560
93	Bank reserves:															
94	Free reserves, mil.\$, NSA (L,U,U) ‡	901	939	1,032	1,096	1,059	1,122	1,023	875	730	845	600	662	804	1,012	P 988
	Member bank borrowings from the Federal Reserve, mil.\$, NSA (L,Lg,U)	180	104	124	165	45	91	73	121	181	244	352	428	285	89	P 82
112 ♦	Credit flows:															
113 ♦	Net change in business loans, bil.\$, AR (L,L,L)	7.67	58.43	-1.19	-70.87	24.49	-76.30	37.81	40.80	6.05	69.90	-20.96	-10.26	-3.61	-2.24	P 97.24
	Net change in consumer installment credit, bil.\$, AR (L,L,L)		21.94	60.84	29.88	43.74	34.84	24.74	-22.80	25.62	60.44	60.47	72.84	91.92	82.57	P 82.57
111	Percent change in business and consumer credit outstanding, AR (L,L,L)		P 2.2													
110 ♦	Funds raised by private nonfinancial borrowers in credit markets, mil.\$, AR (L,L,L)		288,400			219,992			346,024					P 481,036		
14	Credit difficulties:															
39	Current liabilities of business failures, mil.\$, NSA (L,L,L) ‡	48,914.2	3,984.1	8,450.5	P 6,174.9	P 2,406.7	P 4,343.0	P 2,973.4	P 6,634.4	P 2,675.4	P 5,496.4	P 7,382.0	P 3,062.6	P 2,222.1	P 2,991.0	P 2,552.3
	Percent of consumer installment loans delinquent 30 days and over (L,L,L) ⊗ ³ †		2.53	2.43	2.44	2.39	2.31	2.01	2.16	2.06	2.08	2.03	1.95			

NOTE.—The following current high values were reached before November 1992: June 1991—BCI-106 (2,856.4); July 1991—BCI-93 (345); August 1991—BCI-94 (764); December 1991—BCI-62 index (113.1) and BCI-62 smoothed (3.1); and October 1992—BCI-111 (3.0).

See page C-6 for other footnotes.

Series no.	Series title and timing classification	1992		1993												
		1993	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12. MONEY, CREDIT, INTEREST RATES, AND STOCK PRICES—Continued																
66	Outstanding debt:															
	Consumer installment credit outstanding, mil.\$ (Lg,Lg) 0		736,023	741,093	743,583	747,228	750,131	752,193	750,293	752,428	757,465	762,503	768,573	776,234	783,115	
72	Commercial and industrial loans outstanding, mil.\$ (Lg,Lg)	427,591	429,631	429,532	423,626	425,667	419,309	422,460	425,860	426,364	432,189	430,442	429,587	429,286	429,099	437,202
101	Commercial and industrial loans outstanding, mil. 1987\$ (Lg,Lg)	369,762	374,896	375,465	369,012	369,503	363,038	364,190	365,859	366,923	372,898	372,677	371,937	370,713	370,872	379,516
95	Ratio, consumer installment credit outstanding to personal income, percent (Lg,Lg,Lg)		14.05	13.46	14.23	14.24	14.18	14.02	13.94	14.00	14.12	14.04	14.13	14.17	14.22	
	Interest rates (percent, NSA):															
119	Federal funds rate (L,Lg,Lg)*	3.02	3.09	2.92	3.02	3.03	3.07	2.96	3.00	3.04	3.06	3.03	3.09	2.99	3.02	2.96
114	Discount rate on new 91-day Treasury bills (C,Lg,Lg)*	3.02	3.14	3.25	3.06	2.95	2.97	2.89	2.96	3.10	3.05	3.05	2.96	3.04	3.12	3.08
116	Yield on new high-grade corporate bonds (Lg,Lg,Lg)*	7.35	8.25	8.12	7.91	7.73	7.39	7.48	7.52	7.48	7.35	7.04	6.88	6.88	7.22	7.28
115	Yield on long-term Treasury bonds (C,Lg,Lg)*	6.45	7.43	7.30	7.17	6.89	6.65	6.64	6.68	6.55	6.34	6.18	5.94	5.90	6.25	6.27
117	Yield on municipal bonds, 20-bond average (U,Lg,Lg)*	5.59	6.36	6.22	6.16	5.87	5.64	5.76	5.73	5.63	5.57	5.45	5.29	5.25	5.47	5.35
118	Secondary market yields on FHA mortgages (Lg,Lg,Lg)	7.46	8.54	8.12	8.04	7.55	7.57	7.56	7.59	7.52	7.51	7.02	7.03	7.08	7.51	7.52
109	Average prime rate charged by banks (Lg,Lg,Lg)*	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
19	Index of stock prices, 500 common stocks, 1941-43=10, NSA (L,L,L)*	451.41	422.84	435.64	435.23	441.70	450.16	443.08	445.25	448.06	447.29	454.13	459.24	463.90	462.89	465.95
13. NATIONAL DEFENSE																
525	Defense Department prime contract awards, mil.\$				11,358	9,579	11,628	10,231	9,317	10,189	9,656	11,785	11,359			
548	Manufacturers' new orders, defense products, mil.\$	77,460	6,620	7,592	8,812	6,361	7,411	6,853	5,434	5,788	7,231	6,598	6,446	5,304	5,278	5,944
557	Index of industrial production, defense and space equipment, 1987=100	78.7	83.2	82.5	82.0	81.5	80.7	80.5	79.5	78.6	78.0	77.5	77.5	76.9	76.6	76.1
570	Employment, defense products industries, thous.		1,019	1,010	998	992	983	976	963	952	941	933	929	922	912	
564	Federal Government purchases, national defense, bil.\$, AR	303.6	315.7			304.8			307.6			301.9			300.0	
14. EXPORTS AND IMPORTS																
602	Exports, excluding military aid shipments, mil.\$		37,796	39,178	37,504	36,928	38,894	38,479	38,930	37,639	37,109	38,050	38,885	40,092	40,066	
604	Exports of domestic agricultural products, mil.\$		3,451	3,518	3,358	3,484	3,223	3,543	3,388	3,570	3,424	3,319	3,629	3,696	3,415	
606	Exports of nonelectrical machinery, mil.\$		8,026	8,438	7,817	8,090	8,402	8,030	8,263	8,017	8,152	8,559	8,364	8,218	8,807	
612	General imports, mil.\$		45,633	46,143	45,176	44,832	49,347	48,660	47,306	49,698	47,534	48,097	49,506	50,990	50,235	
614	Imports of petroleum and petroleum products, mil.\$		3,923	4,204	4,059	4,146	4,675	5,277	4,300	5,077	4,405	3,689	3,717	3,960	3,432	
616	Imports of automobiles and parts, mil.\$		6,163	6,441	6,147	6,833	7,265	7,046	6,431	6,819	5,947	6,691	7,074	6,852	6,760	
618	Merchandise exports, adjusted, excluding military, mil.\$ ¹		113,992			111,530			113,118			111,912				
620	Merchandise imports, adjusted, excluding military, mil.\$ ¹		139,954			140,839			147,502			148,191				
622	Balance on merchandise trade, mil.\$ ¹		-25,962			-29,309			-34,384			-36,279				
15. INTERNATIONAL COMPARISONS																
47	Industrial production indexes (1987=100):															
721	United States	111.0	108.4	108.9	109.3	109.9	110.1	110.4	110.2	110.5	110.8	111.0	111.4	112.1	113.2	114.0
728	OECD, European countries ²		107	105	106	107	107	105	107	106	107	108	107	108		
725	Federal Republic of Germany		113.1	112.6	112.2	113.5	116.5	113.4	110.6	112.5	111.9	110.9	113.3	107.4	109.5	
726	France		110	107	107	106	108	106	107	107	106	108	107	108	107	106
722	United Kingdom		107	106	105	107	107	106	106	106	106	106	106	106	105	
727	Italy		103	103	103	104	104	104	106	105	106	106	106	106	107	
723	Canada		107.3	100.7	106.8	105.2	100.7	105.1	102.7	105.1	102.7	105.1	103.3	103.1		
	Consumer price indexes (1982-84=100):															
320	United States, NSA	144.5	142.0	141.9	142.6	143.1	143.6	144.0	144.2	144.4	144.4	144.8	145.1	145.7	145.8	145.8
738	Japan, NSA	118.5	117.4	117.4	117.3	117.4	117.7	118.5	118.6	118.5	118.8	119.2	119.3	119.2	118.5	118.6
735	Federal Republic of Germany, NSA	125.6	122.3	122.4	123.8	124.3	124.7	125.1	125.5	125.7	126.0	126.0	126.1	126.4	126.7	126.8
736	France, NSA	141.4	141.4	141.9	142.4	143.1	143.2	143.5	143.4	143.5	143.5	144.0	144.3	144.4		
732	United Kingdom, NSA	165.3	164.1	163.6	162.0	163.1	163.7	165.2	165.8	165.7	165.3	166.0	166.7	166.6	166.4	166.7
737	Italy, NSA	186.4	182.0	182.3	182.9	183.6	184.0	184.7	185.4	186.4	187.1	187.2	187.5	188.6	189.5	189.5
733	Canada, NSA	147.9	146.4	146.4	147.0	147.4	147.3	147.3	147.6	147.6	148.0	148.1	148.2	148.4	149.1	148.8
	Stock price indexes (1967=100, NSA):															
748	United States*	491.0	460.0	473.9	473.4	480.5	489.7	482.0	484.3	487.4	486.6	494.0	499.6	504.6	503.5	506.9
745	Federal Republic of Germany*	1,368.4	1,151.6	1,197.7	1,157.0	1,171.5	1,233.8	1,409.7	1,471.1	1,462.1	1,488.4	1,509.9	1,504.5	1,466.1	1,308.8	1,257.5
746	France*	312.5	269.8	269.1	277.9	291.9	296.8	293.6	286.1	293.3	311.6	325.3	322.8	337.9	345.9	366.4
742	United Kingdom*	968.0	861.7	866.9	868.7	908.6	945.8	938.8	902.3	907.8	954.3	1,021.0	1,006.6	1,047.2	1,033.6	1,080.9
747	Italy* \$	1,370.4	1,240.2	1,281.8	1,302.2	1,324.5	1,351.0	1,324.5	1,324.5	1,339.0	1,323.9	1,404.6	1,412.4	1,421.5	1,418.1	1,499.1
743	Canada*	441.1	370.8	378.6	373.5	390.0	407.1	428.2	437.4	448.2	448.3	467.5	450.9	480.9	472.3	488.3
	Exchange rates:															
750	Exchange value of U.S. dollar, index: March 1973=100, NSA ³	93.18	90.04	90.50	92.36	93.82	93.65	90.62	90.24	91.81	94.59	94.32	92.07	93.29	95.47	95.73
	Foreign currency per U.S. dollar (NSA):															
758	Japan (yen)*	111.08	123.88	124.04	124.99	120.76	117.02	112.41	110.34	107.41	107.69	103.77	105.57	107.02	107.88	109.91
755	Federal Republic of Germany (d. mark)*	1.6545	1.5875	1.5822	1.6144	1.6414	1.6466	1.5964	1.6071	1.6547	1.7157	1.6944	1.6219	1.6405	1.7005	1.7105
756	France (franc)*	5.6689	5.3706	5.3974	5.4751	5.5594	5.5944	5.3984	5.4180	5.5700	5.8464	5.9298	5.6724	5.7541	5.9069	5.8477
752	United Kingdom (pound)*	.6662	.6550	.6447	.6525	.6947	.6841	.6474	.6461	.6630	.6687	.6705	.6558	.6656	.6753	.6706
757	Italy (lira)*	1,573.41	1,364.45	1,412.38	1,491.07	1,550.43	1,591.35	1,536.14	1,475.66	1,505.05	1,586.02	1,603.75	1,569.10	1,600.93	1,666.31	1,687.17
753	Canada (dollar)*	1.2902	1.2674	1.2725	1.2779	1.2602	1.2471	1.2621	1.2698	1.2789	1.2820	1.3080	1.3215	1.3263	1.3174	1.3308
16. ALTERNATIVE COMPOSITE INDEXES																
990	CIBCR long-leading composite index, 1967=100 ⁴	259.1	250.1	236.8	254.7	256.3	258.6	254.8	256.2	258.0	258.8	259.0	259.6	261.6	264.6	266.4
991	CIBCR short-leading composite index, 1967=100 ⁴	223.9	216.8	221.8	220.4	222.9	222.2	221.7	219.3	223.1	222.2	223.6	225.4	227.2	229.7	228.8

See footnotes on page C-6.

FOOTNOTES FOR PAGES C-1 THROUGH C-5

a	Anticipated.	NSA	Not seasonally adjusted.
AR	Annual rate.	p	Preliminary.
c	Corrected.	r	Revised.
©	Copyrighted.	◆	Graph included for this series.
e	Estimated.	§	Major revision—see notes.
*	Later data listed in notes.	◇	End of period.

L,C,Lg,U Cyclical indicator series are classified as L (leading), C (coincident), Lg (lagging), or U (unclassified) at reference cycle peaks, troughs, and overall. Series classifications are shown in parentheses following the series titles.

‡ Cyclical indicator series denoted by ‡ are inverted (i.e., the sign is reversed) for cyclical analysis calculations, including classifications, contributions to composite indexes, and current high values.

† Cyclical indicator series denoted by † are smoothed by an autoregressive-moving-average filter developed by Statistics Canada.

For information on composite indexes and other concepts used in this section, see "Business Cycle Indicators: Upcoming Revision of the Composite Indexes" in the October 1993 SURVEY OF CURRENT BUSINESS and "The Composite Index of Coincident Indicators and Alternative Coincident Indexes" in the June 1992 SURVEY.

References to series in this section use the prefix "BCI-" followed by the series number. Unless otherwise noted, series are seasonally adjusted.

Percent change data are centered within the spans: 1-month changes are placed in the ending month, 3-month changes are placed in the 3d month, 6-month changes are placed in the 4th month, 1-quarter changes are placed in the ending quarter, and 4-quarter changes are placed in the 3d quarter.

Diffusion indexes are defined as the percent of components rising plus one-half of the percent of components unchanged. Diffusion index data are centered within the spans: 1-month indexes are placed in the ending month and 6-month indexes are placed in the 4th month.

High values reached by cyclical indicators in the expansion following the last reference cycle trough (March 1991) are shown in boldface type; high values reached prior to the period shown in the table are listed at the bottom of each page. For inverted series, low values are indicated as highs.

Sources for series in this section are shown on pages C-50 and C-51 in the November 1993 SURVEY.

Page C-1

NOTE.—Major data revisions:

Vendor performance (BCI-32) has been revised by the source from 1991 forward to incorporate updated seasonal adjustment factors. For further information, contact the National Association of Purchasing Management, 2055 East Centennial Circle, Tempe, AZ 85285-2160.

Average duration of unemployment (BCI-91)—see note for page C-2.

* Preliminary January 1994 values: BCI-32 = 55.0, BCI-19 = 472.99, and BCI-109 = 6.00.

1. Data include initial claims made under the July 1992 Emergency Unemployment Compensation amendments. Data exclude Puerto Rico, which is included in figures published by the source agency.

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3. Excludes BCI-57, for which data are not available.

4. Excludes BCI-77 and BCI-95, for which data are not available.

5. The wages and salaries portion of this series has been adjusted to smooth yearend 1992 bonus payments that are in the revised national income and product accounts data. The bonus payments were too large to be adequately dealt with by the autoregressive-moving-average filter used to smooth this series.

Page C-2

NOTE.—Major data revisions:

Series on employment and unemployment in the civilian labor force (BCI-37, -42, -43, -44, -90, -91, -441, -442, -451, -452, and -453) have been revised by the source from 1989 forward to incorporate updated seasonal adjustment factors. For further information, contact the U.S. Department of Labor, Bureau of Labor Statistics, Division of Employment and Unemployment Analysis, Washington, DC 20210.

The ratio of help-wanted advertising in newspapers to number of persons unemployed (BCI-60) has been revised from 1989 forward to incorporate revised unemployment data. For further information, contact the U.S. Department of Commerce, Bureau of Economic Analysis, Business Outlook Division, Washington, DC 20230.

Vendor performance (BCI-32)—see note for page C-1.

* Preliminary January 1994 value: BCI-32 = 55.0; Anticipated 1st quarter 1994 values: BCI-61 = 616.38 and BCI-100 = 590.64; anticipated 2d quarter 1994 values: BCI-61 = 624.33 and BCI-100 = 600.38.

1. Data include initial claims made under the July 1992 Emergency Unemployment Compensation amendments. Data exclude Puerto Rico, which is included in figures published by the source agency.

2. Data exclude Puerto Rico, which is included in figures published by the source agency.

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* Preliminary January 1994 value: BCI-23 = 268.7.

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* Preliminary January 1994 values: BCI-122 = 83.2, BCI-123 = 93.4, and BCI-85 = 0.32.

1. See footnote 5 for page C-1.

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NOTE.—Major data revision: The stock price index for Italy (BCI-747) has been revised to incorporate new source data. For further information, contact the International Monetary Fund, Statistics Department, Financial Institutions, Division 1, 700 19th Street NW, Washington, DC 20431.

* Preliminary January 1994 values: BCI-119 = 3.02, BCI-114 = 3.02, BCI-116 = 7.16, BCI-115 = 6.24, BCI-117 = 5.30, BCI-109 = 6.00, BCI-19 (1941-43=10) = 472.99, BCI-19 (1967=100) = 514.5, BCI-748 = 1,356.2, BCI-745 = 366.4, BCI-746 = 1,111.9, BCI-742 = 1,573.3, BCI-743 = 513.5, BCI-750 = 96.57, BCI-758 = 111.58, BCI-755 = 1.7427, BCI-756 = 5.9214, BCI-752 = 0.6703, BCI-757 = 1,699.66, and BCI-753 = 1.3167.

1. Balance of payments basis: Excludes transfers under military grants and Department of Defense sales contracts (exports) and Department of Defense purchases (imports).

2. Organisation for Economic Co-operation and Development.

3. This index is the weighted-average exchange value of the U.S. dollar against the currencies of the other G-10 countries plus Switzerland. Each country is weighted by its 1972-76 global trade. For a description of this index, see the August 1978 *Federal Reserve Bulletin* (p. 700).

4. This index is compiled by the Center for International Business Cycle Research (CIBCR), Graduate School of Business, Columbia University, New York, NY 10027.