

# **Bureau of Economic Analysis**

# **Survey of Current Business**

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# Special in this issue

# 37. A Satellite Account for Research and Development

BEA has prepared a satellite account that is designed to facilitate analysis of the role of research and development (R&D) in the U.S. economy. In the R&D satellite account, R&D expenditures are treated as a form of investment, and the resulting investment flows are used to estimate stocks of R&D fixed intangible capital. The stock of R&D capital grew rapidly during 1953–70, slowed sharply during 1970–81, and then grew somewhat more rapidly. Adding the constant-cost net stock of R&D fixed capital to the NIPA constant cost net stock of fixed reproducible tangible capital would have raised the net wealth of government and business by nearly 9 percent in 1992.

# Regular features

## 1. Business Situation

Real GDP increased 3.9 percent in the third quarter of 1994, about the same increase as in the second quarter. Corporate profits increased \$10.7 billion, considerably less than in the second quarter, when profits had rebounded from the effects of the Northridge, California, earthquake. The Federal Government deficit increased \$10.0 billion, to \$155.1 billion, and the State and local government surplus decreased \$2.9 billion, to \$24.1 billion.

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# THE BUSINESS SITUATION

The first two sections of this article were prepared by Daniel Larkins, Larry R. Moran, Ralph W. Morris, and Deborah Y. Sieff. The section on the government sector was prepared by Michael W. Webb and David F. Sullivan.

Real gross domestic product (gdp) increased 3.9 percent in the third quarter of
1994, according to the "preliminary" estimates
of the national income and product accounts
(NIPA's). The "advance" estimates of the NIPA's,
reported in the October "Business Situation,"
showed a 3.4-percent increase. Real gross domestic purchases, a measure of goods and services
purchased by U.S. residents, increased 4.5 percent, 0.6 percentage point more than reported a
month ago. The fixed-weighted price index for
gross domestic purchases increased 3.4 percent,
0.2 percentage point more than reported a month
ago. (The sources of these revisions are discussed
in "Revisions" later in this article.)

The 3.9-percent increase in real GDP in the third quarter followed a 4.1-percent increase in the second (chart 1). Output of goods stepped up somewhat, reflecting an upturn in motor vehicle production. Output of services also increased more than in the second quarter, but structures increased substantially less (table 1).

The 4.5-percent increase in real gross domestic purchases followed an increase of 4.6 percent (table 2). The third-quarter increase reflected

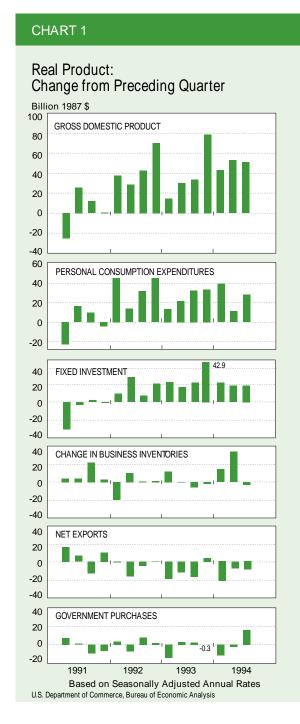
Table 1.—Real Gross Domestic Product, by Major Type of Product

[Seasonally adjusted at annual rates]

		Billions of 1987 dollars					t change quai	from pred	eding	
	Level	Chang	e from pr	eceding o	juarter	1993	· ·			
	LCVCI	1993		1994		1000		1334		
	1994:III	IV	I	II	III	IV	I	II	III	
Gross domestic product	5,365.0	78.6	43.1	53.0	50.9	6.3	3.3	4.1	3.9	
Goods  Motor vehicles  Other	2,236.1 228.4 2,007.7	57.3 22.2 35.1	33.3 18.0 15.3	32.5 -12.2 44.7	34.8 5.0 29.8	11.5 53.8 7.7	6.4 37.4 3.2	6.1 -19.2 9.6	6.5 9.3 6.2	
Services	2,651.4	5.1	14.6	10.0	15.6	.8	2.3	1.5	2.4	
Structures	477.6	16.2	-4.8	10.4	.7	15.0	-4.0	9.2	.6	

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

increases in personal consumption expenditures, nonresidential fixed investment, and government



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 and are based on 1987 weights.

purchases. Inventory investment, which had accounted for more than half of the second-quarter increase, decreased, as did residential investment.

Imports and exports are the link between goods and services produced in the United States (GDP) and goods and services purchased by U.S. residents (gross domestic purchases). In the third quarter, gross domestic purchases continued to increase faster than GDP, as imports increased faster than exports. Both imports and exports increased at a slower rate than in the second quarter.

# Personal consumption expenditures

Real personal consumption expenditures (PCE) increased 3.3 percent in the third quarter after increasing 1.3 percent in the second (table 3). All major components contributed to the acceleration.

Factors frequently considered in analyses of PCE were mixed in the third quarter (chart 2). Real disposable personal income increased, but a little less than in the second quarter. The Index of Consumer Sentiment (prepared by the University

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

[Seasonally adjusted at annual rates]

		Billions	of 1987 o	dollars		Percent change from preceding quarter			
	Laval	Chan	ge from pr	eceding qu	arter	1993		1994	
	Level	1993		1994		IV			III
	1994:III	IV	I	II	III	IV	'	II	 
Gross domestic product	5,365.0	78.6	43.1	53.0	50.9	6.3	3.3	4.1	3.9
Less: Exports of goods and services	662.7 783.5	29.9 25.8	-5.6 16.2	24.3 32.0	18.8 27.9	21.7 16.0	-3.5 9.5	16.6 18.9	12.2 15.6
Equals: Gross domestic purchases	5,485.9	74.4	64.9	60.7	60.1	5.8	5.0	4.6	4.5
Less: Change in business inventories	56.1	-2.2	14.6	33.8	-3.1				
Equals: Final sales to domestic purchasers	5,429.8	76.6	50.3	26.9	63.2	6.0	3.9	2.0	4.8
Personal consumption expenditures Nonresidential fixed investment Residential investment Government purchases	3,586.4 680.4 229.9 933.0	34.0 29.3 13.5 3	40.1 16.4 5.4 –11.6	11.5 14.3 3.9 –2.8	28.6 22.5 -3.9 15.9	4.0 21.1 28.2 1	4.7 10.9 10.0 –4.9	1.3 9.2 7.0 –1.2	3.3 14.4 –6.5 7.1

NOTE.—Dollar levels are found in NIPA tables 1.2 and 1.6, and percent changes are found in table 8.1

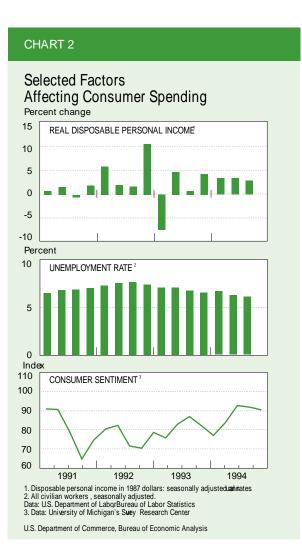
Table 3.—Real Personal Consumption Expenditures

[Seasonally adjusted at annual rates]

		Billion	s of 1987 o	dollars		Percent ch	nange from	preceding	quarter
	Laurel	Chan	ge from pr	eceding qu	arter	1993		1994	
	Level	1993	1993 1994		D./				
	1994:III	IV	I	II	III	IV	'	II	III
Personal consumption expenditures	3,586.4	34.0	40.1	11.5	28.6	4.0	4.7	1.3	3.3
Durable goods	530.2 202.8 78.9 42.6 81.3 241.5 86.0 1,113.2 536.0 210.1 99.4 267.7	18.1 9.7 7.2 5.1 -2.6 8.0 .4 6.3 3.0 3.8 9	10.9 9.0 -1.6 1.0 9.6 1.3 .5 10.3 3.8 1.4 .7 4.3	.5 -8.4 -1.8 -2.4 -4.2 6.6 2.4 6.0 4.2 1.1 -1.4 2.0	8.0 -2.5 -4.9 -2.7 5.1 9.0 1.6 8.9 1 5.2 1.3 2.6	15.5 21.4 41.2 58.8 -13.4 15.6 2.0 2.4 2.3 7.9 -3.6 .6	8.8 18.8 -7.1 8.8 66.3 2.3 2.5 3.8 2.9 2.8 2.9 6.8	.4 -14.8 -8.1 -18.7 -19.3 12.2 12.2 2.2 2.2 2.2 -5.5 3.1	6.3 -4.8 -21.4 -21.8 29.6 16.4 7.8 3.3 1 10.5 5.4 4.0
Services  Housing  Household operation  Energy <sup>2</sup> Other household operation  Transportation  Medical care  Other	1,943.0 502.5 228.0 97.1 131.0 132.5 480.6 599.4	9.6 1.7 5 3 3 1.4 2.8 4.2	18.9 2.3 1.8 1.5 .5 1.1 2.8 11.0	5.1 2.3 .4 9 1.2 .9 4.2 -2.8	11.6 2.5 -1.1 -3.1 2.1 .7 3.2 6.3	2.0 1.4 9 -1.2 9 4.4 2.4 2.9	4.0 1.9 3.2 6.2 1.6 3.4 2.4 7.7	1.1 1.9 .7 -3.5 3.8 2.8 3.6 -1.9	2.4 2.0 -1.9 -11.8 6.7 2.1 2.7 4.3

<sup>1.</sup> Gasoline and oil, and fuel oil and coal.

<sup>2.</sup> Electricity and gas.



of Michigan's Survey Research Center) decreased but remained relatively high. The unemployment rate decreased.

Expenditures for durable goods increased 6.3 percent after edging up 0.4 percent. More than half of the third-quarter increase was accounted for by consumer electronics; furniture and "other durable household furnishings" (which includes such items as floor coverings and lamps) also increased significantly. Motor vehicles and parts decreased, primarily reflecting decreases in new domestic autos and in trucks; in contrast, net purchases of used autos increased.

Expenditures for nondurable goods increased 3.3 percent after increasing 2.2 percent. Clothing and shoes accounted for more than half of the third-quarter increase; food purchased for on-premise consumption, energy, and "other" nondurables also increased. Food purchased for off-premise consumption decreased.

Expenditures for services increased 2.4 percent after increasing 1.1 percent. Increases were recorded in medical care, transportation, housing services, and "other services"; energy decreased, primarily reflecting milder-than-normal weather.

#### Nonresidential fixed investment

Real nonresidential fixed investment increased 14.4 percent in the third quarter after increasing 9.2 percent in the second (table 4).

Table 4.—Real Gross Private Domestic Fixed Investment

[Seasonally adjusted at annual rates]

		Billions	s of 1987 o	dollars		Percent c	hange fron	n preceding	quarter
	Laval	Chan	ge from pr	eceding qu	arter	1993		1994	
	Level	1993		1994		n./			
	1994:III	IV	I	II	III	IV	ı	II	III
Gross private domestic fixed investment	910.3	42.9	21.7	18.3	18.6	23.0	10.6	8.6	8.6
Nonresidential	680.4	29.3	16.4	14.3	22.5	21.1	10.9	9.2	14.4
Structures  Nonresidential buildings, including farm  Utilities  Mining exploration, shafts, and wells  Other	152.1 105.7 29.7 9.4 7.4	1.2 2.2 0 6 4	-4.6 -3.5 1 3 7	6.9 6.2 .6 .2 1	1.1 .3 .7 4 .6	3.3 9.0 0 -21.0 -18.5	-11.8 -13.0 -1.4 -11.6 -32.1	20.6 27.4 8.7 8.6 -5.7	2.9 1.1 10.0 -15.4 40.2
Producers' durable equipment Information processing and related equipment Computers and peripheral equipment Other Industrial equipment Transportation and related equipment Motor vehicles Other Other	528.3 251.1 135.0 116.1 92.1 99.1 90.2 8.9 86.0	28.2 16.3 10.3 6.0 3.7 5.6 5.0 .6 2.7	20.9 8.0 4.7 3.3 2.8 7.6 9.0 -1.4 2.4	7.5 9.0 3.1 5.8 2.5 -6.2 -3.9 -2.3 2.3	21.4 8.9 4.7 4.3 3.2 6.8 5.9 .9 2.4	27.5 35.1 42.1 27.2 19.8 29.0 29.8 23.4 14.9	18.6 15.0 16.3 13.5 14.1 37.9 53.8 -39.9	6.1 16.4 10.1 23.7 12.1 -22.9 -16.5 -63.6 11.8	18.0 15.5 15.2 16.3 15.2 32.9 31.1 53.2 12.0
Residential Single-family structures Multifamily structures Other	229.9 123.9 12.0 94.0	13.5 8.1 2 5.5	5.4 6.8 .3 –1.7	3.9 2.5 1.3 .2	-3.9 -3.7 .7 -1.0	28.2 32.8 -7.8 26.5	10.0 25.1 13.0 –6.9	7.0 8.2 63.0 .8	-6.5 -11.1 27.2 -4.1

tures slowed sharply, but producers' durable equipment stepped up.

Factors that affect investment spending were generally favorable in the third quarter. Real final sales of domestic product increased 4.2 percent, more than in either of the preceding two quarters. The capacity utilization rate in manufacturing continued its uptrend, increasing 0.7 percentage point to 84.1 percent. Corporate profits and cash flow increased, but not as much as in the preceding quarter, when they had rebounded from the effect of the Northridge, California, earthquake. Borrowing costs were one of the few factors that were less favorable to investment spending; for example, the yield on new high-grade corporate bonds increased 25 basis points.

Structures increased 2.9 percent after increasing 20.6 percent—the largest percentage increase in 10 years. Both industrial and commercial buildings increased much less than in the preceding quarter. Utilities structures increased about as much as in the second quarter. Mining exploration, shafts, and wells—mainly oilwell drilling—decreased.

Producers' durable equipment accelerated to an 18.0-percent increase after increasing 6.1 percent. All major categories of equipment contributed to the third-quarter increase. Information processing equipment and transportation equipment accounted for about three-fourths of the increase. The increase in information processing equipment was almost equally divided between

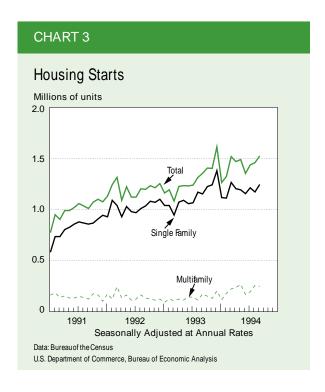
computers and communications equipment; the increase in transportation equipment was mainly accounted for by motor vehicles.

## Residential investment

Real residential investment decreased 6.5 percent in the third quarter after increasing 7.0 percent in the second. Single-family construction turned down, multifamily construction decelerated, and "other residential investment" decreased after no change.

Single-family construction decreased 11.1 percent after increasing 8.2 percent. Single-family construction for a quarter can usually be approximated by the average of housing starts in that quarter and in the preceding quarter; accordingly, construction in the third quarter of 1994 would reflect housing starts in the second and third quarters of 1994. However, in these two quarters housing starts averaged 1.20 million units (seasonally adjusted annual rate)—up slightly from an average of 1.18 million units for the first and second quarters (chart 3). The anomaly of an increase in average starts and a decrease in singlefamily construction is due to a decrease in the "quality" (that is, the size, location, or amenities) of the units; such a decrease in quality is reflected in the NIPA estimate of real single-family construction but not in the average number of starts.

Multifamily construction increased 27.2 percent after increasing 63.0 percent. The rental





vacancy rate decreased a little, to 7.2 percent, but remained high.

"Other residential investment" decreased 4.1 percent after little change. Brokers' commissions accounted for the decrease, reflecting a drop of 154,000 (seasonally adjusted annual rate) in the sales of new and existing residences. Mortgage rates continued to increase; for example, the commitment rate on 30-year fixed-rate mortgages increased 16 basis points, to 8.60 percent (chart 4).

# Inventory investment

Real inventory investment—that is, the change in business inventories—decreased \$3.1 billion in the third quarter, as inventory accumulation slowed to \$56.1 billion from \$59.2 billion (table 5). In contrast, inventory investment had increased \$33.8 billion in the second quarter.

Nonfarm inventories increased strongly for the second consecutive quarter, increasing \$46.3 billion after increasing \$51.7 billion. Inventories in wholesale and retail trade increased somewhat less than in the second quarter but again accounted for more than three-fourths of the accumulation.

In retail trade, inventories of both durable and nondurable goods increased. Inventories held by auto dealers increased after a modest decrease. Inventories of other durable goods increased slightly more than in the second quarter; more than half of the third-quarter increase was accounted for by furniture and appliance stores. Inventories of nondurable goods increased about one-third as much as in the second quarter; department store inventories, which had increased

sharply in the second quarter, increased only modestly in the third.

In wholesale trade, too, inventories of both durable and nondurable goods increased. Most of the increase in inventories of durable goods was accounted for by machinery, equipment, and supplies and by electrical goods. The increase in inventories of nondurable goods was accounted for by apparel and dry goods.

Manufacturing inventories increased more than in the second quarter. The thirdquarter increase was more than accounted for by durable goods, especially electrical and industrial equipment.

"Other nonfarm inventories" increased less than in second quarter. (The "other" component consists mainly of inventories held by the mining, construction, public utilities, transportation, communication, and service industries.)

Farm inventories increased \$9.8 billion after increasing \$7.5 billion. Inventories of both crops and livestock increased more than in the second quarter. The third-quarter increases largely reflected weak open-market sales.

Ratios of nonfarm inventories to final sales changed little in the third quarter. The ratio based on all final sales of domestic business edged up to 2.49 from 2.48. Another ratio, based on final sales of goods and structures, edged down to 4.28 from 4.29. Both ratios remained low by historical standards.

# Net exports of goods and services

Real exports increased 12.2 percent in the third quarter after increasing 16.6 percent in the second. Real imports increased 15.6 percent after increasing 18.9 percent (table 6).

Table 5.—Change in Real Business Inventories

[Billions of 1987 dollars; seasonally adjusted at annual rates]

	Level					Change from preceding quarter			
	1993		1994			1993	1994		
	III	IV	I	II	II	IV	I	II	III
Change in business inventories	13.0	10.8	25.4	59.2	56.1	-2.2	14.6	33.8	-3.1
Farm	-7.9	.1	3.3	7.5	9.8	8.0	3.2	4.2	2.3
Nonfarm  Manufacturing Wholesale trade Retail trade Auto dealers Other retail trade	20.9 2.5 6.8 6.2 -7.4 13.6 5.3	10.7 -7.7 .7 5.0 -4.5 9.5 12.7	22.1 9.9 -1.0 2.0 2.5 5 11.3	51.7 .7 17.7 22.3 -1.9 24.2 11.0	46.3 3.6 15.3 20.7 6.9 13.8 6.6	-10.2 -10.2 -6.1 -1.2 2.9 -4.1 7.4	11.4 17.6 -1.7 -3.0 7.0 -10.0 -1.4	29.6 -9.2 18.7 20.3 -4.4 24.7 3	-5.4 2.9 -2.4 -1.6 8.8 -10.4 -4.4
Addenda: Motor vehicles	-6.7 27.6	.6 10.1	-1.9 24.0	3.5 48.2	7.2 39.1	7.3 –17.5	-2.5 13.9	5.4 24.2	3.7 -9.1

Exports of goods increased 17.9 percent, about the same as in the second quarter. Exports of both agricultural and nonagricultural products increased strongly. Most of the major enduse categories contributed to the third-quarter increase in nonagricultural products. Nonautomotive capital goods accounted for about half of the increase; within this category, computers and "other capital goods" increased substantially and more than offset a drop in civilian aircraft. Exports of services decreased after an increase.

Imports of goods increased 17.1 percent after increasing 23.3 percent. As in exports, the third-quarter increase was spread across most of the major end-use categories. Nonautomotive capital goods accounted for about half of the increase, as increases in computers and "other capital goods" more than offset a decrease in civilian aircraft. Most of the rest of the third-quarter increase in imports of goods was accounted for by petroleum and petroleum products, autos, and nonautomotive consumer goods. Imports of services turned up.

## Government purchases

Real government purchases increased 7.1 percent in the third quarter after decreasing 1.2 percent in the second (table 7). Federal Government purchases turned up sharply, and purchases by State and local governments increased more than in the second quarter.

Federal defense purchases increased 13.6 percent in the third quarter after decreasing in the seven preceding quarters. The increase was attributable to all types of purchases except compensation of employees, which decreased for the 13th consecutive quarter. The largest increases were in purchases of durable goods, particularly aircraft, and in purchases of services other than compensation of employees.

Federal nondefense purchases increased 9.5 percent after decreasing 15.0 percent. The increase was more than accounted for by purchases of services other than employee compensation.<sup>2</sup>

Table 6.—Real Net Exports of Goods and Services

[Seasonally adjusted at annual rates]

		Billions of 1987 dollars				Percent change from preceding qual				
	Level	Chan	ge from pro	eceding qu	arter	1993	1994			
	Level	1993	1993 1994		n./					
	1994:III	IV	I	II	III	IV	'	"		
Net exports of goods and services	-120.8	4.1	-21.8	-7.8	-9.0					
Exports of goods and services	662.7 505.0	29.9 29.6	-5.6 -3.7	24.3 20.2	18.8 20.4	21.7 29.9	-3.5 -3.1	16.6 18.6	12.2 17.9	
Goods Agricultural products Nonagricultural products	40.6 464.4	29.0 2.2 27.5	-3.7 -2.5 -1.3	.9 19.3	3.1 17.3	26.1 30.3	-23.2 -1.2	10.2	37.4 16.4	
Services	157.7	.4	-1.9	4.0	-1.5	1.0	-4.8	10.7	-3.7	
Imports of goods and services	783.5 674.4	25.8 22.8	16.2 15.3	32.0 33.1	27.9 26.1	16.0 16.8	9.5 10.6	18.9 23.3	15.6 17.1	
Petroleum and products Nonpetroleum products Services	64.4 609.9 109.2	1.4 21.4 3.1	-1.6 16.8 .9	3.8 29.3 –1.1	4.1 22.0 1.8	10.2 17.5 12.4	-10.6 13.0 3.4	29.7 22.7 -4.0	30.1 15.8 6.9	

NOTE.—Dollar levels are found in NIPA tables 4.2 and 4.4, and percent changes in major aggregates are found in table 8.1.

Table 7.—Real Government Purchases

[Seasonally adjusted at annual rates]

	Billions of 1987 dollars					Percent change from preceding quarter			
	Lovel	Change from preceding quarter					1993		
	Level	1993	1993 1994		IV				
	1994:III	IV	I	II	III	IV	'	II	
Government purchases	933.0	-0.3	-11.6	-2.8	15.9	-0.1	-4.9	-1.2	7.1
Federal National defense Nondefense	344.7 233.4 111.2	-4.5 -2.2 -2.3	-9.4 -10.2 .8	-7.0 -2.4 -4.5	10.0 7.3 2.5	-5.0 -3.6 -7.8	-10.3 -16.0 2.9	-7.9 -4.1 -15.0	12.5 13.6 9.5
State and local Structures Other	588.4 90.6 497.8	4.2 2.0 2.2	-2.1 -6.0 3.9	4.1 1.7 2.4	6.0 2.5 3.5	2.9 9.1 1.8	-1.4 -23.6 3.2	2.9 8.1 2.0	4.2 11.8 2.9

Note.—Dollar levels are found in NIPA table 3.8B, and percent changes are found in table

The third-quarter increase in purchases of services primarily reflected smaller sales of services by government in the third quarter than in the second.

State and local government purchases increased 4.2 percent after increasing 2.9 percent. All categories of purchases contributed to the third-quarter increase; the largest increases were in structures and in compensation of employees.

#### Revisions

The preliminary third-quarter estimate of a 3.9-percent increase in real GDP is 0.5 percentage point higher than the advance estimate (table 8). This revision is equal to the average revision (without regard to sign) between the advance and the preliminary estimates over the past 10 years.

Upward revisions were made to purchases of equipment and structures by business, purchases of nondurable goods by consumers, and purchases of defense products by government. For producers' durable equipment, more than half of the revision reflected the incorporation of newly available source data on motor vehicle registrations for August and September; the new data indicated that the business share of motor vehicle purchases was much higher than assumed for the advance estimate. (For GDP, this upward revision to producers' durable equipment was largely offset by a downward revision to PCE durable goods that reflected a reduction in the consumer share.) Most of the rest of the upward revision to producers' durable equipment reflected the incorporation of revised data on manufacturers' shipments for September.

For nonresidential structures, the upward revision reflected the incorporation of revised data on the value of construction put in place for August and newly available data for September. For PCE nondurable goods, the upward revision reflected the incorporation of revised data on retail sales for August and September. For defense purchases, the upward revision reflected the incorporation of newly available data on outlays by the Department of Energy for September.

Downward revisions were made to inventory investment, net exports, and PCE durable goods. The revision to inventory investment was largely in durable manufacturing excluding motor vehicles and reflected the incorporation of revised source data for August and newly available data for September. The revision to net exports resulted from a smaller upward revision to exports than to imports, both of which reflected the in-

corporation of newly available data for September on trade in goods.<sup>3</sup>

The third-quarter increase in the fixed-weighted price index for gross domestic purchases was revised up 0.2 percentage point. The

Table 8.—Revisions to Real Gross Domestic Product and Prices, Third Quarter 1994

[Seasonally adjusted at annual rates]

		nange from g quarter	Preliminary minus adv ma	ance esti-
	Advance estimate	Prelimi- nary esti- mate	Percent- age points	Billions of 1987 dol- lars
Gross domestic product	3.4	3.9	0.5	5.8
Less: Exports of goods and services Goods Services Plus: Imports of goods and services Goods Services	9.8 14.6 -3.5 12.1 13.8 2.3	12.2 17.9 -3.7 15.6 17.1 6.9	2.4 3.3 2 3.5 3.3 4.6	3.5 3.6 1 6.0 4.8 1.2
Equals: Gross domestic purchases	3.9	4.5	.6	8.4
Personal consumption expenditures  Durables  Nondurables  Services	3.0 7.9 2.1 2.1	3.3 6.3 3.3 2.4	.3 -1.6 1.2 .3	2.5 -2.0 3.1 1.4
Fixed investment  Nonresidential  Structures  Producers' durable equipment  Residential	3.2 7.0 -5.4 11.0 -7.2	8.6 14.4 2.9 18.0 -6.5	5.4 7.4 8.3 7.0 .7	11.6 11.2 3.2 8.0 .4
Change in business inventories Nonfarm Farm				-8.4 -9.7 1.3
Government purchases Federal National defense Nondefense State and local	5.9 9.8 8.6 11.5 3.8	7.1 12.5 13.6 9.5 4.2	1.2 2.7 5.0 –2.0	2.7 2.1 2.6 5 .6
Gross domestic purchases price index (fixed weights) <sup>1</sup>	3.2 2.7	3.4 2.8	.2 .1	

<sup>1.</sup> Based on 1987 weights.

<sup>3.</sup> The upward revision to constant-dollar imports was substantially larger (\$6.0 billion) than the upward revision to current-dollar imports (\$2.8 billion), primarily because the revisions affected the mix of current-dollar imports. In current dollars, computer imports were revised up, and automotive imports were revised down. The revision to computers translated into a larger upward revision in constant dollars because computer prices have decreased since 1987—that is, because the deflator for computer imports is less than 100.0. Conversely, the downward revision to current-dollar automotive imports translated into a smaller downward revision in constant dollars because automotive prices have increased since 1987. In addition to these mix effects, downward revisions to the prices of imported food, petroleum, and consumer goods increased the revised estimate of constant-dollar imports but not the estimate of current-dollar imports.

NOTE.—Preliminary estimates for the third quarter of 1994 incorporate the following revised or additional major source data tha were not available when the advance estimates were prepared a month ago.

Personal consumption expenditures: Revised retail sales for August and September, and consumers' share of new capurchases for August and September.

Nonresidential fixed investment: Construction put in place for July and August (revised) and September, manufacturers' shipments of machinery and equipment for August and September (revised), and business' share of new car purchases for August and September.

Residential investment: Construction put in place for July and August (revised) and September.

Change in business inventories: Manufacturing and trade inventories for August (revised) and September, and revised unit inventories of motor vehicles for September.

Net exports of goods and services: Merchandise exports and merchandise imports for August (revised) and September.

Government purchases: Detailed Federal outlays for September, State and local construction put in place for July and August

<sup>(</sup>revised) and September, and State and local government employment for August and September (revised).

Wages and salaries: Revised employment, average hourly earnings, and average weekly hours for August and September.

GDP prices: Detailed merchandise export and import price indexes for July through September, values and quantities of petroleum imports for September, and single-family housing prices for the quarter.

In the  ${\tiny NIPA}$  's, sales by the government are deducted from purchases; for more detail, see the section "Government Sector."

increase in the price index for GDP was revised up o.1 percentage point.

# **Corporate Profits**

Profits from current production increased \$10.7 billion in the third quarter after increasing \$38.2 billion in the second (table 9).4 The secondquarter increase largely reflected a rebound from the effect of the Northridge, California, earthquake, which had reduced first-quarter profits by about \$30 billion.

The third-quarter increase was mostly accounted for by roughly equal increases in domestic operations of financial and nonfinancial corporations. For nonfinancial corporations, the increase reflected increases in both unit profits as the prices that corporations received increased

Table 9.—Corporate Profits [Seasonally adjusted at annual rates]

. , ,			
	Level	Change	e from
	1994:111	' qua	
	100 1.111	1994:II	1994:III
	Billio	ns of dol	lars
Profits from current production  Domestic  Financial  Nonfinancial  Rest of the world	<b>557.1</b> 495.9 95.8 400.1 61.2	38.2 38.6 16.0 22.5 4	<b>10.7</b> 10.2 4.9 5.4 .5
IVA	-19.6 37.5 539.2 208.7 330.5	-1.8 .4 39.6 17.6 22.0	-5.5 .1 16.1 7.0 9.1
Cash flow from current production	573.1	8.3	4.9
Profits by industry: Profits before tax with IVA Domestic Financial Nonfinancial Manufacturing Trade Transportation and public utilities Other Rest of the world Receipts (inflows) Payments (outflows)	519.6 458.3 111.8 346.6 	37.8 38.1 16.8 21.3 -2.1 13.0 9.8 .6 4 1.5 1.8	10.6 10.1 5.4 4.8     5. 9.6 9.0
		Dollars	
Unit prices, costs, and profits of domestic nonfinancial corporations: Unit price Unit labor cost Unit nonlabor cost Unit profits from current production	1.175 .768 .279 .128	0.005 .003 003 .005	0.005 .002 .002 .001

NOTE.—Levels of these and other profits series are found in NIPA tables 1.14, 1.16, 6.16C,

more than the unit costs they incurred—and real gross product.

Cash flow from current production, a profitsrelated measure of internally generated funds available to corporations for investment, increased \$4.9 billion after increasing \$8.3 billion. The ratio of cash flow to nonresidential fixed investment decreased from 83.2 percent to 80.8 percent; in the 1980's, the ratio had averaged 72.1 percent.

Related measures.—Industry profits increased \$10.6 billion after increasing \$37.8 billion.<sup>5</sup> Preliminary and incomplete information suggests that an increase in financial industry profits was mainly in banking and that an increase in nonfinancial industry profits was mainly in mining and services.

Profits from the rest of the world increased \$0.5 billion after decreasing \$0.4 billion. This component of profits measures receipts of profits from foreign affiliates of U.S. corporations less payments of profits by U.S. affiliates of foreign corporations. Preliminary and incomplete information indicates that both receipts and payments increased substantially in the third quarter.

Profits before tax increased \$16.1 billion. The difference between this increase and the \$10.7 billion increase in profits from current production reflects a decrease in the inventory valuation adjustment; the capital consumption adjustment changed little.

#### **Government Sector**

The fiscal position of the government sector deteriorated in the third quarter of 1994, as the combined deficit of the Federal Government and of State and local governments increased \$12.9 billion, to \$131.0 billion (table 10). The Federal Government deficit accounted for most of the deterioration; the State and local government surplus decreased slightly.

## Federal

The Federal Government deficit increased \$10.0 billion, to \$155.1 billion, in the third quarter, as expenditures increased more than receipts. The increase in the deficit was the first in seven quarters.

<sup>4.</sup> Profits from current production is estimated as the sum of profits before tax, the inventory valuation adjustment, and the capital consumption adjustment; it is shown in NIPA tables 1.14, 1.16, and 6.16c as "corporate profits with inventory valuation and capital consumption adjustments.

IVA Inventory valuation adjustment CCAdj Capital consumption adjustment

<sup>5.</sup> Industry profits are estimated as the sum of profits before tax and the inventory valuation adjustments; they are shown in NIPA table 6.16c. Estimates of the capital consumption adjustment do not exist.

Receipts.—Receipts increased \$7.8 billion in the third quarter after increasing \$43.2 billion in the second. The deceleration was accounted for by all the major components of receipts except indirect business tax and nontax accruals.

Personal tax and nontax receipts decreased \$4.6 billion after increasing \$20.9 billion. Second-quarter tax receipts had been boosted by the effects of the Omnibus Budget Reconciliation Act of 1993 that retroactively increased tax rates for high-income taxpayers. Persons affected by the rate increases had the option of paying the additional 1993 income taxes in three annual installments, the first of which was due April 15, 1994. Withheld personal income taxes slowed to a \$4.5 billion increase from a \$5.2 billion increase, reflecting a deceleration in wages and salaries.

Corporate profits tax accruals increased \$6.2 billion after increasing \$14.5 billion. The slow-down reflected the deceleration in corporate profits.

Contributions for social insurance increased \$4.5 billion after increasing \$7.9 billion. The slowdown reflected a deceleration in wages and salaries.

Indirect business tax and nontax accruals increased \$1.5 billion after no change in the second quarter. Business nontax accruals increased \$0.9 billion after decreasing \$1.2 billion; the turnaround was more than accounted for by a civil damage recovery settlement in the third quarter that was related to the savings and loan bailout. Excise taxes increased \$1.1 billion after decreasing \$0.2 billion; the turnaround was more than accounted for by a \$0.8 billion windfall-profits-tax refund to the petroleum industry in the second quarter.

Expenditures.—Expenditures increased \$17.7 billion in the third quarter after increasing \$12.2 billion in the second. The acceleration was more than accounted for by an upturn in purchases; in contrast, subsidies decreased more in the third quarter than in the second.

Purchases increased \$9.3 billion after decreasing \$2.7 billion. Defense purchases increased \$8.8 billion after no change. The pickup was more than accounted for by turnarounds in military durables, nondurables, and structures. Deliveries of two B-2 bombers more than accounted for the turnaround in durable goods. Nondefense purchases increased \$0.4 billion after decreasing \$2.6 billion. Most of the turnaround was attributable to a slowdown in sales of services, primarily those associated with the Department of Veterans Affairs hospitals and with foreign military service

training. (Sales, except those by government enterprises for goods and services similar to those provided by the private sector, are treated as deductions from government purchases.) The turnaround in nondefense purchases was partly offset by a downturn in compensation of nondefense employees, which decreased \$2.3 billion after increasing \$1.9 billion. Incentive payments ("buyouts") for civilian employees who leave Federal service voluntarily decreased \$2.1 billion in the third quarter after increasing \$2.2 billion in the second.

Table 10.—Government Sector Receipts and Expenditures

[Billions of dollars, seasonally adjusted at annual rates]

	Level	Change from preceding quarter				
	1994: III	19	93		1994	
	1994: 111	III	IV	I	II	III
Government sector						
Receipts Expenditures Surplus or deficit (–)	2138.7 2269.7 -131.0	15.8 5.2 10.6	54.5 39.1 15.4	31.1 -3.4 34.5	55.4 22.4 33.0	16.8 29.7 –12.9
Federal Government						
Receipts	1388.5	9.0	40.9	23.9	43.2	7.8
Personal tax and nontax receipts  Corporate profits tax accruals  Indirect business tax and nontax accruals  Contributions for social insurance	566.5 172.5 91.9 557.5	7.7 -1.6 -1.2 4.1	9.3 17.6 8.4 5.6	13.4 -6.0 3 16.8	20.9 14.5 0 7.9	-4.6 6.2 1.5 4.5
Expenditures	1543.6	-3.0	36.1	-20.0	12.2	17.7
Purchases National defense Nondefense Transfer payments (net) To persons To rest of the world Grants-in-aid to State and local governments Net interest paid Subsidies less current surplus of government enterprises Subsidies Of which: Agricultural subsidies Less: Current surplus of government enterprises Less: Wage accruals less disbursements Surplus or deficit (-)	444.4 300.5 143.9 683.6 668.6 15.1 200.3 194.4 20.9 25.9 5.0 0	-2.5 -6.8 4.2 7.4 6.0 1.4 4.9 -1.2 -11.8 -11.3 -11.7 .4 0	-2.9 11 -2.9 13.9 10.0 9.21 16.0 15.55 0 4.8	-2.0 -7.4 5.4 -2.6 10.1 -12.7 -7.0 -4.2 -4.2 -3.9 -4.9 3 0	-2.7 0 -2.6 4.7 3.6 1.1 4.4 9.5 -3.8 -3.1 -3.4 .7 0	9.3 8.8 .4 7.4 5.1 2.4 5.9 5.6 -10.4 -8.7 -8.4 1.7 0
State and local governments						
Receipts	950.5	11.7	22.8	.3	16.5	14.9
Personal tax and nontax receipts Corporate profits tax accruals Indirect business tax and nontax accruals Contributions for social insurance Federal grants-in-aid	177.3 36.3 465.4 71.3 200.3	1.8 3 4.5 .7 4.9	2.3 4.0 6.6 .7 9.2	2.7 -1.4 5.2 .8 -7.0	2.4 3.1 5.8 .8 4.4	2.0 .9 5.4 .8 5.9
Expenditures	926.3	13.1	12.2	9.6	14.7	17.7
Purchases Of which: Structures Transfer payments to persons Net interest paid Less: Dividends received by government Subsidies less current surplus of government enterprises Subsidies Less: Current surplus of government enterprises Less: Wage accruals less disbursements	744.3 105.8 277.0 -55.1 10.9 -28.9 .4 29.2	9.0 3.4 5.2 1 .1 9 0	7.2 3.0 5.7 2 .1 4 0	4.6 -5.8 5.7 5 .2 1 0	9.5 2.3 6.4 5 .1 6 0	12.8 4.3 6.3 5 .1 6 0 .5
Surplus or deficit (-)	24.1	-1.4	10.6	-9.3	1.8	-2.9
Social insurance fundsOther	65.3 -41.2	1 -1.3	1 10.7	3 -9.0	0 1.8	6 -2.3

NOTE.-Dollar levels are found in NIPA tables 3.2 and 3.3.

Transfer payments increased \$7.4 billion after increasing \$4.7 billion. The step-up was attributable to both transfer payments to persons, which increased \$5.1 billion after increasing \$3.6 billion, and transfer payments to the rest of the world, which increased \$2.4 billion after increasing \$1.1 billion. Most of the acceleration in transfer payments to persons was accounted for by a turnaround in payments for food stamps and a step-up in medicare (hospital and supplementary medical insurance).

Grants-in-aid to State and local governments increased \$5.9 billion after increasing \$4.4 billion.

The acceleration was more than accounted for by turnarounds in medical research and in aid to families with dependent children and by a stepup in food programs.

Net interest paid increased \$5.6 billion after increasing \$9.5 billion. The deceleration was mainly attributable to interest paid on the public debt, which increased \$6.8 billion after increasing \$8.0 billion.

Subsidies less the current surplus of government enterprises decreased \$10.4 billion after decreasing \$3.8 billion. Both decreases were mostly attributable to agricultural subsi-

# Corrections To Be Made to the Estimates of Property Tax Receipts

Bea has determined that corrections will need to be made to the NIPA estimates of property tax receipts and of related aggregates. These corrections arise because the effects of changes to Michigan's property tax law were not recorded in accordance with NIPA accounting conventions when the changes took effect in 1994. Property taxes and other indirect business taxes are recorded in the NIPA's on an accrual, not on a payments, basis, so the effects of the changes should have been recorded beginning with the first quarter of 1994, even though tax collections were not affected until later in the year. The corrections will be incorporated at the next opportunity to make revisions back to the first quarter of 1994, which is the comprehensive NIPA revision tentatively scheduled for late 1995.

The changes to Michigan's property tax law reduced local taxes and increased State taxes; the combined effect was to reduce property tax liabilities by \$3.4 billion in 1994. In the government accounts, the corrections will reduce State and local government indirect business tax and nontax liability, receipts, and the surplus or deficit by \$3.4 billion.

The corrections will also affect the components of national and personal income in which property taxes are treated as expenses and are subtracted in their calculation. (Gross domestic product is not affected.) The corrections will raise rental income of persons by \$2.5 billion, farm proprietors' income by \$0.1 billion, and nonfarm proprietors' income by \$0.4 billion.<sup>3</sup> Thus, personal income and personal saving will each be raised by \$3.0 billion. In addition, the corrections will

raise corporate profits by \$0.2 billion. (The reduction in property taxes results in a \$0.4 billion increase in corporate profits, but the source data used to estimate this component included most of the effects of the tax law changes.)

The accompanying table shows the corrections that will be made to the NIPA estimates for the first quarter of 1994 in the next comprehensive revision. It is not possible at this time to estimate the corrections for subsequent quarters, but they will probably be about the same as those for the first quarter. Further, it is not known to what extent these corrections to property tax receipts (and related aggregates) will be affected by the incorporation of more complete source data as part of the comprehensive revision.

#### Corrections To Be Made in the Next Comprehensive NIPA Revision: First Quarter 1994

[Billions of dollars, seasonally adjusted at annual rates]

Receipts	-3.4
Indirect business tax and nontax liability	-3.4
Property taxes	-3.4 0
Expenditures Surplus or deficit (–), NIPA's Surplus or deficit (–)	-3.4
ther NIPA estimates:	
Gross domestic product	0
Less: Indirect business tax and nontax liability	-3.4
Statistical discrepancy	.3
Equals: National income	3.1 .5
Farm	.1
Nonfarm	.2
Rental income of persons with CCAdi	2.5
Corporate profits with IVA and CCAdi	.2
Less: Corporate profits with IVA and CCAdj	.2
Equals: Personal income	3.0
Less: Personal tax and nontax payments	3.0
Equals: DPILess: Personal outlays	3.(
Equals: Personal saving	3.0
,	0.0
Addenda:	
Personal saving as percent of DPI	2.3
DPI, 1987 dollars  Nonfarm business product	Z., ;
Nonfarm business product, 1987 dollars	c

sources, and methodology for estimating State and local government indirect business tax and nontax liability, see Bureau of Economic Analysis, Government Transactions, Methodology Paper Series MP-5 (Washington, DC: U.S. Government Printing Office, November 1988): 9, 80-88.

in the published NIPA estimates.

 Several other changes to Michigan taxes also took effect in 1994, including changes to the sales tax, the income tax, the tobacco tax, and the real estate transfer tax. These changes have been properly recorded

2. For additional information about the concepts, definitions, data

<sup>3.</sup> In the NIPA's, property taxes on owner-occupied housing are classified as indirect business taxes because owner-occupied housing is treated as a business; property taxes on owner-occupied housing are subtracted in the calculation of rental income of persons.

DPI Disposable personal income IVA Inventory valuation adjustment CCAdj Capital consumption adjustment

dies, which dropped \$8.4 billion after decreasing \$3.4 billion. The third-quarter drop was mostly accounted for by deficiency payments. (Deficiency payments make up the difference between support prices and market prices for farm commodities.)

## State and local

The State and local government surplus decreased \$2.9 billion, to \$24.1 billion, as expenditures increased more than receipts.

Receipts increased \$14.9 billion in the third quarter after increasing \$16.5 billion in the second. Decelerations in most major categories of receipts were partly offset by an acceleration in Federal grants-in-aid. Reflecting the slowdown in corporate profits, corporate profits tax accruals increased \$0.9 billion after increasing \$3.1 billion.

Personal tax and nontax receipts increased \$2.0 billion after increasing \$2.4 billion. Indirect business tax and nontax accruals increased \$5.4 billion after increasing \$5.8 billion. Federal grants-in-aid increased \$5.9 billion after increasing \$4.4 billion; the acceleration was more than accounted for by increases in aid to families with dependent children, in food programs, and in medical research.

Expenditures increased \$17.7 billion in the third quarter after increasing \$14.7 billion in the second. The acceleration was more than accounted for by purchases, which increased \$12.8 billion after increasing \$9.5 billion. Within purchases, structures increased \$4.3 billion after increasing \$2.3 billion. The acceleration was accounted for by all categories of construction except highways and housing.

# NATIONAL INCOME AND PRODUCT ACCOUNTS

# Selected NIPA Tables

New estimates in this issue: "Preliminary" estimates for the third quarter of 1994.

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

Tables containing the estimates for 1929-87 are available in the two-volume set National Income and Product Accounts of the United States; see inside back cover for order information. For 1988-93, the complete official time series of NIPA estimates can be found as follows:

	1988	1989	1990	1991-93
Most tables	NIPA 's, vol. 2	July 1992 Survey	Aug. 1993 Survey Sept. 1993 Survey	July 1994 Survey
Tables 3.15-3.20 and 9.1-9.6		Sept. 1992 Survey	, , , , , ,	Sept. 1994 Survey
Tables 7.1, 7.2, 7.3, and 8.1 Tables 7.4–7.12	0	Aug. 1994 Survey Apr. 1993 Survey	Aug. 1994 Survey Aug. 1993 Survey	Aug. 1994 Survey July 1994 Survey
1 abics /.4-/.12	ripi. 1993 SURVEI	Apr. 1993 SURVET	rug. 1993 SURVEI	July 1994 BURVET

Summary NIPA series back to 1929 are in the September 1994 issue of the Survey. Errata to published NIPA tables appear in the September 1992, April 1993, October 1993, and March 1994 issues, and in this issue (on page 34.) NIPA tables are also available, most beginning with 1929, on diskettes or magnetic tape. For more information on the presentation of the estimates, see "A Look at How BEA Presents the NIPA'S" in the February 1994 SURVEY.

Note.—This section of the Survey is prepared by the National Income and Wealth Division and the Government Division.

## 1. National Product and Income.

Table 1.1.—Gross Domestic Product [Billions of dollars]

			5	Seasonall	ly adjuste	ed at anr	nual rates	3
	1992	1993		1993			1994	
		0.2 6,343.3 6.9 4,378.2 2.7 538.0 5.5 1,339.2 8.3 882.0 5.2 866.7 1.4 616.1 1.1 173.4 0.3 442.7 250.6 3.0 15.4 2.7 20.1 5.7 -4.7 0.3 659.1 724.3 8.1 8.4 724.3 8.3 1,148.4 443.6 4.2 302.7	II	III	IV	1	II	III
Gross domestic product	6,020.2	6,343.3	6,299.9	6,359.2	6,478.1	6,574.7	6,689.9	6,786.5
Personal consumption expenditures	4,136.9	4,378.2	4,347.3	4,401.2	4,469.6	4,535.0	4,586.4	4,658.1
Durable goods Nondurable goods Services	492.7 1,295.5 2,348.7	1,339.2		1,340.2	1,355.2	1,368.9		
Gross private domestic investment	788.3	882.0	869.7	882.2	922.5	966.6	1,034.4	1,054.2
Fixed investment	785.2 561.4 171.1	616.1	851.1 609.3 172.3	868.3 619.0 173.9	913.5 646.3 176.7	942.5 665.4 172.7	967.0 683.3 181.8	992.6 709.6 185.2
equipmentResidentialChange in business	390.3 223.8			445.1 249.3	469.6 267.2	492.7 277.1	501.5 283.6	524.4 282.9
inventories Nonfarm Farm	3.0 -2.7 5.7	20.1	18.6 23.9 -5.3	13.9 24.2 –10.3	10.7	24.1 22.3 1.8	67.4 60.4 7.0	61.6 52.3 9.3
Net exports of goods and services	-30.3	-65.3	-63.3	<b>-77.0</b>	-71.2	-86.7	-97.6	<b>–114.5</b>
Exports	638.1 668.4		660.1 723.5	649.0 726.0	680.3 751.4	674.2 760.9	704.5 802.1	725.2 839.7
Government purchases	1,125.3	1,148.4	1,146.3	1,152.9	1,157.2	1,159.8	1,166.7	1,188.7
Federal  National defense  Nondefense  State and local	449.0 314.2 134.8 676.3		445.2 305.8 139.4 701.2	442.7 299.0 143.6 710.2	299.1 140.7	437.8 291.7 146.1 722.0	435.1 291.7 143.5 731.5	444.4 300.5 143.9 744.3

Table 1.2.—Gross Domestic Product in Constant Dollars

				Seasonal	y adjuste	ed at anr	nual rates	8
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Gross domestic product	4,979.3	5,134.5	5,105.4	5,139.4	5,218.0	5,261.1	5,314.1	5,365.0
Personal consumption expenditures	3,349.5	3,458.7	3,439.2	3,472.2	3,506.2	3,546.3	3,557.8	3,586.4
Durable goods Nondurable goods Services	452.6 1,057.7 1,839.1			1,081.7	1,088.0		522.2 1,104.3 1,931.4	
Gross private domestic investment	725.3	819.9	806.2	821.8	862.5	898.9	950.9	966.4
Fixed investment	722.9 525.9 149.8	591.6	787.3 581.0 147.3		851.7 627.2 148.7	873.4 643.6 144.1	891.7 657.9 151.0	910.3 680.4 152.1
equipment Residential Change in business	376.2 196.9	443.9 213.0	433.7 206.3	450.3 211.0	478.5 224.5	499.4 229.9	506.9 233.8	528.3 229.9
inventories Nonfarm Farm	2.5 -2.0 4.5	15.3 18.5 –3.2	18.9 22.8 -3.9		10.8 10.7 .1	25.4 22.1 3.3	59.2 51.7 7.5	56.1 46.3 9.8
Net exports of goods and services	-32.3	_ <b>73.9</b>	-69.3	-86.3	-82.2	-104.0	-111.8	<b>–120.8</b>
ExportsImports	578.8 611.2		600.2 669.6		625.2 707.4	619.6 723.6	643.9 755.6	662.7 783.5
Government purchases	936.9	929.8	929.3	931.8	931.5	919.9	917.1	933.0
Federal  National defense  Nondefense  State and local	373.5 261.4 112.2 563.3	243.7	358.3 246.8 111.5 571.0	240.9 114.7	351.1 238.7 112.4 580.4	341.7 228.5 113.2 578.3	226.1 108.7	344.7 233.4 111.2 588.4

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

			5	Seasonall	y adjuste	ed at ann	nual rates	 S
	1992	1993		1993			1994	
			=	II	IV	_	=	III
Gross domestic product	6,020.2	6,343.3	6,299.9	6,359.2	6,478.1	6,574.7	6,689.9	6,786.5
Final sales of domestic product	· .			6,345.4				
inventories  Goods <sup>1</sup>	3.0	_		13.9			-	
G000S	2,295.0	2,405.8	2,396.2	2,395.8	2,461.6	2,513.2	2,561.2	2,606.9
Final sales Change in business inventories	2,292.0			2,381.9 13.9		2,489.1		
Durable goods	955.6 968.6	1,041.0 1,032.4	1,034.4 1,030.6	1,041.7 1,026.8 14.9	1,081.9 1,072.9	1,118.7 1,098.2	1,137.6 1,099.4	1,171.9 1,128.3
Nondurable goods	1,339.4	1,364.8 1,358.0	1,361.8 1,347.0	1,354.0 1,355.1 –1.1	1,379.7 1,379.7	1,394.5 1,390.9	1,423.5 1,394.3	1,435.1 1,417.1
Services 1		_	_	3,429.3	_			
GEI VICES	'		-					
Structures	498.0	532.0	520.6	534.1	557.2	557.7	573.4	581.6

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

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

[Billions of dollars]

Gross domestic product	6,020.2	6,343.3	6,299.9	6,359.2	6,478.1	6,574.7	6,689.9	6,786.5
Less: Exports of goods and services	638.1	659.1						
services	668.4	724.3	723.5	726.0	751.4	760.9	802.1	839.7
Equals: Gross domestic purchases <sup>1</sup>	6,050.5	6,408.6	6,363.3	6,436.3	6,549.3	6,661.4	6,787.5	6,901.1
Less: Change in business inventories	3.0	15.4	18.6	13.9	9.0	24.1	67.4	61.6
Equals: Final sales to domestic purchasers 2	6,047.5	6,393.2	6,344.7	6,422.4	6,540.3	6,637.3	6,720.1	6,839.4

<sup>1.</sup> Purchases by U.S. residents of goods and services wherever produced. 2. Final sales to U.S. residents of goods and services wherever produced.

Table 1.7.—Gross Domestic Product by Sector

[Billions of dollars]

Gross domestic product	6,020.2	6,343.3	6,299.9	6,359.2	6,478.1	6,574.7	6,689.9	6,786.5
Business	5,090.4	5,371.4	5,332.3	5,382.1	5,494.4	5,575.7	5,677.9	5,766.7
Nonfarm		75.3	4,730.8 518.5 77.3	4,796.4 525.8 65.4	4,899.5 532.2 79.2	4,975.0 549.6 87.1	5,075.0 543.8 83.2	5,155.3 551.0 82.2
Households and institutions	268.6	285.3	283.4	286.9	291.0	295.7	300.1	304.6
Private households Nonprofit institutions	10.1 258.4	10.8 274.5		10.8 276.1	10.9 280.0	11.1 284.5	11.3 288.8	
General government	661.2	686.6	684.2	690.2	692.7	703.3	711.8	715.2
FederalState and local	199.5 461.7	203.6 483.0			202.5 490.2	206.3 497.1	208.4 503.4	
Addendum: Gross domestic business product less housing	4,584.2	4,844.0						

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

[Billions of 1987 dollars]

			5	Seasonal	ly adjuste	ed at ann	nual rates	3
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Gross domestic product	4,979.3	5,134.5	5,105.4	5,139.4	5,218.0	5,261.1	5,314.1	5,365.0
Final sales of domestic product	4,976.9 2.5	5,119.3 15.3						
Goods <sup>1</sup>	1,991.0	2,081.8	2,069.9	2,078.2	2,135.5	2,168.8	2,201.3	2,236.1
Final sales Change in business inventories	1,988.5 2.5	2,066.5 15.3						
Durable goods Final sales Change in business inventories	895.6 906.7 –11.2	977.7	968.8	977.9	1,033.6 1,024.7 8.9	1,041.7	1,038.2	l
Nondurable goods	1,095.4	1,095.8 1,088.8	1,096.5 1,082.2	1,086.8	1,101.9 1,100.0	1,107.4 1,101.7	1,129.4 1,103.9	1,132.2 1,114.8
Services 1		2,597.6	1	_		_		
Structures	439.0	455.1	447.0	455.1	471.3	466.5	476.9	477.6

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

## 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	4,979.3	5,134.5	5,105.4	5,139.4	5,218.0	5,261.1	5,314.1	5,365.0
Less: Exports of goods and services	578.8	602.5	600.2	595.3	625.2	619.6	643.9	662.7
services	611.2	676.3	669.6	681.6	707.4	723.6	755.6	783.5
Equals: Gross domestic purchases <sup>1</sup>	5,011.6	5,208.4	5,174.7	5,225.8	5,300.2	5,365.1	5,425.8	5,485.9
Less: Change in business inventories	2.5	15.3	18.9	13.0	10.8	25.4	59.2	56.1
Equals: Final sales to domestic purchasers 2	5,009.2	5,193.1	5,155.8	5,212.8	5,289.4	5,339.7	5,366.6	5,429.8

<sup>1.</sup> Purchases by U.S. residents of goods and services wherever produced. 2. Final sales to U.S. residents of goods and services wherever produced.

Table 1.8.—Gross Domestic Product by Sector in Constant Dollars [Billions of 1987 dollars]

Gross domestic product	4,979.3	5,134.5	5,105.4	5,139.4	5,218.0	5,261.1	5,314.1	5,365.0
Business	4,258.7	4,409.4	4,380.4	4,413.3	4,491.7	4,532.6	4,583.6	4,632.9
Nonfarm Nonfarm less housing Housing Farm Statistical discrepancy		3,925.5 410.9 71.0	3,893.8 409.6	3,941.1 412.7	72.0	4,070.6 415.5 75.9	4,103.5 417.8 81.6	4,146.1 419.8 84.4
Households and institutions	208.5	215.6	215.0	217.0	218.1	220.1	222.5	223.7
Private households Nonprofit institutions	8.8 199.8		9.0 206.0				9.2 213.3	9.3 214.4
General government	512.0	509.6	510.0	509.1	508.2	508.4	508.0	508.4
FederalState and local	151.9 360.1	146.0 363.6	146.9 363.1	145.1 364.0	143.2 365.1	141.9 366.5	139.9 368.1	138.5 369.9
Addendum: Gross domestic business product less housing	3,855.4	3,994.9						

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

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

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

	I							
				Seasonal	y adjuste	ed at anr	nual rates	<u> </u>
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Gross domestic product	6,020.2	6,343.3	6,299.9	6,359.2	6,478.1	6,574.7	6,689.9	6,786.5
Plus: Receipts of factor income from the rest of the world <sup>1</sup>	133.5	136.6	137.6	137.1	141.3	145.4	162.1	174.2
income to the rest of the world 2	127.9	132.1	134.3	128.6	143.3	146.1	169.5	184.9
Equals: Gross national product	6,025.8	6,347.8	6,303.3	6,367.8	6,476.2	6,574.0	6,682.5	6,775.9
Less: Consumption of fixed capital	658.5	669.1	662.0	677.3	674.0	734.1	698.1	709.8
consumption allowances Less: Capital consumption	604.2	635.1	626.9	644.8	650.3	683.2	669.8	679.4
adjustment	-54.4	-33.9	-35.1	-32.6	-23.8	-50.9	-28.3	-30.4
Equals: Net national product	5,367.3	5,678.7	5,641.2	5,690.5	5,802.2	5,840.0	5,984.5	6,066.1
Less: Indirect business tax and nontax liability	504.4	525.3	521.4	524.7	539.7	544.7	550.3	557.3
payments Statistical discrepancy Plus: Subsidies less current	28.1 8.8	28.7 2.3	28.9 5.7	28.9 -5.5	28.6 -16.5	30.1 -36.1	30.3 -24.0	30.8 -21.7
surplus of government enterprises	3.5	9.0	8.8	-3.9	11.7	7.4	3.0	-8.0
Equals: National income	4,829.5	5,131.4	5,094.0	5,138.5	5,262.0	5,308.7	5,430.7	5,491.7
Less: Corporate profits with inventory valuation and capital consumption								
adjustments  Net interest  Contributions for	405.1 420.0	485.8 399.5	473.1 397.6	493.5 396.7	533.9 389.1	508.2 394.2	546.4 399.7	557.1 411.6
social insurance Wage accruals less	556.4	585.6	586.1	590.9	597.2	614.7	623.5	628.8
disbursements Plus: Personal interest income	-20.0 665.2	20.0 637.9	0 636.6	0 634.1	0 627.7	0 631.1	0 649.4	0 670.2
Personal dividend income	161.0	181.3	180.4	182.8	184.1	185.7	191.7	196.9
payments to persons	837.9	892.6	887.6	898.8	908.3	924.2	934.3	945.5
payments to persons	22.3	22.8	22.8	22.8	22.7	23.2	23.4	23.6
Equals: Personal income	5,154.3	5,375.1	5,364.5	5,395.9	5,484.6	5,555.8	5,659.9	5,730.3
Addenda:  Net domestic product  Domestic income  Gross national income	5,361.7 4,824.0 6,017.0	5,674.2 5,126.9 6,345.5	5,090.7	5,130.0	5,804.1 5,264.0 6,492.7	5,309.4	5,991.8 5,438.1 6,706.5	5,502.3

<sup>1.</sup> Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. 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]

			5	Seasonal	y adjuste	ed at anr	nual rates	8
	1992	1993		1993			1994	
			II	III	IV	ı	II	III
Gross domestic product	4,979.3	5,134.5	5,105.4	5,139.4	5,218.0	5,261.1	5,314.1	5,365.0
Plus: Receipts of factor income from the rest of the world <sup>1</sup>	109.2 102.8							136.0 142.0
Equals: Gross national product	4,985.7	5,140.3	5,110.1	5,148.4	5,218.7	5,262.7	5,310.5	5,359.0
Less: Consumption of fixed capital	595.8	599.5	593.9	605.5	602.0	648.1	614.8	621.8
Equals: Net national product	4,389.9	4,540.8	4,516.2	4,542.9	4,616.7	4,614.6	4,695.7	4,737.2
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises	406.0 7.3							
Equals: National income	3,976.6	4,117.7	4,093.3	4,124.3	4,201.8	4,211.3	4,280.2	4,315.6
Addenda:  Net domestic product  Domestic income  Gross national income	3,970.2	4,112.0	4,088.5	4,115.3	4,201.1	4,209.7	4,283.8	4,743.2 4,321.7 5,376.5

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

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

[Billions of 1987 dollars]

Gross national product	4,985.7	5,140.3	5,110.1	5,148.4	5,218.7	5,262.7	5,310.5	5,359.0
Less: Exports of goods and services and receipts of factor income from the rest of the worldPlus: Command-basis exports of goods and services and receipts of factor income <sup>1</sup> .	688.0 691.8	711.6 724.4					771.0 790.6	798.7 812.5
Equals: Command-basis gross national product	4,989.5	5,153.1	5,120.5	5,163.1	5,233.3	5,284.5	5,330.1	5,372.8
Addendum: Terms of trade <sup>2</sup>	100.5	101.8	101.5	102.1	102.0	103.0	102.5	101.7

<sup>1.</sup> Exports of goods and services and receipts of factor income deflated by the implicit price deflator for

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

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

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

		[50	or dollar	~]				
			8	Seasonal	ly adjuste	ed at anr	nual rates	3
	1992	1993		1993			1994	
			II	III	IV	I	II	III
National income	4,829.5	5,131.4	5,094.0	5,138.5	5,262.0	5,308.7	5,430.7	5,491.7
Compensation of employees	3,591.2	3,780.4	3,761.1	3,801.7	3,845.8	3,920.0	3,979.3	4,023.2
Wages and salaries Government Other	2,954.8 567.3 2,387.5	583.8	3,085.1 580.9 2,504.2	3,115.9 586.1 2,529.8	3,148.4 587.8 2,560.7	595.7	3,257.2 601.9 2,655.4	3,293.5 604.3 2,689.2
Supplements to wages and salaries Employer contributions	636.4	679.6	676.0	685.9	697.4	711.7	722.0	729.7
for social insurance Other labor income	307.7 328.7	324.3 355.3	324.6 351.4	327.0 358.8	330.6 366.8	338.5 373.2	343.6 378.4	346.0 383.7
Proprietors' income with IVA and CCAdj	418.7	441.6	438.8	420.3	462.9	471.0	471.3	466.9
Farm	44.4	37.3	39.4	15.8	44.4	47.2	39.3	29.8
Proprietors' income with IVA CCAdj	51.9 -7.5	44.5 -7.2	46.5 -7.2	23.2 -7.4	51.5 -7.0	54.5 -7.3	46.6 -7.3	37.1 -7.4
Nonfarm Proprietors' income	374.4 362.0	404.3 390.2	399.4 385.5	404.5 389.8	418.5 403.7	423.8 409.3	431.9 417.5	437.1 423.0
IVA CCAdj	5 12.9	–.8   14.9	8 14.7	1 14.8	9 15.7	6 15.2	-1.1 15.5	-1.1 15.2
Rental income of persons with CCAdj	-5.5	24.1	23.4	26.3	30.3	15.3	34.1	32.9
Rental income of persons CCAdj	61.2 -66.7	86.3 -62.2	83.6 -60.3	88.9 -62.6	92.4 -62.1	101.7 -86.4	98.6 -64.5	99.0 -66.2
Corporate profits with IVA and CCAdj	405.1	485.8	473.1	493.5	533.9	508.2	546.4	557.1
Corporate profits with IVA  Profits before tax  Profits tax liability  Profits after tax  Dividends  Undistributed profits  IVA	389.4 395.9 139.7 256.2 171.1 85.1 -6.4	456.2 462.4 173.2 289.2 191.7 97.5 -6.2	446.6 456.6 171.8 284.8 190.7 94.1 -10.0	461.7 458.7 169.9 288.9 193.2 95.6 3.0	495.1 501.7 191.5 310.2 194.6 115.6 -6.5	471.2 483.5 184.1 299.4 196.3 103.0 –12.3	509.0 523.1 201.7 321.4 202.5 118.9 -14.1	519.6 539.2 208.7 330.5 207.9 122.6 -19.6
CCAdj	15.7	29.5	26.5	31.7	38.8	37.0	37.4	37.5
Net interest	420.0	399.5	397.6	396.7	389.1	394.2	399.7	411.6
Addenda:  Corporate profits after tax with IVA and CCAdj  Net cash flow with IVA and CCAdj  Undistributed profits with IVA and CCAdj	265.4 491.1 94.3	312.5 528.7 120.9	301.3 515.5 110.7	323.6 543.6 130.3	342.4 558.9 147.9	324.1 559.9 127.7	344.8 568.2 142.3	348.4 573.1 140.5
Consumption of fixed capital	396.8 -6.4 497.5	407.8 -6.2 534.9	404.8 -10.0 525.4	413.3 3.0 540.6	411.1 -6.5 565.5	432.2 -12.3 572.2	425.9 -14.1 582.3	432.6 -19.6 592.7

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

			8	Seasonal	y adjuste	ed at anr	nual rates	3	
	1992	1993		1993			1994		
			II	III	IV	I	II	III	
				Billions o	f dollars				
Gross domestic product of corporate business	3,563.6	3,796.2	3,767.3	3,817.9	3,904.8	3,957.0	4,036.0	4,095.0	
Consumption of fixed capital	396.8	407.8	404.8	413.3	411.1	432.2	425.9	432.6	
Net domestic product	3,166.9	3,388.4	3,362.5	3,404.6	3,493.7	3,524.8	3,610.0	3,662.4	
Indirect business tax and nontax liability plus business transfer payments less subsidies	361.9	377.5	374.7	377.6	388.3	393.5	397.8	404.0	
Domestic income	2,804.9			3,027.0					
Compensation of employeesWages and salaries Supplements to wages	2,340.9 1,942.1	2,471.6	2,459.2	2,484.4 2,055.7	2,513.8	2,564.0	2,603.3	2,635.2	
and salaries	398.8	426.1	423.7	428.7	434.2	442.9	449.0	454.6	
Corporate profits with IVA and CCAdj Profits before tax Profits tax liability Profits after tax Dividends Undistributed	344.5 335.3 139.7 195.6 147.7	420.5 397.2 173.2 223.9 177.2	410.4 393.8 171.8 222.0 173.2	424.3 389.6 169.9 219.7 177.1	472.2 440.0 191.5 248.5 180.2	447.1 422.4 184.1 238.3 177.0	485.7 462.3 201.7 260.7 183.6	495.9 478.0 208.7 269.3 179.1	
profits  IVA  CCAdj  Net interest	47.8 -6.4 15.7 119.5	46.7 -6.2 29.5 118.8	48.8 -10.0 26.5 118.2	42.7 3.0 31.7 118.3	68.3 -6.5 38.8 119.4	61.3 -12.3 37.0 120.2	77.1 -14.1 37.4 123.3	90.1 -19.6 37.5 127.3	
Gross domestic product of financial corporate business	340.7	386.5	381.0	389.1	405.5	388.4	409.3	415.8	
Gross domestic product of nonfinancial corporate business	3 222 0	3 400 7	3 386 3	3,428.7	3 /00 3	3 568 6	3 626 7	3 670 2	
Consumption of fixed capital	352.9	361.5	358.8		363.7	383.7	376.3	382.0	
Net domestic product	2,870.0			3,062.2					
Indirect business tax and nontax liability plus business transfer									
payments less subsidies  Domestic income	328.9 2,541.1	344.0		344.3 2,717.9	354.3	358.9		368.6	
Compensation of employees	2,151.0	2,259.2	2,248.5		2,293.9	2,337.1	2,373.1	2,404.9	
Supplements to wages and salaries	368.7	393.0	390.8	395.2	400.1	407.7	413.4	418.9	
Corporate profits with IVA and CCAdj Profits before tax Profits tax liability Profits after tax Dividends Undistributed	276.6 253.4 87.8 165.5 136.3	293.5 116.8 176.7 159.8	293.7 116.7 176.9 156.7	285.7 113.5 172.2 159.4	325.4 130.8 194.6 162.3	332.8 132.5 200.3 159.5	355.9 143.4 212.5 164.3	366.2 147.8 218.4 159.3	
Profits	29.2 -6.4 29.7 113.5	16.9 -6.2 43.6 114.0	20.2 -10.0 40.7 113.3	12.8 3.0 45.7 114.4	32.2 -6.5 52.7 115.8	40.8 -12.3 51.7 116.6	48.1 -14.1 52.9 119.6	59.1 -19.6 53.5 123.7	
	Billions of 1987 dollars								
Gross domestic product of nonfinancial corporate business	2,802.8	2,942.9	2,920.5	2,963.3	3,019.5	3,062.6	3,098.9	3,131.3	
Consumption of fixed capital Net domestic product Indirect business tax and nontax liability plus	319.2	325.3	322.9	329.0 2,634.2	327.0	342.4	333.9	337.8	
business transfer	260.7	272.4	270.4	273.7	277.3	280.6	282.1	285.6	

# 2. Personal Income and Outlays\_\_\_\_\_

Table 2.1.—Personal Income and Its Disposition

[Billions of dollars]

[Billions of dollars]									
			93	Seasonal	y adjuste	ed at anr	nual rates	5	
	1992	1993		1993			1994		
		Seasonally adjusted at annual rate   1993   1994   1994   1995   1994   1995   1995   1995   1996   1996   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1997   1998		III					
Personal income	5,154.3	5,375.1	5,364.5	5,395.9	5,484.6	5,555.8	5,659.9	5,730.3	
Wage and salary disbursements Commodity-producing	'						· ·	3,293.5	
industries	757.6 578.3 682.3 967.6 567.3	588.4 701.9 1,021.4	591.4 704.0 1,023.7	594.9 709.6 1,038.8	601.7 712.6 1,057.0	609.4 728.6 1,082.0	612.8 742.5 1,101.2	821.6 618.2 753.7 1,113.8 604.3	
Other labor income	328.7						378.4	383.7	
Proprietors' income with inventory valuation and capital consumption adjustments	<b>418.7</b> 44.4 374.4	37.3	39.4	15.8	44.4	47.2	<b>471.3</b> 39.3 431.9	<b>466.9</b> 29.8 437.1	
Rental income of persons with capital consumption									
adjustment	-5.5							32.9	
Personal dividend income Personal interest income	161.0 665.2							196.9 670.2	
Transfer payments to	000.2	007.5	000.0	004.1	027.7	001.1	043.4	070.2	
persons Old-age, survivors, disability, and health	860.2	915.4	910.4	921.6	931.0	947.4	957.6	969.1	
insurance benefits Government unemployment	414.0	444.4	441.9	446.8	452.1	463.8	470.7	476.5	
insurance benefits Veterans benefits Government employees	38.9 19.3						23.5 19.8	21.4 20.3	
retirement benefits Other transfer payments Aid to families with	109.9 278.1						126.2 317.4	128.5 322.4	
dependent children Other	23.3 254.9						24.3 293.1	24.5 298.0	
Less: Personal contributions for social insurance	248.7	261.3	261.5	263.8	266.6	276.3	279.9	282.9	
nontax payments Equals: Disposable personal	648.6	686.4	685.9	695.4	707.0	723.0	746.4	743.8	
income	4,505.8	4,688.7	4,678.6	4,700.5	4,777.6	4,832.8	4,913.5	4,986.5	
Less: Personal outlays	4,257.8	4,496.2	4,464.6	4,518.2	4,588.2	4,657.3	4,712.4	4,788.1	
Personal consumption expenditures Interest paid by persons Personal transfer payments	4,136.9 111.4	4,378.2 108.2	4,347.3 107.5	4,401.2 107.2	4,469.6 108.7	4,535.0 111.7	4,586.4 115.5	4,658.1 119.3	
to rest of the world (net)	9.5	9.9	9.8	9.9	9.8	10.5	10.5	10.7	
Equals: Personal saving	247.9	192.6	214.0	182.3	189.4	175.5	201.1	198.5	
Addenda: Disposable personal income: Total, billions of 1987									
dollars Per capita: Current dollars	17,636	18,153	18,141	18,174		18,588	18,853	19,081	
1987 dollars Population (mid-period, millions)	14,279 255.5	14,341 258.3		14,338 258.6	14,451 259.4	14,535 260.0	14,625 260.6	14,691 261.3	
Personal saving as percentage of disposable personal income	5.5	4.1	4.6	3.9	4.0	3.6	4.1	4.0	
Note.—Percent changes from pre	cedina pe	riod for se	elected ite	ms in this	table are	shown in	table 8.1		

 ${\hbox{NOTE.}--} Percent \ changes \ from \ preceding \ period \ for \ selected \ items \ in \ this \ table \ are \ shown \ in \ table \ 8.1.$ 

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

[Billions of dollars]

[Dillions of dollars]									
			8	Seasonal	y adjuste	ed at anr	nual rates	3	
	1992	1993		1993			1994		
			Ш	III	IV	I	II	III	
Personal consumption expenditures	4,136.9	4,378.2	4,347.3	4,401.2	4,469.6	4,535.0	4,586.4	4,658.1	
Durable goods	492.7	538.0	531.2	541.9	562.8	576.2	580.3	592.3	
Motor vehicles and parts Furniture and household	204.1	228.0		228.4	241.4	253.0		246.5	
equipment Other	192.5 96.1	208.9 101.1	205.5 100.0	210.6 102.9	217.7 103.7	218.1 105.1	225.3 109.3		
Nondurable goods	1,295.5	1,339.2	1,334.2	1,340.2	1,355.2	1,368.9	1,381.4	1,405.9	
Food	626.8 227.7 105.5 13.0 322.5	649.7 235.4 105.6 14.0 334.4	105.6	235.9 104.1	240.7 104.4	667.9 241.9 103.2 15.5 340.4			
Services	2,348.7	2,501.0	2,481.9	2,519.1	2,551.6	2,589.9	2,624.7	2,659.9	
Housing Household operation Electricity and gas Other household	601.3 239.4 105.7	256.3 112.8	252.9 110.1	632.4 260.4 115.5	115.1	648.2 261.1 116.3	655.2 265.9 115.2	663.9 265.2 111.8	
operation Transportation Medical care Other	133.7 156.7 628.3 723.0	143.5 170.6 680.5 764.7	142.8 170.0 674.5 758.7	144.9 171.5 686.1 768.8	146.2 173.6 697.3 780.7	144.8 175.4 707.4 797.8		153.5 180.5 731.8 818.5	

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

[Billions of 1987 dollars]

Personal consumption expenditures	3,349.5	3,458.7	3,439.2	3,472.2	3,506.2	3,546.3	3,557.8	3,586.4
Durable goods	452.6	489.9	483.7	492.7	510.8	521.7	522.2	530.2
Motor vehicles and parts Furniture and household	181.8	196.1	195.1	195.0	204.7	213.7	205.3	202.8
equipment Other	193.3 77.5	214.1 79.7	209.9 78.7	216.6 81.1	224.6 81.5	225.9 82.0		241.5 86.0
Nondurable goods	1,057.7	1,078.5	1,074.3	1,081.7	1,088.0	1,098.3	1,104.3	1,113.2
Food	514.7 193.2 85.6 11.2 253.0	197.8 86.5 12.1	196.1 85.7 11.8	198.6 87.5 12.2	86.6		204.9 86.7	87.6
Services	1,839.1	1,890.3	1,881.2	1,897.8	1,907.4	1,926.3	1,931.4	1,943.0
Housing  Household operation  Electricity and gas  Other household	485.2 217.8 95.2	492.6 225.3 98.6			495.4 226.9 99.6	497.7 228.7 101.1		502.5 228.0 97.1
operation Transportation	122.5 122.9	126.7 127.9		127.5 128.4	127.2 129.8	127.7 130.9	128.9 131.8	131.0 132.5
Medical careOther	454.3 558.9	466.4 578.2	464.3 575.0		470.4 584.9	473.2 595.9		480.6 599.4

# 3. Government Receipts and Expenditures

Table 3.2.—Federal Government Receipts and Expenditures
[Billions of dollars]

Seasonally adjusted at annual rates 1992 1993 Ш IV Ш 1,388.5 1,178.3 1,265.7 1,337.4 1,263.7 1,272.7 1,313.6 1.380.7 Receipts ..... Personal tax and nontax 489.5 520.3 519.8 527.5 536.8 550.2 566.5 receipts ..... Income taxes 476.8 505.9 505.0 513.3 521.4 533.6 552.5 550.4 Estate and gift taxes ...... 11.3 12.9 13.3 12.6 13.8 14.8 16.9 14.3 Nontaxes .. 1.6 1.5 1.6 1.8 1.4 1.7 1.7 1.8 Corporate profits tax accruals 115.6 143.0 141.8 140.2 157.8 151.8 166.3 172.5 Federal Reserve banks .... 16.8 16.0 16.0 15.7 15.8 16.0 169 18.0 Other 98.8 127.0 125.8 124.4 142.0 135.8 149.4 154.4 Indirect business tax and nontax accruals ..... 84.6 83.5 82.3 90.7 90.4 90.4 91.9 53.1 20.2 54.0 21.1 Excise taxes 45.8 48.5 46.7 46.3 53.9 52.9 18.3 19.9 20.4 20.2 21.5 20.3 Customs duties ..... 16.4 15.7 16.6 17.1 15.9 16.8 Nontaxes ..... 16.3 Contributions for social insurance ..... 491.9 517.8 518.6 522.7 528.3 545.1 553.0 557.5 1,507.0 ,500.6 1,497.6 533.7 ,525.9 ,543.6 Expenditures ..... 1,460.9 ,513.7 Purchases 449.0 443.6 445.2 442.7 439.8 437.8 435.1 National defense ..... 302.7 305.8 299.0 299.1 300.5 314.2 291.7 291.7 Nondefense ..... 134.8 140.9 139.4 143.6 140.7 146.1 143.5 143.9 625.3 658.0 652.8 660.2 674.1 671.5 676.2 683.6 Transfer payments (net) ...... 608.8 642.2 639.9 645.9 649.8 659.9 663.5 668.6 To persons ..... To rest of the world (net) ... Grants-in-aid to State and 200.3 local governments ..... 172.2 186.1 182.9 187.8 197.0 190.0 194.4 Net interest paid ..... 183.6 184.8 183.6 214.9 183.5 179.3 188.8 194.4 Interest paid .... 217.5 214.3 215.5 213.9 208.3 217.7 223.2 To persons and business 172.7 174.7 172.6 176.8 177.1 171.4 165.1 172.8 To rest of the world (net) 41.6 40.8 42.2 40.5 42.4 43.2 44.9 46.4 Less: Interest received by government .... 30.7 30.7 30.8 31.2 30.4 29.1 28.9 28.7 Subsidies less current surplus of government enterprises . 39.3 20.9 37.4 37.4 26.1 41.6 37.7 34.6 25.9 Less: Current surplus of 4.1 2.4 28 2.3 2.6 3.3 5.0 government enterprises . 1.7 Less: Wage accruals less disbursements ..... 0 0 0 0 0 0 0 0 Surplus or deficit (-), national income and product accounts ..... -282.7 -237.0 224.9 220.1 176.2 145.1 -155.1 Social insurance funds ...... 33.2 34.0 36.5 36.0 39.3 49.3 53.5 54.0 315.8 275.4 -273.5 -260.9 259.4 225.5 198.7 -209.2

Table 3.3.—State and Local Government Receipts and Expenditures
[Billions of dollars]

		Billions	of dollars	<b>S</b> ]				
			5	Seasonall	y adjuste	ed at ann	ual rates	;
	1992	1993		1993			1994	
			II	III	IV	_	II	III
Receipts	842.9	891.0	884.3	896.0	918.8	919.1	935.6	950.5
Personal tax and nontax receipts	159.1 118.1 21.8 19.1	166.1 123.3 22.7 20.1	166.1 123.4 22.5 20.2	167.9 124.9 22.8 20.2	170.2 126.6 23.2 20.4	172.9 128.7 23.5 20.7	175.3 130.6 23.7 21.1	177.3 132.0 23.9 21.4
Corporate profits tax accruals	24.2	30.3	30.0	29.7	33.7	32.3	35.4	36.3
Indirect business tax and nontax accruals	423.1 202.1 177.5 43.5	440.7 212.4 184.0 44.3	437.9 210.6 183.3 44.0	442.4 212.8 184.8 44.8	449.0 217.8 186.4 44.9	454.2 220.7 188.0 45.6	460.0 224.2 189.8 46.0	465.4 227.6 191.6 46.2
Contributions for social insurance	64.5	67.8	67.5	68.2	68.9	69.7	70.5	71.3
Federal grants-in-aid	172.2	186.1	182.9	187.8	197.0	190.0	194.4	200.3
Expenditures	818.1	864.7	859.0	872.1	884.3	893.9	908.6	926.3
Purchases  Compensation of employees	676.3 461.7	704.7 483.0	701.2 480.6	710.2 485.9	717.4 490.2	722.0 497.1	731.5 503.4	744.3 509.8
Other	214.6	221.7	220.6	224.3	227.2	224.9	228.1	234.5
Transfer payments to persons	229.0	250.4	247.7	252.9	258.6	264.3	270.7	277.0
Net interest paid	–53.1 64.8	-53.4 65.1	–53.3 65.0	–53.4 65.1	–53.6 65.2	–54.1 65.3	-54.6 65.5	–55.1 65.6
government	117.9	118.4	118.3	118.5	118.8	119.4	120.1	120.7
Less: Dividends received by government	10.1	10.4	10.3	10.4	10.5	10.7	10.8	10.9
Subsidies less current surplus of government enterprises . SubsidiesLess: Current surplus of	-24.0 .4	-26.7 .4	-26.3 .4	-27.2 .4	-27.6 .4	-27.7 .4	-28.3 .4	-28.9 .4
government enterprises	24.4	27.1	26.7	27.5	27.9	28.1	28.7	29.2
Less: Wage accruals less disbursements	0	0	0	0	0	0	0	0
Surplus or deficit (–), national income and product accounts	24.8	26.3	25.3	23.9	34.5	25.2	27.0	24.1
Social insurance fundsOther	66.4 -41.6	66.3 -40.0	66.4 -41.1	66.3 -42.4	66.2 -31.7	65.9 -40.7	65.9 -38.9	65.3 -41.2

Table 3.7B.—Government Purchases by Type

		[		-1				
			5	Seasonal	y adjuste	ed at ann	nual rates	3
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Government purchases	1,125.3	1,148.4	1,146.3	1,152.9	1,157.2	1,159.8	1,166.7	1,188.7
Federal	449.0	443.6	445.2	442.7	439.8	437.8	435.1	444.4
National defense	314.2 80.9 10.2 217.8	<b>302.7</b> 70.6 9.5 218.1	74.3 10.5	299.0 66.7 9.2 218.2	299.1 66.6 9.2 219.1	291.7 64.6 7.9 214.5	291.7 63.1 7.2 217.3	300.5 65.5 8.5 221.3
employees	135.9 90.2 45.8 81.8 5.3	135.8 88.3 47.5 82.4 4.5	89.0 46.5	136.2 87.6 48.7 81.9 5.0	134.4 86.4 48.0 84.6 4.4	135.3 87.1 48.2 79.2 4.7	135.6 87.0 48.5 81.7 4.1	134.9 86.3 48.6 86.4 5.2
Nondefense	134.8 6.6 7.7	<b>140.9</b> 7.2 7.2	7.2	<b>143.6</b> 7.4 6.9	<b>140.7</b> 7.3 7.2	<b>146.1</b> 7.4 7.5	<b>143.5</b> 7.2 7.2	<b>143.9</b> 7.5 5.9
inventory change Other nondurables Services Compensation of	6 8.4 109.9	3 7.6 114.8	7.3	–.8 7.6 117.6	.3 6.9 114.3	2 7.7 119.2	2 7.4 118.5	-1.8 7.8 119.5
employees Other services Structures	63.6 46.3 10.5	67.9 47.0 11.7	46.0	68.1 49.6 11.7	68.1 46.2 11.9	71.0 48.2 12.0	72.9 45.6 10.7	70.5 49.0 11.0
State and local	676.3	704.7	701.2	710.2	717.4	722.0	731.5	744.3
Durable goods	35.7 59.9 486.2	36.9 62.6 505.7	63.0	37.2 62.5 508.5	37.3 62.6 512.5	38.0 64.3 520.5	38.4 65.0 526.7	38.8 66.5 533.3
employees Other services Structures	461.7 24.5 94.5	483.0 22.6 99.6	22.2	485.9 22.6 102.0	490.2 22.3 105.0	497.1 23.5 99.2	503.4 23.3 101.5	509.8 23.5 105.8

Table 3.10.—National Defense Purchases

[Billions of dollars]

		Dimono	or donard	<b>'</b> 1				
National defense purchases	314.2	302.7	305.8	299.0	299.1	291.7	291.7	300.5
Durable goods	80.9	70.6	74.3	66.7	66.6	64.6	63.1	65.5
Military equipment	74.9 23.1 14.1 12.1 3.8 6.6 15.1 6.0	65.8 21.7 10.5 10.9 3.0 6.4 13.4 4.8	69.3 23.2 10.1 12.6 3.2 6.8 13.4 5.0	61.8 20.8 9.2 9.9 2.3 6.4 13.1 4.9	61.8 21.5 9.8 10.0 2.1 5.6 12.8 4.8	60.4 20.4 9.5 9.3 2.0 6.2 13.1 4.2	58.8 17.1 9.6 10.3 1.9 5.9 13.9 4.3	60.4 20.3 8.2 10.3 1.6 6.0 14.1 5.1
Nondurable goods	10.2	9.5	10.5	9.2	9.2	7.9	7.2	8.5
Petroleum products Ammunition Other nondurable goods	3.5 3.4 3.4	3.2 3.5 2.8	3.5 4.3 2.7	3.4 2.8 3.0	2.9 3.7 2.5	2.5 3.0 2.4	3.4 1.7 2.2	3.5 1.9 3.1
Services	217.8	218.1	216.7	218.2	219.1	214.5	217.3	221.3
Compensation of employees Military Civilian Other services Contractual research and development Installation support <sup>1</sup> Weapons support <sup>2</sup> Personnel support <sup>3</sup> Transportation of	135.9 90.2 45.8 81.8 27.0 23.2 9.0 15.1	135.8 88.3 47.5 82.4 27.4 25.3 8.0 14.7	135.4 89.0 46.5 81.2 27.5 25.9 7.4 13.8	136.2 87.6 48.7 81.9 26.8 25.7 7.8 14.8	134.4 86.4 48.0 84.6 27.6 25.1 8.3 15.5	135.3 87.1 48.2 79.2 24.5 26.8 7.2 15.6	135.6 87.0 48.5 81.7 26.6 28.1 7.9 16.3	134.9 86.3 48.6 86.4 25.8 29.2 9.6 16.4
material Travel of persons Other	5.3 4.3 –2.0	4.6 4.4 -2.0	3.9 4.0 -1.3	5.0 5.0 -3.2	5.3 4.1 –1.3	4.6 3.9 -3.3	4.3 3.4 -4.8	4.3 4.3 -3.2
Structures	5.3	4.5	4.3	5.0	4.4	4.7	4.1	5.2
Military facilities Other	3.5 1.8	3.1 1.3	3.1 1.2	3.5 1.5	3.0 1.4	3.0 1.7	2.5 1.5	3.6 1.6

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

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

[Billions of 1987 dollars]

	[DI	1110115 01	1907 UUI	iaisj				
			5	Seasonall	y adjuste	ed at ann	ual rates	;
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Government purchases	936.9	929.8	929.3	931.8	931.5	919.9	917.1	933.0
Federal	373.5	356.6	358.3	355.6	351.1	341.7	334.7	344.7
National defense  Durable goods  Nondurable goods  Services  Compensation of	<b>261.4</b>	243.7	246.8	240.9	238.7	228.5	226.1	233.4
	74.3	64.8	67.7	62.5	61.4	57.9	55.8	59.1
	9.4	8.6	9.2	8.5	8.4	7.4	6.7	7.9
	173.3	166.9	166.6	166.2	165.7	159.8	160.6	162.8
employees Military Civilian Other services Structures	102.2	96.5	97.3	96.0	93.7	92.5	91.5	90.5
	66.8	63.0	63.5	62.6	61.3	60.5	59.7	59.0
	35.4	33.4	33.7	33.4	32.4	32.0	31.8	31.5
	71.1	70.4	69.3	70.3	72.0	67.3	69.1	72.3
	4.4	3.4	3.3	3.6	3.1	3.4	2.9	3.7
Nondefense  Durable goods  Nondurable goods  Commodity Credit  Corporation	<b>112.2</b>	<b>113.0</b>	<b>111.5</b>	<b>114.7</b>	<b>112.4</b>	<b>113.2</b>	<b>108.7</b>	<b>111.2</b>
	7.2	8.0	7.8	8.7	8.5	7.5	7.5	8.5
	7.2	6.4	6.1	5.8	6.4	6.5	6.0	5.1
inventory change Other nondurables Services Compensation of	4	3	3	-1.0	.3	2	5	-1.7
	7.5	6.8	6.5	6.8	6.1	6.8	6.6	6.9
	88.6	88.5	87.9	90.1	87.4	88.9	86.1	88.4
employees Other services Structures	49.7	49.6	49.6	49.2	49.4	49.4	48.5	48.0
	38.9	38.9	38.3	40.9	38.0	39.5	37.6	40.4
	9.2	10.1	9.7	10.1	10.2	10.2	9.0	9.2
State and local	563.3	573.1	571.0	576.2	580.4	578.3	582.4	588.4
Durable goods	31.6	32.1	32.0	32.2	32.4	32.7	32.8	33.0
	51.8	53.6	53.3	53.9	54.4	55.2	55.6	56.2
	394.3	399.1	398.2	399.8	401.2	404.0	405.9	408.7
employees Other services Structures	360.1	363.6	363.1	364.0	365.1	366.5	368.1	369.9
	34.2	35.5	35.0	35.7	36.2	37.5	37.8	38.7
	85.7	88.3	87.5	90.4	92.4	86.4	88.1	90.6

Table 3.11.—National Defense Purchases in Constant Dollars

[Billions of 1987 dollars]

	[Bi	llions of	1987 dol	lars]				
National defense purchases	261.4	243.7	246.8	240.9	238.7	228.5	226.1	233.4
Durable goods	74.3	64.8	67.7	62.5	61.4	57.9	55.8	59.1
Military equipment Aircraft Missiles Ships Vehicles Electronic equipment Other Other durable goods	67.9	58.9	61.8	56.0	55.3	53.3	50.9	52.6
	20.6	18.4	19.7	17.6	18.0	16.8	13.7	16.7
	14.4	11.6	11.2	11.1	11.1	10.5	10.2	9.0
	10.4	9.1	10.6	8.2	8.3	7.7	8.3	8.3
	3.4	2.5	2.6	2.0	1.8	1.6	1.6	1.3
	6.1	5.9	6.2	5.9	5.2	5.6	5.3	5.4
	13.0	11.4	11.4	11.2	10.9	11.1	11.8	11.9
	6.4	5.9	5.9	6.5	6.1	4.6	4.9	6.4
Nondurable goods	9.4	8.6	9.2	8.5	8.4	7.4	6.7	7.9
Petroleum products	2.9	2.8	3.0	3.0	2.6	2.5	3.1	3.2
Ammunition	3.5	3.3	3.9	2.8	3.6	2.7	1.7	1.9
Other nondurable goods	3.0	2.5	2.4	2.8	2.3	2.2	1.9	2.8
Services	173.3	166.9	166.6	166.2	165.7	159.8	160.6	162.8
Compensation of employees Military Civilian Other services Contractual research and development	102.2	96.5	97.3	96.0	93.7	92.5	91.5	90.5
	66.8	63.0	63.5	62.6	61.3	60.5	59.7	59.0
	35.4	33.4	33.7	33.4	32.4	32.0	31.8	31.5
	71.1	70.4	69.3	70.3	72.0	67.3	69.1	72.3
Installation support <sup>1</sup> Weapons support <sup>2</sup> Personnel support <sup>3</sup> Transportation of	20.2	21.7	22.4	22.0	21.5	22.9	23.8	24.4
	7.5	6.4	5.9	6.2	6.6	5.6	6.2	7.6
	11.4	11.0	10.3	11.0	11.4	11.6	12.2	12.1
material Travel of persons Other	5.7	5.0	4.1	5.5	5.8	4.7	4.2	4.4
	3.9	3.7	3.5	4.4	3.5	3.3	2.9	3.7
	–1.5	–1.4	–1.0	–2.3	–1.0	–2.3	-3.3	–2.2
Structures	4.4	3.4	3.3	3.6	3.1	3.4	2.9	3.7
Military facilities Other	3.0	2.4	2.5	2.6	2.2	2.2	1.8	2.6
	1.5	1.0	.9	1.1	1.0	1.2	1.1	1.1

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

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

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

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

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

# 4. Foreign Transactions\_

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

[Billions of dollars]

			5	Seasona	ılly adjus	ted at ar	nual rate	es
	638.1 449.7 301.4 148.3 188.5 133.5 0 771.6 668.4 544.6 346.3	1993		1993			1994	
			=	III	IV	I	II	III
Receipts from rest of the world	771.6	795.6	797.7	786.1	821.6	819.6	866.6	899.4
Exports of goods and services  Merchandise <sup>1</sup> Durable  Nondurable  Services <sup>1</sup>	449.7 301.4 148.3	659.1 461.0 314.8 146.2 198.1	660.1 461.7 316.3 145.4 198.4	649.0 450.3 307.1 143.2 198.7	680.3 480.3 329.2 151.1 200.0	674.2 476.0 329.4 146.6 198.3	704.5 499.5 346.0 153.5 205.0	521.1
Receipts of factor income 2	133.5	136.6	137.6	137.1	141.3	145.4	162.1	174.2
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0
Payments to rest of the world	771.6	795.6	797.7	786.1	821.6	819.6	866.6	899.4
Imports of goods and services  Merchandise <sup>1</sup> Durable  Nondurable  Services <sup>1</sup>	668.4 544.6 346.3 198.3 123.8	724.3 592.1 385.5 206.6 132.2	723.5 592.6 379.6 213.0 130.9	726.0 593.2 386.4 206.8 132.8	751.4 613.3 407.8 205.6 138.1	760.9 622.3 418.1 204.2 138.6	802.1 665.3 445.3 220.0 136.8	839.7 699.6 464.0 235.7 140.1
Payments of factor income 3	127.9	132.1	134.3	128.6	143.3	146.1	169.5	184.9
Transfer payments (net)	31.8 9.5 16.5 5.8	31.5 9.9 15.7 5.9	28.8 9.8 12.9 6.1	30.3 9.9 14.3 6.1	40.1 9.8 24.3 5.9	29.0 10.5 11.6 6.9	30.1 10.5 12.7 6.9	33.0 10.7 15.1 7.2
Net foreign investment	-56.6	-92.3	-88.9	-98.8	-113.2	-116.4	-135.1	-158.2

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

Table 4.3.—Exports and Imports of Merchandise by End-Use Category [Billions of dollars]

Exports of merchandise	449.7	461.0	461.7	450.3	480.3	476.0	499.5	521.1
Foods, feeds, and beverages	40.3	40.7	40.4	39.0	42.5	39.7	37.8	41.7
Industrial supplies and materials	105.1	102.7	103.2	101.2	103.4	104.1	111.8	120.9
Durable goods	36.8	37.6	37.6	37.9	37.5	37.9	39.6	43.4
Nondurable goods	68.2	65.1	65.6	63.3	65.9	66.2	72.1	77.5
Capital goods, except automotive	176.1	182.2	183.2	176.3	192.4	194.7	204.3	207.5
Civilian aircraft, engines, and parts	37.7	32.7	36.4	26.7	34.5	34.2	34.1	28.6
Computers, peripherals, and parts	28.8	29.3	28.3	29.5	30.6	31.3	31.9	33.8
Other	109.6	120.2	118.5	120.1	127.3	129.1	138.3	145.1
Automotive vehicles, engines, and parts	47.0	52.4	52.7	50.4	55.0	54.3	55.9	58.0
Consumer goods, except automotive	51.4	54.7	53.7	55.2	56.9	55.4	58.3	61.4
Durable goods	26.6	28.4	28.5	28.4	29.3	28.6	30.5	30.5
Nondurable goods	24.9	26.2	25.2	26.7	27.7	26.8	27.8	31.0
Other	29.8 14.9	28.3 14.1	28.5 14.3	28.2 14.1	30.1 15.1	27.8 13.9	31.4 15.7	31.7 15.8
Durable goods					15.1			15.8
Nondurable goods	14.9	14.1	14.3	14.1	_	13.9	15.7	
Imports of merchandise	544.6	592.1	592.6	593.2	613.3	622.3	665.3	699.6
Foods, feeds, and beveragesIndustrial supplies and materials, except	27.6	27.9	27.4	28.0	28.9	29.4	30.5	32.2
petroleum and products	82.3	88.9	87.9	89.4	92.3	97.6	103.1	107.5
Durable goods	39.2	43.0	41.4	43.3	46.7	48.7	52.9	55.4
Nondurable goods	43.2	45.9	46.5	46.1	45.7	48.8	50.2	52.2
Petroleum and products	51.6	51.5	57.2	50.1	47.6	41.6	51.4	60.7
Capital goods, except automotive	134.3	152.4	150.5	152.9	163.2	170.5	179.0	188.0
Civilian aircraft, engines, and parts	12.6	11.3	11.7	10.4	12.4	11.3	12.3	9.9
Computers, peripherals, and parts	31.7	38.0	37.1	38.9	40.3	41.8	44.3	47.1
Other	90.0	103.1	101.6	103.6	110.6	117.4	122.3	131.0
Automotive vehicles, engines, and parts	91.8	102.4	101.7	101.5	105.9	108.1	116.5	123.4
Consumer goods, except automotive	122.7	134.0	132.7	136.6	137.9	137.8	144.5	148.6
Durable goods	63.9	70.2	68.5	71.4	73.2	72.1	76.8	77.6
Nondurable goods	58.7	63.8	64.2	65.3	64.7	65.7	67.7	71.0
Other	34.3	35.1	35.2	34.7	37.5	37.4	40.4	39.3
Durable goodsNondurable goods	17.2 17.2	17.5 17.5	17.6 17.6	17.4 17.4	18.8 18.8	18.7 18.7	20.2 20.2	19.6 19.6
Addenda:								
Exports of agricultural products 1	44.0	43.7	43.6	42.1	45.4	43.7	43.8	46.7
Exports of nonagricultural products	405.6	417.3	418.1	408.1	435.0	432.2	455.7	474.4
Imports of nonpetroleum products	493.0	540.6	535.4	543.1	565.7	580.7	613.9	638.9
the second secon	1							

<sup>1.</sup> Includes parts of: exports of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable consumer goods.

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

[Billions of 1987 dollars]

		Seasonally adjusted at annual rates						
	1992	1993		1993			1994  I II  19.6 643.9 644.4 484.6 32.6 348.5 31.7 136.1 55.2 159.2 14.8 127.1 23.6 755.6 15.2 648.3 17.7 443.4 97.5 204.9 08.5 107.4	
			II	III	IV	I	II	III
Exports of goods and services  Merchandise <sup>1</sup> Durable  Nondurable  Services <sup>1</sup>	<b>578.8</b> 426.5 291.4 135.2 152.3	<b>602.5</b> 446.0 312.5 133.4 156.5	<b>600.2</b> 443.3 310.4 132.9 156.9	<b>595.3</b> 438.5 308.0 130.5 156.7	<b>625.2</b> 468.1 330.6 137.5 157.1	<b>619.6</b> 464.4 332.6 131.7 155.2	484.6 348.5 136.1	662.7 505.0 361.2 143.8 157.7
Receipts of factor income 2	109.2	109.1	110.1	109.4	112.4	114.8	127.1	136.0
Imports of goods and services  Merchandise   Durable  Nondurable  Services   Services   Imports of goods and services  Merchandise  Services   Imports of goods and services	<b>611.2</b> 512.8 333.4 179.4 98.4	<b>676.3</b> 572.7 380.9 191.8 103.6	669.6 567.4 373.7 193.7 102.2	681.6 577.1 384.0 193.0 104.5	<b>707.4</b> 599.9 405.1 194.8 107.6	<b>723.6</b> 615.2 417.7 197.5 108.5	648.3 443.4 204.9	<b>783.5</b> 674.4 463.0 211.3 109.2
Payments of factor income <sup>3</sup>	102.8	103.4	105.3	100.4	111.7	113.2	130.7	142.0

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

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

[Billions of 1987 dollars]													
Exports of merchandise	426.5	446.0	443.3	438.5	468.1	464.4	484.6	505.0					
Foods, feeds, and beverages	35.8	35.6	35.9	33.8	36.2	33.0	32.0	36.2					
Industrial supplies and materials  Durable goods	97.4 32.1	94.7 31.0	94.3 30.6	93.4 31.1	96.4 31.0	95.4 30.8	99.7 32.2	103.5 34.8					
Nondurable goods	65.3	63.7	63.6	62.3	65.4	64.5	67.6	68.6					
Capital goods, except automotive	180.7	197.6	195.4	194.6	211.9	216.7	226.9	235.2					
Civilian aircraft, engines, and parts	30.7	25.9	29.0	21.1	27.0	26.8	26.5	22.0					
Computers, peripherals, and parts	53.9	66.6	62.9	68.5	74.0	76.9	79.3	86.0					
Other	96.0	105.1	103.5	105.0	110.9	113.0	121.0	127.3					
Automotive vehicles, engines, and parts Consumer goods, except automotive	41.9 44.4	46.3 46.9	46.6 46.2	44.6 47.3	48.6 48.6	47.7 47.3	49.0 49.8	50.7 52.1					
Durable goods	23.6	25.2	25.3	25.3	25.9	25.2	26.9	26.8					
Nondurable goods	20.9	21.7	20.9	22.1	22.7	22.1	22.9	25.3					
Other	26.3	24.8	25.0	24.8	26.4	24.2	27.2	27.2					
Durable goods	13.2	12.4	12.5	12.4	13.2	12.1	13.6	13.6					
Nondurable goods	13.2	12.4	12.5	12.4	13.2	12.1	13.6	13.6					
Imports of merchandise	512.8	572.7	567.4	577.1	599.9	615.2	648.3	674.4					
Foods, feeds, and beverages	25.7	25.6	25.6	25.3	25.7	26.2	26.2	26.2					
Industrial supplies and materials, except petroleum and products	72.1	78.2	77.1	79.3	81.1	85.5	89.6	91.5					
Durable goods	33.8	37.1	35.6	37.7	40.0	41.8	44.8	46.2					
Nondurable goods	38.2	41.1	41.5	41.6	41.1	43.8	44.8	45.3					
Petroleum and products	51.2	56.5	57.7	56.7	58.1	56.5	60.3	64.4					
Capital goods, except automotive	149.2	180.9	176.7	183.6	197.3	207.8	219.0	231.9					
Civilian aircraft, engines, and parts	10.2	8.9	9.3	8.2	9.7	8.8	9.6	7.6					
Computers, peripherals, and parts	60.4 78.5	83.9 88.0	80.0 87.4	87.8 87.6	94.6 93.0	99.7 99.2	106.9 102.6	115.4 108.9					
Other	79.7	87.4	87.1	86.4	88.9	90.3	96.7	100.9					
Consumer goods, except automotive	104.9	113.9	112.8	115.9	116.7	116.9	122.2	125.7					
Durable goods	55.6	60.4	59.1	61.3	62.8	61.9	65.7	66.8					
Nondurable goods	49.3	53.5	53.7	54.6	53.9	55.0	56.5	58.9					
Other	30.0	30.3	30.5	29.9	32.0	32.0	34.2	32.9					
Durable goodsNondurable goods	15.0 15.0	15.1 15.1	15.2 15.2	14.9 14.9	16.0 16.0	16.0 16.0	17.1 17.1	16.4 16.4					
Addenda:					. •	. •							
Exports of agricultural products 1	39.8	38.6	39.3	36.9	39.1	36.6	37.5	40.6					
Exports of nonagricultural products	386.7	407.4	404.0	401.6	429.1	427.8	447.1	464.4					
Imports of nonpetroleum products	461.6	516.3	509.7	520.4	541.8	558.6	587.9	609.9					

<sup>1.</sup> Includes parts of: exports of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable consumer goods.

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

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

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

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

# 5. Saving and Investment\_

Table 5.1.—Gross Saving and Investment

[Billions of dollars]

			5	Seasonal	ly adjuste	ed at ann	nual rates	3
	1992	1993		1993			1994	
			=	III	IV	-	=	III
Gross saving	722.9	787.5	775.0	788.9	825.8	886.2	923.3	917.7
Gross private saving  Personal saving Undistributed corporate profits with inventory valuation and capital	<b>980.8</b> 247.9	<b>1,002.5</b> 192.6	<b>986.6</b> 214.0	<b>989.9</b> 182.3	<b>1,011.4</b> 189.4	<b>1,037.3</b> 175.5	<b>1,041.4</b> 201.1	<b>1,048.8</b> 198.5
consumption adjustments Undistributed profits Inventory valuation	94.3 85.1	120.9 97.5	110.7 94.1	130.3 95.6	147.9 115.6	127.7 103.0	142.3 118.9	140.5 122.6
adjustment Capital consumption	-6.4	-6.2	-10.0	3.0	-6.5	-12.3	-14.1	-19.6
adjustment	15.7	29.5	26.5	31.7	38.8	37.0	37.4	37.5
Corporate consumption of fixed capital	396.8	407.8	404.8	413.3	411.1	432.2	425.9	432.6
of fixed capital	261.8 -20.0	261.2 20.0	257.2 0	264.1	263.0 0	301.8	272.1 0	277.2
Government surplus or deficit (-), national income and product accounts Federal State and local	- <b>257.8</b> -282.7 24.8	- <b>215.0</b> -241.4 26.3	- <b>211.6</b> -237.0 25.3	- <b>201.0</b> -224.9 23.9	- <b>185.6</b> -220.1 34.5	- <b>151.1</b> -176.2 25.2	- <b>118.1</b> -145.1 27.0	- <b>131.0</b> -155.1 24.1
Capital grants received by the United States (net)	0	0	0	0	0	0	0	0
Gross investment	731.7	789.8	780.8	783.4	809.3	850.2	899.3	896.0
Gross private domestic investment	788.3 -56.6	882.0 -92.3	869.7 -88.9	882.2 -98.8	922.5 -113.2	966.6 -116.4	1,034.4 -135.1	1,054.2 -158.2
Statistical discrepancy	8.8	2.3	5.7	-5.5	-16.5	-36.1	-24.0	-21.7

Table 5.4.—Fixed Investment by Type

[Billions of dollars]

			Sea	asonally	adjuste	ed at an	nual ra	tes
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Fixed investment	785.2	866.7	851.1	868.3	913.5	942.5	967.0	992.6
Nonresidential	561.4	616.1	609.3	619.0	646.3	665.4	683.3	709.6
Structures	171.1	173.4	172.3	173.9	176.7	172.7	181.8	185.2
farm Utilities Mining exploration, shafts, and	114.7 34.7	117.6 34.4	115.2 34.2	118.7 34.1	122.3 34.4	119.0 34.7	127.2 35.6	129.2 36.7
wellsOther structures	11.8 9.9	12.2 9.2	12.8 10.1	12.0 9.1	11.4 8.6	11.1 7.9	11.2 7.9	10.7 8.6
Producers' durable equipment	390.3	442.7	437.0	445.1	469.6	492.7	501.5	524.4
Information processing and related equipment	132.0	151.5	146.1	155.0	164.4	169.3	177.0	182.4
equipment 1	36.5	47.0	44.8	49.1	51.5	52.6	53.4	54.1
OtherIndustrial equipmentTransportation and related	95.5 86.0	104.5 96.7	101.4 94.6	105.9 97.9	112.9 102.9	116.7 107.0	123.5 111.0	128.3 115.8
equipment	91.5	104.2		101.4			112.1	121.3
Other	80.8	90.4	89.0	90.7	94.4	97.8	101.5	104.9
Residential	223.8	250.6	241.8	249.3	267.2	277.1	283.6	282.9
Structures Single family Multifamily Other structures	<b>216.5</b> 116.5 13.1 86.9	242.8 133.3 10.8 98.8		241.5 132.0 11.2 98.3	259.2 143.2 11.1 105.0	<b>269.1</b> 152.5 11.4 105.2	<b>275.3</b> 156.2 13.0 106.2	<b>274.5</b> 154.4 14.1 106.0
Producers' durable equipment	7.3	7.7	7.6	7.8	8.0	8.0	8.3	8.5

<sup>1.</sup> Includes new computers and peripheral equipment only.

Table 5.5.—Fixed Investment by Type in Constant Dollars

[Billions of 1987 dollars]

[Billions of 1987 dollars]													
			Sea	sonally	adjuste	ed at an	nual rat	tes					
	1992	1993		1993			1994						
			II	Ш	IV	I	II	III					
Fixed investment	722.9	804.6	787.3	8.808	851.7	873.4	891.7	910.3					
Nonresidential	525.9	591.6	581.0	597.9	627.2	643.6	657.9	680.4					
Structures  Nonresidential buildings, including	149.8	147.7	147.3	147.5	148.7	144.1	151.0	152.1					
farm	100.8 29.9	100.0 28.8	98.5 28.7	100.5 28.5	102.7 28.5	99.2 28.4	105.4 29.0	105.7 29.7					
wellsOther structures	10.3 8.9	10.7 8.2	11.2 9.0	10.5 8.0	9.9 7.6	9.6 6.9	9.8 6.8	9.4 7.4					
Producers' durable equipment Information processing and related	376.2	443.9	433.7	450.3	478.5	499.4	506.9	528.3					
equipmentComputers and peripheral	156.8	200.9	190.8	208.9	225.2	233.2	242.2	251.1					
equipment <sup>1</sup>	68.3 88.5 71.7	105.4 95.5 79.2	98.0 92.8 77.5	112.2 96.7 79.9	122.5 102.7 83.6	127.2 106.0 86.4	130.3 111.8 88.9	135.0 116.1 92.1					
equipmentOther	78.3 69.4	87.8 76.1	90.4 74.9	85.3 76.2	90.9 78.9	98.5 81.3	92.3 83.6	99.1 86.0					
Residential	196.9	213.0	206.3	211.0	224.5	229.9	233.8	229.9					
Structures Single family Multifamily Other structures	189.9 102.4 11.7 75.8	<b>205.7</b> 112.1 9.6 84.1	199.1 108.5 9.2 81.3	<b>203.5</b> 110.2 9.9 83.5	<b>216.9</b> 118.3 9.7 88.9	222.4 125.1 10.0 87.3	226.0 127.6 11.3 87.2	222.0 123.9 12.0 86.1					
Producers' durable equipment	7.0	7.4	7.2	7.5	7.6	7.5	7.8	7.9					

<sup>1.</sup> Includes new computers and peripheral equipment only.

## Table 5.10.—Change in Business Inventories by Industry

[Billions of dollars]

			Sea	asonally	adjuste	ed at an	nual ra	tes
	1992	1993		1993			1994	
			Ш	III	IV	_	II	III
Change in business inventories	3.0	15.4	18.6	13.9	9.0	24.1	67.4	61.6
Farm	5.7	-4.7	-5.3	-10.3	-1.7	1.8	7.0	9.3
NonfarmChange in book value	-2.7 6.4 -9.1	20.1 28.4 -8.3	23.9 38.1 -14.2	24.2 19.6 4.7	10.7 18.4 -7.7	22.3 40.6 –18.3	60.4 84.2 –23.8	52.3 78.4 –26.0
Manufacturing Durable goods Nondurable goods	-11.9 -15.0 3.1	-2.0 -2.3 .3	3.2 1 3.4	2.5 2.6 1	-10.8 -5.5 -5.2		1.1 6.9 –5.9	2.8 5.3 -2.4
Wholesale trade Durable goods Nondurable goods	7.5 3.8 3.7	4.9 2.2 2.8	7.5 .8 6.7	8.1 7.1 1.0	1.1 .7 .4	-2.0 1 -2.0	20.7 19.9 .8	17.1 15.1 1.9
Merchant wholesalers	7.4 3.9 3.4 .1 1	5.0 2.1 2.9 1 .1 2	7.0 2.3 4.7 .5 –1.5 2.0	10.6 6.5 4.1 -2.5 .6 -3.1	.1 2 .3 1.0 .9	-1.0	18.9 19.8 8 1.8 .1	15.9 12.9 3.0 1.2 2.2 -1.0
Retail trade	3.9 .6 .7 1 3.3	10.3 5.3 1 5.4 5.1	1.8 9 1.8 1.0	7.2 5 -8.7 8.2 7.7	5.7 4.6 -5.4 9.9 1.1	2.7 6.2 3.0 3.2 -3.5	26.1 7.2 -2.4 9.6 18.9	24.5 18.9 8.3 10.6 5.7
Other  Durable goods  Nondurable goods	-2.2 -2.4 .2	6.9 3.5 3.4	11.3 2.2 9.1	6.4 5.8 .6	14.7 9.2 5.5	13.3 9.1 4.2	12.6 4.2 8.4	7.9 4.3 3.6

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

[Rillions of dollars]

[Billions of dollars]													
	Seasonally adjusted quarterly totals												
		1993			1994								
	II	III	IV	1	II	III							
Inventories 1	1,123.0	1,131.3	1,138.4	1,145.7	1,163.7	1,185.0							
Farm	95.6	96.7	97.6	99.1	93.8	94.0							
Nonfarm	1,027.4 571.2 456.2	1,034.6 576.1 458.5	1,040.8 582.9 457.9	1,046.6 588.0 458.6	1,070.0 602.2 467.8	1,091.0 617.7 473.4							
Manufacturing Durable goods Nondurable goods	397.3 245.8 151.5	397.0 245.8 151.2	394.6 245.2 149.4	395.9 246.3 149.6	400.2 249.8 150.5	405.0 253.7 151.3							
Wholesale trade  Durable goods  Nondurable goods	254.6 158.2 96.4	257.5 160.4 97.1	259.9 161.7 98.2	260.0 162.4 97.7	266.2 167.6 98.5	272.5 172.5 100.0							
Merchant wholesalers Durable goods Nondurable goods Nonmerchant wholesalers Durable goods Nondurable goods	226.3 141.0 85.3 28.3 17.2 11.1	230.0 143.2 86.9 27.5 17.2 10.3	232.2 144.1 88.0 27.7 17.5 10.2	231.8 144.1 87.8 28.2 18.3 9.9	237.7 149.5 88.3 28.5 18.2 10.3	243.5 153.7 89.8 29.0 18.8 10.2							
Retail trade	277.2 131.7 69.0 62.7 145.5	279.7 132.4 67.0 65.4 147.3	282.0 135.4 66.8 68.6 146.6	283.0 136.6 67.5 69.2 146.4	292.2 140.5 68.5 72.0 151.7	299.4 145.3 70.5 74.8 154.1							
Other	98.3	100.4	104.4	107.7	111.3	114.1							
Final sales of domestic business 2	442.8	447.4	457.1	462.6	467.5	475.4							
Final sales of goods and structures of domestic business <sup>2</sup>	241.5	243.0	250.8	253.9	255.6	260.6							
Ratio of inventories to final sales of domestic business													
Inventories to final sales	2.54 2.32	2.53 2.31	2.49 2.28	2.48 2.26	2.49 2.29	2.49 2.29							
structures	4.25	4.26	4.15	4.12	4.19	4.19							

<sup>1.</sup> Inventories are as of the end of the quarter.

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

[Billions of 1987 dollars]

			Sea	asonally	adjuste	ed at ar	nual ra	tes					
	1992	1993		1993			1994						
			II	III	IV	I	П	III					
Change in business inventories	2.5	15.3	18.9	13.0	10.8	25.4	59.2	56.1					
Farm	4.5	-3.2	-3.9	-7.9	.1	3.3	7.5	9.8					
Nonfarm	-2.0	18.5	22.8	20.9	10.7	22.1	51.7	46.3					
Manufacturing Durable goods Nondurable goods	-10.2 -13.1 2.9	8 -1.3 .5	3.9 .8 3.1	2.5 2.5 0	-7.7 -3.5 -4.2	9.9 6.8 3.1	.7 6.8 –6.0	3.6 5.6 –2.0					
Wholesale trade  Durable goods  Nondurable goods	6.5 3.4 3.1	4.3 2.0 2.4	7.3 .9 6.4	6.8 6.4 .4	.7 .8 0	-1.0 .3 -1.3	17.7 17.3 .4	15.3 13.7 1.7					
Merchant wholesalers	6.4 3.5 2.9 .1 1	4.4 1.9 2.5 0 .1 2	6.8 2.2 4.6 .5 –1.3	9.1 5.9 3.3 –2.3 .5 –2.9	4 3 1 1.1 1.0	1.0	16.0 17.2 -1.2 1.6 0 1.6	14.0 11.5 2.6 1.3 2.2 9					
Retail trade	3.6 .6 .6 0 3.0	9.1 4.7 0 4.7 4.4	1.8 1.0 8 1.8 .8	6.2 3 -7.4 7.0 6.5	5.0 4.0 -4.5 8.5 1.1	2.0 5.0 2.5 2.5 -3.0	22.3 6.2 -1.9 8.1 16.1	20.7 15.9 6.9 9.0 4.8					
Other Durable goods Nondurable goods	-1.9 -2.1 .2	5.9 2.9 3.0	9.8 1.9 7.9	5.3 5.0 .3	12.7 7.7 5.0	11.3 7.5 3.7	11.0 3.5 7.5	6.6 3.5 3.1					

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

[Billions of 1097 dollars]

[Billions of 1987 dollars]													
	Seasonally adjusted quarterly totals												
	II	III	IV	I	II	III							
Inventories 1	997.9	1,001.1	1,003.8	1,010.2	1,025.0	1,039.0							
Farm	87.4	85.5	85.5	86.3	88.2	90.6							
Nonfarm	910.4 511.4 399.0	514.8	517.0	521.9	530.3	540.0							
Manufacturing Durable goods Nondurable goods	361.0 226.7 134.2	227.4	226.5	228.2	229.9	231.3							
Wholesale trade Durable goods Nondurable goods	222.0 139.1 83.0	140.7	140.9	140.9	145.3	83.2							
Merchant wholesalers Durable goods Nondurable goods Nonmerchant wholesalers Durable goods Nondurable goods	197.1 123.9 73.2 25.0 15.2 9.8	74.0 24.4 15.3	125.3 74.0 24.7 15.6	73.9 24.9	129.1 73.6 25.3 16.1	132.0 74.3 25.6 16.7							
Retail trade Durable goods Automotive Other Nondurable goods	239.9 114.9 60.6 54.3 124.9	114.9 58.8 56.1	115.9 57.6 58.2	58.9	118.6 57.8 60.9	122.6 59.5 63.1							
Other	87.6	88.9	92.1	94.9	97.7	99.3							
Final sales of domestic business 2 Final sales of goods and structures of	363.5	366.7	373.4	375.6	377.0	381.4							
domestic business 2	208.2	210.0	216.3	217.5	218.3	221.5							
Ratio of inventories to final sales of domestic business													
Inventories to final sales	2.75 2.50												
structures	4.37	4.36	4.24	4.25	4.29	4.28							

<sup>1.</sup> 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

<sup>2.</sup> 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.

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

# 6. Income, Employment, and Product by Industry\_\_\_\_\_

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

[Billions of dollars]

	Seasonally adjusted at annual ra												
	1992	1993		1993			1994						
			=	III	IV	-	=	III					
National income without capital consumption adjustment	4,875.3	5,156.4	5,120.2	5,162.1	5,276.7	5,350.3	5,449.6	5,512.5					
Domestic industries	4,869.8	5,151.9	5,116.8	5,153.5	5,278.7	5,351.0	5,457.0	5,523.2					
Private industries	4,131.4	4,386.7	4,355.4	4,385.2	4,507.0	4,567.5	4,664.6	4,727.4					
Agriculture, forestry, and fisheries	100.2 38.8 203.3	95.1 40.4 215.4	97.2 40.6 212.5	73.4 39.8 217.7	103.8 40.9 222.7	107.9 39.7 227.9	101.0 38.7 238.9						
Manufacturing Durable goods Nondurable goods	862.8 483.7 379.1	911.9 514.3 397.6	908.1 509.2 398.9	913.1 518.2 394.9	945.5 539.1 406.4	967.1 554.9 412.2	970.3 554.9 415.4						
Transportation and public utilities Transportation Communications Electric, gas, and sanitary services	361.8 153.4 102.6 105.8	384.8 166.1 107.6 111.1	380.8 163.8 108.5	388.1 168.9 108.4 110.9	392.2 170.2 107.7 114.3	391.0 169.3 110.1 111.6	175.9 112.6						
Wholesale trade Retail trade Finance, insurance, and real estate	279.5 420.3 781.3		441.2 836.2	449.4 848.4	451.4 865.2	455.8 860.7	472.2 885.0						
Services	1,083.3	l '	,	1,167.1	l '	,	· ·						
Government	738.4	765.2	761.5	768.3	771.7	783.5	792.4						
Rest of the world	5.6	4.5	3.3	8.5	-1.9	7	-7.4	-10.7					

Table 6.16C.—Corporate Profits by Industry

[Billions of dollars]

[Billions of dollars]													
			Seasonally adjusted at annual rate										
	1992	1993		1993			1994						
			Ш	Ш	IV	_	Ш	III					
Corporate profits with inventory valuation and capital consumption adjustments	405.1	485.8	473.1	493.5	533.9	508.2	546.4	557.1					
Domestic industries	344.5	420.5	410.4	424.3	472.2	447.1	485.7	495.9					
FinancialNonfinancial	67.9 276.6	89.5 330.9	86.0 324.4	90.0 334.3	100.6 371.6	74.9 372.2	90.9 394.7	95.8 400.1					
Rest of the world	<b>60.6</b> 65.4	<b>65.3</b> 74.2	<b>62.7</b> 75.3	<b>69.1</b> 75.2	<b>61.7</b> 74.7	<b>61.1</b> 77.6	<b>60.7</b> 79.1	<b>61.2</b> 88.7					
world	4.8	8.9	12.6	6.1	13.0	16.6	18.4	27.4					
Corporate profits with inventory valuation adjustment	389.4	456.2	446.6	461.7	495.1	471.2	509.0	519.6					
Domestic industries Financial Federal Reserve banks Other Nonfinancial Manufacturing Durable goods Primary metal industries Fabricated metal products Industrial machinery and equipment Electronic and other electric equipment Motor vehicles and equipment Other Nondurable goods Food and kindred products Chemicals and allied	328.8 81.9 17.8 64.2 246.9 94.5 35.5 4 7.5 6.1 9.0 -1.5 14.8 58.9 17.5	391.0 103.7 16.0 87.7 287.3 114.2 49.4 .2 6.8 7.4 11.9 4.1 19.0 64.9 16.9	383.8 100.1 15.9 84.2 283.7 114.2 47.2 .6 7.0 7.1 9.1 4.0 19.4 67.0 16.4	392.6 103.9 15.7 88.2 288.7 112.4 52.2 2 6.7 9.1 13.0 3.1 20.4 60.2 16.3	433.4 114.6 15.8 98.8 318.8 134.2 64.0 1.8 7.6 14.9 10.3 21.5 70.2 15.9	410.1 89.6 16.0 73.6 320.5 145.1 71.4 .2 9.0 9.3 16.6 14.4 21.8 73.8 20.9	9.0 17.9 9.7 22.9 73.5 20.3						
products	15.8 -1.4 27.1 55.6 54.8 42.0 <b>60.6</b>	17.5 4.7 25.8 65.0 61.2 46.9 <b>65.3</b>	16.9 6.0 27.7 61.9 63.3 44.3 <b>62.7</b>	15.7 5.4 22.9 67.0 62.0 47.3 <b>69.1</b>	18.8 9.1 26.4 69.7 63.7 51.3 <b>61.7</b>	18.4 5.5 29.0 63.4 59.0 53.0 <b>61.1</b>							

# 7. Quantity and Price Indexes\_\_\_\_\_

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

				Sea	asonally	adjuste	ed					Seasonally adjusted					
	1992	1993		1993			1994			1992	1993		1993			1994	
			II	III	IV	I	II	III				II	III	IV	I	II	III
Gross domestic product: Current dollars	132.6		138.8		142.7	144.8	147.4	149.5	Nonresidential: Current dollars	112.8	123.8	122.4	124.4	129.8	133.7	137.3	142.6
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Price indexes:	109.7 109.4 109.3	112.2	112.5 111.7 111.5	113.2 112.2 112.0	114.9 113.6 113.4	115.9 114.5 114.3	117.1 115.6 115.5	118.2 116.6 116.5	Fixed 1987 weights Chain-type annual weights Benchmark-years weights	105.7 102.8 103.5	118.8 112.1 112.9	116.7 110.9 111.6	112.5	126.0 117.4 118.1	129.3 120.3 121.1	132.2 122.8 123.6	136.7 126.9 127.8
Fixed 1987 weights	121.9 121.2 121.4 120.9	124.6 124.8	125.2 124.3 124.5 123.4	125.1	126.6 125.6 125.8 124.1	127.5 126.6 126.8 125.0	128.5 127.5 127.7 125.9	129.4 128.3 128.5 126.5	Price indexes:  Fixed 1987 weights  Chain-type annual weights  Benchmark-years weights  Implicit price deflator	111.2 109.7 109.0 106.7	113.0 110.4 109.7 104.1	112.8 110.4 109.6 104.9	110.5 109.8	113.7 110.7 109.9 103.0	111.3 110.5	115.2 111.9 111.2 103.9	112.5 111.8
Personal consumption expenditures: Current dollars	135.5		142.4	144.2	146.4	148.6	150.3	152.6	Structures: Current dollars	99.9	104.1	104.9		103.0	100.8	106.1	104.3
Fixed 1987 weights	109.7 109.3 109.3	112.5	112.7 111.9 111.9	113.8 112.9 112.9	114.9 113.9 113.8	116.2 115.1 115.1	116.6 115.5 115.5	117.5 116.3 116.3	Quantity indexes: Fixed 1987 weights Chain-type annual weights	87.4 87.5	86.2 86.2	86.0 86.0	86.1 86.1	86.8 86.8	84.1 84.2	88.1 88.2	88.8 88.8
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	124.6 124.1 124.1 123.5	127.5 127.5	127.8 127.3 127.3 126.4	127.7	129.1 128.6 128.6 127.5	129.8 129.2 129.2 127.9	130.7 130.2 130.2 128.9	131.8 131.2 131.2 129.9	Benchmark-years weights . Price indexes: Fixed 1987 weights Chain-type annual weights	87.5 114.1 114.2	86.2 117.3 117.4	86.0 116.9 116.9		86.8 118.8 118.8		88.2 120.3 120.4	88.8 121.6 121.6
Durable goods: Current dollars Quantity indexes:	122.0	133.3	131.6	134.2	139.4	142.7	143.7	146.7	Benchmark-years weights . Implicit price deflator	114.2 114.2	117.4	116.9 116.9	117.9	118.8	119.7	120.4 120.4	121.6 121.7
Fixed 1987 weights	112.1 110.6 110.7		119.8 117.5 117.7	122.0 119.3 119.5	126.5 123.3 123.4	129.2 125.7 125.9	129.3 125.5 125.7	131.3 127.1 127.3	Producers' durable equipment: Current dollars	119.6	135.6	133.9	136.3	143.8	150.9	153.6	160.6
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	111.6 110.4 110.2 108.9	112.2 112.1	113.7 112.0 111.8 109.8	112.3	115.0 113.1 113.0 110.2	115.5 113.6 113.4 110.5	116.7 114.6 114.4 111.1	117.8 115.6 115.4 111.7	Fixed 1987 weights	115.2 111.2 112.1	136.0 126.5 127.4	132.8 124.7 125.6	127.2	146.6 134.4 135.3	140.5	155.3 142.1 143.1	161.8 148.3 149.3
Nondurable goods: Current dollars Quantity indexes: Fixed 1987 weights	128.1 104.6		132.0 106.3		134.0 107.6	135.4 108.6	136.6 109.2	139.0 110.1	Fixed 1987 weights	109.7 107.5 106.7 103.8	110.7 107.2 106.5 99.7	110.7 107.4 106.6 100.8	110.9 107.2 106.4 98.8	111.1 107.1 106.3 98.1	111.7 107.5 106.7 98.7	112.5 108.2 107.5 98.9	113.0 108.5 107.8 99.3
Chain-type annual weights Benchmark-years weights Price indexes:	104.4 104.4		105.9 105.9	106.6 106.6	107.2 107.1	108.2 108.1	108.8 108.7	109.7 109.6	Residential:  Current dollars	99.4		107.3		118.6		125.9	
Fixed 1987 weights	123.0 122.7 122.7 122.5	124.6 124.6	125.0 124.6 124.6 124.2	124.3 124.4	125.4 125.0 125.1 124.6	125.4 125.2 125.2 124.6	125.9 125.6 125.6 125.1	127.3 126.9 126.9 126.3	Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	87.4 87.4 87.4	94.6 94.6 94.7	91.6 91.6 91.7	93.7 93.6 93.7	99.7 99.7 99.8	102.1 102.1 102.2	103.8 103.9 103.9	102.1
Services: Current dollarsQuantity indexes: Fixed 1987 weights	143.4 112.3	115.4		115.9	155.8 116.5	158.2 117.6	160.3 118.0		Price indexes:  Fixed 1987 weights  Chain-type annual weights  Benchmark-years weights	113.6 113.7 113.6	117.6	116.9 117.2 117.1	118.2	118.8 119.0 118.9	120.2 120.4	121.0 121.3 121.2	122.8 123.0
Chain-type annual weights Benchmark-years weights Price indexes:	112.0 112.0	114.8	114.3 114.3		115.8 115.8	116.9 116.9	117.3 117.3		Implicit price deflator  Exports of goods and services:	113.7	117.6	117.2		119.0		121.3	
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	128.3	133.0		133.5	135.0 134.5 134.5 133.8	135.9 135.5 135.5 134.4	137.0 136.6 136.7 135.9	137.6	Current dollars  Quantity indexes:  Fixed 1987 weights	159.0	181.1 165.5	164.9	163.6	171.8	170.2	176.9	182.1
Gross private domestic investment: Current dollars	105.2				123.1		138.1	140.7	Chain-type annual weights Benchmark-years weights Price indexes:	155.5 156.5	160.8	159.8 160.9	158.3		163.5		173.9
Fixed 1987 weights	96.8 95.5 95.5	105.4 105.4	107.6 104.1 104.1	105.2 105.2	115.1 109.6 109.6		126.9 121.3 121.2	129.0 122.9 122.9	Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	113.9 112.8 112.0 110.2	112.6	113.5 112.8	112.7	115.6 113.5 112.7 108.8	114.2 113.5	117.5 114.9 114.2 109.4	115.6 114.9
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator									Imports of goods and services:  Current dollars	131.8	142.9	142.7	143.2	148.2	150.1	158.2	165.6
Fixed investment: Current dollarsQuantity indexes:	108.6	119.9	117.7	120.1	126.4	130.4	133.7		Fixed 1987 weights	120.5 116.3 117.5		132.1 125.7 127.0	127.2	139.5 131.7 132.9		149.0 139.9 141.2	144.3
Fixed 1987 weights  Chain-type annual weights  Benchmark-years weights  Price indexes:	100.0 98.0 98.5	106.6 107.2	104.8 105.3	107.2	117.8 111.8 112.4	114.6 115.1	123.3 116.9 117.4	119.1 119.7	Fixed 1987 weights Chain-type annual weights Benchmark-years weights	113.6 112.5		113.5 112.4	112.5 111.4	112.5 111.4	114.5 111.6 110.5	113.1 112.1	115.1 114.1
Fixed 1987 weights		112.4 111.9	112.3 111.7	112.7 112.1	113.0 112.4	113.3	114.6 114.0	115.5 114.9	Implicit price deflator	109.4	107.1	108.1	106.5	106.2	105.2	106.1	107.2

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

				Se	asonally	/ adjust	ed	
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Government purchases: Current dollars	127.7	130.3	130.0	130.8	131.3	131.6	132.3	134.9
Fixed 1987 weights	106.3	105.5	105.4	105.7	105.7	104.4	104.0	105.8
	106.2	105.3	105.3	105.4	105.3	104.4	104.1	105.6
	106.0	105.1	105.1	105.2	105.1	104.2	103.8	105.4
Price indexes: Fixed 1987 weights	120.8	124.5	124.3	124.9	125.4	126.7	128.3	129.1
	120.2	123.7	123.5	124.1	124.6	126.1	127.3	128.0
	120.5	124.0	123.7	124.3	124.9	126.3	127.6	128.2
	120.1	123.5	123.4	123.7	124.2	126.1	127.2	127.4
Federal: Current dollarsQuantity indexes:	116.6	115.2	115.6	115.0	114.2	113.7	113.0	115.5
Fixed 1987 weights	97.0	92.7	93.1	92.4	91.2	88.8	87.0	89.5
	96.9	92.5	93.1	91.9	90.9	89.2	87.4	89.5
	96.5	92.1	92.7	91.6	90.5	88.9	87.1	89.1
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	121.5	126.1	125.7	126.5	127.0	128.5	130.9	131.6
	120.4	124.6	124.2	125.0	125.7	127.5	129.6	129.8
	120.9	125.1	124.7	125.5	126.2	128.0	130.0	130.2
	120.2	124.4	124.2	124.5	125.3	128.1	130.0	129.0
National defense: Current dollars	107.6	103.7	104.7	102.4	102.4	99.9	99.9	102.9
Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	89.5	83.4	84.5	82.5	81.7	78.2	77.4	79.9
	88.9	82.8	84.0	81.5	80.9	78.2	77.3	79.5
	88.8	82.7	83.9	81.5	80.8	78.1	77.3	79.5
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	122.0	126.6	126.0	127.0	127.9	129.0	131.1	132.3
	121.1	125.3	124.6	125.6	126.6	127.8	129.5	130.5
	121.1	125.3	124.6	125.6	126.7	127.9	129.5	130.4
	120.2	124.2	123.9	124.1	125.3	127.7	129.0	128.7
Nondefense: Current dollars	145.1	151.7	150.1	154.6	151.4	157.3	154.5	155.0
Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	120.8	121.7	120.1	123.5	121.0	121.8	117.0	119.8
	122.4	123.4	122.0	125.1	122.6	124.4	119.5	121.3
	121.0	122.0	120.5	123.6	121.2	122.9	118.0	119.9
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	119.8	124.3	124.7	125.1	124.4	127.2	130.5	129.6
	118.6	122.9	123.1	123.6	123.5	126.5	129.4	128.0
	120.0	124.4	124.6	125.1	125.0	127.9	130.9	129.5
	120.2	124.7	125.0	125.2	125.1	129.1	132.0	129.4
State and local: Current dollarsQuantity indexes:	136.2	141.9	141.2	143.0	144.5	145.4	147.3	149.9
Fixed 1987 weights Chain-type annual weights Benchmark-years weights	113.4	115.4	115.0	116.0	116.9	116.4	117.3	118.5
	113.3	115.1	114.7	115.7	116.5	116.2	116.9	118.1
	113.3	115.2	114.8	115.7	116.5	116.2	117.0	118.1
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights Implicit price deflator	120.3	123.4	123.2	123.7	124.1	125.3	126.2	127.1
	120.2	123.3	123.1	123.6	124.0	125.2	126.0	126.9
	120.2	123.2	123.0	123.6	124.0	125.2	126.0	126.9
	120.1	123.0	122.8	123.3	123.6	124.9	125.6	126.5

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, 1987, 1992, 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]

[Index numbers, 1987=100]								
				Se	asonally	adjust	ed	
	1992	1993		1993			1994	
			II	Ш	IV	ı	II	Ш
Gross domestic product: Current dollars	132.6	139.7	138.8	140.1	142.7	144.8	147.4	149.5
Quantity indexes: Fixed 1987 weights	109.7	113.1	112.5	113.2	114.9	115.9	117.1	118.2
	109.4	112.2	111.7	112.2	113.6	114.5	115.6	116.6
	109.3	112.0	111.5	112.0	113.4	114.3	115.5	116.5
Fixed 1987 weights	121.9	125.5	125.2	125.8	126.6	127.5	128.5	129.4
	121.2	124.6	124.3	124.9	125.6	126.6	127.5	128.3
	121.4	124.8	124.5	125.1	125.8	126.8	127.7	128.5
	120.9	123.5	123.4	123.7	124.1	125.0	125.9	126.5
Final sales of domestic product <sup>1</sup> :  Current dollars  Quantity indexes:	133.3	140.2	139.2	140.6	143.3	145.1	146.7	149.0
Fixed 1987 weights	110.3	113.4	112.7	113.6	115.4	116.0	116.4	117.6
Chain-type annual weights	109.9	112.4	111.8	112.4	114.0	114.6	115.0	116.1
Benchmark-years weights	109.8	112.3	111.8	112.4	113.9	114.5	114.9	116.0
Price indexes: Fixed 1987 weights	122.0	125.6	125.3	125.9	126.7	127.7	128.6	129.5
	121.4	124.7	124.4	125.0	125.8	126.8	127.6	128.5
	121.5	124.8	124.5	125.1	125.9	126.9	127.7	128.5
	120.9	123.6	123.5	123.8	124.2	125.1	126.0	126.7
Gross domestic purchases <sup>2</sup> : Current dollarsQuantity indexes:	129.2	136.8	135.9		139.9	142.2	144.9	147.4
Fixed 1987 weights	107.0	111.2	110.5	111.6	113.2	114.6	115.9	117.1
	106.6	110.0	109.4	110.2	111.5	112.8	114.0	115.1
	106.6	110.0	109.4	110.2	111.5	112.8	114.0	115.1
Fixed 1987 weights	121.8	125.2	124.9	125.4	126.2	127.0	128.0	129.1
	121.3	124.4	124.2	124.7	125.4	126.2	127.2	128.1
	121.3	124.5	124.2	124.7	125.5	126.3	127.2	128.2
	120.7	123.0	123.0	123.2	123.6	124.2	125.1	125.8
Final sales to domestic purchasers <sup>3</sup> : Current dollars	129.9	137.3	136.2	137.9	140.4	142.5	144.3	146.9
Fixed 1987 weights	107.6	111.5	110.7	111.9	113.6	114.7	115.2	116.6
	107.0	110.2	109.6	110.5	111.9	112.9	113.4	114.6
	107.1	110.3	109.6	110.5	111.9	112.9	113.5	114.7
Fixed 1987 weights	121.9	125.3	125.0	125.5	126.3	127.1	128.1	129.1
	121.4	124.6	124.3	124.8	125.6	126.4	127.3	128.3
	121.4	124.5	124.3	124.8	125.5	126.3	127.3	128.2
	120.7	123.1	123.1	123.2	123.6	124.3	125.2	126.0

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

			Seasonally adjusted					
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Gross national product: Current dollars	132.6	139.7	138.7	140.1	142.5	144.7	147.0	149.1
Fixed 1987 weights	109.7 109.4 109.3	112.2	111.7	112.3	114.8 113.5 113.3	114.4	115.4	117.9 116.4 116.2
Fixed 1987 weights	121.8 121.2 121.4 120.9	124.5 124.7	124.2 124.4	125.0	126.5 125.6 125.8 124.1			
Less: Exports of goods and services and receipts of factor income: Current dollars	164.5 146.7	169.6 151.7	170.1 151.5	167.6 150.2	175.2 157.3	174.8 156.6		191.8 170.3
Plus: Command-basis exports of goods and services and receipts of factor income:  Current dollars	175.3 147.5	181.1 154.5	181.4 153.7	178.3 153.4	186.9 160.4	185.3 161.2		199.3 173.2
Equals: Command-basis gross national product: Current dollars	132.6 109.8	139.7 113.4			142.5 115.2	144.7 116.3		149.1 118.2

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	124.6	128.1	127.8	128.3	129.1	129.8	130.7	131.8
Durable goods	111.6	113.9	113.7	114.3	115.0	115.5	116.7	117.8
Motor vehicles and parts Furniture and household equipment Other	112.4 103.9 124.2	116.1 104.3 126.8	115.5 104.1 127.2	117.0 104.2 126.8		118.3 105.3 128.3		121.5 106.1 131.2
Nondurable goods	123.0	125.0	125.0	124.7	125.4	125.4	125.9	127.3
Food	122.0 117.9 123.3 116.4 129.0	124.4 119.2 122.1 116.0 131.8	124.1 119.0 123.1 117.6 132.4	124.5 118.9 118.9 116.2 131.8	119.1 120.5 113.6	125.9 118.9 119.9 115.3 131.6		128.0 118.1 125.7 114.4 133.5
Services	128.7	133.5	133.1	133.9	135.0	135.9	137.0	138.0
Housing Household operation Electricity and gas Other household operation Transportation Medical care Other	124.1 112.3 111.0 113.4 129.3 139.1 131.0	127.9 115.4 114.4 116.3 134.3 147.3 134.5	127.6 115.1 114.3 115.7 134.1 146.6 134.2	128.3 116.2 115.6 116.7 134.5 148.2 134.6	115.6 117.7 134.5	130.5 117.0 115.0 118.8 135.1 151.2 136.5		132.3 117.7 115.1 120.0 137.3 154.1 138.6
Addenda: Price indexes for personal consumption expenditures: Chain-type annual weights Benchmark-years weights	124.1 124.1	127.5 127.5	127.3 127.3	127.7 127.7	128.6 128.6	129.2 129.2	130.2 130.2	131.2 131.2

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

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

[Index numbers, 1987=100]

•								
				Sea	asonally	adjust	ed	
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Fixed investment	112.0	114.4	114.1	114.7	115.3	116.2	117.0	118.1
Nonresidential	111.2	113.0	112.8	113.3	113.7	114.4	115.2	115.9
Structures	114.1	117.3	116.9	117.8	118.8	119.7	120.3	121.6
farmUtilitiesMining exploration, shafts, and	113.9 115.6	117.5 118.9	116.9 118.9	118.1 119.4	119.2 120.3	120.0 121.7	120.7 122.7	122.3 123.2
wellsOther structures	115.3 111.5	114.3 112.7	114.4 112.7	114.3 112.9	114.7 113.5	115.8 114.3	114.4 115.4	114.2 116.6
Producers' durable equipment	109.7	110.7	110.7	110.9	111.1	111.7	112.5	113.0
Information processing and related equipment	93.1	91.7	91.9	91.3	91.2	91.1	91.3	91.1
equipment <sup>1</sup>	59.9 107.9 120.3	51.5 109.7 122.3	52.3 109.5 122.2	50.3 109.7 122.6	48.5 110.3 123.2	47.7 110.6 123.8	47.4 111.0 124.6	46.2 111.3 125.5
equipmentOther	116.8 117.1	119.2 119.4	119.1 119.3	119.7 119.7	119.6 120.3	121.2 120.9	122.9 121.9	123.8 122.6
Residential	113.6	117.4	116.9	118.0	118.8	120.2	121.0	122.8
Structures Single family Multifamily Other structures	113.8 113.7 111.7 114.7	<b>117.7</b> 118.9 112.8 117.5	<b>117.2</b> 118.0 112.1 117.8	<b>118.3</b> 119.8 113.2 117.8	119.2 121.0 114.0 118.2	<b>120.5</b> 121.9 114.9 120.3	<b>121.3</b> 122.4 115.3 121.7	<b>123.1</b> 124.6 117.4 122.9
Producers' durable equipment	104.9	105.5	105.4	105.9	106.3	106.8	107.8	108.8
Addenda: Price indexes for fixed investment: Chain-type annual weights Benchmark-years weights		112.4 111.9			113.0 112.4			115.5 114.9

<sup>1.</sup> 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	113.9	115.3	115.3	115.4	115.6	116.7	117.5	118.2
Merchandise <sup>1</sup> Durable Nondurable Services <sup>1</sup>	109.7 109.4 110.2 124.0	110.6 109.8	110.9 109.3	110.0	110.7 110.4	111.2 112.9	114.0	111.9
Receipts of factor income 2	122.3	125.1	125.0	125.3	125.7	126.6	127.5	128.1
Imports of goods and services	115.4	115.2	115.9	115.0	115.3	114.5	116.2	118.4
Merchandise <sup>1</sup> Durable Nondurable Services <sup>1</sup>	112.0 112.8 110.7 130.9	114.0 107.9	113.7 110.1	111.7 114.2 107.3 130.0	115.1 105.6	115.4 103.2	107.7	116.9 112.9
Payments of factor income <sup>3</sup>	124.8	128.0	127.8	128.2	128.7	129.6	130.5	131.1
Addenda: Price indexes for exports of goods and services: Chain-type annual weights	112.8 112.0	113.4 112.6		113.4 112.7		114.2 113.5		
Price indexes for imports of goods and services: Chain-type annual weights Benchmark-years weights	113.6 112.5			112.5 111.4				

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

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

<sup>3.</sup> 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

				Se	asonally	/ adjust	ed	
	1992	1993		1993			1994	
			II	III	IV	I	II	III
Exports of merchandise	109.7	110.3	110.3	110.4	110.6	111.8	112.4	113.2
Foods, feeds, and beverages	114.5 108.3 116.5 104.6 105.9 122.8 59.1 116.4 112.3 118.0 114.5 120.9 113.0 113.0	116.2 109.2 125.3 102.0 105.7 126.0 50.6 117.9 113.2 119.7 114.9 123.8 113.8 113.8	113.1 110.4 127.6 102.6 105.6 125.5 51.3 117.8 113.3 119.7 115.0 123.9 113.9 113.9	118.2 109.1 126.3 101.3 105.6 126.4 49.4 118.1 113.0 119.6 114.7 123.9 113.7 113.7	120.2 108.4 125.1 100.9 105.8 127.6 47.7 118.6 113.3 119.8 114.7 124.2 114.1 114.1	125.8 110.6 127.8 102.8 105.8 127.9 46.9 118.8 120.0 115.2 124.2 114.8 114.8	122.4 113.6 128.7 106.7 105.9 128.6 46.5 118.8 114.0 120.0 115.4 124.1 115.4 115.3	115.8 118.5 130.5 113.1 106.0 130.3 45.2 119.0 114.3 119.8 115.2 123.9 116.3 116.3
Imports of merchandise	112.0	111.8	112.4	111.7	111.7	110.9	113.0	115.5
Foods, feeds, and beverages	108.1 113.8 114.4 113.1 100.8 107.5 122.9 61.8 116.5 114.8 116.9 120.1 114.6 114.6	108.0 113.1 114.6 111.5 91.1 107.8 126.1 54.3 118.4 116.9 119.7 118.8 120.7 115.9 115.9	106.6 113.5 114.7 112.2 99.1 107.5 55.3 117.8 116.5 119.6 118.7 120.9 115.6 115.6	109.0 112.7 114.1 111.2 88.4 108.3 126.4 53.2 119.3 117.1 120.0 119.2 121.0 116.3 116.3	110.8 112.7 114.7 110.5 81.9 108.6 51.1 120.1 119.0 120.3 119.5 121.3 117.3 117.2	110.8 113.5 115.9 110.9 73.6 108.3 127.9 50.0 119.9 119.5 120.1 119.6 120.7 117.1	115.0 114.9 117.4 112.2 85.2 109.0 128.6 49.6 120.8 120.3 120.4 119.7 121.3 118.1 118.1	125.6 117.0 118.8 115.2 94.3 110.0 130.3 48.8 122.1 121.0 120.9 119.9 122.1 119.4 119.4
Addenda: Exports of agricultural products <sup>1</sup> Exports of nonagricultural products Imports of nonpetroleum products	111.5 109.4 113.3	113.3 109.9 114.2	110.5 110.3 113.9	114.9 109.9 114.4	116.7 109.8 115.2	122.6 110.5 115.3	120.0 111.4 116.3	115.2 112.9 118.0

<sup>1.</sup> Includes parts of: exports of foods, feeds, and beverages, of nondurable industrial supplies and materials, and of nondurable consumer goods.

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

[Index numbers, 1987=100]

				Se	asonally	adjust	ed		
	1992	1993		1993			1994		
			II	Ш	IV	_	Ш	III	
Government purchases	120.8	124.5	124.3	124.9	125.4	126.7	128.3	129.1	
Federal	121.5	126.1	125.7	126.5	127.0	128.5	130.9	131.6	
National defense  Durable goods  Nondurable goods  Services  Compensation of employees  Military  Civilian  Other services  Structures	122.0 114.0 115.5 126.3 133.1 135.2 129.0 116.6 121.4	126.6 116.7 113.8 131.9 140.8 140.3 141.8 119.1 132.4	126.0 116.6 117.4 131.0 139.4 140.3 137.6 119.0 127.8	127.0 116.0 112.6 132.7 141.9 140.1 145.6 119.5 136.6	127.9 116.7 111.9 133.7 143.3 141.2 147.6 120.2 137.2	129.0 117.6 107.3 135.3 146.0 143.8 150.4 120.2 138.0	131.1 121.0 111.7 136.7 147.9 145.7 152.4 120.9 138.7	132.3 122.3 115.5 137.7 148.7 146.2 153.7 122.0 139.7	
Nondefense	119.8	124.3	<b>124.7</b> 94.0	<b>125.1</b>	124.4	<b>127.2</b> 92.4	<b>130.5</b> 92.4	129.6	
Durable goods Nondurable goods Commodity Credit Corporation inventory change Other nondurables Services Compensation of employees Other services Structures State and local	100.8 108.0 123.9 128.0 118.3 114.0	93.0 106.3 129.9 136.9 120.1 116.3 <b>123.4</b>	106.5 130.0 137.4 119.7 116.0	94.0 106.3 130.7 138.5 119.8 116.6	90.2 105.5 130.7 137.7 120.9 117.4 <b>124.1</b>	92.4  105.9 134.4 143.7 121.5 118.2 <b>125.3</b>	92.4 	93.5 	
Durable goods Nondurable goods Services Compensation of employees Other services Structures	113.1 115.4 123.4 128.3 69.5 110.2	115.1 116.2 126.9 133.0 60.4 112.8	115.1 117.8 126.4 132.5 60.5 112.7	115.5 115.6 127.4 133.6 59.4 112.9	115.3 114.5 128.0 134.4 57.3 113.9	116.4 116.2 129.1 135.8 56.4 115.0	117.2 116.4 130.1 136.9 55.6 115.6	117.9 117.9 130.8 137.9 52.8 117.1	
Addenda:  Price indexes for government purchases: Chain-type annual weights Benchmark-years weights Price indexes for Federal national	120.2 120.5	123.7 124.0	123.5 123.7	124.1 124.3	124.6 124.9	126.1 126.3	127.3 127.6	128.0 128.2	
defense purchases: Chain-type annual weights Benchmark-years weights Price indexes for Federal nondefense purchases:	121.1 121.1	125.3 125.3	124.6 124.6	125.6 125.6	126.6 126.7	127.8 127.9	129.5 129.5	130.5 130.4	
Chain-type annual weights  Benchmark-years weights  Price indexes for State and local ourchases:	118.6 120.0	122.9 124.4	123.1 124.6	123.6 125.1	123.5 125.0	126.5 127.9	129.4 130.9	128.0 129.5	
Chain-type annual weights Benchmark-years weights	120.2 120.2	123.3 123.2	123.1 123.0	123.6 123.6	124.0 124.0	125.2 125.2	126.0 126.0	126.9 126.9	

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

				Se	asonally	/ adjust	ed	
	1992	1993		1993			1994	
			II	III	IV	I	II	III
National defense purchases	122.0	126.6	126.0	127.0	127.9	129.0	131.1	132.3
Durable goods	114.0	116.7	116.6	116.0	116.7	117.6	121.0	122.3
Military equipment Aircraft Missiles Ships Vehicles Electronic equipment Other Other durable goods	114.8 118.5 101.2 118.4 120.9 109.2 116.6 105.8	117.9 124.6 95.7 121.7 128.2 109.5 118.4 105.1	117.7 124.3 94.4 121.3 131.0 109.4 118.4 105.2	117.1 125.3 89.6 122.6 127.1 109.3 118.2 104.8	117.9 124.3 95.8 122.1 128.5 109.7 118.7 105.1	118.8 125.7 95.3 123.3 129.9 110.1 118.9 105.4	122.5 133.3 94.6 124.5 131.5 111.1 120.0 105.5	124.0 137.2 92.7 125.8 131.1 110.2 120.6 105.3
Nondurable goods	115.5	113.8	117.4	112.6	111.9	107.3	111.7	115.5
Petroleum products Ammunition Other nondurable goods	119.7 108.1 117.9	113.1 112.6 115.6	120.3 115.2 116.5	111.6 111.4 114.7	109.5 112.1 114.2	95.1 113.0 115.0	107.1 113.7 114.7	116.5 115.4 114.6
Services	126.3	131.9	131.0	132.7	133.7	135.3	136.7	137.7
Compensation of employees	133.1 135.2 129.0 116.6	140.8 140.3 141.8 119.1	139.4 140.3 137.6 119.0	141.9 140.1 145.6 119.5	143.3 141.2 147.6 120.2	146.0 143.8 150.4 120.2	147.9 145.7 152.4 120.9	148.7 146.2 153.7 122.0
development Installation support I Weapons support Personnel support Transportation of material Travel of persons Other	112.4 114.5 120.4 133.0 104.8 110.5	113.5 117.3 124.4 136.6 105.3 116.5	113.5 117.4 124.0 136.1 104.9 115.7	113.4 118.3 124.4 137.2 105.8 116.4	114.2 118.1 126.1 138.0 105.4 118.5	113.3 118.6 127.7 137.4 105.3 119.5	113.9 119.6 126.8 140.6 105.5 117.8	114.3 121.4 127.1 143.3 105.1 118.1
Structures	121.4	132.4	127.8	136.6	137.2	138.0	138.7	139.7
Military facilities Other	117.5 128.7	131.0 135.1	123.9 135.0	137.4 135.1	137.8 136.2	138.3 137.3	139.3 137.7	139.6 139.8
Addenda:  Price indexes for national defense purchases:  Chain-type annual weights	121.1 121.1	125.3 125.3	124.6 124.6	125.6 125.6	126.6 126.7	127.8 127.9	129.5 129.5	130.5 130.4

<sup>1.</sup> Includes utilities, communications, rental payments, maintenance and repair, and payments to contractors to operate installations.

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	120.9	123.5	123.4	123.7	124.1	125.0	125.9	126.5
Plus: Receipts of factor income from the rest of the world <sup>1</sup>	122.3	125.1	125.0	125.3	125.7	126.6	127.5	128.1
Less: Payments of factor income to the rest of the world <sup>2</sup>	124.5	127.8	127.5	128.1	128.3	129.1	129.7	130.2
Equals: Gross national product	120.9	123.5	123.3	123.7	124.1	124.9	125.8	126.4
Less: Consumption of fixed capital	110.5	111.6	111.5	111.9	112.0	113.3	113.6	114.1
Equals: Net national product	122.3	125.1	124.9	125.3	125.7	126.6	127.4	128.1
Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises Statistical discrepancy	130.3 119.5							
Equals: National income	121.5	124.6	124.4	124.6	125.2	126.1	126.9	127.3
Addenda: Net domestic product Domestic income	122.3 121.5	125.1 124.7	125.0 124.5	125.3 124.7	125.7 125.3	126.6 126.1	127.5 126.9	128.1 127.3

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

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

[Index numbers, 1987=100]

				Se	asonally	/ adjust	ed	
	1992	1993		1993			1994	
			II	III	IV	_	Ш	III
Gross domestic product	120.9	123.5	123.4	123.7	124.1	125.0	125.9	126.5
Business	119.5	121.8	121.7	122.0	122.3	123.0	123.9	124.5
Nonfarm  Nonfarm less housing  Housing  Farm  Statistical discrepancy	119.8 119.2 125.5 105.9 119.5	121.5 127.2	126.6 107.0	122.2 121.7 127.4 102.1 122.0	121.9 128.2 110.1	123.2 122.2 132.3 114.9 123.0	123.7 130.2 101.9	124.3 131.2 97.3
Households and institutions	128.8	132.3	131.8	132.2	133.4	134.3	134.9	136.2
Private households Nonprofit institutions	115.7 129.4					121.8 134.9		
General government	129.1	134.7	134.2	135.6	136.3	138.4	140.1	140.7
FederalState and local	131.3 128.2	139.4 132.9						
Addendum: Gross domestic business product less housing	118.9	121.3						

## 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 product 1	1.150	1.159	1.159	1.157	1.159	1.165	1.170	1.175
Consumption of fixed capital	.126	.123	.123	.124	.120	.125	.121	.122
Net domestic product	1.024	1.036	1.037	1.033	1.038	1.040	1.049	1.053
Indirect business tax and nontax liability plus business transfer payments less subsidies	.117 .907 .767	.117 .919 .768	.117 .920 .770			.117 .923 .763	.117 .932 .766	.118 .935 .768
consumption adjustments Profits tax liability Profits after tax with inventory valuation and capital	.099 .031	.112 .040	.111 .040	.113 .038	.123 .043	.122 .043	.127 .046	.128 .047
consumption adjustments Net interest	.067 .041	.073 .039	.071 .039	.075 .039	.080 .038	.078 .038	.081 .039	.081 .039

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

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

<sup>3.</sup> Includes compensation of foreign personnel, consulting, training, and education.

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

# 8. Supplementary Tables\_

# Table 8.1.—Percent Change From Preceding Period in Selected Series [Percent]

								[Per	cent]								
			Sea	asonally	adjuste	d at an	nual rat	tes				Sea	asonally	adjuste	d at an	nual rat	es
	1992	1993		1993			1994			1992	1993		1993			1994	
			II	III	IV	I	II	III				II	III	IV	I	II	Ш
Gross domestic product:  Current dollars  Quantity indexes:  Fixed 1987 weights  Chain-type annual weights	5.2 2.3 2.1	3.1 2.5	4.2 2.4 1.8	3.8 2.7 1.8	7.7 6.3 5.1	6.1 3.3 3.2	7.2 4.1 4.2	5.9 3.9 3.5	Structures:  Current dollars	-6.5 -6.7 -6.7	1.3 -1.4 -1.4	4.0	.5 .6	6.6 3.3 3.2	-8.8 -11.8 -11.6	22.8 20.6 20.4	7.7 2.9 3.1
Benchmark-years weights . Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights .	3.2 3.0 3.1	3.0	1.8 2.4 2.3 2.3	1.8 2.0 1.9 1.9	5.1 2.4 2.5 2.4	3.2 3.1 3.2 3.2	4.1 2.9 2.7 2.7	3.5 2.8 2.6 2.6	Benchmark-years weights . Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights .	-6.7 .3 .3	-1.4 2.8 2.8 2.8	.2 3.8 3.8 3.8	3.2	3.2 3.3 3.3 3.3	-11.7 3.2 3.2 3.2	20.4 2.0 2.1 2.1	3.0 4.4 4.3 4.3
Personal consumption expenditures: Current dollars Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	6.0 2.8 2.6 2.7		5.0 2.6 2.3 2.3	5.1 3.9 3.5 3.5	6.4 4.0 3.4 3.4	6.0 4.7 4.3 4.3	4.6 1.3 1.4 1.4	6.4 3.3 3.1 3.1	Producers' durable equipment: Current dollars Quantity indexes: Fixed 1987 weights Chain-type annual weights	4.3 6.0 4.0	13.4 18.0 13.7	18.1 21.6 18.1	8.4	23.9 27.5 24.7	21.2 18.6 19.3	7.3 6.1 4.8	19.6 18.0 18.4
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	3.5 3.4 3.5		2.6 2.5 2.5	1.4 1.5 1.5	2.8 2.8 2.8	1.9 2.0 2.0	2.8 2.9 2.9	3.5 3.3 3.3	Benchmark-years weights . Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights .	4.8 1.3 .4 .7	13.7 .9 2 2	17.7 1.4 .3 .1	8.5 .5 7 7	24.2 .7 5 5	19.4 2.1 1.7 1.8	4.9 3.1 2.6 2.7	18.4 1.8 1.1 1.2
Durable goods: Current dollarsQuantity indexes:	7.9	9.2	12.2	8.3	16.3	9.9	2.9	8.5	Residential: Current dollars	18.0	12.0	-3.4	13.0	32.0	15.7	9.7	-1.0
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Price indexes:	6.4 5.9 6.1	7.4 7.4	9.8 9.3 9.2	7.7 6.3 6.3	15.5 13.9 13.9	8.8 8.2 8.1	.4 6 4	6.3 5.1 5.1	Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights Price indexes:	16.2 16.2 16.2	8.2 8.3 8.3	-7.6 -7.6 -7.6	9.2	28.2 28.4 28.4	10.0 10.2 10.1	7.0 6.9 6.9	-6.5 -6.6 -6.6
Fixed 1987 weights Chain-type annual weights Benchmark-years weights Nondurable goods:	2.3 1.9 2.0	1.7	3.3 2.7 2.7	2.2 1.9 1.9	2.5 2.3 2.2	1.9 1.5 1.5	4.1 3.7 3.7	3.9 3.5 3.6	Fixed 1987 weights Chain-type annual weights Benchmark-years weights	1.5 1.6 1.5	3.3 3.4 3.4	4.2 4.5 4.5	3.5	2.9 2.8 2.8	4.5 4.8 4.8	2.7 2.8 2.8	6.1 5.9 5.9
Current dollars  Quantity indexes: Fixed 1987 weights  Chain-type annual weights	3.0 1.0 .9	2.0	2.2 1.6 1.4	1.8 2.8 2.6	4.6 2.4 2.2	4.1 3.8 3.8	3.7 2.2 2.2	7.3 3.3 3.3	Exports of goods and services: Current dollarsQuantity indexes: Fixed 1987 weights	6.2 6.7	3.3 4.1	8.5 7.7	-3.2	20.7	-3.5 -3.5	19.2 16.6	12.3
Benchmark-years weights Price indexes: Fixed 1987 weights Chain-type annual weights	.9 2.1 2.1		1.4 .9 .8		2.2 2.2 2.3	3.8 .2 .3		3.3 4.4 4.0	Chain-type annual weights  Benchmark-years weights  Price indexes:  Fixed 1987 weights	5.5 6.0 1.2	2.7 2.7 1.2	7.1 6.9 2.1	.4	20.5 20.3 .6 .2 .1	-5.6 -5.5	16.5 16.5 2.7	9.8 9.9 2.5 2.5
Benchmark-years weights Services:	2.1	1.5	.7	9	2.2	.3	1.5	4.0	Chain-type annual weightsBenchmark-years weights	.6 .8	.5 .5	1.5 1.4		.1	2.6 2.8	2.3 2.4	2.6
Current dollars  Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	7.3 3.0 2.8 2.9	2.8 2.6	5.1 1.4 1.3 1.3	3.6 3.4 3.4	5.3 2.0 1.9 1.9	6.1 4.0 3.8 3.8	5.5 1.1 1.4 1.3	5.5 2.4 2.5 2.5	Current dollars  Quantity indexes: Fixed 1987 weights  Chain-type annual weights  Benchmark-years weights	7.7 8.7 7.0 7.8	8.4 10.7 8.9 8.9	16.5 14.9 12.8 12.6	7.4 4.9	14.7 16.0 14.9 14.5	5.2 9.5 8.3 8.3	23.5 18.9 17.4 17.5	20.1 15.6 13.1 13.2
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	4.7 4.6 4.6	3.7	3.4 3.5 3.5	2.6 2.7 2.7	3.2 3.2 3.2	2.9 2.9 2.9	3.3 3.4 3.4	2.9 2.9 2.9	Price indexes:  Fixed 1987 weights  Chain-type annual weights  Benchmark-years weights	1.5 .8 1.1	2	4.2 3.2 3.1	-2.8 -3.3	1.1 3 2	-2.7 -3.0 -2.9	5.8 5.5 5.6	8.0 7.1 7.4
Gross private domestic investment: Current dollars	5.8 6.1 5.2	13.0 10.4	7.7 8.9 5.8	5.9 8.0 4.3	19.6 21.3 18.0	20.5 18.0 17.3	25.2 27.8	7.9 6.7 5.3	Government purchases: Current dollars Quantity indexes: Fixed 1987 weights Chain-type annual weights	2.5 8 7	2.1 8 9	3.3 1.2 .7	1.1	1.5 1 2	.9 -4.9 -3.4	2.4 -1.2 -1.4	7.8 7.1 6.2
Benchmark-years weights Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	5.6	10.4	5.6	4.2	17.9	17.4		5.5	Benchmark-years weights	7 3.5 3.3 3.4	9 3.1 2.9 2.9	.7 2.4 2.4 2.4		2 2 1.6 1.7 1.8	-3.4 4.3 4.6 4.6	-1.4 4.9 4.1 4.1	6.2 2.5 2.1 2.0
Fixed investment: Current dollars	5.2		8.6	8.3	22.5	13.3			Federal: Current dollars	.7	-1.2	-1.5		-2.6	-1.8	-2.4	8.8
Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	5.5 4.5 5.0	8.8	8.9 6.4 6.3	11.4 7.0 7.0	23.0 21.2 20.9	10.6 10.2 10.3	8.1	8.6 7.9 8.0	Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	-3.4 -3.2 -3.3	-4.5 -4.6 -4.6	-3.6 -4.1 -4.2	-3.0 -4.7	-5.0 -4.6 -4.8	-10.3 -7.0 -7.0	-7.9 -8.0	12.5 10.0 10.0
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	1.1 .7 .9		2.9 2.3 2.1	2.2 1.3 1.3	2.0 1.2 1.2	3.1 2.9 2.9	2.7 2.6 2.6	3.8 3.1 3.2	Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	4.3 4.0 4.2	3.7 3.5 3.5	2.3 2.3 2.3	2.6 2.7	1.7 2.2 2.3	4.8 5.8 5.7	7.7 6.6 6.5	2.1 .7 .7
Nonresidential: Current dollars Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	.8 2.0 .5 1.2	12.5 9.0	13.9 15.6 12.7 12.4	6.1	18.8 21.1 18.4 18.0	12.4 10.9 10.2 10.4	9.2 8.6	16.3 14.4 14.2 14.3	National defense: Current dollars Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	-2.7 -7.1 -6.9 -7.0	-3.7 -6.8 -6.9 -6.9	-1.6 -2.2 -3.0 -3.1	-9.2 -11.1	.1 -3.6 -3.0 -3.4	-9.5 -16.0 -12.6 -12.6	0 -4.1 -4.4 -4.3	12.6 13.6 11.9 11.7
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-vears weights	.9 .3 .6	1.6 .6 .6	2.3 1.3 1.2	1.5 .4 .4	1.6 .6 .6	2.5 2.1 2.2	2.7 2.5 2.5	2.7 2.0 2.1	Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-vears weights	4.7 4.6 4.7	3.7 3.4 3.4	1.3 1.0 1.0	3.2	2.9 3.4 3.5	3.5 4.0 3.9	6.7 5.3 5.1	3.7 3.0 2.9

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

[Percent]

	[Pe	rcent]						
			Sea	sonally	adjuste	ed at ar	nual ra	tes
	1992	1993		1993			1994	
			Ш	Ш	IV	I	Ш	III
Nondefense: Current dollars	9.5	4.5	-1.4	12.6	-7.8	16.3	-6.9	1.1
Quantity indexes:  Fixed 1987 weights Chain-type annual weights Benchmark-years weights	6.6 6.6 6.5	.7 .8 .8	-6.2 -6.6 -6.5	12.0 10.6 10.8	-7.8 -7.9 -7.7	2.9 6.0 5.8	-15.0 -14.8 -14.8	9.5 6.2 6.6
Price indexes: Fixed 1987 weights Chain-type annual weights	2.8 2.7 2.8	3.7 3.7	5.7 5.4 5.3	1.1 1.7	-2.0 2	9.1 9.8 9.9	10.9 9.4	-2.7 -4.1 -4.1
Benchmark-years weights  State and local:	2.0	3.7	5.5	1.5	4	9.9	9.5	-4.1
Current dollarsQuantity indexes:	3.8	4.2	6.5	5.2	4.1	2.6	5.4	7.2
Fixed 1987 weights	1.1 1.0 1.0	1.7 1.6 1.6	4.4 4.0 4.0	3.7 3.5 3.5	2.9 2.7 2.7	-1.4 -1.1 -1.2	2.9 2.7 2.7	4.2 4.1 4.1
Fixed 1987 weights Chain-type annual weights Benchmark-years weights	2.8 2.8 2.8	2.5 2.5 2.5	2.4 2.5 2.5	1.8 1.7 1.7	1.5 1.4 1.4	3.9 3.8 3.8	2.7 2.6 2.6	2.9 2.9 2.9
Addenda: Final sales of domestic product: Current dollars	5.1	5.2	4.3	4.1	8.0	5.1	4.5	6.3
Fixed 1987 weights Chain-type annual weights Benchmark-years weights	2.2 2.0 2.1	2.9 2.3 2.3	2.4 1.9 1.9	3.2 2.1 2.2	6.4 5.5 5.4	2.2 2.2 2.2	1.5 1.5 1.5	4.2 3.8 3.8
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	3.2 3.0 3.1	3.0 2.8 2.8	2.4 2.3 2.3	2.0 2.0 1.9	2.5 2.5 2.4	3.2 3.2 3.2	2.9 2.7 2.7	2.8 2.6 2.6
Gross domestic purchases: Current dollars	5.3	5.9	5.0	4.7	7.2	7.0	7.8	6.9
Quantity indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	2.5 2.3 2.4	3.9 3.2 3.2	3.3 2.5 2.4	4.0 3.0 3.0	5.8 4.7 4.7	5.0 4.7 4.7	4.6 4.4 4.4	4.5 3.9 4.0
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	3.2 3.0 3.1	2.8 2.6 2.6	2.6 2.5 2.5	1.6 1.6 1.6	2.4 2.4 2.4	2.5 2.5 2.6	3.2 3.1 3.1	3.4 3.1 3.1
Final sales to domestic purchasers: Current dollars	5.2	5.7	5.2	5.0	7.5	6.1	5.1	7.3
Fixed 1987 weights Chain-type annual weights Benchmark-years weights	2.5 2.2 2.3	3.7 3.0 3.0	3.3 2.6 2.5	4.5 3.4 3.4	6.0 5.1 5.0	3.9 3.7 3.7	2.0 1.8 1.8	4.8 4.3 4.3
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	3.2 3.0 3.1	2.8 2.6 2.6	2.6 2.5 2.5	1.6 1.6 1.6	2.4 2.4 2.4	2.5 2.5 2.6	3.2 3.1 3.1	3.3 3.1 3.1
Gross national product: Current dollars	5.0	5.3	3.9	4.2	7.0	6.2	6.8	5.7
Fixed 1987 weights Chain-type annual weights Benchmark-years weights	2.1 1.9 2.0	3.1 2.5 2.5	2.1 1.5 1.5	3.0 2.1 2.1	5.6 4.4 4.4	3.4 3.2 3.2	3.7 3.7 3.7	3.7 3.3 3.3
Price indexes: Fixed 1987 weights Chain-type annual weights Benchmark-years weights	3.2 3.0 3.1	3.0 2.8 2.8	2.4 2.3 2.3	2.0 1.9 1.9	2.4 2.5 2.4	3.1 3.2 3.2	2.9 2.7 2.7	2.8 2.6 2.6
Command-basis gross national product: Quantity index, fixed 1987 weights	2.2	3.3	2.0	3.4	5.6	4.0	3.5	3.2
Disposable personal income: Current dollars	6.4 3.1	4.1 1.5	7.2 4.7	1.9 .8	6.7 4.3	4.7 3.4	6.8 3.5	6.1 2.9

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, 1987, 1992, and the most recent year.

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

[Dollars]

			[DOIIa	15]										
		Seasonally adjusted at annual rates 1992 1993 1993 1994												
	1992	1993		1993			1994							
			II	III	IV	I	II	III						
Current dollars:														
Gross domestic product	23,564	24,559	24,427	24,588	24,978	25,288	25,669	25,968						
product Personal income . Disposable personal	23,586 20,175	24,576 20,810	24,440 20,800	24,621 20,863	24,970 21,147	25,285 21,369	25,640 21,717	25,927 21,927						
income Personal consumption	17,636	18,153	18,141	18,174	18,421	18,588	18,853	19,081						
expenditures Durable goods Nondurable	16,192 1,928	16,951 2,083	16,856 2,059	17,017 2,095	17,233 2,170	17,443 2,216	17,598 2,227	17,824 2,267						
goods Services	5,071 9,193	5,185 9,683	5,173 9,623	5,182 9,740	5,225 9,838	5,265 9,961	5,300 10,071	5,380 10,178						
Constant (1987) dollars:														
Gross domestic product	19,490	19,879	19,795	19,871	20,119	20,235	20,390	20,529						
product Disposable personal	19,515	19,901	19,814	19,906	20,122	20,242	20,376	20,506						
income Personal	14,279	14,341	14,351	14,338	14,451	14,535	14,625	14,691						
consumption expenditures Durable goods Nondurable	13,110 1,772	13,391 1,897	13,335 1,876	13,425 1,905	13,519 1,970	13,640 2,007	13,651 2,004	13,723 2,029						
goods Services	4,140 7,199	4,176 7,318	4,165 7,294	4,182 7,338	4,195 7,354	4,224 7,409	4,237 7,410	4,260 7,435						
Population (mid- period, thousands)	255,484	258,290	257,908	258,635	259,356	259,997	260,627	261,341						

## Table 8.3.—Auto Output

[Billions of dollars]

			Sea	asonally	adjuste	ed at ar	nual ra	tes
	1992	1993		1993			1994	
			II	III	IV	ı	II	III
Auto output	133.3	144.5	146.8	137.5	151.0	162.7	153.4	158.3
Final sales	133.2	142.2	144.5	142.0	148.3	164.2	150.1	154.2
Personal consumption expenditures	125.9						149.6	
New autos	87.4				101.3		99.1	94.4
Net purchases of used autos	38.6							
Producers' durable equipment	38.0	38.8	41.3	38.8	38.8	43.4	43.9	46.4
New autos	62.7			69.0			79.1	86.0
Net purchases of used autos	-24.7	-29.6	-32.1	-30.2	-29.5	-35.4	-35.2	-39.6
Net exports	-32.8	-37.7	-36.6	-39.2	-38.6	-35.8	-45.4	-46.8
Exports	14.3	14.5	14.9	13.7	15.2	16.7	16.3	18.4
Imports	47.0	52.2	51.6	52.8	53.8	52.5	61.7	65.2
Government purchases	2.0	1.9	2.0	1.9	1.7	2.0	2.1	2.1
Change in business inventories of								
new and used autos	.1	2.2	2.3	-4.5	2.7	-1.5	3.3	4.1
New	.5	1.9		-4.5	1.6	.3		4.4
Used	4	.3	2.4	1	1.1	-1.8	2.0	3
		"			'''			
Addenda:  Domestic output of new autos <sup>1</sup> Sales of imported new autos <sup>2</sup>	104.8 60.0		112.8 66.1	103.9 68.7		133.7 66.2	126.6 69.3	133.5 67.9

- 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]

Truck output 1	83.4	101.9	99.0	99.5	110.8	124.3	123.0	128.0
Final sales	82.2	102.1	102.5	101.4	112.5	122.7	120.2	122.0
Personal consumption expenditures	43.4	52.3	52.0	50.8	57.3	58.9	56.9	54.5
Producers' durable equipment	37.0	48.7	46.7	48.8	54.7	62.2	58.4	63.7
Net exports	-5.1	-5.5	-6.2	-5.0	-3.8	-4.1	-4.6	-5.6
Exports	5.6	5.8	5.8	5.3	6.8	6.7	6.7	6.4
Imports	10.7	11.2	12.0	10.3	10.6	10.7	11.3	12.0
Government purchases	6.9	6.5	10.0	6.8	4.4	5.6	9.6	9.4
Change in business inventories	1.2	2	-3.5	-1.9	-1.7	1.6	2.8	6.1

<sup>1.</sup> Includes new trucks only.

Table 8.4.—Auto Output in Constant Dollars

[Billions of 1987 dollars]

			Sea	asonally	adjuste	ed at ar	nual ra	tes
	1992	1993		1993			1994	
			Ш	Ш	IV	_	Ш	III
Auto output	117.6	121.6	123.4	114.2	127.2	135.1	125.9	128.4
Final sales Personal consumption expenditures New autos Net purchases of used autos Producers' durable equipment New autos Net purchases of used autos Net exports Exports Imports Government purchases	117.2 112.8 77.9 34.9 33.2 55.9 -22.8 -30.5 12.7 43.3 1.8	119.3 81.3 38.0 34.4 59.5 -25.1 -34.2 12.8	38.7 36.6 64.2 -27.6 -33.4 13.1	119.1 80.0 39.1 34.6 59.8 –25.2	58.7 -24.2	129.8 85.6 44.2 38.0 67.4 -29.4 -31.0 14.6	123.8 83.8 40.0 38.1 66.9 -28.8 -39.1 14.0	125.8 123.7 78.9 44.8 40.4 71.9 -31.5 -40.0 15.8 55.8 1.7
Change in business inventories of new and used autos  New	. <b>4</b> .7 3	. <b>5</b> .6 –.1	- <b>.3</b> -2.0 1.7	- <b>5.2</b> -4.8 4	<b>2.0</b> 1.5 .5		<b>1.4</b> 3 1.6	<b>2.6</b> 2.83
Addenda:  Domestic output of new autos <sup>1</sup> Sales of imported new autos <sup>2</sup>	93.7 53.6	97.6 56.7	97.4 57.8	89.6 59.6	104.3 56.2	112.9 56.6	106.4 58.7	111.6 56.8

- 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 8.6.—Truck Output in Constant Dollars

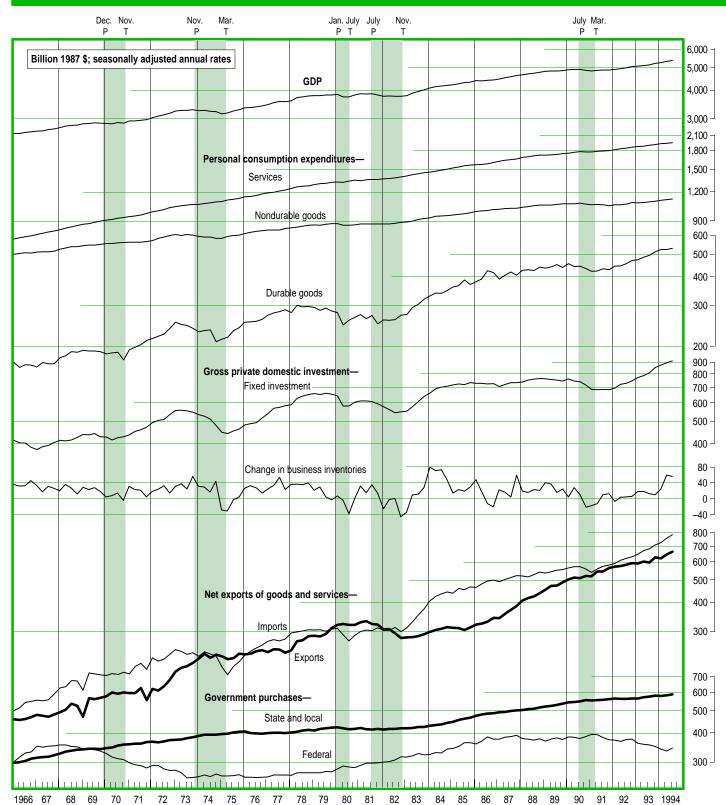
[Billions of 1987 dollars]

Truck output 1	71.4	83.9	81.8	81.2	90.4	100.5	97.5	100.0
Final sales	70.4	84.1	84.7	82.6	91.8	99.2	95.4	95.4
Personal consumption expenditures	37.2	43.3	43.3	41.6	46.7	47.7	45.3	42.6
Producers' durable equipment	31.7	39.9	38.3	39.6	44.6	50.2	46.2	49.8
Net exports	-4.4	-4.5	-5.1	-4.1	-3.1	-3.3	-3.6	-4.4
Exports	4.8	4.7	4.7	4.3	5.5	5.4	5.3	5.0
Imports	9.1	9.2	9.8	8.4	8.6	8.7	8.9	9.4
Government purchases	5.9	5.4	8.2	5.5	3.6	4.5	7.6	7.3
Change in business inventories	1.0	1	-2.9	-1.5	-1.4	1.3	2.1	4.6

<sup>1.</sup> Includes new trucks only.

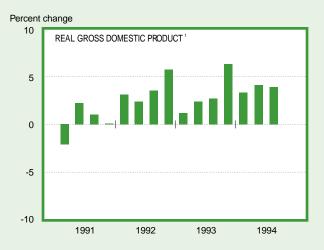
NIPA Charts

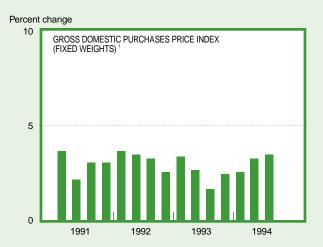
# **REAL GDP AND ITS COMPONENTS: TRENDS AND CYCLES**

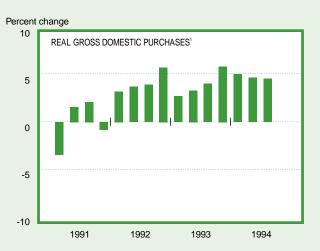


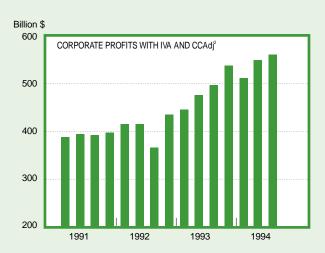


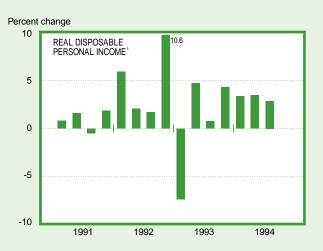
# SELECTED SERIES: RECENT QUARTERS













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

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

# **Reconciliation and Other Special Tables**

Table 1.—Reconciliation of Changes in BEA-Derived Compensation Per Hour with BLS Average Hourly Earnings [Percent change from preceding period]

				Seaso	nally adju rat		innual
	1991	1992	1993	1993		1994	
				IV	I	II	<i>P</i>
BEA-derived compensation per hour of all persons in the nonfarm business sector (less housing)	5.1	5.1	3.3	2.4	6.1	.7	3.0
Less: Contribution of supplements to wages and salaries per hour	.5	.5	.2	.5	0	1	.1
Plus: Contribution of wages and salaries per hour of persons in housing and in nonprofit institutions	0	.1	1	.1	2	.1	.1
Less: Contribution of wages and salaries per hour of persons in government enterprises, unpaid family workers, and self-employed	.2	0	0	1	.5	0	2
Equals: BEA-derived wages and salaries per hour of all employees in the private nonfarm sector	4.4	4.7	3.0	2.1	5.4	.9	3.2
Less: Contribution of wages and salaries per hour of nonproduction workers in manufacturing	1	0	0	4	5	4	2
Less: Other differences <sup>1</sup>	1.6	2.3	.4	7	2.8	5	1.2
Equals: BLS average hourly earnings of production or nonsupervisory workers on private nonfarm payrolls	2.9	2.4	2.5	3.2	3.1	1.8	2.2
Addendum:  BLS estimates of compensation per hour in the nonfarm business sector <sup>2</sup>	5.1	5.1	3.3	2.4	6.1	.7	2.9

P Preliminary.
 1. Includes BEA use of non-BLS data and differences in detailed weighing. Annual estimates also include differences in BEA and BLS benchmarking procedures; quarterly estimates also include differences in seasonal adjustment procedures.
 2. These estimates differ from the BEA-derived estimates (first line) because the BLS estimates

include compensation and hours of tenant-occupied housing. BEA estimates for the third quarter of 1994 also include statistical revisions not yet incorporated in the BLS estimates.

NOTE.—The table incorporates small revisions in BLS data released November 9, 1994. BLS Bureau of Labor Statistics

# **Errata**

# **National Income and Product Accounts**

Tables 7.1 and 8.1 in the "Quantity and Price Indexes, 1988–94" section of the August 1994 Survey of Current Business contained several errors. The error in line 138 for 1990 in NIPA table 8.1 also appeared in that table in the July 1994 Survey. The corrected estimates are provided below.

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

	Line		19	88			19	89			199	90	
	LINE	I	=	III	IV	_	=	III	IV	_	=	III	IV
Gross private domestic investment: Quantity indexes: Chain-type annual weights	43	100.7	102.6	104.0	104.5	107.2	106.1	102.6	102.8	102.7	103.9	100.7	93.0

## Table 8.1—Percent Change From Preceding Period in Selected Series

	Line		19	88			19	89			19	90		1991
	Line	- 1	II	III	IV	I	II	III	IV	I	II	III	IV	ı
Gross private domestic investment: Quantity indexes: Chain-type annual weights	38	-17.3	7.5	5.6	2.3	10.3	-4.0	-12.2	0.5	-0.2	4.5	-11.8	-27.1	-15.2

Table 8.1—Percent Change From Preceding Period in Selected Series

	Line	1988	1989	1990
Gross domestic purchases: Price indexes: Fixed 1987 weights	138	4.0	4.5	4.7

# **Selected Monthly Estimates**

#### Table 1.—Personal Income

[Billions of dollars; monthly estimates seasonally adjusted at annual rates]

	1992	1993		19	93						199	94				
	1992	1993	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>r</sup>	Aug. r	Sept. r	Oct. p
Personal income	5,154.3	5,375.1	5,416.3	5,454.4	5,482.8	5,516.7	5,483.9	5,576.0	5,607.5	5,639.4	5,665.4	5,674.9	5,702.9	5,727.0	5,761.1	5,841.6
Wage and salary disbursements Private industries Commodity-producing industries Manufacturing Distributive industries Service idustries Government	2,974.8 2,407.5 757.6 578.3 682.3 967.6 567.3	3,080.8 2,497.0 773.8 588.4 701.9 1,021.4 583.8	3,119.6 2,531.3 784.7 597.8 706.3 1,040.4 588.3	3,138.5 2,551.3 787.3 598.7 712.7 1,051.3 587.2	3,146.0 2,558.6 790.8 601.2 711.0 1,056.8 587.4	3,160.8 2,572.1 794.9 605.1 714.2 1,063.0 588.6	3,198.2 2,604.0 797.6 605.8 727.4 1,079.0 594.2	3,206.7 2,610.5 802.6 610.6 727.1 1,080.8 596.2	3,220.1 2,623.2 805.4 611.9 731.4 1,086.3 596.9	3,241.4 2,642.0 809.3 611.9 737.8 1,094.9 599.4	3,263.4 2,659.1 810.7 612.0 743.6 1,104.7 604.3	3,267.0 2,665.1 814.9 614.4 746.0 1,104.1 601.9	3,282.6 2,679.6 817.9 615.4 751.0 1,110.7 603.0	3,289.0 2,684.7 820.8 618.4 752.3 1,111.6 604.3	3,308.8 2,703.2 826.2 620.7 757.8 1,119.2 605.6	3,356.5 2,748.8 838.2 631.6 770.2 1,140.4 607.8
Other labor income	328.7	355.3	361.4	364.0	366.7	369.6	371.4	373.2	375.0	376.7	378.4	380.1	381.9	383.7	385.5	387.4
Proprietors' income with IVA and CCAdj	418.7 44.4 374.4	441.6 37.3 404.3	427.8 21.8 406.0	445.9 31.4 414.5	466.3 48.0 418.3	476.5 53.9 422.7	461.3 43.1 418.2	473.8 49.5 424.3	477.9 48.8 429.0	477.1 46.9 430.2	471.0 38.8 432.1	465.8 32.3 433.5	464.2 29.9 434.3	467.1 29.5 437.6	469.2 29.9 439.4	489.2 46.4 442.8
Rental income of persons with CCAdj	-5.5	24.1	29.3	29.6	30.1	31.4	-27.0	34.6	38.4	35.0	34.6	32.6	32.7	32.9	33.1	32.2
Personal dividend income	161.0	181.3	183.5	183.9	184.1	184.3	184.5	185.4	187.1	189.9	191.8	193.4	195.1	197.0	198.8	200.8
Personal interest income	665.2	637.9	634.3	630.9	627.3	624.9	627.9	631.1	634.4	642.0	649.3	656.9	663.4	670.1	677.1	684.4
Transfer payments to persons Old-age, survivors, disability, and health insurance benefits Government unemployment insurance benefits	860.2 414.0 38.9 407.3	915.4 444.4 33.9 437.1	924.6 448.6 34.5 441.5	927.5 449.8 32.8 444.9	928.8 450.7 32.0 446.1	936.8 455.9 33.3 447.6	943.2 461.3 29.1 452.9	947.4 463.1 28.4 455.9	951.5 466.9 26.3 458.3	955.9 469.5 25.3 461.1	957.1 470.8 22.7 463.5	960.0 471.8 22.4 465.7	964.9 474.4 21.7 468.8	969.8 476.4 21.5 471.9	972.6 478.8 20.9 472.9	978.3 481.2 20.8 476.3
Less: Personal contributions for social insurance	248.7	261.3	264.1	265.8	266.4	267.5	275.7	276.2	276.9	278.5	280.2	280.9	282.0	282.6	284.0	287.2
Addenda: Total nonfarm income Total farm income <sup>1</sup>	5,089.4 64.9	5,316.6 58.5	5,373.0 43.3	5,401.4 53.0	5,413.1 69.6	5,441.1 75.7	5,418.6 65.2	5,504.3 71.7	5,536.4 71.1	5,570.1 69.3	5,604.0 61.4	5,619.9 55.0	5,650.2 52.7	5,674.6 52.4	5,708.3 52.8	5,772.2 69.4

<sup>&</sup>lt;sup>p</sup> Preliminary.

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

CCAdj Capital consumption adjustment
IVA Inventory valuation adjustment

# Table 2.—The Disposition of Personal Income

			[Monthly e		•				ie							
	1992	1993	1993				1994									
			Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July <sup>r</sup>	Aug. r	Sept. r	Oct. p
	Billions of dollars, unless otherwise indicated															
Personal income	5,154.3	5,375.1	5,416.3	5,454.4	5,482.8	5,516.7	5,483.9	5,576.0	5,607.5	5,639.4	5,665.4	5,674.9	5,702.9	5,727.0	5,761.1	5,841.6
Less: Personal tax and nontax payments	648.6	686.4	697.5	703.6	706.6	710.8	720.3	722.5	726.3	763.3	737.3	738.7	741.7	743.0	746.6	758.1
Equals: Disposable personal income	4,505.8	4,688.7	4,718.8	4,750.8	4,776.1	4,805.9	4,763.6	4,853.5	4,881.2	4,876.1	4,928.1	4,936.3	4,961.2	4,984.0	5,014.4	5,083.5
Less: Personal outlays	4,257.8	4,496.2	4,531.4	4,567.5	4,592.1	4,604.9	4,605.8	4,665.9	4,700.0	4,687.2	4,711.3	4,738.8	4,753.9	4,799.0	4,811.3	4,844.5
Personal consumption expenditures Durable goods Nondurable goods Services	4,136.9 492.7 1,295.5 2,348.7	4,378.2 538.0 1,339.2 2,501.0	4,414.0 542.6 1,342.1 2,529.2	4,449.8 556.3 1,352.1 2,541.3	4,473.8 562.9 1,355.7 2,555.2	4,485.2 569.2 1,357.8 2,558.3	4,484.3 564.7 1,346.8 2,572.8	4,544.2 575.8 1,374.0 2,594.4	4,576.5 588.3 1,385.8 2,602.4	4,562.5 581.8 1,374.0 2,606.7	4,585.4 576.7 1,380.5 2,628.2	4,611.5 582.5 1,389.8 2,639.2	4,625.9 576.8 1,398.6 2,650.5	4,668.9 602.2 1,405.8 2,660.8	4,679.6 598.0 1,413.3 2,668.4	4,710.7 606.7 1,419.3 2,684.7
Interest paid by persons Personal transfer payments to rest of world	111.4 9.5	108.2 9.9	107.5 9.9	107.9 9.8	108.4 9.8	109.8 9.8	111.0 10.5	111.1 10.5	113.0 10.5	114.2 10.5	115.4 10.5	116.8 10.5	117.4 10.7	119.5 10.7	121.0 10.7	123.2 10.7
Equals: Personal savings	247.9	192.6	187.4	183.3	184.0	201.0	157.8	187.5	181.2	188.9	216.8	197.4	207.2	185.0	203.2	239.0
Addenda:  Disposable personal income: Total, billions of 1987 dollars <sup>1</sup> Per capita: Current dollars 1987 dollars Population (thousands)	3,648.1 17,635 14,279 255,484	3,704.1 18,152 14,341 258,290	3,718.4 18,227 14,363 258,892	3,730.9 18,334 14,398 259,129	3,745.0 18,415 14,440 259,359	3,767.6 18,514 14,514 259,579	3,741.1 18,337 14,401 259,780	3,793.3 18,669 14,591 259,972	3,803.1 18,761 14,617 260,180	3,790.9 18,725 14,558 260,404	3,822.9 18,909 14,668 260,626	3,820.9 18,924 14,648 260,852	3,825.3 19,002 14,651 261,090	3,838.0 19,071 14,686 261,343	3,854.6 19,169 14,735 261,591	3,903.8 19,416 14,910 261,820
Personal consumption expenditures: Total, billions of 1987 dollars  Durable goods  Nondurable goods  Services  Implicit price deflator, 1987=100	3,349.5 452.6 1,057.7 1,839.1 123.5	3,458.7 489.9 1,078.5 1,890.3 126.6	3,478.2 493.0 1,084.8 1,900.5 126.9	3,494.4 503.8 1,086.6 1,904.0 127.3	3,508.0 510.5 1,087.9 1,909.7 127.5	3,516.2 518.2 1,089.5 1,908.4 127.6	3,521.7 513.0 1,081.2 1,927.5 127.3	3,551.6 521.3 1,102.9 1,927.4 127.9	3,565.7 530.8 1,110.8 1,924.1 128.3	3,547.0 524.9 1,100.4 1,921.7 128.6	3,557.0 518.6 1,104.3 1,934.1 128.9	3,569.5 523.0 1,108.1 1,938.3 129.2	3,566.8 516.8 1,109.5 1,940.5 129.7	3,595.3 538.8 1,113.1 1,943.4 129.9	3,597.2 535.1 1,117.0 1,945.1 130.1	3,617.5 543.4 1,121.8 1,952.3 130.2
Personal saving as percentage of disposable personal income <sup>2</sup>	5.5	4.1	4.0	3.9	4.0	3.8	3.8	3.6	3.8	4.0	4.1	4.2	4.0	4.0	4.2	
		Percent change from preceding period														
Personal income, current dollars	6.1	4.3	0	0.7	0.5	0.6	-0.6	1.7	0.6	0.6	0.5	0.2	0.5	0.4	0.6	1.4
Disposable personal income: Current dollars 1987 dollars	6.4 3.1	4.1 1.5	0 1	.7 .3	.5 .4	.6 .6	9 7	1.9 1.4	.6 .3	1 3	1.1 .8	.2 1	.5 .1	.5 .3	.6 .4	1.4 1.3
Personal consumption expenditures: Current dollars	6.0 2.8	5.8 3.3	.2 .1	.8 .5	.5 .4	.3 .2	0 .2	1.3 .8	.7 .4	3 5	.5 .3	.6 .4	.3 –.1	.9 .8	.2 .1	.7 .6

<sup>1.</sup> Equals farm proprietors' income, farm wages, farm other labor income, and agricultural net interest.

Revised.

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

Monthly estimates equal the centered 3-month moving average of personal saving as a percentage of the centered 3-month moving average of disposable personal income.Source: U.S. Department of Commerce, Bureau of Economic Analysis.

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

[Millions of dollars; monthly estimates seasonally adjusted]

	1992	1993		19	93		1994									
	1992	1993	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug. r	Sept. P	Oct.
Exports of goods and services	616,924	641,677	53,300	55,086	54,465	56,728	53,625	52,866	58,386	56,402	56,397	58,363	56,327	59,944	59,673	
Goods Foods, feeds, and beverages Industrial supplies and materials Capital goods, except automotive Automotive vehicles, engines, and parts Consumer goods (nonfood), except automotive Other goods Adjustments <sup>1</sup>	440,361 40,270 109,140 175,915 47,028 51,425 24,385 -7,805	456,866 40,628 111,814 181,696 52,404 54,656 23,893 -8,224	37,909 3,411 9,499 14,707 4,313 4,677 2,003 -700	39,361 3,458 9,881 15,471 4,536 4,647 2,027 -658	39,364 3,476 9,615 15,491 4,679 4,870 1,953 -719	<b>40,953</b> 3,665 9,630 16,894 4,529 4,715 2,224 -705	38,533 3,346 8,974 16,022 4,417 4,500 1,988 -714	37,425 3,163 8,721 15,318 4,417 4,468 2,020 -681	42,065 3,405 10,604 17,309 4,760 4,882 1,849 -743	<b>40,378</b> 3,087 9,625 16,747 4,721 4,659 2,250 -711	<b>40,276</b> 3,268 9,914 16,555 4,543 4,804 2,018 -828	42,028 3,088 9,820 17,727 4,723 5,114 2,340 -783	40,133 3,052 10,254 16,284 4,275 4,859 2,261 -852	<b>44,126</b> 3,676 10,739 17,656 5,204 5,310 2,517 -975	<b>43,539</b> 3,677 10,332 17,858 5,041 5,189 2,301 -859	
Services Travel Passenger fares Other transportation Royalties and license fees Other private services Transfers under U.S. military agency sales contracts 2 U.S. Government miscellaneous services	176,563 54,284 16,972 22,704 19,922 50,992 10,828 861	184,811 57,621 16,550 23,151 20,398 54,870 11,413 808	15,391 4,772 1,361 1,927 1,709 4,659 906 56	15,725 5,067 1,440 1,986 1,703 4,640 832 56	15,100 4,595 1,285 1,924 1,698 4,740 801 57	15,774 5,066 1,410 1,996 1,697 4,762 784 60	15,092 4,567 1,311 1,901 1,763 4,678 802 70	15,440 4,671 1,373 1,864 1,780 4,867 816 70	16,322 5,162 1,505 2,107 1,790 4,851 841 67	16,024 5,140 1,408 2,008 1,796 4,713 905 53	16,121 5,066 1,367 2,018 1,798 4,896 928 49	16,334 5,238 1,432 2,068 1,799 4,812 940 47	16,194 5,186 1,413 1,991 1,810 4,818 916 60	15,817 4,796 1,322 2,106 1,812 4,826 899 56	16,134 5,014 1,387 2,081 1,815 4,886 896 55	
Imports of goods and services	657,308	717,402	61,286	63,005	61,997	61,253	61,455	62,460	65,285	64,849	65,778	67,403	67,518	69,624	69,801	
Goods Foods, feeds, and beverages Industrial supplies and materials Capital goods, except automotive Automotive vehicles, engines, and parts Consumer goods (nonfood), except automotive Other goods Adjustments <sup>1</sup>	536,458 27,610 138,644 134,253 91,788 122,657 17,713 3,795	589,441 27,867 145,606 152,365 102,420 134,015 18,386 8,783	50,440 2,422 12,158 12,902 8,748 11,496 1,500 1,217	51,895 2,551 12,541 13,600 8,893 11,673 1,590 1,045	50,886 2,328 12,276 13,308 8,856 11,526 1,686 905	50,068 2,339 11,495 13,888 8,728 11,281 1,710 629	50,501 2,440 11,653 14,121 8,683 11,603 1,598 404	50,968 2,364 11,932 14,028 8,787 11,502 1,566 789	53,511 2,543 12,659 14,467 9,549 11,335 1,837 1,120	53,715 2,492 12,771 14,727 9,491 11,845 1,808 581	54,547 2,531 13,155 14,883 9,481 12,136 1,801 559	56,047 2,593 14,007 15,129 10,153 12,138 1,820 208	56,081 2,624 14,375 15,195 9,911 12,023 1,701 252	58,220 2,699 14,687 15,304 11,057 12,479 1,632 362	58,143 2,720 14,365 16,496 9,882 12,637 1,821 223	
Services Travel Passenger fares Other transportation Royalties and license fees Other private services Direct defense expenditures 2 U.S. Government miscellaneous services	120,850 39,007 10,608 23,460 4,987 26,625 13,862 2,301	127,961 40,564 11,416 24,502 4,840 32,119 12,176 2,344	10,846 3,459 1,006 2,040 417 2,761 955 209	11,110 3,563 978 2,140 440 2,848 960 182	11,112 3,566 972 2,091 446 2,905 954 178	11,185 3,690 992 2,039 448 2,889 946 181	10,953 3,591 955 1,952 450 2,861 938 207	11,492 3,720 1,006 1,980 713 2,926 932 216	11,774 3,930 1,069 2,159 444 3,025 926 221	11,134 3,615 1,019 2,066 435 2,857 921 221	11,231 3,693 1,048 2,083 434 2,833 918 222	11,356 3,580 1,017 2,167 473 2,978 917 223	11,437 3,702 1,050 2,167 478 2,928 905 207	11,403 3,621 1,036 2,275 443 2,926 893 209	11,658 3,847 1,093 2,222 445 2,959 884 208	
Memoranda: Balance on goods Balance on services	-96,097 55,713 -40,384	-132,575 56,850 -75,725	-12,531 4,545 -7,986	-12,533 4,614 -7,919	-11,521 3,988 -7,533	-9,115 4,589 -4,526	-11,968 4,138 -7,830	-13,542 3,948 -9,594	-11,446 4,548 -6,899	-13,337 4,890 -8,447	-14,271 4,890 -9,381	-14,019 4,979 -9,040	-15,948 4,757 -11,191	-14,094 4,414 -9,680	-14,605 4,476 -10,128	

<sup>&</sup>lt;sup>p</sup> Preliminary.

Revised.

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

definitions used to prepare BEA's international and national accounts.
2. Contains goods that cannot be separately identified.
Source: U.S. Department of Commerce, Bureau of Economic Analysis and Bureau of the Census

# A Satellite Account for Research and Development

BEA has prepared a satellite account that arrays information about research and development (R&D). First, the satellite account provides estimates of expenditures on R&D that are designed to be used in conjunction with the national income and product accounts measures. Second, it treats R&D expenditures as a form of investment, recognizing the role R&D plays in adding to knowledge and in developing new and improved processes and products that lead to increases in productivity and growth. Third, it provides estimates of the stock of knowledge capital. To focus on R&D and facilitate its analysis, the satellite account changes some definitions and classifications used in the national income and product accounts but otherwise is designed to be consistent statistically and conceptually with those accounts. Thus, the satellite account supplements the existing accounts.

BEA's economic accounts have always benefited from discussion and critique of concepts, source data, and estimating methods. The same is to be expected for the R&D satellite account. Comments are welcome.

> Carol S. Carson Director, Bureau of Economic Analysis

N INDUSTRIAL laboratories, agricultural ex-**I** periment stations, medical research institutes, and a variety of other settings, the United States undertakes a sizable research and development (R&D) effort. This effort plays a critical role in economic growth and in addressing many specific related concerns. In the words of the National Science Board:

The absolute magnitude of the [R&D] effort and the manifold tasks to which it is directed are indicative of the critical role that R&D plays in addressing such concerns as national defense, industrial competitiveness, public health, environmental quality, and social well-being. Indeed, the long-term importance of R&D expenditures to technological preeminence, military security, and knowledge growth is axiomatic. 1

Ideally, to document this role within the economy and thus lay the foundation for policy and other decisions, one would measure the output of R&D—the new understanding, or the knowledge, it creates. However, measures of knowledge created, to the extent that they exist, do not share a common yardstick—such as dollars—with other measures with which they might be used. Almost universally then, analysts turn to expenditures on R&D as a starting point.

Several questions about expenditures on R&D immediately come to mind:

- How much is being spent on R&D today? How much has R&D spending grown in recent decades? How large is R&D compared with GDP in the United States? In other countries?
- Who is performing the R&D? What share is being performed by government, by nonprofit organizations, and by industries? Which industries perform the most R&D?
- Who is funding the R&D?

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Expenditures on R&D can be viewed as generating future income and product. With this view, a case is made for treating them as investment, paralleling the treatment of business expenditures on structures and durable equipment, and for recognizing a stock of intangible capital, just as there is a stock of tangible capital. Further questions then arise:

- How large is the stock of R&D capital? How has the stock changed over recent decades?
- How does the stock of R&D capital compare with the stock of buildings, equipment, and other parts of the Nation's wealth?

Answers to these questions have been less than fully satisfactory. On the one hand, the national income and product accounts (NIPA'S) might seem the obvious place to look for expenditure estimates: If R&D expenditure estimates were in the accounts, they could readily be compared with GDP or its components, and models could be constructed to relate changes in R&D to other parts of the economy represented in the accounts. However, only a portion of R&D expenditures are identifiable within the NIPA's, and those identified—as well as the unidentified expenditures on R&D are treated as consumption rather than as investment. Further, because R&D expenditures are not treated as investment, there is no associated stock of capital.2 On the other hand, R&D data from other sources are not fully consistent with the NIPA's and with the NIPA-based measures of tangible capital, so they cannot readily be used in conjunction with NIPA estimates in analysis.

This article introduces a satellite account that is designed to provide a view of R&D that has ties to the NIPA's, while also using alternative definitions and providing consistent detail that help to focus on the role of R&D in the economy. BEA began work on the satellite account for R&D in 1992, following a preliminary evaluation of the feasibility and usefulness of such an account.<sup>3</sup>

The estimates presented in the satellite account build on data published by the National Science Foundation (NSF), which assembles a wide range of information related to R&D.<sup>4</sup> The estimates ex-

tend through 1992, the most recent year for which complete source data are currently available.

The first section of the article defines R&D and describes its role in creating knowledge and then sketches the economic accounting background for the satellite account's investment treatment. The second section provides a methodological overview. The third section presents the estimates of R&D expenditures, investment, capital stocks, and related data. The fourth section discusses future directions that work on the satellite account might follow. A technical note at the end of the article details the construction of the estimates.

# **Background**

## **R&D** and knowledge

R&D is "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications." This definition is from a newly revised manual (the *Frascati Manual*) of standard practice for surveys of R&D activity, prepared by the Organisation for Economic Cooperation and Development.<sup>5</sup> It is widely used internationally as the basis for R&D statistics, such as those compiled and analyzed by NSF in the United States.

More commonly, R&D is characterized as the sum of three types of activities—basic research, applied research, and development. These activities also have been defined in the *Frascati Manual*, although in practice it is often difficult—perhaps increasingly so—to establish the boundaries between them:

- Basic research is "experimental or theoretical work undertaken primarily to acquire new knowledge of the underlying foundation of phenomena and observable facts, without any particular application or use in view."
- Applied research is "original investigation undertaken in order to acquire new knowledge... directed primarily towards a specific practical aim or objective."
- Development is "systematic work, drawing on existing knowledge gained from research and/or practical experience, that is directed to producing new materials, products or devices, to installing new processes, systems

<sup>2.</sup> In an integrated set of economic accounts, flows of fixed investment are viewed as forming stocks of reproducible capital. Bea however, estimates the stocks of consumer durables and of government equipment and structures as if personal consumption expenditures on durable goods and government purchases of durable goods and structures had been treated as fixed investment flows. Flows derived from the NIPA series are used to estimate the stocks, which are, therefore, consistent with the NIPA's.

 $_3$ . For an early presentation about the preliminary work, see Carol Carson and Bruce Grimm [ $_{13}$ ].

<sup>4.</sup> See, for example, National Science Board, National Science Foundation

<sup>5.</sup> See Organisation for Economic Co-operation and Development [43], page 29. This is the fifth edition of the Frascati Manual. The manual was first prepared in 1961.

and services, or to improving substantially those already produced or installed."

R&D is to be distinguished from a wide range of related activities that are linked to R&D both through flows of information and in terms of operations, institutions, and personnel. The basic criterion, according to the Frascati Manual, to be used to distinguish R&D from related activities "is the presence in R&D of an appreciable element of novelty and the resolution of scientific and/or technological uncertainty." R&D does not include, for example, the following: Routine activities (such as product testing, quality control, experimental production, routine software development, and monitoring and evaluation of operational programs), patent and license work, final product or design engineering and manufacturing start-up, and training of scientific and technical personnel.

R&D may be viewed as increasing the stock of knowledge that leads to improved understanding or to improved processes or products. Basic research creates a pool of knowledge that can be drawn upon for further basic research or for performing applied research.7 Applied research draws upon both basic research and earlier applied research to create knowledge that can be used to develop new or improved processes and products. Development draws upon both applied research and earlier development. New or improved processes or products come into being only at the end of the development process. There are lags between the creation of knowledge, particularly that produced by basic research, and its effects on output. The lags reflect both the time needed for R&D to lead to improved processes and products and the time needed for the improved processes and products to be fully adopted throughout the economy.

Neither the creation of knowledge nor the resulting stock of knowledge are measurable directly. Measures of output, such as the number of scientific and technical journal articles published and the number of patents awarded, only roughly approximate the creation of knowledge because they only cover a portion of R&D and because many innovations are not patented. A frequently used method for measuring the output of knowledge is to equate that output with the expenditures required to produce it. Those

expenditures can be cumulated over time—with or without depreciation—to measure the stock of knowledge.

## R&D in economic accounting

R&D in standard economic accounts.—In accounting for a nation's production by adding up expenditures to derive gross domestic product (GDP), two main issues about the treatment of R&D arise:

- Are expenditures on R&D considered expenditures on final goods and services—that is, one of the products whose value is added up in deriving an unduplicated production total such as GDP?
- Even when the expenditures on R&D are considered expenditures on final goods and services, are they considered investment?

In the NIPA's, expenditures on R&D by business—whether actually purchased from others or carried out inhouse—are treated as intermediate rather than final; they are considered as a current expense of production and are not among the expenditures added up in deriving GDP. Treating them as a current expense follows general business accounting practice; the uncertainty about the future benefits of individual projects is a key argument for expensing R&D. Expenditures on R&D by government and by nonprofit institutions are treated as expenditures on final goods and services. All expenditures on R&D by government and nonprofit institutions are treated as part of consumption in the current period, the former as part of government purchases and the latter as part of personal consumption expenditures; none are treated as investment. In the NIPA's, investment—specifically gross private domestic investment—consists solely of purchases of structures, durable equipment, and change in inventories by the business sector. Expenditures by a U.S. resident for R&D performed abroad are treated as imports, and expenditures by a foreign resident for R&D performed in the United States are treated as exports. These points are summarized in table A, which also indicates that, with the exception of contractual R&D in Federal national defense purchases, R&D expenditures are not identified in GDP.

The issue of the scope of investment in the economic accounts, and in particular the issue of including R&D in investment, is a longstanding one. John Kendrick, in 1951, identified activities related to improvements in technology and technical innovations as leading to improved productivity;

<sup>6.</sup> The definitions of R&D and the three types of activities that are found elsewhere—for example, in financial accounting standards and in NSr's specific surveys—are similar to these definitions but place emphasis on elements of the definitions that are relevant to the context.

<sup>7.</sup> See James Adams [1] and [2].

he noted that technological innovations depend on advances in knowledge, and he focused on research as a source of these advances.8 He viewed research expenditures—whether directed toward improving structures and equipment, raising the level of health, or dealing with problems of land and natural resource use—as expenditures devoted to increasing productivity. Accordingly, he proposed that they be treated as investment in the economic accounts. He noted that gross product would be higher by the amount of expenditure by business on R&D, which would be counted as final product rather than expensed; because expenditures by nonprofit institutions and government are already counted as final product, a change to treat them as investment would not change gross product.

The issue was raised again a few years later at a conference that led to the volume *A Critique of the United States Income and Product Accounts.*<sup>9</sup> The case was made that these expenditures "pay" in terms of yielding future returns and thus fit the general characterization of investment. Although various conceptual and statistical difficulties were identified as obstacles, there were some prospects for better statistics.

The 1968 revision of the System of National Accounts, published by the United Nations as international guidelines for economic accounting, referred to the urgent need to clarify the question

R&D in extended economic accounts.—A number of analysts, working with the U.S. economic accounts, have proposed systems that expand the boundaries of investment by including R&D and several other categories of expenditures.

Nancy Ruggles and Richard Ruggles, in 1970, proposed a category of "development" outlays defined as those that meet the criterion that the value of the services provided by the outlay must accrue in future periods rather than entirely in the present period. Outlays on education and training and some outlays on health, as well as outlays on R&D, were viewed as meeting the criterion. Their proposed system included stocks of "development" capital. They valued the services of the R&D portion of the capital stock as the amortization adjusted to market prices plus an imputed interest charge on the capital stock.

John Kendrick implemented his view that expenditures on certain intangibles are "made primarily to improve the quality or productivity of the tangible... factors in which they are embodied" and should be treated as investment that creates intangible capital. The intangible investment and capital included R&D, education and

Table A.—Research and Development in the NIPA's

Published NIPA components containing R&D <sup>1</sup>	R&D identified in NIPA component	R&D included in NIPA component
Gross national product (1.1, 1)		
Personal consumption expenditures (1.1, 2) <sup>2</sup> Nonprofit hospitals (2.4, 52)		R&D funding from nonprofit hospitals  R&D funding from private universities and colleges  R&D funding from other nonprofit institutions serving individuals  Operating expenses for R&D grants
Gross private domestic investment (1.1, 6)	No <sup>3</sup>	
Net exports of goods and services (1.1, 15) Exports of services (4.1, 6)	No	R&D funding from foreign sources to U.S. performers R&D funding from U.S. sources to foreign performers
Government purchases (1.1, 18) Federal (1.1, 19) National defense (1.1, 20) Contractual research and development (3.10, 20) Other Nondefense (1.1, 21) State and local (1.1, 22)	l No	R&D contracted for by the Departments of Defense and Energy <sup>4</sup> Defense R&D performed in-house Nondefense R&D funding by the Federal Government R&D funding by State and local governments
Addendum: Business current expenses of production	No	R&D funding by business

Numbers in parentheses indicate the NIPA table number and the line number of published series.
 Personal consumption expenditures are likely to contain some expenditures for R&D funded by the business and government sectors but performed by universities and colleges, nonprofit hospitals, and other nonprofit institutions serving individuals.

of R&D expenditures in dealing with the boundary between current and capital expenditures. It was noted that the clarification could come only on the basis of experience.

<sup>8.</sup> John Kendrick [33], pp. 79-81.

<sup>9.</sup> See Eric Schiff [51], pp. 434-435 and George Jaszi [31], pp. 454-455.

<sup>10.</sup> See Nancy Ruggles and Richard Ruggles [50], especially page 99.

<sup>11.</sup> See John Kendrick [32], especially pp. 1-21.

Not applicable, business spending on R&D is considered to be an intermediate expenditure.
 Includes only the atomic energy research among that contracted for by the Department of Energy.

NIPA's National income and product accounts

R&D Research and development

training, health and safety, and labor mobility. He created gross stock by cumulating investments over their lifetimes and net stocks by cumulating depreciation on each vintage of investment and subtracting it from the gross stock. He estimated rental values of the capital stocks (referred to by other authors as service values or returns) for the nonbusiness sectors and added them to income and product. His effort, published in 1976, was viewed as a pilot study for determining the feasibility and usefulness of developing estimates of total investment and capital stocks.

Robert Eisner used "include investment in intangible and human capital" as one of the guiding principles for his total incomes system of accounts, published in 1989. His interest in investment stemmed in major part from its relation to productivity and growth. His intangible capital comprised R&D, education and training, and health. His methodology for measuring R&D investment and capitalizing it was essentially the same as Kendrick's.

Satellite accounts.—Meanwhile, the possibility of treating R&D and several other activities as investment was discussed at length in preparing for the System of National Accounts 1993. At the outset of the discussion, there was strong support for treating at least some portion of R&D expenditures as investment. Several proposals were made to identify a portion that was most clearly linked to a future return—for example, the portion of development expenditures in which the expenditures are identifiable and the outcome reasonably certain enough to assure that the costs of the project would be exceeded by the revenue.

In the end, however, no change was made in the treatment of R&D. The explanation of the treatment of business expenditures on R&D noted that they are undertaken to improve efficiency or to derive other future benefits and so are inherently investment-type activities. However, practical difficulties in meeting the accounting requirements for treating R&D and similar activities as investment suggested that they be treated as intermediate:

In order to classify such activities as investment type it would be necessary to have clear criteria for delineating them from other activities, to be able to identify and classify the assets produced, to be able to value such assets in an economically meaningful way and to know the rate at which they depreciate over time. In pracNevertheless, there was strong interest in being able to identify R&D within the economic accounts, and work toward classification systems that would help do so was encouraged. In addition, R&D was recognized as a prime candidate for presentation in a satellite account, an economic accounting tool that achieved international recognition when it was incorporated in the *System of National Accounts* 1993.

In brief, satellite accounts are frameworks designed to expand the analytical capacity of the economic accounts without overburdening them with detail or interfering with their generalpurpose orientation. Satellite accounts, which are meant to supplement, rather than replace, the existing accounts, organize information in an internally consistent way that suits the particular analytical focus at hand, while maintaining links to the existing accounts. In their most flexible application, they may use definitions and classifications that differ from those in the existing accounts; for example, the R&D satellite account uses a different definition of investment, and it classifies transactors into different groupings. In addition, satellite accounts typically add detail or other information, including nonmonetary information, about a particular aspect of the economy to that in the existing accounts; for example, the R&D satellite account includes information about R&D employment.

The advantages of using R&D information assembled along the lines of the *Frascati Manual* to prepare a satellite account have become increasingly clear. One of the first satellite accounts, prepared in France in the 1970's, built on such R&D information. More recently, a framework for an R&D satellite account for the Netherlands was constructed to use such information. The new *Frascati Manual* specifically recognizes the connection between the data it describes and economic accounting, and it includes an annex that explains satellite accounts to experts on science and technology who are not familiar with economic accounting.

tice it is difficult to meet all these requirements. By convention, therefore, all the outputs produced by research and development, staff training, market research and similar activities are treated as being consumed as intermediate inputs even though some of them may bring future benefits.<sup>14</sup>

<sup>12.</sup> See Robert Eisner [24], especially pp. 8-20.

<sup>13.</sup> See [52].

<sup>14.</sup> See System of National Accounts [52], paragraph 6.163.

<sup>15.</sup> See Michael Braibant [5].

<sup>16.</sup> See Fritz Bos, et al. [4].

# **Methodological Overview**

The R&D satellite account focuses on the value of R&D produced in the United States and the use of that output as investment. Because no direct measure of output is available, R&D produced is measured by summing the costs of its production, a technique of measurement used in economic accounting for most nonmarket pro-The resulting total is referred to as R&D expenditures. The expenditure estimates were prepared by starting with the information available from surveys conducted for NSF and adjusting it to statistical and conceptual consistency with the NIPA's. The decision to work with information that is not extensively used to prepare the NIPA estimates was made because the regular source data and estimating methods do not permit the required level of resolution needed to focus on R&D. 17

The satellite account groups organizations in a way that reflects the features of their institutional structures and purposes that are relevant to R&D. In light of the interest in academic R&D, universities and colleges (along with their affiliated institutions, agricultural experiment stations, and associated schools of agriculture) need to be shown separately. Federally funded research and development centers (FFRDC's), which are R&D organizations financed almost entirely by the Federal Government, are shown separately and grouped with the several kinds of entities that administer them. (At present, there are 39 FFRDC's, including the RAND Corporation, Argonne National Laboratory, E.O. Lawrence Livermore Laboratory, and Brookhaven National Laboratory.) The satellite account shows two major groups: "Private" organizations and "gov-"Private" organizations consist of ernment." business (labeled "industry"); private universities and colleges, private hospitals, charitable foundations, and other nonprofit institutions serving households; and most FFRDC's. "Government" consists of the Federal Government, State and local governments (excluding universities and colleges), public universities and colleges, and FFRDC's administered by State and local government organizations, primarily public universities and colleges.

Constant-dollar R&D expenditures are derived by deflation, the method most often used in the NIPA'S. In deflation, constant-dollar estimates are obtained by dividing the most detailed

current-dollar components by appropriate price indexes. In the case of R&D, the current-dollar components are its costs of production. The expenditure estimates are treated as investment and cumulated to yield R&D capital stocks using methodologies developed by BEA to estimate fixed reproducible tangible capital stocks.

The most important of the methodological issues encountered in preparing the satellite account are described in this section.

## Current-dollar expenditures

The measure of expenditures—reflecting labor costs, the costs of materials and supplies, and overhead costs (including a charge for the capital used in producing R&D)—is based on data by performer, when available, from NSF surveys. Only the data by performer provide the cost components needed to construct constant dollars.

BEA supplements the coverage of the survey-based data and extends it back in time. Missing data, primarily for State and local government R&D and the R&D of some types of nonprofit institutions, are interpolated and extrapolated from years for which data are available. Estimates for years prior to the first NSF survey in 1953 (which are needed to estimate stocks and related measures but are not presented in this article) are primarily based on outside studies that estimated R&D for selected years. Some supporting data—in particular, for pre-1953 FFRDC's—are estimated by BEA using various sources.

A number of adjustments are made to the NSF survey-based spending data to make them statistically and conceptually consistent with the NIPA'S. The statistical adjustments are for timing and geographic coverage and to fill gaps with estimates for some industries in some years. A conceptual adjustment is made to put depreciation of structures and equipment used in producing R&D on a basis that reflects the valuation and consistency appropriate for economic accounts.

BEA has implemented three disaggregations of R&D expenditures for analytical use in the satellite account: By performer, with industry detail; by source of funding; and by type. R&D by performer serves the same purposes for R&D as breakdowns by sector or industry of origin in analyses of production, which are often a first step in studies of structural change. R&D by funder is useful because a substantial portion of R&D is not financed by the performer. R&D by type

<sup>17.</sup> In Bea's input-output accounts, neither current expenses nor receipts for RRD are identified at the published level of detail. A portion of RRD is identified at the level of detail at which the estimates are prepared.

<sup>18.</sup> See Nestor Terleckyj [54] and Vannevar Bush [12].

is useful because the different types interact with the economy in different ways and with different lags. Other disaggregations would also be useful, but are not practical given current resources. For example, R&D disaggregated by purpose, such as defense or health, would help relate R&D expenditures to other issues. Geographic breakdowns would also be of interest—for example, in location decisions, for which proximity to research resources may be a factor.

## Constant-dollar expenditures

The R&D satellite account provides estimates of constant-dollar expenditures by performer. In the absence of outputs and output price measures, costs of inputs are deflated by weighted indexes of input prices. The costs of inputs are derived, at the finest level of detail possible, from the limited cost information available from NSF surveys. The cost components are matched as closely as possible with "proxy" prices. The individual constant-dollar cost components are summed to derive constant-dollar expenditures by performer. (Implicit price deflators for R&D by performer are a byproduct of the procedure.)

Constant-dollar estimates derived in this way take into account the changing mix of R&D performers over time. The estimates of constantdollar compensation of employees, which overall is about 45 percent of inputs, reflect changes in labor productivity only to the extent that the price indexes used reflect a procedure that picks up changes in the mix of employee skills. For example, the indexes that include Federal employee compensation reflect changes in the skill mix estimated by taking into account changes over time in the level of experience and education. Consistent with NIPA practice, the estimates do not include any additional, specific adjustment, such as an assumed rate of increase in labor productivity based on observations in related fields.

Ideally, the same breakdowns available for current-dollar expenditures would be prepared in constant dollars—that is, by funder and by type as well as by performer. However, because most performers have multiple sources of funding and because all groups of performers do at least some of each type of R&D, more detail on cost components is necessary to deflate R&D by funder or type. It is possible that constant-dollar estimates by funder could be derived by allocating cost components in the cases for which performer and funder do not coincide. Deriving constant-

dollar estimates by type of R&D will be more problematic.

## Stocks of R&D capital

It is generally agreed that stocks of intangible capital, such as R&D, are best obtained by cumulating investment flows rather than surveying stocks directly. BEA's review of the methods available led to reliance on the following three elements: (1) The performer breakdown currently available for constant-dollar R&D investment; (2) BEA's current methodology for fixed reproducible tangible capital stocks; and (3) uniform service lives for all R&D capital. The resulting R&D capital stock estimates are the first ones that are fully consistent with BEA's estimates of tangible capital.

Scope of R&D capital.—Some researchers have questioned whether expenditures on all types of R&D and in all fields should be treated as capital formation. Some have excluded basic research because they view it as being undertaken for the purpose of improving understanding of the world and not for the purpose of increasing productivity or adding to production.<sup>19</sup> Other researchers have excluded specific fields of research—for example, defense or space R&D-because they view those fields as having little applicability to commercial production.20 Alternatively, if R&D is regarded solely as an input to the production process, comparable to the blueprints for a new building, only businesses' development expenditures for commercial applications might be included. Some researchers, particularly those who have constructed a broadened view of investment and wealth, have included all R&D. 21 Including all types of R&D in all fields, as the satellite account does, is consistent with a view of R&D as a new kind of wealth. Ideally, an R&D satellite account would publish R&D capital stocks showing detailed information that would allow users of the account to decide which categories of R&D to include or exclude, depending on their use of the estimates, but the satellite account does not vet do so.

Others have questioned whether all R&D, both successful and unsuccessful, should be treated as capital formation.<sup>22</sup> The R&D satellite account is consistent in this respect with the existing NIPA treatment of mineral exploration expenditures, which are all treated as investment in line

<sup>19.</sup> See, for example, Federal Republic of Germany, Federal Statistical Office [26].

<sup>20.</sup> See, for example, Zvi Griliches [28].

<sup>21.</sup> See, for example, John Kendrick [32].

<sup>22.</sup> Eric Schiff [51] and Fritz Bos, et al. [4].

with the view that returns from the successes are sufficient overall to pay for the failures.

Allocation of R&D capital and consumption of fixed capital.—In doing analytical work on R&D, some researchers have allocated most R&D capital financed by government and by nonprofit institutions to the business sector. The Congressional Budget Office allocated all R&D to the economy at large. In a more general setting, most presentations of capital stocks, including BEA's fixed reproducible tangible wealth, are on an ownership basis, allocating stocks to the sectors that own them.

For R&D capital in the satellite account, an allocation by funder would be closer to an ownership basis than an allocation by performer. However, the constant-dollar estimates of R&D expenditures by funder needed to prepare the capital stocks by funder will require additional work (see the section "Future Directions"). The R&D satellite account thus allocates the total R&D capital stock on the basis of performer to private and government components. Similarly, the consumption of fixed capital is allocated on the basis of performer.

Timing.—R&D projects typically take more than a year from the time they are started until their results are embedded in new knowledge or in new processes or products. Researchers have identified two types of lags: Gestation lags and applications lags. Gestation lags refer to the time needed to complete an R&D project. Applications lags refer to the time between completion of the R&D and its initial commercial use. The sum of the two lags yields the time needed for R&D investments to increase the stocks of knowledge that are actually being used. Survey-based research has found that gestation lags range from 1 to 2 years and that applications lags range from somewhat less than 1 year to somewhat more than 2 years.<sup>25</sup> Researchers have also studied the total lag between R&D and its peak effects on productivity or profits.<sup>26</sup> They have generally found long lags, particularly for basic research, because most new products and processes that result from R&D are adopted only gradually.

The R&D satellite account only needs to take into account the gestation lag, which is assumed to be 1 year. However, because the U.S. eco-

nomic accounts measure production at the time that capital and labor are used in the production process, the gestation lag means that another category of output—R&D inventories—must be introduced. These inventories are the equivalent of work-in-progress for some tangible fixed capital goods whose production requires more than one time period. R&D inventories are converted to stocks of R&D intangible fixed capital at the end of the gestation lag.

Depreciation patterns and rates.—Some researchers have treated some, or all, capital created by R&D as immortal—that is, as a permanent part of the capital stock once it is added.<sup>27</sup> Other researchers have assumed that once R&D capital has entered the capital stock, it is gradually removed by depreciation—or, more formally, in economic accounting terms, by consumption of fixed capital. They used a variety of patterns and rates of depreciation.<sup>28</sup> In the satellite account, R&D is assumed to depreciate over a finite lifespan. The depreciation is due to obsolescence as knowledge from newer R&D supplants the knowledge from older R&D, or as applied R&D produces newer processes and products that supplant older ones. (For those who wish to treat R&D capital as immortal, the satellite account includes supplemental series that show cumulative R&D expenditures since 1929.)

The choice of a depreciation pattern for R&D stocks is of necessity somewhat arbitrary. There are no R&D capital markets to provide information on the value of "used" R&D. A study of patent renewal rates in several European countries was inconclusive; its findings could support assumptions about the pattern of depreciation ranging from geometric to slower-then-faster-than-straight-line.<sup>29</sup>

In the R&D satellite account, the stock of R&D capital is constructed using the same methodology that is currently used to construct BEA'S estimates of fixed reproducible tangible capital: The perpetual inventory method is used with uniform average service lives, straight-line depreciation, and a bell-shaped distribution within each vintage of capital to determine discards. The current-dollar stock of R&D is measured at replacement cost rather than at historical cost.<sup>30</sup>

<sup>23.</sup> See, for example, Robert Eisner [24] and John Kendrick [32].

<sup>24.</sup> See Congressional Budget Office [14].

<sup>25.</sup> See John Kendrick [32], John Rapoport [46], and Lenore Wagner [57].

<sup>26.</sup> See, for example, James Adams [1], James Adams and Leo Sveikauskas [3], Gellman Associates [27], Edwin Mansfield [37], Ariel Pakes [44], David Ravenscraft and F.M. Scherer [47], and Nestor Terleckyj [53] and [55].

<sup>27.</sup> See, for example, Zvi Griliches [28], John Kendrick [32], David Levy and Nestor Terleckyj [34], Frank Lichtenberg and Donald Siegel [35], and Nestor Terleckyj [53] and [55].

<sup>28.</sup> See, for example, Bureau of Labor Statistics [11], Congressional Budget Office [14], Robert Eisner [24], and M. Ishaq Nadiri and Ingmar Prucha [38].

<sup>29.</sup> See Ariel Pakes and Mark Schankerman [45].

<sup>30.</sup> A full description of Bea's estimates of tangible capital stock may be found in Bureau of Economic Analysis [7]. BEA is now reviewing the

Empirical estimates have been made using geometric depreciation patterns. Among more recent studies, Ariel Pakes and Mark Schankerman found rates of 0.11 to 0.12 per year in some countries, but they reported estimates of 0.17 to 0.26 in the United Kingdom.<sup>31</sup> James Adams estimated depreciation rates of 0.09 to 0.13 for basic research.<sup>32</sup> M. Ishaq Nadiri and Ingmar Prucha estimated a rate of 0.12 for industrial R&D.<sup>33</sup>

The R&D satellite account uses the straight-line lifespan that corresponds most closely to a geometric depreciation of 0.11 per year, a rate chosen because it is near the center of a plausible range of rates. This straight-line average service life is 18 years. A study that compared R&D net capital stocks estimated using an 18-year average service life with alternative estimates made using geometric depreciation and a rate of depreciation of 0.11 per year revealed only modest differences that exhibited no particular time trends.

## Estimates of R&D Flows and Stocks

Table B summarizes some results from the R&D satellite account. It shows the following:

- Industry has performed two-thirds or more of R&D for the last 40 years.
- The Federal Government has funded a large, but declining, share of R&D. The decline was steep after 1987.
- By 1992, basic research was 17 percent of all R&D, almost double its 1960 share. The offsetting decline was in development, which was 59 percent of all R&D in 1992. The share of applied research has changed little.
- R&D funded by government and nonprofit institutions was equal to 1.2 percent of GDP in 1992, and R&D funded by industry was equal to 1.7 percent. Since 1960, the sum of the two has ranged from 2.2 percent in 1978 to 2.9 percent in the mid-1960's, in 1985, and in 1992.
- Constant-dollar expenditures increased at an average annual rate of over 7 percent from 1953 to 1968. Constant-dollar expenditures

Table B.—Selected Summary Measures

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
					C	urrent-dolla	r measures	6				
R&D performed (percent of expenditures): Industry Federal Government Universities and colleges Other	77.2	68.2	66.7	65.6	68.3	72.5	71.4	70.9	70.4	70.5	70.8	70.6
	12.7	15.4	15.6	15.3	12.4	10.8	10.5	10.4	10.4	10.1	9.7	9.7
	4.9	7.4	9.0	9.8	9.8	8.5	9.6	10.1	10.5	10.7	10.8	11.2
	5.2	9.0	8.7	9.3	9.5	8.2	8.5	8.6	8.7	8.7	8.7	8.5
R&D funded (percent of expenditures): Industry Federal Government Universities and colleges Other	33.1	32.3	39.5	44.1	48.7	50.9	49.7	51.0	53.1	54.9	57.3	58.7
	64.6	65.0	57.3	51.7	47.3	45.2	45.9	44.4	42.0	40.1	37.6	36.1
	.5	.6	.9	1.2	1.4	1.5	1.7	1.8	1.9	2.0	2.1	2.1
	1.8	2.1	2.3	3.0	2.6	2.4	2.7	2.8	3.0	3.0	3.0	3.1
R&D by type (percent of expenditures): Basic Applied Development	8.9	12.5	13.2	13.3	13.3	12.4	14.2	14.0	15.2	16.1	17.4	17.3
	21.6	21.3	22.0	22.7	21.9	22.4	22.3	22.3	23.0	23.5	24.5	23.8
	69.5	66.2	64.8	63.9	64.7	65.2	63.5	63.6	61.8	60.4	58.1	58.9
R&D funding as a percent of GDP: Government and nonprofit institutions Industry	1.8	2.0	1.6	1.3	1.2	1.4	1.4	1.3	1.3	1.2	1.2	1.2
	.9	.9	1.0	1.0	1.2	1.5	1.4	1.4	1.4	1.5	1.6	1.7
					C	onstant-cos	t measures	3				
R&D net fixed intangible capital as a percent of government and business net fixed reproducible tangible capital <sup>1</sup>	5.8	7.5	8.4	8.0	7.4	7.7	8.0	8.1	8.2	8.4	8.5	8.7
Average age, in years, of R&D gross fixed intangible capital	6.5	6.6	7.2	8.3	8.9	8.8	8.5	8.4	8.4	8.3	8.2	8.2
	5.9	6.3	7.1	8.3	9.0	8.7	8.4	8.3	8.2	8.1	8.1	8.1
	7.9	7.7	7.4	8.1	8.8	9.1	9.1	9.0	9.0	8.9	8.8	8.8
	Indexes, 1960=100											
R&D expenditures (constant dollars)	100	132	136	131	161	219	229	234	237	245	252	254
	100	155	209	233	247	287	313	327	340	352	365	378

Business fixed reproducible tangible capital includes capital owned by nonprofit institutions.
 R&D Research and development

appropriateness of the concepts and measurement methods underlying these estimates. Future  $_{\rm BEA}$  capital stock estimates may be based on somewhat different concepts and measurement methods.

<sup>31.</sup> See Ariel Pakes and Mark Schankerman [45].

<sup>32.</sup> See James Adams [1].

<sup>33.</sup> M. Ishaq Nadiri and Ingmar Prucha [38].

then leveled off for nearly a decade before resuming an uptrend, but at a more moderate rate.

- With lags and moving more smoothly, the constant-cost R&D net fixed capital stock mirrored the pattern of constant-dollar expenditures. In 1992, R&D capital would have added almost 9 percent to the net wealth of government and business.
- The average age of the constant-cost R&D gross fixed stock, a rough indicator of the age of the knowledge in the stock, increased from about 6.5 years in 1960 to a high of 8.9 years in 1980. It then decreased to 8.2 years in 1992.

The tables that make up the R&D satellite account are in five groups. The tables numbered 1 are summary tables that present expenditures and investment for 1953–92, and stocks for 1959–92, in current dollars (or at current cost) and in constant dollars (or at constant cost)—tables 1.1 and 1.2, respectively. The tables numbered 2 present expenditures in current dollars by performer, by funder, and by type. The tables numbered 3 present estimates by industry in current dollars. The tables numbered 4 present constant-dollar expenditures, including expenditures by performing industry along with the number of scientists and engineers by industry. The tables numbered 5 present implicit price deflators.

## Current-dollar R&D expenditures

Table 2.1 shows R&D expenditures by performer, and within each performer, by source of funds. Chart 1, which is based on this table, shows shares of R&D expenditures by performer for 1992. Industry, with expenditures of \$119.5 billion, was the largest performer of R&D, accounting for 71 percent of total R&D expenditures. It has maintained at least a two-thirds share for most of the last 40 years. Public and private universities and colleges combined, with \$18.9 billion, were the second largest performers of R&D. The Federal Government followed with \$16.3 billion. Expenditures on R&D activities performed within the Federal Government, which had a share of 23 percent in 1953, had a 10-percent share in 1992. The combined expenditures for R&D performed by State and local governments, nonprofit institutions, and FFRDC's—at \$14.6 billion—accounted for the remaining share of 9 percent.

For 1992, the Federal Government, in addition to funding all the R&D it performs, funded a majority of the R&D performed by universities and

colleges (59 percent), FFRDC'S (99 percent), and other nonprofit institutions (57 percent). However, the share of R&D funded by the Federal Government has declined steadily over time. Industry and State and local governments fund most of their own R&D work, 81 percent and 71 percent, respectively.

Table 2.2 shows R&D expenditures by source of funds, and within each source, by performer. Five sources of funds are shown in the R&D satellite account: Industry, the Federal Government, State and local governments, private universities and colleges, and "other." Because of data limitations, some small flows are combined with the major sources of funding; for example, industry's funding of R&D performed by industry includes funds from the rest of the world, because this funding source cannot be separately identified.

Chart 1 also shows shares of R&D expenditures by source of funds for 1992. Industry, providing \$99.4 billion, is the largest source of R&D funds, with a 59-percent share. The Federal Government, providing \$61.2 billion, is the second largest source. Together, these two sources provided 95 percent, or \$160.8 billion, of the total spent on R&D in 1992. Over the 40-year period covered by the satellite account, these two sources of funds have always accounted for most R&D expenditures, but the shares of the two have changed over time. The Federal Government's share reached a high of 67 percent in 1964 and fell to 36 percent in 1992. By contrast, the industry share of R&D funding has steadily increased over time.

Tables 2.3 and 2.4 show R&D expenditures as the sum of expenditures on the three types of R&D—basic research, applied research, and development. Chart 1 also shows shares of R&D expenditures by type for 1992. Development, at \$99.8 billion, is over half the total (59 percent). Applied research, with \$40.2 billion, or a 24-percent share, is less than half as large. Basic research, at \$29.3 billion, is 17 percent of the total. The share of basic research has increased steadily: By 1992, it had almost doubled its 1960 share. The increases in the share of basic research were offset by declines in development. The share of applied research has remained steady.

Basic research is increasingly being performed at universities and colleges: In 1953, universities and colleges performed less than 30 percent of basic research; by 1992, they performed over 40 percent of it. Most applied R&D is performed by industry. Industry currently performs over two-thirds of applied research and well over 80 percent of development. The Federal Gov-

ernment performs about 10 percent of applied R&D.

Table 3.1 shows expenditures by major R&D performing industries.<sup>34</sup> Manufacturing industries are shown at the two-digit standard industrial classification, except that transportation equipment is split into "aircraft and missiles" and "other transportation equipment" because the share of federally funded R&D in the former is so large. All nonmanufacturing R&D expenditures are combined.

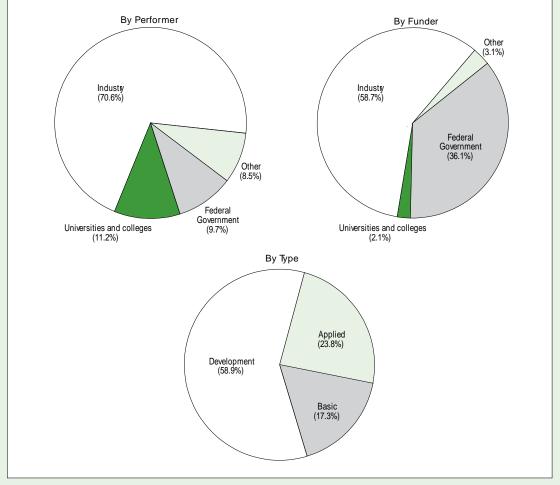
Expenditures on R&D performed by industry were \$122.3 billion in 1992. Until 1992, the aircraft and missile industry consistently had

the largest R&D expenditures, with a peak of \$24.6 billion in 1987. In 1992, chemicals and allied products took top ranking, with expenditures of \$16.8 billion. These two industries were followed by industrial machinery, electronic and other electrical equipment, and other transportation equipment. The nonmanufacturing industries, continuing a sharp uptrend, had R&D expenditures of \$30.4 billion. (Nonmanufacturing industries include communication services; computer programming, data processing, other computer-related engineering, architectural, and surveying services; and research, development, and testing laboratories.)

The federally funded share of industry R&D has been steadily declining over the last 30 years, from a high of 59 percent in 1959 to a low of 20 percent in 1992. The Federal share has shrunk

#### **CHART 1**

#### R&D Expenditures, 1992



Source: Tables 2.1., 2.2., and 2.3.

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

<sup>34.</sup> In the tables showing industry detail, FFRDC's administered by industry are combined with the remainder of industry because source data do not provide FFRDC's administered by industry separately by industry classifications.

rapidly since the mid-1980's, particularly in the aircraft and missiles industry. Federal funding accounted for 61 percent of funding in this industry in 1992, down from 76 percent in 1987. When Federal funding is removed, the aircraft and missile industry drops from second place to sixth place (\$6.3 billion). Chemicals and allied products led non-federally funded manufacturing R&D performance with expenditures of \$16.5 billion. Nonmanufacturing industries, contin-

uing a sharp uptrend, reached \$24.4 billion in non-federally funded R&D.

Table 3.2 shows company-funded R&D expenditures performed outside the United States by U.S. companies and their foreign subsidiaries. The chemicals and allied products industry is the leader, with expenditures of \$2.7 billion, in 1992. This industry accounted for 28 percent of the 1992 industry-funded expenditures of foreign subsidiaries.

## Comparison of R&D Capital Stock Estimates

The accompanying table shows Bea's estimates of the total R&D capital stock, and of selected components, together with estimates that others have published. In addition, it shows an alternative set of Bea estimates that is based on 11-percent per year geometric depreciation (rather than straight-line depreciation). The upper panel of the table contains estimates of R&D stocks for selected years. The lower panel shows Bea's estimates less the estimates by others. The comparison should be viewed as rough, because it was necessary to convert most of the other estimates to 1987 dollars from other base periods by using the ratios of Bea's R&D deflator in various base years to its 1987 value of 100. Because of weight shifts over time, the conversion factors yield only approximations of what would be the actual values of rebased deflators.

The alternative BEA stock estimates are not very different from the BEA estimates in the satellite account, and the two series show no tendency to diverge over time. Estimates made by John Kendrick [32] are increasingly higher than the BEA estimates over time. Estimates made by Robert Eisner [24] begin slightly higher than the BEA estimates and become increasingly higher over time. Estimates made by the Office of Management and Budget (OMB)—which appeared in the Analytical Perspectives volume of the fiscal year 1995 Budget of the United States Government [40]—begin at about the same level and become increasingly higher.

A major reason for these divergences is that BEA'S methodology depreciates basic research capital, while the others' methodologies treat it as immortal and do not depreciate it. The rebasing of prices may also explain some of the differences between the Kendrick and Eisner estimates and the BEA estimates. Other differences result from different methodologies for calculating depreciation and from the others' use of NSF estimates of R&D expenditures rather than BEA'S estimates; Eisner's use of a 20-year life for other R&D capital also contributed to the differences.

Estimates of the federally financed R&D capital stock made by OMB are increasingly larger than those produced using a rough BEA approximation of BEA's constant-dollar expenditures with geometric depreciation. This divergence reflects OMB's assumption that basic research capital is immortal. In addition, OMB's estimates assume a 10-percent rate of depreciation for other research, somewhat lower than the 11-percent depreciation rate underlying BEA's alternative estimates. Other differences arise because OMB used Federal outlays on a fiscal year basis, whereas BEA's estimates are primarily based on performers' reports of expenditures on a calendar year basis.

Estimates of industry R&D capital stock from a study by the Bureau of Labor Statistics (BLS) [11] are increasingly lower than the corresponding BEA estimates from 1960 to 1965 and are roughly the same amount lower thereafter. The principal reason for the lower values is that the BLS study did not include development expenditures in their capital formation estimates. Other differences arise from the

BLS study's assumption that basic research capital is immortal, its lower—10 percent per year—rate of depreciation for applied research, its longer gestation lags, and its different method of deflation.

Estimates of industry R&D capital stock made by Nadiri and Prucha [38] are somewhat higher than BEA's corresponding estimates for 1965. Thereafter, their estimated capital stocks grow a little more slowly, on average, and are modestly lower in 1985. The initial difference may be due to the assumed seed value that begins their capital stock estimates. Thereafter, the slower growth reflects a 12-percent per year estimate for the rate of depreciation, somewhat higher than BEA's effective rates of depreciation.

# Comparison of BEA and Others' R&D Capital Stock Estimates

[Billions of 1987 dollars]

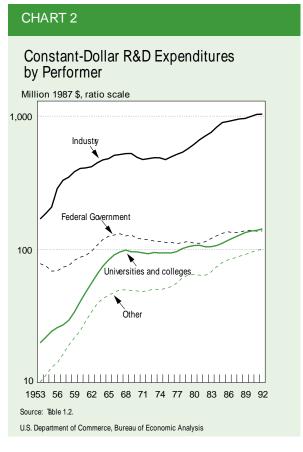
	1960	1965	1970	1975	1980	1985	1990			
				Levels						
R&D net total capital stock: BEABEA alternative with 11-percent	278	429	581	646	686	797	978			
depreciation rateKendrick	280 441	423 661	551	604	670	810	978			
EisnerOMB <sup>1</sup>	298 200	476 400	664 600	835 700	1,096 800	1,000	1,200			
R&D net federally-funded capital stock:										
BEA alternative with 11-percent depreciation rateOMB			312 384	321 427	338 460	381 509	442 593			
R&D net industry capital stock: BEABLS Nadiri and Prucha	189 98 295	297 143 352	391 202 401	425 262 410	451 314 433	547 392 521	698			
	BEA less other estimates									
R&D net total capital stock: BEA alternative with 11-percent depreciation rate	-2	6	30	42	16	-13	0			
Kendrick <sup>2</sup> EisnerOMB <sup>1</sup>	-163 -20 0	-232 -47 0	-298 -83 0	-189 -100	-410 -100	-200	-200			
R&D net federally funded capital stock: OMB			-72	-106	-122	-128	-151			
R&D net industry capital stock: BLS Nadiri and Prucha	91 -106	154 –55	189 -10	163 15	137 18	155 26				

- 1. Published estimates are rounded to the nearest \$100 billion.
- 2. The difference shown for 1970 is actually for 1969, the latest year available.
- BLS Bureau of Labor Statistics
- OMB Office of Management and Budget
- R&D Research and development

## Constant-dollar R&D expenditures

Table 4.1 shows R&D expenditures by performer in constant dollars. Total R&D expenditures grew at an average annual rate of 7.3 percent in 1953–68. (Over much of the period, Federal spending on defense-related and space R&D increased sharply.) Expenditures then leveled off for nearly a decade, with an average decline of 1.3 percent in 1968-75. An uptrend then resumed, but at a more moderate rate; the average annual rate of increase in 1975-92 was 4.0 percent. (During this period, R&D spent on energy, following the 1973 oil embargo, and on health stepped up.) Chart 2 presents expenditures by performer group. Expenditure patterns have been similar for each of the groups performing R&D. Expenditures increased steadily until the late 1960's, leveled off or declined somewhat for a decade, and, except for Federal performance, then increased through 1992. Federal performance has been flat since the late 1980's.

Table 4.2 shows constant-dollar expenditures by industry (including ffrdc's administered by industry). The recent growth in R&D expenditures for industry has been uneven. From 1987 to 1992, real R&D performed by industry increased at an average annual rate of 2.1 percent; however,



7 of the 14 industry groups had declining R&D expenditures during this period. The fastest rates of decline were in stone, clay, and glass products and in aircraft and missiles. The fastest growth has been in nonmanufacturing, which tripled its R&D expenditures between 1987 and 1992.

Table 4.3 shows the number of R&D scientists and engineers by industry, an additional input series. Like the constant-dollar expenditure series, it abstracts from price change over time, but it is narrower in coverage than expenditures. From 1987 to 1992, the picture of uneven growth across industry groups seen in the constant-dollar estimates is also seen in the number of scientists and engineers. Again, the fastest growth is in nonmanufacturing, but the number of scientists and engineers doubled rather than tripling as the constant-dollar expenditures did.

Tables 5.1 and 5.2 show implicit price deflators (IPD's) for each of the performers. IPD's are constructed to derive constant-dollar estimates; the overall IPD for R&D is a byproduct of the constant-dollar estimates.<sup>35</sup> The IPD's of most performers do not greatly differ from the IPD for total R&D, which grew at an average annual rate of 3.7 percent during 1987-92. Notable exceptions are universities and colleges and FFRDC's. During 1987-92, the IPD's for private and public universities and colleges grew at average annual rates of 5.9 percent and 5.8 percent, respectively. On the other end of the scale, the IPD's for FFRDC's administered by nonprofit institutions and by governments grew at average annual rates of 2.5 percent and 2.6 percent, respectively.

# Stock of R&D capital

Investment, consumption of R&D capital, and gross and net stocks are shown in tables 1.1 and 1.2 in current dollars and in constant dollars, respectively. Stocks and consumption of R&D capital are not shown prior to 1959, because the perpetual inventory method for deriving R&D net fixed intangible capital stock would require additional years of constant-dollar investment data, which are not available.

<sup>35.</sup> BEA constructed the R&D IPD at the finest level of detail possible. In contrast, NSF and others have used the GDP implicit price deflator or other summary price measures to produce estimates of constant-dollar R&D expenditures. A comparison of the total R&D IPD and the GDP IPD shows that the latter provides a reasonable approximation to the former for deflating total R&D expenditures. Use of the GDP IPD overstates the historical growth in R&D performed in public and private universities and colleges and understates the historical growth in R&D performed in many FFRDC'S. NSF views the GDP deflator as an "opportunity cost" of the real resources forgone in engaging in R&D rather than as measuring the costs of doing R&D, and recognizes that the deflator is less useful for calculating finer-level components of R&D. See National Science Board, National Science Foundation [39].

In 1992, constant-dollar fixed tangible investment was \$723 billion; the constant-cost net stock of fixed reproducible tangible capital of government and business (including nonprofit institutions) was \$12,020 billion. Adding constant-dollar R&D fixed intangible investment would increase fixed investment by 19 percent, or \$140 billion; adding the resulting R&D stock would increase the constant-cost net stock of fixed reproducible capital by almost 9 percent, or \$1,049 billion.

Chart 3 compares the constant-cost net stock of R&D fixed capital with the constant-cost net stock of fixed reproducible tangible capital of government and business. The chart shows that while the constant-cost fixed reproducible tangible capital stock grew rather steadily from 1959 to 1992 (left scale), the stock of R&D capital grew rapidly until 1970, slowed sharply from 1970 to 1981, and then grew somewhat more rapidly thereafter (right scale). The ratio of the R&D stock to the fixed reproducible tangible stock increased sharply until 1970, fell until 1981, and has increased thereafter.

The average age of the R&D gross fixed intangible capital stock, a rough indicator of the age of the knowledge in the stock, is a byproduct of the perpetual inventory method. As shown in the addenda to table 1.2, the average age of the total constant-cost gross R&D stock increased from about 6.5 years in 1960 to a high of 8.9 years in 1980, then deceased to 8.2 years in 1992. The age of private stock, which makes up about three-quarters of the total stock, showed a very similar

CHART 3 Constant-Cost Net Stocks of Capital Trillion 1987 \$, ratio scale Billion 1987 \$, ratio scale Government and business fixed reproducible tangle capital (left scale 1,000 10 900 800 98 7 700 6 600 5 500 4 400 R&D fixed intangible capital (right scale) 3 300 1959 62 65 68 71 74 77 80 83 86 Source: Table 1.2. U.S. Department of Commerce, Bureau of Economic Analysis

pattern. The age of the government stock started higher, at almost 8 years, decreased about half a year over the decade to 1970, and then increased to 9 years at the end of the 1980's; it stood at 8.8 years in 1992.

#### **Future Directions**

The R&D satellite account now presents basic information about R&D—the value of its production by performer, by funder, and by type in current dollars and by performer in constant dollars—and treats the expenditures that measure that production as investment to obtain a stock of R&D fixed intangible capital. Future work could proceed in several directions: Rounding out the view of R&D within an economic accounting framework, refining the existing estimates and providing additional information, and enhancing the international comparability of the satellite account presentation of R&D.

Rounding out the economic accounting view of R&D.—The satellite account presents the total value of R&D produced in the United States by adjusting the best available source of information about R&D to prepare estimates consistent with the NIPA's. The restructured GDP that is implied is shown as follows:

Personal consumption expenditures

Less: Expenditures on R&D

Plus: Consumption of fixed R&D capital

Gross domestic investment

Gross fixed investment

Tangible fixed investment

R&D fixed investment

Change in inventories

Business tangible inventories

**R&D** inventories

Net exports of goods and services

Government purchases

Less: Expenditures on R&D

Plus: Consumption of fixed R&D capital

Nonprofit institution and government expenditures on R&D are subtracted from personal consumption expenditures and government purchases, respectively. Those expenditures are added to business expenditures on R&D to obtain total R&D investment, split as described earlier between fixed investment and change in inventories. (The term "tangible" is introduced to distinguish the investment in the existing accounts from R&D.) Consumption of fixed R&D capital is allocated to nonprofit institutions and to government; the consumption of fixed R&D capital

This view of the production of R&D is useful, but could be more fully rounded out within an economic accounting framework. To do so within the national income and product (NIP) account—the first of the five accounts in the NIPA summary set of accounts—would call for identifying components on the product and income sides of the NIP account that include subcomponents that relate to R&D. For example, tangible investment includes investment that provides the capital used to produce R&D, and identifying that investment within the total may be useful.

Rounding out the treatment in the NIP account would lead to changes in the other four accounts of the NIPA summary set. In particular, the gross saving and investment account would reflect changes in the coverage of investment, consumption of fixed capital, and sector saving.

Further, the investment allocated to government and nonprofit institutions might be expected to have a net return (over and above costs, such as consumption of fixed capital) that would appear both on the product (or expenditure) side of the account and on the income side. At present, the NIPA's do not include such a return for nonprofit institutions' investment, and they do not treat any government expenditure as investment (so that there is no return to be considered). However, BEA, as part of an ongoing modernization of the accounts, is considering treating government expenditures on structures and durable equipment as investment, and a major issue is whether a net return on the capital created should be estimated. Especially if a net return is calculated for government fixed reproducible tangible capital, the R&D satellite account should be brought into line to have a consistent treatment for all government capital.

These points are raised within the context of the existing NIPA's and the associated capital stock estimates. However, BEA is reviewing the appropriateness of the concepts and methods underlying its capital stock estimates, and future estimates may be based on somewhat different concepts and measurement methods.<sup>36</sup> In

keeping with the approach of constructing the R&D satellite account measures to be consistent with the more general measures with which they might be used and compared, the satellite account measures could change also. Further, as the U.S. accounts are modernized along the lines of the international guidelines in the *System of National Accounts* 1993, further modifications might be made.

Refining the estimates.—Refining the estimates and providing additional breakdowns would strengthen the satellite account. R&D expenditures funded by the Federal Government by agency would provide a proxy for a partial breakdown of R&D by purpose. This breakdown also could lead to a defense-nondefense split; the defense portion would include both purchases of contractual R&D and R&D performed inhouse. Such additional detail could be expected to be of wide interest and also improve the NIPA estimates.

Sources of data on R&D other than NSF have the potential of improving the accuracy of the estimates and of facilitating the provision of additional information. One possibility is that other sources of R&D data could be used to supplement the information from NSF's surveys. These sources could be useful, for example, in developing the analytically interesting but difficult breakdowns by purpose or region. For example, health-related R&D, by all performers, might be separately identified. Another possibility is that BEA'S survey data on direct investment—foreign direct investment in the United States and U.S. direct investment abroad—and on international trade in services could be further mined for information about international R&D expenditure flows. Because the knowledge gained from R&D is highly mobile internationally, and because there is some evidence that the internationalization of R&D is intensifying, there is substantial interest in tracing the flows.

Further work to refine the deflation of R&D could yield constant-dollar estimates by source of funding and by type of R&D. These constant-dollar estimates would yield, in turn, R&D capital stocks that would allow users to examine whether R&D capital from different sources of funding have different effects. For example, this refinement would allow further examination of the finding by some analysts that government-funded R&D has different effects on productivity than other R&D. Similarly, stocks of R&D capital by type would allow the examination of whether the different types have effects on productivity with different time patterns.

*International comparability.*—Because of the substantial interest in comparing R&D across countries, several strands of work in the international area could contribute to, and benefit from, the U.S. R&D satellite account. First, further work on R&D and other forms of intangible capital formation and capital stock is on the research agenda that emerged from the preparation of the System of National Accounts 1993. This work might lead to some useful standardization on aspects for which empirical work is not likely to lead to firm answers—for example, on the issue of longevity of basic research capital. Second, several international classifications that identify purpose, or function, are to be completed or updated in the future. One of the specific goals of the work is to include R&D—for example, in the classification of functions for government and for nonprofit institutions. The classification work is likely to draw upon the Frascati Manual. Third, as noted earlier, several countries prepare or are exploring the preparation of R&D satellite accounts.

In looking to the future of BEA'S R&D satellite account, it is especially fitting to note that satellite accounts are sometimes called economic accountants' laboratories. The work in these laboratories—both in the United States, reflecting comments from users and BEA'S experience, and abroad—can be expected to add to knowl-

#### **Data Availability**

A complete set of data in the R&D satellite account is available on a microcomputer diskette. The data set includes the tables published in the article, but for all years rather than just the selected years shown in the article. The first year of data shown in most tables is either 1953 or 1959, depending on the availability of source data. The disk also includes supplemental tables.

The BEA accession number for the diskette, which is a 3½-inch HD diskette, is 53-94-40-001. Its price is \$20.

For more information about the contents of the diskette, call Carol Moylan at 202–606–9711 or Bruce Grimm at 202–606–9623. To order the diskette using MasterCard or Visa, call Bea's public information office at 202–606–9900. To order by mail, write to the Public Information Office, Order Desk, Be-53, Bureau of Economic Analysis, U.S. Department of Commerce, Washington, DC 20230. Specify the R&D Satellite Account diskette, accession number, and its price. For foreign shipment, add 25 percent to the total amount of the order. A check or money order payable to "Bureau of Economic Analysis" must accompany all written orders. Be sure to include a return address.

edge. This knowledge, combined with resources, would help set a course for future improvements.

#### **Technical Note**

This note provides additional information about the construction of the R&D satellite account. It covers the sources of data, estimating methods, and assumptions used to construct the three major segments of the account: Current-dollar expenditures, constant-dollar expenditures, and current-cost and constant-cost gross and net capital stocks. Because the R&D satellite account is designed to supplement the U.S. economic accounts, the methods used to estimate R&D flows and stocks are consistent with those used to construct the U.S. national income and product accounts (NIPA's) and the associated estimates of capital stocks. As it does with other estimates, BEA has modified available source data to tailor them to the statistical and conceptual requirements of the account.

## Current-dollar expenditures

The estimates of R&D expenditures are largely based on, or are extensions of, data that began in 1953 from four annual surveys published by the National Science Foundation (NSF): Federal Funds for Research and Development, Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, Academic Science and Engineering: R&D Expenditures, and Research and Development in Industry.<sup>37</sup> The two Federal surveys are universe surveys, the academic survey is close to a universe survey, and the industry survey uses a sample that is redrawn every 5 years.<sup>38</sup> The surveys are intended to cover all formal R&D activities, not just the activities assigned to separate R&D units.

The first survey measures obligations and outlays by Federal agency, and the second survey measures obligations by Federal agency. The last two surveys measure expenditures. These survey measures differ with respect to the kind of information they collect about the tangible capital used in performing R&D. For example, the two Federal surveys include a separate measure of tangible capital spending, but exclude its depreciation. The academic and industry surveys do not include a separate measure of capital spending, but include its depreciation as an unidentifiable part of overhead costs. All of these measures are

 $_{37}$ . See Division of Science Resource Studies, National Science Foundation [15], [16], [17], [18], [20], and [22] for more information.

<sup>38.</sup> Beginning in 1992, the industry samples will be redrawn annually.

broken down by type of R&D, and each survey includes at least some geographic detail. In addition, the industry survey provides tabulations of the net sales of R&D performing companies and the full-time-equivalent number of industry R&D scientists and engineers.

Data from surveys of State and local R&D expenditures and of nonprofit institution R&D expenditures, published occasionally by NSF, were also used.<sup>39</sup> These data were interpolated and extrapolated to obtain estimates for missing years.

Performer-based estimates.—The R&D satellite account features estimates of R&D expenditures that are largely based on data reported by performers of the R&D rather than by funders of the R&D. This approach attempts to avoid at least two problems. First, the data reported by funders would have to be adjusted to convert them from a time-of-payment-to-the-performer basis to a time-of-expenditure-by-the-performer basis in order to be consistent with the timing with which purchases of goods and services are generally recorded in the NIPA's. Second, the data reported by funders would have to be adjusted to

39. See Division of Science Resources Studies, National Science Foundation [20] and [22] for more information.

avoid double-counting. Otherwise, R&D that is subcontracted would be counted twice—once by the primary source of funding and once by the secondary source of funding that subcontracted the R&D.

Expenditures for R&D performed by industry, by public and private universities and colleges, and by academically administered, federally funded research and development centers (FFRDC'S) are prepared from data reported by R&D performers. In recent years, these performers have accounted for roughly 85 percent of all R&D expenditures. For the remaining 15 percent, performer reports are not available, and expenditures are based on data reported by funders.

Adjustments to the survey data.—BEA adjusts the survey-based data to make them conceptually and statistically consistent with the NIPA's. The adjustments raised the level of current-dollar expenditures, on average, 2.5 percent in 1953–92; in 1987–92, the adjustments raised the level somewhat less, an average of 1.5 percent. The four major types of adjustments to the NSF survey data are summarized in table C.

First, BEA adjusts the R&D expenditures from NSF surveys to obtain consumption of fixed tangi-

Table C.—Major Adjustments to National Science Foundation Survey Data to Derive R&D Satellite Account Expenditures

Type of adjustment	Method used	R&D performers affected
Adjustments to obtain consumption of fixed tangible capital used in performing R&D.	Expenditures for R&D structures and equipment are removed from R&D expenditures. Consumption of this capital is estimated using perpetual inventory methodology and added to R&D expenditures.	Federal Government State and local governments
	Implied depreciation of fixed tangible capital used in performing R&D is put on an economic accounting basis.	Private universities and colleges Public universities and colleges FFRDC's administered by universities and colleges Industry
Timing adjustments	Fiscal years are converted to calendar years, using weighted averages.	Federal Government State and local governments FFRDC's administered by NPI's Other NPI's (Federal funds)
	Academic years are converted to calendar years, using weighted averages.	Private universities and colleges Public universities and colleges FFRDC's administered by NPI's
	Federal R&D obligations are converted to expenditures, using statistically estimated phase-out patterns.	Federal Government FFRDC's administered by NPI's Other NPI's (Federal funds)
Geographic coverage adjustments	R&D expenditures primarily in U.S. territories and possessions are removed from R&D expenditures.	Private universities and colleges Public universities and colleges FFRDC's administered by universities and colleges
Adding estimates of suppressed industry detail	Judgmental estimates are used where R&D data have been suppressed by NSF to avoid disclosures of confidential survey data.	Industry

NPI's Nonprofit institutions NSF National Science Foundation ble capital used in performing R&D. Two methods are used, depending on the handling of this capital in the surveys. For the Federal Government and for State and local governments, BEA removes expenditures on fixed reproducible tangible capital—structures and equipment—and adds an estimate of the consumption of that capital based on BEA's perpetual inventory methodology. For other performers, BEA converts the depreciation implied in the R&D survey (part of overhead) to a basis that reflects the valuation and consistency (for example, of service lives) appropriate for economic accounts.

To make the conversion for private and public universities and colleges and for FFRDC's administered by universities and colleges, an estimate of expenditures on R&D structures and equipment is made as a first step. Equipment is then split between capital equipment and expensed "research" equipment. (Research equipment is purchased by the academic institution from current fund accounts.) Next, the implied depreciation of structures and capital equipment is calculated using the depreciation patterns and the service lives prescribed for NSF reporting purposes. This implied depreciation and the expenditures on research equipment are then subtracted from reported R&D expenditures. Finally, BEA's estimate of consumption of structures and equipment, which is estimated using BEA's perpetual inventory methodology and the same service lives used in preparing fixed tangible capital stocks, is added back in: it is valued at current cost.

To make the conversion for industry performers, the information on capital expenditures needed to develop an estimate of implied depreciation is not available. BEA developed estimates based on the 1958 survey-based depreciation reported by NSF and the 1982 depreciation charges of R&D auxiliaries from the Bureau of the Census 1982 Enterprise Statistics [6]. For each industry, the depreciation is converted to an economic basis using the ratios of historical-cost to current-cost valuation from the estimates of academic expenditures described above.

Second, two timing adjustments are made. Data from the Federal Government are on a fiscal year basis, and data from universities and colleges are on an academic year basis. These data are converted to a calendar year basis by using weighted averages of adjacent years. Federal obligations by performer—for example, contracts awarded or other binding commitments made that will require outlays—are converted to ex-

penditures using statistically estimated phasing patterns prepared by BEA.

Third, data from the academic surveys are adjusted to exclude R&D performed in geographic areas—primarily U.S. territories and possessions—that are not included in the NIPA's. Because these academic surveys tabulate expenditures by individual school or FFRDC, these expenditures could be removed.

In the fourth adjustment, BEA developed R&D expenditure estimates for industries and years that had been suppressed by NSF in order to avoid disclosure of confidential information from the industry survey. The BEA estimates are based on statistical techniques (primarily interpolations), on fragmentary data from other sources, and on judgment; they do not disclose confidential company data.

Backward extensions of the survey data.—In order to develop the necessary statistical foundation to construct capital stock estimates using the perpetual inventory method, BEA prepared estimates of R&D expenditures for years prior to 1953, when the NSF surveys began. Using various data sources, BEA extended the R&D expenditure estimates back to 1920. Estimates of R&D expenditures are not made for years before 1920, because little information is available; it is assumed that R&D expenditures before 1920 were quite small.

The BEA estimates of expenditures by R&D performers for 1920-52 are made using a methodology generally similar to that described by John Kendrick.<sup>40</sup> First, expenditures are established for benchmark years. Benchmark years are 1921, 1930, 1940, and 1951 for total R&D expenditures and 1921, 1927, 1931, 1933, 1938, 1940, 1946, and 1951 for industry R&D, and the expenditures are from Nestor Terleckyj.<sup>41</sup> Expenditures in the non-benchmark years in 1920-41 are estimated by interpolation or extrapolation, using estimates of R&D reported by Vannevar Bush as indicators when available.42 Expenditures for nonbenchmark years in 1942-52 are estimated using data published by the Research and Development Board.43

The BEA estimates for 1920–52 are supplemented in two ways. Expenditures for FFRDC's, from their inception in 1942, are based on data published in a study by the Denver Research Institute. Expenditures on the Manhattan project

<sup>40.</sup> See John Kendrick [32].

<sup>41.</sup> See Nestor Terleckyj [54].

<sup>42.</sup> See Vanevar Bush [12].

<sup>43.</sup> See Research and Development Board, Department of Defense [54].

<sup>44.</sup> See Denver Research Institute [15].

(which developed the first atomic bomb) for 1942–46 are based on data reported by Richard Hewlett and Oscar Anderson, Jr. 45 At its peak in 1944, the Manhattan project accounted for nearly one-tenth of all R&D performed in the United States.

Issues with R&D by funder and by type.—As discussed above, the basic framework for the R&D satellite account is R&D arrayed by performer. In addition, R&D is shown broken down by source of funding and by type.

In the R&D satellite account, a maximum of five sources of funding are distinguished: Federal Government, State and local governments, industry, universities and colleges, and other (which includes nonprofit institutions and foreign sources). The satellite account shows less source-of-funding detail for some performers because of varying source data. For example, three sources of funding are distinguished for R&D performed by industry (see table 2.1), although industry source data divide R&D performed into only two funding categories—Federal funds and all other funds. Within the other funds category, BEA estimated State and local government funding using data from surveys of State and local R&D. BEA assumed that the funding of industry R&D from universities and colleges and from other nonprofit institutions is negligible and that foreign funding is small enough so that the remainder of industry R&D funding could be labeled "from industry."

The breakdowns by type embody substantial uncertainty. Because there are no clear-cut distinctions between the types, uncertainties must be resolved by the judgment of the survey respondents. It is unlikely that these resolutions will be the same among reporting groups. For example, academic respondents may be less likely to report research as applied or development. In addition, the breakdowns by type are voluntary on industry and academic surveys, and not all surveys ask for the full three-way breakdown.

# Constant-dollar expenditures

Table D provides an overview of the source data and methods used in deriving constant-dollar R&D expenditures. For each group of performers, constant-dollar expenditures are calculated by dividing current-dollar expenditures by price deflators at the most detailed cost level available. Constant-dollar estimates begin in 1929, the year NIPA price indexes become available. The

methodology of using cost components that are matched with existing indexes builds on both existing BEA work and work done by others—most notably John Jankowski of NSF and Edwin Mansfield of the University of Pennsylvania for industry R&D expenditures and D. Kent Halstead of Research Associates of Washington for academic R&D expenditures.<sup>46</sup>

Typically, the cost components are compensation of employees, materials and supplies, and overhead. Data used for deflation include information on prices paid by the Federal Government, the NIPA price index for noncommercial research organizations, the producer price index for industrial commodities published by the Bureau of Labor Statistics (BLS), average hourly earnings and median weekly salaries of managers and administrators from BLS, annual mean salaries of engineers from the Engineering Manpower Commission, component price indexes from the National Institute of Health's biomedical R&D price index, and higher education price indexes published by Research Associates of Washington.<sup>47</sup> The base year is 1987, for which each price index is set equal to 100.

## Capital stocks

R&D investment is broken into two components fixed investment and change in R&D inventories. In the R&D satellite account, it is assumed that expenditures on R&D are inventoried for 1 year before they are included in R&D fixed capital in order to allow for the time needed to complete R&D projects. When measured in constant dollars, R&D fixed investment is equal to the R&D expenditures for the preceding year, and for each year, the change in R&D inventories is equal to the change in R&D expenditures. Because the beginning and ending inventory levels reflect different price levels, current-dollar R&D inventories from the end of the preceding year are revalued to correspond to the prices for the current year by using an inventory valuation adjustment. 48

R&D fixed capital stocks are constructed using the methods BEA uses to construct capital stocks associated with the NIPA's, including the same perpetual inventory method that is used for

<sup>46.</sup> See John Jankowski [30], Edwin Mansfield [36], and Research Associates of Washington [48].

<sup>47.</sup> Additional information on BEA's deflators for Federal purchases of R&D may be obtained from the Bureau of Economic Analysis [8]. Additional information on BEA's deflators for higher education and research may be obtained from the Bureau of Economic Analysis [10]. Additional information on the biomedical R&D price index may be obtained from Office of Science Policy and Technology Transfer, National Institutes of Health [42].

<sup>48.</sup> See Bureau of Economic Analysis [9] for more information about the NIPA inventory valuation adjustment.

Table D.—Research and Development Expenditures by Performer: Sources and Methods for Constant-Dollar Estimates

Cost component	Source data for cost component	1987 (billions of dollars)	Method and source data
R&D expenditures	NSF reported distribution of wages of R&D personnel	127.39 93.25 38.32	Sum of detail Sum of detail Sum of detail
Scientists and engineers	by industry.  Based on a 1975 split	24.43	Deflation: Proxy prices by industry—annual professional income of engineers from the
Support staff	Based on a 1975 split	13.89	Engineering Manpower Commission.  Deflation: Proxy prices by industry—indexes of average hourly earnings of production workers.  Deflation: Proxy prices—PPI for industrial
Materials and supplies  Overhead less CFC	NSF reported distribution of costs of materials and supplies by industry.  NSF reported distribution of other costs by industry	16.73 33.25	Deflation: Proxy prices—PPI for industrial commodities less fuel.  Deflation: Proxy prices—median weekly salaries of
CFC for structures and equipment	less BEA estimate of depreciation.  Based on 1958 NSF reported distribution of depreciation and on 1982 depreciation charges of R&D auxiliaries from the Bureau of the Census 1982 Enterprise Statistics.	4.94	managers and administrators.
Private universities and colleges	Derived from sample of individual schools: Based on direct costs less materials and supplies.	4.21 1.86	Deflation: Proxy prices by school (from a sample of private universities and medical schools representing 90 percent of R&D expenditures)—fixed weighted price indexes for academic personnel costs (salaries and fringe benefits) from the NIH BRDPI.
Materials and supplies	Weight from NIH BRDPI	.73	
Overhead less CFC	R&D expenditures less direct costs	1.28	
CFC for structures	Expenditures for R&D structures	.17	
CFC for equipment	Expenditures for R&D capital equipment and reclassification of research equipment from current	.17	Deflation: Proxy prices—NIPA IPD for educational services equipment.
FFRDC's administered by private universities and colleges.  DOD funded	expense to investment.  Weight of expenditures based on R&D obligations to individual FFRDC's from four agency categories.	2.38	Sum of detail  Deflation: Proxy prices—NIPA IPD for DOD
DOE funded		.75	purchases of R&D. Deflation: Proxy prices—NIPA IPD for DOE
NASA funded		.82	purchases of R&D. Deflation: Proxy prices—NIPA IPD for NASA purchases of R&D.
All other funded		.13	
CFC for structures	Expenditures for R&D structures	.15	
CFC for equipment	reclassification of research equipment from current	.09	Deflation: Proxy prices—NIPA IPD for educational services equipment.
FFRDC's administered by other nonprofit institutions .	expense to investment.  Weight of expenditures based on R&D obligations to FFRDC's administered by nonprofit institutions divided into four agency categories.	.59	Sum of detail
DOD funded	uniqued into four agency categories.	.47	Deflation: Proxy prices—NIPA IPD for DOD purchases of R&D price.
DOE funded		.11	Deflation: Proxy prices—NIPA IPD for DOE purchases of R&D.
NASA funded		<.01	Deflation: Proxy prices—NIPA IPD for NASA purchases of R&D.
All other funded		.02	Deflation: Proxy prices—NIPA IPD for Federal other
Other nonprofit institutions	R&D expenditures	2.90	purchases of R&D. Deflation: Proxy prices—NIPA index for noncommercial R&D.
Federal	Federal obligations for intramural R&D personnel	13.33 4.94	Sum of detail Sum of detail
DOD	costs divided into four agency categories.	2.38	Deflation: Proxy prices—NIPA IPD for Federal
All other agencies		2.55	defense compensation of civilian employees.  Deflation: Proxy prices—NIPA IPD for Federal
Materials and supplies and overhead excluding CFC.	Expenditures excluding compensation of employees and OMB budget based estimates of equipment.	6.06	nondefense compensation of employees. Sum of detail
DOE		.07	Deflation: Proxy prices—NIPA IPD for Federal installation support services.  Deflation: Proxy prices—NIPA IPD for Federal weapons support services.

gross and net stocks of fixed reproducible tangible capital. Thus, the estimates of fixed intangible R&D capital are comparable with those of fixed reproducible tangible capital.

With the perpetual inventory method, the gross capital stock for a given period is obtained by cumulating past investment and deducting the cumulated value of investment that has been discarded, using estimated average service lives and retirement patterns.<sup>49</sup> The gross stock of fixed capital is a measure of the cumulative value of past investment still in existence. The net capital stock is equal to the gross stock less the accumulated depreciation on the assets in the gross stock.

Table D.—Research and Development Expenditures by Performer: Sources and Methods for Constant-Dollar Estimates— Continued

Cost component	Source data for cost component	1987 (billions of dollars)	Method and source data
All other agencies		1.88	Deflation: Proxy prices—NIPA IPD for Federal nondefense services excluding compensation of employees.
CFC for structures	Federal obligations for intramural R&D plant and judgment split between structures and large equipment.	.67	Deflation: Proxy prices—NIPA IPD for Federal nondefense industrial building, less force account construction.
CFC for equipment	OMB budget detail on equipment, Federal obligations for intramural R&D plant, and judgment.	1.68	Deflation: Proxy prices—NIPA IPD for Federal nondefense durable goods.
State and local	R&D expenditures excluding expenditures on plant	.71 .61	Sum of detail Deflation: Proxy prices—NIPA price index for noncommercial R&D.
CFC for structures	State and local expenditures on R&D plant and judgmental split between structures and large equipment.	.03	Deflation: Proxy prices—NIPA IPD for State and local structures new construction put-in-place, other buildings.
CFC for equipment	State and local expenditures on R&D plant and judgmental split between structures and large equipment.	.07	Deflation: Proxy prices—NIPA IPD for State and local new equipment.
Public universities and colleges  Compensation of employees	Derived from sample of individual schools: Based on direct costs less materials and supplies.	8.02 4.18	Sum of detail Deflation: Proxy prices by school (from a sample of public universities and medical schools representing 80 percent of R&D expenditures)—Fixed weighted price indexes for academic personnel costs (salaries and fringe benefits) from the NIH BRDPI.
Materials and supplies	Weight from NIH BRDPI	1.40	Deflation: Proxy prices—Fixed weighted price index for academic nonpersonnel costs from the NIH BRDPI.
Overhead excluding CFC	R&D expenditures less compensation of employees, materials and supplies, and research equipment.	1.84	Deflation: Proxy prices by school (from a sample of public universities and medical schools representing 80 percent of R&D expenditures)—Product of the price index of direct costs and an index of the indirect cost rate.
CFC for structures	Expenditures for R&D structures	.30	Deflation: Proxy prices—NIPA IPD for educational services structures.
CFC for equipment	Expenditures for R&D capital equipment and the reclassification of research equipment from current expense to investment.	.30	Deflation: Proxy prices—NIPA educational services equipment IPD.
FFRDC's administered by public universities and colleges.	Weight of expenditures excluding CFC based on R&D obligations to individual FFRDC's from four agency categories.	1.99	Sum of detail
DOD funded	agency categories.	.46	Deflation: Proxy prices—NIPA IPD for DOD purchases of R&D.
DOE funded		1.32	Deflation: Proxy prices—NIPA IPD for DOE purchases of R&D.
NASA funded		<.01	Deflation: Proxy prices—NIPA IPD for NASA
All other funded		.03	purchases of R&D. Deflation: Proxy prices—NIPA IPD for Federal other
CFC for structures	Expenditures for R&D structures	.09	nondefense purchases of R&D.  Deflation: Proxy prices—NIPA IPD for educational services structures.
CFC for equipment	Expenditures for R&D capital equipment and reclassification of research equipment from current expense to investment.	.09	Deflation: Proxy prices—NIPA IPD for educational services equipment.

BEA Bureau of Economic Analysis
BRDPI Biomedical research and development price index
CFC Consumption of fixed capital
DOD U.S. Department of Defense

DOE U.S. Department of Energy FFRDC Federally funded research and development center

IPD Implicit price deflator

NASA National Aeronautics and Space Administration NIH National Institutes of Health

NIPA National income and products accounts NSF National Science Foundation

NSF National Science Foundation
OMB U.S. Office of Management and Budget

R&D Research and development

<sup>49.</sup> For a more complete description of the NIPA perpetual inventory method, see Bureau of Economic Analysis [9], page M-3.

The perpetual inventory method used by BEA is based on uniform service lives, straight-line depreciation, and replacement cost. To adjust for varying retirement patterns, discards (retirement years) are based on a Winfrey S-3 distribution, which is a bell-shaped distribution around the expected service life of the R&D capital. Discards of capital begin as early as 45 percent of, and end as late as 155 percent of, the average lifespan.

In deciding how to apply its methodology to R&D, BEA examined several alternative depreciation patterns and performed sensitivity studies. Geometric depreciation is the pattern typically used in R&D studies, and a rate of 11 percent per year for R&D fixed capital is a plausible midpoint of a range published by academic researchers. (Some recent studies had estimates that ranged from 9 to 13 percent per year and tended to concentrate near 11 percent.) BEA's studies showed that using a depreciation rate for R&D fixed capital of 12 percent yielded a real stock of R&D capital for 1991 that was \$65 billion lower (1987 dollars) than a stock constructed using a rate of 11 percent. Using a rate of 10 percent yielded a real stock of R&D capital that was \$74 billion higher. Regardless of which rates are used, the general patterns of R&D stock are similar over time.

Because BEA currently uses the straight-line perpetual inventory method for fixed tangible capital, an average service life for R&D capital was chosen that yields a net stock comparable to a net stock from a geometric depreciation rate of 11 percent; an 18-year service life for straight-line depreciation yields the closest match. The gross and net stocks constructed in the account for 1959–92 are based on current- and constant-dollar R&D investment for 1930–91.

As with the constant-dollar expenditure estimates, constant-cost net and gross stocks are expressed in 1987 prices. Net and gross stocks valued at replacement cost are constructed by multiplying the constant-cost stocks by the corresponding R&D implicit price deflator.

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Tables 1.1 through 5.2 follow.

Table 1.1.—Research and Development Expenditures, Investment, and Stock by Performer [Millions of dollars]

[Millions of dollars]										
1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	
<b>5,288</b>	5,777	<b>6,397</b>	8,528	10,022	10,955	12,517	13,735	14,526	15,588	
451	500	561	680	783	899	1,037	1,221	1,400	1,695	
1,260	1,364	1,486	1,866	2,360	2,682	2,848	2,966	3,009	3,611	
3,577	3,913	4,350	5,982	6,879	7,374	8,632	9,548	10,117	10,282	
35,802	41,579	47,976	56,504	66,526	77,481	89,998	103,733	118,259	133,847	
1,501	392	432	1,871	1,203	576	1,179	859	413	669	
3.787	5.385	5.965	6.657	8,819	10.379	11.338	12.876	14.113	14,919	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5,030	5,742	6,551	7,410	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	92,983	106,334	120,864	136,026	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	59,799	68,799	78,366	87,997	
3,897	<b>4,374</b>	<b>4,988</b>	<b>7,004</b> 425 1,402 5,177 41,582	8,314	9,064	10,425	11,440	11,988	12,724	
253	287	334		485	557	648	768	870	1,056	
829	927	1,050		1,846	2,112	2,219	2,282	2,260	2,773	
2,815	3,160	3,604		5,983	6,395	7,558	8,390	8,858	8,895	
25,216	29,590	34,578		49,896	58,960	69,385	80,825	92,813	105,537	
1,082	416	506	1,846	1,095	517	1,004	699	268	406	
2,815	3,958	4,482	5,158	7,219	8,547	9,421	10,741	11,720	12,318	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3,699	4,317	4,992	5,722	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	68,865	80,158	92,324	105,119	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	46,028	53,892	62,109	70,359	
1,391	1,403	1,409	1,524	1,708	1,891	2,092	2,295	2,538	2,864	
198	213	227	255	298	342	389	453	530	639	
431	437	436	464	514	570	629	684	749	838	
762	753	746	805	896	979	1,074	1,158	1,259	1,387	
10,586	11,989	13,398	14,922	16,630	18,521	20,613	22,908	25,446	28,310	
419	-24	-74	25	108	59	175	160	145	263	
972	1,427	1,483	1,499	1,600	1,832	1,917	2,135	2,393	2,601	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	1,331	1,425	1,559	1,688	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	24,118	26,176	28,540	30,907	
n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	13,771	14,907	16,257	17,638	
1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	
17,449	19,078	<b>20,343</b>	22,299	23,653	25,133	26,490	26,765	27,476	29,305	
1,982	2,268	2,540	2,828	3,063	3,278	3,410	3,532	3,656	3,801	
3,783	4,105	4,333	4,710	4,925	5,236	5,555	5,882	6,027	6,326	
11,684	12,705	13,470	14,761	15,665	16,619	17,525	17,351	17,793	19,178	
151,296	170,374	190,717	213,016	236,669	261,802	288,292	315,057	342,533	371,838	
1,415	1,202	735	1,193	476	259	-31	-1,478	-887	268	
16,034	17,876	19,608	21,106	23,177	24,874	26,521	28,243	28,363	29,037	
8,342	9,350	10,464	11,820	13,274	15,022	16,942	19,196	21,453	23,675	
152,580	171,095	192,332	216,550	244,542	276,646	312,883	353,303	392,592	435,533	
98,174	109,494	122,331	136,626	153,037	171,278	191,218	212,795	232,218	252,541	
<b>14,110</b>	<b>15,185</b>	16,026	17,637	18,651	19,846	20,843	20,715	21,027	22,403	
1,192	1,318	1,458	1,605	1,716	1,802	1,808	1,810	1,827	1,883	
2,824	3,003	3,105	3,348	3,450	3,677	3,850	4,045	4,093	4,226	
10,094	10,864	11,463	12,684	13,485	14,367	15,185	14,860	15,107	16,294	
119,647	134,832	150,858	168,495	187,146	206,992	227,835	248,550	269,577	291,980	
1,026	800	447	998	302	320	-57	-1,309	-841	280	
13,084	14,385	15,579	16,639	18,349	19,526	20,900	22,024	21,868	22,123	
6,512	7,321	8,224	9,333	10,522	11,884	13,402	15,068	16,787	18,443	
118,723	133,669	150,817	170,581	193,118	218,231	246,000	276,530	306,080	338,917	
78,749	87,815	98,003	109,388	122,262	136,155	151,083	166,986	181,103	196,145	
<b>3,339</b> 790 959 1,590 31,649	3,893 950 1,102 1,841 35,542	<b>4,317</b> 1,082 1,228 2,007 39,859	<b>4,662</b> 1,223 1,362 2,077 44,521	5,002 1,347 1,475 2,180 49,523	5,287 1,476 1,559 2,252 54,810	5,647 1,602 1,705 2,340 60,457	6,050 1,722 1,837 2,491 66,507	6,449 1,829 1,934 2,686 72,956	6,902 1,918 2,100 2,884 79,858	
389	402	288	195	174	-61	26	-169	-46	-12	
2,950	3,491	4,029	4,467	4,828	5,348	5,621	6,219	6,495	6,914	
1,830	2,029	2,240	2,487	2,752	3,138	3,540	4,128	4,666	5,232	
33,857	37,426	41,515	45,969	51,424	58,415	66,883	76,773	86 512	96.616	
	5,288 451 1,260 3,577 35,802 1,501 3,787 n.a. n.a. n.a. 1,391 1,982 2,815 25,216 1,082 2,815 25,216 1,082 2,815 26,216 1,082 2,815 1,082 2,815 1,082 2,815 1,082 2,815 1,082 2,815 1,082 2,815 1,082 2,815 1,082 2,815 1,082 1,1892 1,1892 1,1892 1,1892 1,18,723 1,1844 1,192 2,824 1,1944 1,192 2,824 1,1946 1,1947 1,026 1,1949 1,1947 1,026 1,1949 1,	1953 1954  5,288 5,777 451 500 1,260 1,364 3,577 3,913 35,802 41,579 1,501 392 3,787 5,385 n.a. n.a. n.a. n.a. n.a. n.a. n.a. n.a	1953         1954         1955           5,288         5,777         6,397           451         500         561           1,260         1,364         1,486           3,577         3,913         4,350           35,802         41,579         47,976           1,501         392         432           3,787         5,385         5,965           n.a.         n.a.         n.a.           n.a.         n.a.         n.a.           n.a.         n.a.         n.a.           283         287         334           829         927         1,050           2,815         3,160         3,604           25,216         29,590         34,578           1,082         416         506           2,815         3,958         4,482           n.a.         n.a.         n.a.           n.a.         n.a.         n.a	5,288         5,777         6,397         8,528           451         500         1,364         1,486         1,866           3,577         3,913         4,350         5,982           35,802         41,579         47,976         56,504           1,501         392         432         1,871           3,787         5,385         5,965         6,657           n.a.         n.a.         n.a.         n.a.           253         287         334         425           829         2927         1,050         1,402           2,815         3,604         5,177           25,216         29,590         34,578         41,562           1,082         416         506         1,846           2,815         3,958         4,482         5,158           n.a.         n.a.         n.a.         n.a.           n.a.         n.a.         n.a. <t< td=""><td>  1953</td><td>  1953</td><td>  1953</td><td>  1953</td><td>  1953</td></t<>	1953	1953	1953	1953	1953	

See footnotes at end of table.

Table 1.1.—Research and Development Expenditures, Investment, and Stock by Performer—Continued [Millions of dollars]

	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
Research and development expenditures, total	31.731	34,268	36.794	40.617	44,512	49.882	57,211	65.185	74,486	82,854
Basic research Applied research Development Cumulative research and development expenditures <sup>1</sup>	4,038 6,920 20,773 403,569	4,477 7,611 22,180 437,837	4,908 8,368 23,518 474,631	5,324 9,327 25,966 515,248	5,976 10,034 28,502 559,760	6,927 11,026 31,929 609,642	7,786 12,595 36,830 666,853	8,685 14,305 42,195 732,038	9,773 17,057 47,656 806,524	10,667 19,009 53,178 889,378
Change in research and development inventories	353 31,378	-103 34,371	-845 37,639	1,420 39,197	1,429 43,083	1,913 47,969	3,008 54,203	3,104 62,081	4,081 70,405	3,864 78,990
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	26,283 486,919 277,052	29,479 550,106 307,491	33,337 613,511 337,107	36,422 668,449 361,133	39,458 731,197 389,629	43,398 809,843 426,904	48,084 897,483 469,670	53,182 992,890 517,922	58,630 1,085,968 566,454	63,516 1,171,988 613,375
Private research and development expenditures  Basic research Applied research Development Cumulative research and development expenditures <sup>1</sup>	24,343 2,014 4,581 17,748 316,323	26,390 2,237 5,117 19,036 342,713	28,160 2,442 5,515 20,203 370,873	31,298 2,658 6,148 22,492 402,171	34,528 2,998 6,738 24,792 436,699	<b>38,766</b> 3,483 7,547 27,736 475,465	<b>44,654</b> 3,865 8,697 32,092 520,119	<b>51,587</b> 4,333 10,052 37,202 571,706	59,539 4,941 12,437 42,161 631,245	66,592 5,415 14,152 47,025 697,837
Change in research and development inventories	356 23,987	-75 26,465	-826 28,986	1,333 29,965	1,429 33,099	1,552 37,214	2,630 42,024	3,157 48,430	3,991 55,548	3,636 62,956
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	20,452 379,342 215,097	23,003 429,064 238,786	25,982 477,799 261,229	28,316 518,972 278,780	30,559 566,486 300,130	33,582 626,426 328,562	37,111 692,905 361,158	41,004 764,977 398,034	45,105 834,898 435,388	48,784 901,216 472,918
Government research and development expenditures  Basic research Applied research Development Cumulative research and development expenditures <sup>1</sup>	<b>7,388</b> 2,024 2,339 3,025 87,246	<b>7,878</b> 2,240 2,494 3,144 95,124	8,634 2,466 2,853 3,315 103,758	9,319 2,666 3,179 3,474 113,077	9,984 2,978 3,296 3,710 123,061	<b>11,116</b> 3,444 3,479 4,193 134,177	<b>12,557</b> 3,921 3,898 4,738 146,734	<b>13,598</b> 4,352 4,253 4,993 160,332	14,947 4,832 4,620 5,495 175,279	<b>16,262</b> 5,252 4,857 6,153 191,541
Change in research and development inventories	-3 7,391	-28 7,906	-19 8,653	87 9,232	0 9,984	361 10,755	378 12,179	-53 13,651	90 14,857	228 16,034
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	5,831 107,577 61,955	6,476 121,042 68,705	7,355 135,712 75,878	8,106 149,477 82,353	8,899 164,711 89,499	9,816 183,417 98,342	10,973 204,578 108,512	12,178 227,913 119,888	13,525 251,070 131,066	14,732 70,772 140,457
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Research and development expenditures, total  Basic research Applied research Development Cumulative research and development expenditures <sup>1</sup>	<b>91,578</b> 11,789 20,964 58,825 980,956	103,597 13,059 23,135 67,403 1,084,553	115,435 14,309 25,892 75,234 1,199,988	121,224 16,695 27,806 76,723 1,321,212	<b>127,39</b> ( 18,064 28,467 80,859 1,448,602	18,914 7 30,139 85,827	142,91 21,67 32,93 88,31 1,726,40	3 24,671 0 36,054 5 92,723	162,818 28,346 39,896 94,576 2,042,666	29,308 40,205 99,795
Change in research and development inventories  Research and development fixed investment	4,738 86,840	8,003 95,594	8,012 107,423	2,807 118,417	2,621 124,769		1,98 140,93		4,531 158,287	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	68,121 1,255,274 660,640	72,905 1,340,428 710,695	77,769 1,425,140 763,511	82,459 1,514,514 821,287	87,923 1,616,123 885,298	1,737,364	101,83 1,871,84 1,039,93	2 2,004,242	117,121 2,134,514 1,192,648	2,246,959
Private research and development expenditures  Basic research Applied research Development Cumulative research and development expenditures <sup>1</sup>	<b>73,751</b> 5,989 15,846 51,916 771,588	84,103 6,736 17,827 59,540 855,691	<b>94,146</b> 7,414 20,394 66,338 949,837	98,373 9,123 22,011 67,239 1,048,210	9,843 22,266 71,227	3 10,061 5 23,437 7 75,544	115,09 12,04 25,61 77,44 1,375,68	2 14,254 2 28,248 4 81,280	17,104	17,287 31,210 88,425
Change in research and development inventories	3,991 69,760	7,129 76,974	7,085 87,061	1,998 96,375	2,401 100,935		1,11 113,98			
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	52,434 967,669 512,151	56,299 1,035,392 553,474	60,183 1,102,947 597,223	63,956 1,174,007 644,858	68,295 1,254,372 696,825	1,353,273	79,67 1,462,94 824,67	7 1,567,734	91,807 1,671,934 946,631	1,768,322
Government research and development expenditures  Basic research Applied research Development Cumulative research and development expenditures <sup>1</sup>	17,827 5,800 5,118 6,909 209,368	19,494 6,323 5,308 7,863 228,862	21,289 6,895 5,498 8,896 250,151	22,851 7,572 5,795 9,484 273,002	<b>24,05</b> 4 8,221 6,201 9,632 297,056	8,853 6,702 10,283	<b>27,82</b> 9,63 7,31 10,87 350,71	1 10,417 8 7,806 1 11,443	<b>31,044</b> 11,242 8,490 11,312 411,424	12,021 8,995 11,370
Change in research and development inventories	747 17,080	874 18,620	927 20,362	809 22,042	220 23,834		86 26,95		-25 31,069	
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	15,687 287,605 148,489	16,606 305,036 157,221	17,586 322,193 166,288	18,503 340,507 176,429	361,751	384,091	22,16 408,89 215,25	5 436,508	25,314 462,580 246,017	478,637

n.a. Not available.
1. Cumulative since 1929.

Table 1.2.—Research and Development Expenditures, Investment, and Stock by Performer in Constant Dollars [Millions of 1987 dollars]

[Williotis of 1907 dollars]											
	1953	1954	1955	1956	1957	1958	1959	1960	1961	1962	
Research and development expenditures, total	<b>27,688</b> 79,521	<b>29,475</b> 109,151	<b>31,330</b> 140,936	<b>39,496</b> 180,290	<b>44,736</b> 224,436	<b>47,208</b> 271,343	<b>52,134</b> 322,596	<b>55,697</b> 377,505	<b>57,529</b> 434,346	<b>60,365</b> 493,498	
Change in research and development inventories	27,688	29,475	31,330	39,494	33,781	47,208	4,926	55,697	47,150	15,629	
	19,815	27,688	29,475	31,330	39,496	44,736	47,208	52,134	55,697	57,529	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	21,448	23,744	26,250	28,858	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	390,712	432,582	477,102	522,415	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	249,314	277,674	307,086	335,754	
Private research and development expenditures  Cumulative research and development expenditures <sup>1</sup>	<b>18,456</b> 48,970	<b>20,398</b> 69,368	<b>22,708</b> 92,076	<b>30,732</b> 122,808	<b>35,382</b> 158,190	<b>37,553</b> 195,743	<b>41,598</b> 237,341	<b>44,373</b> 281,714	<b>45,517</b> 327,231	<b>47,140</b> 374,371	
Change in research and development inventories	63,192	20,041	33,663	31,306	26,318	37,553	4,045	44,373	36,970	11,758	
	13,361	18,456	20,398	22,708	30,732	35,382	37,553	41,598	44,373	45,517	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	14,760	16,725	18,862	21,079	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	270,720	306,128	343,739	381,931	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	180,799	205,661	231,119	255,580	
Government research and development expenditures Cumulative research and development expenditures <sup>1</sup>	<b>9,232</b> 30,551	<b>9,077</b> 39,783	<b>8,622</b> 48,860	<b>8,764</b> 57,482	<b>9,354</b> 66,246	<b>9,655</b> 75,600	<b>10,536</b> 85,255	<b>11,324</b> 95,791	<b>12,012</b> 107,115	<b>13,225</b> 119,127	
Change in research and development inventories	-35,504	9,434	-2,333	8,188	7,463	9,655	881	11,324	10,180	3,871	
	6,454	9,232	9,077	8,622	8,764	9,354	9,655	10,536	11,324	12,012	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6,688	7,019	7,388	7,779	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	119,992	126,454	133,363	140,484	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	68,515	72,013	75,967	80,174	
Addenda: Average age, in years, of R&D gross fixed intangible capital	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.6	6.5	6.5	6.5	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	6.0	5.9	5.9	6.0	
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7.9	7.9	8.0	8.0	
	3,702,100	3,845,700	4,007,200	4,155,900	4,299,300	4,430,200	4,593,500	4,749,000	4,905,900	5,079,800	
	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	
Research and development expenditures Cumulative research and development expenditures <sup>1</sup>	<b>65,886</b> 559,384	<b>70,504</b> 629,888	<b>73,327</b> 703,215	<b>77,442</b> 780,657	<b>79,113</b> 859,770	<b>79,854</b> 939,624	<b>79,733</b> 1,019,357	<b>75,668</b> 1,095,025	<b>73,344</b> 1,168,369	<b>73,970</b> 1,242,339	
Change in research and development inventories	66,243	59,549	72,751	75,551	79,113	70,199	79,733	73,836	63,990	74,094	
	60,365	65,886	70,504	73,327	77,442	79,113	79,854	79,733	75,668	73,344	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	31,547	34,423	37,527	40,765	44,085	47,461	50,800	54,020	56,941	59,493	
	569,675	621,255	676,436	732,803	791,295	850,214	908,392	964,142	1,013,144	1,057,120	
	364,615	396,042	429,103	461,585	494,897	526,509	555,591	581,351	600,037	613,820	
Private research and development expenditures	<b>50,916</b> 425,287	<b>53,811</b> 479,098	<b>55,441</b> 534,539	<b>58,774</b> 593,313	<b>59,774</b> 653,087	<b>60,737</b> 713,824	<b>60,529</b> 774,353	<b>56,987</b> 831,340	<b>54,794</b> 886,134	<b>55,451</b> 941,585	
Change in research and development inventories	51,149	44,747	54,924	65,371	59,774	85,909	60,529	63,205	78,471	55,365	
	47,140	50,916	53,811	55,441	58,774	59,774	60,737	60,529	56,987	54,794	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	23,341	25,717	28,233	30,817	33,459	36,132	38,758	41,278	43,534	45,465	
	421,181	463,341	507,677	552,534	599,413	645,964	691,943	735,650	773,498	806,818	
	279,419	304,570	330,207	354,769	380,066	403,700	425,706	445,013	458,443	467,717	
Government research and development expenditures  Cumulative research and development expenditures <sup>1</sup>	<b>14,970</b> 134,097	<b>16,693</b> 150,790	<b>17,886</b> 168,676	<b>18,668</b> 187,344	<b>19,339</b> 206,683	<b>19,117</b> 225,800	<b>19,204</b> 245,004	<b>18,681</b> 263,685	<b>18,550</b> 282,235	<b>18,519</b> 300,754	
Change in research and development inventories	15,094	14,802	17,827	10,180	19,339	-15,710	19,204	10,631	-14,481	18,729	
	13,225	14,970	16,693	17,886	18,668	19,339	19,117	19,204	18,681	18,550	
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	8,206	8,706	9,294	9,948	10,626	11,329	12,042	12,742	13,407	14,028	
	148,494	157,914	168,759	180,269	191,882	204,250	216,449	228,492	239,646	250,302	
	85,196	91,472	98,896	106,816	114,831	122,809	129,885	136,338	141,594	146,103	
Addenda: Average age, in years, of R&D gross fixed intangible capital Private Government	6.5	6.6	6.6	6.7	6.8	6.9	7.0	7.2	7.4	7.6	
	6.0	6.1	6.3	6.4	6.5	6.7	6.9	7.1	7.3	7.6	
	7.9	7.8	7.7	7.6	7.4	7.4	7.4	7.4	7.5	7.6	
Government and business net fixed reproducible tangible capital 2	5,271,700	5,478,000	5,720,200	5,978,100	6,217,200	6,478,400	6,736,100	6,957,700	7,187,800	7,434,400	

See footnotes at end of table.

Table 1.2.—Research and Development Expenditures, Investment, and Stock by Performer in Constant Dollars—Continued [Millions of 1987 dollars]

[minioto of 1507 delicits]											
	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	
Research and development expenditures Cumulative research and development expenditures <sup>1</sup>	<b>74,773</b> 1,317,112	<b>74,530</b> 1,391,642	<b>72,922</b> 1,464,564	<b>75,476</b> 1,540,040	<b>77,932</b> 1,617,972	<b>81,067</b> 1,699,039	<b>85,503</b> 1,784,542	<b>89,660</b> 1,874,202	<b>94,747</b> 1,968,949	<b>99,312</b> 2,068,261	
Change in research and development inventories	72,882	74,471	64,434	75,476	43,105	81,067	77,453	56,629	94,957	90,824	
	73,970	74,773	74,530	72,922	75,476	77,932	81,067	85,503	89,660	94,747	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	61,804	63,954	65,915	67,602	69,092	70,514	71,888	73,286	74,758	76,345	
	1,098,707	1,137,821	1,173,343	1,203,353	1,232,252	1,259,927	1,286,892	1,314,738	1,343,574	1,374,495	
	626,039	636,843	645,486	650,799	657,202	664,625	673,792	686,000	700,876	719,288	
Private research and development expenditures	<b>56,262</b> 997,847	<b>56,084</b> 1,053,931	<b>54,516</b> 1,108,447	<b>56,896</b> 1,165,343	<b>59,352</b> 1,224,695	<b>61,864</b> 1,286,559	<b>65,704</b> 1,352,263	<b>69,938</b> 1,422,201	<b>74,906</b> 1,497,107	<b>79,189</b> 1,576,296	
Change in research and development inventories	62,859	56,463	46,604	56,896	27,251	61,864	58,151	39,258	75,093	71,277	
	55,451	56,262	56,084	54,516	56,896	59,352	61,864	65,704	69,938	74,906	
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	47,190	48,787	50,233	51,454	52,521	53,560	54,581	55,636	56,796	58,112	
	838,230	867,638	894,101	915,897	937,072	957,757	977,862	999,069	1,022,102	1,047,870	
	476,027	483,483	489,358	492,428	496,810	502,612	509,876	519,950	533,057	549,858	
Government research and development expenditures	<b>18,511</b> 319,265	<b>18,446</b> 337,711	<b>18,406</b> 356,117	<b>18,580</b> 374,697	<b>18,580</b> 393,277	<b>19,203</b> 412,480	<b>19,799</b> 432,279	<b>19,722</b> 452,001	<b>19,841</b> 471,842	<b>20,123</b> 491,965	
Change in research and development inventories	10,023	18,008	17,830	18,580	15,854	19,203	19,302	17,371	19,864	19,547	
	18,519	18,511	18,446	18,406	18,580	18,580	19,203	19,799	19,722	19,841	
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	14,614	15,167	15,682	16,148	16,571	16,954	17,307	17,650	17,962	18,233	
	260,477	270,183	279,242	287,456	295,180	302,170	309,030	315,669	321,472	326,625	
	150,012	153,360	156,128	158,371	160,392	162,013	163,916	166,050	167,819	169,430	
Addenda:  Average age, in years, of R&D gross fixed intangible capital  Private  Government	7.8	8.0	8.3	8.5	8.6	8.8	8.9	8.9	9.0	9.0	
	7.8	8.1	8.3	8.5	8.7	8.8	8.9	9.0	9.0	8.9	
	7.8	7.9	8.1	8.3	8.4	8.6	8.7	8.8	8.9	9.0	
Government and business net fixed reproducible tangible capital $^2\dots\dots$	7,715,000	7,944,800	8,099,500	8,277,200	8,511,100	8,791,700	9,088,600	9,320,700	9,532,000	9,665,800	
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	
Research and development expenditures	<b>104,707</b> 2,172,968	<b>113,433</b> 2,286,401	<b>121,871</b> 2,408,272	<b>124,769</b> 2,533,041	<b>127,390</b> 2,660,431	<b>130,427</b> 2,790,858	<b>132,253</b> 2,923,111	<b>136,493</b> 3,059,604	<b>140,435</b> 3,200,039	<b>141,410</b> 3,341,449	
Change in research and development inventories	104,269	112,857	121,871	122,043	127,390	129,930	129,902	136,516	139,859	141,331	
	99,312	104,707	113,433	121,871	124,769	127,390	130,427	132,253	136,493	140,435	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	78,080	80,004	82,266	84,962	87,923	90,991	94,179	97,463	100,868	104,450	
	1,407,407	1,443,719	1,486,946	1,536,885	1,588,302	1,641,320	1,696,480	1,752,683	1,812,302	1,874,989	
	740,530	765,220	796,389	833,320	870,166	906,578	942,794	977,584	1,013,185	1,049,195	
Private research and development expenditures	<b>83,704</b> 1,660,000	<b>91,444</b> 1,751,444	<b>98,881</b> 1,850,325	<b>100,935</b> 1,951,260	<b>103,336</b> 2,054,596	<b>105,700</b> 2,160,296	<b>106,732</b> 2,267,028	<b>110,545</b> 2,377,573	<b>114,508</b> 2,492,081	<b>115,186</b> 2,607,267	
Change in research and development inventories	83,345	90,868	98,881	98,209	103,336	105,203	104,381	110,568	113,932	115,107	
	79,189	83,704	91,444	98,881	100,935	103,336	105,700	106,732	110,545	114,508	
Consumption of research and development fixed intangible capital  Gross stock of research and development fixed intangible capital  Net stock of research and development fixed intangible capital	59,603	61,283	63,275	65,668	68,295	71,016	73,845	76,736	79,720	82,877	
	1,076,064	1,107,406	1,145,278	1,189,429	1,234,684	1,281,684	1,330,414	1,379,599	1,431,891	1,487,428	
	569,459	591,878	620,050	653,290	685,930	718,264	750,086	780,075	810,869	842,526	
Government research and development expenditures	<b>21,003</b> 512,968	<b>21,989</b> 534,957	<b>22,990</b> 557,947	<b>23,834</b> 581,781	<b>24,054</b> 605,835	<b>24,727</b> 630,562	<b>25,521</b> 656,083	<b>25,948</b> 682,031	<b>25,927</b> 707,958	<b>26,224</b> 734,182	
Change in research and development inventories	20,924	21,989	22,990	23,834	24,054	24,727	25,521	25,948	25,927	26,224	
	20,123	21,003	21,989	22,990	23,834	24,054	24,727	25,521	25,948	25,927	
Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangible capital	18,477	18,721	18,991	19,294	19,628	19,975	20,334	20,727	21,148	21,573	
	331,343	336,313	341,668	347,456	353,618	359,636	366,066	373,084	380,411	387,561	
	171,071	173,342	176,339	180,030	184,236	188,314	192,708	197,509	202,316	206,669	
Addenda: Average age, in years, of R&D gross fixed intangible capital Private Government	8.9	8.9	8.8	8.6	8.5	8.4	8.4	8.3	8.2	8.2	
	8.9	8.8	8.7	8.5	8.4	8.3	8.2	8.1	8.1	8.1	
	9.1	9.1	9.1	9.1	9.1	9.0	9.0	8.9	8.8	8.8	
Government and business net fixed reproducible tangible capital $^2\dots\dots$	9,833,800	10,088,700	10,381,100	10,666,800	10,937,900	11,203,700	11,462,000	11,696,700	11,856,200	12,019,600	

n.a. Not available.
1. Cumulative since 1929.
2. Business fixed reproducible tangible capital includes capital owned by nonprofit institutions.

Table 2.1.—Research and Development Expenditures by Performer, Showing Source of Funds [Millions of dollars]

			•									
	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Research and development expenditures, total	13,735	20,343	26,765	36,794	65,185	115,435	127,390	134,880	142,918	153,448	162,818	169,308
Private	11,440	16,026	20,715	28,160	51,587	94,146	103,336	109,042	115,098	123,782	131,774	136,922
By industry From industry <sup>1</sup> From Federal Government From State and local governments	10,606	13,883	17,858	24,124	44,507	83,663	90,898	95,590	100,679	108,246	115,328	119,508
	4,465	6,473	10,425	15,975	31,293	57,839	62,033	67,322	74,293	82,444	91,321	97,296
	6,137	7,406	7,420	8,114	13,155	25,748	28,766	28,153	26,273	25,690	23,898	22,105
	4	4	13	35	59	76	99	115	113	112	109	107
By FFRDC's administered by industry From Federal Government	n.a.	373	473	727	1,277	1,863	2,351	2,538	2,632	2,764	2,722	2,746
	n.a.	373	473	727	1,277	1,863	2,351	2,538	2,632	2,764	2,722	2,746
By private universities and colleges From industry From Federal Government From State and local governments From private universities and colleges From other 2	335	674	987	1,333	2,296	3,398	4,212	4,639	5,044	5,440	5,773	6,169
	16	17	27	47	102	230	303	335	370	400	424	453
	261	558	788	1,030	1,803	2,537	3,093	3,383	3,635	3,882	4,083	4,386
	7	11	24	35	46	73	100	115	128	137	141	136
	17	37	63	83	173	297	374	414	464	523	591	631
	34	51	85	138	172	261	342	392	447	498	534	563
By FFRDC's administered by private universities and colleges <sup>3</sup>	208	375	462	662	1,380	1,936	2,383	2,585	2,683	2,750	2,849	2,844
	206	375	459	658	1,377	1,919	2,370	2,572	2,672	2,739	2,834	2,827
	2	0	3	4	3	17	13	13	11	11	15	17
By FFRDC's administered by private nonprofit institutions	68	202	261	241	476	707	590	567	584	652	740	821
	67	200	248	224	443	657	549	527	543	607	688	764
	1	2	13	17	33	50	41	40	41	45	52	57
By other nonprofit institutions <sup>4</sup> From industry From Federal Government From State and local governments From other	223	519	674	1,073	1,651	2,579	2,902	3,123	3,476	3,930	4,362	4,834
	48	62	92	123	198	356	467	517	587	655	717	752
	107	335	421	687	1,062	1,569	1,624	1,681	1,849	2,133	2,403	2,752
	2	2	4	14	17	19	35	43	39	35	35	35
	66	120	157	249	374	635	776	882	1,001	1,107	1,207	1,295
Government	2,295	4,317	6,050	8,634	13,598	21,289	24,054	25,838	27,820	29,666	31,044	32,386
By Federal Government <sup>5</sup>	1,746	3,149	4,170	5,616	8,098	12,513	13,334	14,005	14,818	15,542	15,856	16,340
By State and local governments (excluding universities and colleges) From Federal Government From State and local governments From other	54	87	176	297	446	613	710	816	866	909	946	991
	26	38	82	131	157	175	140	192	234	245	255	267
	26	47	90	156	274	426	557	611	615	646	672	704
	2	2	4	10	15	12	13	13	17	18	19	20
By State and local universities and colleges From industry From Federal Government From State and local governments From State and local universities and colleges From other <sup>2</sup>	335	834	1,411	2,287	4,076	6,432	8,020	8,937	9,973	10,958	11,886	12,740
	23	23	37	73	157	372	507	570	663	752	811	874
	167	545	893	1,405	2,475	3,517	4,242	4,752	5,230	5,666	6,129	6,707
	79	131	205	313	466	718	931	1,015	1,122	1,234	1,336	1,360
	47	91	191	356	729	1,385	1,827	2,019	2,301	2,577	2,807	2,928
	19	44	85	140	249	440	513	581	657	729	803	871
By FFRDC's administered by governments From Federal Government From other	160	247	293	434	978	1,731	1,990	2,080	2,163	2,257	2,356	2,315
	160	247	293	432	967	1,706	1,971	2,059	2,135	2,226	2,325	2,285
	0	0	0	2	11	25	19	21	28	31	31	30

n.a. Not separately available, included in industry.

1. Includes funds from nonprofit institutions and from the rest of the world.

2. Includes funds from nonprofit institutions.

3. Includes FFRDC's administered by consortia of public and private universities and colleges.

4. Nonprofit institutions are divided into four subgroups: Private universities and colleges, FFRDC's administered by universities and colleges, FFRDC's administered by nonprofit institutions, and other nonprofit institutions.

<sup>5.</sup> Includes R&D performed at Federal universities and colleges.

NOTE.—This table shows R&D expenditures and the breakdown of expenditures by private organizations and government organizations. Within the "private" and "government" categories, lines preceded by the word "by" are "performers." Within "performer" categories, lines preceded by the word "from" are "sources." FFRDC Federally funded research and development center

Table 2.2.—Domestically Funded Research and Development Expenditures by Source of Funds, Showing Performer [Millions of dollars]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Domestically funded research and development expenditures, total	13,788	20,375	26,813	38,312	68,658	119,316	132,922	141,607	150,382	161,659	172,314	179,573
Private expenditures <sup>1</sup> From industry To industry To State and local universities and colleges To private universities and colleges To other private nonprofit institutions <sup>2</sup> To foreign affiliates	<b>4,693</b> 4,552 4,465 23 16 48 n.a.	6,831 6,575 6,473 23 17 62 n.a.	10,991 10,581 10,425 37 27 92 n.a.	18,315 17,672 15,975 73 47 123 1,454	<b>36,045</b> 35,015 31,293 157 102 198 3,265	64,184 62,447 57,839 372 230 356 3,650	<b>70,627</b> 68,536 62,033 507 303 467 5,226	<b>77,395</b> 75,039 67,322 570 335 517 6,295	85,393 82,727 74,293 663 370 587 6,814	<b>94,940</b> 91,978 82,444 752 400 655 7,727	105,672 102,420 91,321 811 424 717 9,147	112,840 109,356 97,296 874 453 752 9,981
From private universities and colleges  To private universities and colleges	17	37	63	83	173	297	374	414	464	523	591	631
	17	37	63	83	173	297	374	414	464	523	591	631
From other To State and local universities and colleges To private universities and colleges To other private nonprofit institutions To State and local governments To FFRDC's	124	219	347	560	857	1,440	1,717	1,942	2,202	2,439	2,661	2,853
	19	44	85	140	249	440	513	581	657	729	803	871
	34	51	85	138	172	261	342	392	447	498	534	563
	66	120	157	249	374	635	776	882	1,001	1,107	1,207	1,295
	2	2	4	10	15	12	13	13	17	18	19	20
	3	2	16	23	47	92	73	74	80	87	98	104
Government expenditures From Federal To industry To Federal Government To State and local governments To State and local universities and colleges To private universities and colleges To FFRDC's To other private nonprofit institutions To foreign	9,095	13,544	15,822	19,997	32,613	55,132	62,295	64,212	64,989	66,719	66,642	66,733
	8,930	13,258	15,295	19,088	31,022	52,435	58,746	60,294	60,671	61,978	61,542	61,463
	6,137	7,406	7,420	8,114	13,155	25,748	28,766	28,153	26,273	25,690	23,898	22,105
	1,746	3,149	4,170	5,616	8,098	12,513	13,334	14,005	14,818	15,542	15,856	16,340
	26	38	82	131	157	175	140	192	234	245	255	267
	167	545	893	1,405	2,475	3,517	4,242	4,752	5,230	5,666	6,129	6,707
	261	558	788	1,030	1,803	2,537	3,093	3,383	3,635	3,882	4,083	4,386
	433	1,195	1,473	2,041	4,064	6,145	7,241	7,696	7,982	8,336	8,569	8,622
	107	335	421	687	1,062	1,569	1,624	1,681	1,849	2,133	2,403	2,752
	53	32	48	64	208	231	306	432	650	484	349	284
From State and local <sup>3</sup> To industry To State and local governments To State and local universities and colleges To private universities and colleges To other private nonprofit institutions	165	286	527	909	1,591	2,697	3,549	3,918	4,318	4,741	5,100	5,270
	4	4	13	35	59	76	99	115	113	112	109	107
	26	47	90	156	274	426	557	611	615	646	672	704
	126	222	396	669	1,195	2,103	2,758	3,034	3,423	3,811	4,143	4,288
	7	11	24	35	46	73	100	115	128	137	141	136
	2	2	4	14	17	19	35	43	39	35	35	35
Addenda: Total domestic performers Total foreign performers	13,735	20,343	26,765	36,794	65,185	115,435	127,390	134,880	142,918	153,448	162,818	169,308
	53	32	48	1,518	3,473	3,881	5,532	6,727	7,464	8,211	9,496	10,265
Final expenditures Intermediate expenditures Gross domestic product Final expenditures as a percent of gross domestic product Intermediate expenditures as a percent of gross domestic product	9,183	13,768	16,184	20,576	33,435	56,638	64,080	66,136	67,005	69,197	69,545	69,933
	4,552	6,575	10,581	16,218	31,750	58,797	63,310	68,744	75,913	84,251	93,273	99,375
	513,400	702,700	1,010,700	1,585,900	2,708,000	4,038,700	4,539,900	4,900,400	5,250,800	5,546,100	5,724,800	6,020,200
	1.79	1.96	1.60	1.30	1.23	1.40	1.41	1.35	1.28	1.25	1.21	1.16
	0.89	0.94	1.05	1.02	1.17	1.46	1.39	1.40	1.45	1.52	1.63	1.65

n.a. Not available.

NOTE.—This table shows R&D expenditures and the breakdown of expenditures by private organizations and government organizations. Within the "private" and "government" categories, lines preceded by the word "from" are "sources." Within "source" lines preceded by the word "to" are "performers." FFRDC Federally funded research and development center

I. Includes funds from the rest of world.
 Nonprofit institutions are divided into four subgroups: Private universities and colleges, FFRDC's administered by universities and colleges, FFRDC's administered by nonprofit institutions, and other nonprofit institutions.
 Includes State and local universities and colleges.

Table 2.3.—Research and Development Expenditures by Type, Showing Performer [Millions of dollars]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Research and development expenditures, total	13,735	20,343	26,765	36,794	65,185	115,435	127,390	134,880	142,918	153,448	162,818	169,308
Private	11,440 10,606 335 276 223	<b>16,026</b> 13,883 674 950 519	<b>20,715</b> 17,858 987 1,196 674	28,160 24,124 1,333 1,630 1,073	<b>51,587</b> 44,507 2,296 3,133 1,651	<b>94,146</b> 83,663 3,398 4,506 2,579	103,336 90,898 4,212 5,324 2,902	109,042 95,590 4,639 5,690 3,123	<b>115,098</b> 100,679 5,044 5,899 3,476	<b>123,782</b> 108,246 5,440 6,166 3,930	<b>131,774</b> 115,328 5,773 6,311 4,362	136,922 119,508 6,169 6,411 4,834
Government Federal Government State and local governments (excluding universities and colleges) State and local universities and colleges FFRDC's administered by governments	<b>2,295</b>	<b>4,317</b>	<b>6,050</b>	8,634	13,598	21,289	<b>24,054</b>	<b>25,838</b>	<b>27,820</b>	29,666	<b>31,044</b>	32,386
	1,746	3,149	4,170	5,616	8,098	12,513	13,334	14,005	14,818	15,542	15,856	16,340
	54	87	176	297	446	613	710	816	866	909	946	991
	335	834	1,411	2,287	4,076	6,432	8,020	8,937	9,973	10,958	11,886	12,740
	160	247	293	434	978	1,731	1,990	2,080	2,163	2,257	2,356	2,315
Basic research Private Industry Private universities and colleges FFRDC's not administered by governments Other nonprofit institutions Government Federal Government State and local governments State and local universities and colleges FFRDC's administered by governments	1,221	2,540	3,532	4,908	8,685	14,309	18,064	18,914	21,673	24,671	28,346	29,308
	768	1,458	1,810	2,442	4,333	7,414	9,843	10,061	12,042	14,254	17,104	17,287
	380	565	574	698	1,244	2,777	4,231	3,922	5,346	6,928	9,290	9,000
	255	5777	840	1,091	1,723	2,589	3,147	3,198	3,444	3,712	3,952	4,212
	57	160	209	359	828	1,098	1,319	1,644	1,777	1,948	2,013	2,025
	76	156	187	294	538	950	1,146	1,297	1,475	1,666	1,849	2,050
	453	1,082	1,722	2,466	4,352	6,895	8,221	8,853	9,631	10,417	11,242	12,021
	193	386	568	757	1,232	1,860	2,021	2,081	2,238	2,386	2,491	2,600
	14	30	44	73	89	93	88	96	110	119	127	137
	202	581	1,003	1,442	2,535	4,089	5,142	5,644	6,203	6,772	7,395	8,077
	44	85	107	194	496	853	970	1,032	1,080	1,140	1,229	1,207
Applied research Private Industry Private universities and colleges FFRDC's not administered by governments Other nonprofit institutions Government Federal Government State and local governments State and local universities and colleges FFRDC's administered by governments	2,966	4,333	5,882	8,368	14,305	25,892	28,467	30,139	32,930	36,054	39,896	40,205
	2,282	3,105	4,045	5,515	10,052	20,394	22,266	23,437	25,612	28,248	31,406	31,210
	2,048	2,626	3,380	4,555	8,419	17,903	19,344	20,337	22,233	24,589	27,562	27,005
	67	79	117	207	435	623	823	1,117	1,249	1,343	1,427	1,543
	83	205	287	328	592	1,029	1,085	852	884	917	864	941
	84	195	261	425	606	839	1,014	1,131	1,236	1,399	1,553	1,721
	684	1,228	1,837	2,853	4,253	5,498	6,201	6,702	7,318	7,806	8,490	8,995
	491	903	1,339	1,885	2,646	3,022	3,238	3,339	3,514	3,658	4,064	4,392
	27	38	86	156	259	396	491	558	583	609	631	657
	112	207	326	723	1,170	1,804	2,224	2,553	2,943	3,254	3,520	3,676
	54	80	86	89	178	276	248	252	278	285	275	270
Development Private Industry Private universities and colleges FFRDC's not administered by governments Other nonprofit institutions Government Federal Government State and local governments State and local universities and colleges FFRDC's administered by governments	9,548	13,470	17,351	23,518	42,195	75,234	80,859	85,827	88,315	92,723	94,576	99,795
	8,390	11,463	14,860	20,203	37,202	66,338	71,227	75,544	77,444	81,280	83,264	88,425
	8,178	10,692	13,904	18,871	34,844	62,983	67,323	71,331	73,100	76,729	78,476	83,503
	13	18	30	35	138	186	242	324	351	385	394	414
	136	585	700	943	1,713	2,379	2,920	3,194	3,228	3,301	3,434	3,445
	63	168	226	354	507	790	742	695	765	865	960	1,063
	1,158	2,007	2,491	3,315	4,993	8,896	9,632	10,283	10,871	11,443	11,312	11,370
	1,062	1,860	2,263	2,974	4,220	7,631	8,075	8,585	9,066	9,498	9,301	9,348
	13	19	46	68	98	124	131	162	173	181	188	197
	21	46	82	122	371	539	654	740	827	932	971	987
	62	82	100	151	304	602	772	796	805	832	852	838

Nonprofit institutions are divided into four subgroups: Private universities and colleges, FFRDC's administered by universities and colleges, FFRDC's administered by nonprofit institutions, and other nonprofit institutions. FFRDC Federally funded research and development center

Table 2.4.—Research and Development Expenditures by Performer, Showing Type [Millions of dollars]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Research and development expenditures, total Basic research Applied research Development	13,735 1,221 2,966 9,548	<b>20,343</b> 2,540 4,333 13,470	<b>26,765</b> 3,532 5,882 17,351	<b>36,794</b> 4,908 8,368 23,518	<b>65,185</b> 8,685 14,305 42,195	115,435 14,309 25,892 75,234	<b>127,390</b> 18,064 28,467 80,859	134,880 18,914 30,139 85,827	142,918 21,673 32,930 88,315	<b>153,448</b> 24,671 36,054 92,723	162,818 28,346 39,896 94,576	169,308 29,308 40,205 99,795
Private Basic research Applied research Development	11,440 768 2,282 8,390	16,026 1,458 3,105 11,463	<b>20,715</b> 1,810 4,045 14,860	28,160 2,442 5,515 20,203	<b>51,587</b> 4,333 10,052 37,202	<b>94,146</b> 7,414 20,394 66,338	103,336 9,843 22,266 71,227	109,042 10,061 23,437 75,544	115,098 12,042 25,612 77,444	<b>123,782</b> 14,254 28,248 81,280	<b>131,774</b> 17,104 31,406 83,264	136,922 17,287 31,210 88,425
Industry Basic research Applied research Development	10,606	13,883	17,858	24,124	44,507	83,663	90,898	95,590	100,679	108,246	115,328	119,508
	380	565	574	698	1,244	2,777	4,231	3,922	5,346	6,928	9,290	9,000
	2,048	2,626	3,380	4,555	8,419	17,903	19,344	20,337	22,233	24,589	27,562	27,005
	8,178	10,692	13,904	18,871	34,844	62,983	67,323	71,331	73,100	76,729	78,476	83,503
Private universities and colleges Basic research Applied research Development	335	674	987	1,333	2,296	3,398	4,212	4,639	5,044	5,440	5,773	6,169
	255	577	840	1,091	1,723	2,589	3,147	3,198	3,444	3,712	3,952	4,212
	67	79	117	207	435	623	823	1,117	1,249	1,343	1,427	1,543
	13	18	30	35	138	186	242	324	351	385	394	414
FFRDC's not administered by governments Basic research Applied research Development	276	950	1,196	1,630	3,133	4,506	5,324	5,690	5,899	6,166	6,311	6,411
	57	160	209	359	828	1,098	1,319	1,644	1,777	1,948	2,013	2,025
	83	205	287	328	592	1,029	1,085	852	894	917	864	941
	136	585	700	943	1,713	2,379	2,920	3,194	3,228	3,301	3,434	3,445
Other nonprofit institutions <sup>1</sup> Basic research Applied research Development	223	519	674	1,073	1,651	2,579	2,902	3,123	3,476	3,930	4,362	4,834
	76	156	187	294	538	950	1,146	1,297	1,475	1,666	1,849	2,050
	84	195	261	425	606	839	1,014	1,131	1,236	1,399	1,553	1,721
	63	168	226	354	507	790	742	695	765	865	960	1,063
Government Basic research Applied research Development	<b>2,295</b> 453 684 1,158	<b>4,317</b> 1,082 1,228 2,007	<b>6,050</b> 1,722 1,837 2,491	<b>8,634</b> 2,466 2,853 3,315	<b>13,598</b> 4,352 4,253 4,993	<b>21,289</b> 6,895 5,498 8,896	<b>24,054</b> 8,221 6,201 9,632	<b>25,838</b> 8,853 6,702 10,283	<b>27,820</b> 9,631 7,318 10,871	<b>29,666</b> 10,417 7,806 11,443	<b>31,044</b> 11,242 8,490 11,312	<b>32,386</b> 12,021 8,995 11,370
Federal Government Basic research Applied research Development	1,746	3,149	4,170	5,616	8,098	12,513	13,334	14,005	14,818	15,542	15,856	16,340
	193	386	568	757	1,232	1,860	2,021	2,081	2,238	2,386	2,491	2,600
	491	903	1,339	1,885	2,646	3,022	3,238	3,339	3,514	3,658	4,064	4,392
	1,062	1,860	2,263	2,974	4,220	7,631	8,075	8,585	9,066	9,498	9,301	9,348
State and local governments (excluding universities and colleges) Basic research Applied research Development	54	87	176	297	446	613	710	816	866	909	946	991
	14	30	44	73	89	93	88	96	110	119	127	137
	27	38	86	156	259	396	491	558	583	609	631	657
	13	19	46	68	98	124	131	162	173	181	188	197
State and local universities and colleges Basic research Applied research Development	335	834	1,411	2,287	4,076	6,432	8,020	8,937	9,973	10,958	11,886	12,740
	202	581	1,003	1,442	2,535	4,089	5,142	5,644	6,203	6,772	7,395	8,077
	112	207	326	723	1,170	1,804	2,224	2,553	2,943	3,254	3,520	3,676
	21	46	82	122	371	539	654	740	827	932	971	987
FFRDC's administered by governments Basic research Applied research Development	160	247	293	434	978	1,731	1,990	2,080	2,163	2,257	2,356	2,315
	44	85	107	194	496	853	970	1,032	1,080	1,140	1,229	1,207
	54	80	86	89	178	276	248	252	278	285	275	270
	62	82	100	151	304	602	772	796	805	832	852	838

Nonprofit institutions are divided into four subgroups: Private universities and colleges, FFRDC's administered by universities and colleges, FFRDC's administered by nonprofit institutions, and other nonprofit institutions. FFRDC Federally funded research and development center

Table 3.1.—Industry Research and Development Expenditures by Performing Industry [Millions of dollars]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Industry research and development expenditures, total <sup>1</sup>	10,606	14,256	18,331	24,851	45,784	85,526	93,249	98,128	103,311	111,010	118,050	122,254
Manufacturing industries	10,436	13,870	17,613	24,092	43,908	77,092	85,292	87,471	89,079	89,941	89,311	91,897
Food and kindred products	105	158	235	347	645	1,131	1,196	1,163	1,236	1,230	1,259	1,385
Chemicals and allied products	993	1,366	1,808	2,817	4,779	8,677	9,758	11,201	12,222	13,447	14,782	16,835
Petroleum refining and extraction 2	300	400	528	727	1,636	2,296	1,942	2,042	2,232	2,357	2,541	2,372
Rubber and miscellaneous plastics products	122	163	281	483	678	717	635	854	1,073	1,493	1,394	1,511
Stone, clay, and glass products	89	113	170	243	424	852	1.014	720	633	557	471	499
Primary metal industries	179	214	280	455	747	798	738	643	693	746	719	558
Fabricated metal products	147	145	210	332	563	839	791	889	913	947	981	1.063
Industrial machinery and equipment	956	1.070	1,758	3,312	6,150	12,508	11.980	13,477	14,645	14,698	14,975	15,303
Electronic and other electric equipment	2,555	3,216	4,279	5,236	9,414	14,635	16,025	14,278	13,466	13,537	13,522	13,634
Transportation equipment	4,432	6,404	6,881	8,289	14,557	28,146	34,481	35,002	34,094	31,562	27,567	26,574
Aircraft and missiles	3,541	5,169	5,271	5,807	9,336	22,403	24,609	24,309	22,468	20,752	16,702	16,178
Other transportation equipment	891	1,235	1,610	2,482	5,221	7,341	9,872	10,693	11,626	10,810	10,865	10,396
Instruments and related products	333	406	759	1,218	3,152	5,125	5,314	5,623	6,097	7,170	8,815	9,752
Other manufacturing industries	225	215	424	633	1.163	1,368	1,418	1.579	1.775	2,197	2,285	2,411
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Nonmanufacturing industries	170	386	718	759	1,876	6,836	7,957	10,657	14,232	21,069	28,739	30,357
Federal funding	6,137	7,779	7,893	8,841	14,432	27,611	31,117	30,691	28,905	28,454	26,620	24,851
Manufacturing industries	6,026	7,509	7,405	8,521	13,628	25,265	28,378	27,390	25,123	23,951	21,057	18,909
Food and kindred products	9	1	3	1	1	1	2	2	2	2	0	0
Chemicals and allied products	174	192	184	244	383	234	192	242	128	124	211	293
Petroleum refining and extraction 2	20	48	23	47	159	36	14	22	18	17	11	9
Rubber and miscellaneous plastics products	38	22	72	163	217	46	30	109	150	378	279	162
Stone, clay, and glass products	8	3	11	20	5	7	10	10	6	9	10	15
Primary metal industries	15	8	10	22	139	58	19	17	20	22	8	13
Fabricated metal products	36	15	7	28	50	50	152	164	180	205	228	295
Industrial machinery and equipment	394	240	266	527	674	1,531	1,202	1,333	1,051	886	1,069	1,074
Electronic and other electric equipment	1,700	1,993	2,242	2,366	3,842	5,234	5,459	4,197	3,785	4,175	4,586	3,882
Transportation equipment	3,392	4,844	4,364	4,880	7,481	15,946	20,927	21,001	19,397	17,207	12,634	10,783
Aircraft and missiles	3,174	4,517	4,045	4,501	6,727	15,100	18,633	18,509	16,931	15,334	11,145	9,908
Other transportation equipment	218	326	318	375	744	829	2,284	2,483	2,456	1,863	1,483	870
Instruments and related products	155	133	198	179	596	400	277	194	268	749	1,889	2,249
Other manufacturing industries	79	6	9	5	6	10	2	9	26	97	88	104
Nonmanufacturing industries	111	269	489	320	805	2,355	2,739	3,301	3,782	4,501	5,562	5,942
Other funding	4,469	6,477	10,438	16,010	31,352	57,915	62,132	67,437	74,406	82,556	91,430	97,403
Manufacturing industries	4,410	6,361	10,208	15,571	30,280	51,827	56,914	60,081	63,956	65,990	68,254	72,988
Food and kindred products	96	157	232	346	644	1,130	1,194	1,161	1,234	1,228	1.259	1,385
Chemicals and allied products	819	1.174	1.624	2,573	4.396	8,443	9.566	10.959	12,094	13,323	14.571	16,542
Petroleum refining and extraction 2	280	352	505	680	1,477	2,260	1,928	2.020	2,214	2,340	2.530	2,363
Rubber and miscellaneous plastics products	84	141	209	320	461	671	605	745	923	1,115	1,115	1,349
Stone, clay, and glass products	81	110	159	223	419	845	1,004	710	627	548	461	484
Primary metal industries	164	206	270	433	608	740	719	626	673	724	711	545
Fabricated metal products	111	130	203	304	513	789	639	725	733	742	753	768
Industrial machinery and equipment	562	830	1,492	2,785	5,476	10,977	10,778	12,144	13,594	13,812	13,906	14,229
Electronic and other electric equipment	855	1,223	2,037	2,870	5,572	9,401	10,566	10,081	9,681	9,362	8,936	9.752
Transportation equipment	1,040	1,560	2,517	3,409	7,076	12,200	13,554	14,001	14,697	14,355	14,933	15,791
Aircraft and missiles	367	652	1,226	1,306	2,609	7,303	5,976	5,800	5,537	5,418	5,557	6,270
Other transportation equipment	673	909	1,292	2,107	4,477	6,512	7,588	8,210	9,170	8,947	9.382	9,526
Instruments and related products	178	273	561	1,039	2,556	4,725	5,037	5,429	5,829	6,421	6,926	7,503
Other manufacturing industries	146	209	415	628	1,157	1,358	1,416	1,570	1,749	2,100	2,197	2,307
Nonmanufacturing industries	59	117	229	439	1.071	4,481	5,218	7,356	10.450	16,568	23,177	24,415
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#### Table 3.2.—Industry Expenditures on Research and Development Performed Outside the United States by U.S. Companies and Their Foreign Subsidiaries

[Millions of dollars]

	1974	1975	1980	1985	1987	1988	1989	1990	1991	1992
Total	1,300	1,454	3,265	3,650	5,226	6,295	6,814	7,727	9,147	9,981
Manufacturing industries	1,297	1,450	3,258	3,632	5,162	6,200	6,706	7,613	8,369	9,121
Food and kindred products Chemicals and allied products Petroleum refining and extraction 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 Other manufacturing industries		23 269 (¹) 7 9 (¹) 331 245 412 49 105	54 603 141 21 11 33 599 451 1,020 186 139	75 843 47 (P) (P) 21 689 591 1,025 169 125	37 1,243 47 (P) 18 40 1,233 432 (P) 317 138	27 1,501 58 (P) 24 (P) 1,364 669 1,801 393 145	41 1,504 45 (P) 26 46 1,515 574 (P) 449	40 1,990 71 263 30 65 1,580 671 2,153 563 187	66 2,401 107 38 20 86 1,476 651 2,402 656 467	68 2,683 119 41 20 98 1,450 554 (P) 700 (P)
Nonmanufacturing industries	3	4	7	18	64	95	108	114	778	860

NOTE.—Data on research and development performed outside the United States are not available prior to 1974.

Includes research and development expenditures by FFRDC's administered by industry.
 Petroleum refining and extraction includes oil and gas extraction, normally included under mining.
 FFRDC Federally funded research and development center

Estimates included in "other manufacturing industries" for these years.
 Data are suppressed in order to avoid the disclosure of confidential information; estimates are included in totals.

Table 4.1.—Research and Development Expenditures by Performer in Constant Dollars

[Millions of 1987 dollars]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Research and development expenditures, total	55,697	73,327	75,668	72,922	89,660	121,871	127,390	130,427	132,253	136,493	140,435	141,410
Private Industry <sup>1</sup> Private universities and colleges FFRDC's administered by private universities and colleges FFRDC's administered by private universities and colleges Other nonprofit institutions <sup>2</sup>	<b>44,373</b>	<b>55,441</b>	<b>56,987</b>	<b>54,516</b>	<b>69,938</b>	98,881	103,336	105,700	106,732	110,545	114,508	115,186
	40,489	47,942	49,101	47,134	61,364	89,550	93,249	95,252	95,959	99,392	103,045	103,405
	2,149	3,968	4,183	3,615	3,934	3,814	4,212	4,394	4,505	4,571	4,583	4,643
	679	1,147	1,117	1,144	1,796	2,025	2,383	2,526	2,517	2,492	2,494	2,414
	213	556	604	406	598	730	590	562	562	612	673	726
	843	1,828	1,982	2,217	2,246	2,762	2,902	2,966	3,189	3,478	3,713	3,998
Government Federal Government State and local governments (excluding universities and colleges) State and local universities and colleges FFRDC's administered by governments	11,324	17,886	18,681	18,406	<b>19,722</b>	<b>22,990</b>	<b>24,054</b>	24,727	<b>25,521</b>	25,948	<b>25,927</b>	26,224
	8,720	12,539	12,118	11,286	11,138	13,202	13,334	13,494	13,803	13,905	13,684	13,763
	206	308	516	615	607	657	710	775	795	805	805	819
	1,895	4,356	5,388	5,802	6,742	7,318	8,020	8,406	8,847	9,138	9,304	9,602
	503	683	659	703	1,235	1,813	1,990	2,052	2,076	2,100	2,134	2,040

Table 4.2.—Industry Research and Development Expenditures by Performing Industry in Constant Dollars

[Millions of 1987 dollars]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Industry research and development expenditures, total <sup>1</sup>	40,489	47,942	49,101	47,134	61,364	89,550	93,249	95,252	95,959	99,392	103,045	103,405
Manufacturing industries	39,814	46,581	47,086	45,614	58,696	82,427	85,292	84,909	82,683	80,327	77,762	77,602
Food and kindred products Chemicals and allied products Petroleum refining and extraction 2 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 Aicraft and missiles Other transportation equipment Instruments and related products Other manufacturing industries	429 3,849 1,247 496 362 670 555 3,530 9,480 17,018 13,298 3,720 1,264	561 4,703 1,449 578 405 718 489 3,433 10,399 21,709 17,221 4,488 1,357 780	659 4,971 1,473 792 483 763 567 4,451 11,077 18,629 13,901 4,728 2,017 1,204	700 5,507 1,421 968 487 643 5,918 9,658 15,859 10,796 5,063 2,307 1,279	908 6,532 2,240 953 590 991 763 7,791 12,444 19,592 12,296 7,296 4,248 1,644	1,176 9,212 2,375 746 885 830 874 13,016 15,470 31,028 23,424 7,604 5,392 1,423	1,197 9,758 1,942 635 1,014 791 11,980 16,025 34,481 24,609 9,872 5,314	1,131 10,886 1,991 827 699 631 871 13,098 13,804 33,950 23,626 10,324 5,488 1,533	1,159 11,380 2,078 1,002 593 656 863 13,320 12,371 31,818 21,012 10,806 5,778 1,665	1,123 11,998 2,111 1,354 507 686 869 12,712 11,901 28,480 18,697 9,783 6,584 2,002	1,115 12,784 2,220 1,231 418 644 878 12,834 11,711 24,099 14,547 9,552 7,809 2,019	1,186 14,087 1,928 1,290 487 926 12,881 11,507 22,404 13,514 8,890 8,417 2,060
Nonmanufacturing industries	675	1,361	2,015	1,520	2,668	7,123	7,957	10,343	13,276	19,065	25,283	25,803

<sup>1.</sup> Includes research and development expenditures by FFRDC's administered by industry.

Table 4.3.—Annual Average Full-Time-Equivalent Number of Research and Development Scientists and Engineers by Industry [Thousands]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Total <sup>1</sup>	302.1	348.4	375.6	363.9	469.2	646.8	702.2	714.4	725.6	717.5	741.7	783.2
Manufacturing industries	(T)	337.7	359.6	349.1	448.2	575.8	603.0	(T)	(T)	(T)	(T)	576.4
Food and kindred products Chemicals and allied products Petroleum refining and extraction 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 Aircraft and missiles Other transportation equipment Instruments and related products Other manufacturing industries	9.1 5.4	6.2 37.9 8.8 5.8 3.3 5.5 6.5 29.9 89.8 123.6 99.3 24.4 12.0	6.4 41.4 9.6 6.9 4.4 6.5 6.5 42.5 96.2 112.0 85.2 26.8 15.1 12.1	6.9 44.8 8.5 8.5 4.6 7.2 7.1 54.2 81.3 94.5 67.2 27.4 18.4	7.3 53.1 11.9 (T) 5.5 8.0 7.8 65.7 100.7 128.6 90.6 38.1 33.8 (S)	(s) 73.5 12.0 (T) 7.1 6.4 (s) 85.7 115.6 169.8 137.5 32.3 (s) (s)	(s) 75.5 9.7 (s) 8.6 5.6 10.2 97.1 131.5 187.8 136.4 51.4 (s)	(s) 76.7 9.9 (s) 8.6 5.7 10.1 99.1 136.6 139.4 51.2 (s)	(s) 78.3 10.3 (s) 8.6 (s) (s) 106.1 139.3 188.4 135.4 53.0 (s) (s)	8.0 78.9 10.1 (S) 8.5 (S) (S) 109.8 137.9 175.8 123.2 52.6 (S) (S)	9.6 82.2 10.8 (S) 6.8 (S) (S) 103.3 114.8 154.5 105.4 49.1 (S) (S)	9.9 87.4 11.5 14.9 5.3 5.0 8.5 99.4 91.2 142.9 94.0 49.0 79.4 21.3
Nonmanufacturing industries	(T)	10.7	16.0	14.8	21.0	71.0	99.2	(S)	(S)	(S)	(S)	206.8

Includes FFRDC's administered by industry.
 Nonprofit institutions are divided into four subgroups: Private universities and colleges, FFRDC's administered by universities and colleges, FFRDC's administered by nonprofit institutions, and other nonprofit institutions.
 FFRDC Federally funded research and development center

Petroleum refining and extraction includes oil and gas extraction, normally included under mining. FFRDC Federally funded research and development center

Annual average.
 Data are not shown separately because more than 50 percent were imputed by National Science Foundation; estimates included in total.

 $<sup>^{\</sup>rm T}$  Data are not shown separately; estimates included in total.

[Index numbers, 1987=100]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Research and development expenditures, total	24.7	27.7	35.4	50.5	72.7	94.7	100.0	103.4	108.1	112.4	115.9	119.7
Private Industry I Private universities and colleges FFRDC's administered by private universities and colleges FFRDC's administered by private nonprofit institutions Other nonprofit institutions	25.8 26.2 15.6 30.7 32.0 27.5	28.9 29.7 17.0 32.7 36.3 30.2	<b>36.4</b> 37.3 23.6 41.4 43.2 36.1	<b>51.7</b> 52.7 36.9 57.9 59.4 50.1	<b>73.8</b> 74.6 58.4 76.8 79.6 74.8	<b>95.2</b> 95.5 89.1 95.6 96.9 94.1	100.0 100.0 100.0 100.0 100.0 100.0	103.2 103.0 105.6 102.3 100.7 104.6	107.8 107.7 112.0 106.6 103.8 108.2	112.0 111.7 119.0 110.4 106.5 112.0	115.1 114.6 126.0 114.3 109.9 116.3	118.9 118.2 132.9 117.8 113.1 119.7
Government Federal Government State and local governments (excluding universities and colleges) State and local universities and colleges FFRDC's administered by governments	20.3 20.0 26.4 17.7 31.8	<b>24.1</b> 25.1 28.4 19.1 36.1	<b>32.4</b> 34.4 34.0 26.2 44.5	<b>46.9</b> 49.8 48.4 39.4 61.7	<b>69.0</b> 72.7 73.5 60.5 79.2	<b>92.6</b> 94.8 93.4 87.9 95.4	100.0 100.0 100.0 100.0 100.0	104.5 103.8 105.3 106.3 101.3	<b>109.0</b> 107.4 109.0 112.7 104.2	114.3 111.8 113.0 119.9 107.5	<b>119.7</b> 115.9 117.5 127.7 110.4	<b>123.5</b> 118.7 120.9 132.7 113.5
Addendum: Gross domestic product	26.0	28.4	35.2	49.2	71.7	94.4	100	103.9	108.5	113.3	117.6	120.9

Includes research and development expenditures by FFRDC's administered by industry.
FFRDC Federally funded research and development center

#### Table 5.2.—Implicit Price Deflators for Industry Research and Development

[Index numbers, 1987=100]

	1960	1965	1970	1975	1980	1985	1987	1988	1989	1990	1991	1992
Industry research and development expenditures, total 1	26.2	29.7	37.3	52.7	74.6	95.5	100.0	103.0	107.7	111.7	114.6	118.2
Manufacturing industries	26.2	29.8	37.4	52.8	74.8	95.5	100.0	103.0	107.7	112.0	114.9	118.4
Food and kindred products Chemicals and allied products Petroleum refining and extraction 2 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 Aircraft and missiles Other transportation equipment Instruments and related products Other manufacturing industries Other manufacturing industries	24.5 25.8 24.1 24.6 24.6 26.7 26.5 27.1 27.0 26.0 24.0 26.3 24.3	28.2 29.0 27.6 28.2 27.9 29.8 29.7 31.2 30.9 27.5 29.5 29.9 27.6	35.7 36.4 35.8 35.5 35.2 36.7 37.0 39.5 38.6 36.9 37.9 34.1 37.6 35.2	49.6 51.2 49.9 49.9 52.5 51.6 56.0 54.2 52.3 53.8 49.0 52.8 49.5	71.0 73.2 73.0 71.1 71.9 75.4 73.8 78.9 75.7 74.3 75.9 71.6 74.2 70.7	96.2 94.2 96.7 96.1 96.3 96.1 96.0 96.1 94.6 95.9 95.6 96.5 95.0 96.1	100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0 100.0	102.8 102.9 102.6 103.3 103.0 101.9 102.1 102.9 103.4 103.1 102.9 103.6 102.5	106.6 107.4 107.4 107.1 106.7 105.6 105.8 109.9 108.9 107.2 106.9 107.6 105.5 106.6	109.5 112.1 111.7 110.3 109.9 108.7 109.0 115.6 113.7 110.8 111.0 110.5 108.9	112.9 115.6 114.5 113.2 112.7 111.6 111.7 116.7 115.5 114.4 114.8 113.7	116.8 119.5 123.0 117.1 116.3 114.6 114.8 118.5 118.6 119.7 116.9 115.9
Nonmanufacturing industries	25.2	28.4	35.6	49.9	70.3	96.0	100.0	103.0	107.2	110.5	113.7	117.6

Includes research and development expenditures by FFRDC's administered by industry.
 Petroleum refining and extraction includes oil and gas extraction, normally included under mining.
 FFRDC Federally funded research and development center

## 1995 Release Dates for BEA Estimates

Subject	Relea Date		Subject	Relea Date	
U.S. International Trade in Goods and Services, November 1994.	† Jan.	19	Personal Income and Outlays, May 1995	July July	3 6
State Personal Income, 3rd quarter 1994		25 27	Indicators, May 1995. U.S. International Trade in Goods and Services,	J	18
Personal Income and Outlays, December 1994	Jan.	30	May 1995. State Personal Income, 1st quarter 1995	July	26
Composite Indexes of Leading, Coincident, and Lagging Indicators, December 1994. U.S. International Trade in Goods and Services,	Feb.	17	Gross Domestic Product, 2nd quarter 1995 (advance) Personal Income and Outlays, June 1995	July	28 31
December 1994.	† Feb.	17	Composite Indexes of Leading, Coincident, and Lagging Indicators, June 1995.	Aug.	2
Gross Domestic Product, 4th quarter 1994 (preliminary) . Personal Income and Outlays, January 1995	Mar.	1 2	U.S. International Trade in Goods and Services, June 1995.	† Aug.	17
Composite Indexes of Leading, Coincident, and Lagging Indicators, January 1995.	Mar.	3	State Per Capita Personal Income, 1994 (revised) Gross Domestic Product, 2nd quarter 1995 (preliminary).	Aug.	23 30
<ul><li>U.S. International Transactions, 4th quarter 1994</li></ul>	† Mar.	14 22	Corporate Profits, 2nd quarter 1995 (preliminary) Personal Income and Outlays, July 1995		30 31
Gross Domestic Product, 4th quarter 1994 (final)	Mar. Mar.	31 31	Composite Indexes of Leading, Coincident, and Lagging Indicators, July 1995.	Sept.	1
Personal Income and Outlays, February 1995	Apr. Apr.	3 5	<ul><li>U.S. International Transactions, 2nd quarter 1995</li><li>U.S. International Trade in Goods and Services, July 1995.</li></ul>	Sept. † Sept.	12 20
Indicators, February 1995. U.S. International Trade in Goods and Services,	† Apr.	19	Gross Domestic Product, 2nd quarter 1995 (final) Corporate Profits, 2nd quarter 1995 (revised)		29 29
February 1995. State Personal Income, 4th quarter 1994 and Per Capita	Apr.	27	Personal Income and Outlays, August 1995		2
Personal Income, 1994 (preliminary)	Apr.	28	Composite Indexes of Leading, Coincident, and Lagging Indicators, August 1995.  LLS International Trade in Cooks and Services	Oct.	4
Personal Income and Outlays, March 1995	May May	1 3	U.S. International Trade in Goods and Services, August 1995.	† Oct.	
Indicators, March 1995.  Metropolitan Area Personal Income, 1993	v	4	State Personal Income, 2nd quarter 1995	Oct.	25 27 30
Gross State Product by Industry, 1992		10 18	Composite Indexes of Leading, Coincident, and Lagging	Nov.	1
March 1995. Gross Domestic Product, 1st quarter 1995 (preliminary)		31	Indicators, September 1995	† Nov.	21
Corporate Profits, 1st quarter 1995 (preliminary)	_	31	September 1995.		
Personal Income and Outlays, April 1995	June June	1 2	Gross Domestic Product, 3rd quarter 1995 (preliminary). Corporate Profits, 3rd quarter 1995 (preliminary) Personal Income and Outlays, October 1995	Dec.	1 1 4
U.S. International Transactions, 1st quarter 1995 U.S. International Trade in Goods and Services,	June † June	13 21	Composite Indexes of Leading, Coincident, and Lagging Indicators, October 1995.	Dec.	6
April 1995.  Gross Domestic Product, 1st quarter 1995 (final)  Corporate Profits 1st quarter 1995 (revised)		30 30	U.S. International Transactions, 3rd quarter 1995	Dec. † Dec.	12 20
Corporate Profits, 1st quarter 1995 (revised)	Julie	JU	Gross Domestic Product, 3rd quarter 1995 (final)	Dec. Dec.	22 22
1. This release will be based on the complete tabulation of the Census Quarterly Financial Report, BEA's source data for profits in 1 mining, and trade. The complete tabulation had previously not been April; the speed-up in the Census program has eliminated the need	nanufact available	uring, until	Personal Income and Outlays, November 1995		26 29

revision of corporate profits.

\* 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.

<sup>†</sup> 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 title and timing classification															
	1993	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
				1. CON	IPOSITE	INDEXE	S								
The Leading Index															
Composite index of leading indicators, 1987=100 (L,L,L) Percent change from previous month Percent change over 3-month span, AR	98.8 .1 1.4	98.7 .2 4.6	99.2 .5 4.5	99.6 .4 6.6	100.3 .7 5.3	100.5 .2 4.5	100.7 .2 4.0	101.3 .6 3.6	101.4 .1 3.2	101.5 .1 1.6	101.7 .2 1.2	101.7 0 2.8	102.2 .5 <sup>r</sup> 2.4	r <b>102.3</b> r .1 P 2.0	<sup>p</sup> 102.2 <sup>p</sup> 1
Leading index components:  Average weekly hours, mfg. (L,L,L)  Average weekly initial claims for unemployment insurance thous (1 C, 1) 1+	41.4 365	41.5 370	41.6 354	41.7 336	41.7 <b>318</b>	41.7 360	41.3 338	42.1 327	<b>42.2</b> 344	42.1 371	42.0 348	42.0 345	42.0 328	42.0 324	<sup>p</sup> 42.1 330
Mfrs.' new orders, consumer goods and materials,	1,304.63	108.97	111.33	112.47	114.60	116.08	115.62	118.25	117.64	118.72	<sup>r</sup> 117.72	115.34	<sup>r</sup> 121.96	<sup>r</sup> 120.34	<sup>p</sup> 120.64
Vendor performance, slower deliveries diffusion index,	51.6	50.9	50.7	50.7	51.7	55.0	58.8	55.1	57.6	60.7	59.7	57.3	61.1	61.6	64.7
Contracts and orders for plant and equipment, bil. 1987\$	445.78	36.77	r 38.92	41.33	40.82	42.06	42.18	43.49	42.01	42.10	<sup>r</sup> 44.15	43.23	<sup>r</sup> 44.67	<sup>r</sup> 46.46	p 45.10
Index of new private housing units authorized by local	96.3	100.9	103.5	108.7	117.5	104.6	99.8	104.7	110.0	108.2	104.9	106.6	108.0	113.6	111.5
Change in mfrs.' unfilled orders, durable goods, bil.	-2.87	-3.23	-3.10	-2.92	-2.89	-2.21	-1.68	-1.41	-1.02	63	18	20	r45	r48	P56
Change in sensitive materials prices, percent, smoothed	26	50	32	05	.26	.52	.85	1.07	1.22	1.44	<sup>r</sup> 1.85	<sup>r</sup> 2.32	<sup>r</sup> 2.37	<sup>r</sup> 2.27	2.09
Index of stock prices, 500 common stocks, 1941-43=10,	451.41	459.24	463.90	462.89	465.95	472.99	471.58	463.81	447.23	450.90	454.83	451.40	464.24	466.96	463.81
Money supply M2, bil. 1987\$ (L,L,L)	2,774.9 72.8	2,777.7 66.8	2,772.0 72.5	2,772.9 70.3	2,772.3 78.8	2,776.4 86.4	2,767.0 83.5	2,769.3 85.1	2,771.8 82.6	2,768.5 84.2	2,756.8 82.7	2,757.2 78.5	<sup>r</sup> 2,744.4 80.8	<sup>r</sup> 2,737.2 83.5	<sup>p</sup> 2,732.6 85.1
Diffusion index of 11 leading indicator components: Percent rising over 1-month span Percent rising over 6-month span	57.6 66.3	59.1 90.9	81.8 90.9	72.7 81.8	81.8 90.9	77.3 86.4	45.5 63.6	81.8 63.6	54.5 63.6	63.6 72.7	45.5 72.7	36.4 <sup>p</sup> 81.8	77.3	59.1	p 36.4
The Coincident Index															
Composite index of coincident indicators, 1987=100 (C,C,C) Percent change from previous month Percent change over 3-month span, AR	109.4 .1 2.6	109.9 .1 4.5	110.3 .4 4.1	110.9 .5 6.0	111.5 .5 4.0	111.4 1 4.4	112.1 .6 4.4	112.7 .5 5.5	112.9 .2 4.0	113.2 .3 3.2	113.6 .4 2.9	113.7 .1 4.3	114.4 .6 3.9	114.7 .3 <sup>3</sup> 6.1	<sup>3</sup> <b>115.4</b> <sup>3</sup> .6
Coincident index components:  Employees on nonagricultural payrolls, thous. (C,C,C)  Personal income less transfer payments, bil. 1987\$, AR (C,C,C)	110,525 3,523.2	110,923 3,539.6	111,112 3,556.1	111,366 3,571.8	111,610 3,589.3	111,711 3,566.9	111,919 3,618.9	112,298 3,629.0	112,699 3,641.9	112,951 3,652.7	113,334 3,649.3	113,624 r3,653.0	r 113,914 r 3,662.2	r 114,162 r 3,680.6	<sup>p</sup> 114,356 <sup>p</sup> 3,735.3
Index of industrial production, 1987=100 (C,C,C) §  Manufacturing and trade sales, mil. 1987\$ (C,C,C)	112.0 6,261,861	<sup>r</sup> 112.5 <sup>r</sup> 527,519	<sup>7</sup> 112.7 <sup>7</sup> 530,513	<sup>r</sup> 113.7 535,649	<sup>r</sup> 114.7 541,961	<sup>r</sup> 114.7 539,978	<sup>r</sup> 115.6 545,678	<sup>r</sup> 116.6 553,121	<sup>r</sup> 116.7 549,559	<sup>r</sup> 117.4 550,330	*118.0 553,961	r 118.2 r 550,009	*119.1 * <b>565,532</b>	<sup>r</sup> 119.1 <sup>p</sup> 564,424	<sup>p</sup> 119.8
Diffusion index of 4 coincident indicator components: Percent rising over 1-month span Percent rising over 6-month span	83.3 97.9	75.0 100.0	100.0 100.0	100.0 100.0	100.0 100.0	50.0 100.0	100.0 100.0	100.0 100.0	75.0 100.0	100.0 100.0	75.0 100.0	75.0 <sup>3</sup> 100.0	100.0	<sup>r</sup> 62.5	<sup>3</sup> 100.0
The Lagging Index															
Composite index of lagging indicators, 1987=100 (Lg,Lg,Lg) Percent change from previous month Percent change over 3-month span, AR	96.3 .1 .2	96.7 .3 –1.2	96.5 2 4	96.3 2 -2.1	96.2 1 4	96.4 .2 –1.2	96.0 4 -1.7	95.8 2 0	96.4 .6 3.4	96.8 .4 - 6.9	r 97.4 r.6 r 5.1	r 97.6 .2 3.8	97.7 r.1 r4.2	98.4 .7 45.4	4 <b>98.9</b> 4 .5
Lagging index components: Average duration of unemployment, weeks (Lg,Lg,Lg) 5 ‡ Ratio, mfg. and trade inventories to sales in 1987\$ ((a.l.g.l.g.l.g.)	18.1 1.53	18.4 1.52	18.4 1.51	18.9 1.50	18.2 1.48	18.3 1.49	18.7 1.48	19.2 1.45	19.1 1.47	19.6 1.48	18.3 1.47	19.2 1.49	19.2 r1.45	19.2 P 1.46	19.6
Change in labor cost per unit of output, mfg., percent,	2	r 1.4	r1.4	r.4	r−1.1	r−1.2	r−1.2	r-2.4	r-3.3	r-4.0	r-3.7	r−3.5	r−3.5	r-2.5	P.1
Average prime rate charged by banks, percent, NSA	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.06	6.45	6.99	7.25	7.25	7.51	7.75	7.75
Commercial and industrial loans outstanding, mil. 1987\$	371,343	376,574	373,963	374,072	373,476	375,033	371,935	369,083	371,660	375,953	<sup>r</sup> 377,654	<sup>r</sup> 383,714	<sup>r</sup> 385,534	<sup>r</sup> 392,510	p <b>398,239</b>
Ratio, consumer installment credit outstanding to	14.12	r 14.26	14.29	<sup>r</sup> 14.34	<sup>r</sup> 14.40	<sup>r</sup> 14.57	r 14.40	r 14.51	r14.60	r 14.77	r 14.94	<sup>r</sup> 14.98	15.18	p <b>15.28</b>	
Change in Consumer Price Index for services, percent, AR, smoothed (Lg,Lg,Lg) †.	3.8	3.7	3.6	3.5	3.5	3.1	3.2	3.6	3.6	3.3	3.0	2.9	3.1	3.1	3.0
Percent rising over 1-month span Percent rising over 6-month span	47.6 44.0 113.6	50.0 35.7 113.7	28.6 28.6 114.3	28.6 21.4 115.2	42.9 28.6 115.9	50.0 35.7 115.6	35.7 42.9 116.8	42.9 42.9 <b>117.6</b>	78.6 50.0 117.1	57.1 42.9 116.9	71.4 * 64.3 * 116.6	64.3 4 60.0 r 116.5	<sup>7</sup> 71.4 117.1	, 85.7 116.6	450.0 
	Composite index of leading indicators, 1987=100 (L.L.L) Percent change from previous month	Composite index of leading indicators, 1987=100 (L,L,L)	Composite index of leading indicators, 1987=100 (L,L,L)	Composite index of leading indicators, 1987=100 (L.L.L)	The Leading Index	The Leading Index   Composite index of leading indicators, 1987=100 (L.L.L)   98.8   98.7   99.2   99.6   100.3   7.7   7.5	The Leading Index   Composite index of leading indicators, 1987=100 (L.L.L)   98.8   98.7   99.2   99.6   100.3   100.5   1   2   2   4   4   4   4   4   5   5   4   4   7   2   2   2   5   5   4   4   7   2   2   5   5   4   4   5   6   5   5   3   4   5   6   5   5   5   6   5   5   7   5   5   6   5   5   7   5   5   6   5   5   5   5   5   5   5	Composite index of leading indicators, 1987=100 (L.L.L)	The Leading Index  Composite index of leading indicators, 1987=100 (L.L.L)	The Leading Index  Composite index of leading Indicators, 1987-100 (L.L.I.) 98.8 95.7 99.2 99.6 100.3 100.5 100.7 101.3 101.4 Percent change from previous month	The Leading Index  Composite Index of leading indicators, 1987-100 (L.L.L.)  Percent Change Index of leading indicators, 1987-100 (L.L.L.)  Percent Change Index of leading indicators, 1987-100 (L.L.L.)  Leading Index Composites  Leading Index Composite  1, 2, 4, 4, 4, 4, 5, 6, 4, 5, 3, 2, 4, 6, 3, 3, 2, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	The Leading Index  Composite Index of leading indicators, 1987-100 (L.L.L.)	The Leading Index	The Leading Index Companie Index of Leading Index Companie Index of Leading Index (1867-100 (L.L.L.) 98.8 98.7 99.2 99.6 100.3 100.5 100.7 101.3 101.4 101.5 101.7 101.7 101.2 Percent change from previous morning from the companies (1.1.1) 14.4 46 45 66 5.3 45 40 36 32 16 12 28 7.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4.2 4	The Leading Index Composite index of leading Indexes 1987-100 (LLL) Persons Change over Smorth Span, AR.  14. 46. 45. 66. 65. 3. 47. 41. 41. 41. 41. 41. 41. 41. 41. 41. 41

Note.—The following current high values were reached before September 1993: May 1991—BCI-106 (2,865.8); December 1991—BCI-77 (1.65); January 1992—BCI-120 smoothed (4.2); October 1992—BCI-62 smoothed (1.7); December 1992—BCI-83 (89.5); and April 1993—BCI-91 (17.7).

See page C-6 for other footnotes.

### SURVEY OF CURRENT BUSINESS

Series	Series title and timing classification	Year		19	93						199	)4				
no.	Series title and timing classification	1993	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
			2. LAB	OR FOR	CE, EMP	LOYME	NT, AND	UNEMPI	LOYMEN	IT						
441	Labor force:	128,040	128,108	128,580	128,662	128,898	130,667	130,776	130,580	130,747	130,774	130,248	130,457	131,189	131,343	131,836
442	Civilian labor force, thous.   Civilian employment, thous.   Civilian labor force participation rates (percent):	119,306	119,568	119,941	120,332	120,661	121,971	122,258	122,037	122,338	122,872	122,430	122,452	123,166	123,628	124,236
451 452 453	Civilian labor force participation rates (percent):  Males 20 years and over <sup>1</sup> Females 20 years and over <sup>1</sup> Both sexes 16-19 years of age <sup>1</sup>	76.9 58.4 51.5	76.7 58.4 51.2	77.0 58.6 51.1	76.8 58.7 51.2	76.8 58.9 50.9	77.0 59.3 53.3	76.9 59.5 52.4	76.8 59.3 52.3	76.7 59.2 54.0	76.7 59.3 53.1	76.2 58.9 53.7	76.4 59.0 52.5	76.6 59.4 53.0	76.5 59.8 51.1	76.9 59.6 52.6
1 +	Marginal employment adjustments:	41.4	41.5	41.6	41.7	41.7	41.7	41.3	42.1	42.2	42.1	42.0	42.0	42.0	42.0	P 42.1
21 <b>♦</b> 5 <b>♦</b>	Average weekly hours, mfg. (L,L,L)	4.1 365	4.2 370	4.3 354	4.4 336	4.4 318	4.5 360	4.5 338	4.7 327	<b>4.8</b> 344	4.7 371	4.7 348	4.6 345	4.6 328	7 4.7 324	<sup>p</sup> 4.7 330
	insurance, thous. (L,C,L) <sup>2</sup> ‡.  Job vacancies:															
46 <b>♦</b> 60	Index of help-wanted advertising, 1967=100 (L,Lg,U) Ratio, help-wanted advertising to unemployed (L,Lg,U) <sup>1</sup>	101 .343	100 .348	r 107 r .368	107 .382	110 .397	105 .359	115 .402	117 .407	116 .410	121 .456	117 .445	122 .453	119 .441	117 .451	<sup>P</sup> 128 <sup>P</sup> .501
48 ♦	Employment: Employee hours in nonagricultural establishments, bil. hours, AR (U,C,C).	204.76	204.88	206.15	206.18	206.89	207.96	205.56	208.41	209.56	210.47	210.03	210.18	<sup>r</sup> 210.14	<sup>r</sup> 211.74	<sup>p</sup> 213.41
42	Persons engaged in nonagricultural activities, thous. (U,C,C) <sup>1</sup> .	116,232	116,475	116,920	117,218	117,565	118,639	118,867	118,611	118,880	119,437	119,195	119,173	119,722	120,219	120,741
41 <b>♦</b> 963	Employees on nonagricultural payrolls, thous. (C,C,C) Diffusion index of employees on private nonagricultural	110,525	110,923	111,112	111,366	111,610	111,711	111,919	112,298	112,699	112,951	113,334	113,624	<sup>r</sup> 113,914	<sup>r</sup> 114,162	<sup>p</sup> 114,356
	payrolls, 356 industries: Percent rising over 1-month span Percent rising over 6-month span	56.2 59.5	56.7 59.7	57.4 60.8	61.0 62.8	57.4 63.6	56.6 67.0	58.3 65.9	62.9 68.8	62.5 66.0	56.3 767.8	63.2 ** 65.9	59.3 <sup>p</sup> 67.6	<sup>r</sup> 59.8	<sup>rp</sup> 56.0	<sup>p</sup> 59.6
40 <b>♦</b> 90 <b>♦</b>	Employees in goods-producing industries, thous. (L,C,U) Ratio, civilian employment to population of working age, percent (U,Lg,U) <sup>1</sup> .	23,256 61.6	23,206 61.6	23,245 61.8	23,281 61.9	23,298 62.0	23,328 62.2	23,327 62.3	23,395 62.2	23,506 62.3	23,519 62.5	23,576 62.2	23,590 62.2	<sup>r</sup> 23,640 62.5	<sup>r</sup> 23,665 62.7	<sup>p</sup> 23,706 62.9
37	Unemployment: Number of persons unemployed, thous. (L,Lg,U) 1 ‡	8,734	8,540	8,639	8,330	8,237	8,696	8,518	8,543	8,408	7,902	7,817	8,005	8,023	7,715	7,600
43 <b>♦</b> 45	Civilian unemployment rate, percent (L,Lg,U) <sup>1</sup> ‡	6.8 2.6	6.7 2.6	6.7 <b>2.6</b>	6.5 2.6	6.4 2.5	6.7 2.5	6.5 2.6	6.5 2.6	6.4	6.0 2.5	6.0 2.5	6.1 2.5	6.1 2.5	5.9 2.4	5.8 2.3
91 <b>♦</b> 44	(L,Lg,U) <sup>3</sup> ‡.  Average duration of unemployment, weeks (Lg,Lg,Lg) <sup>1</sup> ‡  Unemployment rate, 15 weeks and over, percent	18.1 2.4	18.4 2.4	18.4 2.4	18.9 2.3	18.2 2.2	18.3 2.3	18.7 2.4	19.2 2.4	19.1 2.3	19.6 2.1	18.3 2.1	19.2 2.2	19.2 <b>2.1</b>	19.2 2.2	19.6 2.3
	(Lg,Lg,Lg) 1 ‡.				2.0		2.0			2.0						
			3. OUT	PUT, PR	ODUCT	ON, ANI	CAPAC	ITY UTI	LIZATIO	N						
55 ♦	Output: Gross domestic product, bil. 1987\$, AR (C,C,C)	5,134.5			5,218.0			5,261.1			5,314.1			5,365.0		
50 49	Percent change from previous quarter, AR	3.1 5,140.3 2,081.8			6.3 5,218.7 2,135.5			3.3 5,262.7 2,168.8			4.1 5,310.5 2,201.3			<sup>7</sup> 3.9 <sup>9</sup> 5,359.0 2,236.1		
47 <b>♦</b>	Industrial production indexes, 1987=100: Total (C,C,C) §	112.0	r 112.5	r 112.7	r 113.7	r 114.7	r 114.7	r 115.6	r 116.6	r 116.7	r 117.4	r 118.0	r 118.2	r 119.1	r 119.1	P 119.8
73 ♦ 74 ♦	Durable manufactures (C,C,C) §	116.1 109.3	r 116.9 r 109.4	r 117.5 r 109.1	r 119.1 r 110.0	7 121.2 7 110.4	7121.0 7110.0	r 122.1 r 110.7	r 122.9 r 112.5	r 123.7 r 112.4	<sup>7</sup> 124.0 <sup>7</sup> 113.4	r 124.6 r 113.4	7 125.2 113.6	r 127.0 r 113.9	r 127.4 r 113.6	P 128.4 P 114.3
75 ♦	Consumer goods (C,L,C) §	109.4	<sup>r</sup> 109.4	<sup>r</sup> 109.8	r 110.6	r 110.9	<sup>r</sup> 111.5	r 112.4	r 112.9	<sup>*</sup> 112.3	<sup>r</sup> 112.8	r 113.5	<sup>r</sup> 113.3	113.7	r 113.0	<sup>p</sup> 113.3
124 82 ◆	Total industry (L,C,U) §	81.7 80.9	r 81.7 r 80.8	81.7 *80.7	r 82.3 r 81.4	82.9 *82.2	r 82.7 r 81.8	r 83.2 r 82.2	r 83.7 r 82.9	783.6 783.0	, 83.8 , 83.2	r 84.1 r 83.2	<sup>7</sup> 84.1 <sup>7</sup> 83.3	r 84.5 r 83.8	<sup>7</sup> 84.3 <sup>7</sup> 83.6	P 84.6 P 84.0
				4. SAI	LES, OR	DERS, A	ND DEL	IVERIES								
57 ♦	Sales: Manufacturing and trade sales, mil. 1987\$ (C,C,C)	6.261.861	r 527,519	r530,513	535,649	541,961	539,978	545,678	553,121	549,559	550,330	553,961	r550,009	r 565,532	<sup>p</sup> 564.424	
59 ♦	Sales of retail stores, mil. 1987\$ (U,L,U)	1,758,766	<sup>*</sup> 147,609	<sup>*</sup> 149,739	150,675	152,566	150,500	153,034	155,456	153,754	153,469	154,498	154,021	<sup>r</sup> 156,124		P 158,768
7 <b>♦</b> 8 <b>♦</b>	Mfrs.' new orders, durable goods, bil. 1987\$ (L,L,L) Mfrs.' new orders, consumer goods and materials,	1,381.61 1,304.63	115.01 108.97	117.87 111.33	120.10 112.47	122.20 114.60	126.86 116.08	124.58 115.62	125.24 118.25	125.61 117.64	126.94 118.72	128.04 117.72	122.89 115.34	"130.42 " <b>121.96</b>	<b>130.75</b> 120.34	<sup>p</sup> 128.63 <sup>p</sup> 120.64
	bil. 1987\$ (L,L,L).  Mfrs.' unfilled orders, durable goods, mil. 1987\$♦  Change from previous month, bil. 1987\$	362,630 -2.88	370,372 -4.40	368,404 -1.97	366,140 -2.26	362,630 -3.51	364,684 2.05	363,422 -1.26	361,459 -1.96	361,811 .35	361,963 .15	362,987 1.02	360,716 -2.27	<sup>r</sup> 358,695 <sup>r</sup> –2.02	r 359,127	<sup>p</sup> 358,184 <sup>p</sup> 94
92 ♦	Change from previous month, bil. 1987\$, smoothed (L,L,L) †.	-2.87	-3.23	-3.10	-2.92	-2.89	-2.21	-1.68	-1.41	-1.02	63	18	20	r45	r48	<sup>p</sup> 56
32 ♦	Vendor performance, slower deliveries diffusion index, percent (L,L,L)*.	51.6	50.9	50.7	50.7	51.7	55.0	58.8	55.1	57.6	60.7	59.7	57.3	61.1	61.6	64.7
				5.	FIXED C	APITAL	INVEST	MENT								
12 ♦	Formation of business enterprises: Index of net business formation, 1967=100 (L,L,L)	121.1	122.3	119.2	123.5	125.3	125.2	125.1	127.5	125.4	124.8	125.9	r 122.9	r 121.5	<sup>r</sup> 120.2	P 122.2
13 ♦	Number of new business incorporations (L,L,L)	707,413	63,758	55,294	61,739	61,873	61,978	60,680	64,119	58,992	58,528	63,097	p 56,380			
10	Contracts and orders for plant and equipment, bil.\$ (L,L,L).	431.33	35.28	r 37.07	38.78	38.84	40.91	40.72	41.12	39.41	39.69	41.99	40.64	r 42.34	<sup>*</sup> 43.68	p 41.35
20 <b>♦</b> 27 <b>♦</b>	Contracts and orders for plant and equipment, bil. 1987\$ (L,L,L).  Mfrs.' new orders, nondefense capital goods, bil. 1987\$	445.78 401.86	36.77 33.09	r 38.92	41.33 37.99	40.82 37.60	42.06	42.18 38.50	43.49 39.27	42.01 38.98	42.10 38.58	r 44.15	43.23 39.62	r 44.67	r 46.46	P 45.10
9 ♦	(L,L,L). Construction contracts awarded for commercial and	535.60	45.34	35.28 46.74	47.15	52.36	38.43 52.76	49.34	61.83	50.96	53.48	51.96	62.47	57.50	57.08	59.31
	industrial buildings, mil. sq. ft. (L,C,U) © 4.  Business investment expenditures:					- 1										
61	New plant and equipment expenditures by business, bil.\$, AR (C,Lg,Lg)*.	586.73			604.51			619.34			637.08			4 651.92		
100 ♦	New plant and equipment expenditures by business, bil. 1987\$, AR (C,Lg,Lg)*. Mfrs.' machinery and equipment sales and business	563.40 462.79	461.86	467.11	586.90 489.94	511.08	480.27	598.97 491.54	503.68	499.18	<b>613.16</b> 503.95	517.15	509.90	<sup>a</sup> 628.96 <sup>r</sup> 525.10	, 534.44	P 530.57
	construction expenditures, bil.\$, AR (C,Lg,Lg).	-02.79	-01.00	-07.11	-100.04	571.00	700.27	701.04	555.00	-100.10	555.55	511.15	555.50	020.10	557.74	000.01

NOTE.—The following current high values were reached before September 1993: July 1991—BCI-92 change (6.72) and April 1993—BCI-91 (17.7).

See page C-6 for other footnotes.

Series	Series title and timing classification	Year		19	93						199	4				
no.	Conco and and aning dassilication	1993	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.
			5	. FIXED	CAPITA	L INVES	TMENT-	-Continu	ıed							
76 ♦	Business investment expenditures—Continued: Index of industrial production, business equipment, 1987=100 (C.I.g.U) §. Gross private nonresidential fixed investment, bil. 1987\$,	134.6	<sup>r</sup> 136.0	<sup>r</sup> 136.4	<sup>r</sup> 138.3	<sup>r</sup> 140.0	<sup>r</sup> 140.4	<sup>r</sup> 142.0	<sup>r</sup> 142.6	<sup>*</sup> 143.5	<sup>r</sup> 144.5	<sup>r</sup> 145.5	<sup>r</sup> 146.9	r 148.9	′ 149.5	<sup>p</sup> 151.1
86 <b>♦</b> 87 <b>♦</b> 88 <b>♦</b>	AR: Total (C,Lg,C) Structures (Lg,Lg,Lg) Producers' durable equipment (C,Lg,C)	591.6 147.7 443.9			627.2 148.7 478.5			643.6 144.1 499.4			657.9 151.0 506.9			<sup>7</sup> <b>680.4</b> <sup>7</sup> 152.1 <sup>7</sup> <b>528.3</b>		
28 <b>•</b> 29 <b>•</b> 89 <b>•</b>	Residential construction and investment: New private housing units started, thous, AR (L,L,L) Index of new private housing units authorized by local building permits, 1967=100 (L,L,L). Gross private residential fixed investment, bil. 1987\$, AR (L,L,L).	1,288 96.3 213.0	1,359 100.9	1,409 103.5	1,406 108.7 224.5	1,612 117.5	1,271 104.6	1,328 99.8 229.9	1,519 104.7	1,471 110.0	1,491 108.2 <b>233.8</b>	1,358 104.9	1,439 106.6	<sup>r</sup> 1,463 108.0 <sup>r</sup> 229.9	<sup>7</sup> 1,497 113.6	<sup>P</sup> 1,419 111.5
	(-1-1-)		6. 1	INVENTO	ORIES A	I ND INVE	NTORY I	NVESTN	/IENT							
	Inventories on hand:															
70 77 <b>♦</b>	Mfg. and trade inventories, bil. 1987\$ (Lg,Lg,Lg) ◊	801.57 1.53	802.34 1.52	801.82 1.51	803.66 1.50	801.57 1.48	802.70 1.49	805.34 1.48	804.03 1.45	805.40 1.47	811.95 1.48	813.79 1.47	<sup>7</sup> 819.83 1.49	r 822.70 r 1.45	<sup>p</sup> <b>823.38</b> <sup>p</sup> 1.46	
30 <b>♦</b> 31 <b>♦</b>	Change in business inventories, bil. 1987\$, AR (L,L,L) Change in mfg. and trade inventories, bil.\$, AR (L,L,L)	15.3 23.8	r24.8	r11.2	10.8 55.3	-13.6	25.3	25.4 49.8	-19.8	57.6	59.2 122.4	47.0	67.1	r 56.1 r 93.9	<i>p</i> 56.4	
						7. PRICI	ES			'						
99 💠	Sensitive commodity prices: Index of sensitive materials prices, 1987=100  Percent change from previous month  Percent change from previous month, smoothed (LLLL) †:	99.58 03 26	97.67 37 50	98.55 .90 32	99.48 .94 05	100.50 1.03 .26	101.38 .88 .52	103.25 1.84 .85	104.31 1.03 1.07	105.59 1.23 1.22	107.90 2.19 1.44	′111.72 ′3.54 ′1.85	<sup>r</sup> 115.72 r <b>3.58</b> r 2.32	7116.42 .60 7 <b>2.37</b>	r118.09 r1.43 r2.27	<b>119.75</b> 1.41 2.09
98	Index of producer prices for sensitive crude and intermediate materials, 1982=100 (L,L,L).	161.79	161.13	165.78	169.43	172.15	174.01	173.02 176.4	173.22	169.51	167.70	7171.62	174.86	178.05 210.7	179.32	<b>181.68</b> 236.7
	Cattle hides Lumber and wood products Wastepaper, news Wastepaper, corrugated Iron and steel scrap Copper base scrap Aluminum base scrap Other nonferrous scrap, n.e.c., NSA Sand, gravel, and crushed stone Raw cotton Domestic apparel wool	180.4 174.1 100.6 90.2 142.3 172.8 136.2 129.3 113.8 134.0 92.2 56.5	185.9 174.4 93.5 80.4 138.9 171.2 125.1 125.6 107.5 134.8 90.5 51.7	184.4 177.7 94.2 80.2 139.0 190.7 119.0 128.7 100.7 136.3 95.9 53.1	185.2 181.3 94.0 79.3 139.9 202.5 117.3 128.1 98.5 135.7 97.9 56.8	182.6 183.8 91.1 74.2 141.2 207.4 123.2 129.6 102.4 136.2 104.3 58.1	181.8 186.5 88.0 72.3 139.9 203.0 128.2 132.0 106.5 137.2 114.8 56.7	176.4 181.8 101.1 75.0 157.6 205.8 135.1 141.7 115.4 136.9 124.6 63.2	178.1 181.7 100.2 72.4 195.0 201.4 137.4 146.5 119.1 136.9 121.4 69.3	181.2 176.1 99.9 89.6 206.3 195.0 137.2 149.7 121.8 137.5 120.4 80.2	185.6 173.3 107.6 105.2 262.0 183.1 144.4 151.5 123.1 137.1 122.2 86.4	191.1 *177.3 *129.5 *185.7 *384.2 *168.4 *161.0 *133.1 *137.5 121.0 83.5	203.1 176.9 208.9 302.1 477.2 175.9 161.4 172.5 139.1 138.0 107.4 85.0	210.7 179.1 240.7 283.1 481.0 185.4 157.2 171.6 141.1 138.2 114.9 82.1	215.7 180.0 325.5 265.2 401.1 188.1 162.1 177.8 143.7 138.2 123.1 87.8	236.7 181.8 359.2 270.8 333.7 191.4 166.4 201.1 149.6 138.9 115.3 87.9
23 •	Index of spot market prices, raw industrial materials, 1967=100, NSA (U,L,L) © 1*.  Copper scrap, \$ per lb. ©	260.4 .702 .139 115.553 3.494 .484 .247 .556 .677 3.339 .799 59.238 .450 .147	253.1 .611 .123 110.402 3.095 .445 .241 .547 .700 3.400 .805 59.940 .447 .142	255.6 .578 .118 127.351 3.189 .459 .247 .571 .700 3.450 .815 59.118 .442 .140	258.1 .572 .123 138.940 3.225 .466 .256 .607 .750 3.600 .808 56.112 .448 .138	263.7 .644 .124 140.435 3.286 .492 .265 .644 .750 3.500 .798 56.225 .446 .143	268.8 .696 .128 139.625 3.324 .496 .269 .703 .750 3.500 .756 55.944 .152	275.2 .717 .131 140.201 3.598 .483 .273 .753 .750 3.750 .746 55.944 .447	279.1 .747 .130 138.530 3.621 .467 .275 .726 .750 3.900 .788 55.944 .493 .155	280.9 .744 .128 135.827 3.630 .461 .275 .724 .772 3.950 .845 .512 .145	288.0 .876 .128 125.098 3.730 .478 .275 .752 .860 3.910 .873 .56.000 .518 .157	290.9 .917 .129 113.198 3.713 .484 .275 .705 .890 4.000 .886 56.000 .557 .164	299.5 .895 .157 117.992 3.620 .490 .275 .673 .890 4.000 .906 56.000 .627 .173	305.3 .844 .165 132.161 3.518 .482 .275 .680 .890 4.070 .896 55.888 .665 .186	313.6 .887 .154 131.992 3.612 .505 .278 .721 .890 4.475 .938 55.944 .669 .192	.912 .167 132.295 3.673 .530 .282 .707 .895 4.525 .941 56.112 .737 .183
336 •	Producer Price Indexes: Finished goods, 1982=100 Percent change over 1-month span Percent change over 6-month span, AR Pinished goods less foods and energy, 1982=100	124.7 0 .2 135.8	124.3 .2 -1.4 135.2	124.2 1 8 134.8	124.3 .1 1.6 135.3	124.2 1 1.6 135.5	124.6 .3 1.8 136.2	125.1 .4 1.3 136.3	125.3 .2 1.6 136.5	125.3 0 1.9 136.6	125.1 2 2.4 137.1	125.2 .1 1.1 137.2	125.8 .5 .2 137.3	126.6 .6 137.8	126.0 5 137.9	125.4 5 137.2
334	Percent change over 1-month span Percent change over 6-month span, AR Finished consumer goods, 1982=100	0 .3 123.0	.1 -1.3 122.3	3 6 122.3	.4 1.8 122.4	.1 1.9 122.1	.5 2.7 122.4	.1 2.7 123.0	.1 2.5 123.1	.1 1.6 123.0	.4 2.2 122.7	.1 2.1 122.8	.1 .9 123.4	124.3	.1	5 1
333	Percent change over 1-month span	0 2 131.4 .2	.2 -2.3 131.9 .1	0 -1.6 131.4 4	.1 1.5 131.8 .3	2 1.3 132.0 .2	.2 1.1 132.9 .7	.5 .5 133.1 .2	.1 * 1.1 133.4 .2	1 1.6 133.9 .4	2 2.1 134.3 .3	r.1 .8 r134.4 r.1	7.5 .2 134.8 7.3		6 5 135.2 .1	133.9 -1.0
332	Percent change over 6-month span, AR	1.8 116.2	1.2 116.3	2.0 116.4	2.0 116.6	2.3 116.3	3.8 116.4	3.8 116.9	73.7 117.1	2.9 117.1	2.9 117.2	2.7 *117.9	0 118.3	119.1	119.4	119.8
331	Percent change over 1-month span Percent change over 6-month span, AR Crude materials for further processing, 1982=100 Percent change over 1-month span Percent change over 6-month span, AR	.1 1.0 102.4 0 .9	0 0 101.5 .7 -3.4	.1 .2 103.7 2.2 4.0	.2 1.0 103.4 3 2.6	3 1.4 101.8 -1.5 3.8	.1 1.2 103.5 1.7 –1.0	.4 1.0 102.1 -1.4 -3.3	.2 *2.8 103.4 1.3 *1.4	0 3.3 103.2 2 -2.9	.1 3.8 101.7 -1.5 -1.0	r.6 4.0 r102.5 r.8 -6.5	7.3 4.7 102.0 75 -7.2	.7 101.6 4	.3 100.0 -1.6	.3 99.4 6
311	Fixed-weighted price index, gross domestic business product, 1987=100.  Percent change from previous quarter, AR	124.0 2.8			125.0 2.4			125.9 2.8			126.7 2.7			127.6 *3.0		
320	Consumer Price Indexes for all urban consumers: All items, 1982-84=100, NSA Percent change over 1-month span Percent change over 6-month span, AR	144.5 .2 2.6	145.1 .1 2.6	145.7 .3 2.4	145.8 .3 2.4	145.8 .2 2.9	146.2 0 2.5	146.7 .3 2.3	147.2 .3 2.5	147.4 .1 3.2	147.5 .2 3.3	148.0 .3 3.0	148.4 .3 2.9	149.0	149.4	149.5
323	All items less food and energy, 1982-84=100  Percent change over 1-month span  Percent change over 6-month span, AR	152.2 .3 3.0	153.1 .1 2.8	153.5 .3 2.6	154.1 .4 2.6	154.4 .2 3.2	154.6 .1 3.0	155.0 .3 2.9	155.5 .3 3.0	155.8 .2 3.1	156.3 .3 3.1	156.7 .3 2.8	157.0 .2 2.8	157.4 .3	157.7 .2	158.0 .2
120 💠	Services, 1982-84=100  Percent change from previous month, AR  Percent change from previous month, AR, smoothed (Lg,Lg,Lg) †.	157.9 3.8 3.8	159.1 3.1 3.7	159.5 3.1 3.6	160.0 3.8 3.5	3.2 160.5 3.8 3.5	160.6 .8 3.1	161.3 5.4 3.2	162.0 5.3 3.6	162.3 2.2 3.6	162.5 1.5 3.3	162.8 2.2 3.0	163.3 3.7 2.9	163.9 4.5 3.1	164.2 2.2 3.1	<b>164.6</b> 3.0 3.0

NOTE.—The following current high values were reached before September 1993: July 1991—BCI-120 change (5.9); December 1991—BCI-77 (1.65); and January 1992—BCI-120 smoothed (4.2). See page C-6 for other footnotes.

### **C-4** • November 1994

### SURVEY OF CURRENT BUSINESS

Series	Series title and timing classification	Year		19	93						199	94				
no.	Series title and timing classification	1993	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	Мау	June	July	Aug.	Sept.	Oct.
				8	. PROFI	TS AND	CASH FL	.ow								
16 <b>•</b> 18 <b>•</b> 22 <b>•</b>	Profits and profit margins: Corporate profits after tax, bil.\$, AR (L,L,L) Corporate profits after tax, bil. 1987\$, AR (L,L,L) Ratio, corporate domestic profits after tax to corporate	289.2 245.1 7.4			310.2 264.9 8.0			299.4 253.1 7.6			321.4 271.5 8.1			<sup>p</sup> 330.5 <sup>p</sup> 277.6 <sup>p</sup> 8.3		
81 <b>♦</b> 26 <b>♦</b>	domestic income, percent (L,L,L). Ratio, corporate domestic profits after tax with IVA and CCAdj to corporate domestic income, percent(U,L,L). Ratio, implicit price deflator to unit labor cost, all	8.2 103.7			<b>9.0</b> 104.5			8.4 104.1			8.8 * 104.5			<sup>P</sup> 8.8		
35	persons, nonfarm business sector,1982=100 (L,L,L).  Corporate net cash flow, bil. 1987\$, AR (L,L,L)	494.7			524.9			527.1			535.0			<sup>p</sup> 543.5		
			9.	WAGES	LABOR	COSTS	AND PF		IVITY							
	Wages and compensation:		, . 		, 2, (30)		, ,									
345	Index of average hourly compensation, all employees, nonfarm business sector, 1982=100 §.	158.2			r 159.7			″161.9			r162.2			<sup>p</sup> 163.4		
346	Percent change from previous quarter, AR §	3.2 105.6			2.4 *105.6			75.8 7106.5			r.7 r106.0			P 2.9 P 105.8		
53 ♦	Percent change from previous quarter, AR §	.2 599.8	606.0	606.1	6 606.9	608.5	610.4	"3.6 612.9	613.1	615.0	<sup>r</sup> -2.0 614.6	616.4	616.3	<sup>P</sup> –.6 <sup>r</sup> 616.6	r 619.3	
63	Unit labor costs: Index of unit labor cost, all persons, business sector, 1982=100 (Lq,Lq,Lq).	136.9			136.3			137.4			<sup>r</sup> 138.2			P 138.2		
62 ◆	Index of labor cost per unit of output, mfg., 1987=100 § . Percent change from previous month, AR §	110.2 -1.6 2	r110.8 r2.2 r1.4	r 110.8 r 0 r 1.4	r110.2 r-6.3 r.4	r109.6 r-6.3 r-1.1	r110.0 r4.5 r-1.2	r109.9 r-1.1 r-1.2	r109.0 r-9.4 r-2.4	r108.6 -4.3 r-3.3	r 108.2 r –4.3 r –4.0	r108.3 1.1 r-3.7	r108.0 r-3.3 r-3.5	107.6 -4.4 -3.5	107.9 3.4 2.5	P 109.0 P 12.9 P .1
370	Productivity: Index of output per hour, all persons, business sector,	117.2			r 119.0			r 119.8			r119.2			<sup>p</sup> 120.1		
:	1982=100 §.  Percent change over 1-quarter span, AR §  Percent change over 4-quarter span, AR §	1.5 2.2			5.7 r 2.4			2.9 P 2.4			r-2.0			<sup>p</sup> 3.1		
358	Index of output per hour, all persons, nonfarm business sector, 1982=100 §.	115.4			r 117.0			<sup>r</sup> 117.9			117.2			P 118.0		
			10. PI	ERSONA	L INCO	ME AND	CONSU	MER AT	TITUDES	;						
	Personal income:															
52 51 ◆	Personal income, bil. 1987\$, AR (C,C,C) Personal income less transfer payments, bil. 1987\$, AR (C,C,C).	4,246.4 3,523.2	4,268.2 3,539.6	4,284.7 3,556.1	4,300.2 3,571.8	4,323.4 3,589.3	4,307.9 3,566.9	4,359.7 3,618.9	4,370.6 3,629.0	4,385.2 3,641.9	4,395.2 3,652.7	4,392.3 3,649.3	r4,397.0 r3,653.0	r 4,408.8 r 3,662.2	r 4,428.2 r 3,680.6	<sup>p</sup> 4,486.6 <sup>p</sup> 3,735.3
58	Indexes of consumer attitudes: Consumer sentiment, U. of Michigan, 1966:I=100, NSA $(L,L,L) \odot ^1$ .	82.8	77.9	82.7	81.2	88.2	94.3	93.2	91.5	92.6	92.8	91.2	89.0	91.7	91.5	92.7
83 ♦	Consumer expectations, U. of Michigan, 1966:I=100, NSA (L,L,L) © 1.	72.8	66.8	72.5	70.3	78.8	86.4	83.5	85.1	82.6	84.2	82.7	78.5	80.8	83.5	85.1
122 123 ◆	Consumer confidence, The Conference Board, 1985=100 (L,L,L)*.  Consumer expectations, The Conference Board,	65.9 77.4	63.8 72.8	60.5 66.7	71.9 80.3	79.8 91.8	82.6 92.6	79.9 84.4	86.7 92.6	92.1 95.4	88.9 93.6	<b>92.5</b> 94.6	91.3 91.9	90.4 89.4	89.5 89.5	89.1 87.9
125 🗸	1985=100 (L,L,L)*.	77.4	72.0	00.7	00.0	31.0	32.0	04.4	32.0	35.4	33.0	34.0	31.3	00.4	00.0	
						11. SAV	NG									
290 295	Gross saving, bil.\$, AR Business saving, bil.\$, AR	787.5 789.9			825.8 821.9			886.2 861.8			923.3 840.4			<sup>p</sup> 917.7 <sup>p</sup> 850.3		
292 298 ◆ 293 ◆	Personal saving, bil.\$, AR	192.6 -215.0 4.1			189.4 -185.6 4.0			175.5 -151.1 3.6			201.1 -118.1 4.1			r 198.5 P –131.0 4.0		
200 🗸	1 district saving day, persons		2 MONI	Y CRE		FREST F	RATES, A		CK PRI	`FS				4.0		
	Money:			_ 1, OKE	₽11, II <b>4</b> 1	LICLOIF			OK I KI							
85 ◆ 102 ◆ 105 106 ◆	Percent change in money supply M1 (L,L,L)*  Percent change in money supply M2 (L,C,U)  Money supply M1, bil. 1987\$ (L,L,L)  Money supply M2, bil. 1987\$ (L,L,L)	.81 .14 848.9 2,774.9	.89 .23 866.1 2,777.7	.75 .10 869.8 2,772.0	.81 .35 874.1 2,772.9	.53 .21 876.8 2,772.3	.45 .15 880.7 2,776.4	.44 11 882.6 2,767.0	.33 .40 <b>882.8</b> 2,769.3	11 .24 880.5 2,771.8	.15 .11 879.8 2,768.5	.31 19 880.4 2,756.8	r.59 .40 r882.2 2,757.2	r17 16 r878.0 r2,744.4	r.08 03 r876.7 r2,737.2	<sup>p</sup> 30 <sup>p</sup> 09 <sup>p</sup> 873.5 <sup>p</sup> 2,732.6
107	Velocity of money: Ratio, gross domestic product to money suppy M1	5.880			5.777			5.777			5.851			<sup>r</sup> 5.891		
108	(C,C,C). Ratio, personal income to money supply M2 (C,Lg,C)	1.524	1.528	1.537	1.540	1.546	1.535	1.562	1.565	1.570	1.575	1.581	<sup>r</sup> 1.583	<sup>7</sup> 1.592	<sup>r</sup> 1.602	P 1.626
93 94	Bank reserves: Free reserves, mil.\$, NSA (L,U,U)   Member bank borrowings from the Federal Reserve, mil.\$, NSA (L,Lg,U).	901 180	662 428	804 285	1,012 89	981 82	1,375 73	1,070 70	912 55	1,027 124	715 200	772 333	649 458	535 469	r 573 487	<sup>p</sup> 424 <sup>p</sup> 380
112 <b>•</b> 113 <b>•</b>	Credit flows: Net change in business loans, bil.\$, AR (L,L,L) Net change in consumer installment credit, bil.\$, AR (L,L,L).\$.	2.15 63.20	43 - 98.56	-22.73 <sup>r</sup> 85.74	-2.98 <sup>r</sup> 81.42	-21.72 *98.39	39.56 ° 54.53	-34.12 * 46.51	-21.98 <sup>r</sup> 132.36	35.99 *115.10	68.99 *163.13	50.99 *129.35	r <b>89.83</b> r 81.04	″53.38 ″ <b>181.91</b>	<sup>r</sup> 84.58 <sup>p</sup> 126.80	P 80.84
110 ◆	Funds raised by private nonfinancial borrowers in credit markets, mil.\$, AR (L,L,L).	421,285			422,480			385,504			p 363,792					
14	Credit difficulties: Current liabilities of business failures, mil.\$, NSA (L,L,L).\$.	47,811.0	'	r 2,531.2			P 1,736.4	P 2,141.3			<sup>p</sup> 2,565.0		<sup>p</sup> 2,111.7	P 2,459.5	p 3,533.5	<sup>p</sup> 3,674.4
39	Percent of consumer installment loans delinquent 30 days and over (L,L,L) © 2 0 ‡.	1.77	1.95	1.93	1.86	1.77	1.98	1.87	1.74	1.78	1.72	1.71				

NOTE.—The following current high values were reached before September 1993: May 1991—BCI-106 (2,865.8); July 1991—BCI-93 (345); August 1991—BCI-94 (764); October 1991—BCI-62 change (17.6); December 1991—BCI-62 index (112.1); October 1992—BCI-62 smoothed (1.7); December 1992—BCI-53 (664.2), BCI-83 (89.5), and BCI-

123 (103.9); May 1993—BCI-85 (1.97) and BCI-102 (0.68); and 3d Q 1993—BCI-110 (512,916). See page C-6 for other footnotes.

Series	Series title and timing classification	Year		19	93						199	94				
no.	Series title and timing classification	1993	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.
		12. MON	NEY, CR	EDIT, IN	TEREST	RATES	, AND ST	TOCK PE	RICES—	Continue	ed					
	Outstanding debt:	704.000		* 770 040	r 700 404	* 704 000	. 700 044	r 000 700	r 040 750	* 000 040	r 000 000	*047.745	F054 400	* 000 000	2000 404	
66 72	Consumer installment credit outstanding, mil.\$ (Lg,Lg,Lg) ◊ §. Commercial and industrial loans outstanding, mil.\$,	794,300 429,487	7772,171 434,943	7779,316 433,049	786,101 432,801	794,300 430,991	<sup>r</sup> 798,844 434,288	<sup>r</sup> 802,720 431,445	<sup>r</sup> 813,750 429,613	<sup>r</sup> 823,342 432,612	<sup>7</sup> 836,936 438,361	<sup>r</sup> 847,715 442,610	r854,469	r 869,628	<sup>p</sup> <b>880,194</b> <sup>r</sup> 461,592	p 468,329
101 <b>•</b>	(Lg,Lg,Lg).  Commercial and industrial loans outstanding, mil. \$,  Commercial and industrial loans outstanding, mil. 1987\$	371,343	376,574	373,963	374,072	373,476	375,033	371,935	369,083	371,660	375,953	r 377,654	r 383,714	r 385,534	r 392,510	p 398,239
95 ♦	(Lg,Lg,Lg). Ratio, consumer installment credit outstanding to	14.12	r 14.26	14.29	r 14.34	r 14.40	r 14.57	r 14.40	<sup>r</sup> 14.51	r 14.60	r 14.77	°14.94	714.98	15.18	<sup>p</sup> <b>15.28</b>	
50 <b>t</b>	personal income, percent (Lg,Lg,Lg) §.	14.12	14.20	14.20	14.04	14.40	14.07	14.40	14.01	14.00	14.77	14.04	14.00	10.10	10.20	
119 ♦	Interest rates (percent, NSA): Federal funds rate (L,Lg,Lg)*	3.02	3.09	2.99	3.02	2.96	3.05	3.25	3.34	3.56	4.01	4.25	4.26	4.47	4.73	4.76
114 ◆ 116 ◆ 115 ◆	Discount rate on new 91-day Treasury bills (C,Lg,Lg)* Yield on new high-grade corporate bonds (Lg,Lg,Lg)*	3.02 7.34 6.46	2.96 6.88 5.94	3.04 6.88 5.90	3.12 7.17	3.08 7.22 6.27	3.02 7.16	3.21 7.27 6.44	3.52 7.64 6.90	3.74 7.95 7.32	4.19 8.17 7.47	4.18 8.16 7.43	4.39 8.30 7.61	4.50 8.25 7.55	4.64 <b>8.48</b> 7.81	<b>4.96</b> 8.76 <b>8.02</b>
117 118	Yield on long-term Treasury bonds (C,Lg,Lg)* Yield on municipal bonds, 20-bond average (U,Lg,Lg)* Secondary market yields on FHA mortgages (Lg,Lg,Lg)	5.60 7.46	5.29 7.03	5.25 7.08	6.25 5.47 7.51	5.35 7.52	6.24 5.31 7.05	5.40 7.59	5.91 8.57	6.23 8.63	6.19 8.63	6.11 9.03	6.23 8.65	6.21 8.66	6.28 9.10	6.52 9.23
109 ◆	Average prime rate charged by banks (Lg,Lg,Lg)*	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.06	6.45	6.99	7.25	7.25	7.51	7.75	7.75
19 ◆	Index of stock prices, 500 common stocks, 1941-43=10, NSA (L,L,L)*.	451.41	459.24	463.90	462.89	465.95	472.99	471.58	463.81	447.23	450.90	454.83	451.40	464.24	466.96	463.81
				'	13. NA	TIONAL	DEFENS	E			<b>'</b>			'		
525	Defense Department prime contract awards, mil.\$		11,359				10,247	9,343	10,064	7,314	8,834	14,601	8,865	<sup>p</sup> 15,767		
548 557	Manufacturers' new orders, defense products, mil.\$ Index of industrial production, defense and space	76,649 78.5	6,446 <sup>7</sup> 77.4	5,304 <sup>r</sup> 76.4	5,172 * 76.3	5,239 <sup>r</sup> 75.2	7,738 <sup>r</sup> 74.5	6,136 <sup>7</sup> 73.6	4,902 *73.7	6,280 <sup>r</sup> 73.6	7,180 <sup>7</sup> 72.4	7,050 771.3	5,546 <sup>r</sup> 69.9	<sup>r</sup> 6,147 <sup>r</sup> 69.3	<sup>r</sup> 6,861 <sup>r</sup> 68.7	<sup>p</sup> 5,699 <sup>p</sup> 68.6
570	equipment, 1987=100 §. Employment, defense products industries, thous.	961	940	933	923	910	901	895	892	887	883	877	870	<sup>,</sup> 867	<sup>p</sup> 862	
564 ◆	Federal Government purchases, national defense, bil.\$, AR	302.7			299.1			291.7			291.7			<sup>r</sup> 300.5		
				1	4. EXPC	RTS AN	D IMPOR	RTS								
602 604	Exports, excluding military aid shipments, mil.\$ Exports of domestic agricultural products, mil.\$	465,091 41,940	38,610 3,550	40,019 3,521	40,084 3,509	41,657 3,768	39,247 3,497	38,106 3,118	42,808 3,412	41,089 3,326	41,103 3,685	42,811 3,718	40,985 3,487	<sup>r</sup> 45,101 4,013	44,398 3,908	
606 612	Exports of nonelectrical machinery, mil.\$  General imports, mil.\$	99,787 580,659	8,301 49,224	8,279 50,849	8,660 49,979	8,975 49,439	8,435 50,097	8,363 50,178	9,096 52,391	9,009 53,134	9,198 53,988	9,329 55,839	9,321 55,830	10,079 *57,859	9,741 57,921	
614 616	Imports of petroleum and petroleum products, mil.\$	50,455 79,399	73,699 76,735	3,936 6,871	3,729 6,748	3,371 6,849	2,981 6,134	3,960 6,713	4,162 7,258	3,997 7,546	3,863 7,300	4,606 7,842	5,027	4,950 8,765	4,258 7,378	
618 <b>♦</b> 620 <b>♦</b>	Merchandise exports, adjusted, excluding military, mil.\$\frac{1}{2} \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	456,866 589,441			119,679 152,848			118,018 154,980			<sup>p</sup> 122,670 <sup>p</sup> 164,441					
622	Balance on merchandise trade, mil.\$ 1	-132,575			-33,169			-36,962			<i>P</i> −41,771					
				15. IN	ITERNA	TIONAL	COMPA	RISONS								
47 ♦	Industrial production indexes (1987=100): United States §	112.0	r 112.5	<sup>r</sup> 112.7	<sup>r</sup> 113.7	<sup>r</sup> 114.7	<sup>r</sup> 114.7	<sup>r</sup> 115.6	<sup>r</sup> 116.6	r 116.7	r117.4	<sup>r</sup> 118.0	r 118.2	r 119.1	r 119.1	P 119.8
721 <b>♦</b> 728 <b>♦</b>	OECD, European countries <sup>2</sup> Japan	107 111.6	108 111.4	108 108.1	108 109.7	108 109.0	107 109.5	109 109.0	109 113.7	111 111.1	111 110.1	<sup>p</sup> 112 113.0	P 111.9			
725 ♦ 726 ♦	Federal Republic of GermanyFrance	107 107	108 107	107 106	107 107	107 106	105 107	107 107	108 108	110 110	110 110	P 111 P 109				
722 <b>♦</b> 727 <b>♦</b>	United Kingdomltaly	105 105.7	105 103.7	107 105.8	107 105.9	107 104.3	108 104.0	108 106.0	108 105.5	110 109.9	110 109.9	110 P 109.7	<i>P</i> 110			
723 ♦	Canada	103.1	104.4	104.4	104.8	104.6	105.1	104.8	106.3	107.7	108.8	r 109.9	<sup>7</sup> 110.5	111.8	P 111.4	
320	United States, NSA	144.5 2.6	145.1 2.6	145.7 2.4	145.8 2.4	145.8 2.9	146.2 2.5	146.7 2.3	147.2 2.5	147.4 3.2	147.5 3.3	148.0 3.0	148.4 2.9	149.0	149.4	149.5
738	Japan, NSAPercent change over 6-month span, AR	118.5 1.1	119.3 .5	119.2 2	118.5 5	118.6 .7	118.7 .7	118.7 .7	119.3 .7	119.5 2	119.6 .5	119.2 3	118.6	119.2	119.5	
735 •	Federal Republic of Germany, NSA Percent change over 6-month span, AR	125.6 3.5	126.1 2.7	126.4 2.9	126.7 3.4	126.9 3.5	128.0 3.5	128.5 3.2	128.7 3.3	129.0 2.8	129.3 2.5	129.5 *2.3	129.6 2.0	129.7	<sup>r</sup> 129.8	129.9
736 ◆	France, NSA  Percent change over 6-month span, AR	143.5 1.9	144.0 1.8	144.3 1.5	144.4 1.8	144.3 1.7	144.5 1.8	144.9 1.7	145.2 1.7	145.6 1.8	145.9 1.5	145.9 1.5	145.9 1.5	145.9	146.3	146.7
732	United Kingdom, NSA Percent change over 6-month span, AR	165.3 1.9	166.7 2.6	166.6 2.4	166.4 2.4	166.7 2.2	166.0 2.8		167.4 2.7	169.4 2.3	170.0 2.4	170.0 2.3	169.2 2.0	170.0	170.4	170.6
737 •	Italy, NSA Percent change over 6-month span, AR	186.3 4.2	187.4 3.9	188.6 3.9	189.5 3.3	189.5 3.5	190.6 3.4	191.3 3.6	191.7 3.6	192.2 3.2	192.9 4.1	193.3 3.7	193.6 4.2	194.2	194.2	195.8
733 •	Canada, NSA Percent change over 6-month span, AR	147.9 1.1	148.2 2.6	148.4 1.5	149.1 9	148.8 -1.6	148.8 -1.5	147.7 -2.5	147.6 -2.3	147.6 -1.2	147.3 1.2	147.6 1.9	148.2 1.2	148.3	148.4	148.2
19 ♦	Stock price indexes (1967=100, NSA): United States*	491.0	499.6	504.6	503.5	506.9	514.5	513.0	504.5	486.5	490.5	494.8	491.0	505.0	508.0	504.5
748 <b>♦</b> 745 <b>♦</b>	Japan* Federal Republic of Germany*	1,381.4 312.2	1,506.4 322.9	1,490.6 337.9	1,381.9 345.7	1,308.7 363.1	1,376.0 374.2	1,445.1 372.7	1,466.9 380.2	1,457.0 396.9	1,488.6 399.8	1,526.2 373.1	1,498.5 372.0	1,494.6 389.4	1,441.2 379.8	<sup>p</sup> 1,435.2 361.7
746 ♦ 742 ♦	France*United Kingdom*	970.2 1,375.0	1,007.1 1,414.1	1,047.2 1,440.2	1,023.8 1,430.8	1,111.5 1,509.1	<sup>p</sup> 1,145.8 1,584.3	<sup>p</sup> 1,141.4 1,584.3	<sup>p</sup> 1,095.8 1,520.6	<sup>p</sup> 1,072.1 1,488.3	<sup>p</sup> 1,075.8 1,472.6	<sup>p</sup> 987.1 1,409.9	<sup>p</sup> 998.2 1,430.8	<sup>p</sup> 1,030.6 1,503.9	<sup>p</sup> 975.9 <sup>r</sup> 1,463.2	<sup>P</sup> 943.0 <sup>P</sup> 1,425.3
747 <b>♦</b> 743 <b>♦</b>	Italy* Canada*	575.2 441.1	633.1 450.9	617.2 480.9	575.2 472.3	622.7 488.3	646.8 514.7	703.3 499.9	699.9 489.2	815.6 482.2	823.9 488.9	757.1 454.8	738.5 472.2	721.2 491.5	710.2 492.0	<sup>p</sup> 668.7 484.9
750 ♦	Exchange rates: Exchange value of U.S. dollar, index: March 1973=100, NSA 3*.	93.18	92.07	93.29	95.47	95.73	96.54	95.79	94.35	94.39	92.79	91.60	89.06	89.26	88.08	86.66
758 ♦	Foreign currency per U.S. dollar (NSA): Japan (yen)*	111.08	105.57	107.02	107.88	109.91	111.44	106.30	105.10	103.48	103.75	102.53	98.45	99.94	98.77	98.35
755 ♦ 756 ♦	Federal Republic of Germany (d. mark)* France (franc)*	1.6545 5.6669	1.6219 5.6724	1.6405 5.7541	1.7005 5.9069	1.7105 5.8477	1.7426 5.9207	1.7355 5.8955	1.6909 5.7647	1.6984 5.8170	1.6565 5.6728	1.6271 5.5597	1.5674 5.3702	1.5646 5.3602	1.5491 5.2975	1.5195 5.2025
752 <b>♦</b> 757 <b>♦</b>	United Kingdom (pound)*ltaly (lira)*	.6662 1,573.41	.6558 1,569.10	.6656 1,600.93	.6753 1,666.31	.6706 1,687.17	.6701 1,699.45	.6760 1,685.96	.6703 1,666.63	.6746 1,626.07	.6648 1,594.56	.6552 1,592.22	.6465 1,562.31	.6484 1,582.15	.6385 1,565.79	.6225 1,548.29
753 ♦	Canada (dollar)*	1.2902	1.3215	1.3263	1.3174	1.3308	1.3173	1.3424	1.3644	1.3830	1.3808	1.3836	1.3826	1.3783	1.3540	1.3503
				16. AL	ERNAT	IVE CON	IPOSITE	INDEXE	S							
990 <b>•</b> 991 <b>•</b>	CIBCR long-leading composite index, 1967=100 <sup>4</sup>	254.9 224.3	254.6 226.4	256.1 226.9	258.4 230.0	261.5 230.7	260.4 232.4	260.5 - 234.0	260.3 237.1	261.1 237.4	263.0 238.4	<sup>r</sup> 263.1 239.7	264.7 - 237.9	r 265.1 r 243.3	r 264.4 r 245.6	<sup>p</sup> 262.3 <sup>p</sup> 245.7
331 ₹	ODON SHORT-BAUTING COMPOSITE INDEX, 1907=100 ·	224.3	220.4	220.9	230.0	230.7	232.4	234.0	231.1	231.4	230.4	233.7	231.9	243.3	240.0	· 240.1

See footnotes on page C-6.

### FOOTNOTES FOR PAGES C-1 THROUGH C-5

a Anticipated.

AR Annual rate.

c Corrected.© Copyrighted.

e Estimated.

Later data listed in notes.

NSA Not seasonally adjusted.

p Preliminary.

Revised.

Graph included for this series.

§ Major revision—see 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-53 through C-55 in the October 1994 SURVEY.

#### Page C-1

Note.—Major data revisions:

Index of industrial production (BCI-47)—see note for page C-2.

Change in labor cost per unit of output, manufacturing (BCI-62)—see note for page C-4.

- Ratio, consumer installment credit to personal income (BCI-95)—see note for page C-4.

  \* Preliminary November 1994 values: BCI-32 = 64.4, BCI-19 = 461.01, and BCI-109 = 8.08.
- Data exclude Puerto Rico, which is included in figures published by the source agency. From August 1992 through April 1994, data include initial claims made under the July 1992 Emergency Unemployment Compensation amendments.
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  of Michigan, Survey Research Center, P.O. Box 1248, Ann Arbor, MI 48106-1248.
  - 3. Excludes BCI-57, for which data are not available.
  - 4. Excludes BCI-77 and BCI-95, for which data are not available.
- Data beginning January 1994 are based on the revised Current Population Survey and are not directly comparable with data for earlier periods.

#### Page C-2

Note.—Major data revisions: Industrial production indexes (BCI-47, -73, -74, -75, -76, and -557) and related measures of capacity utilization (BCI-82 and BCI-124) have been revised to incorporate updated weights used in constructing the indexes and updated source data, seasonal factors, and productivity relationships. Periods covered by these revisions are as follows: BCI-82 from 1987 forward; BCI-124 from 1989 forward; and BCI-47, -73, -74, -75, -76, and -557 from 1991 forward. For further information, contact the Board of Governors of the Federal Reserve System, Research and Statistics Division, Industrial Output Office, Washington, DC 20551.

- \* Preliminary November 1994 value: BCI-32 = 64.4; anticipated 4th quarter 1994 values: BCI-61 = 645.13 and BCI-100 = 623.89.
- 1. Data beginning January 1994 are based on the revised Current Population Survey and are not directly comparable with data for earlier periods.
- Data exclude Puerto Rico, which is included in figures published by the source agency. From August 1992 through April 1994, data include initial claims made under the July 1992 Emergency Unemployment Compensation amendments.
  - 3. Data exclude Puerto Rico, which is included in figures published by the source agency.
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#### Page C-3

Note.—Major data revision: Index of industrial production, business equipment (BCI-76)—see note for page C-2.

- \* Preliminary November 1994 value: BCI-23 = 329.7.
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### Page C-4

Note.—Major data revisions:

Series on productivity and costs (BCI-345, -346, -358, and -370) have been revised to reflect new source data and the results of the 1993 Hours at Work Survey. Periods covered by these revisions are as follows: BCI-370 from 1986 forward; BCI-345 from 1990 forward; BCI-346 from 1992 forward; and BCI-358 from 1993 forward. For further information, contact the U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, Division of Productivity Research, Washington, DC 20210

Change in labor cost per unit of output, manufacturing (BCI-62) has been revised from 1991 forward to incorporate revisions in industrial production—see note for page C-2. For further information, contact the U.S. Department of Commerce, Bureau of Economic Analysis, Business Outlook Division, Washington, DC 20230.

Series based on consumer installment credit (BCI-66, -95, and -113) have been revised from 1990 forward to incorporate a new estimation procedure for finance companies, recent call report data for savings institutions and credit unions, and updated seasonal factors. For further information, contact the Board of Governors of the Federal Reserve System, Division of Research and Statistics, Mortgage and Consumer Finance Section, Washington, DC 20551 (BCI-66) and the U.S. Department of Commerce, Bureau of Economic Analysis, Business Outlook Division, Washington, DC 20230 (BCI-95 and BCI-113).

\* Preliminary November 1994 values: BCI-122 = 101.3, BCI-123 = 96.7, and BCI-85 = -0.52.

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### Page C-5

Note.—Major data revisions:

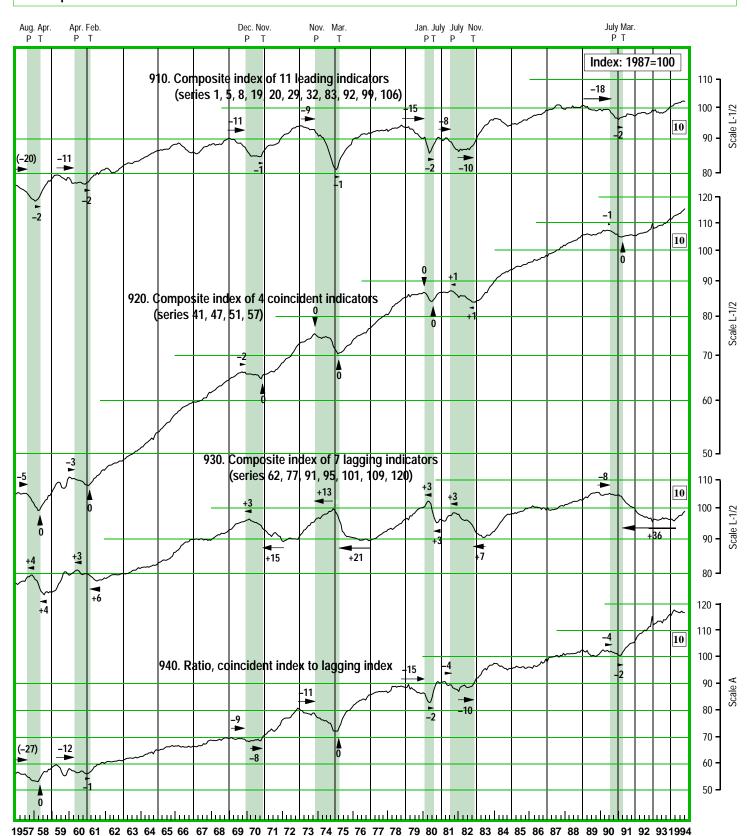
Series based on consumer installment credit (BCI-66 and BCI-95)—see note for page C-4. Industrial production indexes (BCI-47 and BCI-557)—see note for page C-2.

- \* Preliminary November 1994 values: BCI-119 = 5.06, BCI-114 = 5.25, BCI-116 = 8.89, BCI-115 = 8.17, BCI-17 = 6.97, BCI-109 = 8.08, BCI-19 (1941-43=10) = 461.01, BCI-19 (1967=100) = 501.5, BCI-748 = 1,393.6, BCI-745 = 367.7, BCI-746 = 970.1, BCI-742 = 1,440.9, BCI-747 = 668.5, BCI-743 = 462.5, BCI-750 = 87.71, BCI-758 = 98.04, BCI-755 = 1.5396, BCI-756 = 5.2867, BCI-752 = 0.6292, BCI-757 = 1,583.81, and BCI-753 = 1.3647.
- 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.

#### **Historical Data for Selected Series**

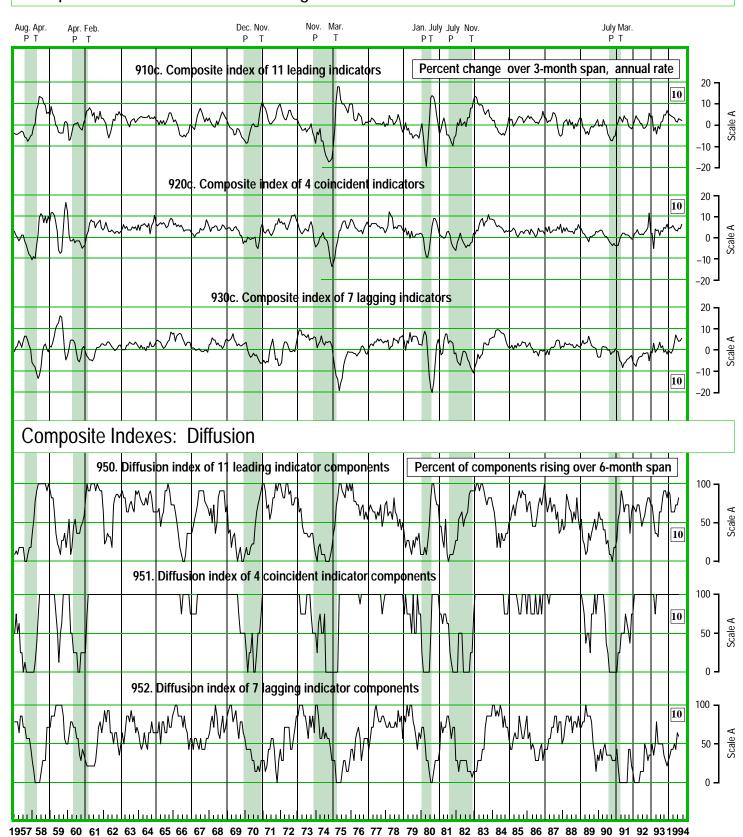
Historical data for selected Business Cycle Indicators series are shown on pages C-29 through C-44. See page C-28 for a list of the series for which historical data are included in the October and November issues of the Survey.

## Composite Indexes



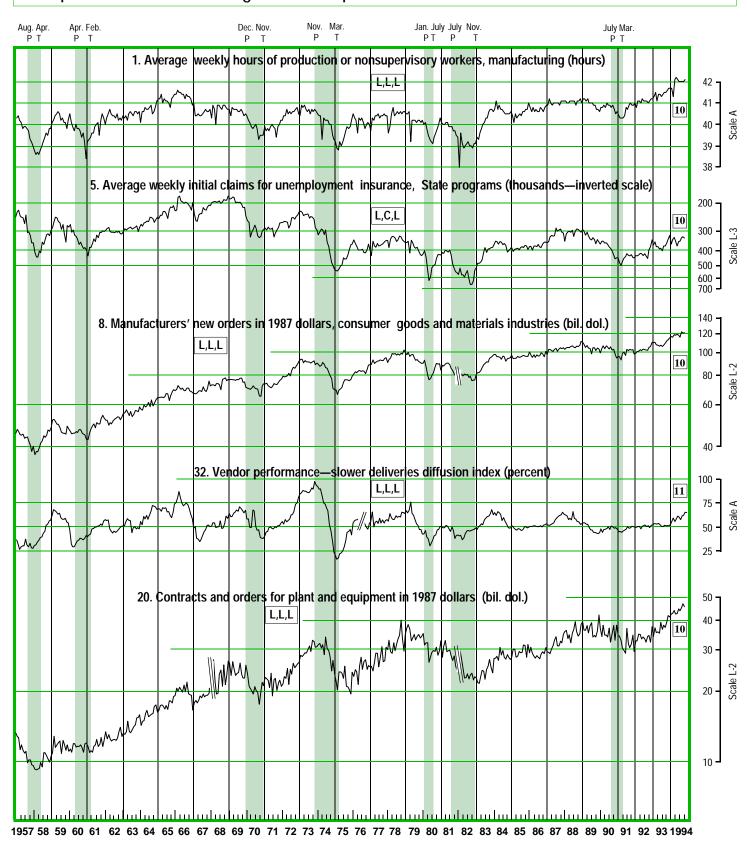
Note. — The numbers and arrows indicate length of leads (-) and lags (+) in months from business cycle turning dates. Current data for these series are shown on page C-1.

Composite Indexes: Rates of Change

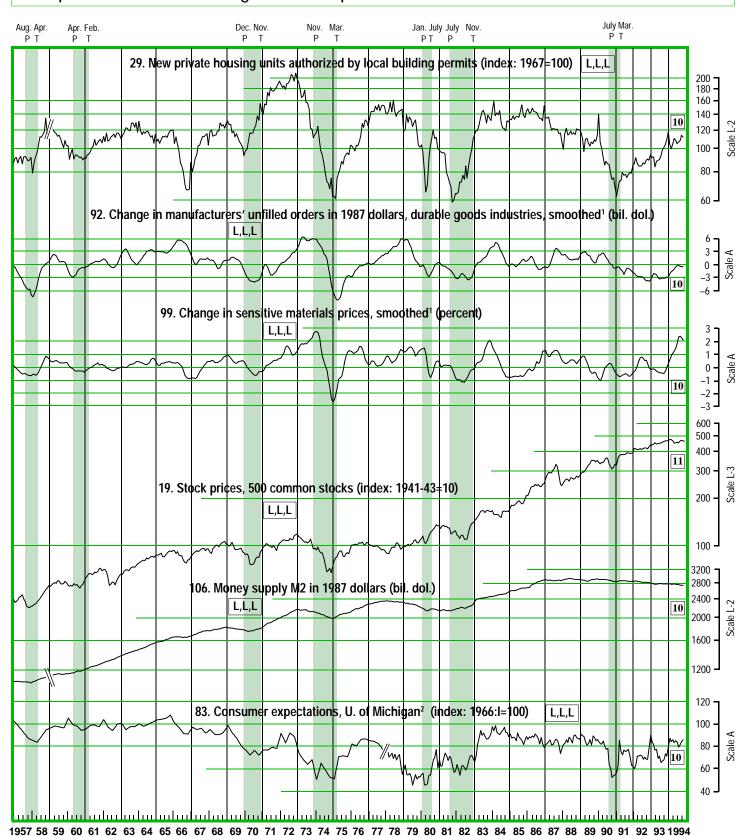


Note.—Current data for these series are shown on page C-1.

# Composite Indexes: Leading Index Components



# Composite Indexes: Leading Index Components—Continued

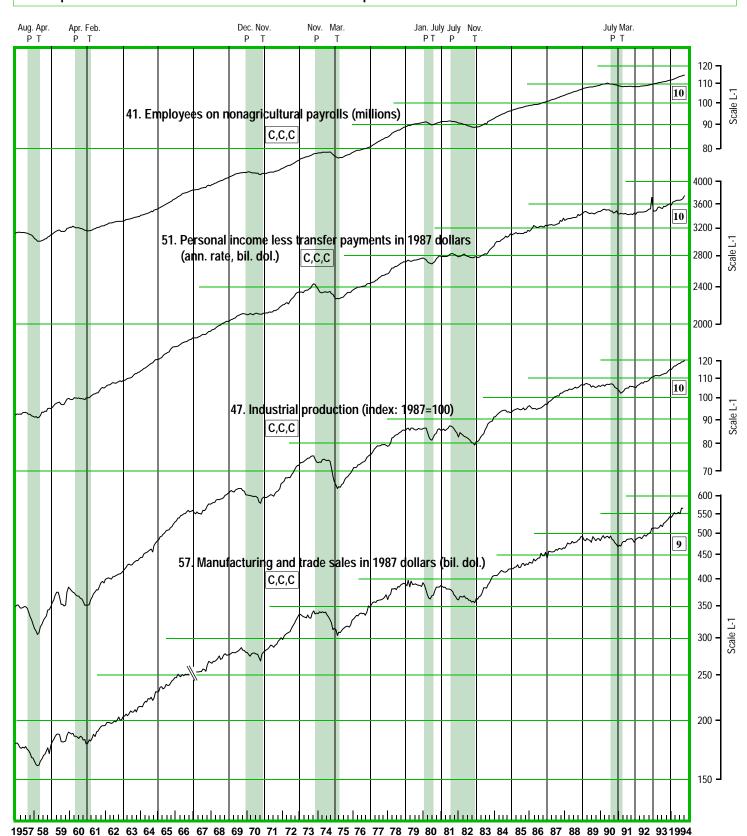


1. This series is smoothed by an autoregressive-moving-average filter developed by Statistics Canada.

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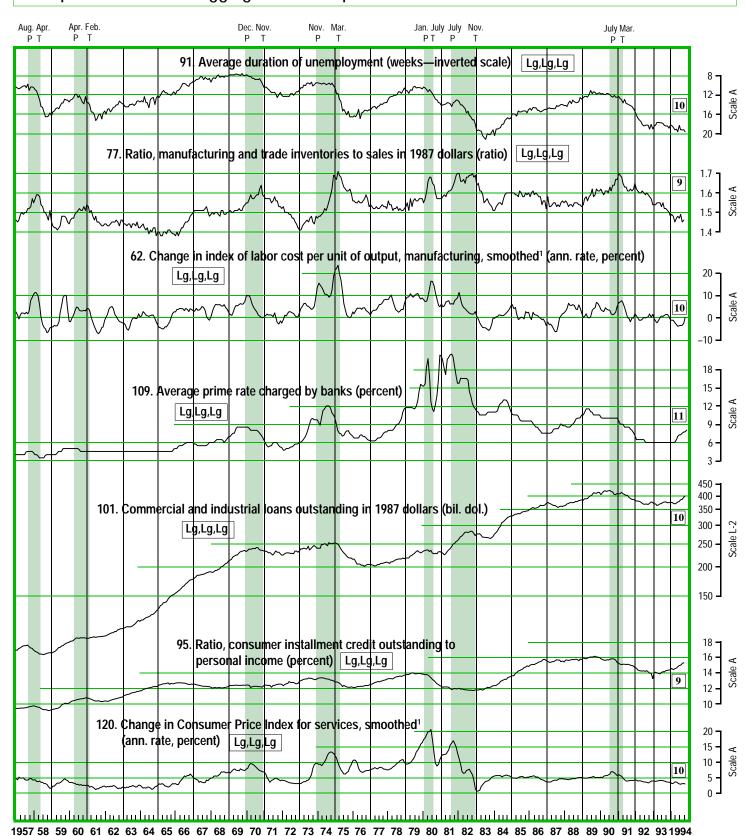
Note.—Current data for these series are shown on page C-1.

# Composite Indexes: Coincident Index Components



Note.—Current data for these series are shown on page C-1.

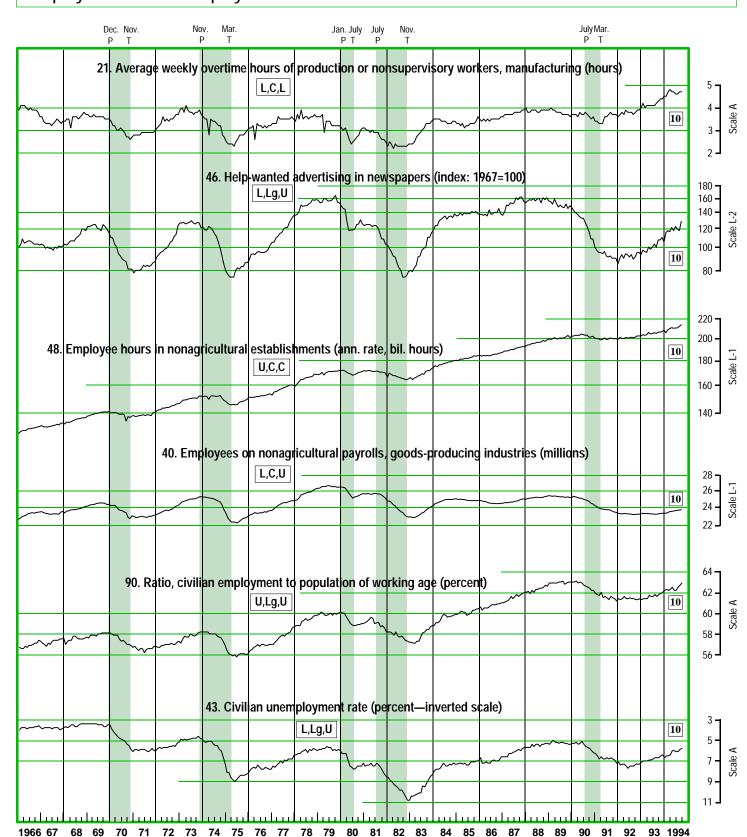
# Composite Indexes: Lagging Index Components



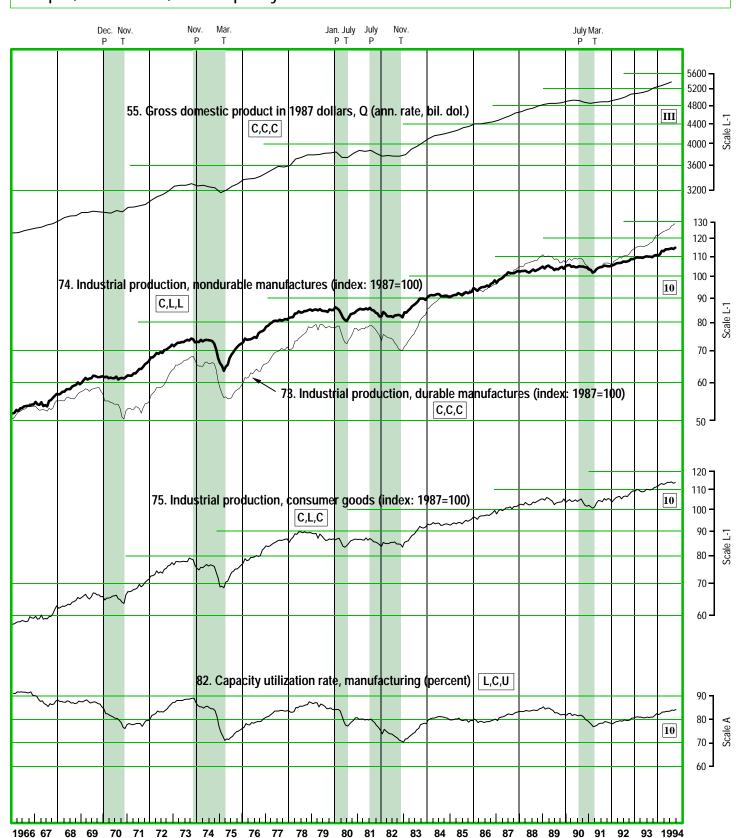
<sup>1.</sup> This series is smoothed by an autoregressive-moving-average filter developed by Statistics Canada Note.—Current data for these series are shown on page C-1.

4

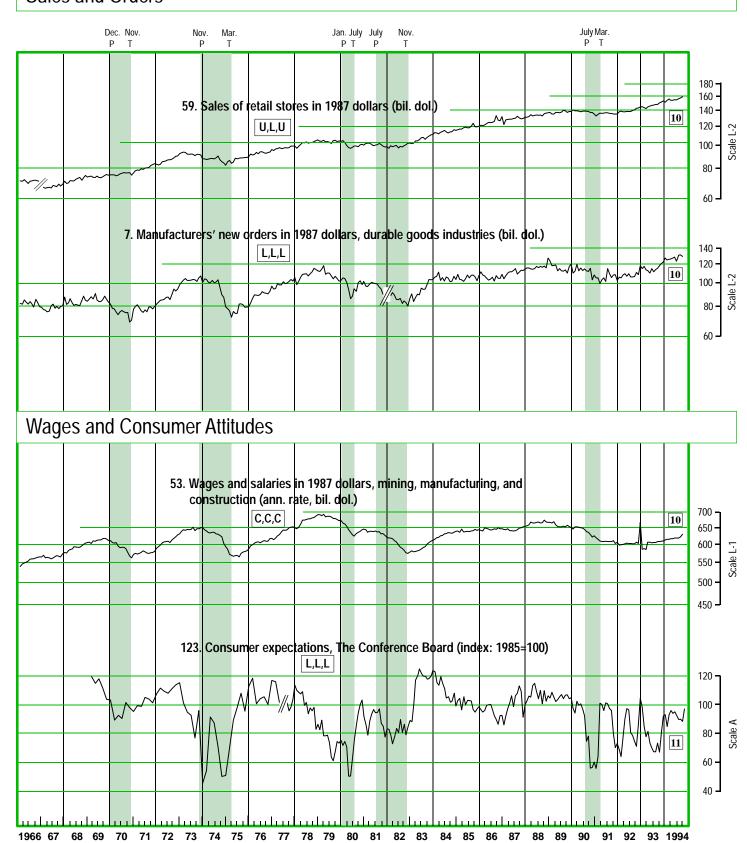
# **Employment and Unemployment**



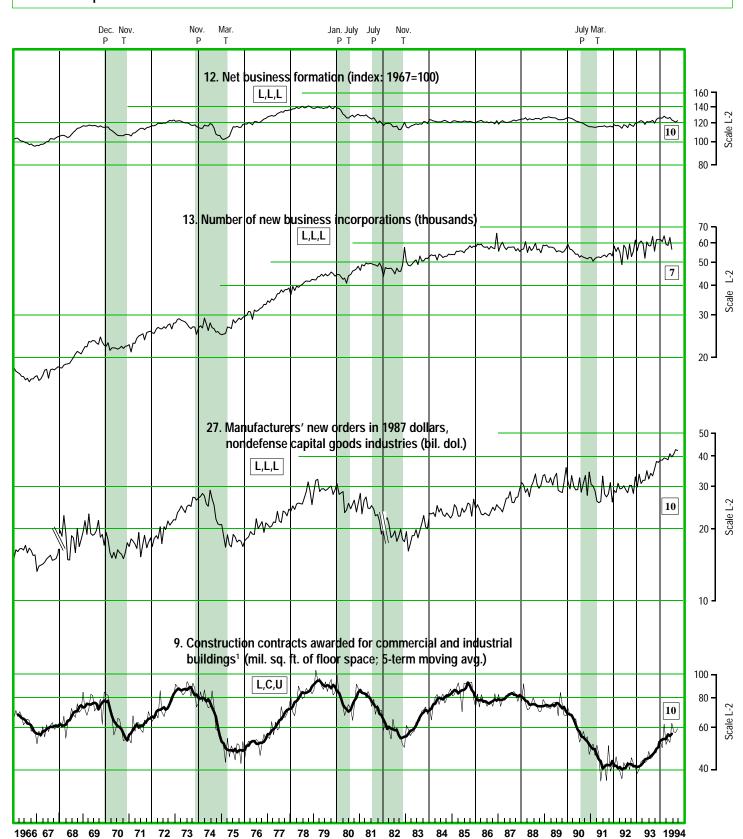
## Output, Production, and Capacity Utilization



### Sales and Orders

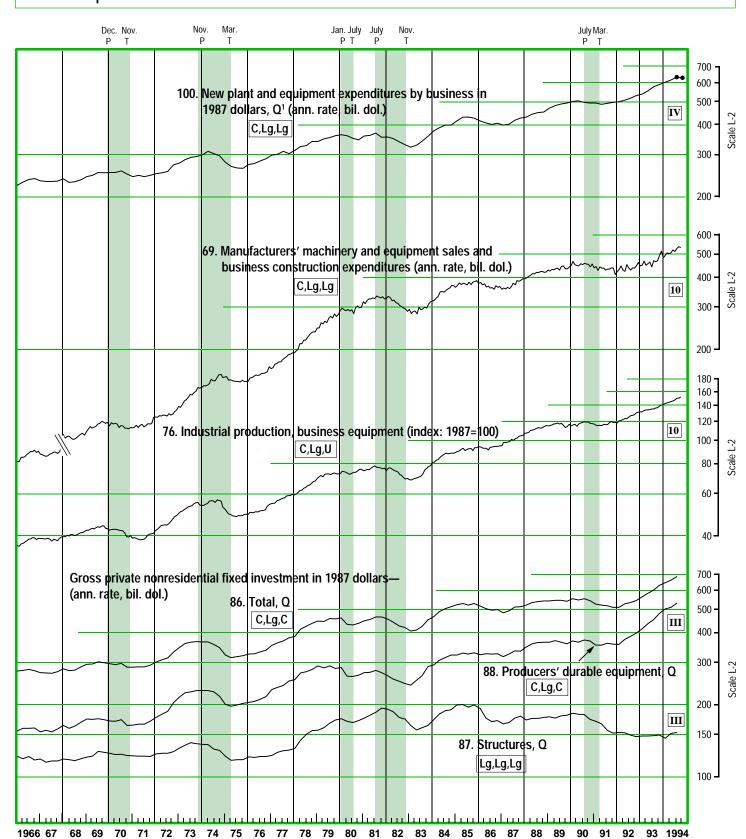


## **Fixed Capital Investment**



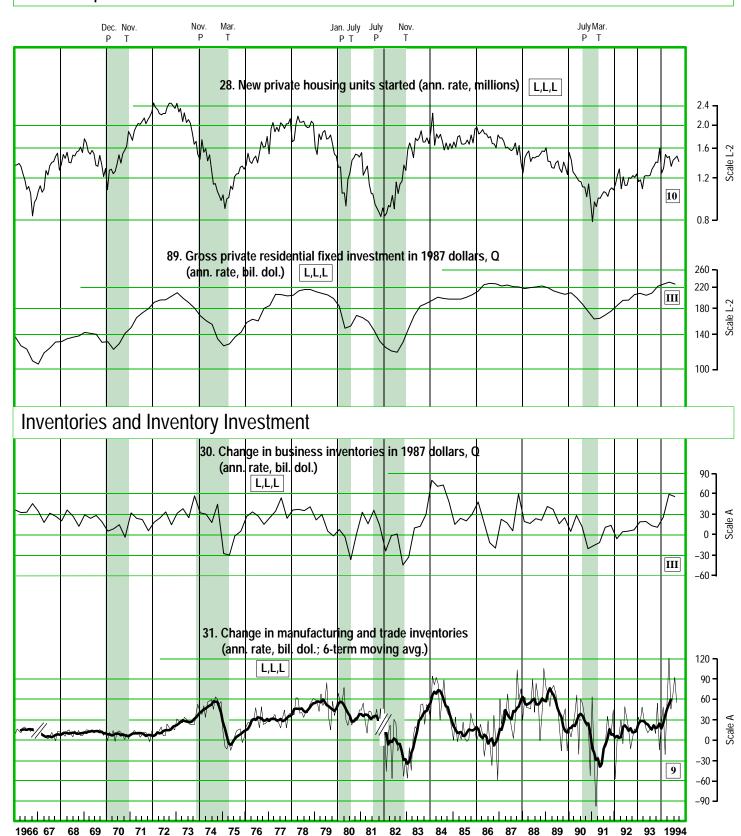
<sup>1.</sup> This is a copyrighted series used by permission; it may not be reproduced without written permission from McGraw-Hill Information Systems Company, F.W. Dodge Division.

### Fixed Capital Investment—Continued

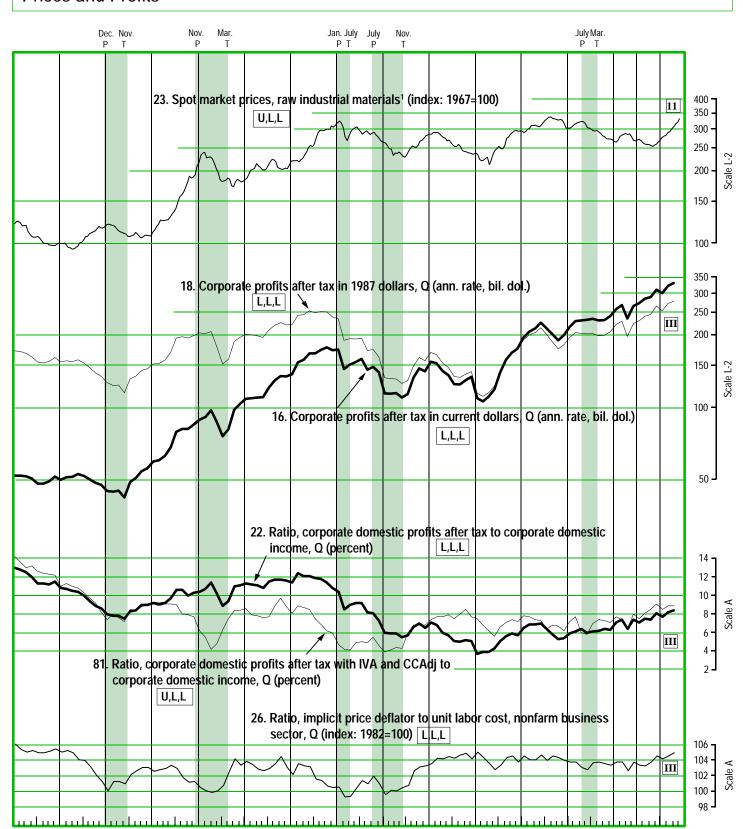


Note.—Current data for these series are shown on pages C-2 and C-3.

# Fixed Capital Investment—Continued



### **Prices and Profits**



72

73 74 75

76

71

70

1966 67

68 69

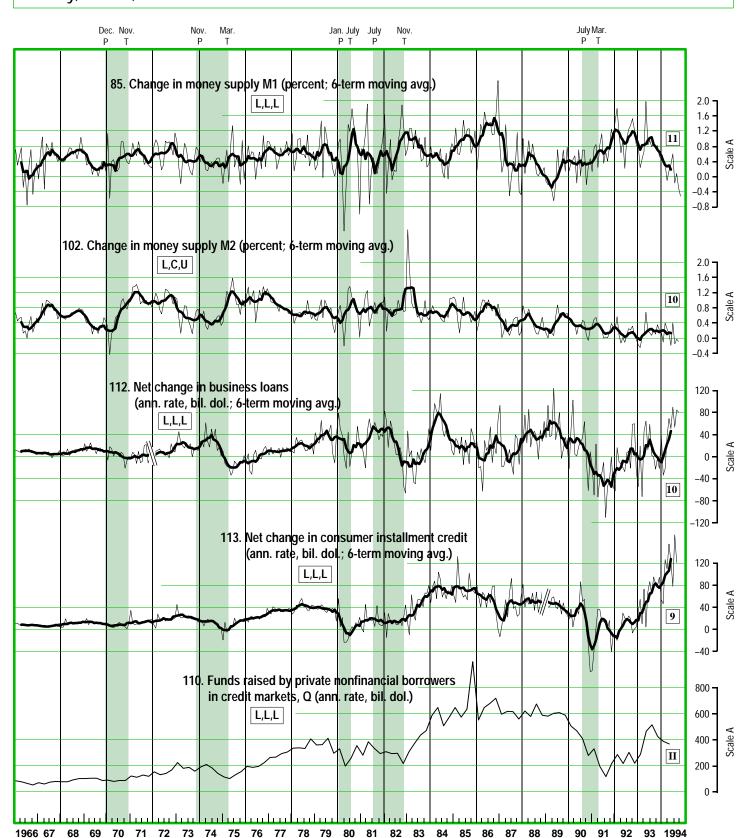
88 89 90 91 92

86 87

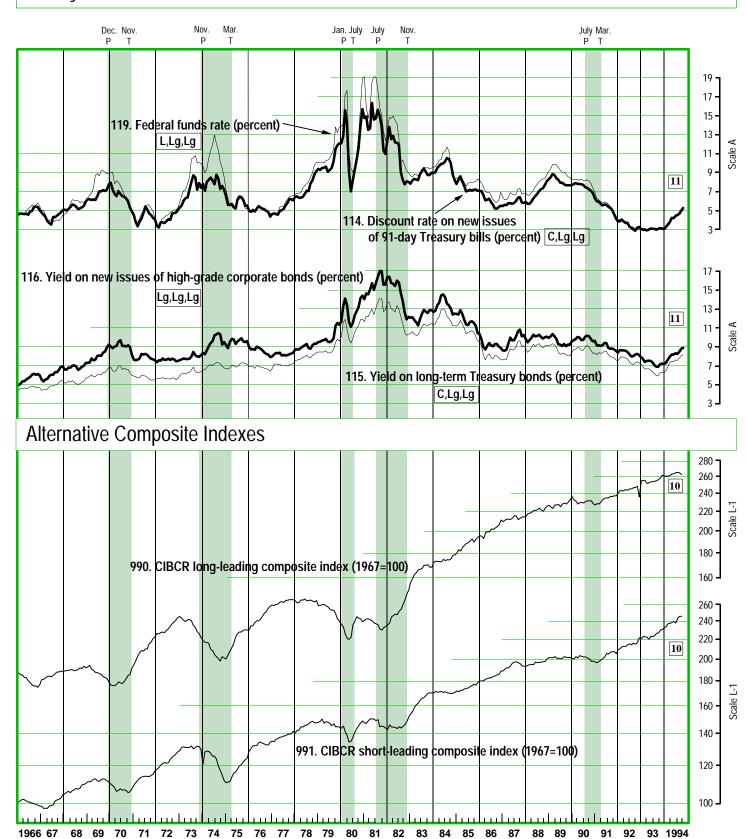
83 84 85

78 79 80 81 82

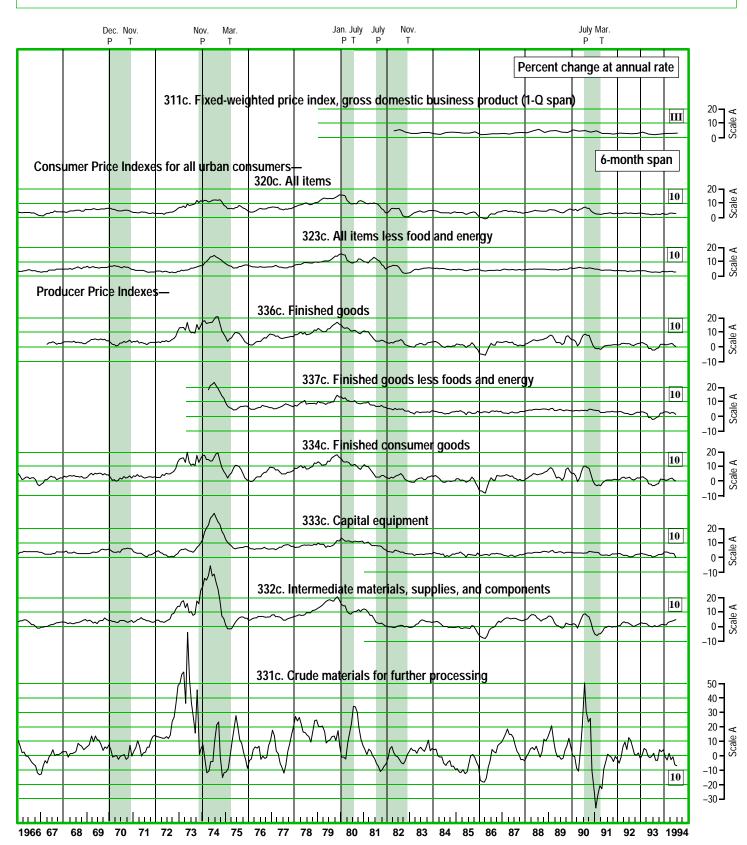
### Money, Credit, and Interest Rates



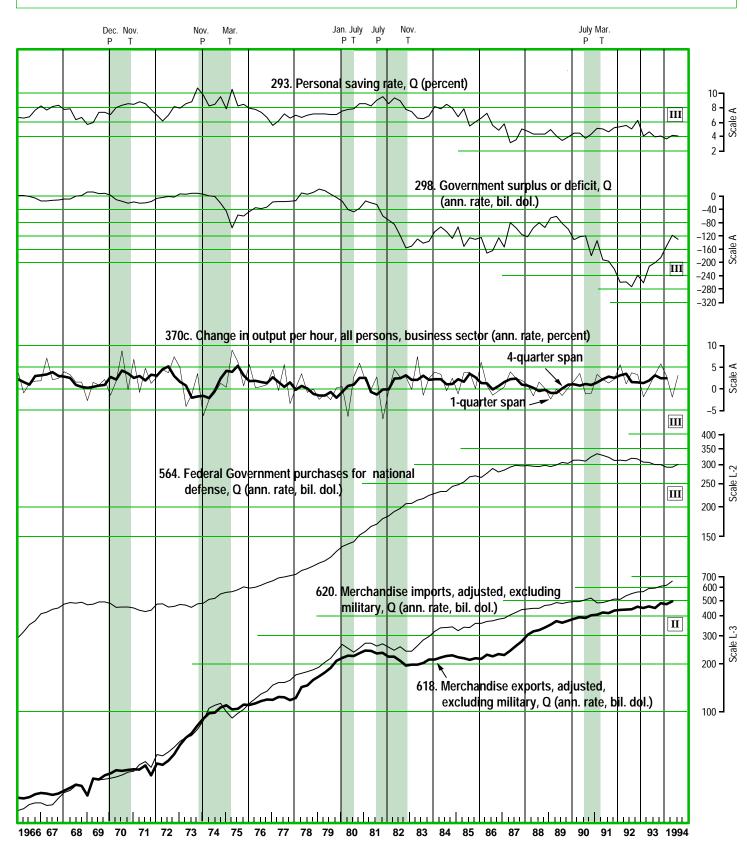
## Money, Credit, and Interest Rates—Continued



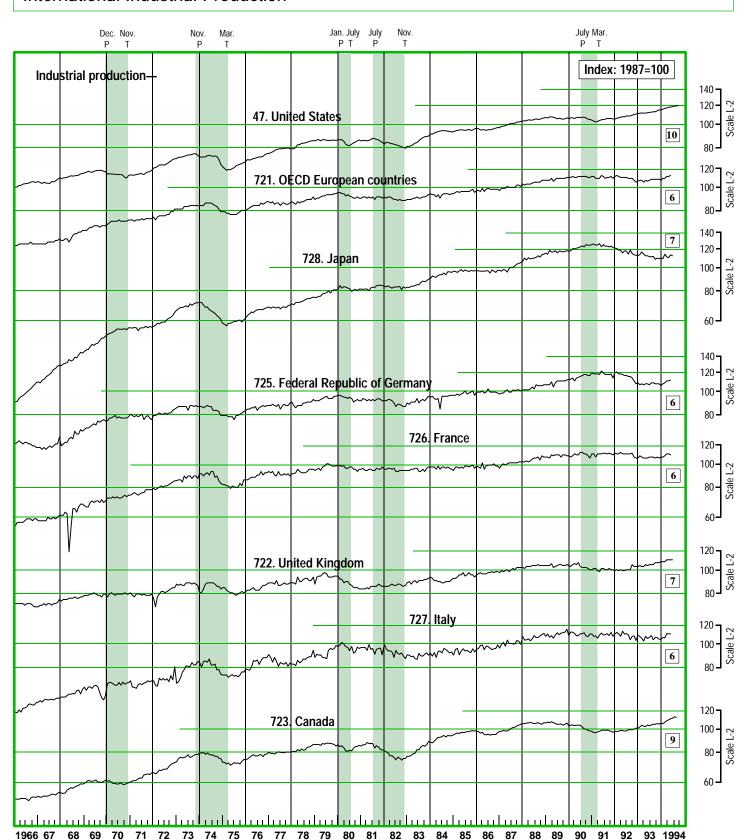
### **Prices**



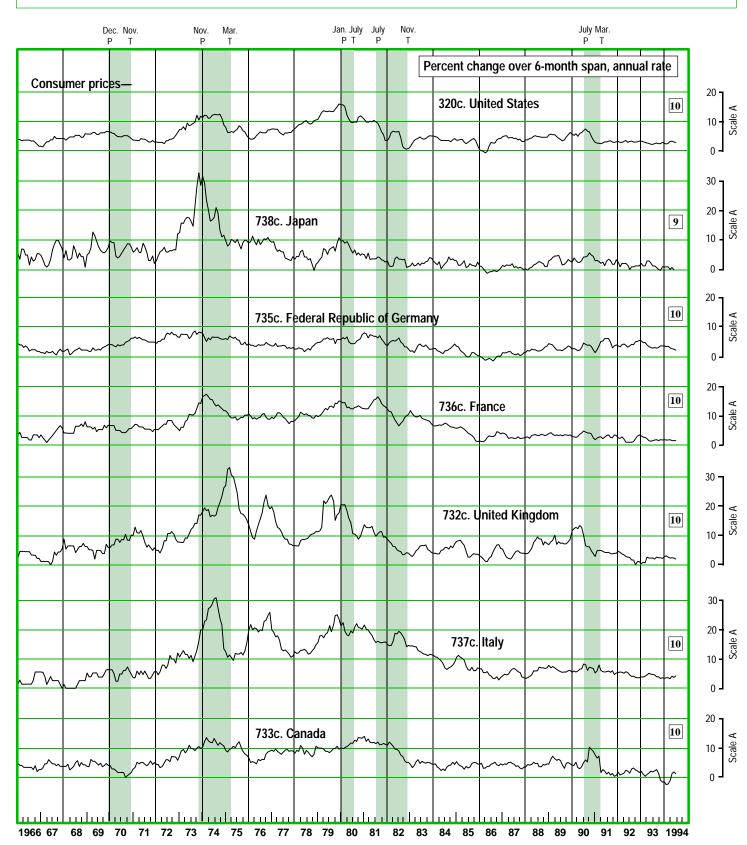
### Other Measures



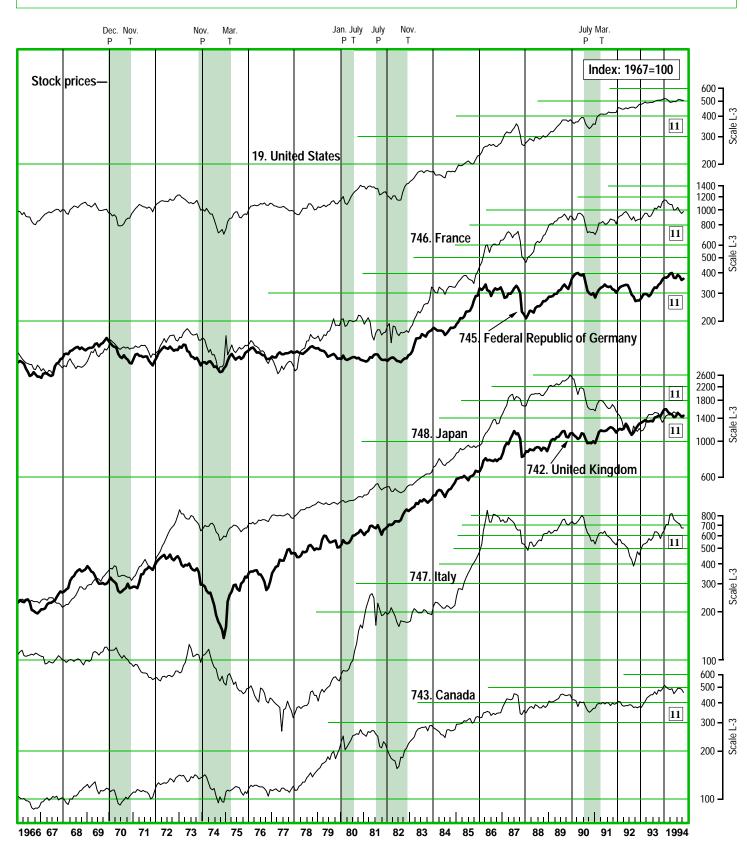
### International Industrial Production



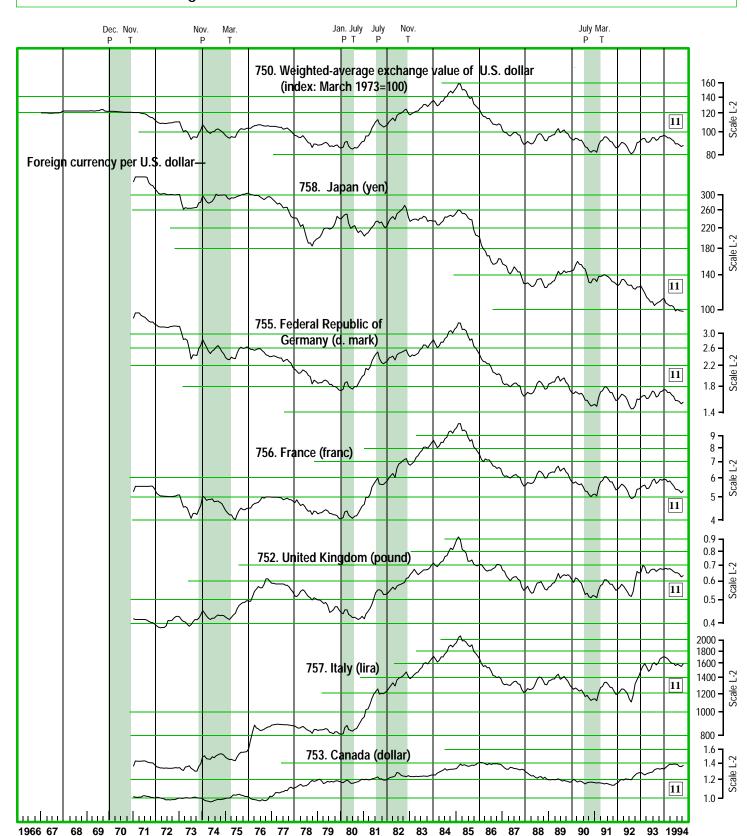
### **International Consumer Prices**



### International Stock Prices



## **International Exchange Rates**



### **Historical Data for Selected Series**

Pages C-29 through C-44 present data for 1948-93 for selected Business Cycle Indicators series. The series for which historical data are shown in the October and November issues are listed below by subject, by series number, and by issue. Historical data for additional series will be shown, as space allows, in future issues.

Subject	Series number	Issue	Page	Subject	Series number	Issue	Page
Duainage formation	Tidiliboi			Industrial production index		10/04	C-40
Business formation: Current liabilities of business failures	14	11/94	C-30	Industrial production index	47	10/94	C-40
Index of net business formation	12	11/94	C-30 C-29	Interest rates:	400	40/04	0.40
New business incorporations	13	11/94	C-29 C-29	Average prime rate charged by banks	109	10/94	C-49
Business loans:	13	11/94	U-29	Corporate bond yield	116	11/94	C-40
	72	11/94	C-36	Federal funds rate	119	11/94	C-42
Commercial and industrial loans, current dollars	101	10/94	C-36 C-48	Mortgage yield, secondary market	118	11/94	C-41
Commercial and industrial loans, 1987 dollars  Net change in business loans	112	11/94	C-46 C-38	Municipal bond yield	117	11/94	C-41
	112	11/94	C-36	Treasury bill rate	114	11/94	C-39
Capital investment:  Contracts and orders for plant and equipment,	20	10/94	C-38	Treasury bond yield	115	11/94	C-40
	20	10/94	U-36	Inventories:			
1987 dollars.				Manufacturing and trade, 1987 dollars	70	11/94	C-35
Composite indexes:	000	10/94	C-30-31	Ratio, manufacturing and trade inventories to sales,	77	10/94	C-43
Coincident indicators (and changes)	920			1987 dollars.			
Lagging indicators (and changes)		10/94 10/94	C-33-34 C-28-29	Labor cost per unit of output, manufacturing, index	62	10/94	C-41-42
Leading indicators (and changes)	910	10/94		(and changes).			
Ratio, coincident index to lagging index	940	10/94	C-35	Money supply:			
Consumer attitudes:	122	11/01	C-42	Change in money supply M1	85	11/94	C-36
Index of consumer confidence	122	11/94		Change in money supply M2	102	11/94	C-37
Index of consumer expectations <sup>1</sup> Index of consumer expectations <sup>2</sup>	123	11/94	C-43	Money supply M1, 1987 dollars	105	11/94	C-38
index of consumer expectations 2	83 58	10/94	C-43	Money supply M2, 1987 dollars	106	10/94	
Index of consumer sentiment	58	11/94	C-34	New orders, consumer goods and materials, 1987	8	10/94	C-37
Consumer installment credit:	00	44/04	0.04	dollars.	١	10/34	0-37
Delinquency rate	39	11/94	C-31	Prices:			
Net change	113	11/94	C-39	Consumer Price Index, all items (and changes)	320	11/0/	C-43-44
Ratio, credit to personal income	95 66	10/94	C-46	Consumer Price Index, all items (and changes)  Consumer Price Index for services (and changes)	120	10/94	C-43-44 C-49-50
Total outstanding	00	11/94	C-35				
Diffusion indexes:	054	40/04	0.00	Index of producer prices for sensitive crude and	98	11/94	C-37
Coincident indicator components	951	10/94	C-32	intermediate materials.	00	40/04	0 40 47
Lagging indicator components	952	10/94	C-34-35	Index of sensitive materials prices (and changes)	99	10/94	C-46-47
Leading indicator components	950	10/94	C-29-30	Index of spot market prices, raw industrial materials	23	11/94	C-30
Employment:	ا ا	40/04	0.00	Sales:			
Average weekly hours, manufacturing	1 1	10/94	C-36	Manufacturing and trade, 1987 dollars	57	10/94	C-41
Employees on nonagricultural payrolls	41	10/94	C-39	Retail stores, 1987 dollars	59	11/94	C-34
Index of help-wanted advertising	46	11/94	C-32	Stock price index, 500 common stocks	19	10/94	C-37
Housing:		40/04	0.00	Unemployment:			
Index of new private housing units authorized by	29	10/94	C-38	Average duration in weeks	91	10/94	C-44
local building permits.				Average weekly initial claims for unemployment	5	10/94	C-36
New private housing units started	28	11/94	C-31	insurance.			
Income:		44/6:	0.00	Civilian unemployment rate	43	11/94	C-32
Personal income, 1987 dollars	52	11/94	C-33	Unfilled orders, durable goods, 1987 dollars (and	92	10/94	C-44-45
Personal income less transfer payments, 1987	51	10/94	C-40	changes).			
dollars.				Vendor performance, slower deliveries diffusion index	32	10/94	C-39
Wages and salaries in mining, manufacturing, and	53	11/94	C-33		-		
construction, 1987 dollars.							

Source: The Conference Board.
 Source: University of Michigan, Survey Research Center.

				піз	torical Data	a ioi Selec	ieu series		:u				
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
					12. Index	of net business	formation (1967	7=100)					
1948 1949	115.7 90.5	107.5 87.0	105.0 84.4	104.5 83.0	103.7 82.5	102.7 81.5	100.6 80.8	97.4 81.0	96.3 81.8	95.2 83.0	93.4 83.6	91.7 85.5	101.1 83.7
1950	85.5	86.4	87.8	89.4	89.7	89.8	89.7	88.2	86.4	86.7	86.7	86.6	87.7
1951 1952	86.4 87.8	86.8 89.3	87.6 90.3	86.7 89.1	85.3 89.4	85.5 91.5	85.9 90.6	85.9 91.9	86.4 93.0	87.1 92.7	88.3 92.1	88.2 91.9	86.7 90.8
1953	92.7	92.3	92.1	91.4	91.1	89.4	89.2	89.4	87.9	87.4	86.5	86.6	89.7
1954 1955	86.5 95.1	86.1 96.9	85.5 96.9	86.1 96.2	87.0 96.9	87.9 97.9	88.6 97.2	88.9 96.7	89.7 97.1	92.0 96.2	93.3 96.1	93.4 95.9	88.8 96.6
1956	95.9 91.5	96.9 91.2	95.5 91.3	96.4 91.6	96.3 90.6	94.9 91.6	94.4 91.3	93.5 90.5	92.7 89.5	94.0 89.3	92.7 88.0	92.3 87.2	94.6
1957 1958	86.9	86.3	85.9	85.1	87.9	89.5	90.1	92.3	94.0	93.4	94.8	96.2	90.3 90.2
1959 1960	97.1 99.0	97.8 97.3	99.3 96.7	99.4 96.2	99.3 95.5	97.6 95.2	97.5 95.1	97.9 93.7	97.0 92.8	96.6 92.7	97.6 91.0	98.0 89.3	97.9 94.5
1961	87.9	89.1	89.6	91.2	91.0	91.2	92.0	90.6	90.4	91.9	92.4	92.6	90.8
1962 1963	92.2 92.7	92.8 93.7	93.3 94.4	92.7 93.9	92.6 93.6	92.3 94.0	92.4 94.3	92.2 95.5	93.2 95.3	92.8 95.6	92.4 94.8	92.4 95.4	92.6 94.4
1964 1965	96.1 99.7	96.8 100.3	96.6 100.3	97.4 98.9	99.0 98.7	98.2 99.9	97.5 100.2	97.0 100.0	99.6 99.8	100.4 99.5	100.0 100.5	99.6 100.3	98.2 99.8
1966	101.7	103.0	103.0	101.3	100.1	99.8	98.7	98.3	96.9	97.5	96.1	95.5	99.3
1967 1968	96.3 105.2	96.0 106.1	97.2 106.0	97.3 105.0	98.0 103.8	99.7 104.6	100.0 107.0	102.9 109.4	102.5 111.1	102.1 113.2	103.6 113.9	104.6 114.6	100.0 108.3
1969 1970	116.1 114.9	115.9 114.6	115.8 111.8	116.8 110.9	116.4 109.1	116.2 107.5	116.4 106.1	115.9 105.5	114.6 105.7	116.1 105.7	114.6 107.0	114.3 106.8	115.8 108.8
1971	106.4	105.4	108.3	108.6	110.1	111.8	113.2	113.4	112.0	114.1	114.4	115.4	111.1
1972 1973	116.1 121.4	116.0 121.6	117.2 122.0	118.9 121.2	118.7 120.1	118.8 119.5	119.4 119.3	119.0 118.6	121.0 116.8	122.3 116.4	121.7 117.3	122.6 115.3	119.3 119.1
1974 1975	114.1 102.8	113.5 101.9	113.2 102.9	116.8 103.7	116.3 105.1	115.7 110.3	118.8 115.2	117.5 114.7	113.8 115.4	107.3 114.4	105.9 114.4	105.8 117.6	113.2 109.9
1976	118.3	118.1	119.7	119.0	117.4	121.0	121.1	119.7	120.1	121.9	123.8	124.8	120.4
1977 1978	126.8 135.0	127.3 136.8	128.3 136.6	127.3 138.9	128.1 137.2	130.7 138.4	131.9 140.0	133.2 138.0	132.3 138.3	134.5 140.4	134.4 139.7	135.0 138.2	130.8 138.1
1979 1980	137.1 137.9	138.1 137.1	139.4 134.9	138.2 129.8	137.8 128.5	137.1 125.6	138.0 125.2	137.8 127.2	140.5 128.6	138.2 126.2	136.7 128.4	140.3 129.9	138.3 129.9
1981	128.0	128.3	127.9	129.0	126.5	124.9	123.8	125.6	122.7	119.2	121.6	119.8	124.8
1982 1983	116.3 114.7	118.8 113.8	118.7 115.5	119.0 116.4	118.0 117.3	115.2 118.5	115.2 117.6	115.8 118.2	112.0 118.1	112.0 120.9	115.4 120.5	120.0 118.8	116.4 117.5
1984 1985	123.2 121.2	122.6 122.1	121.6 121.4	121.4 120.8	120.4 120.4	120.7 120.4	120.5 121.5	121.6 121.2	122.5 120.7	121.4 121.2	120.0 120.4	119.5 119.9	121.3 120.9
1986	119.3	120.8	121.5	122.4	120.7	120.3	120.7	119.3	120.4	119.7	118.3	121.9	120.4
1987 1988	118.1 124.0	120.5 124.1	122.0 125.4	120.7 122.7	119.8 124.3	120.3 123.7	120.4 123.3	121.5 124.5	122.8 124.2	121.8 124.6	122.8 123.2	123.2 125.5	121.2 124.1
1989	125.5 125.9	125.9 125.1	126.5 124.7	125.8 123.3	125.4 121.6	125.6 121.1	124.6 120.0	123.2 119.7	123.0 118.6	123.3 117.2	123.7 116.1	124.6 115.2	124.8 120.7
1990 1991	115.2	114.6	114.4	114.9	115.5	115.5	115.5	116.0	114.9	115.1	115.8	114.9	115.2
1992 1993	117.2 119.3	116.0 120.9	116.4 122.0	115.4 121.0	113.2 117.6	117.4 120.8	116.6 120.7	114.1 121.1	118.5 122.3	116.4 119.2	115.3 123.5	119.0 125.3	116.3 121.1
						of new business		. ,					
1948 1949	9,380 7,012	8,329 6,826	8,349 6,791	8,396 6,879	8,064 7,006	8,210 6,879	8,168 7,057	7,439 7,330	7,483 7,403	7,349 7,532	7,241 7,659	7,054 7,788	95,462 86,162
1950	7,830 7,214	8,275 7,016	8,078 6,937	8,132 7,082	8,403 6,848	8,394 6,759	7,898 6,796	7,684 6,880	7,092 6,952	7,176 6,995	7,059 7,119	7,007 7,181	93,028 83,779
1952	7,080	7,214	7,348	7,499	7,441	7,700	7,683	8,065	8,259	8,341	8,265	8,096	92,991
1953 1954	8,304 8,638	8,351 8,937	8,634 9,155	8,534 9,276	8,785 9,158	8,605 9,436	8,757 9,772	8,515 9,882	8,185 10,085	8,698 10,730	8,556 11,212	8,696 11,604	102,620 117,885
1955 1956	11,902 11,620	11,843 12,449	11,679 11,591	11,215 11,888	11,521 12,245	12,072 11,999	11,655 11,851	11,572 11,707	11,968 11,193	11,668 11,925	11,761 11,186	11,560 11,139	140,416 140,793
1957	11,250	11,359	11,367	11,507	11,109	11,739	11,686	11,593	11,318	11,251	10,788	10,791	135,758
1958 1959	11,042 16,346	11,049 16,255	11,042 16,548	10,636 16,604	11,752 16,296	12,032 15,204	12,504 15,658	13,644 15,813	13,933 15,728	13,669 15,383	14,599 15,695	15,577 15,959	151,479 191,489
1960	16,561 13,607	15,274	15,233	15,280	15,176	15,630	15,828 15,492	15,114	15,112	15,035	14,264	14,097	182,604 183,127
1962	15,599	14,570 15,758	14,658 15,670	15,327 15,372	15,298 15,245	15,431 14,947	15,171	15,277 15,056	15,402 15,249	16,035 14,892	16,149 14,951	15,881 14,985	182,895
1963 1964	14,924 15,993	15,390 16,326	15,563 15,917	15,305 16,132	15,682 16,473	15,536 16,282	15,431 16,550	16,093 15,692	15,689 16,948	16,275 16,728	15,759 16,804	15,867 17,021	187,514 196,866
1965	16,784	16,854	17,131 17,266	16,664	16,580	17,017	16,844 16,074	16,901 16,343	17,136	16,994 16,233	17,606	17,625 16,583 18,238	204,136
1966 1967	18,087 16,703	17,451 15,987	16,244 18,538	17,057 16,760	16,644 17,627	16,577 17,799	16,300	17,674	15,764 17,818	17,654	16,206 17,958	18,238	204,136 200,285 206,762 233,403
1968 1969	18,061 21,364	18,041 22,105	18,538 22,083	18,663 23,262	18,723 23,118	18,839 23,439	19,407 23,366	19,947 22,871	20,582 22,594	21,093 24,263	20,890 23,125	20,619 22,404	233,403 273,994
1970	22,196	22,968	21,346 22,883	21,829	21,874 23,960	21,796	21,614	21,796 25,012	22,181	21,712	22,217 25,510	22,272 25,634	263,801
1971 1972	22,563 25,270	21,034 25,084	26,231	22,814 26,630	26,270	24,481 26,175	24,677 26,789	26,365	23,623 27,168	25,356 27,529	26,234	27,699	287,547 317,444
1973 1974	27,796 26,511	28,752 27,056	28,964 26,458	28,522 29,071	28,286 27,562	27,999 25,785	27,477 27,790	26,689 26,495	26,240 26,313	26,809 25,404	26,718 25,555	24,881 25,003	329,133 319,003
1975	24,809	24,931 29,772	25,076	26,708	26.632	26,307	28,655	27,810	28.359	29,079	28.634		326,282
1976 1977	29,613 34,311	33,844	31,000 35,018	30,808 34,529	28,784 35,256	31,420 36,694	31,037 36,874	31,301 38,180	31,921 37,271	32,160 38,213	33,183 38,308	29,282 33,124 38,900	326,282 374,123 437,398 479,950
1978 1979	36,414 42,043	39,434 42,014	37,847 43,299	39,585 43,401	39,059 44,317	39,860 43,504	40,152 44,513	41,007 43,634	41,553 44,173	41,437 45,295	41,423 44,540	42,179 43,563	479,950 524,296
1980	44,230	44,175	43,359	42,240	42,710	40,648	43,621	44,255	45,746	45,945 47,947	46,750	47,840	531,519
1981 1982	46,039 43,330	48,588 47,234	47,972 46,899	49,413 46,876	48,866 46,995	49,172 45,936	49,038 44,525	48,631 46,981	48,450 45,552	45,530	49,413 48,474	47,840 47,556 57,507 51,557	531,519 581,085 565,839
1983 1984	49,999 52,674	48,296 53,535	48,032 53,075	48,903 53,298	50,211 50,736	50,992 53,884	48,601 53,211	52,828 52,025	50,445 52,646	50,441 52,587	51,642 53,838	51,557 53,558	601,947 635,067
1985	53,674	53,479	55,335	55,133	55,545	55,339	54,507	56,159	56,662	58,307	57,308	58,074	669,522
1986 1987	57,636 55,348	59,114 58,495	58,870 60,248	59,156 57,537	57,747 56,178	57,446 57,612	57,717 57,330	56,299 57,650	57,942 57,568	57,120 55,504	56,652 56,681	65,691 55,226	701,390 685,377
1988 1989	56,108 58,253	56,475 58,560	60,655 57,383	54,670 57,631	58,046 57,326	55,620 56,950	56,915 54,948	59,730 55,500	55,915 55,390	56,529 54,651	54,553 55,116	58,592 56,945	683,808 678,653
1990	59,141	56,325	56,172	55,000	53,616	53,784	52,142	52,958	52,176	51,899	51,429 54,163	52,060 52,923	646,702 629,886
1991 1992	51,991 58,141	50,384 55,092	51,536 57,449	52,235 54,474	52,327 48,688	52,071 58,730	52,767 56,942	53,313 51,245	52,284 59,179	53,892 52,492	55,392	61,695	669,519
1993	55,625	59,691	61,002	59,648	51,765	60,422	58,387	58,209	63,758	55,294	61,739	61,873	707,413

						a for Selec							
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1948	13.0	25.6	17.5	15.3	14. Current 13.8	liabilities of busin 12.2	ess failures, NS 13.9	SA (mil. \$) 21.4	20.7	25.1	24.4	31.7	234.6
1949	19.2	27.6	37.2	31.9	24.6	28.2	21.8	31.2	20.6	23.9	22.8	19.2	308.2
1950	26.4	22.2	27.9	21.2	22.7	18.1	19.5	18.4	15.2	16.6	18.9	21.0	248.1
1951	21.7	16.0	17.7	17.1	23.5	22.8	21.1	26.4	26.6	29.7	17.6	19.4	259.6
1952	26.2	19.5	29.2	29.5	21.2	21.2	22.8	16.3	20.1	35.1	18.8	23.4	283.3
1953	23.3	27.3	31.1	27.5	32.8	32.4	39.8	28.5	33.8	37.1	36.8	43.8	394.2
1954	29.6	47.8	57.3	42.5	38.5	41.6	32.2	32.6	36.4	29.0	35.1	40.1	462.7
1955	37.9	42.1	41.2	36.0	34.7	36.7	32.5	36.0	33.1	34.8	42.8	41.6	449.4
1956	42.9	49.2	42.6	41.9	59.9	43.0	48.7	55.0	39.3	50.0	39.9	50.3	562.7
1957	54.1	65.4	55.8	57.1	52.6	51.4	44.3	43.5	45.4	47.4	52.9	45.3	615.2
1958	64.4	65.3	71.6	84.0	56.2	61.4	65.4	50.8	48.1	47.3	56.7	57.1	728.3
1959	73.6	58.6	65.0	71.9	50.9	49.2	51.2	54.5	54.7	50.4	53.2	59.6	692.8
1960	53.7	60.9	70.2	69.2	73.3	126.4	61.7	97.6	80.6	81.5	84.5	79.0	938.6
1961	81.5	88.1	126.6	86.1	80.5	83.8	69.2	102.7	116.7	70.3	119.2	65.5	1,090.2
1962	106.6	90.5	80.9	121.8	91.5	88.5	91.6	146.8	96.2	119.1	98.8	81.3	1,213.6
1963	161.0	94.7	97.7	100.8	118.3	86.2	120.5	65.2	85.9	91.8	262.1	68.4	1,352.6
1964	96.7	123.9	111.0	112.9	93.4	144.5	125.6	95.2	114.6	93.8	119.3	98.3	1,329.2
1965	89.3	112.0	146.6	83.2	133.1	144.6	121.5	135.0	105.0	82.1	71.7	97.6	1,321.7
1966	103.2	95.5	103.5	110.1	96.4	123.6	69.9	178.1	129.2	108.0	106.7	161.5	1,385.7
1967	108.2	113.4	119.3	103.8	93.4	104.6	72.6	108.9	93.9	81.6	70.0	195.5	1,265.2
1968	104.5	79.6	88.6	80.1	91.4	74.7	90.3	65.8	58.7	65.4	58.7	83.4	941.2
1969	75.0	90.0	84.1	118.8	92.6	91.9	112.7	62.8	73.7	116.4	127.1	96.8	1,141.9
1970	137.3	139.4	120.0	131.9	147.9	170.5	251.9	169.6	232.9	144.8	119.8	121.7	1,887.7
1971	168.8	150.9	224.6	153.8	249.5	165.8	147.0	155.6	115.8	144.7	129.0	111.3	1,916.8
1972	101.6	191.3	220.7	148.5	190.1	127.9	204.6	253.6	113.5	153.0	208.6	86.8	2,000.2
1973	205.8	137.2	252.3	119.3	167.9	180.2	206.2	190.1	189.5	185.7	218.7	245.6	2,298.5
	337.3	213.1	204.6	209.8	375.7	215.5	153.4	232.7	217.0	306.8	344.7	242.6	3,053.2
1974 1975	391.1	384.8	343.3	372.1	357.8	175.9	242.0	222.4	205.5	1,295.4	252.9	136.9	4,380.1
1976	257.1	211.8	247.7	206.4	233.3	373.6	305.6	264.0	250.3	183.6	277.6	200.4	3,011.4
1977	168.5	194.2	248.2	207.3	473.9	305.9	577.8	338.3	97.0	115.7	200.3	168.3	3,095.4
1978	168.3	205.0	324.4	203.0	160.4	178.8	231.8	206.4	127.0	475.3	178.9	196.5	2,655.8
1979	182.2	177.1	187.8	242.8	200.4	273.2	212.2	287.4	186.2	395.8	184.3	138.0	2,667.4
1980	243.1	190.8	274.2	428.2	381.1	436.7	445.7	345.4	1,002.9	359.2	239.3	288.3	4,634.9
1981	341.4	789.2	485.3	536.9	428.2	408.5	619.5	450.4	752.3	897.9	618.8	626.7	6,955.1
1982	645.1	913.5	836.0	1,309.3	2,850.5	1,020.3	1,425.6	2,759.6	1,024.7	1,299.0	733.3	794.0	15,610.9
1983	2,158.1	1,086.4	1,154.7	1,125.6	920.0	2,188.6	829.2	1,353.1	947.2	1,816.8	1,624.5	868.5	16,072.7
1984	1,783.3	1,713.1	3,479.7	2,429.4	3,074.3	3,427.4	2,783.7	1,968.7	2,045.6	1,471.3	2,763.7	2,328.4	29,268.6
	1,821.0	2,409.8	3,485.8	3,289.2	3,048.3	2,914.1	2,173.9	3,018.4	2,200.1	6,844.3	4,160.4	1,548.8	36,914.1
1986	3,238.9	3,252.2	3,278.8	1,766.8	3,572.8	3,467.6	7,464.6	2,748.4	5,126.7	2,870.8	2,170.2	4,326.8	43,284.6
	3,220.7	3,586.0	3,249.5	3,222.5	2,488.5	3,332.4	2,036.1	1,968.2	2,967.2	3,004.2	1,663.5	3,985.0	34,723.8
1988	3,894.1	4,625.5	3,291.7 6,242.1	3,065.6	2,316.5	2,453.4	4,582.8 3,992.8	2,291.2 3,435.1	3,555.5 1,585.8	1,785.0	2,020.0 1,892.1	2,026.8	35,908.1 42,328.8
1989 1990	2,102.9 6,168.0	2,307.7 7,247.4	3,579.7	6,170.5 6,365.2	1,863.5 4,688.1	6,318.9 6,911.8	2,143.7	3,764.4	4,136.2	2,106.8 3,635.6	3,927.4	4,310.6 3,591.6	56,159.1
1991	7,427.5	11,204.3	8,572.3	7,573.7	11,930.5	15,757.6	5,920.5	3,064.3	5,472.0	8,634.7	5,032.0	6,236.0	96,825.4
1992	6,356.0	9,857.8	6,322.2	7,907.0	13,842.4	13,665.1	3,272.0	9,056.2	3,220.7	8,383.6	3,984.1	8,450.5	94,317.6
1993	5,541.7	2,630.0	4,118.4	3,219.7 23 Inc	5,544.2 lex of spot mark	2,738.0 et prices, raw indu	5,552.7 strial materials	7,144.9 NSA (1967=100)	3,246.9	2,531.2	2,991.0	2,552.3	47,811.0
1948	129.1	124.2	119.2	120.7	119.9	121.3	121.1	121.9	120.2	118.0	121.3	119.4	121.4
1949	116.6	110.3	101.8	91.2	89.9	87.0	88.6	93.5	95.0	91.1	93.8	92.8	96.0
1950	94.1	93.2	92.9	94.0	98.2	101.8	112.8	127.7	142.7	148.1	158.8	164.0	119.0
1951	173.0	174.3	169.4	167.1	164.7	156.8	139.0	134.1	132.6	135.5	133.5	133.3	151.1
1952	130.3	123.3	118.4	115.0	113.3	110.4	108.9	108.4	108.8	105.7	105.7	104.8	112.8
1953	102.2	101.5	102.6	97.8	97.1	96.6	95.9	95.4	93.3	90.4	92.8	92.7	96.5
1954	91.6	91.0	92.3	95.7	96.7	97.4	96.3	95.9	97.3	99.0	99.5	99.3	96.0
1955	101.7	103.3	101.4	103.0	101.7	103.0	106.8	108.2	109.6	108.8	110.3	113.5	105.9
1956	112.2	110.4	110.7	111.2	107.3	104.4	104.9	107.8	109.8	109.0	111.9	112.0	109.3
1957	109.0	105.6	105.3	104.3	103.4	104.0	103.4	102.7	99.6	96.5	94.5	93.9	101.9
1958	92.8	93.0	92.2	89.8	90.2	91.7	94.3	96.0	95.9	98.9	101.4	99.9	94.7
1959	99.2	99.1	100.7	101.7	102.4	102.8	102.8 101.2	103.3	104.7	105.4	105.5	104.4	102.7
1960 1961	105.3 96.9	103.9 98.9	102.0 102.7	103.4 103.7	103.7 104.0 97.4	102.3 100.6	101.3	101.7 102.5	100.8 102.5	99.3 101.9	98.1 98.5	96.4 100.6	101.5 101.2
1962	102.5	100.2	100.0	97.9	94.8	95.0	93.8	94.1	93.6	94.5	96.0	95.4	96.7
1963	95.1	94.7	94.0	94.1		93.5	93.8	93.8	93.7	95.9	96.9	97.3	94.8
1964	98.1	98.1	98.5	102.0	100.5	101.0	102.1	105.3	107.8	111.6	112.7	112.1	104.2
1965	110.2	110.3	112.7	116.2	116.4	114.8	114.1	114.7	114.3	114.5	115.0	116.6	114.2
1966	120.0	122.4	123.0	121.0	117.8	117.9	118.3	111.3	108.5	105.9	105.5	105.4	114.8
1967	106.4	104.8	102.1	99.7	99.2	99.4	97.9	97.7	97.4	97.3	98.7	99.7	100.0
1968	99.4	99.1	99.7	97.9	95.7	95.2	94.0	94.5	95.7	97.1	99.9	100.3	97.4
1969	103.0	105.9	106.5	108.9	110.0	111.2	112.0	114.5	116.9	115.1	115.1	116.7	111.3
1970	118.9	119.5	118.7	118.2	117.5	114.8	112.4	111.2	110.5	109.5	108.8	106.4	113.9
1971	105.9	107.2	107.8	110.2	108.6	106.1	104.7	106.1	107.5	107.4	106.9	106.8	107.1
1972	110.7	113.0	117.2	119.5	124.3	123.8	123.7	124.6	124.8	128.1	131.6	134.8	123.0
1973	139.3	147.5	155.3	158.2	162.9	170.1	178.1	189.8	186.3	188.1	192.4	208.9	173.1
1974	215.9	232.0	237.2	238.4	226.2	227.5	228.2	224.2	214.7	204.4	196.4	183.4	219.0
1975	180.1	181.1	182.3	186.4	184.2	173.2	171.5	179.6	184.2	181.9	179.8	180.6	180.4
1976	183.6	186.6	193.2	200.9	202.7	205.2	214.1	209.6	206.2	201.6	201.0	203.2	200.7
1977	210.2	216.4	222.8	221.9	218.1	206.4	204.1	202.7	202.9	204.7	203.8	210.9	210.4
1978	219.7	219.9	219.8	220.3	217.8	222.1	224.7	232.6	239.1	249.4	254.8	251.8	231.0
1979	258.3	273.5	288.5	294.5	293.8	293.9	297.3	298.1	297.3	307.7	304.0	309.6	293.0
1980	316.2	322.5	316.9	301.9	278.5	267.5	277.6	292.1	298.3	300.8	304.7	298.4	298.0
1981	291.6	284.2	289.8	293.0	288.9	282.9	286.6	289.5	283.0	277.2	270.5	264.2	283.5
1982	263.4	261.0	254.5	247.4	245.5	232.2	237.0	236.2	239.0	235.5	230.4	227.4	242.5
1983	232.1	241.3	248.8	253.2	251.5	250.5	256.0	265.2	267.9	273.4	279.8	282.4	258.5
1984	283.6	283.6	289.2	288.6	289.5	286.2	280.1	275.6	274.0	266.4	268.3	261.9	278.9
1985	255.8 236.9	253.1 233.3	252.4 223.1	257.1	252.0 221.3	242.9 225.0	240.7 227.6	239.8 212.0	238.0 221.2	236.9 235.5	234.5 243.7	235.0	244.9 228.9
1986 1987	252.8 252.5	247.2	246.3	219.9 253.8 297.3	272.6	276.4	284.2	288.3	292.4	294.6	292.0	247.5 293.1	228.9 274.5 303.3
1988 1989	324.7	288.9 329.3	292.3 334.6	335.0	301.6 330.5	309.5 329.1	309.0 326.7	309.9 325.0	306.4 327.0	305.0 325.7	309.7 314.2	317.2 301.7	325.3
1990	300.9	301.1	304.5	310.9	314.7	317.2	319.7	321.1	320.0	313.9	303.2	301.2	310.7
1991	298.6	293.9	292.4	294.7	290.2	285.4	279.8	276.9	271.9	271.7	271.0	269.2	283.0
1992	265.6	262.8	268.0	278.1	281.5	284.2	285.7	283.1	284.7	277.7	267.7	266.4	275.5
1993	268.7	270.0	266.9	261.5	257.8	257.1	257.2	255.5	253.1	255.6	258.1	263.7	260.4

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NSA Not seasonally adjusted

				1113	lorical Date	a 101 Selec	icu ocnes	Johnne	·u				
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
						orivate housing ur		,					
1948 1949	1,385 1,196	1,200 1,137	1,379 1,171	1,501 1,292	1,450 1,319	1,441 1,341	1,419 1,384	1,329 1,500	1,303 1,603	1,190 1,662	1,196 1,785	1,218 1,824	1,344 1,430
1950	1,883	1,834	1,976	1,945	2,052	2,042	2,051	2,121	1,821	1,605	1,561	1,900	1,908
1951 1952	1,928 1,388	1,638 1,516	1,481 1,483	1,352 1,412	1,359 1,408	1,419 1,353	1,257 1,438	1,334 1,443	1,456 1,483	1,386 1,513	1,324 1,475	1,330 1,476	1,420 1,446
1953	1,484	1,460	1,506	1,498	1,425	1,380	1,346	1,324	1,348	1,342	1,383	1,343	1,402
1954 1955	1,358 1,757	1,417 1,664	1,411 1,684	1,433 1,708	1,412 1,730	1,498 1,704	1,559 1,632	1,563 1,625	1,618 1,580	1,610 1,490	1,730 1,434	1,807 1,431	1,532 1,627
1956 1957	1,441 1,151	1,444 1,168	1,401 1,173	1,408 1,147	1,375 1,174	1,325 1,175	1,289 1,191	1,313 1,193	1,234 1,191	1,266 1,204	1,212 1,162	1,184 1,146	1,325 1,175
1958	1,170	1,107	1,108	1,154	1,191	1,236	1,337	1,374	1,451	1,472	1,593	1,598	1,314
1959 1960	1,657 1.460	1,667 1,503	1,620 1,109	1,590 1,289	1,498 1,271	1,503 1,247	1,547 1,197	1,430 1,344	1,540 1,097	1,355 1,246	1,416 1,246	1,601 1,063	1,517 1,252
1961	1,183	1,226	1,312	1,166	1,228 1,483	1,382	1,335	1,312	1,429	1,415	1,385 1,622	1,365	1,313
1962 1963	1,361 1,244	1,278 1,456	1,443 1,534	1,524 1,689	1,641	1,404 1,588	1,450 1,614	1,517 1,639	1,324 1,763	1,533 1,779	1,622	1,564 1,491	1,463 1,603
1964 1965	1,603 1,361	1,820 1,433	1,517 1,423	1,448 1,438	1,467 1,478	1,550 1,488	1,562 1,529	1,569 1,432	1,455 1,482	1,524 1,452	1,486 1,460	1,484 1,656	1,529 1,473
1966	1,370	1,378	1,394	1,352	1,265	1,194 1,248	1,086 1,364	1,119	1,046	843	961 1,538	990	1,165 1,292
1967 1968	1,067 1,380	1,123 1,520	1,056 1,466	1,091 1,554	1,304 1,408	1,405	1,512	1,407 1,495	1,421 1,556	1,491 1,569	1,630	1,308 1,548	1,508
1969 1970	1,769 1,085	1,705 1,305	1,561 1,319	1,524 1,264	1,583 1,290	1,528 1,385	1,368 1,517	1,358 1,399	1,507 1,534	1,381 1,580	1,229 1,647	1,327 1,893	1,467 1,434
1971	1,828	1,741	1,910	1,986	2,049	2,026	2,083	2,158	2,041	2,128	2,182	2,295	2,052
1972 1973	2,494 2,481	2,390 2,289	2,334 2,365	2,249 2,084	2,221 2,266	2,254 2,067	2,252 2,123	2,382 2,051	2,481 1,874	2,485 1,677	2,421 1,724	2,366 1,526	2,357 2,045
1974 1975	1,451 1,032	1,752 904	1,555 993	1,607 1,005	1,426 1,121	1,513 1,087	1,316 1,226	1,142 1,260	1,150 1,264	1,070 1,344	1,026 1,360	975 1,321	1,338 1,160
1976	1,367	1,538	1,421	1,395	1,459	1,495	1,401	1,550	1,720	1,629	1,641	1,804	1,538 1,987
1977 1978	1,527 1,718	1,943 1,738	2,063 2,032	1,892 2,197	1,971 2,075	1,893 2,070	2,058 2,092	2,020 1,996	1,949 1,970	2,042 1,981	2,042 2,094	2,142 2,044	2,020
1979 1980	1,630 1,341	1,520 1,350	1,847 1,047	1,748 1,051	1,876 927	1,913 1,196	1,760 1,269	1,778 1,436	1,832 1,471	1,681 1,523	1,524 1,510	1,498 1,482	1,745 1,292
1981	1,547 843	1,246	1,306 931	1,360 917	1,140	1,045 902	1,041	940	911	873	837	910	1,084
1983	1,586	866 1,699	1,606	1,472	1,025 1,776	1,733	1,166 1,785	1,046 1,910	1,144 1,710	1,173 1,715	1,372 1,785	1,303 1,688	1,062 1,703
1984 1985	1,897 1,711	2,260 1,632	1,663 1,800	1,851 1,821	1,774 1,680	1,843 1,676	1,732 1,684	1,586 1,743	1,698 1,676	1,590 1,834	1,689 1,698	1,612 1,942	1,750 1,742
1986	1,972 1,774	1,848 1,784	1,876 1,726	1,933 1,614	1,854 1,628	1,847 1,594	1,782 1,575	1,807 1,605	1,687 1,695	1,681 1,515	1,623 1,656	1,833 1,400	1,805 1,620
1987 1988	1,271	1,473	1,532	1,573	1,421	1,478	1,467	1,493	1,492	1,522	1,569	1,563	1,488
1989	1,621 1,551	1,425 1,437	1,422 1,289	1,339 1,248	1,331 1,212	1,397 1,177	1,427 1,171	1,332 1,115	1,279 1,110	1,410 1,014	1,351 1,145	1,251 969	1,376 1,193
1991	798 1,144	965 1,245	921	1,001 1,094	996	1,036	1,063	1,049	1,015	1,079	1,145 1,103	1,079	1.014
1992 1993	1,170	1,194	1,324 1,092	1,232	1,223 1,241	1,129 1,238	1,132 1,245	1,216 1,319	1,207 1,359	1,239 1,409	1,221 1,406	1,258 1,612	1,200 1,288
								over, EOP (pct.)					
1948 1949	2.31 2.22	2.11 2.81	2.49 2.85	2.34 2.70	2.21 2.80	2.29 2.91	2.17 2.91	2.22 2.55	2.20 2.69	2.23 2.70	2.37 2.69	2.02 2.67	2.02 2.67
1950	2.70 2.20	2.73 2.08	2.38 2.10	2.45 2.31	2.43 2.09	2.22 2.06	2.17 2.17	2.26 2.11	2.30 2.09	2.23 2.05	1.97 2.23	2.09 2.15	2.09 2.15
1952	2.03	1.91	2.05	1.98	2.08	2.25	2.19	2.14	1.99	1.99	1.85	1.92	1.92
1953 1954	1.87 2.05	1.83 2.07	1.90 1.98	1.75 1.99	1.88 1.94	1.82 1.91	1.83 1.86	2.01 1.83	1.97 1.81	1.97 1.84	2.02 1.79	1.98 1.65	1.98 1.65
1955 1956	1.61 1.52	1.62 1.46	1.53 1.53	1.55 1.54	1.55 1.49	1.50 1.51	1.49 1.51	1.44 1.53	1.47 1.54	1.47 1.48	1.44 1.49	1.50 1.52	1.50 1.52
1957	1.50	1.50	1.57	1.47	1.46	1.52	1.50	1.48	1.54	1.51	1.55	1.57	1.57
1958 1959	1.57 1.56	1.63 1.55	1.76 1.52	1.70 1.50	1.74 1.49	1.75 1.43	1.71 1.36	1.75 1.52	1.63 1.56	1.60 1.67	1.60 1.75	1.55 1.65	1.55 1.65
1960 1961	1.71 1.81	1.60 1.84	1.60 1.81	1.64 1.85	1.64 1.83	1.68 1.79	1.73 1.83	1.70 1.80	1.71 1.76	1.79 1.70	1.78 1.67	1.76 1.68	1.76 1.68
1962	1.69	1.69	1.69	1.67	1.64	1.65	1.61	1.61	1.63	1.61	1.63	1.64	1.64
1963 1964	1.59 1.69	1.60 1.68	1.64 1.66	1.59 1.59	1.57 1.68	1.68 1.63	1.68 1.63	1.67 1.71	1.73 1.65	1.65 1.71	1.79	1.76 1.70	1.76 1.70
1965 1966		4		4		1.76 . 1.76 .		4.70		4		1.65 1.74	1.65 1.74
1967		1.86 .		1.87		1.72 .		1.64 .		1.67		1.69	1.69
4000						4.04		4.00		4.00		1.63 1.76	1.63 1.76
4074				4 70		4 70				4.00		1.90 1.72	1.90 1.72
1972		1.72 .		1.76		1.85 .		1.93 .		2.00		1.96 2.27	1.96 2.27
		0 = 4		0.50		0.04		0.00		0.05		2.80	2.80
1975 1976	2.59 2.49	2.71 2.46	2.94 2.45	2.74 2.34	2.65 2.41	2.63 2.40	2.60 2.39	2.65 2.39	2.59 2.36	2.48 2.53	2.29 2.19	2.47 2.40	2.47 2.40
1977	2.37	2.37	2.37	2.40 2.44	2.43	2.38	2.41	2.34	2.36	2.41	2.24	2.36	2.36
1978 1979	2.42 2.12	2.48 2.31	2.51 2.33	2.44	2.28 2.37	2.44 2.45	2.42 2.45	2.37 2.47	2.42 2.59	2.35 2.45	2.34 2.50	2.45 2.64	2.45 2.64
1980 1981	2.37 2.42	2.32 2.51	2.53 2.53	2.53 2.40	2.64 2.40	2.74 2.30	2.77 2.22	2.94 2.35	2.70 2.28	2.53 2.37	2.66 2.42	2.57 2.37	2.57 2.37
1982	2.48	2.39	2.24	2.20	2.21	2.16	2.19	2.21	2.19	2.24	2.23	2.18	2.18
1983 1984	2.24 1.84	2.23 1.78	2.22 1.85	2.07 2.06	2.00 1.96	1.92 2.02	1.95 1.96	1.90 1.93	1.88 2.10	1.91 1.91	1.86 1.97	1.94 2.09	1.94 2.09
1985	2.20 2.27	2.19 2.29	2.40 2.41	2.38 2.44	2.25 2.52	2.33 2.53	2.29 2.22	2.35 2.33	2.39 2.24	2.26 2.25	2.32 2.34	2.32 2.26	2.32 2.26
1986 1987	2.43	2.40	2.28	2.36	2.43	2.35	2.34	2.37	2.35	2.66	2.54	2.47	2.47
1988 1989	2.44 2.32	2.32 2.42	2.19 2.39	2.31 2.35	2.32 2.34	2.34 2.30	2.45 2.86	2.38 2.73	2.42 2.88	2.62 2.71	2.48 2.63	2.49 2.64	2.49 2.64
1990	2.45	2.41	2.46	2.60	2.55	2.55	2.53	2.43	2.56	2.47	2.47	2.57	2.57
1991 1992	2.53 2.94	2.53 2.84	2.67 2.86	2.65 2.67	2.65 2.77	2.73 2.60	2.79 2.55	2.79 2.60	2.74 2.46	2.58 2.51	2.62 2.53	2.58 2.43	2.58 2.43 1.77
1993	2.44	2.39	2.31	2.01	2.16	2.06	2.08	2.03	1.95	1.93	1.86	1.77	1.77

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 AR Annual rate
 EOP End of period

				піъ	lorical Data	tor Select	eu Series-	-Continue	ŧu				
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
						Civilian unemploy							
1948	3.4	3.8	4.0	3.9	3.5	3.6	3.6	3.9	3.8	3.7	3.8	4.0	3.8
1949	4.3	4.7	5.0	5.3	6.1	6.2	6.7	6.8	6.6	7.9	6.4	6.6	5.9
1950	6.5	6.4	6.3	5.8	5.5	5.4	5.0	4.5	4.4	4.2	4.2	4.3	5.3
1951	3.7	3.4	3.4	3.1	3.0	3.2	3.1	3.1	3.3	3.5	3.5	3.1	3.3
1952	3.2	3.1	2.9	2.9	3.0	3.0	3.2	3.4	3.1	3.0	2.8	2.7	3.0
1953	2.9	2.6	2.6	2.7	2.5	2.5	2.6	2.7	2.9	3.1	3.5	4.5	2.9
1954	4.9	5.2	5.7	5.9	5.9	5.6	5.8	6.0	6.1	5.7	5.3	5.0	5.5
1955	4.9	4.7	4.6	4.7	4.3	4.2	4.0	4.2	4.1	4.3	4.2	4.2	4.4
1956	4.0	3.9	4.2	4.0	4.3	4.3	4.4	4.1	3.9	3.9	4.3	4.2	4.1
1957	4.2	3.9	3.7	3.9	4.1	4.3	4.2	4.1	4.4	4.5	5.1	5.2	4.3
1958	5.8	6.4	6.7	7.4	7.4	7.3	7.5	7.4	7.1	6.7	6.2	6.2	6.8
1959	6.0	5.9	5.6	5.2	5.1	5.0	5.1	5.2	5.5	5.7	5.8	5.3	5.5
1960	5.2 6.6	4.8 6.9	5.4 6.9	5.2 7.0	5.1	5.4 6.9	5.5 7.0	5.6 6.6	5.5 6.7	6.1	6.1	6.6 6.0	5.5
1961 1962	5.8	5.5	5.6	5.6	7.1 5.5	5.5	5.4	5.7	5.6	6.5 5.4	6.1 5.7	5.5	6.7 5.5
1963	5.7	5.9	5.7	5.7	5.9	5.6	5.6	5.4	5.5	5.5	5.7	5.5	5.7
1964	5.6	5.4	5.4	5.3	5.1	5.2	4.9	5.0	5.1	5.1	4.8	5.0	5.2
1965	4.9	5.1	4.7	4.8	4.6	4.6	4.4	4.4	4.3	4.2	4.1	4.0	4.5
1966	4.0	3.8	3.8	3.8	3.9	3.8	3.8	3.8	3.7	3.7	3.6	3.8	3.8
1967	3.9	3.8	3.8	3.8	3.8	3.9	3.8	3.8	3.8	4.0	3.9	3.8	3.8
1968	3.7	3.8	3.7	3.5	3.5	3.7	3.7	3.5	3.4	3.4	3.4	3.4	3.6
1969	3.4	3.4	3.4	3.4	3.4	3.5	3.5	3.5	3.7	3.7	3.5	3.5	3.5
1970	3.9	4.2	4.4	4.6	4.8	4.9	5.0	5.1	5.4	5.5	5.9	6.1	4.9
1971	5.9	5.9	6.0	5.9	5.9	5.9	6.0	6.1	6.0	5.8	6.0	6.0	5.9
1972	5.8	5.7	5.8	5.7	5.7	5.7	5.6	5.6	5.5	5.6	5.3	5.2	5.6
1973	4.9	5.0	4.9	5.0	4.9	4.9	4.8	4.8	4.8	4.6	4.8	4.9	4.9
1974	5.1	5.2	5.1	5.1	5.1	5.4	5.5	5.5	5.9	6.0	6.6	7.2	5.6
1975	8.1	8.1	8.6	8.8	9.0	8.8	8.6	8.4	8.4	8.4	8.3	8.2	8.5
1976	7.9	7.7	7.6	7.7	7.4	7.6	7.8	7.8	7.6	7.7	7.8	7.8	7.7
1977	7.5	7.6	7.4	7.2	7.0	7.2	6.9	7.0	6.8	6.8	6.8	6.4	7.1
1978	6.4	6.3	6.3	6.1	6.0	5.9	6.2	5.9	6.0	5.8	5.9	6.0	6.1
1979	5.9	5.9	5.8	5.8	5.6	5.7	5.7	6.0	5.9	6.0	5.9	6.0	5.8
1980	6.3	6.3	6.3	6.9	7.5	7.6	7.8	7.7	7.5	7.5	7.5	7.2	7.1
1981	7.5	7.4	7.4	7.2	7.5	7.5	7.2	7.4	7.6	7.9	8.3	8.5	7.6
1982	8.6	8.9	9.0	9.3	9.4	9.6	9.8	9.8	10.1	10.4	10.8	10.8	9.7
1983	10.4	10.4	10.3	1 <u>0.2</u>	10.1	10.1	9.4	9.5	9.2	8.8	8.5	8.3	9.6
1984	8.0	7.8	7.8	7.7	7.4	7.2	7.5	7.5	7.3	7.4	7.2	7.3	7.5
1985	7.3	7.2	7.2	7.3	7.2	7.4	7.4	7.1	7.1	7.1	7.0	7.0	7.2
1986	6.7	7.2	7.2	7.1	7.2	7.2	7.0	6.9	7.0	7.0	6.9	6.6	7.0
1987	6.6	6.6	6.6	6.3	6.3	6.2	6.1	6.0	5.9	6.0	5.8	5.7	6.2
1988	5.7	5.7	5.7	5.4	5.6	5.4	5.4	5.6	5.4	5.4	5.3	5.3	5.5
1989	5.4	5.2	5.0	5.2	5.2	5.3	5.2	5.2	5.3	5.3	5.4	5.4	5.3
1990	5.3	5.3	5.2	5.4	5.3	5.1	5.4	5.6	5.7	5.8	6.0	6.2	5.5
1991	6.3	6.5	6.8	6.6	6.8	6.8	6.7	6.8	6.7	6.8	6.9	7.2	6.7
1992	7.1	7.4	7.3	7.3	7.5	7.7	7.5	7.5	7.5	7.3	7.3	7.3	7.4
1993	7.1	7.0	7.0	7.0	6.9	6.9	6.8	6.7	6.7	6.7	6.5	6.4	6.8
1948	65	63	59	59	46. Index of help			s (1967=100) 59	62	57	53	48	58
1949	47	40	40	38	59 38	59 35	58 34	33	62 32	31	53 30	29	36
1950	34	34	35	37	38	40	43	49	50	54	53	51	43
1951	62	63	66	64	66	63	64	64	63	65	65	65	64
1952	68	67	65	66	65	65	66	67	71	74	74	74	69
1953	72	73	77	75	73	70	67	64	61	56	51	46	65
1954	45	43	41	41	40	41	40	40	40	40	43	44	42
1955	47	49	52	53	56	58	60	63	67	65	68	71	59
1956	68	70	69	70	69	68	65	67	66	70	69	67	68
1957	69	66	65	62	61	58	60	57	56	52	47	45	58
1958	43	40	38	37	37	38	40	41	44	45	47	50	42
1959	50	52	55	59	59	62	64	62	63	61	61	62	59
1960	63	63	60	59	58	57	55	54	52	50	49	47	56
1961 1962	47 61	46 60	47 60	47 60	49 62	50 60	51 60	53 59	52 54 58	50 57 57	59 57	58 57 62	56 52 59
1963	58	58	59	58	57	57	59	58	58	60	59	62	59
	62	61	62	65	65	67	69	68	69	69	72	72	67
1964 1965	73	76	77	78	81	82	82	85	88	91	97	99	84
1966	100	102	108	104	105	106	106	105	103	103	103	102	104
1967	103	102	99	100	99	99	97	100	99	101	100	101	100
1968	103	102	104	106	106	106	109	111	113	119	119	117	110
1969	122	122	123	124	124	120	119	117	124	122	119	115	121
1970	110	109	103	100	94	92	89	88	87	81	81	81	93
1971	78	80	80	80	81	84	83	84	83	84	86	87	83
1972	91	93	95	96	98	99	101	105	106	111	113	123	103
1973	126	126	127	125	126	127	129	126	125	127	126	121	126
1974	121	118	118	122	121	118	114	111	105	99	91	84	110
1975	79	77	75	75	75	80	82	81	83	83	86	86	80
1976	88	93	94	93	95	96	95	95	95	96	98	102	95
1977 1978	105 136	105	109 141	111 150	114 148	115 149	119 149	121 151	121	127	131 157	135	118
1979	157	137 153	154	160	159	156	156	157	153 161	158 164	154	158 153	149 157
1980	149	145	144	127	117	118	118	119	124	125	130	125	128
1981	123	124	124	124	122	123	123	121	115	108	108	103	118
1982	102	99	96	92	91	86	82	80	75	75	76	79	86
1983	80	79	82	84	91	92	97	99	100	110	110	115	95
1984	118	123	123	129	131	133	135	131	134	135	133	138	130
1985	135	136	139	136	139	138	138	138	141	139	141	138	138
1986	137	137	136	137	135	143	137	138	140	139	145	138	139
1987	136	140	150	149	153	152	153	161	158	162	162	155	153
1988	153	156	158	157	160	156	159	160	153	161	158	161	158
1989	156	155	151	159	152	147	150	147	146	151	145	149	151
1990 1991	146 100	142 97	139 95 93 96	137 95	134 94	132 96 93 98	132 92	127 91	122 92 89	116 90	108 90 95	108 90 95	129 94 92
1992 1993	85 93	97 90 97	93 96	95 90 95	94 100	93 98	91 100	93 103	89 100	91 107	95 107	95 110	92 101

YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1948	950.0	943.7	958.7	958.4	52. Pers 962.3	onal income in 19 976.4	987 dollars (AR, 974.7	bil. \$) 981.2	982.1	985.8	979.4	971.4	968.7
1949	956.2	956.5	961.6	961.9	959.5	951.6	944.2	952.1	967.4	945.8	957.4	963.4	956.5
1950	1,002.8	1,017.1	1,041.2	1,015.7	1,018.4	1,014.2	1,024.4	1,034.1	1,043.9	1,054.5	1,064.7	1,075.3	1,033.9
1951	1,067.4	1,065.2	1,076.8	1,093.5	1,099.6	1,107.3	1,100.9	1,114.2	1,111.5	1,119.6	1,118.6	1,123.3	1,099.8
1952	1,111.0	1,127.4	1,129.5	1,127.4	1,139.7	1,141.2	1,136.6	1,163.2	1,175.3	1,171.0	1,163.6	1,172.7	1,146.6
1953	1,172.0	1,180.7	1,192.2	1,188.9	1,194.7	1,198.0	1,196.3	1,193.9	1,194.7	1,200.8	1,193.9	1,191.0	1,191.4
1954	1,191.4	1,191.0	1,187.3	1,177.2	1,180.5	1,186.1	1,187.8	1,198.8	1,205.7	1,213.9	1,225.4	1,224.9	1,197.5
1955	1,227.2	1,230.0	1,240.1	1,247.2	1,257.3	1,261.3	1,275.9	1,277.1	1,285.9	1,291.6	1,300.8	1,309.6	1,267.0
1956	1,308.0	1,315.6	1,321.6	1,334.8	1,332.7	1,336.5	1,327.3	1,339.8	1,343.9	1,357.6	1,352.7	1,354.9	1,335.5
1957	1,354.9	1,362.0	1,362.2	1,364.5	1,366.2	1,376.5	1,377.0	1,377.5	1,373.7	1,368.8	1,370.3	1,362.1	1,368.0
1958	1,361.7	1,355.1	1,362.3	1,360.0	1,365.3	1,372.8	1,397.0	1,396.2	1,403.8	1,401.1	1,418.0	1,419.5	1,384.4
1959	1,416.8	1,425.7	1,437.3	1,448.5	1,453.2	1,458.1	1,460.4	1,445.0	1,444.1	1,447.4	1,469.0	1,483.8	1,449.1
1960	1,487.5	1,480.6	1,480.6	1,482.9	1,493.8	1,495.3	1,492.4	1,494.2	1,492.4	1,492.4	1,492.1	1,489.1	1,489.4
1961	1,501.8	1,509.4	1,508.7	1,516.7	1,528.3	1,538.6	1,541.4	1,543.9	1,543.0	1,557.0	1,572.8	1,581.7	1,536.9
1962	1,579.2	1,583.9	1,596.8	1,601.4	1,600.0	1,611.0	1,618.5	1,617.4	1,614.4	1,624.7	1,627.8	1,634.5	1,609.1
1963	1,641.8	1,639.1	1,638.9	1,644.9	1,654.0	1,655.7	1,658.2	1,666.9	1,678.0	1,690.9	1,691.3	1,702.4	1,663.5
1964	1,711.8	1,713.8	1,722.1	1,733.8	1,738.5	1,747.4	1,758.1	1,766.1	1,776.7	1,780.1	1,793.8	1,808.9	1,754.3
	1,816.7	1,809.5	1,818.6	1,825.0	1,841.6	1,855.4	1,860.3	1,867.7	1,906.0	1,898.7	1,916.7	1,926.3	1,861.9
1966	1,926.2	1,930.0	1,935.5	1,942.8	1,951.3	1,961.0	1,966.3	1,978.8	1,984.5	1,997.7	2,007.7	2,011.9	1,966.1
1967	2,029.7	2,031.9	2,038.9	2,035.6	2,044.6	2,053.7	2,064.3	2,073.7	2,068.1	2,075.1	2,087.4	2,101.9	2,058.7
1968	2,102.5	2,118.6	2,129.9	2,141.2	2,154.3	2,164.8	2,176.5	2,181.2	2,197.6	2,200.0	2,209.9	2,221.9	2,166.5
1969	2,221.9	2,229.0	2,241.7	2,245.3	2,256.6	2,260.4	2,280.9	2,286.6	2,294.2	2,302.0	2,307.8	2,308.9	2,269.6
1970	2,304.9	2,302.0	2,306.5	2,352.1	2,327.6	2,323.0	2,334.7	2,342.5	2,346.9	2,342.4	2,341.7	2,345.6	2,330.8
1971	2,356.0	2,358.0	2,360.7	2,362.8	2,373.4	2,416.8	2,386.7	2,399.7	2,404.8	2,407.1	2,423.0	2,441.8	2,390.9
1972	2,451.8	2,471.0	2,478.9	2,487.5	2,496.6	2,481.1	2,514.9	2,541.4	2,550.9	2,593.1	2,626.7	2,635.4	2,527.4
1973	2,640.7	2,640.9	2,641.5	2,632.8	2,658.9	2,665.0	2,663.5	2,681.6	2,693.5	2,724.9	2,743.4	2,735.0	2,676.8
1974	2,710.9	2,685.0	2,654.7	2,653.2	2,655.0	2,660.4	2,674.4	2,666.0	2,670.6	2,681.3	2,661.8	2,660.9	2,669.5
1975	2,635.8	2,625.7	2,632.2	2,635.6	2,646.2	2,697.1	2,669.0	2,690.9	2,706.9	2,727.2	2,723.4	2,725.6	2,676.3
1976	2,751.2	2,765.1	2,771.7	2,780.0	2,786.5	2,786.0	2,799.4	2,803.6	2,806.5	2,802.5	2,830.6	2,838.6	2,793.5
1977	2,835.6	2,843.1	2,852.1	2,857.6	2,869.4	2,869.1	2,898.7	2,917.7	2,929.8	2,928.4	2,941.9	2,953.7	2,891.4
1978	2,957.2	2,968.2	2,997.9	3,022.6	3,027.5	3,039.3	3,051.4	3,065.7	3,076.9	3,093.6	3,102.6	3,112.0	3,042.9
1979	3,114.7	3,123.4	3,136.8	3,126.5	3,122.1	3,123.1	3,151.6	3,152.5	3,153.2	3,163.5	3,171.5	3,178.0	3,143.1
1980	3,189.5	3,176.4	3,158.2	3,135.9	3,119.1	3,118.8	3,145.4	3,157.6	3,178.2	3,210.6	3,224.0	3,248.6	3,171.9
1981	3,239.8	3,235.5	3,240.8	3,238.6	3,235.3	3,244.0	3,281.5	3,293.1	3,290.1	3,280.5	3,271.1	3,257.9	3,259.0
1982	3,243.6	3,254.3	3,262.5	3,289.5	3,294.1	3,277.0	3,276.4	3,272.7	3,267.3	3,267.0	3,275.3	3,287.1	3,272.2
1982 1983 1984	3,278.9 3,427.9	3,274.3 3,468.2	3,281.1 3,487.7	3,291.9 3,493.7	3,309.5 3,491.7	3,314.8 3,513.6	3,322.0 3,529.6	3,309.8 3,545.8	3,327.8 3,568.9	3,360.6 3,553.6	3,385.3 3,568.2	3,407.1 3,599.1	3,321.9 3,520.7
1985	3,601.5	3,614.7	3,626.3	3,641.0	3,619.1	3,630.7	3,631.8	3,625.6	3,627.6	3,645.4	3,640.5	3,676.0	3,631.7
1986	3,669.0	3,689.3	3,723.0	3,765.2	3,751.5	3,739.5	3,745.2	3,752.6	3,758.3	3,749.2	3,752.3	3,776.4	3,739.3
1987	3,762.8	3,783.1	3,782.7	3,785.4	3,781.8	3,775.6	3,785.7	3,797.3	3,798.7	3,849.6	3,831.2	3,885.7	3,801.6
1988	3,861.8	3,877.5	3,895.9	3,898.4	3,895.4	3,902.9	3,907.4	3,909.8	3,912.7	3,961.4	3,937.6	3,963.1	3,910.3
1989	3,990.3	4,008.9	4,026.3	4,014.0	3,995.0	3,991.2	3,999.7	3,999.3	3,989.8	4,010.2	4,030.3	4,038.8	4,007.8
1990	4,053.6	4,071.3	4,081.5	4,088.5	4,075.7	4,079.6	4,082.3	4,060.3	4,059.8	4,031.4	4,043.6	4,079.3	4,067.2
1991	4,045.4	4,042.0	4,060.9	4,056.4	4,055.4	4,067.3	4,053.8	4,051.0	4,057.8	4,068.8	4,052.6	4,095.3	4,058.9
1992	4,096.0	4,129.5	4,135.6	4,140.8	4,141.2	4,141.5	4,146.0	4,160.2	4,175.5	4,201.9	4,200.2	4,412.0	4,173.4
1993	4,175.7	4,177.9	4,192.7	4,242.2 53. Wages ar	4,251.9 nd salaries in 198	4,238.0 7 dollars, mining,	4,230.7 manufacturing,	4,270.8 and construction	4,268.2 (AR, bil. \$)	4,284.7	4,300.2	4,323.4	4,246.4
1948	271.6	270.2	275.4	267.9	271.1	274.1	274.0	278.1	276.7	278.5	281.6	278.3	274.8
1949	276.8	275.7	269.0	265.2	263.3	258.6	262.0	259.6	262.2	252.4	255.3	260.1	263.4
1950	266.2	263.0	273.6	280.8	287.1	291.9	296.7	304.7	304.7	313.5	317.1	315.0	292.9
1951	314.3	313.7	317.5	323.2	321.4	325.0	325.0	325.6	323.6	321.3	323.4	325.8	321.7
1952	328.3	332.3	334.5	329.2	333.2	328.8	314.9	340.2	352.6	356.4	361.5	365.5	339.8
1953	367.9	371.4	373.6	374.0	374.9	372.5	375.7	372.5	366.1	365.8	362.3	357.0	369.5
1954	352.7	354.0	351.5	348.9	350.2	348.9	347.9	348.3	347.0	354.0	360.2	363.4	352.3
1955	365.5	368.2	373.3	377.1	384.7	386.0	389.4	388.9	388.6	394.9	399.2	401.7	384.8
1956 1957	403.0 419.3	402.5 421.3	404.6 418.8	411.8 417.1	409.3 413.4	408.8 414.6	400.8 412.1	411.2 412.0	414.9 408.4	418.6 405.2	417.8 402.0 400.4	422.6 396.4	410.5 411.7
1958	388.9 405.9	380.6 408.6	378.7 416.9	371.3 420.8	371.3 426.3	375.6 427.7	379.5 426.6	385.4 413.6	389.8 412.0	387.8 408.9	413.5	403.9 426.3	384.4 417.3
1960	433.7	433.2	430.9	430.9	432.4	427.7	427.4	423.5	420.4	418.3	414.1	406.5	424.9
1961	410.3	409.2	411.1	414.1	418.3	424.0	424.0	427.0	421.2	429.2	435.6	438.3	421.9
1962	436.4	439.6	444.2	448.5	447.4	447.7	449.6	449.6	451.3	449.8	452.1	452.4	447.4
1963	454.3	454.3	453.7	456.0	460.4	461.7	463.2	461.9	465.2	465.7	467.2	469.9	461.1
1964	466.9	475.4	478.7	482.0	483.8	484.2	487.5	491.9	496.0	489.4	496.0	504.7	486.4
1965	505.8	510.6	510.5	507.2	513.0	512.9	516.2	517.3	519.8	524.4	530.1	534.6	516.9
1966	537.5	543.8	547.2	549.6	552.1	556.8	558.2	558.0	560.8	561.9	563.3	563.0	554.4
1967	567.5	560.7	562.1	560.5	558.2	560.1	563.8	566.8	564.7	562.8	571.4	575.5	564.5
1968	574.0	580.5	583.1	585.1	591.7	590.2	589.6	589.6	593.9	597.7	601.6	603.2	590.0
1969	604.5	600.6	607.6	607.2	609.7	610.9	611.4	614.2	615.3	614.0	608.8	608.7	609.4
1970	603.9	601.2	603.0	593.2	588.2	589.4	589.2	586.3	575.7	565.6	560.9	569.7	585.5
1971	572.6	571.0	573.0	575.1	579.9	577.0	574.0	572.7	574.7	575.3	577.8	586.4	575.8
1972	591.7	596.4	602.7	604.9	606.3	606.5	603.8	610.6	615.4	620.7	625.5	628.9	609.5
1973	636.5	642.1	639.9	642.6	642.0	642.7	649.6	639.1	644.1	644.1	647.3	648.5	643.2
1974	641.1	638.0	633.1	632.2	633.5	633.7	629.3	628.2	624.5	620.3	600.4	591.7	625.5
1975	584.3	570.0	567.2	564.9	566.5	567.4	562.8	572.5	576.0	578.3	579.8	585.1	572.9
1976	594.3	597.2	601.2	604.3	605.2	602.6	606.4	608.7	607.5	606.7	614.9	615.8	605.4
1977	612.0	616.9	622.9	627.3	634.6	640.6	640.1	641.9	647.7	650.0	651.2	647.8	636.1
1978	644.3	649.3	658.4	672.4	672.3	674.1	676.2	675.9	679.1	680.5	686.0	690.3	671.6
1979	689.5	686.9	690.7	682.6	684.6	684.6	681.9	676.9	676.9	673.7	669.5	671.9	680.8
1980	662.8	660.1	652.9	642.1	633.4	625.9	622.3	630.3	633.5	636.6	641.3	643.6	640.4
1981	642.1	633.9	637.2	636.7	636.1	637.3	635.2	635.5	629.0	630.1	624.4	619.0	633.0
1982	616.6	616.7	614.5	608.6	605.6	595.8	590.1	586.2	581.6	574.7	572.9	576.4	595.0
1983	580.0	577.3	578.1	579.4	581.2	585.1	588.8	591.1	598.6	603.3	607.1	610.3	590.0
1984	612.8	617.3	618.2	623.1	624.4	629.4	630.4	632.4	631.3	630.6	633.3	636.2	626.6
	638.0	633.7	643.7	635.0	635.6	636.8	635.5	637.9	638.9	642.5	639.2	641.2	638.2
1986	639.3	637.6	647.9	645.4	643.9	641.0	641.5	644.6	642.3	648.2	644.2	645.1	643.4
1987	642.3	641.5	644.3	639.0	639.0	637.4	638.2	641.3	646.2	647.4	650.5	652.4	643.3
1988	653.1	657.0	666.0	662.6	663.1	664.7	665.9	663.0	663.8	671.8	665.9	664.3	663.4
1989	664.8	662.8	666.9	657.1	651.7	651.1	650.2	652.4	651.0	655.3	651.9	648.7	655.3
1990	643.4	650.3	650.9	649.7	647.7	646.2	642.9	636.1	633.7	626.9	619.6	623.5	639.2
1991	617.1	612.7	607.8	606.2	606.0	607.3	605.9	605.9	605.8	609.3	600.2	604.2	607.4
1992	596.1	597.2	598.0	599.4	601.7	600.6	600.6	600.0	599.4	604.6	600.8	664.2	605.2
1993	583.9	586.1	583.2	604.0	604.0	602.2	603.4	603.5	606.0	606.1	606.9	608.5	599.8

YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
-					58. Index	of consumer sent	iment, NSA (196	6:l=100) © 1					
1948 1949													
1950 1951													
1952 1953		90.7						80.8			86.2 80.7		
1954 1955		82.0 95.9			82.9 99.1						87.0 99.7		
1956 1957					98.2 92.9			99.9			100.2 83.7		
1958 1959		78.5			80.9 95.3						90.8 93.8		
1960 1961		100.0 91.6			93.3 92.5			97.2 99.2			90.1 93.0		
1962 1963		99.9 98.4			95.4 91.7			91.6 96.4			95.0 94.4		
1964		99.5 102.0			98.5 102.2			100.6 103.4			99.9 102.9		
1966		100.0 94.1			95.7 95.9			91.2 97.0			88.3 92.9		
1968 1969		97.2 98.2			92.4 91.5			92.4 86.4			91.7 79.7		
1970		78.1 78.1			75.4 80.2			77.6 82.1			72.4 82.0		
1972		92.8 81.9			88.6 77.0			95.2 72.0			90.7 76.5		
1974		61.8			72.1			64.4			59.5		
1975 1976		57.6 84.6			72.8 83.3			75.7 89.7			75.6 87.0		
1977 1978 1979	83.7	87.1 84.3 73.9	78.8 68.4	81.6 66.0	90.2 82.9 68.1	80.0 65.8	82.4 60.4	89.0 78.4 64.5	80.4 66.7	79.3 62.1	84.4 75.0 63.3	66.1 61.0	79.4 66.0
1980	67.0	66.9	56.5	52.7	51.7	58.7	62.3	67.3	73.7	75.0	76.7	64.5	64.4
1981 1982	71.0	66.9 66.5	66.5 62.0	72.4 65.5	76.3 67.5	73.1 65.7	74.1 65.4	77.2 65.4	73.1 69.3	70.3 73.4	62.5 72.1	64.3 71.9	70.7 68.0
1983 1984	100.1	74.6 97.4	80.8 101.0	89.1 96.1	93.3 98.1	92.2 95.5	93.9 96.6	90.9 99.1	89.9 100.9	89.3 96.3	91.1 95.7	94.2 92.9	87.5 97.5
1985 1986		93.7 95.9	93.7 95.1	94.6 96.2	91.8 94.8	96.5 99.3	94.0 97.7	92.4 94.9	92.1 91.9	88.4 95.6	90.9 91.4	93.9 89.1	93.2 94.8
1987 1988	90.4 90.8	90.2 91.6	90.8 94.6	92.8 91.2	91.1 94.8	91.5 94.7	93.7 93.4	94.4 97.4	93.6 97.3	89.3 94.1	83.1 93.0	86.8 91.9	90.6 93.7
1989	97.9 93.0	95.4 89.5	94.3 91.3	91.5 93.9	90.7 90.6	90.6 88.3	92.0 88.2	89.6 76.4	95.8 72.8	93.9 63.9	90.9 66.0	90.5 65.5	92.8 81.6
1991 1992	66.8 67.5	70.4 68.8	87.7 76.0	81.8 77.2	78.3 79.2	82.1 80.4	82.9 76.6	82.0 76.1	83.0 75.6	78.3 73.3	69.1 85.3	68.2 91.0	77.6 77.3
1993	89.3	86.6	85.9	85.6	80.3 59. Sa	81.5 ales of retail store	77.0 s in 1987 dollars	77.3 s (mil. \$)	77.9	82.7	81.2	88.2	82.8
1948 1949	37,985 37,788	37,879 38,398	38,518 38,963	38,785 39,406	37,312 39,223	38,034 41,521	38,179 38,715	38,288 39,264	37,946 39,971	38,168 39,759	38,129 40,134	39,113 39,632	458,336 472,774
1950	40,660	41,504	41,862	41,849	42,290	43,643	46,661	46,535	43,973	42,226	40,785	43,154	515,142
1951 1952	44.40=	44,438 42,019 45,502	41,648 40,897 45,851	40,828 41,907 45,215	41,166 43,494 45,000	41,060 44,056 44,933	40,561 42,822	41,472 41,821 44,474	41,214 42,513 44,440	41,691 44,466	41,491 44,022 44,111	40,629 45,213 43,679	501,883 514,335
1953 1954	43,656	44,750	44,637	44,597	44,539	45,597	44,755 44,856	44,976	45,435	44,662 45,517	46,564	47,421	538,158 542,545
1955 1956	47,669 50,320	48,091 49,974	48,444 50,869	49,310 50,273	49,443 50,857	49,123 50,704	50,026 50,185	50,013 50,503	50,794 50,641	50,917 50,437	50,771 50,984	50,320 51,142	594,921 606,889
1957 1958 1959	51,452 50,919 53,444	52,119 49,633 53,673	51,549 49,102 54,121	51,557 49,538 53,991	51,626 49,584 54,414	52,342 49,821 54,580	52,100 50,586 54,726	52,382 50,977 54,910	52,053 50,514 54,192	51,928 50,331 54,425	51,499 51,223 53,310	51,223 52,757 53,063	621,830 604,985 648,849
1960	54,330	54,368	54,636	55,567	55,066	54,826	54,438	54,461	54,574	54,889	54,105	53,710	654,970
1961 1962		53,560 56,412	54,126 57,192	53,327 57,333	53,967 57,723	54,368 56,982	54,003 58,228	54,761 58,417	54,531 58,076	55,679 58,988	56,071 59,471	56,092 59,459	654,236 694,855
1963 1964	59,534 60,827	59,259 60,756	59,557 61,372	59,640 61,879	59,437 62,715	59,531 62,764	60,047 63,075	59,971 63,963	59,997 64,379	60,687 62,429	60,177 62,832	61,322 65,189	719,159 752,180
1965 1966	70,592	66,083 70,403	65,427 71,433	65,789 70,263	66,618 69,056	66,219 70,453	67,299 70,749	67,706 71,153	67,692 71,100	69,439 70,599	70,276 70,430	70,127 69,928	808,343 846,159 807,864 859,855 886,772
1967 1968	68,856	65,873 69,484	66,354 70,971	66,522 70,622	66,038 70,700	67,646 71,858	67,177 72,380	66,829 73,138	68,541 71,210	67,315 72,829	68,528 74,438	70,496 73,369	807,864 859,855
1969 1970	74,973	74,125 74,953	73,155 74,252	73,203 74,766	73,904 75,650	73,068 76,131	72,927 76,583	73,596 76,373	74,422 76,241	75,050 76,501	74,615 74,629	74,928 76,450	907,502
1971 1972	82,554	78,520 83,051	78,259 85,000	79,526 85,406	78,874 85,938	79,793 86,499	80,224 86,565	80,297 87,191	81,872 88,235	82,668 89,479	83,433 89,878	82,995 91,703	964,371 1,041,499
1973 1974	92,652 87,457	93,168 86,922	93,053 87,128	91,567 87,600	91,171 87,742	91,415 87,446	91,247 88,172	90,165 89,820	91,376 86,522	91,113 85,074	90,698 84,006	87,436 82,268	1,095,061 1,040,157
1975 1976	91,443	86,055 90,799	83,650 91,244 96,353	84,654 92,876	88,090 91,809	87,363 93,390	87,941 93,605	88,264 92,784	88,281 92,167	88,555 92,925	88,458 93,312	89,218 95,649	1,045,661 1,112,003 1,165,886
1977 1978	94,656 96,661	96,036 98,477	100,433	97,368 102,143	96,468 101,851	96,666 102,823	97,302 101,541	97,061 102,262	97,330 102,276	98,789 103,321	98,938 104,129	98,919 104,888	1,220,805
1979	103,634 104,102	103,451 102,166	104,479 99,341	103,059 97,276	103,105 96,720	102,541 97,558	101,257 98,975	104,287 98,970	104,602 98,317	103,152 100,118	103,829 100,206	103,159 99,605	1,240,555 1,193,354
1981 1982	101,344 96,663	101,571 99,217	101,589 98,314	100,345 98,880	99,260 99,518	99,822 97,057	100,020 98,340	101,256 97,967	100,261 99,192	98,681 100,124	98,077 101,677	98,274 101,582	1,200,500 1,188,531 1,271,829
1983 1984	101,240	101,520 112,116	103,994 110,972	103,709 112,792	104,986 113,528	107,173 115,030	107,450 113,102	105,392 112,118	107,288 113,350	108,716 113,659	110,013 115,707	110,348 115,098	1,271,829 1,359,961
1985 1986	115,603	116,355 120,369	116,462 120,896	117,723 122,556	118,583 123,948 127,794	117,800 123,693	117,884 124,244	119,451 125,385	122,818 132,340	118,765 126,933	118,971 126,083	119,844 131,236	1,420,259 1,498,442
1987 1988	121,584 130,516	127,023 131,293	127,457 133,592	128,141 132,043	132,913	128,646 133,412	129,337 132,932	131,707 133,397	129,453 131,847	128,466 134,805	128,633 135,800	130,634 136,181	1.538.875
1989 1990	136,557	134,340 138,674	134,621 138,616	136,593 138,071	136,336 137,487	135,900 138,199	136,720 138,347	139,407 137,995	138,540 137,792	136,667 136,511	137,843	137,934	1,598,731 1,641,458 1,652,737
1991 1992	131,812	134,059 138,204	135,861 137,457	135,172 137,204	135,578 137,648	136,178 137,651	135,870 137,940	135,091 139,020	135,517 140,019	134,694 142,272	136,541 134,318 142,362	134,536 134,688 143,945	1,652,737 1,618,838 1,670,907
1993	144,157	143,076	141,655	144,029	145,291	145,892	146,685	147,392	147,609	149,739	150,675	152,566	1,758,766

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NSA Not seasonally adjusted

YEAD	lan	Feb.	Mar.			lune			Sant	Oct	Nov.	Dec.	Appual
YEAR	Jan.	reD.	ıvıdi.	Apr.	May	June	July	Aug.	Sept.	Oct.	INUV.	Dec.	Annual
1948	7,167	7,342	7,719	7,987	66. Consume 8,197	er installment cred 8,378	it outstanding, E 8,583	OP (mil. \$) 8,786	9,027	9,074	9,167	9,278	9,278
1949	9,371	9,520	9,667	9,870	10,130	10,373	10,571	10,800	11,054	11,375	11,684	11,946	11,946
1950	12,232	12,546	12,801	13,027	13,344	13,768	14,300	14,649	15,038	15,179	15,145	15,166	15,166
1951	15,386	15,516	15,531	15,429	15,385	15,357	15,222	15,327	15,458	15,550	15,710	15,859	15,859
1952	15,953	16,046	16,169	16,345	16,892	17,524	17,929	18,224	18,613	19,198	19,593	20,121	20,121
1953	20,563	20,984	21,569	21,944	22,334	22,605	22,952	23,203	23,428	23,655	23,846	23,870	23,870
1954	23,809	23,821	23,744	23,743	23,725	23,770	23,837	23,878	23,984	24,101	24,223	24,470	24,470
1955	24,777	25,151	25,732	26,243	26,773	27,337	27,756	28,302	28,838	29,130	29,451	29,809	29,809
1956	30,093	30,399	30,798	31,048	31,288	31,443	31,571	31,823	31,987	32,187	32,479	32,660	32,660
1957	32,814	33,053	33,232	33,378	33,642	33,814	34,088	34,283	34,476	34,653	34,804	34,914	34,914
1958	34,933	34,846	34,679	34,540	34,456	34,324	34,317	34,277	34,364	34,311	34,437	34,736	34,736
1959	35,135	35,499	35,891	36,316	36,802	37,321	37,891	38,528	39,127	39,698	40,121	40,421	40,421
1960	40,863	41,255	41,825	42,348	42,691	43,055	43,325	43,550	43,826	43,996	44,227	44,335	44,335
1961	44,596	44,656	44,502	44,323	44,270	44,310	44,352	44,475	44,669	44,854	45,119	45,438	45,438
1962	45,590	46,007	46,184	46,686	47,137	47,587	48,027	48,461	48,866	49,297	49,862	50,375	50,375
1963	50,878	51,499	51,857	52,466	52,974	53,530	54,141	54,736	55,304	55,976	56,511	57,056	57,056
1964	57,782	57,997	59,147	59,679	60,399	61,023	61,659	62,239	62,982	63,563	63,966	64,674	64,674
1965	65,406	66,281	66,760	67,677	68,458	69,081	69,780	70,444	71,108	71,602	72,212	72,814	72,814
1966	73,468	74,195	74,604	74,953	75,292	75,660	76,187	76,608	76,950	77,268	77,690	78,162	78,162
1967	78,506	78,930	78,969	78,967	79,034	79,367	79,587	79,976	80,395	80,571	81,136	81,783	81,783
1968	81,774	81,904	83,331	84,030	84,724	85,442	86,170	86,782	87,440	88,347	89,189	90,112	90,112
1969	90,987	92,448	92,905	93,830	94,780	95,611	96,339	96,913	97,718	98,376	99,076	99,381	99,381
1970	99,973	100,468	100,515	100,473	100,717	101,346	102,179	102,714	103,322	103,458	103,268	103,905	103,905
1971	106,716	107,424	107,901	108,480	109,105	109,825	110,771	111,823	112,956	113,885	115,143	116,434	116,434
1972	116,870	116,751	118,947	120,345	121,692	123,347	124,383	125,896	127,130	128,339	129,685	131,258	131,258
1973	134,989	136,998	138,615	140,197	142,229	143,995	145,927	147,425	148,806	150,481	152,017	152,910	152,910
1974	154,058	155,245	155,514	156,498	157,880	159,058	160,221	161,438	162,245	162,501	162,376	162,203	162,203
1975	160,187	161,027	160,246	160,067	160,034	160,074	161,589	162,337	163,265	164,479	165,531	167,043	167,043
1976	168,564	169,451	171,137	173,042	174,339	176,015	177,831	179,190	181,171	182,882	184,658	187,782	187,782
1977	190,183	192,392	195,802	198,936	201,559	204,481	207,020	210,005	212,677	215,370	218,443	221,475	221,475
1978	223,682	226,179	229,830	233,244	237,571	242,304	245,661	249,086	251,924	254,749	258,421	261,976	261,976
1979	265,196	268,150	271,238	274,933	278,444	281,167	283,650	286,602	289,546	292,690	295,423	296,483	296,483
1980	301,192	301,328	302,950	300,553	298,151	296,322	295,649	295,820	295,413	296,189	296,469	298,154	298,154
1981	298,145	297,432	301,167	302,150	303,837	305,007	306,228	306,420	309,974	310,545	310,928	311,259	311,259
1982	313,656	312,053	314,344	315,355	316,553	317,641	318,110	318,603	319,932	320,263	322,125	325,805	325,805
1983	326,443	325,245	330,550	332,658	333,867	338,371	342,974	347,428	350,835	356,482	362,075	368,966	368,966
1984	373,059	379,749	387,297	391,987	401,024	408,820	413,765	419,591	424,309	430,318	435,744	442,602	442,602
1985	447,835	451,898	463,468	470,388	476,160	481,090	486,397	490,887	499,737	506,072	512,093	517,660	517,660
1986	524,559	529,526	532,812	538,554	543,752	547,051	552,672	556,664	563,348	570,145	572,306	572,006	572,006
1987	570,505	570,864	573,058	577,605	579,352	585,119	593,090	596,208	599,663	601,502	603,670	608,675	608,675
1988	615,676	618,996	623,649	627,461	631,523	637,118	639,924	645,708	648,184	652,007	657,905	661,812	661,812
1989	678,882	682,174	685,698	690,518	695,533	698,871	701,928	706,352	708,557	712,582	715,112	717,200	717,200
1990	718,575	721,621	721,758	723,683	726,770	728,963	736,431	740,708	745,311	744,783	742,063	734,898	734,898
1991	727,888	724,211	724,087	727,103	730,032	731,047	732,086	732,642	732,351	733,528	729,592	728,389	728,389
1992	726,813	724,764	724,027	723,640	725,980	727,535	728,715	730,601	732,092	731,189	730,952	731,098	731,098
1993	733,686	738,275	738,918	745,176	745,308	751,104	758,607	763,958	772,171	779,316	786,101	794,300	794,300
1049	170.10	477.00	470.04			and trade invento			404.00	405.00	405.00	404.50	404.50
1948	176.16	177.22	178.31	178.95	179.56	181.79	184.35	184.64	184.82	185.09	185.09	184.53	184.53
1949	187.45	188.12	188.17	187.35	187.26	187.35	187.67	187.72	188.42	187.24	185.44	183.13	183.13
1950	183.55	183.13	184.45	185.25	187.26	188.81	186.42	190.70	192.87	195.05	198.35	199.47	199.47
1951	203.75	205.36	207.73	210.81	214.56	217.48	219.59	222.05	222.98	224.58	225.93	226.92	226.92
1952	228.73	228.56	228.78	228.80	228.24	229.71	229.66	229.60	232.41	234.75	236.14	237.15	237.15
1953	242.57	243.10	244.19	246.42	247.19	248.23	250.07	249.93	250.07	248.41	246.74	245.97	245.97
1954	244.78	244.01	243.05	241.88	240.92	239.67	238.55	237.15	236.99	235.90	236.75	236.38	236.38
1955	237.12	237.28	238.90	238.64	240.09	242.30	243.63	245.07	244.75	245.97	246.24	246.92	246.92
1956	248.31	250.73	251.18	253.60	255.01	256.15	257.37	258.25	259.55	259.73	260.93	260.80	260.80
1957	261.33	260.90	260.83	261.47	261.44	261.78	262.32	263.70	264.62	262.18	261.57	261.70	261.70
1958	258.06	256.90	256.15	254.96	253.84	253.35	253.01	252.35	253.94	254.50	255.03	256.66	256.66
1959	257.69	258.28	259.63	262.54	263.74	265.53	266.71	267.83	266.59	266.57	266.57	270.07	270.07
1960	273.02	274.86	276.31	275.90	277.03	277.17	277.86	278.25	279.29	278.71	278.75	275.32	275.32
1961	274.76	273.89	272.95	272.89	273.04	272.87	273.16	275.15	276.46	276.70	278.20	279.05	279.05
1962	280.99	282.20	283.66	283.99	285.84	286.72	287.13	289.16	290.57	291.28	291.32	291.82	291.82
1963	292.80	293.37	294.45	294.91	296.07	297.57	298.77	300.81	301.45	302.52	303.38	303.23	303.23
1964	305.51	306.35	307.29	308.46	309.38	310.34	310.77	312.66	314.17	314.21	316.45	318.29	318.29
1965	321.35	322.34	325.39	326.62	328.11	329.64	332.46	335.69	335.09	335.58	337.36	338.83	338.83
1966	341.42	344.78	347.47	349.37	352.58	355.92	358.55	363.09	363.97	367.68	371.23	374.02	374.02
1967	378.64	380.17	381.60	383.30	384.09	383.54	385.02	388.97	389.00	388.87	391.74	394.22	394.22
1968	396.36	396.66	397.04	399.54	402.47	403.33	404.92	409.10	409.28	411.57	412.66	412.77	412.77
1969	414.08	416.02	417.65	419.05	420.63	421.45	423.99	426.92	427.96	430.57	431.32	433.22	433.22
1970	432.39	433.37	433.97	436.10	435.16	436.28	438.68	441.33	440.34	439.89	440.41	439.41	439.41
1971	441.78	442.56	445.08	446.53	448.20	448.20	449.73	452.23	452.64	453.33	452.17	453.56	453.56
1972	455.27	454.38	454.84	456.38	459.20	459.54	459.87	463.18	465.89	467.72	469.62	469.93	469.93
1973	472.26	474.48	476.92	479.61	481.28	484.15	487.23	486.82	488.51	490.34	492.96	497.99	497.99
1974	498.82	500.39	503.58	506.17	510.42	513.70	514.68	513.99	517.58	519.93	521.94	526.79	526.79
1975	526.73	523.53	520.14	519.66	516.18	513.15	512.38	511.32	511.28	512.25	510.36	509.89	509.89
1976	511.17	513.60	515.38	517.30	519.61	523.18	525.83	526.38	530.50	532.70	533.95	535.67	535.67
1977	537.63	538.88	540.22	542.10	544.60	546.34	548.89	552.22	555.96	556.41	558.77	561.82	561.82
1978	564.28	566.56	570.96	575.62	577.86	579.58	580.89	583.36	584.44	587.51	591.15	595.07	595.07
	598.13	600.14	600.04	602.89	604.50	605.71	610.08	609.05	605.65	607.60	606.59	606.41	606.41
1979 1980	608.65	608.98	609.54	613.07	612.07	610.24	608.79	606.89	605.25	604.26	604.07	604.92	604.92
1981	606.22	608.03	608.24	607.29	609.16	611.05	612.79	613.48	616.06	616.16	619.40	616.70	616.70
1982	613.86	609.79	610.27	612.54	607.68	610.04	611.97	610.29	609.96	608.19	603.02	600.18	600.18
1983	596.27	595.67	591.99	592.33	594.29	595.29	596.65	599.48	602.70	603.53	608.34	612.43	612.43
1984	615.00	621.98	627.88	634.57	641.36	643.85	649.45	656.85	660.36	664.58	669.12	671.67	671.67
1985	671.88	674.63	673.99	674.84	675.28	678.19	678.84	679.39	681.56	684.16	685.47	685.99	685.99
1986	687.32	690.78	696.21	699.78	699.65	700.15	701.92	699.85	697.92	699.42	697.28	693.80	693.80
1987	697.42	698.56	701.49	703.11	707.28	708.60	708.30	707.24	710.22	716.27	719.33	724.18	724.18
1988	725.84	728.69	730.09	731.46	733.32	736.52	737.50	741.90	743.56	743.85	745.46	751.15	751.15
1989	755.88	759.34	760.88	762.26	766.38	769.22	773.96	776.74	774.27	779.80	784.15	783.72	783.72
1990	782.99	781.77	782.97	785.98	791.25	790.01	793.39	794.29	793.55	793.04	794.34	790.62	790.62
1991	795.99	794.95	788.53	787.65	785.27	783.20	782.71	782.52	785.00	785.91	786.04	789.07	789.07
1992	785.45	785.02	784.62	785.78	783.38	785.52	787.32	788.76	787.38	786.88	787.81	788.87	788.87
1993	790.39	792.59	794.74	795.49	796.91	797.87	798.91	799.28	802.34	801.82	803.66	801.57	801.57

EOP End of period

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YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
				72.	Commercial and	industrial loans or	utstanding in cur	ent dollars (mil.	\$)				
1948	13,417	13,358	13,371	13,473	13,834	14,065	14,385	14,507	14,461	14,356	14,196	14,087	13,959
1949 1950	14,055 12,677	13,979 12,764	13,861 12,763	13,605 12,849	13,409 12,936	13,163 13,242	12,833 13,619	12,660 14,057	12,641 14,696	12,670 15,027	12,604 15,462	12,573 15,986	13,171 13,840
1951	16,503 19,632	17,116 19,641	17,579 19,761	18,079 19,742	18,453 19,809	18,646 19,969	18,757 20,141	18,865 20,190	18,968 20,381	19,111 20,650	19,194 21,031	19,411	18,390 20,173
1953	21,227	21,277	21,430	21,675	21,816	21,747	21,778	21,934	21,819	21,640	21,451	21,133 21,058	21,571
1954 1955	21,000 20,529	21,064 20,692	21,036 20,916	20,967 21,049	20,811 21,416	20,650 21,796	20,651 22,244	19,804 22,664	19,753 22,977	19,718 23,421	19,955 23,771	20,314 24,110	20,477 22,132
1956	24,515	24,686	25,414	25,932	26,448	26,799	27,145	27,418	27,778	27,858	28,199	28,395	26,716
1957 1958	28,695 29,171	28,720 28,835	29,182 28,728	29,503 28,554	29,650 28,168	30,033 28,079	30,245 28,039	30,285 27,941	30,374 28,122	29,969 28,215	29,573 28,342	29,517 28,496	29,646 28,391
1959	28,567	28,583	28,820	29,092	29,573	30,042	30,026	30,456	30,646	30,915	31,076	31,288	29,924
1960 1961	31,433 32,999	31,870 32,966	32,093 33,111	32,293 33,079	32,591 33,020	33,011 32,955	32,993 33,012	32,840 33,131	32,956 33,214	32,996 33,215	33,118 33,280	33,018 33,429	32,601 33,118
1962 1963	33,582 36,039	33,712 36,126	33,907 36,251	34,121 36,458	34,269 36,626	34,509 36,740	34,740 36,872	35,038 37,047	35,318 37,341	35,635 37,821	35,939 38,579	35,986 39,045	34,730 37,079
1964	38,931	39,195	39,201	39,554	39,882	40,137	40,428	40,839 49,139	41,418	41,625	42,068	42,737	40,501
1965 1966	43,562 53,195	44,618 54,071	45,563 54,805	46,203 55,377	47,209 56,139	47,718 57,228	48,072 58,223	59,360	50,141 59,950	50,812 60,578	51,650 61,043	52,300 61,332	48,082 57,608
1967 1968	61,876 67,254	62,404 67,415	63,100 67,732	63,598 68,877	63,998 69,067	64,682 69,598	65,083 70,294	64,862 71,359	65,155 72,318	65,644 73,153	66,161 74,374	67,068 75,150	64,469 70,549
1969	77,048	77,843	79,091	81,132	82,277	83,502	83,909	85,141	86,404	87,358	88,070	89,059	83,403
1970 1971	88,521 90,944	90,023 91,625	91,243 91,904	91,333 90,891	91,864 91,662	92,444 90,706	92,433 89,951	93,072 91,627	93,435 93,437	91,680 92,465	91,082 92,301	91,069 91,788	91,517 91,608
1972 1973	84,478 94,279	85,260 98,034	86,195 100,124	87,342 101,768	87,906 103,074	88,268 105,166	88,429 106,581	88,800 108,505	88,593 108,458	90,502 109,664	91,408 110,877	92,111 111,764	88,274 104,858
1974	113,967	116,322	117,738	122,857	125,111	126,537	130,706	133,304	137,429	138,352	139,734	139,873	128,494
1975 1976	140,652 125,349	139,605 125,758	138,152 123,490	136,564 120,789	133,750 121,069	131,397 122,018	130,713 121,328	129,579 121,083	128,146 120,710	126,999 121,770	126,131 123,317	126,245 124,225	132,328 122,576
1977 1978	124,450 135,158	125,824 135,658	126,179 138,536	126,925 140,620	127,740 143,029	128,990 145,547	128,860 146,937	130,214 147,792	130,848 148,769	132,174 150,501	133,272 152,486	134,372 152,870	129,154 144,825
1979	155,975	158,341	160,335	165,793	168,229	171,623	175,320	179,017	183,790	184,399	183,394	186,443	172,722
1980 1981	193,068 213,016	197,288 213,391	200,406 211,676	200,583 215,581	198,756 221,279	202,454 225,515	200,910 229,664	201,732 234,814	203,417 238,847	204,727 241,377	209,253 244,824	211,014 247,853	201,967 228,153
1982 1983	254,693 268,553	259,934 268,582	261,328 269,450	266,688 265,604	271,022 261,465	272,899 262,099	273,160 261,703	273,540 262,875	274,885 262,747	274,856 261,829	270,235 263,187	264,699 267,368	268,162 264,622
1984	274,768 329,668	279,364 332,412	287,370 334,670	294,220 335,158	300,525 338,108	310,036	314,375 339,378	317,394 340,740	321,437 339,599	325,648 343,857	328,615 347,028	329,459 348,859	306,934
1985 1986	351,101	349,392	347,888	342,642	345,052	336,876 345,978	347,464	351,931	351,008	352,769	353,255	358,781	338,863 349,772
1987 1988	366,490 369,444	364,936 375,735	363,447 377,816	363,216 384,954	362,718 386,365	363,766 389,832	362,668 393,650	359,989 396,588	363,258 396,160	366,003 400,153	364,818 402,456	367,421 407,748	364,061 390,075
1989	410,623 452,036	418,363 456,148	421,349 464,694	424,588 465,029	435,006 465,112	437,531 466,658	441,709 468,858	448,360 471,704	448,107 476,985	449,146 476,314	452,060	453,842 471,865	436,724 467,213
1990 1991	470,448	464,621	466,493	460,390	457,099	454,526	453,642	444,401	439,866	436,113	471,150 436,035	431,393	451,252
1992 1993	426,198 424,282	427,535 425,840	426,733 419,774	425,611 423,533	423,944 428,900	421,653 429,942	422,233 434,808	423,062 434,979	421,291 434,943	426,169 433,049	431,152 432,801	428,843 430,991	425,369 429,487
						Change in money							
1948 1949	.27 28	18 0	54 0	27 .09	–.18 .18	−.09 −.18	.18 –.09	.09 –.18	09 09	09 0	27 .09	27 .18	12 02
1950	.28 .44	.55 .35	.37 .44	.64 .17	.45 .35	.36 .26	.36 .43	.36 .43	.18 .68	.44 .51	.18 .85	.27 .59	.37 .46
1952	.25	.42	.17	.25	.33	.41	.25	.33	.57	.24	.32	.16	.31
1953 1954	08 .16	.08 .08	.48 .08	.24 48	.16 .88	0 .16	.08 .32	.08 .31	08 .16	.08 .39	0 .47	.08 .16	.09 .22
1955 1956	.54 .23	.69 0	23 .15	.23 .15	.54 15	15 .15	.30 0	0 15	.15 .30	.15 .08	23 .23	.23 .22	.19 .10
1957	0 23	07 .45	.07 .23	0 .38	.07 .37	07 .67	.07 0	.07 .52	22 .29	22 .37	15 .58	30 .15	06 .32
1958 1959	.80	.36	.22	0	.72	.36	.35	.14	63	35	07	28	.14
1960 1961	0 .28	07 .35	07 .21	14 .14	0 .42	0 .14	.43 0	.78 .42	07 .21	21 .21 .27	0 .49	14 .28	.04 .26
1962 1963	0 .34	.34 .40	.21 .20	.27 .34	.27 .47	14 0	07 .66	.07 .26	20 .13	.27 .39	.41 .66	.34 20	.15 .30
1964	.26	.39	.13	.19	.32	.19	.77	.64	.57	.32	.50	.19	.37
1965 1966	.25 .71	.12 .30	.37 .53	.31 .76	19 29	.31 .18	.49 –.76	.43 .29	.73 .70	.67 47	.42 .12	.72 .35	.39 .20
1967 1968	06 .38	.64 .38	1.04 .43	34 .59	.86 .75	.74 .74	.62 .58	.29 .90 .68	.56 .47	.55 .67	.39 1.03	.49 .71	.20 .53 .62 .27
1969	.66	.30	.35	.35	.05	.25	.20	0	.20	.40	.34	.15	
1970 1971	1.13 .51	58 .88	.39 .64	.44 .55	.24 .91	.14 .68	.24 .63	.91 .31	.91 .40	.52 .31 .78	.38 .26 .57	.33 .22	.42 .53
1972 1973	.79 .92	.96 .24	.86 20	.51 .44	.17 .87	.30 .71	.93 .31	.88 .12	.91 .04	.78 .43	.57 .77	1.14 .69	.42 .53 .73 .45 .36
1974	.38	.57	.53	.19	.15	.30	.37	.22	.41	.48	.48	.22	
1975 1976	18 .38	.33 .80	.69 .48	14 .65	.94 .61	1.33 07	.25 .41	.49 .64	.35 .20	21 1.07	.95 .26	07 .92	.39 .53 .65 .66 .55
1977 1978	.91 1.12	.78 .15	.64 .48	.80 .98	.19 1.00	.44 .58	.75 .58	.53 .49	.65 1.09	.93 .28	.55 .51	.64 .65	.65 66
1979	.17	.31	.75	1.46	03	1.31	1.05	.53	.61	.21	0	.24	.55
1980 1981	.89 .73	.98 .70	13 1.13	-1.44 1.91	16 73	1.38 0	1.18 .50	1.78 .33	1.38 .07	1.11 .33	.66 .68	99 .97	.55 .55 .70 .79
1982 1983	1.63 .74	45 1.26	.23 1.26	.97 .73	09 1.22	.16 .74	.13 1.01	.89 .41	1.24 .45	1.88 1.03	1.27 .25	.55 .33	.70 .79
1984	.79	.46	.64	.57	.45	.73	.15	04	.61	06	.66	.86	.49
1985 1986	.72 .16	1.28 .69	.60 1.38	.58 1.15	.86 1.70	1.48 1.40	1.01 1.39	1.24 1.43	1.26 1.10	.61 1.11	.81 1.67	1.19 2.53	.97 1.31
1987 1988	.79 1.00	.11 .08	.36 .47	1.36 .95	.43 .43	51 .85	0 .54	.40 .08	.28 .01	1.16 .13	41 .10	48 .23	.29 .41
1989	13	22	17	37	65	21	.70	.08	.29	.69	.14	.77	.08
1990 1991	.15 .13	.36 .75	.44 .84	.54 .24	17 .83	.70 1.12	.02 .35	.69 .66	.69 .40	22 .77	.26 1.25	.47 .97	.33 .69
1992 1993	1.48 .80	1.79 .23	1.13 .46	.63 .66	.95 1.97	.21 .83	1.00 .95	1.23 .78	1.34 .89	1.52 .75	1.23 .81	.81 .53	1.11 .81

					1113	otorical Dat	a ioi seiec	ica ociica	Jonana	,u				
<u> </u>	'EAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
46 :-		40.00	,	,			s for sensitive cru			,			,	.=
1948 1949		43.90 42.40	45.20 40.80	44.80 40.10	46.10 37.70	47.50 36.20	47.20 35.80	46.60 35.10	45.10 35.30	44.80 37.30	44.10 37.30	43.70 38.10	43.00 38.40	45.17 37.88
1950		38.40	39.20	39.90	41.00	43.20	45.80	46.90	49.60	51.20	51.60	52.90	54.80	46.21 53.77
1952		57.40 46.30	57.80 46.30	58.10 45.90	56.60 45.90	57.30 45.50	58.50 45.40	57.40 45.00	50.50 45.60	49.40 46.30	48.20 45.70	47.20 45.20	46.80 45.80	53.77 45.74
1953 1954		45.30 41.60	45.90 41.50	46.50 41.30	46.60 41.40	46.50 42.10	46.30 42.10	46.60 42.50	46.10 41.90	45.10 42.30	44.30 43.40	43.50 44.20	42.40 43.60	45.43 42.33
1955		44.40 50.60	44.90 50.50	45.30 51.00	45.30 51.90	45.70 51.60	46.40 49.60	47.70 48.30	48.00 48.90	48.20 49.20	48.10 48.50	48.80 49.10	50.00	46.90 49.92
1957		46.90	45.20	44.70	43.00	43.80	45.70	44.70	44.30	43.60	42.20	41.20	49.80 41.20	43.88
1958 1959		40.70 44.00	41.40 44.80	41.00 45.40	40.40 45.20	40.70 44.90	41.10 45.60	41.50 45.20	42.40 44.80	43.20 45.00	44.10 45.70	44.40 45.70	43.50 45.30	42.03 45.13
1960		42.80	41.60	40.50	40.50	40.20	39.20	38.90	38.10	37.90	37.30	37.20	37.30	39.29
1962		37.20 39.50	37.50 39.40	37.90 39.00	38.70 38.50	38.80 38.20	39.20 37.80	39.30 37.70	39.30 37.80	39.50 37.70	39.80 37.60	38.80 37.40	39.10 37.60	38.76 38.18
1963		37.60 38.80	37.80 38.70	37.90 39.00	37.70 39.60	37.90 39.60	37.90 39.90	38.50 40.20	38.70 40.70	38.30 40.50	38.50 41.00	38.60 41.20	38.70 41.60	38.18 40.07
1965		41.10	40.70	40.80	40.80	41.30	41.00	41.10	41.60	41.40	41.70	42.00	42.10	41.30
1967		42.70 39.90	43.00 39.20	43.90 38.80	44.10 38.50	44.20 38.80	44.30 39.50	44.30 39.80	42.20 40.00	41.80 40.60	41.60 40.50	41.10 41.10	40.40 41.60	42.80 39.86
1968 1969		41.50 47.70	41.60 48.30	42.10 49.40	42.00 48.70	41.80 48.30	42.60 47.50	43.30 47.00	43.60 47.50	44.10 47.80	45.10 47.80	45.60 48.60	46.70 48.60	43.33 48.10
1970		48.40 45.00	47.80	47.50	47.30 46.30	47.60	47.50 46.60	46.90	46.60	46.40 48.70	46.50 48.90	45.10 49.10	44.70	46.86
1972		50.50	45.40 50.70	45.70 51.20	51.40	46.10 51.80	52.70	47.80 53.60	48.60 54.20	54.10	55.60	56.60	49.80 57.30	47.33 53.31
		58.30 83.70	60.50 85.70	62.10 88.90	64.80 92.40	67.20 84.90	68.60 85.40	68.10 86.60	70.50 85.20	74.00 83.60	77.30 79.90	82.50 77.60	84.90 70.80	69.90 83.73
1975		68.10	67.90	66.50	66.90	68.90	67.10	65.50	67.60	71.30	71.10	71.40	73.00	68.78
1977		75.50 85.80	76.50 85.70	78.30 87.90	80.30 87.30	81.10 86.70	82.40 85.60	86.20 86.80	86.00 89.00	86.30 90.40	84.80 89.50	85.00 88.90	86.30 92.00	82.39 87.97
1978		94.30 110.30	95.30 112.50	95.30 118.20	95.70 118.10	97.30 118.50	100.60 121.80	101.60 119.60	103.20 118.50	104.10 118.50	106.40 120.40	109.70 120.00	109.40 118.20	101.08 117.88
1980		119.20	121.20	120.30	113.20	108.50	107.00	109.80	113.80	115.20	117.20	119.70	120.20	115.44
1982		116.50 105.20	112.90 103.50	113.60 102.40	114.90 101.20	114.90 100.80	114.40 99.30	113.30 99.50	113.10 97.90	110.50 97.80	109.10 97.60	106.20 97.10	105.30 97.70	112.06 100.00
1983		99.90 120.40	103.00 122.10	105.20 122.50	104.70 121.90	106.80 121.30	109.90 119.70	113.80 117.10	116.70 115.00	116.60 115.20	117.80 113.80	119.40 113.20	120.70 112.70	111.21 117.91
1985		112.90	111.40	110.60	109.90	109.60	109.20	109.10	108.70	107.70	108.20	107.80	107.80	109.41
1987		108.09 113.72	107.39 114.31	108.25 115.14	110.07 115.61	110.56 117.60	111.04 119.89	112.15 122.07	109.90 123.90	111.12 127.87	112.51 131.45	113.67 133.29	113.48 133.79	110.69 122.39
1988 1989		134.05 140.27	135.73 141.09	137.22 141.75	136.27 141.36	135.47 141.70	135.74 141.06	137.69 140.59	137.32 139.77	137.08 140.40	137.02 142.39	138.04 140.94	138.91 139.27	136.71 140.88
1990		138.11	137.34	138.28	140.67	141.56	141.12	141.67	142.46	142.22	141.89	140.49	139.95	140.48
1991 1992		138.86 136.19	137.19 138.75	135.95 140.45	135.39 140.82	135.67 140.88	136.16 141.06	136.86 141.56	135.04 141.93	135.08 143.70	135.97 144.18	136.21 145.05	136.31 149.40	136.22 142.00
1993		153.83	157.91	161.00	161.06	159.80	159.63	160.26	159.54	161.13	165.78	169.43	172.15	161.79
1948		.24	0	39	20	102. 15	. Change in mone 0	ey supply M2 (pc .15	i.) .15	10	05	15	20	06
1949		15	Ö	0	.15	.20	05	05	15	10	0	.10	.15	.01
1950 1951		.20 .33	.54 .19	.24 .33	.54 .19	.49 .33	.24 .33	.29 .51	.19 .47	.05 .69	.29 .46	.19 .73	.24 .55	.29 .43
1952		.41 .13	.50 .17	.22 .52	.31 .30	.36 .30	.44	.31 .21	.40 .25	.61 .08	.31 .30	.48 .17	.30 .25	.43 .39 .23 .34
1954		.29	.29	.29	08	.87	.29	.49	.49	.20	.45	.36	.16	.34
		.52 .08	.60 0	12 .24	.28 .27	.40 08	0 .27	.24 .12	0 0	.28 .43	.16 .12	04 .27	.24 .19	.21 .16
1957		.39	.19 1.21	.38	.15 .74	.30 .66	.11 .91	.30 .40	.26 .65	.04 .29	.11	.11 .53	.18	.20 .55
1959		11 .99	.38	.45	.35	.76	.55	.48	.37	.03	.03	.20	.20	.40
1960 1961		.17 .61	.07 .76	.23 .47	.30 57	.30 75	.40 .56	.66 49	.85 58	.46 52	.45 58	.45 69	.42 60	.40 60
1962		.63 .74	.77 .71	.79 .68	.57 .79 .76	.30 .75 .55 .75	.46 .56	.49 .52 .79	.58 .54 .63	.46 .52 .51 .55 .77	.58 .76 .70	.69 .73	.60 .78 .41	.40 .60 .65 .68
1963		.58	.56	.48	.55	.75 .62	.62	.79	.78	.55 .77	.62	.82 .72	.62	.65
1965 1966		.71 .67	.61 .45	.60 .52	.58 .54	.37 .13	.62 .19	.70 0	.63 .36	.79 .57	.80 .15	.71 .32	.72 .52	.65 37
1967		.40	.62	.91	.59	1.00	.97	.92	.89 .71	.72	.74	.50 .75	.61	.65 .37 .74 .64 .33
		.57 .53	.53 .40	.49 .40	.58 .37	.58 .10	.67 .31	.63 .24	.11	.71 .31	.78 .26	.75	.73 .44	.33
1970		.29 .96	44 1.34	.12 1.35	.19 1.41	.54 1.26	.59 .90	.55 .96	.95 .91	1.04 1.00	.85 .86	.76 .93	.93 .82	.53 1.06
1972		.97	1.18	1.06	.75	.63	.90	1.28	1.26	1.18	1.10	.90	1.07	1.02
1973		1.03 .52	.53 .55	.12 .71	.55 .31	.85 .23	.83 .40	.47 .38	.31 .34	.11 .46	.46 .56	.71 .59	.76 .33	.56 .45
1975		.42 1.05	.85	1.23	1.08	1.35	1.58	1.21	.89	.89	.62	1.01	.83	1.00
1977		1.16	.95	.93	1.08 .98 .65	1.25 .85 .68	.41 .70	.83 .88	1.26 .76	1.07 .80	1.35 .76	1.12 .65 .50	1.30 .65 .66	.84
1978 1979		.75 .48	1.34 .95 .39 .47	1.23 .88 .93 .56	.65 1.01	.68 .53	.55 1.00	.64 .86	.61 .69	.99 .80	.68 .38	.50 .14	.66 .44	1.08 .84 .64 .63
1980		.72	.86 .73	.43 1.14	21	.56 .31	1.29	1.36 .77	1.06 .94	.89	.77	.75	.02	.71
1982		.66 1.08	.18	.69	1.25 .77	.64	.50 .59	.63	1.00	.63 .79	.84 .80	.93 .69	.93 .72	.80 .72
1983 1984		2.86 .68	1.88 .85	.94 .70	.79 .72	.83 .66	.55 .53	.59 .46	.40 .42	.57 .71	.98 .54	.55 1.05	.48 1.05	.95 .70
1985		1.08	.99	.47	.14	.64	1.07	.65	.70	.61	.41		.70	.67
1987		.19 .66	.39 .01	.82 .16	1.01 .51	.99 .17	.78 .07	1.01 .22	.82 .48	.71 .53	.85 .55	.53 .58 .07	.90 .15	.75 .30
1988		.84 .13	.64 0	.60 .25	.76 .13	.59 .06	.41 .56	.24 .87	.11 .57	.10 .55	.31 .63	.55 .62	.25 .65	.45 .42
1990		.40	44	.37		.09		.30	.47	.42	.07	07	.24	.29
1991		.31 .25	.49 .56 –.25	.54 .08	.35 .32 13 .09	.29 .01	.35 .23 12	01 .08	.03	0 .21	.14 .31	.38 .09 .35	.29 04	.29 .25 .13 .14
1993		18	25	.02	.09	.68	.19	.14	.25 .07	.23	.10	.35	.21	.14

-				піз	lorical Date	a ioi Selec	ieu series	-Continue	:u				
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
					105. Mo	oney supply M1 i	n 1987 dollars (b	bil. \$)					
1948	532.7	531.7	531.4	524.9	519.0	516.0	509.8	510.2	509.8	511.7	515.1	513.7	518.8
1949	514.7	517.1	517.1	517.6	518.6	517.6	522.1	521.2	518.2	520.7	521.2	522.1	519.0
1950	526.1	526.4	528.4	531.7	531.6	533.5	527.8	527.2	525.7	525.6	524.1	515.9	527.0
1951	511.2	504.0	503.9	504.8	504.4	507.9	510.1	514.5	513.5	513.9	516.0	514.6	509.9
1952	515.9	520.3	521.1	520.2	524.1	524.0	520.9	524.8	527.8	529.1	530.8	529.4	524.0
1953	531.2	531.6	531.9	533.2	534.0	531.8	534.5	532.6	532.2	530.4	532.6	530.8	532.2
	531.6	532.1	532.5	530.0	534.6	535.4	539.4	541.1	541.9	546.4	546.6	549.8	538.5
1954 1955	552.8	554.2	553.0	554.2	559.6	558.7	560.4	560.4	556.5	559.7	556.1	559.7	557.1
1956	561.0	558.6	559.5	560.3	559.5	555.6	553.3	552.5	551.9	550.0	551.2	550.2	555.3
1957	550.2	547.5	545.7	545.7	543.9	541.3	539.5	537.8	536.5	535.3	532.4	530.8	540.6
1958	525.4	527.8	526.9	526.8	528.7	532.3	532.3	535.0	536.6	538.6	539.6	542.5	532.7
1959	544.7	546.7	550.0	547.8	551.8	551.6	553.5	552.1	546.5	542.5	542.1	540.5	547.5
1960	542.6	540.7	539.8	539.0	539.0	536.9	541.3	543.5	543.1	537.8	537.8	537.0	539.8
1961	538.5	540.5	541.6	542.4	544.7	545.4	543.3	545.6	544.7	545.8	548.5	550.0	544.3
1962	550.0	549.8	550.9	550.4	551.9	551.1	550.8	551.1	547.9	549.4	551.7	553.6	550.7
1963	555.4	557.7	556.7	558.6	561.2	559.1	562.8	562.2	563.0	563.1	566.8	563.6	560.9
1964	565.1	567.3	568.0	569.1	571.0	570.0	574.4	578.0	581.3	583.2	583.9	585.0	574.7
1965	586.5	587.2	587.3	587.0	585.9	583.5	588.4	588.8	593.2	595.0	597.5	599.6	590.0
1966	603.9	603.6	604.6	604.9	603.2	602.1	597.5	593.1	597.2	592.4	593.1	595.2	599.2
1967	594.8	596.6	602.8	598.6	601.7	604.1	607.8	609.2	612.5	613.9	614.1	615.1	605.9
1968	613.3	611.6	614.2	615.8	620.5	621.0	620.5	622.7	623.6	625.8	630.2	632.7	621.0
1969	634.8	630.7	630.9	629.2	627.5	625.2	622.5	620.6	619.9	618.6	617.0	614.2	624.3
1970	619.2	611.9	612.5	609.7	611.2	610.3	608.2	612.0	613.9	615.3	614.1	612.6	612.6
1971	614.0	617.6	621.6	623.2	627.1	627.8	628.2	628.4	630.9	631.1	632.8	632.4	626.3
1972	635.6	638.2	643.7	645.2	644.5	644.7	648.9	652.8	657.0	658.6	660.6	666.3	649.7
1973	670.7	666.9	660.4	659.8	660.4	659.9	662.0	651.0	649.6	645.9	646.0	647.3	656.7
1974	641.8	637.7	635.0	633.2	626.7	624.2	620.7	615.0	610.6	606.7	604.2	600.2	621.3
1975	595.2	593.3	596.1	594.0	595.7	601.1	595.0	596.6	595.0	590.1	592.0	587.9	594.3
1976	587.8	591.3	594.1	596.8	596.8	592.8	592.8	593.1	590.7	594.7	593.9	595.9	593.4
1977	599.0	597.9	598.3	598.5	598.5	597.7	597.8	599.8	601.5	603.7	603.7	604.2	600.1
1978	607.6	605.2	603.8	605.3	607.1	604.2	603.5	602.2	604.6	600.2	599.2	600.0	603.6
1979	597.0	591.0	589.6	592.4	584.7	586.8	586.4	584.1	581.4	577.3	571.3	566.7	584.1
1980	562.5	561.5	552.1	538.8	533.4	534.8	541.2	546.3	549.3	549.5	547.9	537.5	546.2
1981	536.5	535.4	538.0	544.8	537.4	532.7	529.3	527.1	523.0	523.4	523.8	527.6	531.6
1982	534.2	529.9	531.1	535.0	530.0	524.0	522.3	526.3	532.2	539.7	547.2	552.2	533.7
1983	554.9	561.3	567.7	568.5	572.8	575.7	578.9	580.0	580.6	584.7	584.1	584.7	574.5
1984	584.7	584.8	586.6	588.0	589.3	592.3	591.3	589.1	590.8	588.5	591.1	594.9	589.3
1985	598.0	602.4	603.4	605.6	608.9	616.6	621.5	627.9	635.1	636.3	638.8	643.7	619.9
1986	642.8	647.9	660.9	670.6	679.9	687.2	696.1	705.3	710.9	717.2	727.7	743.8	690.9
1987	744.3 742.7	742.9	742.5	749.6	750.6	743.7	741.5	741.6	740.7	747.8	741.8	737.6	743.7
1988	737.0	741.9	743.2	745.9	747.6	750.4	750.8	748.5	744.3	743.2	741.8	741.4	745.1
1989		733.4	728.7	720.7	712.0	709.3	710.9	711.5	712.3	713.3	712.4	714.7	718.0
1990	710.0	709.4	708.7	711.3	708.8	709.4	706.4	705.2	705.1	699.4	698.8	699.7	706.0
1991	698.3	703.0	708.3	708.2	712.2	718.4	719.1	722.0	722.6	727.5	733.0	738.2	717.6
1992	748.6	760.7	766.2	769.1	775.2	773.7	780.1	787.2	796.5	805.9	813.3	818.5	782.9
1993	823.1	822.4	824.2	827.1	841.4	847.7	854.4	859.1	866.1	869.8	874.1	876.8	848.9
1993	023.1	022.4	024.2	027.1		t change in busir			000.1	003.0	074.1	070.0	040.9
1948	3.11	71	.16	1.22	4.33	2.77	3.84	1.46	55	-1.26	-1.92	-1.31	.93
1949	38	91	-1.42	-3.07	-2.35	-2.95	-3.96	-2.08	23	.35	79	37	-1.51
1950	1.25	1.04	01	1.03	1.04	3.67	4.52	5.26	7.67	3.97	5.22	6.29	3.41
1951	6.20	7.36	5.56	6.00	4.49	2.32	1.33	1.30	1.24	1.72	1.00	2.60	3.43
1952	2.65	.11	1.44	23	.80	1.92	2.06	.59	2.29	3.23	4.57	1.22	1.72
1953	1.13	.60	1.84	2.94	1.69	83	.37	1.87	-1.38	-2.15	-2.27	-4.72	08
	70	.77	34	83	-1.87	-1.93	.01	-10.16	61	42	2.84	4.31	74
1954 1955	2.58	1.96	2.69	1.60	4.40	4.56	5.38	5.04	3.76	5.33	4.20	4.07	3.80
1956	4.86	2.05	8.74	6.22	6.19	4.21	4.15	3.28	4.32	.96	4.09	2.35	4.29
1957	3.60	.30	5.54	3.85	1.76	4.60	2.54	.48	1.07	-4.86	-4.75	67	1.12
1958	-4.15	-4.03	-1.28	-2.09	-4.63	-1.07	48	-1.18	2.17	1.12	1.52	1.85	-1.02
1959	.85	.19	2.84	3.26	5.77	5.63	19	5.16	2.28	3.23	1.93	2.54	2.79
1960	1.74	5.24	2.68	2.40	3.58	5.04	22	-1.84	1.39	.48	1.46	-1.20	1.73
1961	23	40	1.74	38	–.71	78	.68	1.43	1.00	.01	.78	1.79	.41
1962	1.84	1.56	2.34	2.57	1.78	2.88	2.77	3.58	3.36	3.80	3.65	.56	2.56
1963	.64	1.04	1.50	2.48	2.02	1.37	1.58	2.10	3.53	5.76	9.10	5.59	3.06
1964	-1.37	3.17	.07	4.24	3.94	3.06	3.49	4.93	6.95	2.48	5.32	8.03	3.69
1965	9.90	12.67	11.34	7.68	12.07	6.11	4.25	12.80	12.02	8.05	10.06	7.80	9.56
1966	10.74	10.51	8.81	6.86	9.14	13.07	11.94	13.64	7.08	7.54	5.58	3.47	9.03
1967	6.53	6.34	8.35	5.98	4.80	8.21	4.81	-2.65	3.52	5.87	6.20	10.88	5.74
1968	2.23	1.93	3.80	13.74	2.28	6.37	8.35	12.78	11.51	10.02	14.65	9.31	8.08
1969	22.78	9.54	14.98	24.49	13.74	14.70	4.88	14.78	15.16	11.45	8.54	11.87	13.91
1970	-6.46	18.02	14.64	1.08	6.37	6.96	13	7.67	4.36	-21.06	−7.18	−.16	2.01
	-1.50	8.17	3.35	-12.16	9.25	-11.47	-9.06	20.11	21.72	-11.66	−1.97	−6.16	.72
1972		9.38	11.22	13.76	6.77	4.34	1.93	4.45	-2.48	22.91	10.87	8.44 .	
1973	26.02	45.06	25.08	19.73	15.67	25.10	16.98	23.09	56	14.47	14.56	10.64	19.65
1974	26.44	28.26	16.99	61.43	27.05	17.11	50.03	31.18	49.50	11.08	16.58	1.67	28.11
1975	9.35	-12.56	-17.44	-19.06	-33.77	-28.24	-8.21	-13.61	-17.20	-13.76	-10.42	1.37	-13.63
1976	-10.75	4.91	-27.22	-32.41	3.36	11.39	-8.28	-2.94	-4.48	12.72	18.56	10.90	-2.02
1977	2.70 9.43	16.49	4.26 34.54	8.95	9.78	15.00	-1.56	16.25	7.61	15.91	13.18	13.20	10.15
1978 1979	43.40	6.00 28.39	23.93	25.01 65.50	28.91 29.23	30.22 40.73	16.68 44.36	10.26 44.36	11.72 57.28	20.78 7.31	23.82 -12.06	4.61 36.59	18.50 34.09
1980	79.50	50.64	37.42	2.12	-21.92	44.38	-18.53	9.86	20.22	15.72	54.31	21.13	24.57
1981	24.02	4.50	-20.58	46.86	68.38	50.83	49.79	61.80	48.40	30.36	41.36	36.35	36.84
1982	82.08	62.89	16.73	64.32	52.01	22.52	3.13	4.56	16.14	35	-55.45	-66.43	16.85
1983	46.25	.35	10.42	-46.15	-49.67	7.61	-4.75	14.06	-1.54	-11.02	16.30	50.17	2.67
1984	11.14	55.15	96.07	82.20	75.66	114.13	52.07	36.23	48.52	50.53	35.60	10.13	55.62
1985	2.51	32.93	27.10	5.86	35.40	-14.78	30.02	16.34	-13.69	51.10	38.05	21.97	19.40
1986	26.90	-20.51	-18.05	-62.95	28.92	11.11	17.83	53.60	-11.08	21.13	5.83	66.31	9.92
1987	92.51	-18.65	-17.87	-2.77	-5.98	12.58	-13.18	-32.15	39.23	32.94	-14.22	31.24	8.64
1988	24.28	75.49	24.97	85.66	16.93	41.60	45.82	35.26	-5.14	47.92	27.64	63.50	40.33
1989	34.50	92.88	35.83	38.87	125.02	30.30	50.14	79.81	-3.04	12.47	34.97	21.38	46.09
1990	-21.67	49.34	102.55	4.02	1.00	18.55	26.40	34.15	63.37	-8.05	-61.97	8.58	18.02
1991	-17.00	-69.92	22.46	-73.24	-39.49	-30.88	-10.61	-110.89	-54.42	-45.04	94	-55.70	-40.47
1992	-62.34	16.04	-9.62	-13.46	-20.00	-27.49	6.96	9.95	-21.25	58.54	59.80	-27.71	-2.55
1993	-54.73	18.70	-72.79	45.11	64.40	12.50	58.39	2.05	43	-22.73	-2.98	-21.72	2.15
	0-1.10	10.70	12.10	70.11	0-1.70	12.00	00.00	2.00	0	22.10	2.00	21.12	2.10

				1113	torical Date	2 101 Selec	ieu Series	Oontinue	·u				
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
					113. Net chan	ge in consumer i	nstallment credit	(AR, bil. \$)					_
1948	3.19	2.10	4.52	3.22	2.52	2.17	2.46	2.44	2.89	0.56	1.12	1.33	2.38
1949	1.12 3.43	1.79 3.77	1.76	2.44	3.12	2.92 5.09	2.38	2.75 4.19	3.05	3.85	3.71 41	3.14	2.67
1950 1951	2.64	1.56	3.06 .18	2.71 -1.22	3.80 53	34	6.38 -1.62	1.26	4.67 1.57	1.69 1.10	1.92	.25 1.79	3.22 .69
1952 1953	1.13 5.30	1.12 5.05	1.48 7.02	2.11 4.50	6.56 4.68	7.58 3.25	4.86 4.16	3.54 3.01	4.67 2.70	7.02 2.72	4.74 2.29	6.34 .29	4.26 3.75
1954	73	.14	92	01	22	.54	.80	.49	1.27	1.40	1.46	2.96	.60
1955 1956	3.68 3.41	4.49 3.67	6.97 4.79	6.13 3.00	6.36 2.88	6.77 1.86	5.03 1.54	6.55 3.02	6.43 1.97	3.50 2.40	3.85 3.50	4.30 2.17	5.34 2.85
1957	1.85	2.87	2.15	1.75	3.17	2.06	3.29	2.34	2.32	2.12	1.81	1.32	2.25
1958 1959	.23 4.79	-1.04 4.37	-2.00 4.70	-1.67 5.10	-1.01 5.83	-1.58 6.23	08 6.84	48 7.64	1.04 7.19	64 6.85	1.51 5.08	3.59 3.60	18 5.69
1960	5.30	4.70	6.84	6.28	4.12	4.37	3.24	2.70	3.31	2.04	2.77	1.30	3.91
1961 1962	3.13 1.82	.72 5.00	-1.85 2.12	-2.15 6.02	64 5.41	.48 5.40	.50 5.28	1.48 5.21	2.33 4.86	2.22 5.17	3.18 6.78	3.83 6.16	1.10 4.94
1963	6.04	7.45	4.30	7.31	6.10	6.67	7.33	7.14	6.82	8.06	6.42	6.54	6.68
1964 1965	8.71 8.78	2.58 10.50	13.80 5.75	6.38 11.00	8.64 9.37	7.49 7.48	7.63 8.39	6.96 7.97	8.92 7.97	6.97 5.93	4.84 7.32	8.50 7.22	7.62 8.14
1966	7.85	8.72	4.91	4.19	4.07	4.42	6.32	5.05	4.10	3.82	5.06	5.66	5.35
1967 1968	4.13 11	5.09 1.56	.47 17.12	02 8.39	.80 8.33	4.00 8.62	2.64 8.74	4.67 7.34	5.03 7.90	2.11 10.88	6.78 10.10	7.76 11.08	3.62 8.33
1969	10.50	17.53	5.48	11.10	11.40	9.97	8.74	6.89	9.66	7.90	8.40	3.66	9.27
1970 1971	7.10 33.73	5.94 8.50	.56 5.72	50 6.95	2.93 7.50	7.55 8.64	10.00 11.35	6.42 12.62	7.30 13.60	1.63 11.15	-2.28 15.10	7.64 15.49	4.52 12.53
1972 1973	5.23 44.77	-1.43 24.11	26.35 19.40	16.78 18.98	16.16 24.38	19.86 21.19	12.43 23.18	18.16 17.98	14.81 16.57	14.51 20.10	16.15 18.43	18.88 10.72	14.82 21.65
1974	13.78	14.24	3.23	11.81	16.58	14.14	13.96	14.60	9.68	3.07	-1.50	-2.08	9.29
1975 1976	-24.19 18.25	10.08 10.64	-9.37 20.23	-2.15 22.86	40 15.56	.48 20.11	18.18 21.79	8.98 16.31	11.14 23.77	14.57 20.53	12.62 21.31	18.14 37.49	4.84 20.74
1977	28.81	26.51	40.92	37.61	31.48	35.06	30.47	35.82	32.06	32.32	36.88	36.38	33.69
1978 1979	26.48 38.64	29.96 35.45	43.81 37.06	40.97 44.34	51.92 42.13	56.80 32.68	40.28 29.80	41.10 35.42	34.06 35.33	33.90 37.73	44.06 32.80	42.66 12.72	40.50 34.51
1980	56.51	1.62	19.46	-28.76	-28.81	-21.96	-8.08	2.05	-4.88	9.32	3.36	20.22	1.67
1981 1982	11 28.75	-8.56 -19.24	44.82 27.49	11.78 12.13	20.26 14.38	14.03 13.06	14.65 5.63	2.30 5.93	42.66 15.95	6.84 3.97	4.60 22.34	3.98 44.17	13.10 14.55
1983	7.66 49.12	-14.38 80.28	63.65 90.58	25.30 56.28	14.51 108.44	54.05 93.55	55.24 59.34	53.46 69.91	40.88 56.62	67.76 72.11	67.12 65.11	82.69 82.28	43.16 73.64
1984 1985	62.80	48.76	138.85	83.04	69.26	59.16	63.68	53.88	106.20	76.02	72.25	66.80	75.04
1986	82.79 -18.01	59.60	39.43	68.90 54.56	62.38 20.96	39.59 69.20	67.45	47.90 37.42	80.21 41.46	81.56 22.07	25.93 26.02	-3.60 60.06	54.35 36.67
1987 1988	84.01	4.31 39.84	26.33 55.84	45.74	48.74	67.14	95.65 33.67	69.41	29.71	45.88	70.78	46.88	53.14
1989	40.50	39.50	42.29	57.84	60.18	40.06	36.68	53.09	26.46	48.30	30.36	25.06 .	47.70
1990 1991	16.50 -84.12	36.55 -44.12	1.64 -1.49	23.10 36.19	37.04 35.15	26.32 12.18	89.62 12.47	51.32 6.67	55.24 -3.49	-6.34 14.12	-32.64 -47.23	-85.98 -14.44	17.70 -6.51
1992 1993	-18.91 31.06	-24.59 55.07	-8.84 7.72	-4.64 75.10	28.08 1.58	18.66 69.55	14.16 90.04	22.63 64.21	17.89 98.56	-10.84 85.74	-2.84 81.42	1.75 98.39	2.71 63.20
			=		Discount rate of								
1948	.97	.99	1.00	1.00	1.00	1.00	1.00	1.03	1.09	1.12	1.14	1.15	1.04
1949 1950	1.16 1.09	1.16 1.12	1.16 1.14	1.16 1.16	1.15 1.17	1.16 1.17	.98 1.17	1.02 1.21	1.06 1.32	1.04 1.33	1.06 1.36	1.10 1.37	1.10 1.22
1951	1.39	1.39	1.42	1.52	1.58	1.50	1.59	1.64	1.65	1.61	1.61	1.73	1.55 1.77
1952 1953	1.69 2.04	1.57 2.02	1.66 2.08	1.62 2.18	1.71 2.20	1.70 2.23	1.82 2.10	1.88 2.09	1.79 1.88	1.78 1.40	1.86 1.43	2.13 1.63	1.77 1.94
1954	1.21	.98	1.05	1.01	.78	.65	.71	.89	1.01	.99	.95	1.17	.95
1955 1956	1.26 2.46	1.18 2.37	1.34 2.31	1.62 2.61	1.49 2.65	1.43 2.53	1.62 2.33	1.88 2.61	2.09 2.85	2.26 2.96	2.22 3.00	2.56 3.23	1.75 2.66
1957 1958	3.21 2.60	3.16 1.56	3.14 1.35	3.11 1.13	3.04 1.05	3.32 .88	3.16 .96	3.40 1.69	3.58 2.48	3.59 2.79	3.34 2.76	3.10 2.81	3.26 1.84
1959	2.84	2.71	2.85	2.96	2.85	3.25	3.24	3.36	4.00	4.12	4.21	4.57	3.41
1960	4.44 2.30	3.95 2.41	3.44 2.42	3.24 2.33	3.39 2.29	2.64 2.36	2.40 2.27	2.29 2.40	2.49	2.43	2.38 2.46	2.27 2.62	2.95 2.38 2.78
1961 1962	2.75	2.75	2.72	2.74	2.69	2.72	2.94	2.84	2.30 2.79	2.35 2.75	2.80	2.86	2.78
1963 1964	2.91 3.53	2.92 3.53	2.90 3.55	2.91 3.48	2.92 3.48	3.00 3.48	3.14 3.48	3.32 3.51	3.38 3.53	3.45 3.58	3.52 3.62	3.52 3.86	3.16 3.55
1965	3.83	3.93	3.94	3.93	3.90	3.81	3.83	3.84	3.91	4.03	4.08	4.36	3.95
1966 1967	4.60 4.76	4.67 4.55	4.63 4.29	4.61 3.85	4.64 3.64	4.54 3.48	4.86 4.31	4.93 4.28	5.36 4.45	5.39 4.59	5.34 4.76	5.01 5.01	4.88 4.33
1968 1969	5.08 6.18	4.97 6.16	5.14 6.08	5.36 6.15	5.62 6.08	5.54 6.49	5.38 7.00	5.10 7.01	5.20 7.13	5.33 7.04	5.49 7.19	5.92 7.72	5.34 6.69
1970	7.91	7.16	6.71	6.48	7.04	6.74	6.50	6.41	6.24	5.93	5.29	4.86	6.44
1971 1972	4.49 3.40	3.77 3.18	3.32 3.72	3.78 3.72	4.14 3.65	4.70 3.87	5.40 4.06	5.08 4.01	4.67 4.65	4.49 4.72	4.19 4.77	4.02 5.06	4.34 4.07
1973	5.31	5.56	6.05	6.29	6.35	7.19	8.02	8.67	8.48	7.16	7.87	7.36	7.03
1974	7.76 6.49	7.06	7.99	8.23	8.43	8.14 5.19	7.75	8.74	8.36	7.24 6.08	7.58 5.47	7.18	7.87
1975 1976	4.96	5.58 4.85	5.54 5.05	5.69 4.88	5.32 5.18	5.44	6.16 5.28	6.46 5.15	6.38 5.08	4.93	4.81	5.50 4.35	5.82 5.00
1977 1978	4.60 6.45	4.66 6.46	4.61 6.32	4.54 6.31	4.94 6.43	5.00 6.71	5.15 7.07	5.50 7.04	5.77 7.84	6.19 8.13	6.16 8.79	6.06 9.12	5.27 7.22
1979	9.35	9.27	9.46	9.49	9.58	9.05	9.26	9.45	10.18	11.47	11.87	12.07	10.04
1980 1981	12.04 14.72	12.81 14.90	15.53 13.48	14.00 13.63	9.15 16.30	7.00 14.56	8.13 14.70	9.26 15.61	10.32 14.95	11.58 13.87	13.89 11.27	15.66 10.93	11.61 14.08
1982	12.41	13.78	12.49	12.82	12.15	12.11	11.91	9.01	8.20	7.75	8.04	8.01	10.72
1983 1984	7.81 8.93	8.13 9.03	8.30 9.44	8.25 9.69	8.19 9.90	8.82 9.94	9.12 10.13	9.39 10.49	9.05 10.41	8.71 9.97	8.71 8.79	8.96 8.16	8.62 9.57
1985	7.76	8.22	8.57	8.00	7.56	7.01	7.05	7.18	7.08	7.17	7.20	7.07	7.49
1986 1987	7.04 5.45	7.03 5.59	6.59 5.56	6.06 5.76	6.12 5.75	6.21 5.69	5.84 5.78	5.57 6.00	5.19 6.32	5.18 6.40	5.35 5.81	5.49 5.80	5.97 5.83
1988	5.90	5.69	5.69	5.92	6.27	6.50	6.73	7.02	7.23	7.34	7.68	8.09	6.67
1989 1990	8.29 7.64	8.48 7.76	8.83 7.87	8.70 7.78	8.40 7.78	8.22 7.74	7.92 7.66	7.91 7.44	7.72 7.38	7.63 7.19	7.65 7.07	7.64 6.81	8.12 7.51
1991	6.30	5.95	5.91	5.67	5.51	5.60	5.58	5.39	5.25	5.03	4.60	4.12	5.41
1992 1993	3.84 3.06	3.84 2.95	4.05 2.97	3.81 2.89	3.66 2.96	3.70 3.10	3.28 3.05	3.14 3.05	2.97 2.96	2.84 3.04	3.14 3.12	3.25 3.08	3.46 3.02
	0.00	2.00	2.0.	2.00	2.00	5	0.00	0.00	2.00	0.0 .	02	0.00	5.52

AR Annual rate NSA Not seasonally adjusted

				піѕ	lorical Date	a for Selec	ieu Series	—continue	:u				
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
					115. Yield	on long-term Trea	asury bonds, NS	SA (pct.)					
1948	2.45	2.45	2.44	2.44	2.42	2.41	2.44	2.45	2.45	2.45	2.44	2.44	2.44
1949	2.42	2.39	2.38	2.38	2.38	2.38	2.27	2.24	2.22	2.22	2.20	2.19	2.31
1950	2.20	2.24	2.27	2.30	2.31	2.33	2.34	2.33	2.36	2.38	2.38	2.39	2.32
1951	2.39	2.40	2.47	2.56	2.63	2.65	2.63	2.57	2.56	2.61	2.66	2.70	2.57
1952	2.74	2.71	2.70	2.64	2.57	2.61	2.61	2.70	2.71	2.74	2.71	2.75	2.68
1953	2.80	2.83	2.89	2.97	3.11	3.13	3.02	3.02	2.98	2.83	2.86	2.79	2.94
	2.69	2.62	2.53	2.48	2.54	2.55	2.47	2.48	2.52	2.54	2.57	2.59	2.55
1954 1955	2.68	2.78	2.78	2.82	2.81	2.82	2.91	2.46	2.92	2.87	2.89	2.91	2.85
1956	2.88	2.85	2.93	3.07	2.97	2.93	3.00	3.17	3.21	3.20	3.30	3.40	3.08
1957	3.34	3.22	3.26	3.32	3.40	3.58	3.60	3.63	3.66	3.73	3.57	3.30	3.47
1958	3.24	3.28	3.25	3.12	3.14	3.20	3.36	3.60	3.75	3.76	3.70	3.80	3.43
1959	3.91	3.92	3.92	4.01	4.08	4.09	4.11	4.10	4.26	4.11	4.12	4.27	4.08
1960	4.37	4.22	4.08	4.01	4.16	3.98	3.86	3.79	3.84	3.91	3.93	3.88	4.02
1961	3.89	3.81	3.78	3.80	3.73	3.88	3.90	4.00	4.02	3.98	3.98	4.06	3.90
1962	4.08	4.09	4.01	3.89	3.88	3.90	4.02	3.98	3.94	3.89	3.87	3.87	3.95
1963	3.89	3.92	3.93	3.97	3.97	4.00	4.01	3.99	4.04	4.07	4.11	4.14	4.00
1964	4.15	4.14	4.18	4.20	4.16	4.13	4.13	4.14	4.16	4.16	4.12	4.14	4.15
1965	4.14	4.16	4.15	4.15	4.14	4.14	4.15	4.19	4.25	4.28	4.34	4.43	4.21
1966	4.43	4.61	4.63	4.55	4.57	4.63	4.75	4.80	4.79	4.70	4.74	4.65	4.65
1967	4.40	4.47	4.45	4.51	4.76	4.86	4.86	4.95	4.99	5.19	5.44	5.36	4.85
1968	5.18	5.16	5.39	5.28	5.40	5.23	5.09	5.04	5.09	5.24	5.36	5.66	5.26
1969	5.74	5.86	6.05	5.84	5.85	6.05	6.07	6.02	6.32	6.27	6.52	6.81	6.12
1970	6.86	6.44	6.39	6.53	6.94	6.99	6.57	6.75	6.63	6.59	6.24	5.97	6.58
1971	5.92	5.84	5.71	5.75	5.96	5.94	5.91	5.78	5.56	5.46	5.48	5.62	5.74
1972	5.62	5.67	5.66	5.74	5.64	5.59	5.59	5.59	5.70	5.69	5.51	5.63	5.64
1973	5.96	6.14	6.20	6.11	6.25	6.32	6.53	6.85	6.41	6.25	6.30	6.35	6.31
1974	6.56	6.54	6.81	7.04	7.09	7.02	7.18	7.33	7.30	7.22	6.93	6.77	6.98
1975	6.68	6.66	6.77	7.05	7.01	6.86	6.89	7.11	7.28	7.29	7.21	7.17	7.00
1976	6.93	6.92	6.88	6.73	7.01	6.92	6.85	6.82	6.70	6.65	6.62	6.38	6.78
1977	6.68	7.16	7.20	7.13	7.17	6.99	6.98	7.01	6.94	7.08	7.16	7.24	7.06
1978	7.51	7.60	7.63	7.74	7.87	7.94	8.10	7.88	7.82	8.07	8.16	8.36	7.89
1979	8.43	8.43	8.45	8.44	8.55	8.32	8.35	8.42	8.68	9.44	9.80	9.58	8.74
1980	10.03	11.55	11.87	10.83	9.82	9.40	9.83	10.53	10.94	11.20	11.83	11.89	10.81
1981	11.65	12.23	12.15	12.62	12.96	12.39	13.05	13.61	14.14	14.13	12.68	12.88	12.87
1982	13.73	13.63	12.98	12.84	12.67	13.32	12.97	12.15	11.48	10.51	10.18	10.33	12.23
1983	10.37	10.60	10.34	10.19	10.21	10.64	11.10	11.42	11.26	11.21	11.32	11.44	10.84
1984	11.29	11.44	11.90	12.17	12.89	13.00	12.82	12.23	11.97	11.66	11.25	11.21	11.99
1985	11.15	11.35	11.78	11.42	10.96	10.36	10.51	10.59	10.67	10.56	10.08	9.60	10.75
1986	9.51	9.07	8.13	7.59	8.02	8.23	7.86	7.72	8.08	8.04	7.81	7.67	8.14
1987	7.60	7.69	7.62	8.31	8.79 9.24	8.63 9.04	8.70	8.97	9.58	9.61	8.99 9.07	9.12	8.63
1988 1989	8.82 9.07	8.41 9.16	8.61 9.33	8.91 9.18	9.24 8.95	8.40	9.20 8.19	9.33 8.26	9.06 8.31	8.89 8.15	8.03	9.13 8.02	8.98 8.59
1990	8.39	8.66	8.74	8.92	8.90	8.62	8.64	8.97	9.11	8.93	8.60	8.31	8.73
1991	8.33	8.12	8.38	8.29	8.33	8.54	8.50	8.17	7.96	7.88	7.83	7.58	8.16
1992	7.48	7.78	7.93	7.88	7.80	7.72	7.40	7.19	7.08	7.26	7.43	7.30	7.52
1993	7.17	6.89	6.65	6.64	6.68	6.55	6.34	6.18	5.94	5.90	6.25	6.27	6.46
1000		0.00	0.00		16. Yield on new				0.04	0.00	0.20	0.27	0.40
1948	2.97 2.66	2.85 2.77	2.99	2.81 2.74	2.86	2.93	2.80	2.83	2.86 2.40	2.99	2.96 2.54	3.15	2.92
1949 1950	2.60	2.58	2.75 2.57	2.74	2.69 2.58	2.77 2.63	2.68 2.55	2.60 2.61	2.40	2.50 2.64	2.63	2.53 2.75	2.64 2.60
1951	2.74	2.78	2.90	3.06	2.98	3.24	3.20	3.01	2.91	3.09	3.36	3.22	3.04
1952	3.08	2.94	3.14	3.09	3.25	3.09	3.11	3.08	3.14	3.16	3.07	3.04	3.10
1953	3.17	3.26	3.41	3.53	3.80	3.82	3.59	3.46	3.60	3.09	3.13	3.23	3.42
1954	3.00	2.88	2.74	2.88	2.90	2.91	2.94	2.94	3.01	2.84	2.94	2.87	2.90
1955	2.99	3.09	3.14	3.11	3.15	3.11	3.14	3.41	3.27	3.15	3.17	3.27	3.17
1956	3.20	3.07	3.25	3.55	3.48	3.56	3.56	4.02	3.96	3.94	4.29	4.26	3.68
1957	4.28	4.13	4.18	4.23	4.41	4.81	4.59	4.78	4.68	4.71	4.56	4.04	4.45
1958	3.62	3.73	3.88	3.67	3.66	3.61	3.85	4.39	4.56	4.48	4.35	4.44	4.02
1959	4.58	4.60	4.53	4.60	4.92	5.00	4.95	4.90	5.28	5.37	5.14	5.27	4.93
1960	5.34	5.24	4.98	4.97	4.95	4.91	4.79	4.65	4.64	4.75	4.82	4.94	4.92 4.63
1961	4.63	4.43	4.37	4.57	4.67	4.82	4.81	4.79	4.72	4.60	4.52	4.58	4.36
1962	4.56	4.53	4.41	4.37	4.32	4.30	4.41	4.39	4.28	4.26	4.23	4.28	
1963	4.22	4.25	4.28	4.35	4.36	4.32	4.34	4.34	4.40	4.37	4.42	4.49	4.35
1964	4.50	4.39	4.45	4.48	4.48	4.50	4.44	4.44	4.49	4.49	4.48	4.49	4.47
1965	4.45 4.93	4.45 5.09	4.49 5.33	4.48 5.38	4.52 5.55	4.57 5.67	4.57	4.66 6.04	4.71 6.14	4.70 6.04	4.75 6.11	4.92 5.98	4.61
1966 1967	5.53	5.35	5.55	5.59	5.90	6.06	5.81 6.06	6.30	6.33	6.53	6.87	6.93	5.67 6.08
1968	6.57	6.57	6.80	6.79	7.00	7.02	6.91	6.54	6.69	6.88	7.00	7.28	6.84
1969	7.29	7.33	7.76	7.54	7.62	8.04	8.06	8.05	8.36	8.46	8.94	9.22	8.06
1970	9.00	8.84	9.00	9.09	9.53	9.70	9.09	9.08	9.00	9.14	8.97	8.13	9.05
1971	7.63	7.54	7.62	7.76	8.25	8.15	8.24	8.14	7.90	7.72	7.67	7.54	7.85
1972	7.36	7.57	7.53	7.77	7.61	7.63 7.73	7.72	7.59	7.72	7.66	7.46	7.50	7.59 7.89
1973 1974	7.61 8.32	7.67 8.21	7.75 8.60	7.70 9.04	7.69 9.39	9.59	7.97 10.18	8.45 10.30	8.10 10.44	7.97 10.29	7.95 9.22	8.09 9.47	9.42
1975	9.17	8.84	9.48	9.81	9.76	9.27	9.56	9.71	9.89	9.54	9.48	9.59	9.51
1976	8.97	8.71	8.73	8.68	9.00	8.90	8.76	8.59	8.37	8.25	8.17	7.90	8.59
1977	7.96	8.18	8.33	8.30	8.38	8.08	8.12	8.06	8.11	8.21	8.26	8.39	8.20
1978	8.70	8.70	8.70	8.88	9.00	9.15	9.27	8.83	8.78	9.14	9.30	9.30	8.98
1979	9.47	9.52	9.65	9.69	9.82	9.51	9.47	9.57	9.87	11.17	11.52	11.30	10.05
1980	11.65	13.23	14.08	13.36	11.61	11.12	11.48	12.31	12.74	13.17	14.10	14.38	12.77
1981	14.01	14.60	14.49	15.00	15.68	14.97	15.67	16.34	16.97	16.96	15.53	15.55	15.48
1982	16.34	16.35	15.72	15.62	15.37	15.96	15.75	14.64	13.78	12.63	11.89	12.15	14.68
1983	12.04	12.11	11.81	11.58	11.24	11.90	12.46	12.89	12.68	12.54	12.86	12.87	12.25
1984	12.65	12.80	13.36	13.64	14.41	14.49	14.25	13.54	13.37	13.02	12.40	12.47	13.37
1985	12.46	12.39	12.85	12.45	11.85	11.33	11.28	11.61	11.66	11.51	11.19	10.42	11.75
1986	10.33	9.76	8.95	8.71	9.09	9.39	9.11	9.03	9.28	9.29	8.99	8.87	9.23
1987	8.59	8.58	8.68	9.36	9.95	9.64	9.70	10.09	10.63	10.80	10.09	10.22	9.69
1988	9.81	9.43	9.68	9.92	10.25	10.08	10.12	10.27	10.03	9.86	9.98	10.05	9.96
1989	9.92	10.11	10.33	10.11	9.82	9.24	9.20	9.09	9.29	9.04	9.20	9.23	9.55
1990	9.56	9.68	9.79	10.02	9.97	9.69	9.72	10.05	10.17	10.09	9.79	9.55	9.84
1991	9.60	9.14	9.14	9.07	9.13	9.37	9.38	8.88	8.79	8.81	8.72	8.55	9.05
1992	8.36	8.63	8.62	8.59	8.57	8.45	8.19	7.96	7.99	8.17	8.25	8.12	8.33
1993	7.91	7.73	7.39	7.48	7.52	7.48	7.35	7.04	6.88	6.88	7.17	7.22	7.34
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				1118	Storical Date	u 101 00100	ica ociica	Johnne	,u				
YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
					117. Yield on n	nunicipal bonds,	20-bond average	e, NSA (pct.)					
1948	0	2.47	2.45	2.37	2.31	2.24	2.27	2.37	2.41	2.42	2.38 2.12	2.26	2.16
1949 1950	2.16 2.06	2.20 2.03	2.18 2.01	2.14 2.03	2.14 2.00	2.20 1.99	2.16 2.01	2.12 1.83	2.14	2.16 1.79	2.12 1.74	2.09	2.15 1.92
1951	1.61	1.58	1.74	1.94	2.00	2.19	2.15	2.02	1.84 2.01	2.06	2.05	1.72 2.09	1.95
1952 1953	2.09 2.43	2.07 2.55	2.08 2.65	2.04 2.65	2.06 2.78	2.13 2.99	2.15 2.98	2.24 2.90	2.30 2.90	2.38 2.75	2.38 2.62	2.38 2.60	2.19 2.73
1954	2.50	2.42	2.40	2.47	2.50	2.48	2.32	2.26	2.31	2.34	2.32	2.36	2.39
1955 1956	2.40 2.50	2.44 2.44	2.44 2.57	2.41 2.70	2.38 2.68	2.41 2.54	2.54 2.65	2.60 2.80	2.58 2.94	2.51 2.95	2.46 3.16	2.57 3.22	2.48 2.76
1957 1958	3.18 2.91	3.00 3.02	3.10 3.06	3.13 2.96	3.27 2.92	3.41 2.97	3.40 3.09	3.54 3.36	3.54 3.54	3.42 3.45	3.37 3.32	3.04 3.34	3.28 3.16
1959	3.42	3.36	3.30	3.39	3.58	3.72	3.71	3.58	3.78	3.62	3.55	3.68	3.56
1960 1961	3.72 3.40	3.60 3.31	3.56 3.45	3.56 3.50	3.60 3.43	3.55 3.52	3.50 3.52	3.34 3.52	3.42 3.53	3.53 3.42	3.40 3.41	3.40 3.47	3.52 3.46
1962	3.34	3.21	3.14	3.06	3.11	3.26	3.28	3.23	3.11	3.02	3.04	3.07	3.16
1963 1964	3.10 3.22	3.15 3.14	3.05 3.28	3.10 3.28	3.11 3.20	3.21 3.20	3.22 3.18	3.13 3.19	3.20 3.23	3.20 3.25	3.30 3.18	3.27 3.13	3.17 3.21
1965 1966	3.06 3.52	3.09 3.64	3.18 3.72	3.15 3.56	3.17 3.65	3.24 3.77	3.27 3.95	3.24 4.12	3.35 4.12	3.40 3.94	3.46 3.86	3.54 3.86	3.26 3.81
1967	3.54	3.52	3.55	3.60	3.89	3.96	4.02	3.99	4.12	4.30	4.34	4.43	3.94
1968 1969	4.29 4.85	4.31 4.98	4.54 5.26	4.34 5.19	4.54 5.33	4.50 5.76	4.33 5.75	4.21 6.00	4.38 6.26	4.49 6.09	4.60 6.30	4.82 6.82	4.45 5.72
1970	6.65 5.36	6.36 5.23	6.03 5.17	6.49 5.37	7.00 5.90	6.96 5.95	6.53 6.06	6.20 5.82	6.25 5.37	6.39 5.06	5.93 5.20	5.46 5.21	6.35 5.48
1971 1972	5.12	5.28	5.31	5.43	5.30	5.34	5.41	5.30	5.36	5.18	5.02	5.05	5.26
1973 1974	5.05 5.22	5.13 5.20	5.29 5.40	5.15 5.73	5.14 6.02	5.18 6.13	5.40 6.68	5.48 6.71	5.10 6.76	5.05 6.57	5.18 6.61	5.12 7.05	5.19 6.17
1975	6.82	6.39	6.74	6.95	6.97	6.95	7.07	7.17	7.44	7.39	7.43	7.31	7.05
1976 1977	7.07 5.87	6.94 5.89	6.92 5.89	6.60 5.73	6.87 5.75	6.87 5.62	6.79 5.63	6.61 5.62	6.51 5.51	6.30 5.64	6.29 5.49	5.94 5.57	6.64 5.68
1978 1979	5.71 6.47	5.62 6.31	5.61 6.33	5.80 6.29	6.03 6.25	6.22 6.13	6.28 6.13	6.12 6.20	6.09 6.52	6.13 7.08	6.19 7.30	6.50 7.22	6.03 6.52
1980	7.35	8.16	9.17	8.63	7.59	7.63	8.13	8.67	8.94	9.11	9.56	10.20	8.60
1981 1982	9.68 13.28	10.10 12.97	10.16 12.82	10.62 12.59	10.78 11.95	10.67 12.45	11.14 12.28	12.26 11.23	12.92 10.66	12.83 9.69	11.89 10.06	12.91 9.96	11.33 11.66
1983 1984	9.50 9.63	9.58 9.64	9.20 9.93	9.05 9.96	9.11 10.49	9.52 10.67	9.53 10.42	9.72 9.99	9.58 10.10	9.66 10.25	9.75 10.17	9.89 9.95	9.51 10.10
1985	9.51	9.65	9.77	9.42	9.01	8.69	8.81	9.08	9.27	9.08	8.54	8.43	9.11
1986 1987	8.08 6.61	7.44 6.61	7.08 6.66	7.20 7.55	7.54 8.00	7.87 7.79	7.51 7.72	7.21 7.82	7.11 8.26	7.08 8.70	6.85 7.95	6.86 7.96	7.32 7.64
1988 1989	7.69 7.35	7.49 7.44	7.74 7.59	7.81 7.49	7.91 7.25	7.78 7.02	7.76 6.96	7.79 7.06	7.66 7.26	7.47 7.22	7.46 7.14	7.61 6.98	7.68 7.23
1990	7.33	7.44	7.29	7.49	7.35	7.02	7.19	7.32	7.43	7.49	7.14	7.09	7.27
1991 1992	7.08 6.54	6.91 6.74	7.10 6.76	7.02 6.67	6.95 6.57	7.13 6.49	7.05 6.13	6.90 6.16	6.80 6.25	6.68 6.41	6.73 6.36	6.69 6.22	6.92
1993	6.16	5.87	5.64	5.76	5.73	5.63	5.57	5.45	5.29	5.25	5.47	5.35	6.44 5.60
40.40					118. Secondary	market yields or	r FHA mortgage	s, NSA (pct.)					
1948 1949	4.35	4.35	4.35	4.35	4.34	4.35	4.34	4.34	4.32	4.32	4.32	4.32	4.34
1950	4.31 4.07	4.31 4.07	4.30 . 4.12	4.19	4.27	4.09 4.29	4.07 4.31	4.07 4.31	4.07 4.30	4.07 4.27	4.07 4.27	4.07 4.26	4.23
1952	4.26	4.27	4.29	4.29	4.29	4.30	4.30	4.30	4.30	4.31	4.32	4.32	4.30
1953 1954	4.34 4.75	4.34 4.69	4.34 . 4.64	4.62	4.59	4.67 4.57	4.74 4.56	4.82 4.56	4.86 4.56	4.82 4.56	4.81 4.56	4.78 4.56	4.60
1955 1956	4.56 4.73	4.56 4.70	4.59 4.68	4.60 4.71	4.63 4.78	4.63 4.81	4.64 4.81	4.67 4.87	4.70 4.92	4.73 4.95	4.75	4.73	4.65
1957		5.36	5.35	5.35	5.32	5.35	5.38			5.63	5.63	5.62	
1958 1959	5.59 5.60	5.57 5.59	5.51 5.58	5.44 5.59	5.39 5.64	5.37 5.71	5.35 5.75	5.37 5.81	5.50	5.58	5.60 6.23	5.60 6.23	5.49
1960 1961	6.25 6.02	6.23 5.86	6.22 5.80	6.21 5.77	6.20	6.19	6.17	6.14 5.68	6.11	6.09 5.70	6.07 5.70	6.04 5.69	6.16
1962	5.69	5.68	5.65	5.64	5.60	5.59	5.68 5.58	5.57	5.69 5.56	5.55	5.54	5.53	5.60
1963 1964	5.52 5.45	5.48 5.45	5.47 5.45	5.46 5.45	5.45 5.45	5.45 5.45	5.45 5.46	5.45 5.46	5.45 5.46	5.45 5.45	5.45 5.45	5.45 5.45	5.46 5.45
1965 1966	5.45 5.70	5.45	5.45 6.00 .	5.45	5.45 6.32	5.44 6.45	5.44 6.51	5.45 6.58	5.46 6.63	5.49	5.51 6.81	5.62 6.77	5.47
1967	6.62	6.46	6.35	6.29	6.44	6.51	6.53	6.60	6.63	6.65	6.77	6.81	6.56
1968 1969	6.81	6.78 7.99	6.83 8.05	6.94 8.06	8.06	7.52 8.35	7.42 8.36	7.35 8.36	7.28 8.40	7.29 8.48	7.36 8.48	7.50 8.62	
		9.29	9.20 7.32	9.10 7.37	9.11 7.75	9.16 7.89	9.11 7.97	9.07 7.92	9.01 7.84	8.97 7.75	8.90 7.62	8.40 7.59	
1971 1972	7.49	7.46	7.45	7.50	7.53	7.54	7.54	7.55	7.56	7.57	7.57	7.56	7.53
1973 1974	7.55	7.56 8.54	7.63 8.66	7.73 9.17	7.79 9.46	7.89 9.46	8.19 9.85	10.30	9.18 10.38	8.97 10.13	8.86	8.78 9.51	
1975	8.99	8.84	8.69 .	0 00	9.16	9.06	9.13	9.32	9.74	9.53	9.41	9.32	
1976 1977	9.06 8.45	9.04 . 8.55	8.65	8.82 8.64	9.03	9.05 8.77	8.99 8.77	8.93 8.77	8.82 8.74	8.55 8.81	8.45 8.81	8.28 8.96	
1978 1979	9.18 10.24	10.24	9.35 10.26 .	9.44	9.74 . 10.61	10.49	9.96 10.46	9.81 10.58	9.81 11.37 .	9.98	10.04 12.41	10.23 12.24	
1980	12.60		14.63	13.45	11.99	11.85	12.39	13.54	14.26	14.38	14.47	14.08	
1981 1982	14.23 17.38	14.79 17.10	15.04 16.41	15.91 16.31	16.33 16.19	16.31 16.73	16.76 16.29	17.96 14.61	18.55 14.03	17.43 12.99	15.98 12.82	16.43 12.80	16.31 15.31
1983 1984	12.87 13.08	12.65 13.20	12.68 13.68	12.50 13.80	12.41 15.01	12.96 14.91	14.23 14.58	13.78 14.21	13.55 13.99	13.23 13.43	13.23 12.90	13.25 12.99	13.11 13.82
1985	13.01	13.27	13.43	12.97	12.28	11.89	12.12	11.99	12.04	11.87	11.28	10.70	12.24
1986 1987	10.78 8.79	10.59 8.81	9.77 8.94	9.80 10.02	10.07 10.61	9.98 10.33	10.01 10.38	9.80 10.55	9.90 11.22	9.80 10.90	9.26 10.76	9.21 10.63	9.91 10.16
1988 1989	10.17 10.69	9.86 10.88	10.28 11.16	10.46 10.88	10.84 10.55	10.65 10.08	10.66 9.61	10.74 9.95	10.58 9.94	10.23 9.73	10.63 9.69	10.81 9.72	10.49 10.24
1990	10.01	10.22	10.30	10.75	10.23	10.18	10.11	10.28	10.24	10.23	9.81	9.66	10.17
1991 1992	9.58 8.72	9.57 8.74	9.61 8.85	9.61 8.79	9.62 8.66	9.71 8.56	9.59 8.12	9.14 8.08	9.06 8.06	8.71 8.29	8.69 8.54	8.10 8.12	9.25 8.46
1993	8.04	7.55	7.57	7.56	7.59	7.52	7.51	7.02	7.03	7.08	7.51	7.52	7.46

YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
4040						119. Federal fun	ds rate, NSA (pc	,					
1948 1949 1950													
1951 1952													
1953 1954 1955	1.37	1.29	1.35	1.43	1.43	1.62	1.68	1.21	1.07	0.90 2.24	0.91 2.35	1.26 2.48	1.78
1956 1957	2.44 2.93	2.50 3.00	2.50 2.96	2.62 3.00	2.75 3.00	2.71 3.00	2.74 2.99	2.74 3.24	2.95 3.50	2.96 3.50	2.88 3.22	2.94 2.98	2.73 3.11
1958 1959	2.72 2.48	1.67 2.40	1.20 2.80	1.26 2.96 3.92	.63 2.90	.93 3.39	.68 3.44	1.53 3.50	1.76 3.76	1.80 3.98	2.27 4.00	2.42 3.99	1.57 3.30
1960 1961 1962	3.99 1.45 2.14	3.97 2.54 2.37	3.84 2.02 2.70	1.50 2.69	3.85 1.98 2.29	3.32 1.73 2.68	3.23 1.16 2.71	2.98 2.00 2.93	2.60 1.88 2.90	2.47 2.26 2.90	2.44 2.62 2.94	1.98 2.33 2.93	3.22 1.96 2.68
1963 1964	2.91 3.48	3.00 3.48	2.98 3.43	2.90 3.47	3.00 3.50	2.99 3.50	3.02 3.42	3.49 3.50	3.48 3.45	3.50 3.36	3.48 3.52	3.38 3.85	3.18 3.50
1965 1966 1967	3.90 4.42 4.94	3.98 4.60 5.00	4.04 4.65 4.53	4.09 4.67 4.05	4.10 4.90 3.94	4.04 5.17 3.98	4.09 5.30 3.79	4.12 5.53 3.89	4.01 5.40 4.00	4.08 5.53 3.88	4.10 5.77 4.12	4.32 5.40 4.51	4.07 5.11 4.22
1968 1969	4.60 6.30	4.72 6.64	5.05 6.79	5.76 7.41	6.12 8.67	6.07 8.90	6.02 8.61	6.03 9.19	5.78 9.15	5.92 9.00	5.81 8.85	6.02 8.97	5.66 8.21
1970 1971 1972	8.98 4.14 3.50	8.98 3.72 3.29	7.76 3.71 3.83	8.10 4.15 4.17	7.94 4.63 4.27	7.60 4.91 4.46	7.21 5.31 4.55	6.61 5.57 4.80	6.29 5.55 4.87	6.20 5.20 5.04	5.60 4.91 5.06	4.90 4.14 5.33	7.18 4.66 4.43
1973 1974	5.94 9.65	6.58 8.97	7.09 9.35	7.12 10.51	7.84 11.31	8.49 11.93	10.40 12.92	10.50 12.01	10.78 11.34	10.01 10.06	10.03 9.45	9.95 8.53	8.73 10.50
1975 1976 1977	7.13 4.87 4.61	6.24 4.77 4.68	5.54 4.84 4.69	5.49 4.82 4.73	5.22 5.29 5.35	5.55 5.48 5.39	6.10 5.31 5.42	6.14 5.29 5.90	6.24 5.25 6.14	5.82 5.03 6.47	5.22 4.95 6.51	5.20 4.65 6.56	5.82 5.05 5.54
1978 1979	6.70 10.07	6.78 10.06	6.79 10.09	6.89 10.01	7.36 10.24	7.60 10.29	7.81 10.47	8.04 10.94	8.45 11.43	8.96 13.77	9.76 13.18	10.03 13.78	7.93 11.19
1980 1981 1982	13.82 19.08 13.22	14.13 15.93 14.78	17.19 14.70 14.68	17.61 15.72 14.94	10.98 18.52 14.45	9.47 19.10 14.15	9.03 19.04 12.59	9.61 17.82 10.12	10.87 15.87 10.31	12.81 15.08 9.71	15.85 13.31 9.20	18.90 12.37 8.95	13.36 16.38 12.26
1983 1984	8.68 9.56	8.51 9.59	8.77 9.91	8.80 10.29	8.63 10.32	8.98 11.06	9.37 11.23	9.56 11.64	9.45 11.30	9.48 9.99	9.34 9.43	9.47 8.38	9.09 10.23
1985 1986	8.35 8.14 6.43	8.50 7.86 6.10	8.58 7.48 6.13	8.27 6.99 6.37	7.97 6.85 6.85	7.53 6.92 6.73	7.88 6.56 6.58	7.90 6.17 6.73	7.92 5.89 7.22	7.99 5.85 7.29	8.05 6.04 6.69	8.27 6.91 6.77	8.10 6.81 6.66
1987 1988 1989	6.83 9.12	6.58 9.36	6.58 9.85	6.87 9.84	7.09 9.81	7.51 9.53	7.75 9.24	8.01 8.99	8.19 9.02	8.30 8.84	8.35 8.55	8.76 8.45	7.57 9.22
1990 1991	8.23 6.91	8.24 6.25	8.28 6.12	8.26 5.91	8.18 5.78	8.29 5.90	8.15 5.82	8.13 5.66	8.20 5.45	8.11 5.21	7.81 4.81	7.31 4.43	8.10 5.69
1992 1993	4.03 3.02	4.06 3.03	3.98 3.07	3.73 2.96	3.82 3.00	3.76 3.04	3.25 3.06	3.30 3.03	3.22 3.09	3.10 2.99	3.09 3.02	2.92 2.96	3.52 3.02
1948 1949							r confidence (198						
1950 1951													
1952 1953													
1954 1955 1956													
1957 1958													
1959 1960 1961													
1962 1963													
1964 1965													
1966 1967 1968													
1969		138.2 1 <u>01</u> .7		136.6 98.0		137.9 88.1		131.7 91.0		126.8 83.2		126.0 75.7	
1971 1972 1973		77.4 93.6 110.8		75.2 95.1 102.8		82.3 98.9 104.4		82.1 104.1 93.8		80.3 112.0 107.5		85.0 116.1 70.6	
1974 1975		62.7 54.5		95.1 66.4		92.5 72.2		77.3 82.4		54.5 77.6		43.2 93.7	
1976 1977 1978	107.8	101.0 97.6 107.0	104.7	89.5 93.1 109.9	105.5	94.5 98.2 109.5	97.5 105.4	94.6 98.7 108.0	96.7 106.6	87.1 95.5 108.6	98.9 96.5	98.9 109.7 102.2	106.0
1979	99.5 85.9	101.5 85.3	96.4 80.8	94.6 60.5	96.0 50.1	92.7 56.1	81.4 65.4	79.4 70.8	87.8 80.3	92.3 84.2	90.2 87.2	90.7 78.6	91.9 73.8
1981 1982	74.4 64.9	69.0 62.3	77.8 56.7	81.6 57.0	86.9 61.4	83.0 56.7	83.5 63.2	85.7 56.9	77.6 58.1	75.6 54.3	66.9 57.4	66.6 59.5	77.4 59.0
1983 1984 1985	59.0 103.9 102.0	67.6 101.0 103.1	79.4 101.1 96.1	83.1 106.1 104.4	87.7 104.8 99.6	87.5 105.8 102.6	89.0 100.4 103.2	91.2 103.1 100.9	91.1 100.0 96.0	92.1 99.1 96.1	96.7 105.5 98.1	103.6 97.0 98.2	85.7 102.3 100.0
1986 1987	96.9 85.4	96.0 91.8	95.1 95.8	100.0 97.4	100.2 103.0	100.0 102.1	97.5 105.8	91.7 110.7	89.7 115.7	85.8 115.1	89.7 100.8	93.2 107.7	94.7 102.6
1988 1989	109.9 115.8	114.9 120.7	112.7 117.4	115.7 116.6	120.2 116.7	115.7 117.2	113.5 120.4	119.7 115.4	110.7 116.3	116.9 117.0	112.9 115.1	119.4 113.0	115.2 116.8
1990 1991 1992	106.5 55.1 50.2	106.7 59.4 47.3	110.6 81.1 56.5	107.3 79.4 65.1	107.3 76.4 71.9	102.4 78.0 72.6	101.7 77.7 61.2	84.7 76.1 59.0	85.6 72.9 57.3	62.6 60.1 54.6	61.7 52.7 65.6	61.2 52.5 78.1	91.5 68.5 61.6
1993	76.7	68.5	63.2	67.6	61.9	58.6	59.2	59.3	63.8	60.5	71.9	79.8	65.9

YEAR	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
TEAR	Jan.	1 60.	IVICIT.	лρι.	•				Осрі.		NOV.	Dec.	Ailliuai
1948					123. II	ndex of consume	expectations (1	985=100)					
1949 1950													
1951 1952													
1953 1954													
1955													
1956 1957													
1958 1959													
1960 1961													
1962 1963													
1964													
1965 1966													
1967 1968													
1969		119.1 88.8		114.5 92.1		117.4 90.0		111.0 101.0		103.2 97.5		102.9 94.8	
1971 1972		98.9 111.0		98.5 108.8		104.6 107.5		103.4 110.7		100.9 113.3		107.1 114.9	
1973 1974		100.8 53.9		94.4 91.2		92.2 86.8		76.4 70.4		95.6 49.9		45.2 50.5	
1975		69.5 117.9		88.9 100.1		97.8 103.8		107.6 105.1		95.2 99.7		112.1 116.3	
1977	109.4	115.5		100.1 100.9 108.6		99.4 101.0	100.6	100.5 97.4	95.3	97.9 97.7	103.2 82.4	113.1	00.0
1979	82.2	108.2 88.8	107.1 78.0	77.9	99.1 78.5	73.3	93.3 63.1	60.7	95.3 66.9	74.1	73.0	86.1 74.8	98.8 74.3
1980 1981	71.4 85.9	74.1 78.4	70.5 88.1	50.0 93.1	50.0 96.3	62.3 94.0	75.4 94.1	85.0 96.5	93.8 86.6	99.6 84.7	102.9 77.0	91.1 82.8	77.2 88.1
1982 1983	82.5 87.7	78.2 101.1	72.4 116.5	77.6 119.7	83.2 124.3	80.1 121.0	89.2 119.2	80.2 119.3	86.1 117.3	78.6 117.6	84.7 119.5	88.6 123.2	81.8 115.5
1984	122.4 102.5	114.7 103.9	113.1 95.9	119.1 105.1	114.7 99.6	110.6 102.7	104.2 102.5	105.1 102.1	101.4 96.3	102.0 94.5	107.4 96.8	98.7 98.2	109.5 100.0
1986 1987	96.3 85.6	94.4 91.8	95.5 96.8	99.0 100.5	99.4 105.6	99.7 98.2	96.4 105.6	92.0 107.5	89.4 112.5	86.1 108.9	92.0 90.9	92.2 99.6	94.4 100.3
1988 1989	102.2 104.1	105.5 108.3	104.9 104.9	112.8 101.8	114.4 103.0	108.6 105.1	103.7 106.6	109.4 103.7	100.1 106.1	109.3 106.4	102.0 103.7	105.6 104.4	106.5 104.8
1990	97.0	93.7	101.9	99.2	100.3	96.6	91.8	74.2	77.7	55.6	56.1	59.8	83.7
1991	55.3 68.7 98.0	63.6 63.5 84.7	100.7 76.7	99.7 89.7	95.5 96.9	100.9 95.9	100.3 80.1	96.8 78.3	95.4 74.2	79.5 70.7 66.7	69.7 85.7	72.6 103.9	85.8 82.0 77.4
1993	90.0	04.7	77.3	81.1 320. C	73.1 onsumer Price Ir	69.6 ndex for all urban	66.8 consumers, all i	66.8 tems, NSA (1982	72.8 2-84=100)	00.7	80.3	91.8	11.4
1948 1949	23.7 24.0	23.5 23.8	23.4 23.8	23.8 23.9	23.9 23.8	24.1 23.9	24.4 23.7	24.5 23.8	24.5 23.9	24.4 23.7	24.2 23.8	24.1 23.6	24.1 23.8
1950	23.5	23.5	23.6	23.6	23.7	23.8	24.1	24.3	24.4	24.6	24.7	25.0	24.1
1951 1952	25.4 26.5	25.7 26.3	25.8 26.3	25.8 26.4	25.9 26.4	25.9 26.5	25.9 26.7	25.9 26.7	26.1 26.7	26.2 26.7	26.4 26.7	26.5 26.7	26.0 26.5
1953 1954	26.6 26.9	26.5 26.9	26.6 26.9	26.6 26.8	26.7 26.9	26.8 26.9	26.8 26.9	26.9 26.9	26.9 26.8	27.0 26.8	26.9 26.8	26.9 26.7	26.7 26.9
1955 1956	26.7 26.8	26.7 26.8	26.7 26.8	26.7 26.9	26.7 27.0	26.7 27.2	26.8 27.4	26.8 27.3	26.9 27.4	26.9 27.5	26.9 27.5	26.8 27.6	26.8 27.2
1957 1958	27.6 28.6	27.7 28.6	27.8 28.8	27.9 28.9	28.0 28.9	28.1 28.9	28.3 29.0	28.3 28.9	28.3 28.9	28.3 28.9	28.4 29.0	28.4 28.9	28.1 28.9
1959	29.0 29.3	28.9 29.4	28.9 29.4	29.0 29.5	29.0 29.5	29.1 29.6	29.2 29.6	29.2 29.6	29.3 29.6	29.4 29.8	29.4 29.8	29.4 29.8	29.1 29.6
1961 1962	29.8 30.0	29.8 30.1	29.8 30.1	29.8 30.2	29.8 30.2	29.8 30.2	30.0 30.3	29.9 30.3	30.0 30.4	30.0 30.4	30.0 30.4	30.0 30.4	29.9 30.2
1963	30.4 30.9	30.4 30.9	30.5 30.9	30.5 30.9	30.5 30.9	30.6 31.0	30.7 31.1	30.7 31.0	30.7 31.1	30.8 31.1	30.8 31.2	30.9 31.2	30.6 31.0
1965	31.2	31.2	31.3	31.4	31.4	31.6	31.6	31.6	31.6	31.7	31.7	31.8	31.5
1966 1967	31.8 32.9	32.0 32.9	32.1 33.0	32.3 33.1	32.3 33.2	32.4 33.3	32.5 33.4	32.7 33.5	32.7 33.6	32.9 33.7	32.9 33.8	32.9 33.9	32.4 33.4
1968 1969	34.1 35.6	34.2 35.8	34.3 36.1	34.4 36.3	34.5 36.4	34.7 36.6	34.9 36.8	35.0 37.0	35.1 37.1	35.3 37.3	35.4 37.5	35.5 37.7	34.8 36.7
1970 1971	37.8 39.8	38.0 39.9	38.2 40.0	38.5 40.1	38.6 40.3	38.8 40.6	39.0 40.7	39.0 40.8	39.2 40.8	39.4 40.9	39.6 40.9	39.8 41.1	38.8 40.5
1972 1973	41.1 42.6	41.3 42.9	41.4 43.3	41.5 43.6	41.6 43.9	41.7 44.2	41.9 44.3	42.0 45.1	42.1 45.2	42.3 45.6	42.4 45.9	42.5 46.2	41.8 44.4
1974	46.6 52.1	47.2 52.5	47.8 52.7	48.0 52.9	48.6 53.2	49.0 53.6	49.4 54.2	50.0 54.3	50.6 54.6	51.1 54.9	51.5 55.3	51.9	49.3 53.8
1975 1976	55.6	55.8 59.1	55.9 59.5	56.1 60.0	56.5	56.8	57.1 61.0	57.4 61.2	57.6 61.4	57.9 61.6	58.0 61.9	55.5 58.2	56.9
1977 1978	58.5 62.5 68.3	62.9 69.1	63.4 69.8	63.9	60.3 64.5 71.5	60.7 65.2 72.3	65.7 73.1	66.0	66.5 74.6	67.1	67.4	62.1 67.7 76.7	60.6 65.2 72.6
1979 1980	77.8	78.9	80.1	70.6 81.0	71.5 81.8	82.7	82.7	73.8 83.3	84.0	75.2 84.8	75.9 85.5	76.7 86.3	82.4
1981 1982	94.3	87.9 94.6	88.5 94.5	89.1 94.9	89.8 95.8	90.6 97.0	91.6 97.5	92.3 97.7	93.2 97.9	93.4 98.2	93.7 98.0	94.0 97.6	90.9 96.5
1983 1984	97.8 101.9	97.9 102.4	97.9 102.6	98.6 103.1	99.2 103.4	99.5 103.7	99.9 104.1	100.2 104.5	100.7 105.0	101.0 105.3	101.2 105.3	101.3 105.3	99.6 103.9
1985 1986	105.5 109.6	106.0 109.3	106.4 108.8	106.9 108.6	107.3 108.9	107.6 109.5	107.8 109.5	108.0 109.7	108.3 110.2	108.7 110.3	109.0 110.4	109.3 110.5	107.6 109.6
1987 1988	111.2 115.7	111.6 116.0	112.1 116.5	112.7 117.1	113.1 117.5	113.5 118.0	113.8 118.5	114.4 119.0	115.0 119.8	115.3 120.2	115.4 120.3	115.4 120.5	113.6 118.3
1989	121.1	121.6	122.3	123.1	123.8	124.1	124.4	124.6	125.0	125.6	125.9	126.1	124.0
1990 1991	127.4 134.6	128.0 134.8	128.7 135.0	128.9 135.2	129.2 135.6	129.9 136.0	130.4 136.2	131.6 136.6	132.7 137.2	133.5 137.4	133.8 137.8	133.8 137.9	130.7 136.2
1992 1993	138.1 142.6	138.6 143.1	139.3 143.6	139.5 144.0	139.7 144.2	140.2 144.4	140.5 144.4	140.9 144.8	141.3 145.1	141.8 145.7	142.0 145.8	141.9 145.8	140.3 144.5

				пізіої	icai Dat	a for Selec	teu Series-	-continue	u				
YEAR	Jan.	Feb.	Mar.	Apr. 1	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
				320c. Consumer Price			ers, all items, cha	ange over 1-mon	th span (pct.)				_
1948	1.2	0	-0.7	1.4	0.8	0.6	1.0	0.1	-0.3	-0.2	-0.6	-0.5	0.2
1949	2	4	0	0	0	0	9	0	.2	3	.1	4	2
1950	4	.4	.1	0	.5	.5	.8	.5	.6	.7	.4	1.5	.5
1951	1.6	1.8	.2	.2	.3	2	1	2	.7	.5	.6	.6	.5
1952	1 3	2 2	1 .2	.2 .3 .2	.5 0 0	2 .2 .3	.6	0 .2	2	.3 .2 .2	0	.1	.5 .1 0
1953 1954	.3	.2	2	3	.3	0	.1 3	0	.1 –.1	3	4 .2	.1 0	Ō
1955	0	.2	1	0	1	2	.2	−.1	.5	1	.2	0	0
1956	1	.1	.1	.1	.4	.4	.5	.1	.1	.6	0	.4	.2
1957	.1	.5	.2	.3	.3	.4	.3	.3	.1	0	.3	.2	.3
1958	.6	.2	.6	.2	0	1	1	.2	1		.1	.1	.1
1959	.1	0	1	0	.2	.2	.1	.1	.2	.3	0	.2	.1
1960	–.1	.1	0	.4	.1	.1	–.2	.2	0	.5	.1	.1	.1
1961	.1	0	0	1	.1	0	.3	.1	.1	0	0	.1	.1
1962	.1	.2	.2	.1	.1	1	0	.2	.5	1		0	.1
1963	.2	.1	.1	1	.1	.3	.3	.2	−.1	.1	.1	.3	.1
1964	.2	1	.1	0	.1	.1	0	.1	.1	.1	.3	.1	.1
1965	.1	0	.1	.2	.3	.4	1	1	.2	.1	.3	.3	.2
1966	.1	.6	.3	.3	.2	.1	.2	.6	.3	.3	.1	.1	.3
1967 1968	1 .3	.3	0 .3	.3	0 .3	.6 .6	.3	.3	.3	.3	.6 .3	.3	.3
1969 1970	.3 .5	.3 .5	.8 .5	.6 .5	.3 .3	.5 .5	.5 .3	.3 .3	.5 .5	.5 .5	.5	.5 .5	.5
1971 1972	.3 .2	.5 .5	.3 0	.3 .2 .7	.5 .5	.5 .5	.2 .2	.2 .2	.2 .5	.2 .2	.5 .2 .5	.2 .2	.5 .3 .3 .7
1973 1974	.5 1.1	.7 1.1	.9 1.1	.7 .6	.5 1.0	.7 .8	0 .6	1.8 1.2	.4 1.4	.9 .8	.7 1.0	.9 .8	.5 .7 1.0
1975	.8	.6	.4	.4	.2	.8	.9	.4	.7	.5	.7	.5	.6
1976	.4	.2	.2	.2	.5	.5	.5	.5	.5	.5	.3	.5	.4
1977	.5	1.0	.5	.7	.3	.5	.5	.5	.3	.5	.6	.5	.5
1978	.6	.5	.6	.8	.9	.8	.8	.6	.9	.9	.6	.6	.7
1979	.9	1.0	1.0	1.0	1.1	1.1	1.1	1.0	.9	1.1	1.1	1.2	1.0
1980	1.4	1.3	1.4	1.0	1.0	1.0	.1	.7	.8	1.0	1.1	.9	1.0
1981	.9	.9	.7	.6	.7	.9	1. <u>1</u>	.8	1.0	.3	.4	.3	.7
1982	.3	.3	0	.3	.9	1.1	.5	.2	0	.4	1	3	.3
1983	. <u>2</u>	. <u>1</u>	.1	.7	.4	.2	.4	.3	.3	.4	.3	.3	.3
1984	.7	.5	.3	.4	.2	.2	.4	.3	.3	.4	.2	.2	.3
1985	.2	.6	.5	.2	.2	.3	.2	.2	.2	.4	.5	.5	.3
1986 1987	.4 .6	2 .4	5 .4	4 .4	.2 .3 .3	.4 .4	.1 .3	.1 .4	.4 .3	.2 .3	.2 .3	.4 .2	.1 .4
1988	.3	.1	.3	.5	.3	.4	.4	.3	.5	.3	.3	.3	.3
1989	.4	.3	.5	.7	.5	.2	.4	0	.2	.5	.3	.4	.4
1990	.9	.4	.5	.2	.2	.6	.5	.8	.7	.6	.4	.3	.5
1991	.4	.1	.1	.2	.3	.2	.3	.2	.3	.1	.4	.3	.2
1992 1993	.1	.1 .4	.4	.2	.2	.4 .1	.2	.3	.1	.4	.3	.2	.2
				20c. Consumer Price									
1948	8.1	8.4	6.4	6.2	6.5	7.5	4.2	1.3	8	−3.2	-4.2	-3.7	3.1
1949	-3.2	-2.1	-1.1	-2.6	-1.7	-1.3	-2.1	-1.7	-2.6	−1.6	8	9	-1.8
1950	2	.6	2.3	4.8	5.1	6.0	7.3	7.1	9.4	11.2	13.9	13.1	6.7
1951	11.9	11.6	7.8	4.2	.2	1.2	1.9	2.6	4.2	4.2	4.3	2.8	4.7
1952	2.3	1.1	.5	1.7	2.1	1.8	1.7	1.7	1.4	3	7	0	1.1
1953	0	.1	.4	1.1	2.0	2.0	2.0	1.1	.7	1.1	1.0	.3	1.0
1954	7	.6	.5	−.6	−1.0	9	-1.0	-1.1	-1.3	7	2	1	5
1955	.5	–.1	4	−.1	−.7	4	.2	.8	1.2	.5	1.1	.3	.3
1956	.8	1.1	2.1	3.5	3.4	3.5	4.4	3.6	3.6	2.8	3.6	3.8	3.0
1957	3.1	3.6	3.5	3.8	3.5	3.3	2.8	3.0	2.6	3.2	3.0	3.9	3.3
1958	4.4	3.8	3.1	1.8	1.7	.3	2	.1	.4	.8	.4	.4	1.4
1959	.5	.6	1.0	1.0	1.2	1.9	2.6	2.1	2.1	1.5	1.6	1.1	1.4
1960	1.3 .4	1.5 .4	1.4 .2	1.2 .5	1.4 .7	1.4 .9	1.4 1.1	1.4 .9	1.4 1.1	2.0	1.6 1.1	1.6 1.3	1.5 .8
1961 1962 1963	1.5 .7	1.7 .9	1.3 1.5	1.2 1.6	1.1 1.8	1.7 1.4	1.1 1.8	.9 1.8	1.1 1.8	1.5 1.6	1.3 1.0	.6 1.4	1.3 1.4
1964	1.3	1.3	.8	.5	.9	.9	1.1	1.5	1.6	1.7	1.5	1.5	1.2
1965 1966	1.7 4.0 1.5	1.7 3.8	2.3 3.4 2.3	1.9 3.6 3.1	1.7 3.6 3.1	2.0 3.6	1.7 3.6 3.7	1.7 3.3	1.5 3.4 4.2	1.9 2.8	3.4 2.2 4.2	3.6 1.5 4.2	2.1 3.2 3.4
1967 1968	4.2 5.7	1.3 3.6 5.7	4.2 5.7	4.7 6.3	4.7 6.2	3.7 4.7 5.6	5.7 5.3 5.6	4.9 5.3 6.1	5.3 6.1	4.2 4.6 6.1	4.6	5.8 6.6	4.8 6.0
1969 1970	6.5	6.0	5.9	5.3	4.8	4.8	4.7	5.2	5.2	6.1 5.2	6.6 4.7	4.1	5.2 3.5
1971	3.6	3.6	3.5	3.5	4.1	4.0	4.0	3.5	3.0	3.0	3.5	3.0	3.7
1972	3.0	2.9	2.9	2.9	2.4	3.4	3.4	3.9	3.9	4.4	5.3	6.3	
1973	7.2	7.2	8.2	7.1	9.5	8.5	8.9	9.3	9.7	12.1	10.5	11.8	9.2
1974	11.3	12.1	12.0	11.0	11.3	12.1	12.4	12.3	12.2	12.5	11.1	8.9	11.6
1975	8.0	6.3	6.3	6.6	6.2	6.9	7.3	8.5	8.0	6.8	6.4	5.2	6.9
1976	4.4	4.0	4.0	4.3	5.1	5.8	6.5	6.1	6.1	6.1	7.1	7.1	5.6
1977	7.4	7.4	7.3	7.3	6.2	5.8	5.4	6.1	6.0	6.3	6.3	7.0	6.5
1978	7.6	8.2	8.9	9.1	9.4	10.0	10.3	9.5	9.1	9.4	10.3	10.5	9.4
1979	10.7	11.9	13.1	13.6	13.4	13.3	13.5	13.3	13.4	14.2	14.9	15.9	13.4
1980	15.7	15.6	15.1	12.1	10.9	9.7	9.6	9.8	9.7	11.4	11.9	11.5	11.9
1981	10.7	9.8	9.7	10.1	9.8	10.4	9.9	9.4	8.1	6.4	5.5	3.5	8.6
1982	3.5	4.5	6.3	6.7	6.4	6.4	6.6	4.4	1.4	.8	.6	.8	4.0
1983	1.4	2.5	3.5	3.9	4.3	4.7	4.1	3.9	4.1	4.7	5.1	5.0	3.9
1984	5.0	4.8	4.6	4.0	3.5	3.5	3.5	3.5	3.5	3.1	3.7	4.1	3.9
1985	3.6	3.6	3.8	3.8	3.0	2.4	2.8	3.4	3.8	4.1	3.4	1.9	3.3
1986	.4	0	2	7	2	1.7	2.8	2.6	2.6	3.7	4.2	4.2	1.8
1987	4.8	5.0	5.1	4.4	4.5	4.5	4.1	4.3	3.7	3.9	3.2	3.2	4.2
1988	3.7	3.7	4.2	4.4	4.9	5.2	4.8	4.8	4.6	4.6	4.6	4.6	4.5
1989	5.4	5.7	5.5	5.5	4.8	4.3	3.8	3.4	3.7	4.7	5.5	6.2	4.9
1990 1991	5.7 2.9 3.2	5.3 2.7 2.8	5.8 2.5 2.9 2.8	4.9 2.4 3.2	5.9 2.7 3.5	6.2 3.1	6.9 3.0 3.2	7.4 3.3	6.7 3.4 3.0	6.5 3.0 3.0	4.9 2.8 3.1	3.7 3.1 3.3	5.8 2.9 3.1
1992 1993	3.3	3.1	2.8	3.2 2.7	3.5 2.5	2.9 2.2	3.2 2.2	3.3 2.4	3.0 2.6	3.0 2.4	3.1 2.4	3.3 2.9	3.1 2.6

Note.—Data are centered within the spans: 1-month changes are placed on the 2d month, and 6-month changes are placed on the 4th month.

AR Annual rate

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