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## Survey of Current Business


U.S. DERARTMENT OF COMMERCE ~ ECONOMICS AND STATISTICS ADMINISIRATION bureav of economic anaiysis

# SURVEY of Current Business 

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# TABLE <br> O F <br> C O N T E N T S 

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## 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 (red) in the U.S. economy. In the R夭D satellite account, RevD expenditures are treated as a form of investment, and the resulting investment flows are used to estimate stocks of RoD fixed intangible capital. The stock of Reb capital grew rapidly during 1953-70, slowed sharply during 1970-81, and then grew somewhat more rapidly. Adding the constant-cost net stock of RerD fixed capital to the NIPA constantcost 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). ${ }^{1}$ 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, o. 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

[^0]Table 1.-Real Gross Domestic Product, by Major Type of Product
[Seasonally adjusted at annual rates]

|  | Billions of 1987 dollars |  |  |  |  | Percent change from preceding quarter |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Change from preceding quarter |  |  |  |  |  |  |  |
|  |  | 1993 | 1994 |  |  | 1993 | 1994 |  |  |
|  | 1994:III | IV | 1 | 11 | III | N | 1 | 11 | III |
| Gross domestic product ... | 5,365.0 | 78.6 | 43.1 | 53.0 | 50.9 | 6.3 | 3.3 | 4.1 | 3.9 |
| Goods ........................... | 2,236.1 | 57.3 | 33.3 | 32.5 | 34.8 | 11.5 | 6.4 | 6.1 | 6.5 |
| Motor vehicles ............ | 228.4 | 22.2 | 18.0 | -12.2 | 5.0 | 53.8 | 37.4 | -19.2 | 9.3 |
| Other ........................ | 2,007.7 | 35.1 | 15.3 | 44.7 | 29.8 | 7.7 | 3.2 | 9.6 | 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 |

[^1]increases in personal consumption expenditures, nonresidential fixed investment, and government

## CHART 1

## Real Product:

 Change from Preceding Quarter
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 dollars |  |  |  |  | Percent change from preceding quarter |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Change from preceding quarter |  |  |  | $\frac{1993}{\text { IV }}$ | 1994 |  |  |
|  |  | 1993 | 1994 |  |  |  |  |  |  |
|  | 1994:111 | IV | 1 | 11 | III |  | 1 | 1 |  |
|  | 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 $\qquad$ <br> Plus: Imports of goods and services $\qquad$ | $\begin{aligned} & 662.7 \\ & 783.5 \end{aligned}$ | 29.9 25.8 | -5.6. | 24.3 32.0 | $\begin{aligned} & 18.8 \\ & 27.9 \end{aligned}$ | 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 $\qquad$ Nonresidential fixed investment | 3,586.4 | 34.0 29.3 | 40.1 <br> 16.4 | 11.5 14.3 | 28.6 | 4.0 21.1 | 4.7 10.9 | 1.3 9.2 | 3.3 14.4 |
|  | 229.9 | 13.5 | 5.4 | 3.9 | -3.9 | 28.2 | 10.0 | 7.0 | -6.5 |
| Government purchases ............................................................. | 933.0 | -. 3 | -11.6 | -2.8 | 15.9 | -. 1 | -4.9 | -1.2 | 7.1 |

NOTE.-Doliar 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]

|  | Billions of 1987 dollars |  |  |  |  | Percent change from preceding quarter |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Change from preceding quarter |  |  |  | I993 | 1994 |  |  |
|  |  | $\frac{1993}{\mathrm{NV}}$ | 1994 |  |  |  |  |  |  |
|  | 1994:111 |  | 1 | 11 | III |  | 1 |  |  |
| 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 | 18.1 | 10.9 | . 5 | 8.0 | 15.5 | 8.8 | 4 | 6.3 |
| Motor vehicles and parts ............................................................... | 202.8 | 9.7 | 9.0 | -8.4 | -2.5 | 21.4 | 18.8 | -14.8 | -4.8 |
| New autos | 78.9 <br> 42.6 | 7.2 5.1 | -1.6 1.0 | -1.8 -2.4 | -4.9 -2.7 | 41.2 <br> 58.8 | -7.1 8.8 | -8.18 -18.7 | -21.4 -21.8 |
| Other .... | 81.3 | -2.6 | 9.6 | -4.2 | 5.1 | -13.4 | 66.3 | -19.3 | 29.6 |
|  | 241.5 | 8.0 | 1.3 | 6.6 | 9.0 | 15.6 | 2.3 | 12.2 | 16.4 |
| Other ............................................................................. | 86.0 | . 4 | . 5 | 2.4 | 1.6 | 2.0 | 2.5 | 12.2 | 7.8 |
| Nondurable goods .... | 1,113.2 | 6.3 | 10.3 | 6.0 | 8.9 | 2.4 | 3.8 | 2.2 | 3.3 |
| Food. | 536.0 | 3.0 | 3.8 | 4.2 | -1 | 2.3 | 2.9 | 3.2 | - 10 |
|  | 210.1 | 3.8 | 1.4 | 1.1 | 5.2 | 7.9 | 2.8 | 2.2 | 10.5 |
|  | 99.4 2677 | -. 4 | .7 4 | -1.4 2.0 | 1.3 2.6 | -3.6 | 2.9 <br> 6 | -5.5 3.1 | 5.4 4.0 |
| Other .................................................................................. |  |  |  |  |  |  |  |  |  |
|  | 1,943.0 | 9.6 | 18.9 | 5.1 | 11.6 | 2.0 | 4.0 | 1.1 | 2.4 |
| Housing .................................................................................. | 502.5 | 1.7 | 2.3 | 2.3 | 2.5 | 1.4 | 1.9 | 1.9 | 2.0 |
| Household operation .................................................................... | 228.0 | -. 5 | 1.8 | . 4 | -1.1 | -. 9 | 3.2 | 75 | -1.9 |
| Energy ${ }^{2}$..................................................................... | 97.1 | -. 3 | 1.5 | -. 9 | -3.1 | -1.2 | 6.2 | -3.5 | -11.8 |
| Other household operation ....................................................... | 131.0 | -. 3 | . 5 | 1.2 | 2.1 | -.9 | 1.6 | 3.8 | 6.7 |
|  | 132.5 | 1.4 | 1.1 | . 9 | . 7 | 4.4 | 3.4 | 2.8 | 2.1 |
|  | 480.6 | 2.8 | 2.8 | 4.2 | 3.2 | 2.4 | 2.4 | 3.6 | 2.7 |
| Other .................................................................................. | 599.4 | 4.2 | 11.0 | -2.8 | 6.3 | 2.9 | 7.7 | -1.9 | 4.3 |
| 1. Gasoline and oil, and fuel oil and coal. 2. Electricity and gas. |  | NOTE,tables 8.4 | $\begin{aligned} & i \text { r levels } \\ & \text { id 8.6. } \end{aligned}$ | Ound ing | ma ta | 23. New gregates are | $\begin{aligned} & \text { nd trr } \\ & \text { nd in } \end{aligned}$ | urchases 8.1. | found |


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). Struc-

Table 4.-Real Gross Private Domestic Fixed Investment
[Seasonally adjusted at annual rates]

|  | Billions of 1987 dollars |  |  |  |  | Percent change from preceding quarter |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Change from preceding quarter |  |  |  | 1993 | 1994 |  |  |
|  |  | 1993 | 1994 |  |  | IV | 1 | II | ili |
|  | 1994:111 | IV | 1 | 11 | 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 ................................................................................ | 152.1 | 1.2 | -4.6 | 6.9 | 1.1 | 3.3 | -11.8 | 20.6 | 2.9 |
| Nonresidential buildings, including farm ........................................ | 105.7 | 2.2 | -3.5 | 6.2 | . 3 | 9.0 | -13.0 | 27.4 | 1.1 |
| Utilities ................................................................................ | 29.7 | 0 | -. 1 | . 6 | . 7 | 0 | -1.4 | 8.7 | 10.0 |
| Mining exploration, shafts, and wells ......................................... | 9.4 | -. 6 | -. 3 | . 2 | -. 4 | -21.0 | -11.6 | 8.6 | -15.4 |
| Other .................................................................................. | 7.4 | -. 4 | -. 7 | -. 1 | . 6 | -18.5 | -32.1 | -5.7 | 40.2 |
| Producers' durable equipment ...................................................... | 528.3 | 28.2 | 20.9 | 7.5 | 21.4 | 27.5 | 18.6 | 6.1 | 18.0 |
| Information processing and related equipment .............................. | $251: 1$ | 16.3 | 8.0 | 9.0 | 8.9 | 35.1 | 15.0 | 16.4 | 15.5 |
| Computers and peripheral equipment ...................................... | 135.0 | 10.3 | 4.7 | 3.1 | 4.7 | 42.1 | 16.3 | 10.1 | 15.2 |
| Other .................................................................................. | 116.1 | 6.0 | 3.3 | 5.8 | 4.3 | 27.2 | 13.5 | 23.7 | 16.3 |
| Industrial equipment ................................................................ | 92.1 | 3.7 | 2.8 | 2.5 | 3.2 | 19.8 | 14.1 | 12.1 | 15.2 |
| Transportation and related equipment ......................................... | 99.1 | 5.6 | 7.6 | -6.2 | 6.8 | 29.0 | 37.9 | -22.9 | 32.9 |
| Motor vehicles .................................................................... | 90.2 | 5.0 | 9.0 | -3.9 | 5.9 | 29.8 | 53.8 | -16.5 | 31.1 |
| Other ............................................................................... | 8.9 | . 6 | -1.4 | -2.3 | . 9 | 23.4 | -39.9 | -63.6 | 53.2 |
| Other ................................................................................... | 86.0 | 2.7 | 2.4 | 2.3 | 2.4 | 14.9 | 12.7 | 11.8 | 12.0 |
| Residential .................................................................................................... | 229.9 | 13.5 | 5.4 | 3.9 | -3.9 | 28.2 | 10.0 | 7.0 | -6.5 |
| Single-family structures ................................................................................................................ | 123.9 | 8.1 | 6.8 | 2.5 | -3.7 | 32.8 | 25.1 | 8.2 | -11.1 |
| Multifamily structures ................................................................. | 12.0 | -. 2 | . 3 | 1.3 | . 7 | -7.8 | 13.0 | 63.0 | 27.2 |
| Other ........................................................................................ | 94.0 | 5.5 | -1.7 | 2 | -1.0 | 26.5 | -6.9 | . 8 | -4.1 |

NOTE.-Dollar levels are found in NIPA table 5.5. Motor vehicles are found in tables 8.4 (autos) and 8.6 (trucks). Percent changes in major aggregates are found in table 8.1.
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 |  |  | $\frac{1993}{\text { IV }}$ | 1994 |  |  |
|  | III | IV | 1 | 11 | II |  | 1 | 11 | 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 |
| Nonlarm .... | 20.92.56.8 | 10.7-7.7 | $\begin{gathered} 22.1 \\ 9.9 \end{gathered}$ | $\begin{array}{r} 51.7 \\ 17.7 \end{array}$ | $\begin{array}{r} 46.3 \\ 3.6 \end{array}$ | $\begin{aligned} & -10.2 \\ & -10.2 \end{aligned}$ | 11.4 | 29.6 | $\begin{array}{r}-5.4 \\ 2.9 \\ \hline\end{array}$ |
| Manufacturing .......................................................................... |  |  |  |  |  |  | -1.7 | -9.2 |  |
| Wholesale trads ......................................................................... | 6.8 6.2 | 5.7 | -1.0 | 17.7 | 15.3 | -6.1 |  | 18.7 | -2.4 |
|  | $\begin{array}{r}-7.4 \\ \hline 13.6\end{array}$ | $\begin{array}{r}-4.5 \\ \hline 9.5\end{array}$ | 2.5 | -1.924.2 | 6.913.813.8 | $\begin{array}{r}-1.2 \\ 2.9 \\ \hline\end{array}$ | 7.0 | -4.4 | 8.8-10.4 |
| Other retail trade .................................................................................... |  |  |  |  |  | -4.1 | -10.0 |  |  |
| Other ............................................................................... | 5.3 | 12.7 | 11.3 | 11.0 | 6.6 | 7.4 | -1.4 | -. 3 | -4.4 |
| Addenda: Molor vehicles ............................................................................ | $\begin{array}{r} -6.7 \\ 27.6 \end{array}$ | $10.6$ | $\begin{gathered} -1.9 \\ 24.0 \end{gathered}$ | $\begin{array}{r} 3.5 \\ 48.2 \end{array}$ | $\begin{array}{r} 7.2 \\ 39.1 \end{array}$ | $\begin{array}{r} 7.3 \\ -17.5 \end{array}$ | $\begin{gathered} -2.5 \\ 13.9 \end{gathered}$ | 5.424.2 | 3.7-9.1 |
| Nonfarm less motor vehicles .......................................................... |  |  |  |  |  |  |  |  |  |

Note.-Dollar levels for change in real business inventories are found in NIPA table 5.11. Motor vehicles are found in tables 8.4 (autos) and 8.6 (trucks).

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 thirdquarter 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 13 th 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. ${ }^{2}$
2. The third-quarter increase in purchases of services primarily reflected smaller sales of services by government in the third quarter than in the second.

Table 6.-Real Net Exports of Goods and Services
[Seasonally adiusted at annual rates]

|  | Billions of 1987 dollars |  |  |  |  | Percent change from preceding quarter |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Change from preceding quarter |  |  |  | 1993 | 1994. |  |  |
|  |  | 1993 | 1994 |  |  |  | 1 | 11 | III |
|  | 1994:III | IV | I | II | III |  |  |  |  |
| Net exports of goods and services ................................................... | -120.8 | 4.1 | $-21.8$ | -7.8 | -9.0 | ............. | ............. | ............. | ............. |
| Exports of goods and services .......................................................... | 662.7 | 29.9 | -5.6 | 24.3 | 18.8 | 21.7 | -3.5 | 16.6 | 12.2 |
| Goods ........................................................................................................................... | 505.0 | 29.6 | -3.7 | 20.2 | 20.4 | 29.9 | -3.1 | 18.6 | 17.9 |
| Agricultural products ................................................................................. | 40.6 | 2.2 | -2.5 | . 9 | 3.1 | 26.1 | -23.2 | 10.2 | 37.4 |
| Nonagricultural products ......................................................... | 464.4 | 27.5 | -1.3 | 19.3 | 17.3 | 30.3 | -1.2 | 19.3 | 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 | 25.8 | 16.2 | 32.0 | 27.9 | 16.0 | 9.5 | 18.9 | 15.6 |
|  | 674.4 | 22.8 | 15.3 | 33.1 | 26.1 | 16.8 | 10.6 | 23.3 | 17.1 |
| Petroleum and products .................................................................................................................................. | 64.4 | 1.4 | -1.6 | 3.8 | 4.1 | 10.2 | -10.6 | 29.7 | 30.1 |
| Nonpetroleum products ............................................................. | 609.9 | 21.4 | 16.8 | 29.3 | 22.0 | 17.5 | 13.0 | 22.7 | 15.8 |
| Services .................................................................................. | 109.2 | 3.1 | . 9 | -1.1 | 1.8 | 12.4 | 3.4 | -4.0 | 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 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Level | Change from preceding quarter |  |  |  | $\frac{1993}{\text { IV }}$ | 1994 |  |  |
|  |  | 1993 | 1994 |  |  |  | 1 |  |  |
|  | 1994:111 | IV | 1 | II | III |  | 1 | 1 | II |
| Government purchases ..................................................................... | 933.0 | -0.3 | -11.6 | -2.8 | 15.9 | -0.1 | -4.9 | -1.2 | 7.1 |
| Federal ........................................................................................ | 344.7 | -4.5 | -9.4 | -7.0 | 10.0 | -5.0 | -10.3 | -7.9 | 12.5 |
| National defense | 233.4 | -2.2 | -10.2 | -2.4 | 7.3 | -3.6 | -16.0 | -4.1 | 13.6 |
| Nondefense ............................................................................. | 111.2 | -2.3 | . 8 | -4.5 | 2.5 | -7.8 | 2.9 | -15.0 | 9.5 |
| State and local ................................................................................. | 588.4 | 4.2 | -2.1 | 4.1 | 6.0 | 2.9 | -1.4 | 2.9 | 4.2 |
| Structures ................................................................................. | 90.6 | 2.0 | -6.0 | 1.7 | 2.5 | 9.1 | -23.6 | 8.1 | 11.8 |
| Other ....................................................................................... | 497.8 | 2.2 | 3.9 | 2.4 | 3.5 | 1.8 | 3.2 | 2.0 | 2.9 |

[^2]8.1.

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

## Revisions

The preliminary third-quarter estimate of a 3.9percent 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-

[^3]corporation of newly available data for September on trade in goods. ${ }^{3}$
The third-quarter increase in the fixedweighted price index for gross domestic purchases was revised up 0.2 percentage point. The

[^4]Table 8.-Revisions to Real Gross Domestic Product and Prices, Third Quarter 1994
[Seasonally adjusted at annual rates]

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

1. Based on 1987 weights.

NOTE.-Preliminary estimates for the third quarter of 1994 incorporate the following revised or additional major source data that 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 car purchases 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 Septermber, 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 (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.
increase in the price index for GDP was revised up 0.1 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 profitsas the prices that corporations received increased

[^5]Table 9.-Corporate Profits
[Seasonally adjusted at annual rates]

|  | Level | Change from preceding quarter |  |
| :---: | :---: | :---: | :---: |
|  | 1994:111 | 1994:11 | 1994:\||1 |
|  | Billions of dollars |  |  |
| Profits from current production ... | 557.1 | 38.2 | 10.7 |
| Domestic |  |  |  |
| Financial | 95.8 | 16.0 | 4.9 |
| Rest of the world .............................................. | 61.2 | 22.5 -.4 | 5. 5 |
| IVA | -19.6 | -1.8 | -5.5 |
| CCAdi ...................................... | 37.5 |  |  |
| Profits before tax ........................................... | 539.2 | 39.6 | 16.1 |
| Profits tax liability ........................................... | 208.7 | 17.6 | 7.0 |
| Profits atter tax .......................................... | 330.5 | 22.0 | 9.1 |
| Cash flow from current production ......................... | 573.1 | 8.3 | 4.9 |
| Profits by industry: |  |  |  |
| Profits before tax with IVA ................................... | 519.6 | 37.8 | 10.6 |
| Domestic | 458.3 | 38.1 | 10.1 |
| Financial | 111.8 | 16.8 | 5.4 |
| Nonfinancial | 346.6 | 21.3 | 4.8 |
| Manutacturing ................................... |  | -2.1 |  |
| Trade |  | 3.0 | . |
|  |  | 9.8 | ........... |
| Rest of the world ........................................................... | 61.2 | -. 6 |  |
| Recipits (inflows) | 88.7 | 1.5 | 9.6 |
|  | 27.4 | 1.8 | 9.0 |
|  | Dollars |  |  |
| Unit prices, costs, and profits of domestic <br> nonfinancial corporations: <br> Unit price <br> Unit labor cost $\qquad$ $\qquad$ <br> Unit nonlabor cost $\qquad$ |  |  |  |
|  | 1.175 | 0.005 | 0.005 |
|  | . 768 | . 003 | . 002 |
|  | . 278 | -. 003 | . 002 |
|  | . 128 | . 005 | . 01 |

[^6] and 7.15.
IVA Inventory valuation adjusiment
CCAdi Capital consumption adjustment
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. ${ }^{5}$ 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.

[^7]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. Secondquarter 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 slowdown 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
[Bilions of dollars, seasonally adjusted at annual rates]

|  | $\begin{array}{\|c\|} \hline \text { Level } \\ \hline \text { 1994: III } \\ \hline \end{array}$ | Change from preceding quarter |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1993 |  | 1994 |  |  |
|  |  | III | IV | 1 | II | III |
| Government sector |  |  |  |  |  |  |
| Receipts | 2138.7 | 15.8 | 54.5 | 31.1 | 55.4 | 16.8 |
| Expenditures | 2269.7 | 5.2 | 39.1 | -3.4 | 22.4 | 29.7 |
| Surplus or deficit ( - ) .............................................. | -131.0 | 10.6 | 15.4 | 34.5 | 33.0 | -12.9 |
| Federal Govemment |  |  |  |  |  |  |
| Receipts ......................................................... | 1388.5 | 9.0 | 40.9 | 23.9 | 43.2 | 7.8 |
| Personal tax and nontax receipts ................................ | 566.5 | 7.7 | 9.3 | 13.4 | 20.9 | -4.6 |
| Corporate profits tax accruals .................................... | 172.5 | -1.6 | 17.6 | -6.0 | 14.5 | 6.2 |
| Indirect business tax and nontax accruals .................... | 91.9 | -1.2 | 8.4 | -. 3 | 0 | 1.5 |
| Contributions for social insurance ................................ | 557.5 | 4.1 | 5.6 | 16.8 | 7.9 | 4.5 |
| Expenditures .................................................... | 1543.6 | -3.0 | 36.1 | -20.0 | 12.2 | 17.7 |
| Purchases ............................................................ | 444.4 | -2.5 | -2.9 | -2.0 | -2.7 | 9.3 |
| National defense | 300.5 | -6.8 | . 1 | -7.4 | 0 | 8.8 |
| Nondefense ................................................... | 143.9 | 4.2 | -2.9 | 5.4 | -2.6 | . 4 |
| Transfer payments (net) ........................................... | 683.6 | 7.4 | 13.9 | -2.6 | 4.7 | 7.4 |
| To persons ... | 668.6 | 6.0 | 3.9 | 10.1 | 3.6 | 5.1 |
| To rest of the world ............................................. | 15.1 | 1.4 | 10.0 | -12.7 | 1.1 | 2.4 |
| Grants-in-aid to State and local governments ................ | 200.3 | 4.9 | 9.2 | -7.0 | 4.4 | 5.9 |
| Net interest paid ........................................ | 194.4 | -1.2 | -. 1 | -4.2 | 9.5 | 5.6 |
| Subsidies less current surplus of government enterprises | 20.9 | -11.8 | 16.0 | -4.2 | -3.8 | -10.4 |
| Subsidies ............................................................. | 25.9 | -11.3 | 15.5 | -3.9 | -3.1 | -8.7 |
| Of which: Agricultural subsidies ....... | . 5 | -11.7 | 15.5 | -4.9 | -3.4 | -8.4 |
| Less: Current surplus of government enterprises ........ | 5.0 | . 4 | -. 5 | . 3 | . 7 | 1.7 |
| Less: Wage accruals less disbursements ..................... | 0 | 0 | 0 | 0 | 0 | 0 |
| Surplus or deficit ( - ) ......................................... | -155.1 | 12.1 | 4.8 | 43.9 | 31.1 | -10.0 |
| State and local govemments |  |  |  |  |  |  |
| Receipts .......................................................... | 950.5 | 11.7 | 22.8 | . 3 | 16.5 | 14.9 |
| Personal tax and nontax receipts ............................... | 177.3 | 1.8 | 2.3 | 2.7 | 2.4 | 2.0 |
| Corporate profits tax accruals .................................... | 36.3 | -. 3 | 4.0 | -1.4 | 3.1 | . 9 |
| Indirect business tax and nontax accruals .................... | 465.4 | 4.5 | 6.6 | 5.2 | 5.8 | 5.4 |
| Contributions for social insurance ............................... | 71.3 | 7 | . 7 | . 8 | . 8 | . 8 |
| Federal grants-in-aid ................................................ | 200.3 | 4.9 | 9.2 | -7.0 | 4.4 | 5.9 |
| Expenditures ................................................... | 926.3 | 13.1 | 12.2 | 9.6 | 14.7 | 17.7 |
| Purchases ............................................................. | 744.3 | 9.0 | 7.2 | 4.6 | 9.5 | 12.8 |
| Of which: Structures ............................................ | 105.8 | 3.4 | 3.0 | -5.8 | 2.3 | 4.3 |
| Transter payments to persons ................................... | 277.0 | 5.2 | 5.7 | 5.7 | 6.4 | 6.3 |
| Net interest paid ..................................................... | -55.1 | -. 1 | -. 2 | -. 5 | -. 5 | -. 5 |
| Less: Dividends received by government ...................... | 10.9 | . 1 | . 1 | . 2 | . 1 | . 1 |
| Subsidies less current surplus of government enterprises | -28.9 | -. 9 | -. 4 | -. 1 | -. 6 | $-6$ |
| Subsidies .......................................................... | . 4 | 0 | 0 | 0 | 0 | 0 |
| Less. Current surplus of government enterprises ........ | 29.2 | . 8 | . 4 | . 2 | . 6 | . 5 |
| Less: Wage accruals less disbursements ..................... | 0 | 0 | 0 | 0 | 0 | 0 |
| Surplus or deficit (-) ......................................... | 24.1 | -1.4 | 10.6 | -9.3 | 1.8 | -2.9 |
| Social insurance funds ............................................. | 65.3 | -. 1 | -. 1 | -. 3 | 0 | -. 6 |
| Other ................................................................... | -41.2 | -1.3 | 10.7 | -9.0 | 1.8 | -2.3 |

[^8]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. ${ }^{1}$ 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. ${ }^{2}$ 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. ${ }^{3}$ Thus, personal income and personal saving will each be raised by $\$ 3.0$ billion. In addition, the corrections will

[^9]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]

| State and local govermment receipts and expenditures: |  |
| :---: | :---: |
| Reccipts | -3.4 |
| Indirect business tax and nontax liability ............................ | $-3.4$ |
| Property taxes ........................................................ | -3.4 |
|  | 0 |
| Surplus or deficit ( - ), NIPA's | -3.4 |
| Other NIPA estimates: |  |
| Gross domestic product | 0 |
| Less: Indirect business tax and nontax liability ........................ | . 4 |
| Statistical discrepancy ................. | 3 |
| Equals: National income ...... | 3.1 |
| Proprietors' income with IVA and CCAdj ............................. | . 5 |
| Farm ............................... | . |
| Nonfarm ............................................................. |  |
| Rental income of persons with CCAdj .............................. | 2.5 |
| Corporate profits with IVA and CCAdj .............................. | . 2 |
| Less: Corporate profits with IVA and CCAdj ............................ | . 2 |
| Equals: Personal income ................................................... | 3.0 |
| Less: Personal tax and nontax payments ............................... |  |
| Equals. DPI ........................................................................ | 3.0 |
| Less. Personal outlays ................................................... |  |
| Equals: Personal saving ................................................... | 3.0 |
| Addenda: |  |
| Personal saving as percent of DPI |  |
| DPI, 1987 dolilars ...... | 2.3 |
| Nonfarm business procuct | -3 |
| Nonfarm business product, 1987 dollars ............................ | . 2 |
| DPI Disposable personal income IVA Inventory valuation adjustment CCAd 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 PRODUCTACCOUNTS <br> <br> Selected NIPA Tables 

 <br> <br> 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 call (202) 606-9700.

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 Survex | Aug. 1993 Survey | July 1994 Survey |
| Tables 1.15, 1.16 , and 7.15. |  |  | Sept. 1993 Survey |  |
| Tables 3.15-3.20 and 9.1-9.6 |  | Sept. 1992 Survey |  | Sept. 1994 Survey |
| Tables 7.1, 7.2, 7.3, and 8.1. | Aug. 1994 Survey | Aug. 1994 Survey | Aug. 1994 Survey | Aug. 1994 Survey |
| Tables 7.4-7.12. | Apr. 1993 Survey | Apr. 1993 Survey | Aug. 1993 Survey | July 1994 Survey |

Summary nipa series back to 1929 are in the September 1994 issue of the Survex. 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]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | II | 111 |
| Gross domestic product $\qquad$ | 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 | 492.7 | 538.0 | 531.2 | 541.9 | 562.8 | 576.2 | 580.3 | 592.3 |
| 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 |
| 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 |
| Gross private domestic investment $\qquad$ | 788.3 | 882.0 | 869.7 | 882.2 | 922.5 | 966.6 | 1,034.4 | 1,054.2 |
| 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 $\qquad$ Producers' durable | 171.1 | 173.4 | 172.3 | 173.9 | 176.7 | 172.7 | 181.8 | 185.2 |
| equipment ............. | 390.3 | 442.7 | 437.0 | 445.1 | 469.6 | 492.7 | 501.5 | 524.4 |
| Residential ................... | 223.8 | 250.6 | 241.8 | 249.3 | 267.2 | 277.1 | 283.6 | 282.9 |
| Change in business inventories $\qquad$ | 3.0 | 15.4 | 18.6 | 13.9 | 9.0 | 24.1 | 67.4 | 61.6 |
| Noniarm ............................. | -2.7 | 20.1 | 23.9 | 24.2 | 10.7 | 22.3 | 60.4 | 52.3 |
| Farm | 5.7 | -4.7 | -5.3 | -10.3 | -1.7 | 1.8 | 7.0 | 9.3 |
| Net exports of goods and services $\qquad$ | -30.3 | -65.3 | -63.3 | -77.0 | -71.2 | -86.7 | -97.6 | -114.5 |
| Exports <br> Imports | $\begin{aligned} & 638.1 \\ & 668.4 \end{aligned}$ | $\begin{aligned} & 659.1 \\ & 724.3 \end{aligned}$ | $\begin{aligned} & 660.1 \\ & 723.5 \end{aligned}$ | $\begin{aligned} & 649.0 \\ & 726.0 \end{aligned}$ | $\begin{aligned} & 680.3 \\ & 751.4 \end{aligned}$ | $\begin{aligned} & 674.2 \\ & 760.9 \end{aligned}$ | $\begin{aligned} & 704.5 \\ & 802.1 \end{aligned}$ | $\begin{aligned} & 725.2 \\ & 839.7 \end{aligned}$ |
| Govemment 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 | 302.7 | 305.8 | 299.0 | 299.1 | 291.7 | 291.7 | 300.5 |
| Nondefense ................... | 134.8 | 140.9 | 139.4 | 143.6 | 140.7 | 146.1 | 143.5 | 143.9 |
| zedStaje and locat R............... | 676.3 | 704.7 | 701.2 | 710.2 | 717.4 | 722.0 | 731.5 | 744.3 |

Table 1.2.-Gross Domestic Product in Constant Dollars [Billions of 1987 doliars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | II | III |
| Gross domestic product $\qquad$ | 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 $\qquad$ | 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 |
| 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 |
| 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 |
| Gross private domestic investment $\qquad$ | 725.3 | 819.9 | 806.2 | 821.8 | 862.5 | 898.9 | 950.9 | 966.4 |
| Fixed investment ............... | 722.9 | 804.6 | 787.3 | 808.8 | 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 $\qquad$ Producers' durable | 149.8 | 147.7 | 147.3 | 147.5 | 148.7 | 144.1 | 151.0 | 152.1 |
| equipment | 376.2 | 443.9 | 433.7 | 450.3 | 478.5 | 499.4 | 506.9 | 528.3 |
| Residential | 196.9 | 213.0 | 206.3 | 211.0 | 224.5 | 229.9 | 233.8 | 229.9 |
| Change in business inventories | 2.5 | 15.3 | 18.9 | 13.0 | 10.8 | 25.4 | 59.2 | 56.1 |
| Nonfarm ............................. | -2.0 | 18.5 | 22.8 | 20.9 | 10.7 | 22.1 | 51.7 | 46.3 |
| Farm ............................ | 4.5 | -3.2 | -3.9 | -7.9 | . 1 | 3.3 | 7.5 | 9.8 |
| Net exports of goods and services $\qquad$ | -32.3 | -73.9 | -69.3 | -86.3 | -82.2 | -104.0 | -111.8 | $-120.8$ |
| Exports $\qquad$ <br> Imports | $\begin{aligned} & 578.8 \\ & 611.2 \end{aligned}$ | 602.5 676.3 | 600.2 669.6 | 595.3 681.6 | 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 ............................ | 373.5 | 356.6 | 358.3 | 355.6 | 351.1 | 341.7 | 334.7 | 344.7 |
| National defense ........... | 261.4 | 243.7 | 246.8 | 240.9 | 238.7 | 228.5 | 226.1 | 233.4 |
| Nondefense | 112.2 | 113.0 | 111.5 | 114.7 | 112.4 | 113.2 | 108.7 | 111.2 |
| State and local ................. | 563.3 | 573.1 | 571.0 | 576.2 | 580.4 | 578.3 | 582.4 | 588.4 |

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

Table 1.3.-Gross Domestic Product by Major Type of Product
[Billions of dollars]


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

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

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

[Bililions 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 $\qquad$ | 638.1 | 659.1 | 660.1 | 649.0 | 680.3 | 674.2 | 704.5 | 725.2 |
| Pius: Imports of goods and services $\qquad$ | 668.4 | 724.3 | 723.5 | 726.0 | 751.4 | 760.9 | 802.1 | 839.7 |
| Equals: Gross domestic purchases ${ }^{1}$ $\qquad$ | 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 $\qquad$ | 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 |

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

NoTE.-Percent changes from preceding period for selected thems in this table are shown in table 8.1.
Table 1.7.-Gross Domestic Product by Sector
[Billions of dollars]

| Gross domestic product $\qquad$ | 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 |
| Noniarm | 4,996.1 | 5,293.8 | 5,249.3 | 5,322.3 | 5,431.7 | 5,524.7 | 5,618.7 | 5,706.3 |
| Noniarm less housing .... | 4,494.4 | 4,771.0 | 4,730.8 | 4,796.4 | 4,899.5 | 4,975.0 | 5,075.0 | 5,155.3 |
| Housing ........................ | 501.7 | 522.7 | 518.5 | 525.8 | 532.2 | 549.6 | 543.8 | 551.0 |
| Farm ............................... | 85.6 | 75.3 | 77.3 | 65.4 | 79.2 | 87.1 | 83.2 | 82.2 |
| Statistical discrepancy ........ | 8.8 | 2.3 | 5.7 | -5.5 | -16.5 | -36.1 | -24.0 | -21.7 |
| Househoids and institutions | 268.6 | 285.3 | 283.4 | 286.9 | 291.0 | 295.7 | 300.1 | 304.6 |
| Private households. | $\begin{array}{r} 10.1 \\ 258.4 \end{array}$ | $\begin{array}{r} 10.8 \\ 274.5 \end{array}$ | $\begin{array}{r} 10.7 \\ 272.7 \end{array}$ | $\begin{array}{r} 10.8 \\ 276.1 \end{array}$ | $\begin{array}{r} 10.9 \\ 280.0 \end{array}$ | $284.5$ | 11.3 288.8 | $\begin{array}{r} 11.5 \\ 293.2 \end{array}$ |
| overnment | 661.2 | 686.6 | 684.2 | 690.2 | 692.7 | 703.3 | 711.8 | 715.2 |
| Federal | 199.5 | 203.6 | 203.6 | 204.3 | 202.5 | 206.3 | 208.4 | 205.4 |
| State and local .................. | 461.7 | 483.0 | 480.6 | 485.9 | 490.2 | 497.1 | 503.4 | 509.8 |
| 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 doliars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | II | III |
| Gross domestic product $\qquad$ | 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 $\qquad$ | 4,976.9 | 5,119.3 | 5,086.5 | 5,126.5 | 5,207.2 | 5,235.7 | 5,254.9 | 5,309.0 |
| Change in business inventories $\qquad$ | 2.5 | 15.3 | 18.9 | 13.0 | 10.8 | 25.4 | 59.2 | 56.1 |
| Goods ${ }^{1}$............................... | 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 $\qquad$ <br> Change in business inventories $\qquad$ | $1,988.5$ 2.5 | 2,066.5 | $2,051.0$ 18.9 | 2,065.3 | 2,124.7 | $2,143.3$ 25.4 | $2,142.1$ 59.2 | $2,180.0$ 56.1 |
| Durable goods .................. | 895.6 | 986.0 | 973.4 | 991.4 | 1,033.6 | 1,061.4 | 1,071.9 | 1,103.9 |
| Final sales | 906.7 | 977.7 | 968.8 | 977.9 | 1,024.7 | 1,041.7 | 1,038.2 | 1,065.2 |
| Change in business inventories $\qquad$ | -11.2 | 8.3 | 4.6 | 13.5 | 8.9 | 19.7 | 33.7 | 38.7 |
| Nondurable goods ............. | 1,095.4 | 1,095.8 | 1,096.5 | 1,086.8 | 1,101.9 | 1,107.4 | 1,129.4 | 1,132.2 |
| Final sales | 1,081.8 | 1,088.8 | 1,082.2 | 1,087.4 | 1,100.0 | 1,101.7 | 1,103.9 | 1,114.8 |
| Change in business inventories $\qquad$ | 13.6 | 7.0 | 14.3 | -.6 | 1.9 | 5.7 | 25.5 | 17.4 |
| Services ${ }^{1}$............................ | 2,549.3 | 2,597.6 | 2,588.5 | 2,606.1 | 2,611.2 | 2,625.8 | 2,635.8 | 2,651.4 |
| Structures ............................. | 439.0 | 455.1 | 447.0 | 455.1 | 471.3 | 466.5 | 476.9 | 477.6 |

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

NoTE.-Percent changes from preceding period for selected items in this table are shown in table 8.1.
Table 1.6.-Relation of Gross Domestic Product, Gross Domestic Purchases, and Final Sales to Domestic Purchasers in Constant Dollars
[Bilions 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 $\qquad$ | 578.8 | 602.5 | 600.2 | 595.3 | 625.2 | 619.6 | 643.9 | 662.7 |
| Plus: Imports of goods and services $\qquad$ | 611.2 | 676.3 | 669.6 | 681.6 | 707.4 | 723.6 | 755.6 | 783.5 |
| Equals: Gross domestic purchases ${ }^{1}$ $\qquad$ | 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 $\qquad$ | 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 |

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

Note.-Percent changes from preceding period for selected items in this table are shown in table 8.1.
Table 1.8.-Gross Domestic Product by Sector in Constant Dollars [Bilions of 1987 dollars]

| Gross domestic product $\qquad$ | 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 | 4,170.6 | 4,336.4 | 4,303.4 | 4,353.8 | 4,433.2 | 4,486.1 | 4,521.3 | 4,566.0 |
| Nonfarm less housing ..................... | 3,771.0 | 3,925.5 | 3,893.8 | 3,941.1 | 4,017.9 | 4,070.6 | 4,103.5 | 4,146.1 |
| Housing ........................ | 399.6 | 410.9 | 409.6 | 412.7 | 415.3 | 415.5 | 417.8 | 419.8 |
| Farm ............................... | 80.8 | 71.0 | 72.3 | 64.0 | 72.0 | 75.9 | 81.6 | 84.4 |
| Statistical discrepancy ........ | 7.3 | 1.9 | 4.7 | -4.5 | -13.5 | -29.3 | -19.3 | -17.5 |
| Households and institutions | 208.5 | 215.6 | 215.0 | 217.0 | 218.1 | 220.1 | 222.5 | 223.7 |
| Private households | 8.8 | 9.0 | 9.0 | 9.0 | 9.0 | 9.1 | 9.2 | 9.3 |
| Nonprofit institutions ........... | 199.8 | 206.5 | 206.0 | 208.0 | 209.1 | 217.0 | 213.3 | 214.4 |
| General government ............, | 512.0 | 509.6 | 510.0 | 509.1 | 508.2 | 508.4 | 508.0 | 508.4 |
| Federal | 151.9 | 146.0 | 146.9 | 145.1 | 143.2 | 141.9 | 139.9 | 138.5 |
| State and local | 360.1 | 363.6 | 363.1 | 364.0 | 365.1 | 366.5 | 368. | 369.9 |
| Addendum: Gross domestic business product less housing $\qquad$ | 3,855.4 | 3,994.9 |  |  |  |  |  |  |

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


Table 1.10.-Relation of Gross Domestic Product, Gross National Product, Net National Product, and National Income in Constant Dollars
[Billions of 1987 dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | 11 | III |
| Gross domestic produci ...... | 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 ${ }^{1}$ $\qquad$ |  |  |  |  |  |  |  |  |
| Less: Payments of factor income to the rest of the world ${ }^{2}$ $\qquad$ | 102.8 | 103.4 | 105.3 | 109.4 | 112.4 | 114.8 | 127.1 | 136.0 |
| Equals: Gross national product $\qquad$ | 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 $\qquad$ | 595.8 $4,389.9$ | 599.5$4,540.8$ | 593.9 | 605.5$4,542.9$ | $\begin{array}{r} 602.0 \\ 4,616.7 \end{array}$ | $\begin{array}{r} 648.1 \\ 4,614.6 \end{array}$ | $\begin{array}{r} 614.8 \\ 4,695.7 \end{array}$ | $\begin{array}{r} 621.8 \\ 4,737.2 \end{array}$ |
| Equals: Net national product | 4,389.9 |  | 4,516.2 |  |  |  |  |  |
| Less: Indirect business tax and nontax liability plus business transfer payments less subsidies plus current surplus of government enterprises $\qquad$ |  |  |  | 4,542.9 |  | $\|4,614,6\|$ |  | $4,737.2$ |
| Statistical discrepancy | $\begin{array}{\|r\|} 406.0 \\ 7.3 \\ \hline \end{array}$ | $\begin{array}{r} 421.2 \\ 1.9 \end{array}$ | $\begin{array}{r} 418.2 \\ 4.7 \end{array}$ | $\begin{array}{r} 423.1 \\ -4.5 \end{array}$ | $\begin{aligned} & 428.3 \\ & -13.5 \end{aligned}$ | $\begin{gathered} 432.7 \\ -29.3 \end{gathered}$ | $\begin{array}{r} 434.9 \\ -19.3 \end{array}$ | $\begin{array}{r} 439.0 \\ -17.5 \end{array}$ |
| 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 |  |  |  |  |  |  |  |  |
| Net domestic product ......... | $\left\|\begin{array}{l} 4,383.5 \\ 3,970.2 \\ 4,978.4 \end{array}\right\|$ | $\left\|\begin{array}{l} 4,535.1 \\ 4,112.0 \end{array}\right\|$ | $\left\|\begin{array}{l} 4,511.4 \\ 4,088.5 \end{array}\right\|$ | $\left\|\begin{array}{l} 4,533.9 \\ 4,115.3 \end{array}\right\|$ | $\begin{aligned} & 4,616.0 \\ & 4,201.1 \end{aligned}$ | $\left\|\begin{array}{l} 4,613.0 \\ 4,209.7 \end{array}\right\|$ | $\left\|\begin{array}{l} 4,699.3 \\ 4,283.8 \end{array}\right\|$ | $\begin{aligned} & 4,743.2 \\ & 4,321.7 \end{aligned}$ |
| Domestic income .............. |  |  |  | 4,115.3 | 4,201.1 | 4,209.7 |  | 4,321.7 |

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

Table 1.11.-Command-Basis Gross National Product in Constant Dollars
[Billions of 1987 dollars]

| 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 world $\qquad$ | 688.0 | 711.6 | 710.3 | 704.7 | 737.6 | 734.5 | 771.0 | 798.7 |
| Plus: Command-basis exporis of goods and services and receipts of factor income ${ }^{1}$ | 691.8 | 724.4 | 720.7 | 719.3 | 752.2 | 756.2 | 790.6 | 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: <br> Terms of trade ${ }^{2}$ $\qquad$ | 100.5 | 101.8 | 101.5 | 102.1 | 102.0 | 103.0 | 102.5 | 101.7 |

1. Exports of goods and services and receipts of factor income deflated by the implicit price deflator for imports of goods and services and payments of factor income.
2. Ratio of the implicit price deflator for exports of goods and services and receipts of factor income to the corresponding implicit price deflator for imports with the decimal point shifted two places to the right.
NOTE.-Percent changes irom preceding period for selected items in this table are shown in table 8.1.

Table 1.14.-National Income by Type of Income [Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | 11 | 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 $\qquad$ <br> Government $\qquad$ | $\begin{array}{r} 2,954.8 \\ 567.3 \\ 2,387.5 \end{array}$ | $\begin{array}{r} 3,100.8 \\ 583.8 \\ 2,517.0 \end{array}$ | $\left\|\begin{array}{r} 3,085.1 \\ 580.9 \\ 2,504.2 \end{array}\right\|$ | $\left\lvert\, \begin{aligned} & 3,115.9 \\ & 586.1 \\ & 2,529.8 \end{aligned}\right.$ | $\begin{array}{r} 3,148.4 \\ 587.8 \\ 2,560.7 \end{array}$ | $\left\|\begin{array}{r} 3,208.3 \\ 595.7 \\ 2,612.6 \end{array}\right\|$ | $\begin{array}{r} 3,257.2 \\ 601.9 \\ 2,655.4 \end{array}$ | $\left\{\begin{array}{r} 3,293.5 \\ 604.3 \\ 2,689.2 \end{array}\right.$ |
| Other ............................ |  |  |  |  |  |  |  |  |
| Supplements to wages and | 636.4 | 679.6 | 676.0 |  | 697.4 | 711.7 |  |  |
| Employer contributions |  |  |  | 685.9 |  |  | 722.0 | 729.7 |
| for social insurance | 307.7 | 324.3 | 324.6 | 327.0 | 330.6 | 338.5 | 343.6 | 384.038.7 |
| Other labor income ..... | 328.7 | 355.3 | 351.4 | 358.8 | 366.8 | 373.2 | 378.4 |  |
|  |  |  |  |  |  |  |  |  |
| Farm | 44.4 | 37.3 | 39.4 | 15.8 | 44.4 | 47.2 | 39.3 | 29.8 |
| Proprietors' income with IVA $\qquad$ | 51.9-7.5 | 44.5 | 46.5 | 23.2 | 51.5 | 54.5 | 46.6 | 37.1 |
| CCAdj ........................ |  | -7.2 | -7.2 | -7.4 | -7.0 | -7.3 | -7.3 | -7.4 |
| Nonfarm | 374.4 | 404.3 | $399.4$ | 404.5 | 418.5 | 423.8 | 431.9 | 437.1 |
| Proprietors' income | $\begin{array}{r} 3 r 4.4 \\ 362.0 \\ -.5 \\ 12.9 \end{array}$ |  | $\begin{array}{r} 385.5 \\ -14.8 \\ 14.7 \end{array}$ | $\begin{array}{r} 389.8 \\ -.1 \end{array}$ | $\begin{array}{r} 403.7 \\ -9 \end{array}$ | 409.3-6 | 417.5 | 423.0 |
| IVA |  | $\begin{array}{r} 390.2 \\ -.8 \end{array}$ |  |  |  |  | -1.1 | -1.1 |
| CCAdj ......................... |  | 14.9 |  | 14.8 | 15.7 | 15.2 | 15.5 | 15.2 |
| Rental income of persons with CCAdJ $\qquad$ | -5.5 | 24.1 | 23.4 | 26.3 | 30.3 | 15.3 | 34.1 | 32.9 |
| Rental income of persons | $\begin{array}{r} 61.2 \\ -66.7 \end{array}$ | $\begin{array}{r} 86.3 \\ -62.2 \end{array}$ | $\begin{array}{r} 83.6 \\ -60.3 \end{array}$ | $\begin{array}{r} 88.9 \\ -62.6 \end{array}$ | $\begin{array}{r} 92.4 \\ -62.1 \end{array}$ | $\begin{gathered} 101.7 \\ -86.4 \end{gathered}$ | $\begin{array}{r} 98.6 \\ -64.5 \end{array}$ | $\begin{array}{r} 99.0 \\ -66.2 \end{array}$ |
| CCAdj ............................. |  |  |  |  |  |  |  |  |
| Corporate profits with IVA and CCAdJ $\qquad$ | 405.1 | 485.8 | 473.1 | 493.5 | 533.9 | 508.2 | 546.4 | 557.1 |
| Corporate profits with IVA | $\begin{aligned} & 389.4 \\ & 395.9 \end{aligned}$ | $\begin{aligned} & 456.2 \\ & 462.4 \end{aligned}$ | $\begin{aligned} & 446.6 \\ & 456.6 \end{aligned}$ | 461.7 | $\begin{aligned} & 495.1 \\ & 501.7 \end{aligned}$ | $\begin{aligned} & 471.2 \\ & 483.5 \end{aligned}$ | $\begin{aligned} & 509.0 \\ & 523.1 \end{aligned}$ | 519.6539.22087 |
| Profits before tax ........... |  |  |  | 458.7 |  |  |  |  |
| Profits tax liability ....... | 139.7 | 173.2 | 171.8 | 169.9 | 191.5 | 184.1 | 201.7 |  |
| Profits after tax .... | 256.2 | 289.2 | 284.8 | 288.9 | 310.2 | 299.4 | 321.4 | 208.7 330.5 |
| Dividends .. | 171.1 | 191.7 | 190.7 | 193.2 | 194.6 | 196.3 | 202.5 | 207.9 |
| Undistributed profits | 85.1 | $\begin{gathered} 97.5 \\ -6.2 \end{gathered}$ | 94.1 | 95.03.0 | -6.5 | $\begin{array}{r} 103.0 \\ -12.3 \end{array}$ | -118.9 |  |
| IVA ....... | -6. |  | $\begin{array}{r} 070.0 \\ -10.0 \\ 26.5 \end{array}$ |  |  |  |  | -19.6 |
| CCAdj .......... | 15.7 | $\begin{array}{r} 29.5 \\ 399.5 \end{array}$ |  | $\begin{array}{r} 31.7 \\ 396.7 \end{array}$ | 38.8 | 37.0 | $\begin{array}{r} 37.4 \\ 399.7 \end{array}$ | 37.5411.6 |
| Net interest ....... | 420.0 |  | $\begin{array}{r} 26.5 \\ 397.6 \end{array}$ |  | 389.1 |  |  |  |
| Addenda: | 265.4 | 312.5 | 301.3 | 323.6 | 342.4 | 324.1 | 344.8 |  |
| Corporate profits after tax with IVA and CCAdi .... |  |  |  |  |  |  |  | 348.4 |
| Net cash flow with IVA and |  | 528.7 | 515.5 | 543.6 |  |  |  |  |
| CCAdj ....................... | 491.1 |  |  |  | 558.9 | 559.9 | 568.2 | 573.1 |
|  |  | 120.9 | 110.7 |  |  |  |  |  |
| IVA and CCAdj $\qquad$ Consumption of fixed | 94.3 |  |  | 130.3 | 147.9 | 127.7 | 142.3 | 140.5 |
| capital .................... | 396.8 | 407.8 | $\begin{array}{r} 404.8 \\ -10.0 \end{array}$ | $\begin{array}{r} 413.3 \\ 3.0 \end{array}$ | $\begin{gathered} 411.1 \\ -6.5 \end{gathered}$ | 432.2 | 425.9-14.1 | 432.6-19.6 |
| Less: IVA | -6.4 | $\begin{array}{r} -6.2 \\ 534.9 \end{array}$ |  |  |  | -12.3 |  |  |
| Equals: Net cash flow ........ | 497.5 |  | $\begin{array}{r} -10.0 \\ 525.4 \end{array}$ | 540.6 | 565.5 | 572.2 | 582.3 | 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

|  | 1992 | 1993 | Seasonally acjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 11 | III |
|  | Billions of doilars |  |  |  |  |  |  |  |
| Gross domestic product of corporate business $\qquad$ | 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 | 3,010.9 | 2,987.8 | 3,027.0 | 3,105.4 | 3,131.3 | 3,212.2 | 3,258.4 |
| Compensation of employees |  |  |  |  | 2,513.8 | 2,564.0 | 2,603.3 | 2,635.2 |
| Wages and salaries .... | 1,942.1 | 2,045:6 | 2,035.5 | 2,055.7 | 2,079.6 | 2,121.1 | 2,154.2 | 2,180.6 |
| Supplements to wages and salaries $\qquad$ | 398.8 | 426.1 | 423.7 | 428.7 | 434.2 | 442.9 | 449.0 | 454.6 |
| Corporate profits with IVA and CCAdi | 344.5 | 420.5 | 410.4 | 424.3 | 472.2 | 447.1 | 485.7 | 495.9 |
| Profits before tax ........ | 335.3 | 397.2 | 393.8 | 389.6 | 440.0 | 422.4 | 462.3 | 478.0 |
| Profits tax liability .. | 139.7 | 173.2 | 171.8 | 169.9 | 191.5 | 184.1 | 201.7 | 208.7 |
| Profits after tax ...... | 195.6 | 223.9 | 222.0 | 219.7 | 248.5 | 238.3 | 260.7 | 269.3 |
| Dividends $\qquad$ Undistributed | 147.7 | 177.2 | 173.2 | 177.1 | 180.2 | 177.0 | 183.6 | 179.1 |
| profits ........... | 47.8 | 46.7 | 48.8 | 42.7 | 68.3 | 61.3 | 77.1 | 90.1 |
| IVA .......................... | -6.4 | -6.2 | -10.0 | 3.0 | -6.5 | -12.3 | -14.1 | -19.6 |
| CCAdj | 15.7 | 29.5 | 26.5 | 31.7 | 38.8 | 37.0 | 37.4 | 37.5 |
| Net interest ............ | 119.5 | 118.8 | 118.2 | 118.3 | 119.4 | 120.2 | 123.3 | 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 .. | 3,222.9 | 3,409.7 | 3,386.3 | 3,428.7 | 3,499.3 | 3,568.6 | 3,626.7 | 3,679.2 |
| Consumption of fixed capital .. | 352.9 | 361.5 | 358.8 | 366.5 | 363.7 | 383.7 | 376.3 | 382.0 |
| Net domestic product ............ | 2,870.0 | 3,048.2 | 3,027.5 | 3,062.2 | 3,135.6 | 3,184.8 | 3,250.3 | 3,297.2 |
| Indirect business tax and nontax liability plus business transter payments less subsidies | 328.9 | 344.0 | 341.3 | 344.3 | 354.3 | 358.9 | 362.9 | 368.6 |
| Domestic income .............. | 2,541.1 | 2,704.2 | 2,686.2 | 2,717.9 | 2,781.3 | 2,825.9 | 2,887.5 | 2,928.7 |
| Compensation of employees $\qquad$ | 2,151.0 | 2,259.2 | 2,248.5 | 2,269.1 | 2,293.9 | 2,337.1 | 2,373.1 | 2,404.9 |
| Wages and salaries .... | 1,782,3 | 1,866.2 | 1,857.7 | 1,873.9 | 1,893.8 | 1,929.4 | 1,959.8 | 1,986.0 |
| Supplements to wages and salaries $\qquad$ | 368.7 | 393.0 | 390.8 | 395.2 | 400.1 | 407.7 | 413.4 | 418.9 |
| Corporate profits with |  |  |  |  |  |  |  |  |
| IVA and CCAdj .......... | 276.6 | 330.9 | 324.4 | 334.3 | 371.6 | 372.2 | 394.7 | 400.1 |
| Profits before tax ...... | 253.4 | 293.5 | 293.7 | 285.7 | 325.4 | 332.8 | 355.9 | 366.2 |
| Profits tax liability .. | 87.8 | 116.8 | 116.7 | 113.5 | 130.8 | 132.5 | 143.4 | 147.8 |
| Profits after tax ...... | 165.5 | 176.7 | 176.9 | 172.2 | 194.6 | 200.3 | 212.5 | 218.4 |
| Dividends .......... | 136.3 | 159.8 | 156.7 | 159.4 | 162.3 | 159.5 | 164.3 | 159.3 |
| Undistributed profits $\qquad$ | 29.2 | 16.9 | 20.2 | 12.8 | 32.2 | 40.8 | 48.1 | 59.1 |
| IVA ............................ | -6.4 | -6.2 | -10.0 | 3.0 | -6.5 | -12.3 | -14.1 | -19.6 |
| CCAdj ..................... | 29.7 | 43.6 | 40.7 | 45.7 | 52.7 | 51.7 | 52.9 | 53.5 |
| Net interest ................... | 113.5 | 114.0 | 113.3 | 114.4 | 115.8 | 116.6 | 119.6 | 123.7 |
|  |  |  |  | ons of 1 | 987 dolla |  |  |  |
| 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 .. | 319.2 | $325.3$ | 322.9 | 329.0 | 327.0 | 342.4 | 333.9 | 337.8 |
| Net domestic product .............. Indirect business tax and nontax liability plus business transfer | 2,483.6 | 2,617.6 | 2,597.6 | 2,634.2 | 2,692.5 | 2,720.2 | 2,765.0 | 2,793.4 |
| payments less subsidies | 260.7 | 272.4 | 270.4 | 273.7 | 277.3 | 280.6 | 282.1 | 285.6 |
| Domestic income ............... | 2,222.8 | 2,345.2 | 2,327.2 | 2,360.5 | 2,415.2 | 2,439.6 | 2,482.9 | 2,507.8 |

Table 2.1.-Personal Income and Its Disposition [Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV |  | II | III |
| Personal income $\qquad$ <br> Wage and salary disbursements Commodity-producing industries $\qquad$ Manufacturing $\qquad$ <br> Distributive industries $\qquad$ <br> Service industries $\qquad$ <br> Government $\qquad$ | 5,154,3 | 5,375.1 | 5,364.5 | 5,395.9 | 5,484,6 | 5,555.8 | 5,659.9 | 5,730.3 |
|  | 2,974.8 | 3,080.8 | 3,085.1 | 3,115.9 | 3,148.4 | 3,208.3 | 3,257.2 | 3,293.5 |
|  |  |  |  |  |  |  |  |  |
|  | 757.6 | 773.8 | 776.4 | 781.4 | 791.0 | 801.9 | 811.6 | 821.6 |
|  | 578.3 | 588.4 | 591.4 | 594.9 | 601.7 | 609.4 | 812.8 | 618.2 |
|  | 682.3 | 701.9 | 704.0 | 709.6 | 712.6 | 728.6 | 742.5 | 753.7 |
|  | 967.6 | 1,021.4 | 1,023.7 | 1,038.8 | 1,057.0 | 1,082.0 | 1,101.2 | 1,113.8 |
|  | 567.3 | 583.8 | 580.9 | 586.1 | 587.8 | 595.7 | 601.9 | 604.3 |
| Other labor income .......... | 328.7 | 355.3 | 351.4 | 358.8 | 366.8 | 373.2 | 378.4 | 383.7 |
| Proprietors' income with inventory valuation and capital consumption | 418.7 | 441.6 | 438.8 | 420.3 | 462.9 | 471.0 | 471.3 | . 9 |
| Farm .............................. | 44.4 | 37.3 | 39.4 | 15.8 | 44.4 | 47.2 | 39.3 | 8 |
| Nonfarm .............................. | 374.4 | 404.3 | 399.4 | 404.5 | 418.5 | 423.8 | 431.9 | 437.1 |
| Rental income of persons with capital consumption adjustment | -5.5 | 24.1 | 23.4 | 26.3 | 30.3 | 15.3 | 34.1 | 32.9 |
| Personal dlvidend income | 161.0 | 181.3 | 180.4 | 182.8 | 184.1 | 185.7 | 191.7 | 196.9 |
| Personal interest income | 665.2 | 637.9 | 636.6 | 634.1 | 627.7 | 631.1 | 649.4 | 670.2 |
| Transfer payments to persons | 860.2 | 915.4 | 910.4 | 921.6 | 931.0 | 947.4 | 957.6 | 969.1 |
| persons <br> Old-age, survivors, disability, and health insurance benefits | 860.2 414.0 | 915.4 444.4 | 910.4 441.9 | 446.8 | 452.1 | 463.8 | 470.7 | 476.5 |
| Government unemployment |  |  |  |  |  |  |  |  |
| insurance benefits ...... | 38.9 | 33.9 | 34.0 | 34.5 | 32.7 | 27.9 | 23.5 | 21.4 |
| Veterans benefits .......... | 19.3 | 20.1 | 20.2 | 20.2 | 20.0 | 20.0 | 19.8 | 20.3 |
| Government employees retirement benefits ..... | 109.9 | 118.7 | 118.0 | 119.6 | 121.1 | 122.8 | 126.2 | 128.5 |
| Other transfer payments | 278.1 | 298.3 | 296.2 | 300.5 | 305.1 | 312.9 | 317.4 | 322.4 |
| Aid to families with dependent children | 23.3 | 23.9 | 24.0 | 24.0 | 24.1 | 24.2 | 24.3 | 24.5 |
| Other ........................ | 254.9 | 274.4 | 272.2 | 276.5 | 281.0 | 288.7 | 293.1 | 298.0 |
| Less: Personal contributions for social insurance $\qquad$ | 248.7 | 261.3 | 261.5 | 263.8 | 266.6 | 276.3 | 279.9 | 282.9 |
| Less: Personal tax and nontax payments $\qquad$ | 648.6 | 686.4 | 685.9 | 695.4 | 707.0 | 723.0 | 746.4 | 743.8 |
| Equals: Disposable personal income $\qquad$ | 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.t |
| Personal consumption expenditures $\qquad$ | 4,136.9 | 4,378.2 | 4,347.3 | 4,401.2 | 4,469.6 | 4,535.0 | 4,586.4 | 4,658.1 |
| Interest paid by persons .... | 111.4 | 108.2 | 107.5 | 107.2 | 108.7 | 111.7 | 115.5 | 119.3 |
| Personal transier payments 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 $\qquad$ | 3,648.1 | 3,704.1 | 3,701.3 | 3,708.4 | 3,747.8 | 3,779.2 | 3,811.5 | 3,839.3 |
| Per capita: .................... |  |  |  |  |  |  |  |  |
| Current dollars .......... | 17,636 | 18,153 | 18,141 | 18,174 | 18,421 | 18,588 | 18,853 | 19,081 |
| 1987 dollars ............. | 14,279 | 14,341 | 14,351 | 14,338 | 14,451 | 14,535 | 14,625 | 14,691 |
| Population (mid-period, millions)..................$~$ | 255.5 | 258.3 | 257.9 | 258.6 | 259.4 | 260.0 | 260.6 | 261.3 |
| Personal saving as percentage of disposable personal income $\qquad$ | 5.5 | 4.1 | 4.6 | 3.9 | 4.0 | 3.6 | 4.1 | 4.0 |

NoTE.-Percent changes from preceding period for selected lems in this table are shown in table 8.1.

Table 2.2.-Personal Consumption Expenditures by Major Type of Product
[Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | II | III |
| Personal consumption expenditures $\qquad$ | 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. | 204.1 | 228.0 | 225.7 | 228.4 | 241.4 | 253.0 | 245.8 | 246.5 |
| Furniture and household equipment |  |  |  |  | 217.7 | 218.1 | 225.3 | 233.5 |
| Other .................................... | 96.1 | 101.1 | 100.0 | 102.9 | 103.7 | 105.1 | 109.3 | 112.3 |
| 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 | 649.7 | 646.0 | 651.7 | 660.8 | 667.9 | 675.5 | 684.0 |
| Clothing and shoes | 227.7 | 235.4 | 233.2 | 235.9 | 240.7 | 241.9 | 243.9 | 247.7 |
| Gasoline and oil | 105.5 | 105.6 | 105.6 | 104.1 | 104.4 | 103.2 | 103.7 | 110.2 |
| Fuel oil and coal ............... | 13.0 | 14.0 | 13.9 | 14.2 | 13.9 | 15.5 | 13.1 | 13.6 |
| Other .............................. | 322.5 | 334.4 | 335.5 | 334.2 | 335.4 | 340.4 | 345.2 | 350.5 |
| 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 | 601.3 | 629.0 | 625.9 | 632.4 | 638.8 | 648.2 | 655.2 | 663.9 |
| Household operation .......... | 239.4 | 256.3 | 252.9 | 260.4 | 261.3 | 261.1 | 265.9 | 265.2 |
| Electricity and gas $\qquad$ Other household | 105.7 | 112.8 | 110.1 | 115.5 | 115.1 | 116.3 | 115.2 | 111.8 |
| operation ........... | 133.7 | 143.5 | 142.8 | 144.9 | 146.2 | 144.8 | 150.7 | 153.5 |
| Transportation .................... | 156.7 | 170.6 | 170.0 | 171.5 | 173.6 | 175.4 | 178.5 | 180.5 |
| Medical care ..................... | 628.3 | 680.5 | 674.5 | 686.1 | 697.3 | 707.4 | 720.9 | 731.8 |
| Other ............................... | 723.0 | 764.7 | 758.7 | 768.8 | 780.7 | 797.8 | 804.3 | 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 | 89.9 | 83.7 | 492.7 | 10.8 | 521.7 | 522.2 | 530.2 |
| Motor vehicles and | 181.8 | 196.1 | 195.1 | 195.0 | 204.7 | 213.7 | 205.3 | 202.8 |
| Furniture and household equipment |  |  | 209.9 |  | 224.6 | 225.9 | 232.5 | 41.5 |
| Other. | 77.5 | 79.7 | 78.7 | 81.1 | 81.5 | 82.0 | 84.4 | 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 | 524.0 | 522.3 | 525.1 | 528.1 | 531.9 | 536.1 | 536.0 |
| Clothing and shoes | 193.2 | 197.8 | 196.1 | 198.6 | 202.4 | 203.8 | 204.9 | 210.1 |
| Gasoline and oil | 85.6 | 86.5 | 85.7 | 87.5 | 86.6 | 86.1 | 86.7 | 87.6 |
| Fuel oil and coal | 11.2 | 12.1 | 11.8 | 12.2 | 12.2 | 13.4 | 11.4 | 11.8 |
| Other .... | 253.0 | 258.2 | 258.3 | 258.4 | 258.8 | 263.1 | 265.1 | 267.7 |
| 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 | 485.2 | 492.6 | 491.5 | 493.7 | 495.4 | 497.7 | 500.0 | 502.5 |
| Household operation | 217.8 | 225.3 | 222.8 | 227.4 | 226.9 | 228.7 | 229.1 | 228.0 |
| Electricity and gas ..... <br> Other household | 95.2 | 98.6 | 96.3 | 99.9 | 99.6 | 101.1 | 100.2 | 97.1 |
| operation | 122.5 | 126.7 | 126.5 | 127.5 | 127.2 | 127.7 | 128.9 | 131.0 |
| Transportation | 122.9 | 127.9 | 127.6 | 128.4 | 129.8 | 130.9 | 131.8 | 132.5 |
| Medical care .. | 454.3 | 466.4 | 464.3 | 467.6 | 470.4 | 473.2 | 477.4 | 480.6 |
| Other ... | 558.9 | 578.2 | 575.0 | 580.7 | 584.9 | 595.9 | 593.1 | 599.4 |

## 3. Government Receipts and Expenditures

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

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | II | III |
| Receipts | 1,178.3 | 1,265.7 | 1,263.7 | 1,272.7 | 1,313.6 | 1,337.4 | 1,380.7 | 1,388.5 |
| Personal tax and nontax receipts |  |  |  |  |  |  |  |  |
| income taxes ............... | 476.8 | 505.9 | $\begin{aligned} & 519.8 \\ & 505.0 \end{aligned}$ | 527.5 | $\begin{aligned} & 536.8 \\ & 521.4 \end{aligned}$ | $\begin{array}{r} 550.2 \\ 533.6 \end{array}$ | 571.1 552.5 | $\begin{aligned} & 566.5 \\ & 550.4 \end{aligned}$ |
| Estate and gift taxes | 11.3 | 12.9 | 13.3 | 12.6 | 13.8 | 14.8 | 16.9 | 14.31.8 |
| Nontaxes ............... | 1.4 | 1.6 | 1.5 | 1.6 | 1.7 | 1.7 | 1.8 |  |
| Corporate profits tax accruals Federal Reserve banks Other $\qquad$ | $\begin{array}{r} 115.6 \\ 16.8 \\ 98.8 \end{array}$ | 143.016.0127.0 | $\begin{array}{r} 141.8 \\ 16.0 \\ 125.8 \end{array}$ | $\begin{array}{r} 140.2 \\ 15.7 \\ 124.4 \end{array}$ | $\begin{array}{r} 157.8 \\ 15.8 \\ 142.0 \end{array}$ | 151.816.0135.8 | 166.316.9149.4 | 172.518.0 |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | 154.4 |
| Indirect business tax and |  |  |  |  |  |  |  |  |
| nontax accruals | $\begin{aligned} & 81.3 \\ & 45.8 \end{aligned}$ |  |  | $\begin{aligned} & 82.3 \\ & 46.3 \end{aligned}$ | 90.753.9 | $\begin{aligned} & 90.4 \\ & 53.1 \end{aligned}$ | 90.452.9 |  |
| Excise taxes |  |  |  |  |  |  |  |  |
| Cusioms duties | 18.3 | 19.9 | 20.4 | 20.3 | 20.2 | 20.2 | 21.5 | 21.1 |
| Nontaxes ... | 17.2 | 16.3 | 16.4 | 15.7 | 16.6 | 17.1 | 15.9 | 16.8 |
| Contributions for social |  |  |  |  |  |  |  |  |
| Expenditures ..... | 1,460.9 | 1,507.0 | $\begin{array}{r} 518.6 \\ 1,500.6 \end{array}$ | $\begin{array}{r} 522.7 \\ 1,497.6 \end{array}$ | $\begin{array}{r} 528.3 \\ 1,533.7 \end{array}$ | $\begin{array}{r} 545.1 \\ 1,513.7 \end{array}$ | $\begin{array}{r} 553.0 \\ 1,525.9 \end{array}$ | $\begin{array}{r} 557.5 \\ 1,543.6 \end{array}$ |
| Purchases | 449.0 | 443.6 | 445.2 | $442.7$ | 439.8 | 437.8 | 435.1 | 444.4 |
| National defense | 314.2 | 302.7 | 305.8 | 299.0 | 299.1 | 291.7 | 291.7 | 300.5 |
| Nondefense. | 134.8 | 140.9 | 139.4 | 143.6 | 140.7 | 146.1 | 143.5 | 143.9 |
| Transier payments (net) ....... | $\begin{array}{r} 625.3 \\ 608.8 \\ 16.5 \end{array}$ | $\begin{aligned} & 658.0 \\ & 642.2 \end{aligned}$ | $\begin{aligned} & 652.8 \\ & 639.9 \end{aligned}$ | $\begin{aligned} & 660.2 \\ & 645.9 \end{aligned}$ | $\begin{aligned} & 674.1 \\ & 649.8 \end{aligned}$ | $\begin{aligned} & 671.5 \\ & 659.9 \end{aligned}$ | $\begin{aligned} & 676.2 \\ & 663.5 \end{aligned}$ | 683.6668.6 |
| To persons ................ |  |  |  |  |  |  |  |  |
| To rest of the world (net) ... |  | 15.7 | 12.9 | 14.3 | 24.3 | 11.6 | 12.7 | 15.1 |
| Grants-in-aid to State and local governments | 172.2 | 186.1 | 182.9 | 187.8 | 197.0 | 190.0 | 194.4 | 200.3 |
| Net interest paid | $\begin{aligned} & 186.8 \\ & 217.5 \end{aligned}$ | $\begin{aligned} & 183.6 \\ & 214.3 \end{aligned}$ | $\begin{aligned} & 184.8 \\ & 215.5 \end{aligned}$ | $\begin{aligned} & 183.6 \\ & 214.9 \end{aligned}$ | $\begin{aligned} & 183.5 \\ & 213.9 \end{aligned}$ | 179.3208.3 | $\begin{aligned} & 188.8 \\ & 217.7 \end{aligned}$ | 194.4223.2 |
| Interest paid.. |  |  |  |  |  |  |  |  |
| To persons and business | 177.140.5 | 172.7 | 174.740.8 | $\begin{array}{r} 172.6 \\ 42.2 \end{array}$ | 171.4 | 165.1 | 172.844.9 | 176.846.4 |
| To rest of the world (net) |  | 41.6 |  |  | 42.4 | 43.2 |  |  |
| Less: Interest received by government $\qquad$ | 30.7 | 30.7 | 30.8 | 31.2 | 30.4 | 29.1 | 28.9 | 28.7 |
| Subsidies less current surplus |  |  |  |  |  |  |  |  |
| of government enterprises | 27.631.7 | 35.7 | 35.1 | 23.3 | 39.3 | 35.1 | 31.3 | 20.925.9 |
| Subsidies ...................... |  | 37.4 | 37.4 | 26.1 | 41.6 | 37.7 | 34.6 |  |
| Less: Current surplus of government enterprises .. | 4.1 | 1.7 | 27 | 26.8 2.8 | 1.8 2.3 | 2.6 | 3.3 | 5.0 |
| Less: Wage accruals less disbursements | 0 |  |  | $\left\|\begin{array}{c} 0 \\ -224.9 \\ 36.0 \\ -260.9 \end{array}\right\|$ | $\left.\begin{array}{\|r} 0 \\ \\ -220.1 \\ 39.3 \\ -259.4 \end{array} \right\rvert\,$ | $\left.\begin{array}{r} 0 \\ \\ -176.2 \\ 49.3 \\ -225.5 \end{array} \right\rvert\,$ | 0 | 0 |
| Surplus or deficit ( - ), national income and product accounts ..... |  | $\left.\begin{array}{r} 0 \\ \\ -241.4 \\ 34.0 \\ -275.4 \end{array} \right\rvert\,$ | $\left\|\begin{array}{r} 0 \\ -237.0 \\ 36.5 \\ -273.5 \end{array}\right\|$ |  |  |  |  |  |
| Social insurance funds ........... | $\begin{array}{r} -282.7 \\ 33.2 \\ -315.8 \end{array}$ | $\left\|\begin{array}{r} -241.4 \\ 34.0 \\ -275.4 \end{array}\right\|$ | $\begin{array}{r} -237.0 \\ 36.5 \\ -273.5 \end{array}$ | $\begin{array}{r} -224.9 \\ 36.0 \\ -260.9 \end{array}$ | $\begin{array}{r} -220.1 \\ 39.3 \\ -259.4 \end{array}$ | $\left\|\begin{array}{r} -176.2 \\ 49.3 \\ -225.5 \end{array}\right\|$ | $\begin{array}{r} -145.1 \\ 53.5 \\ -198.7 \end{array}$ | $\begin{array}{r} -155.1 \\ 54.0 \\ -209.2 \end{array}$ |
| Other ................................. |  |  |  |  |  |  |  |  |

Table 3.3.-State and Local Government Receipts and Expenditures [Bilions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 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 | 166.1 | 166.1 | 167.9 | 170.2 | 172.9 | 175.3 | 177.3 |
| Income taxes .................... | 118.1 | 123.3 | 123.4 | 124.9 | 126.6 | 128.7 | 130.6 | 132.0 |
| Nontaxes .......................... | 21.8 | 22.7 | 22.5 | 22.8 | 23.2 | 23.5 | 23.7 | 23.9 |
| Other .............................. | 19.1 | 20.1 | 20.2 | 20.2 | 20.4 | 20.7 | 21.1 | 21.4 |
| Corporate profits tax accruals | 24.2 | 30.3 | 30.0 | 29.7 | 33.7 | 32.3 | 35.4 | 36.3 |
|  |  |  |  |  |  |  |  |  |
| Sales taxes $\qquad$ | 202.1 | 212.4 | 210.6 | 212.8 | 217.8 | 220.7 | 224.2 | 227.6 |
| Properly taxes | 177.5 | 184.0 | 183.3 | 184.8 | 186.4 | 188.0 | 189.8 | 191.6 |
| Other $\qquad$ | 43.5 | 44.3 | 44.0 | 44.8 | 44,9 | 45.6 | 46.0 | 46.2 |
| Contributions for social         |  |  |  |  |  |  |  |  |
| 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 ........................... | 676.3 | 704.7 | 701.2 | 710.2 | 717.4 | 722.0 | 731.5 | 744.3 |
| Compensation of employees | 461.7 | 483.0 | 480.6 | 485.9 | 490.2 | 497.1 | 503.4 | 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 | -53.4 | -53.3 | -53.4 | -53.6 | -54.1 | -54.6 | -55.1 |
| Interest paid ..................... | 64.8 | 65.1 | 65.0 | 65.1 | 65.2 | 65.3 | 65.5 | 65.6 |
| Less: Interest received by government $\qquad$ | 117.9 | 118.4 | 118.3 | 118.5 | 118.8 | 119.4 | 120.1 | 120.7 |
| Less: Dividends received by government $\qquad$ | 10.1 | 10.4 | 10.3 | 10.4 | 10.5 | 10.7 | 10.8 | 10.9 |
| Subsidies less current surplus |  |  |  |  |  |  |  |  |
| of government enterprises. | -24.0 | -26.7 | -26.3 | -27.2 | -27.6 | -27.7 | -28.3 | -28.9 |
| Subsidies ........................ | 4 | . 4 | . 4 | . 4 | . 4 | . 4 | . 4 | . 4 |
| Less: Current surplus of government enterprises .. | 24.4 | 27.1 | 26.7 | 27.5 | 27.9 | 28.1 | 28.7 | 29.2 |
| Less: Wage accruals less |  |  |  |  |  |  |  |  |
| 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 funds ......... | 65.4 | 66.3 | 66.4 | 66.3 | 66.2 | 65.9 | 65.9 | 65.3 |
| Other ................................... | -41.6 | -40.0 | -41.1 | -42.4 | -31.7 | -40.7 | -38.9 | -41.2 |

Table 3.7B.-Government Purchases by Type
[Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | 111 | IV | 1 | 1 | 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 | 302.7 | 305.8 | 299.0 | 299.1 | 291.7 | 291.7 | 300.5 |
| Durable goods ............... | 80.9 | 70.6 | 74.3 | 66.7 | 65.6 | 64.6 | 63.1 | 65.5 |
| Nondurable goods .......... | 10.2 | 9.5 | 10.5 | 9.2 | 9.2 | 7.9 | 7.2 | 8.5 |
| Services $\qquad$ Compensation of | 217.8 | 218.1 | 216.7 | 218.2 | 219.1 | 214.5 | 217.3 | 221.3 |
| employees ............. | 135.9 | 135.8 | 135.4 | 136.2 | 134.4 | 135.3 | 135.6 | 134.9 |
| Military ................. | 90.2 | 88.3 | 89.0 | 87.6 | 86.4 | 87.1 | 87.0 | 86.3 |
| Civilian ................ | 45.8 | 47.5 | 46.5 | 48.7 | 48.0 | 48.2 | 48.5 | 48.6 |
| Other services ........... | 81.8 | 82.4 | 81.2 | 81.9 | 84.6 | 79.2 | 81.7 | 86.4 |
| Structures ..................... | 5.3 | 4.5 | 4.3 | 5.0 | 4.4 | 4.7 | 4.1 | 5.2 |
| Nondefense | 134.8 | 140.9 | 139.4 | 143.6 | 140.7 | 146.1 | 143.5 | 143.9 |
| Durable goods .............. | 6.6 | 7.2 | 7.2 | 7.4 | 7.3 | 7.4 | 7.2 | 7.5 |
| Nondurable goods $\qquad$ Commodity Credit Corporation | 7.7 | 7.2 | 6.8 | 6.9 | 7.2 | 7.5 | 7.2 | 5.9 |
| inventory change ... | -. 6 | -. 3 | -. 5 | -.8 | . 3 | -. 2 | -. 2 | -1.8 |
| Other nondurables ..... | 8.4 | 7.6 | 7.3 | 7.6 | 6.9 | 7.7 | 7.4 | 7.8 |
| Services ...................... | 109.9 | 114.8 | 114.2 | 117.6 | 114.3 | 119.2 | 118.5 | 119.5 |
| Compensation of employees. $\qquad$ | 63.6 | 67.9 | 68.2 | 68.1 | 68.1 | 71.0 | 72.9 | 70.5 |
| Other services ............ | 46.3 | 47.0 | 46.0 | 49.6 | 46.2 | 48.2 | 45.6 | 49.0 |
| Structures ..................... | 10.5 | 11.7 | 11.3 | 11.7 | 11.9 | 12.0 | 10.7 | 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 | 36.9 | 36.8 | 37.2 | 37.3 | 38.0 | 38.4 | 38.8 |
| Nondurable goods ............. | 59.9 | 62.6 | 63.0 | 62.5 | 62.6 | 64.3 | 65.0 | 66.5 |
| Services ......................... | 486.2 | 505.7 | 502.8 | 508.5 | 512.5 | 520.5 | 526.7 | 533.3 |
| Compensation of employees $\qquad$ | 461.7 | 483.0 | 480.6 | 485.9 | 490.2 | 497.1 | 503.4 | 509.8 |
| Other services .............. | 24.5 | 22.6 | 22.2 | 22.6 | 22.3 | 23.5 | 23.3 | 23.5 |
| Structures .......................... | 94.5 | 99.6 | 98.6 | 102.0 | 105.0 | 99.2 | 101.5 | 105.8 |

Table 3.10.-National Defense Purchases
[Billions of dollars]

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

[^10]3. Includes compensation of foreign personnel, consulting, training, and education.

Table 3.8B.-Government Purchases by Type in Constant Dollars
[Biltions of 1987 dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 11 | 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 | 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 |
| Nondurable goods ......... | 9.4 | 8.6 | 9.2 | 8.5 | 8.4 | 7.4 | 6.7 | 7.9 |
| Services ....................... | 173.3 | 166.9 | 166.6 | 166.2 | 165.7 | 159.8 | 160.6 | 162.8 |
| Compensation of employees. | 102.2 | 96.5 | 97.3 | 96.0 | 93.7 | 92.5 | 91.5 | 90.5 |
| Military .................. | 66.8 | 63.0 | 63.5 | 62.6 | 61.3 | 60.5 | 59.7 | 59.0 |
| Civilian ................. | 35.4 | 33.4 | 33.7 | 33.4 | 32.4 | 32.0 | 31.8 | 31.5 |
| Other services ............ | 71.1 | 70.4 | 69.3 | 70.3 | 72.0 | 67.3 | 69.1 | 72.3 |
| Structures .................... | 4.4 | 3.4 | 3.3 | 3.6 | 3.1 | 3.4 | 2.9 | 3.7 |
| Nondefense ..................... | 112.2 | 113.0 | 111.5 | 114.7 | 112.4 | 113.2 | 108.7 | 111.2 |
| Durable goods ............... | 7.2 | 8.0 | 7.8 | 8.7 | 8.5 | 7.5 | 7.5 | 8.5 |
| Nondurable goods ......... | 7.2 | 6.4 | 6.1 | 5.8 | 6.4 | 6.5 | 6.0 | 5.1 |
| Commodity Credit Corporation inventory change ... | 4 | -. 3 | -. 3 | -1.0 | 3 | -. 2 | -. 5 | -1.7 |
| Other nondurables ..... | 7.5 | 6.8 | 6.5 | 6.8 | 6.1 | 6.8 | 6.6 | 6.9 |
| Services ...................... | 88.6 | 88.5 | 87.9 | 90.1 | 87.4 | 88.9 | 86.1 | 88.4 |
| Compensation of employees $\qquad$ | 49.7 | 49.6 | 49.6 | 49.2 | 49.4 | 49.4 | 48.5 | 48.0 |
| Other services .............. | 38.9 | 38.9 | 38.3 | 40.9 | 38.0 | 39.5 | 37.6 | 40.4 |
| Structures ....................... | 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 |
| Nondurable goods ............. | 51.8 | 53.6 | 53.3 | 53.9 | 54.4 | 55.2 | 55.6 | 56.2 |
| Services ......................... | 394.3 | 399.1 | 398.2 | 399.8 | 401.2 | 404.0 | 405.9 | 408.7 |
| Compensation of |  |  |  |  |  |  |  |  |
| employees ................ | 360.1 | 363.6 | 363.1 | 364.0 | 365.1 | 366.5 | 368.1 | 369.9 |
| Other services ............... | 34.2 | 35.5 | 35.0 | 35.7 | 36.2 | 37.5 | 37.8 | 38.7 |
| Structures ........................ | 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 [Bililions of 1987 dollars]

| 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 | 67.9 | 58.9 | 61.8 | 56.0 | 55.3 | 53.3 | 50.9 | 52.6 |
| Aircraft ......................... | 20.6 | 18.4 | 19.7 | 17.6 | 18.0 | 16.8 | 13.7 | 16.7 |
| Missiles ... | 14.4 | 11.6 | 11.2 | 11.1 | 11.1 | 10.5 | 10.2 | 9.0 |
| Ships ...... | 10.4 | 9.1 | 10.6 | 8.2 | 8.3 | 7.7 | 8.3 | 8.3 |
| Vehicles | 3.4 | 2.5 | 2.6 | 2.0 | 1.8 | 1.6 | 1.6 | 1.3 |
| Electronic equipment ...... | 6.1 | 5.9 | 6.2 | 5.9 | 5.2 | 5.6 | 5.3 | 5.4 |
| Other .......................... | 13.0 | 11.4 | 11.4 | 11.2 | 10.9 | 11.1 | 11.8 | 11.9 |
| Other durable goods ......... | 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 $\qquad$ | 102.2 | 96.5 | 97.3 | 96.0 | 93.7 | 92.5 | 81.5 | 90.5 |
| Military ........................ | 66.8 | 63.0 | 63.5 | 62.6 | 61.3 | 60.5 | 59.7 | 59.0 |
| Civilian | 35.4 | 33.4 | 33.7 | 33.4 | 32.4 | 32.0 | 31.8 | 31.5 |
| Other services | 71.1 | 70.4 | 69.3 | 70.3 | 72.0 | 67.3 | 69.1 | 72.3 |
| Contractual research and development $\qquad$ | 23.9 | 24.0 | 24.1 | 23.5 | 24.2 | 21.6 | 23.2 | 22.5 |
| Installation support ${ }^{1}$....... | 20.2 | 21.7 | 22.4 | 22.0 | 21.5 | 22.9 | 23.8 | 24.4 |
| Weapons support ${ }^{2}$......... | 7.5 | 6.4 | 5.9 | 6.2 | 6.6 | 5.6 | 6.2 | 7.6 |
| Personnel support ${ }^{3}$........ | 11.4 | 11.0 | 10.3 | 11.0 | 11.4 | 11.6 | 12.2 | 12.1 |
| Transportation of material | 5.7 | 5.0 | 4.1 | 5.5 | 5.8 | 4.7 | 4.2 | 4.4 |
| Travel of persons ........................ | 3.9 | 3.7 | 3.5 | 4.4 | 3.5 | 3.3 | 2.9 | 3.7 |
| Other ................... | -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 ................. | 3.0 | 2.4 | 2.5 | 2.6 | 2.2 | 2.2 | 1.8 | 2.6 |
| Other .............................. | 1.5 | 1.0 | . 9 | 1.1 | 1.0 | 1.2 | 1.1 | 1.1 |

[^11] operate installations.
2. Includes depot maintenance and contractual services for weapons systems, other than research and development
3. Includes compensation of foreign personnel, consulting, training, and education

## 4. Foreign Transactions

Table 4.1.-Foreign Transactions in the National Income and Product Accounts
[Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 11 | III |
| Receipts from rest of the world $\qquad$ | 771.6 | 795.6 | 797.7 | 786.1 | 821.6 | 819.6 | 866.6 | 899.4 |
| Exports of goods and services | 638.1 | 659.1 | 660.1 | 649.0 | 680.3 | 674.2 | 704.5 | 725.2 |
| Merchandise ${ }^{1}$ | 449.7 | 461.0 | 461.7 | 450.3 | 480.3 | 476.0 | 499.5 | 521.1 |
| Durable .... | 301.4 | 314.8 | 316.3 | 307.1 | 329.2 | 329.4 | 346.0 | 355.2 |
| Nondurable | 148.3 | 146.2 | 145.4 | 143.2 | 151.9 | 146.6 | 153.5 | 165.9 |
| Services ${ }^{1}$...... | 188.5 | 198.1 | 198.4 | 198.7 | 200.0 | 198.3 | 205.0 | 204.1 |
| 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) $\qquad$ | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Payments to rest of the world $\qquad$ | 771.6 | 795.6 | 797.7 | 786.1 | 821.6 | 819.6 | 866.6 | 899.4 |
| Imports of goods and services ....... | 668.4 | 724.3 | 723.5 | 726.0 | 751.4 | 760.9 | 802.1 | 839.7 |
| Merchandise ${ }^{1}$......................... | 544.6 | 592.1 | 592.6 | 593.2 | 613.3 | 622.3 | 665.3 | 699.6 |
| Durable ..... | 346.3 | 385.5 | 379.6 | 386.4 | 407.8 | 418.1 | 445.3 | 464.0 |
| Nondurable ......................... | 198.3 | 206.6 | 213.0 | 206.8 | 205.6 | 204.2 | 220.0 | 235.7 |
| Services ${ }^{1}$............................... | 123.8 | 132.2 | 130.9 | 132.8 | 138.1 | 138.6 | 136.8 | 140.1 |
| Payments of factor income ${ }^{3}$......... | 127.9 | 132.1 | 134.3 | 128.6 | 143.3 | 146.1 | 169.5 | 184.9 |
| Transier payments (net) ................ | 31.8 | 31.5 | 28.8 | 30.3 | 40.1 | 29.0 | 30.1 | 33.0 |
| From persons (net) .................. | 9.5 | 9.9 | 9.8 | 9.9 | 9.8 | 10.5 | 10.5 | 10.7 |
| From government (net) ............. | 16.5 | 15.7 | 12.9 | 14.3 | 24.3 | 11.6 | 12.7 | 15.1 |
| From business ......................... | 5.8 | 5.9 | 6.1 | 6.1 | 5.9 | 6.9 | 6.9 | 7.2 |
| Net foreign investment .................. | -56.6 | -92.3 | -88.9 | -98.8 | -113.2 | -116.4 | -135.1 | $-158.2$ |

1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.
2. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign affiliates of U.S. corporations.
3. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.

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

| Exports of merchandise | 449.7 | 461.0 | 461.7 | 450.3 | 480.3 | 476.0 | 499.5 | 521.1 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Foods, | 40.3 | 40.7 | 40.4 | 39.0 | 42.5 | 39.7 | 37.8 | 41.7 |
| Industrial supplies and materi | 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. | 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. | . 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. | 58. | 61.4 |
| Durable goods | 26.6 | 28.4 | 28.5 | 28.4 | 29.3 | 28. | 30.5 | 30.5 |
| Nondurable good | 24.9 | 26.2 | 25.2 | 26.7 | 27.7 | 26 | 27.8 | 31.0 |
| Other | 29.8 | 28.3 | 28.5 | 28.2 | 30.1 | 27. | 31. | 31.7 |
| Durable goods | 14.9 | 14.1 | 14.3 | 14.1 | 15.1 | 13. | 15.7 | 15.8 |
| Nondurable goods | 14.9 | 14.1 | 14.3 | 14.1 | 15. | 13 | 15 | 15.8 |
| Imports of merchandise | 544.6 | 592.1 | 592.6 | 593.2 | 613.3 | 622.3 | 665.3 | 699.6 |
| Foods, feeds, and beverages | 27.6 | 27.9 |  | 28.0 | 28 | 29.4 | 30.5 | 32.2 |
| dun |  |  |  |  |  |  |  |  |
| petroleum and products | 82.3 | 88.9 | 87.9 | 89.4 | 92. | 97.6 | 103.1 | 107.5 |
| Durable goods | 39.2 | 43.0 | 41.4 | 43.3 | 46. | 48.7 | 52.9 | 55.4 |
| Nondurable goods | 43.2 | 45.9 | 46.5 | 46.1 | 45.7 | 48. | 50. | 52.2 |
| Petroleum and products | 51.6 | 51.5 | 57.2 | 50.1 | 47.6 | 41.6 | 51. | 60.7 |
| Capital goods, except auto | 134.3 | 152.4 | 150.5 | 152.9 | 163.2 | 170.5 | 179.0 | 188.0 |
| Civilian aircraft, engines, and | 12.6 | 11.3 | 11.7 | 10.4 | 12.4 | 11.3 | 12. | 9.9 |
| Computers, peripherals, and parts | 31.7 | 38.0 | 37.1 | 38.9 | 40. | 41. | 44.3 | 47.1 |
| Other | 90.0 | 103.1 | 101.6 | 103.6 | 110.6 | 117 | 122. | 131.0 |
| Automotive vehicles, engines, and parts | 91.8 | 102.4 | 101.7 | 101.5 | 105. | 108.1 | 116. | 123.4 |
| Consumer goods, except automotive | 122.7 | 134.0 | 132.7 | 136.6 | 137.9 | 137.8 | 144. | 148.6 |
| Durable goods | 63.9 | 70.2 | 68.5 | 71.4 | 73.2 | 72. | 76.8 | 77.6 |
| Nondurable goods | 58.7 | 63.8 | 64.2 | 65.3 | 64. | 65. | 67.7 | 71.0 |
| Other | 34.3 | 35.1 | 35.2 | 34.7 | 37. | 37.4 | 40. | 39.3 |
| Durable goods | 17.2 | 17.5 | 17.6 | 17.4 | 18.8 | 18.7 | 20.2 | 19.6 |
| Nondurable goods | 17.2 | 17.5 | 17.6 | 17.4 | 18.8 | 18.7 | 20.2 | 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. | 455.7 | 474.4 |
| Imports of nonpetroleum products ..... | 49 | 540.6 | 535 | 54 | 56 | 58 | 61 | 638.9 |

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

## 5. Saving and Investment

Table 5.1.-Gross Saving and Investment
[Billions of dollars]


Table 5.4.-Fixed Investment by Type
[Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | 11 | III |
| Fixed investment .... | $\begin{array}{r} 785.2 \\ 561.4 \\ 171.1 \\ 114.7 \\ 34.7 \\ 11.8 \\ 9.9 \end{array}$ | 886.7 | 851.1 | 868.3 | 913.5 | 942.5 | 967.0 | 992.6 |
| Nonresidential .......................... |  | 816.1 | 609.3 | 619.0 | 646.3 | 665.4 | $683.3$ | 709.6 |
| Structures |  | $173.4$ | 172.3 | 173.9 | 176.7 | 172.7 | 181.8 | 185.2 |
| Nonresidential buildings, including farm $\qquad$ |  |  | 115.2 | 118.7 | 122.3 |  | 127.235.6 | 129.2 |
| Utilities |  | 117.6 <br> 34.4 | 34.2 | 34.1 | 34.4 | 119.0 34.7 |  |  |
| Mining exploration, shafts, and wells $\qquad$ |  | 12.29.2 | 12.8 | 12.09.1 | $\begin{array}{r} 11.4 \\ 8.6 \end{array}$ |  |  | 10.78.6 |
| Other structures ......................... |  |  | 10.1 |  |  | $\begin{array}{r} 11.1 \\ 7.9 \end{array}$ | 11.2 |  |
| Producers' durable equipment ...... | 390.3 | 442.7 | 437.0 | 445.1 | 469.6 | 492.7 | 501.5 | 524.4 |
| ormation processing and related <br> equipment | 132.0 | 151.5 | 146.1 | 155.0 | 164.4 | 169.3 | 177.0 | 182.4 |
| Computers and peripheral equipment ${ }^{1}$ $\qquad$ | 36.5 | 47.0 | 44.8 | 49.1 | 51.5 | 52.6 | 53.4 |  |
| Other ................................... | 95.5 | 104.5 | 101.4 | 105.9 | 112.9 | 116.7 | 123.5 | 128.3 |
| Industrial equipment | 86.0 | 96.7 | 94.6 | 97.9 | 102.9 | 107.0 | 111.0 | 115.8 |
| Transportation and related equipment | 91.5 |  |  | 101.490.7 |  |  |  |  |
| Other ................................................ | 80.8 | $\left\|\begin{array}{r} 104.2 \\ 90.4 \end{array}\right\|$ | 107.3 89.0 |  | $\begin{array}{r} 107.9 \\ 94.4 \end{array}$ | $\left.\begin{array}{r} 118.6 \\ 97.8 \end{array} \right\rvert\,$ | $\begin{aligned} & 112.1 \\ & 101.5 \end{aligned}$ | $\begin{aligned} & 121.3 \\ & 104.9 \end{aligned}$ |
| Residential ...................................... | 223.8 | 250.6 | 241.8 | 249.3 | 267.2 | 277.1 | 283.6 | 282.9 |
| Structures ................................... | 216.5 | 242.8 | 234.2 | 241.5 | 259.2 | 269.1 | 275.3 | 274.5 |
| Single family ............................. | 116.5 | $\begin{array}{r} 133.3 \\ 10.8 \\ 98.8 \\ 77 \end{array}$ | $\begin{array}{r} 128.1 \\ 10.3 \\ 95.8 \\ 7.6 \end{array}$ | $\begin{array}{r} 132.0 \\ 11.2 \\ 98.3 \\ 7.8 \end{array}$ | $\left\|\begin{array}{r} 143.2 \\ 11.1 \\ 105.0 \\ 8.0 \end{array}\right\|$ | $\begin{array}{r} 152.5 \\ 11.4 \\ 105.2 \end{array}$ | $\begin{array}{r} 156.2 \\ 13.0 \\ 106.2 \end{array}$ | 154.414.1106.08.5 |
| Mutifamily ................................ | 13.1 |  |  |  |  |  |  |  |
| Other structures ......................... | 86.9 |  |  |  |  |  |  |  |
| Producers' durable equipment ....... | 7.3 |  |  |  |  | 8.0 | 8.3 |  |

1. Includes new computers and peripheral equipment only.

Table 5.5.-Fixed Investment by Type in Constant Dollars
[Billions of 1987 dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | II | III |
| Fixed investment ....................... | 722.9 | 804.6 | 787.3 | 808.8 | 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 | 149.8 | 147.7 | 147.3 | 147.5 | 148.7 | 144.1 | 151,0 | 152.1 |
| Nonresidential buildings, including farm $\qquad$ | 100.8 | 100.0 | 98.5 | 100.5 | 102.7 | 99.2 | 105.4 | 105.7 |
| Utilities ..................................... | 29.9 | 28.8 | 28.7 | 28.5 | 28.5 | 28.4 | 29.0 | 29.7 |
| Mining exploration, shafts, and wells $\qquad$ | 10.3 | 10.7 | 11.2 | 10.5 | 9.9 | 9.6 | 9.8 | 9.4 |
| Other structures | 8.9 | 8.2 | 9.0 | 8.0 | 7.6 | 6.9 | 6.8 | 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 |
| equipment ............................. | 156.8 | 200.9 | 190.8 | 208.9 | 225.2 | 233.2 | 242.2 | 251.1 |
| Computers and peripheral |  |  |  |  |  |  |  |  |
| equipment ${ }^{1}$ | $\begin{aligned} & 68.3 \\ & 885 \end{aligned}$ | 105.4 | 98.0 | 112.2 | 122.5 | 127.2 | 130.3 | 135.0 |
| Other | 88.5 | 95.5 | 92.8 | 96.7 | 102.7 | 106.0 | 111.8 | 116.1 |
| Industrial equipment ......... | 71.7 | 79.2 | 77.5 | 79.9 | 83.6 | 86.4 | 88.9 | 92.1 |
| Transportation and related equipment | 78.3 | 87.8 | 90.4 | 85.3 | 90.9 | 98.5 | 92.3 | 99.1 |
| Other ........................................ | 69.4 | 76.1 | 74.9 | 76.2 | 78.9 | 81.3 | 83.6 | 86.0 |
| Residential ............................ | 196.9 | 213.0 | 206.3 | 211.0 | 224.5 | 229.9 | 233.8 | 229.9 |
| Structures | 189.9 | 205.7 | 199.1 | 203.5 | 216.9 | 222.4 | 226.0 | 222.0 |
| Single family .............................. | 102.4 | 112.1 | 108.5 | 110.2 | 118.3 | 125.1 | 127.6 | 123.9 |
| Multifamily .................................. | 11.7 | 9.6 | 9.2 | 9.9 | 9.7 | 10.0 | 11.3 | 12.0 |
| Other structures ........................ | 75.8 | 84.1 | 81.3 | 83.5 | 88.9 | 87.3 | 87.2 | 86.1 |
| Producers' durable equipment ....... | 7.0 | 7.4 | 7.2 | 7.5 | 7.6 | 7.5 | 7.8 | 7.9 |

[^12]Table 5.10.-Change in Business Inventories by Industry
[Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 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 |
| Nonfarm ............................ | -2.7 | 20.1 | 23.9 | 24.2 | 10.7 | 22.3 | 60.4 | 52.3 |
| Change in book value ................ | 6.4 | 28.4 | 38.1 | 19.6 | 18.4 | 40.6 | 84.2 |  |
| Inveniory valuation adjustment ...... | -9.1 | -8.3 | -14.2 | 4.7 | -7.7 | -18.3 | -23.8 | -26.0 |
| Manufacturing .............................. | -11.9 | -2.0 | 3.2 | 2.5 | -10.8 | 8.3 | 1.1 | 2.8 |
| Durable goods ........................... | -15.0 | -2.3 | -. 1 | 2.6 | -5.5 | 5.3 | 6.9 | 5.3 |
| Nondurable goods ........................ | 3.1 | . 3 | 3.4 | -. 1 | -5.2 | 2.9 | -5.9 | -2.4 |
| Wholesale trade ............ | 7.5 | 4.9 | 7.5 | 8.1 | 1.1 | -2.0 | 20.7 | 17.1 |
| Durable goods ............ | 3.8 | 2.2 | . 8 | 7.1 | . 7 | -. 1 | 19.9 | 15.1 |
| Nondurable goods .............. | 3.7 | 2.8 | 6.7 | 1.0 | . 4 | -2.0 | . 8 | 1.9 |
| Merchant wholesalers ....... | 7.4 | 5.0 | 7.0 | 10.6 | . 1 | -3.2 | 18.9 | 15.9 |
| Durabie goods ........... | 3.9 | 2.1 | 2.3 | 6.5 | -. 2 | -2.2 | 19.8 | 12.9 |
| Nondurable goods ............... | 3.4 | 2.9 | 4.7 | 4.1 | . 3 | -1.0 | -8 | 3.0 |
| Nonmerchant wholesalers ........ | . 1 | -. 1 | . 5 | -2.5 | 1.0 | 1.1 | 1.8 | 1.2 |
| Durable goods ................... | -. 1 |  | -1.5 | . 6 | 9 | 2.1 |  | 2.2 |
| Nondurable goods .............. | . 2 | -. 2 | 2.0 | -3.1 | . 1 | -1.0 | 1.6 | -1.0 |
| Retail trade | 3.9 | 10.3 | 1.8 | 7.2 | 5.7 | 2.7 | 26.1 | 24.5 |
| Durable goods ............ | . 6 | 5.3 | . 8 | -. 5 | 4.6 | 6.2 | 7.2 | 18.9 |
| Automotive ............................. | 7 | - ${ }^{-1}$ | -9 | -8.7 | -5.4 | 3.0 | -2.4 | 8.3 |
| Other |  | 5.4 | 1.8 | 8.2 | 9.9 | 3.2 | 9.6 | 10.6 |
| Nondurable goods ..................... | 3.3 | 5.1 | 1.0 | 7.7 | 1.1 | -3.5 | 18.9 | 57 |
| Other ................................. | -2.2 | 6.9 | 11.3 | 6.4 | 14.7 | 13.3 | 12.6 | 7.9 |
| Durable goods | -2.4 | 3.5 | $\underline{2.1}$ | 5.8 | 9.2 5.5 | 9.1 4 | 4.2 <br> 8.4 | 4.3 |

Table 5.12.-Inventories and Final Sales of Domestic Business by Industry
[Billions of dollars]

|  | Seasonally adjusted quarterly totals |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1993 |  |  | 1994 |  |  |
|  | 11 | 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 $\qquad$ <br> Durable goods $\qquad$ <br> Nondurable goods $\qquad$ | 1,027.4 | 1,034.6 | 1,040.8 | 1,046.6 | 1,070.0 | 1,091.0 |
|  | 571.2 | 576.1 | 582.9 | 588.0 | 602.2 | 617.7 |
|  | 456.2 | 458.5 | 457.9 | 458.6 | 467.8 | 473.4 |
| Manufacturing $\qquad$ <br> Durable goods $\qquad$ <br> Nondurable goods $\qquad$ | 397.3 | 397.0 | 394.6 | 395.9 | 400.2 | 405.0 |
|  | 245.8 | 245.8 | 245.2 | 246.3 | 249.8 | 253.7 |
|  | 151.5 | 151.2 | 149.4 | 149.6 | 150.5 | 151.3 |
| Wholesale trade $\qquad$ <br> Durable goods $\qquad$ <br> Nondurable goods $\qquad$ | 254.6 | 257.5 | 259.9 | 260.0 | 266.2 | 272.5 |
|  | 158.2 | 160.4 | 161.7 | 162.4 | 167.6 | 172.5 |
|  | 96.4 | 97.1 | 98.2 | 97.7 | 98.5 | 100.0 |
| Merchant wholesalers ......................... | 226.3 | 230.0 | 232.2 | 231.8 | 237.7 | 243.5 |
| Durable goods ......... | 141.0 | 143.2 | 144.1 | 144.1 | 149.5 | 153.7 |
| Nondurable goods $\qquad$ Nonmerchant wholecalers | 85.3 | 86.9 | 88.0 | 87.8 | 88.3 | 89.8 |
|  | 28.3 | 27.5 | 27.7 | 28.2 | 28.5 | 29.0 |
| Nonmerchant wholesalers $\qquad$ Durable goods $\qquad$ | 17.2 | 17.2 | 17.5 | 18.3 | 18.2 | 18.8 |
| Nondurable goods ........................ | 11.1 | 10.3 | 10.2 | 9.9 | 10.3 | 10.2 |
| Retail trade | 277.2 | 279.7 | 282.0 | 283.0 | 292.2 | 299.4 |
| Durable goods .................................... | 131.7 | 132.4 | 135.4 | 136.6 | 140.5 | 145.3 |
| Automotive ...................................... | 69.0 | 67.0 | 66.8 | 67.5 | 68.5 | 70.5 |
| Other ............................................... | 62.7 | 65.4 | 68.6 | 69.2 | 72.0 | 74.8 |
| Nondurable goods ................................................................... | 145.5 | 147.3 | 146.6 | 146.4 | 151.7 | 154.1 |
| Other | 98.3 | 100.4 | 104.4 | 107.7 | 111.3 | 114.1 |
| Final sales of domestic business ${ }^{2}$ $\qquad$ Final sales of goods and structures of domestic business ${ }^{2}$ $\qquad$ | 442.8 | 447.4 | 457.1 | 462.6 | 467.5 | 475.4 |
|  | 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 | 2.53 | 2.49 | 2.48 | 2.49 | 2.49 |
| Nonfarm inventories to final sales ................... | 2.32 | 2.31 | 2.28 | 2.26 | 2.29 | 2.29 |
| Noniarm inventories to final sales of goods and structures $\qquad$ | 4.25 | 4.26 | 4.15 | 4.12 | 4.19 | 4.19 |

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

Table 5.11.-Change in Business Inventories by Industry in Constant Dollars
[Billions of 1987 dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | II | 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 | -10.2 | -. 8 | 3.9 | 2.5 | -7.7 | 9.9 | . 7 | 3.6 |
| Durable goods .. | -13.1 | -1.3 | . 8 | 2.5 | -3.5 | 6.8 | 6.8 | 5.6 |
| Nondurable goods ....................... | 2.9 | . 5 | 3.1 | 0 | -4.2 | 3.1 | -6.0 | -2.0 |
| Wholesale trade | 6.5 | 4.3 | 7.3 | 6.8 | . 7 | -1.0 | 17.7 | 15.3 |
| Durable goods ........................... | 3.4 | 2.0 | . 9 | 6.4 | 8 | . 3 | 17.3 | 13.7 |
| Nondurable goods ...................... | 3.1 | 2.4 | 6.4 | . 4 | 0 | -1.3 | . 4 | 1.7 |
| Merchant wholesalers ............... | 6.4 | 4.4 | 6.8 | 9.1 | -. 4 | -2.0 | 16.0 | 14.0 |
| Durable goods ..................... | 3.5 | 1.9 | 2.2 | 5.9 | -. 3 | -1.8 | 17.2 | 11.5 |
| Nondurable goods ............... | 2.9 | 2.5 | 4.6 | 3.3 | -. 1 | -. 1 | -1.2 | 2.6 |
| Nonmerchant wholesalers ......... | . 1 | 0 | . 5 | -2.3 | 1.1 | 1.0 | 1.6 | 1.3 |
| Durable goods ................... | -. 1 | . 1 | -1.3 | . 5 | 1.0 | 2.2 | 0 | 2.2 |
| Nondurable goods ............... | . 2 | -. 2 | 1.8 | -2.9 | . 1 | -1.2 | 1.6 | -. 9 |
| Retail trade | 3.6 | 9.1 | 1.8 | 6.2 | 5.0 | 2.0 | 22.3 | 20.7 |
| Durable goods ........................... | . 6 | 4.7 | 1.0 | -. 3 | 4.0 | 5.0 | 6.2 | 15.9 |
| Automotive ............................. | . 6 | 0 | -. 8 | -7.4 | -4.5 | 2.5 | -1.9 | 6.9 |
| Other ................................... | 0 | 4.7 | 1.8 | 7.0 | 8.5 | 2.5 | 8.1 | 9.0 |
| Nondurable goods ...................... | 3.0 | 4.4 | . 8 | 6.5 | 1.1 | -3.0 | 16.1 | 4.8 |
| Other | -1.9 | 5.9 | 9.8 | 5.3 | 12.7 | 11.3 | 11.0 | 6.6 |
| Durable goods ............................ | -2.1 | 2.9 | 1.9 | 5.0 | 7.7 | 7.5 | 3.5 | 3.5 |
| Nondurable goods ....................... | 2 | 3.0 | 7.9 | . 3 | 5.0 | 3.7 | 7.5 | 3.1 |

Table 5.13.-Inventories and Final Sales of Domestic Business by Industry in Constant Dollars
[Billions of 1987 dollars]

|  | Seasonally adjusted quarterly totals |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1993 |  |  | 1994 |  |  |
|  | 11 | 111 | IV | 1 | 1 | 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 |
| Noniarm | 910.4 | 915.6 | 918.3 | 923.8 | 936.8 | 948.3 |
| Durable goods | 511.4 | 514.8 | 517.0 | 521.9 | 530.3 | 540.0 |
| Nondurable goods ............................... | 399.0 | 400.9 | 401.3 | 401.9 | 406.4 | 408.3 |
| Manufacturing | 361.0 | 361.6 | 359.7 | 362.1 | 362.3 | 363.2 |
| Durable goods | 226.7 | 227.4 | 226.5 | 228.2 | 229.9 | 231.3 |
| Nondurable goods ................................ | 134.2 | 134.2 | 133.2 | 133.9 | 132.4 | 131.9 |
| Wholesale trade | 222.0 | 223.7 | 223.9 | 223.7 | 228.1 | 231.9 |
| Durable goods ................................. | 139.1 | 140.7 | 140.9 | 140.9 | 145.3 | 148.7 |
| Nondurable goods ................................ | 83.0 | 83.1 | 83.0 | 82.7 | 82.8 | 83.2 |
| Merchant wholesalers ........................ | 197.1 | 199.3 | 199.2 | 198.7 | 202.7 | 206.3 |
| Durable goods ....................... | 123.9 | 125.3 | 125.3 | 124.8 | 129.1 | 132.0 |
| Nondurable goods .......................... | 73.2 | 74.0 | 74.0 | 73.9 | 73.6 | 74.3 |
| Nonmerchant wholesalers ................... | 25.0 | 24.4 | 24.7 | 24.9 | 25.3 | 25.6 |
| Durable goods ............... | 15.2 | 15.3 | 15.6 | 16.1 | 16.1 | 16.7 |
| Nondurable goods ......................... | 9.8 | 9.1 | 9.1 | 8.8 | 9.2 | 9.0 |
| Retail trade ............................................. | 239.9 | 241.4 | 242.7 | 243.2 | 248.7 | 253.9 |
| Durable goods .................................... | 114.9 | 114.9 | 115.9 | 117.1 | 118.6 | 122.6 |
| Automotive ...................................... | 60.6 | 58.8 | 57.6 | 58.3 | 57.8 | 59.5 |
| Other .............................................. | 54.3 | 56.1 | 58.2 | 58.9 | 60.9 | 63.1 |
| Nondurable goods .................................. | 124.9 | 126.5 | 126.8 | 126.1 | 130.1 | 131.3 |
| Other ..................................................... | 87.6 | 88.9 | 92.1 | 94.9 | 97.7 | 99.3 |
| Final sales of domestic business ${ }^{2}$ | 363.5 | 366.7 | 373.4 | 375.6 | 377.0 | 381.4 |
| Final sales of goods and structures of domestic business ${ }^{2}$ $\qquad$ | 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 | 2.73 | 2.69 | 2.69 | 2.72 | 2.72 |
| Nonfarm inventories to final sales ............... | 2.50 | 2.50 | 2.46 | 2.46 | 2.48 | 2.49 |
| Nonfarm inventories to final sales of goods and structures $\qquad$ | 4.37 | 4.36 | 4.24 | 4.25 | 4.29 | 4.28 |

[^13] quarterly rates, whereas the constant-dollar change in business inventories component of GDP is stated at annual rates,
2. Quarrerly totals at monthly rates. Final seles of domestic business equals final sales of domestic product less gross product of households and institutions and general government and inciudes a small amount of final sales by farm.

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

Table 6.1C.-National Income Without Capital Consumption Adjustment by Industry
[Billions of doilars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | 11 | 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 $\qquad$ | 100.2 | 95.1 | 97.2 | 73.4 | 103.8 | 107.9 | 101.0 |  |
| Mining ......................... | 38.8 | 40.4 | 40.6 | 39.8 | 40.9 | 39.7 | 38.7 | -.......... |
| Construction ................. | 203.3 | 215.4 | 212.5 | 217.7 | 222.7 | 227.9 | 238.9 |  |
| Manufacturing ............... | 862.8 | 911.9 | 908.1 | 913.1 | 945.5 | 967.1 | 970.3 |  |
| Durable goods ........... | 483.7 | 514.3 | 509.2 | 518.2 | 539.1 | 554.9 | 554.9 | ........ |
| Nondurable goods ...... | 379.1 | 397.6 | 398.9 | 394.9 | 406.4 | 412.2 | 415.4 | ........... |
| Transportation and public utilities $\qquad$ | 361.8 | 384.8 | 380.8 | 388.1 | 392.2 | 391.0 | 404.8 |  |
| Transportation .............. | 153.4 | 166.1 | 163.8 | 168.9 | 170.2 | 169.3 | 175.9 | ........... |
| Communications $\qquad$ <br> Electric, gas, and | 102.6 | 107.6 | 108.5 | 108.4 | 107.7 | 110.1 | 112.6 | ........... |
| Electrin, gas, and | 105.8 | 111.1 | 108.5 | 110.9 | 114.3 | 111.6 | 116.3 |  |
| Wholesale trade ............. | 279.5 | 288.6 | 290.9 | 288.3 | 294.3 | 300.2 | 312.6 |  |
| Retail trade ................... | 420.3 | 444.9 | 441.2 | 449.4 | 451.4 | 455.8 | 472.2 | ........... |
| Finance, insurance, and real estate $\qquad$ | 781.3 | 846.0 | 836.2 | 848.4 | 865.2 | 860.7 | 885.0 |  |
| Services ....................... | 1,083.3 | 1,159.6 | 1,147.9 | 1,167.1 | 1,190.9 | 1,217.2 | 1,241.1 | ........... |
| Government .................... | 738.4 | 765.2 | 761.5 | 768.3 | 771.7 | 783.5 | 792.4 | 795.8 |
| 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]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | II | III |
| Corporate profits with inventory valuation and capital consumption adjustments ...... | $\left.\begin{array}{r} 405.1 \\ 344.5 \\ 67.9 \\ 276.6 \end{array} \right\rvert\,$ | $\begin{aligned} & 485.8 \\ & 420.5 \end{aligned}$ | $\begin{aligned} & 473.1 \\ & 410.4 \end{aligned}$ | $\begin{aligned} & 493.5 \\ & 424.3 \end{aligned}$ | $\begin{aligned} & 533.9 \\ & 472.2 \end{aligned}$ | $\begin{aligned} & 508.2 \\ & 447.1 \end{aligned}$ | $\begin{aligned} & 546.4 \\ & 485.7 \end{aligned}$ | $\begin{aligned} & 557.1 \\ & 495.9 \end{aligned}$ |
| Domestic industries |  |  |  |  |  |  |  |  |
| Financial |  | 89.5 | 86.0 | 90.0 | 100.6 | 74.9 | 90.9 | 95.8 |
| Nonfinancial |  | 330.9 | 324.4 | 334.3 | 371.6 | 372.2 | 394.7 | 400.1 |
| Rest of the world | 60.6 | 65.3 | 62.7 | 69.1 | 61.7 | 61.1 | 60.7 | 61.2 |
| Receipts from the rest of the world ... | 65.4 | 74.2 | 75.3 | 75.2 | 74.7 | 77.6 | 78.1 | 88.7 |
| Less: Payments to the rest of the world $\qquad$ | 4.8 | 8.9 | 12.6 | 6.1 | 13.0 | 16.6 | 18.4 | 27.4 |
| Corporate profits with inventory valuation adjustment $\qquad$ | 389.4 | 456.2 | 446.6 | 461.7 | 495.1 | 471.2 | 509.0 | 519.6 |
| Domestic industries | 328.8 | 391.0 | 383.8 | 392.6 | 433.4 | 410.1 | 448.2 | 458.3 |
| Financial | 81.9 | 103.7 | 100.1 | 103.9 | 114.6 | 89.6 | 106.4 | 111.8 |
| Federal Reserve banks | 17.8 | 16.0 | 15.9 | 15.7 | 15.8 | 16.0 | 16.9 | 18.0 |
| Other ..... | 64.2 | 87.7 | 84.2 | 88.2 | 98.8 | 73.6 | 89.6 | 93.8 |
| Nonfinancial | 246.9 | 287.3 | 283.7 | 288.7 | 318.8 | 320.5 | 341.8 | 346.6 |
| Manufacturing ............................. | 94.5 | 114.2 | 114.2 | 112.4 | 134.2 | 145.1 | 143.0 | ......... |
| Durable goods ....................... | 35.5 | 49.4 | 47.2 | 52.2 | 64.0 | 71.4 | 69.4 | ... |
| Primary metal industries ....... | -. 4 | . 2 | . 6 | -. 2 | 1.8 | . 2 | . 9 | ......... |
| Fabricated metal products .... Industrial machinery and | 7.5 | 6.8 | 7.0 | 6.7 | 7.8 | 9.0 | 9.0 | ......... |
| equipment | 6.1 | 7.4 | 7.1 | 9.1 | 7.6 | 9.3 | 9.0 | ........ |
| Electronic and other electric |  |  |  |  |  |  |  |  |
| equipment $\qquad$ Motor vehicles and | 9.0 | 11.9 | 9.1 | 13.0 | 14.9 | 16.6 | 17.9 |  |
| equipment ....................... | -1.5 | 4.1 | 4.0 | 3.1 | 10.3 | 14.4 | 9.7 | .......... |
| Other ................................ | 14.8 | 19.0 | 19.4 | 20.4 | 21.5 | 21.8 | 22.9 |  |
| Nondurable goods .................. | 58.9 | 64.9 | 67.0 | 60.2 | 70.2 | 73.8 | 73.5 |  |
| Food and kindred products ... Chemicals and allied | 17.5 | 16.9 | 16.4 | 16.3 | 15.9 | 20.9 | 20.3 | ......... |
| products ......................... | 15.8 | 17.5 | 16.9 | 15.7 | 18.8 | 18.4 | 19.1 |  |
| Petroleum and coal products. | -1.4 | 4.7 | 6.0 | 5.4 | 9.1 | 5.5 | 4.6 |  |
| Other ............................... | 27.1 | 25.8 | 27.7 | 22.9 | 26.4 | 29.0 | 29.5 |  |
| Transportation and public utilities .. | 55.6 | 65.0 | 61.9 | 67.0 | 69.7 | 63.4 | 73.2 |  |
| Wholesale and retail trade ............ | 54.8 | 61.2 | 63.3 | 62.0 | 63.7 | 59.0 | 72.0 |  |
| Other ....................................... | 42.0 | 46.9 | 44.3 | 47.3 | 51.3 | 53.0 | 53.6 |  |
| Rest of the world .............................. | 60.6 | 65.3 | 62.7 | 69.1 | 61.7 | 61.1 | 60.7 | 61.2 |

## 7. Quantity and Price Indexes

Table 7.1.-Fixed-Weighted and Alternative Quantity and Price Indexes for Gross Domestic Product
[Index numbers, 1987=100]


Table 7.1.-Fixed-Weighted and Alternative Quantity and Price Indexes
for Gross Domestic Product-Continued [Index numbers, 1987=100]

|  | 1992 | 1993 | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | II | III |
| Government purchases: <br> Current dollars $\qquad$ <br> Quantity indexes: <br> Fixed 1987 weights $\qquad$ <br> Chain-type annual weights $\qquad$ <br> Benchmark-years weights $\qquad$ <br> Price indexes: <br> Fixed 1987 weights $\qquad$ <br> Chain-type annual weights $\qquad$ <br> Benchmark-years weights $\qquad$ <br> Implicit price deflator ........................ |  |  |  |  |  |  |  |  |
|  | 127.7 | 130.3 | 130.0 | 130.8 | 131.3 | 131.6 | 132.3 | 134.9 |
|  |  |  |  |  |  |  |  |  |
|  | 106.3 | 105.5 | 105.4 | 105.7 | 105.7 | 104.4 | 104.0 | 105.8 |
|  | 106.2 106.0 | 105.31 | 105.3 105.1 | 105.4 | 105.3 105.1 | 104.4 104.2 | 104.1 103.8 | 105.6 105.4 |
|  | 106.0 | 105.1 | 105.1 | 105.2 | 105.1 | 104.2 | 103.8 | 105.4 |
|  | 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: <br> Current dollars $\qquad$ <br> Quantity indexes: <br> Fixed 1987 weights $\qquad$ <br> Chain-lype annual weights $\qquad$ <br> Benchmark-years weights $\qquad$ <br> Price indexes: <br> Fixed 1987 weights $\qquad$ <br> Chain-type annual weights $\qquad$ <br> Benchmark-years weights $\qquad$ <br> Implicit price deflator $\qquad$ |  |  |  |  |  |  |  |  |
|  | 116.6 | 115.2 | 115.6 | 115.0 | 114.2 | 113.7 | 113.0 | 115.5 |
|  |  |  |  |  |  |  |  |  |
|  | 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 |
|  |  |  |  |  |  |  |  |  |
|  | 121.5 | 126.1 | 125.7 | 128.5 | 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: |  |  |  |  |  |  |  |  |
|  | 107.6 | 103.7 | 104.7 | 102.4 | 102.4 | 99.9 | 99.9 | 102.9 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ............ | 89.5 | 83.4 | 84.5 | 82.5 | 81.7 | 78.2 | 77.4 | 79.9 |
| Chain-type annual weights .... | 88.9 | 82.8 | 84.0 | 81.5 | 80.9 | 78.2 | 77.3 | 79.5 |
| Benchmark-years weights ..... | 88.8 | 82.7 | 83.9 | 81.5 | 80.8 | 78.1 | 77.3 | 79.5 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ......... | 122.0 | 126.6 | 126.0 | 127.0 | 127.9 | 129.0 | 131.1 | 132.3 130.5 |
| Chain-type annual weights | 121.1 | 125.3 | 124.6 | 125.6 | 126.6 | 127.8 | 129.5 | 130.5 130.4 |
| Benchmark-years weights ..... | 121.1 | 125.3 | 124.6 | 125.6 | 126.7 | 127.9 | 129.5 | 130.4 |
| Implicit price deflator ................ | 120.2 | 124.2 | 123.9 | 124.1 | 125.3 | 127.7 | 129.0 | 128.7 |
| Nondefense: |  |  |  |  |  |  |  |  |
| Quantity indexes: ...................... 145.1 151.7 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |
| Fixed 1987 weights | 120.8 | 121.7 | 120.1 | 123.5 | 121.0 | 121.8 | 117.0 | 119.8 |
| Chain-type annual weights .... | 122.4 | 123.4 | 122.0 | 125.1 | 122.6 | 124.4 | 119.5 | 121.3 |
| Benchmark-years weights ..... | 121.0 | 122.0 | 120.5 | 123.6 | 121.2 | 122.9 | 118.0 | 119.9 |
| Benchmark-years weights .....Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ............. | 119.8 | 124.3 | 124.7 | 125.1 | 124.4 | 127.2 | 130.5 | 129.6 |
| Chain-type annual weights .... | 118.6 | 122.9 | 123.1 | 123.6 | 123.5 | 126.5 | 129.4 | 128.0 |
| Benchmark-years weights ..... | 120.0 | 124.4 | 124.6 | 125.1 | 125.0 | 127.9 | 130.9 | 129.5 |
| Implicit price deflator ............... | 120.2 | 124.7 | 125.0 | 125.2 | 125.1 | 129.1 | 132.0 | 129.4 |
| State and local: |  |  |  |  |  |  |  |  |
| Current dollars ... | 136.2 | 141.9 | 141.2 | 143.0 | 144.5 | 145.4 | 147.3 | 149.9 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights | 113.4 | 115.4 | 115.0 | 116.0 | 116.9 | 116.4 | 117.3 | 118.5 |
| Chain-type annual weights ........ | 113.3 | 115.1 | 114.7 | 115.7 | 116.5 | 116.2 | 116.9 | 118.1 |
| Benchmark-years weights ........ | 113.3 | 115.2 | 114.8 | 115.7 | 116.5 | 116.2 | 117.0 | 118.1 |
| Price indexes: Fixed 1987 weights |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ................ | 120.3 | 123.4 | 123.2 | 123.7 | 124.1 | 125.3 | 126.2 | 127.1 |
| Chain-type annual weights ....... | 120.2 | 123.3 | 123.1 | 123.6 | 124.0 | 125.2 | 126.0 | 126.9 |
| Benchmark-years weights ......... | 120.2 | 123.2 | 123.0 | 123.6 | 124.0 | 125.2 | 126.0 | 126.9 |
| Implicit price deflator .................... | 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]

|  | 1992 | 1993 | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | 11 | III |
|  |  |  |  |  |  |  |  |  |
| Current dollars | 132.6 | 139.7 | 138.8 | 140.1 | 142.7 | 144.8 | 147.4 | 149.5 |
|  | 10 | 113.1 | 112.5 | 113.2 |  | 115.9 | 117.1 | 118.2 |
| Chain-type annual weights | 109.4 | 112.2 | 111.7 | 112.2 | 113.6 | 114.5 | 115.6 | 116.6 |
| Benchmark-years weights. | 109.3 | 112.0 | 111.5 | 112.0 | 113.4 | 114.3 | 115.5 | 116.5 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights | 121.9 | 125.5 | 125.2 | 125.8 | 126.6 | 127.5 | 128.5 | 129.4 |
| Chain-type annual weights | 121.2 | 124.6 | 124.3 | 124.9 | 125.6 | 126.6 | 127.5 | 128.3 |
| Benchmark-years weights | 121.4 | 124.8 | 124.5 | 125.1 | 125.8 | 126.8 | 127.7 | 128.5 |
| Implicit price deflator ...................... | 120.9 | 123.5 | 123.4 | 123.7 | 124.1 | 125.0 | 125.9 | 126.5 |
| Final sales of domestic product ${ }^{\text {: }}$ : |  |  |  |  |  |  |  |  |
| Current dollars .................................. | 133.3 | 140.2 | 139.2 | 140.6 | 143.3 | 145.1 | 146.7 | 149.0 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| 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 |
| Chain-type annual weights .... | 121.4 | 124.7 | 124.4 | 125.0 | 125.8 | 126.8 | 127.6 | 128.5 |
| Benchmark-years weights .... | 121.5 | 124.8 | 124.5 | 125.1 | 125.9 | 126.9 | 127.7 | 128.5 |
| Implicit price deflator ........................ | 120.9 | 123.6 | 123.5 | 123.8 | 124.2 | 125.1 | 126.0 | 126.7 |
| Gross domestic purchases ${ }^{2}$ : |  |  |  |  |  |  |  |  |
| Current dollars ..................... | 129.2 | 136.8 | 135.9 | 137.4 | 139.9 | 142.2 | 144.9 | 147.4 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights . | 107.0 | 111.2 | 110.5 | 111.6 | 113.2 | 114.6 | 115.9 | 117.1 |
| Chain-type annual weights. | 106.6 | 110.0 | 109.4 | 110.2 | 111.5 | 112.8 | 114.0 | 115.1 |
| Benchmark-years weights ............. | 106.6 | 110.0 | 109.4 | 110.2 | 111.5 | 112.8 | 114.0 | 115.1 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights $\qquad$ | 121.8 | 125.2 | 124.9 | 125.4 | 126.2 | 127.0 | 128.0 | 129.1 |
| Chain-type annual weights Benchmark-years weights | 121.3 | 124.4 | 124.2 | 124.7 | 125.5 | 126.2 | 127.2 | 128.1 |
| Implicit price deflator .......................... | 120.7 | 123.0 | 123.0 | 123.2 | 123.6 | 124.2 | 125.1 | 125.8 |
| Final sales to domestic purchasers ${ }^{3}$ : |  |  |  |  |  |  |  |  |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights .................... | 107.6 | 111.5 | 110.7 | 111.9 | 113.6 | 114.7 | 115.2 | 116.6 |
| Chain-type annual weights ........... | 107.0 | 110.2 | 109.6 | 110.5 | 111.9 | 112.9 | 113.4 | 114.6 |
| Benchmark-years weights ............. | 107.1 | 110.3 | 109.6 | 110.5 | 111.9 | 112.9 | 113.5 | 114.7 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights .................... | 121.9 | 125.3 | 125.0 | 125.5 | 126.3 | 127.1 | 128.1 | 129.1 |
| Chain-type annual weights ........... | 121.4 | 124.6 | 124.3 | 124.8 | 125.6 | 126.4 | 127.3 | 128.3 |
| Benchmark-years weights ............. | 121.4 | 124.5 | 124.3 | 124.8 | 125.5 | 126.3 | 127.3 | 128.2 |
| Implicit price deflator ........................ | 120.7 | 123.1 | 123.1 | 123.2 | 123.6 | 124.3 | 125.2 | 126.0 |

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

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

Table 7.3.-Fixed-Weighted and Alternative Quantity and Price Indexes for Gross National Product and Command-Basis Gross National Product
[Index numbers, 1987=100]

|  | 1992 | 1993 | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | ! | III |
| Gross national product: <br> Current dollars $\qquad$ <br> Quantity indexes: <br> Fixed 1987 weights $\qquad$ <br> Chain-type annual weights $\qquad$ <br> Benchmark-years weights $\qquad$ |  |  |  |  |  |  |  |  |
|  | 132.6 | 139.7 | 138.7 | 140.1 | 142.5 | 144.7 | 147.0 | 149.1 |
|  |  |  |  |  |  |  |  |  |
|  | 109.7 | 113.1 | 112.4 | 113.3 | 114.8 | 115.8 | 116.9 | 117.9 |
|  | 109.4 | 112.2 | 111.7 | 112.3 | 113.5 | 114.4 | 115.4 | 116.4 |
|  | 109.3 | 112.0 | 111.5 | 112.1 | 113.3 | 114.2 | 115.3 | 116.2 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ..................... | 121.8 | 125.4 | 125.1 | 125.7 | 126.5 | 127.5 | 128.4 | 129.3 |
| Chain-type annual weights ........... | 121.2 | 124.5 | 124.2 | 124.8 | 125.6 | 126.6 | 127.4 | 128.2 |
| Benchmark-years weights ............. | 121.4 | 124.7 | 124.4 | 125.0 | 125.8 | 126.8 | 127.6 | 128.4 |
| Implicit price deflator ....................... | 120.9 | 123.5 | 123.3 | 123.7 | 124.1 | 124.9 | 125.8 | 126.4 |
| Less: Exports of goods and services and receipts of factor income: Current dollars $\qquad$ Quantity index, fixed 1987 weights ... | 164.5 | 169.6 | 170.1 | 167.6 | 175.2 | 174.8 | 184.8 | 191.8 |
|  | 146.7 | 151.7 | 151.5 | 150.2 | 157.3 | 156.6 | 164.4 | 170.3 |
| Plus: Command-basis exports of goods and services and receipts of factor income: <br> Current dollars $\qquad$ Quantity index, fixed 1987 weights ... |  |  |  |  |  |  |  |  |
|  | 175.3 | 181.1 | 181.4 | 178.3 | 186.9 | 185.3 | 193.6 | 199.3 |
|  | 147.5 | 154.5 | 153.7 | 153.4 | 160.4 | 161.2 | 168.6 | 173.2 |
| Equals: Command-basis gross national product: <br> Current dollars $\qquad$ Quantity index, fixed 1987 weights ... |  |  |  |  |  |  |  |  |
|  | 132.6 | 139.7 | 138.7 | 140.1 | 142.5 | 144.7 | 147.0 | 149.1 |
|  | 109.8 | 113.4 | 112.7 | 113.6 | 115.2 | 116.3 | 117.3 | 118.2 |

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

## Table 7.4.-Price Inclexes for Personal Consumption Expenditures by Major Type of Product, Fixed 1987 Weights

[Index numbers, 1987=100]

| Personal consumption expenditures $\qquad$ | 24.6 | 128.1 | 127.8 | 128.3 | 129.1 | 129.8 | 130.7 | 131.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Durable goods | 11.6 | 113.9 | 113.7 | 114.3 | 115.0 | 115.5 | 116.7 | 117 |
| Motor vehicles and parts. | 112.4 | 116.1 | 115.5 | 117.0 | 117.8 | 118.3 | 119.7 | 121.5 |
| Furniture and househ | 103.9 | 104.3 | 104. | 104 | 104.9 | 105 | 105.9 | 106.1 |
| Other | 4.2 | 126.8 | 127.2 | 126.8 | 127.1 | 128.3 | 129.9 | 1.2 |
| Nondurable goods | 123.0 | 125.0 | 25.0 | 124.7 | 125.4 | 125.4 | 125.9 | 127.3 |
| Food. | 122.0 | 4.4 | 124.1 | . 5 | 125.6 | 5.9 | 26.3 | 128.0 |
| Clothing and shoes | 117.9 | 119.2 | 119.0 | 118 | 119.1 | 118 | 19.3 | 118 |
| Gasoline and oil | 123. | 122.1 | 12 | 118.2 | 120.5 | 119. | 119 | 125 |
| Fuel oil and coal | 116.4 | 116.0 | 117.6 | 116.2 | 113.6 | 115 | 14. | 114.4 |
| Other .... | 129.0 | 131.8 | 132.4 | 131.8 | 131.2 | 13 | 132.7 | 133.5 |
| Services | 128.7 | 133.5 | 133.1 | 133.9 | 135.0 | 135.9 | 137.0 | 138.0 |
| Housing | 124.1 | 127.9 | 127.6 | 128.3 | 129.2 | 130 | 131 | 132.3 |
| Household operation | 112.3 |  |  | 116.2 | 117. | 17 |  |  |
| Electricity and gas | 111.0 | 114.4 | 114.3 | 115 | 115. | 115 | 115 | 115.1 |
| Other houschold operation | 113.4 | 116.3 | 115. | 116. | 117. | 118 | 119 | 120.0 |
| Transportation .... | 12 | 134 | 134. | 134.5 | 134.5 | 135 |  | 54. |
| Medical care .... |  | 147 | 146.6 | 148.2 | 149.8 | 151.2 | 152.7 | 154.1 |
| Other ............ | 131.0 | 134.5 | 134.2 | 134.6 | 135.8 | 136.5 | 137.7 | 138.6 |
| Addenda: |  |  |  |  |  |  |  |  |
| in |  |  |  |  |  |  |  |  |
| Consumntype annual weights | 124.1 | 127.5 | 127.3 | 127.7 | 128.6 | 129.2 | 130.2 | 131.2 |
| Benchmark-years weights ........ | 12 | 127 | 127.3 | 127. |  | 129.2 |  | . 2 |

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

Table 7.6.-Price Indexes for Fixed Investment by Type, Fixed
1987 Weights
[Index numbers, 1987=100]

|  | 1992 | 1993 | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 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 | $\begin{aligned} & 114.4 \\ & \$ 19.7 \end{aligned}$ | $115.2$ | 115.8 |
| Structures | 114.1 | 117.3 | 116.9 | 117.8 | 118.8 |  | 120.3 | 121.6 |
| Nonresidential buildings, including farm $\qquad$ | 113.9 | 117.5 | 116.9 | 118.1 | 119.2 | 120.0 | 120.7 | 122.3 |
| Utilities ........................................ | 115.6 | 118.9 | 118.9 | 119.4 | 120.3 | 121.7 | 122.7 |  |
| Mining exploration, shatts, and wells $\qquad$ |  |  |  |  |  |  |  |  |
| Other structures ......................... | 111.5 | 112.7 | $112.7$ | $112.9$ | 113.5 | 114.3 | 115.4 | 114.6 |
| Producers' durable equipment ....... Information processing and related | 109.7 | 110.7 | 110.7 | 110.9 | 111.1 | 118.7 | 112.5 | 113.0 |
| equipment $\qquad$ Computers and peripheral | 93.1 | 91.7 | 91.9 | 91.3 | 91.2 | 91.1 | 91.3 | 91.1 |
| equipment ${ }^{1}$........................ | 59.9 | 51.5 | 52.3 | 50.3 | 48.5 | 47.7 | 47.4 | 46.2 |
| Other ..................................... | 107.9 | 109.7 | 109.5 | 109.7 | 110.3 | 110.6 | 111.0 | 111.3 |
| Industrial equipment $\qquad$ Transportation and related | 120.3 | 122.3 | 122.2 | 122.6 | 123.2 | 123.8 | 124.6 | 125.5 |
| equipment .............................. | 116.8 | 119.2 | 119.1 | 119.7 | 119.6 | 121.2 | 122.9 | 123.8 |
| Other ....................................... | 113.6 | 119.4 | 119.3 | 119.7 | 120.3 | 120.9 | 121.9 | 122.6 |
| Residential ...... |  | 117.4 | 116.9 | 118.0 | 118.8 | 120.2 | 121.0 | 122.8 |
| Structures .................................. | 113.8 | 117.7 | 117.2 | 118.3 | 119.2 | 120.5 | 121.3 | 123.1 |
| Singie family ............................. | 113.7111.7114.7 | $\begin{aligned} & 118.9 \\ & 112.8 \end{aligned}$ | $\begin{aligned} & 118.0 \\ & 112.1 \end{aligned}$ | $\begin{aligned} & 119.8 \\ & 113.2 \\ & +117 . \end{aligned}$ | $\begin{aligned} & 121.0 \\ & 114.0 \end{aligned}$ | $\begin{aligned} & 121.9 \\ & 114.9 \end{aligned}$ | 122.4 | 124.617.4122.9 |
| Multifamily -............................... |  |  |  |  |  |  |  |  |
| Other structures ......................... |  | 117.5 | 117.8 | 117.8 | 118.2 | 120.3 | 121.7 |  |
| 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: | $\begin{aligned} & 110.9 \\ & 110.3 \end{aligned}$ | $\begin{aligned} & 112.4 \\ & 111.9 \end{aligned}$ |  | $\begin{aligned} & 112.7 \\ & 112.1 \end{aligned}$ |  |  |  |  |
| Chain-type annual weights ........... Genchmark-years weights .......... |  |  | $\begin{aligned} & 112.3 \\ & 111.7 \end{aligned}$ |  | $\begin{aligned} & 113.0 \\ & 112.4 \end{aligned}$ | 113.8 <br> 113.3 | 114.6 | $\begin{aligned} & 115.5 \\ & 114.9 \end{aligned}$ |
| Genchmark-years weights ............. |  |  |  |  |  |  |  |  |

1. Includes new computers and peripheral equipment only.

NOTE.-Percent changes from preceding period for selected items in this table are shown in table 8.1.
Table 7.9.-Price indexes for Exports and Imports of Goods and Services and for Receipts and Payments of Factor Income, Fixed 1987 Weights
[Index numbers, 1987=100]

| Exports of goods and services . | 113.9 | 115.3 | 115.3 | 115.4 | 115.6 | 116.7 | 117.5 | 118.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Merchandise ${ }^{1}$ | 109.7 | 110.3 | 110.3 | 110.4 | 110.6 | 111.8 | 112.4 | 113.2 |
| Durable | 109.4 | 110.6 | 110.9 | 110.7 | 110.7 | 111.2 | 111.5 | 111.9 |
| Nondurable | 110.2 | 109.8 | 109.3 | 110.0 | 110.4 | 112.9 | 114.0 | 115.4 |
| Services ${ }^{1}$ | 124.0 | 127.3 | 127.4 | 127.6 | 127.8 | 128.4 | 129.7 | 130.3 |
| 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 ${ }^{\text {l }}$ | 112.0 | 111.8 | 112.4 | 11.7 | 111.7 | 110.9 | 113.0 | 115.5 |
| Durable | 112.8 | 114.0 | 113.7 | 114.2 | 115.1 | 115.4 | 116.1 | 116.9 |
| Nondurable | 110.7 | 107.9 | 110.1 | 107.3 | 105.6 | 103.2 | 107.7 | 112.9 |
| Services ${ }^{1}$... | 130.9 | 130.7 | 131.3 | 130.0 | 131.9 | 130.8 | 130.4 | 131.8 |
| Payments of factor income ${ }^{3}$.............. | 124.8 | 128.0 | 127.8 | 128.2 | 128.7 | 129.6 | 130.5 | 131.1 |
| Addenda: <br> Price indexes for exports of goods and services: |  |  |  |  |  |  |  |  |
| Chain-type annual weights ........... | 112.8 | 113.4 | 113.5 | 113.4 | 113.5 | 114.2 | 114.9 | 115.6 |
| Benchmark-years weights ............ | 112.0 | 112.6 | 112.8 | 112.7 | 112.7 | 113.5 | 114.2 | 114.9 |
| Price indexes for imports of goods and services: |  |  |  |  |  |  |  |  |
| Chain-type annual weights ........... | 113.6 | 112.8 | 113.5 | 112.5 | 112.5 | 111.6 | 113.1 | 115.1 |
| Benchmark-years weights ............. | 112.5 | 111.7 | 112.4 | 111.4 | 111.4 | 110.5 | 112.1 | 114.1 |

[^14]NOTE- Percent changes from preceding period for selected items in this table are shown in table 8.1.

Table 7.10.-Price Indexes for Exports and Imports of Merchandise by End-Use Category, Fixed 1987 Weights
[Index numbers, 1987=100]


1. 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 ${ }_{3}$ Fixed 1987 Weights

|  | 1992 | 1993 | Seasonally adjusied |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 11 | 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 | 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 |
| Nondurable goods | 115.5 | 113.8 | 117.4 | 112.6 | 111.9 | 107.3 | 111.7 | 115.5 |
| Services | 126.3 | 131.9 | 131.0 | 132.7 | 133.7 | 135.3 | 136.7 | 137.7 |
| Compensation of employees | 133.1 | 140.8 | 139.4 | 141.9 | 143.3 | 146.0 | 147.9 | 148.7 |
| Military | 135.2 | 140.3 | 140.3 | 140.1 | 141.2 | 143.8 | 145.7 | 146.2 |
| Civilian | 129.0 | 141.8 | 137.6 | 145.6 | 147.6 | 150.4 | 152.4 | 153.7 |
| Other services | 116.6 | 119.1 | 119.0 | 119.5 | 120.2 | 120.2 | 120.9 | 122.0 |
| Structures .......... | 121.4 | 132.4 | 127.8 | 136.6 | 137.2 | 138.0 | 138.7 | 139.7 |
| Nondefense | 119.8 | 124.3 | 124.7 | 125.1 | 124.4 | 127.2 | 130.5 | 129.6 |
| Durabie goods | 100.8 | 93.0 | 94.0 | 94.0 | 90.2 | 92.4 | 92.4 | 93.5 |
| Nondurable goods $\qquad$ Commodity Credit Corporation inventory change $\qquad$ |  |  |  |  |  |  |  |  |
| Other nondurables .................. | 108.0 | 106.3 | 106.5 | 106.3 | 105.5 | 105.9 | 105.6 | 106.7 |
| Services | 123.9 | 129.9 | 130.0 | 130.7 | 130.7 | 134.4 | 138.2 | 136.2 |
| Compensation of employees | 128.0 | 136.9 | 137.4 | 138.5 | 137.7 | 143.7 | 150.3 | 147.0 |
| Other services ....................... | 118.3 | 120.1 | 119.7 | 119.8 | 120.9 | 121.5 | 121.3 | 121.2 |
| Structures | 114.0 | 116.3 | 116.0 | 116.6 | 117.4 | 118.2 | 119.1 | 120.3 |
| State and locai | 120.3 | 123.4 | 123.2 | 123.7 | 124.1 | 125.3 | 126.2 | 127,1 |
| Durable goods | 113.1 | 115.1 | 115.1 | 115.5 | 115.3 | 116.4 | 117.2 | 117.9 |
| Nondurable goods ......................... | 115.4 | 116.2 | 117.8 | 145.6 | 114.5 | 116.2 | 116.4 | 117.9 |
| Services | 123.4 | 126.9 | 126.4 | 127.4 | 128.0 | 129.1 | 130.1 | 130.8 |
| Compensation of employees.. | 128.3 | 133.0 | 132.5 | 133.6 | 134.4 | 135.8 | 136.9 | 137.9 |
| Other services ............................ | 69.5 | 60.4 | 60.5 | 59.4 | 57.3 | 56.4 | 55.6 | 52.8 |
| Structures ..................................... | 110.2 | 112.8 | 112.7 | 112.9 | 113.9 | 115.0 | 115.6 | 117.1 |
| Addenda: <br> Price indexes for government purchases: <br> Chain-type annual weights $\qquad$ <br> Benchmark-years weights $\qquad$ |  |  |  |  |  |  |  |  |
|  | 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 |
| Price indexes for Federal national defense purchases: Chain-type annual weights $\qquad$ Benchmark-years weights $\qquad$ |  |  |  |  |  |  |  |  |
|  | 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 |
| Price indexes for Federal nondefense purchases: Chain-type annual weights $\qquad$ |  |  |  |  |  |  |  |  |
|  | 118.6 | 122.9 | 123.1 | 123.6 | 123.5 | 126.5 | 129.4 | 128.0 |
| Benchmark-years weights ............. | 120.0 | 124.4 | 124.6 | 125.1 | 125.0 | 127.9 | 130.9 | 129.5 |
| Price indexes for State and local purchases: Chain-type annual weights $\qquad$ Benchmark-years weights $\qquad$ |  |  |  |  |  |  |  |  |
|  | 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 |

Table 7.12.-Price Indexes for National Defense Purchases, Fixed 1987 Weights
[Index numbers, 1987=100]

|  | 1992 | 1993 | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 11 | III | IV | 1 | 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 | 114.8 | 117.9 | 117.7 | 117.1 | 117.9 | 118.8 | 122.5 | 124.0 |
| Aircraft | 118.5 | 124.6 | 124.3 | 125.3 | 124.3 | 125.7 | 133.3 | 137.2 |
| Missiles | 101.2 | 95.7 | 94.4 | 89.6 | 95.8 | 95.3 | 94.6 | 92.7 |
| Ships | 118.4 | 121.7 | 121.3 | 122.6 | 122.1 | 123.3 | 124.5 | 125.8 |
| Vehicles | 120.9 | 128.2 | 131.0 | 127.1 | 128.5 | 129.9 | 131.5 | 131.1 |
| Electronic equipment | 109.2 | 109.5 | 109.4 | 109.3 | 109.7 | 110.1 | 111.1 | 110.2 |
| Other | 116.6 | 118.4 | 118.4 | 118.2 | 118.7 | 118.9 | 120.0 | 120.6 |
| Other durable goods .................. | 105.8 | 105.1 | 105.2 | 104.8 | 105.1 | 105.4 | 105.5 | 105.3 |
| Nondurable goods ........................... | 115.5 | 113.8 | 117.4 | 112.6 | 111.9 | 107.3 | 111.7 | 115.5 |
| Petroleum products | 119.7 | 113.1 | 120.3 | 111.6 | 109.5 | 95.1 | 107.1 | 116.5 |
| Ammunition | 108.1 | 112.6 | 115.2 | 111.4 | 112.1 | 113.0 | 113.7 | 115.4 |
| Other nondurable goods .................. | 117.9 | 115.6 | 116.5 | 114.7 | 114.2 | 115.0 | 114.7 | 114.6 |
| Services | 126.3 | 131.9 | 131.0 | 132.7 | 133.7 | 135.3 | 136.7 | 137.7 |
| Compensation of employees ............. | 133.1 | 140.8 | 139.4 | 141.9 | 143.3 | 146.0 | 147.9 | 148.7 |
| Military .................................... | 135.2 | 140.3 | 140.3 | 140.1 | 141.2 | 143.8 | 145.7 | 146.2 |
| Civilian | 129.0 | 141.8 | 137.6 | 145.6 | 147.6 | 150.4 | 152.4 | 153.7 |
| Other services .............................. | 116.6 | 119.1 | 119.0 | 119.5 | 120.2 | 120.2 | 120.9 | 122.0 |
| Contractual research and development $\qquad$ | 112.4 | 113.5 | 113.5 | 113.4 | 114.2 | 113.3 | 113.9 | 114.3 |
| installation support ${ }^{1}$............................ | 114.5 | 117.3 | 117.4 | 118.3 | 118.1 | 118.6 | 119.6 | 121.4 |
| Weapons support ${ }^{2}$ | 120.4 | 124.4 | 124.0 | 124.4 | 126.1 | 127.7 | 126.8 | 127.1 |
| Personnel support ${ }^{3}$ | 133.0 | 136.6 | 136.1 | 137.2 | 138.0 | 137.4 | 140.6 | 143.3 |
| Transportation of material ............. | 104.8 | 105.3 | 104.9 | 105.8 | 105.4 | 105.3 | 105.5 | 105.1 |
| Travel of persons ............ | 110.5 | 116.5 | 115.7 | 116.4 | 118.5 | 119.5 | 117.8 | 118.1 |
| Structures | 121.4 | 132.4 | 127.8 | 136.6 | 137.2 | 138.0 | 138.7 | 139.7 |
| Military facilities ............................. | 117.5 | 131.0 | 123.9 | 137.4 | 137.8 | 138.3 | 139.3 | 139.6 |
| Other .................................................. | 128.7 | 135.1 | 135.0 | 135. | 136.2 | 137.3 | 137.7 | 139.8 |
| Addenda: <br> Price indexes for national defense purchases: <br> Chain-type annual weights $\qquad$ <br> Benchmark-years weights $\qquad$ |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | 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 |

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

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

## [Index numbers, 1987=100]

## Gross domestic product

Pius: Receipts of factor income from the rest of the world ${ }^{\text {l }}$
Less: Payments of factor income to the resi of the world ${ }^{2}$ $\qquad$
Equals: Gross national product Less: Consumption of fixed capital Equals: Net national product
Less: Indirect business tax and nontax liability pius business transier payments less subsidies plus current surplus of government enterprises .... Statistical discrepancy
Equals: National income
Addenda:
Net domestic product Domestic income

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

Table 7.14.-Implicit Price Deflators for Gross Domestic Product by Sector
[Index numbers, 1987=100]

|  | 1992 | 1993 | Seasonally adjusted |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 11 | 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 | 119.8 | 122.1 | 122.0 | 122.2 | 122.5 | 123.2 | 124.3 | 125.0 |
| Nonfarm less housing .................. | 119.2 | 121.5 | 121.5 | 121.7 | 121.9 | 122.2 | 123.7 | 124.3 |
| Housing .................................... | 125.5 | 127.2 | 126.6 | 127.4 | 128.2 | 132.3 | 130.2 | 131.2 |
| Farm ........................................... | 105.9 | 106.1 | 107.0 | 102.1 | 110.1 | 114.9 | 101.9 | 97.3 |
| Statistical discrepancy ..................... | 119.5 | 121.8 | 121.7 | 122.0 | 122.3 | 123.0 | 123.9 | 124.5 |
| Househoids and institutions ............. | 128.8 | 132.3 | 131.8 | 132.2 | 133.4 | 134.3 | 134.9 | 136.2 |
| Private households ......................... | 115.7 | 119.4 | 118.7 | 119.9 | 121.1 | 121.8 | 122.5 | 123.5 |
| Nonprofit institutions ......................... | 129.4 | 132.9 | 132.4 | 132.8 | 133.9 | 134.9 | 135.4 | 136.7 |
| General government ......................... | 129.1 | 134.7 | 134.2 | 135.6 | 136.3 | 138.4 | 140.1 | 140.7 |
| Federal | 131.3 | 139.4 | 138.6 | 140.8 | 141.4 | 145.4 | 148.9 | 148.3 |
| State and local ............................. | 128.2 | 132.9 | 132.3 | 133.5 | 134.3 | 135.6 | 136.8 | 137.8 |
| Addendum: <br> Gross domestic business product less housing $\qquad$ | 118.9 | 121.3 |  | ...... |  | ...... | ......... |  |

Table 7.15.-Current-Dollar Cost and Profit Per Unit of ConstantDollar 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 | 1.17 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Consumption of fixed capital ............. | . 126 | . 123 | . 123 | . 124 | . 120 | . 125 | . 121 | . 12 |
| 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 transier payments less subsidies $\qquad$ | . 117 | . 117 | . 117 | . 116 | . 117 | . 117 | . 117 | 118 |
| Domestic income ............................ | . 907 | . 919 | . 920 | . 917 | . 921 | . 923 | . 932 | . 935 |
| Compensation of employees ......... Corporate profits with inventory valuation and capital | . 767 | . 768 | . 770 | . 766 | . 760 | . 763 | . 766 | . 768 |
| consumption adjustments .... | . 099 | . 112 | . 111 | . 113 | . 123 | . 122 | . 127 | . 128 |
| Profits tax liability ................... | . 031 | . 040 | . 040 | . 038 | . 043 | . 043 | . 046 | . 047 |
| Profits after tax with inventory valuation and capital |  |  |  |  |  |  |  |  |
| consumption adjustments ...... | . 067 | . 073 | . 074 | . 075 | . 080 | . 078 | . 081 | . 081 |
| Net interest ................................. | . 041 | . 039 | . 039 | . 039 | . 038 | . 038 | . 039 | . 039 |

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

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


Table 8.1.-Percent Change From Preceding Period in Selected Series-Continued
[Percent]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 11 | III |
| Nondefense: <br> Current dollars $\qquad$ <br> Quantity indexes: <br> Fixed 1987 weights $\qquad$ <br> Chain-type annual weights .... <br> Benchmark-years weights ..... <br> Price indexes: <br> Fixed 1987 weights $\qquad$ <br> Chain-type annual weights .... <br> Benchmark-years weights ..... |  |  |  |  |  |  |  |  |
|  | 9.5 | 4.5 | -1.4 | 12.6 | -7.8 | 16.3 | -6.9 | 1.1 |
|  |  |  |  |  |  |  |  |  |
|  | 6.6 | 7 | -6.2 | 12.0 | -7.8 | 2.9 | -15.0 | 9.5 |
|  | 6.6 | . 8 | -6.6 | 10.6 | -7.9 | 6.0 | -14.8 | 6.2 |
|  | 6.5 | . 8 | -6.5 | 10.8 | -7.7 | 5.8 | -14.8 | 6.6 |
|  |  |  |  |  |  |  |  |  |
|  | 2.8 | 3.7 | 5.7 | 1.1 | -2.0 | 9.1 | 10.9 | -2.7 |
|  | 2.7 | 3.7 | 5.4 | 1.7 | -. 2 | 9.8 | 9.4 | -4.1 |
|  | 2.8 | 3.7 | 5.3 | 1.5 | -. 4 | 9.9 | 9.5 | -4.1 |
| State and local: |  |  |  |  |  |  |  |  |
| Current dollars ........................... | 3.8 | 4.2 | 6.5 | 5.2 | 4.1 | 2.6 | 5.4 | 7.2 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ................ | 1.1 | 1.7 | 4.4 | 3.7 | 2.9 | -1.4 | 2.9 | 4.2 |
| Chain-type annual weights ........ | 1.0 | 1.6 | 4.0 | 3.5 | 2.7 | -1.1 | 2.7 | 4.1 |
| Benchmark-years weights ........ | 1.0 | 1.6 | 4.0 | 3.5 | 2.7 | -1.2 | 2.7 | 4.1 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Chain-type annual weights | 2.8 | 2.5 | 2.5 | 1.7 | 1.4 | 3.8 | 2.6 | 2.9 2.9 |
| Benchmark-years weights ..... | 2.8 | 2.5 | 2.5 | 1.7 | 1.4 | 3.8 | 2.6 | 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 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights .................... | 2.2 | 2.9 | 2.4 | 3.2 | 6.4 | 2.2 | 1.5 | 4.2 |
| Chain-type annual weights ........... | 2.0 | 2.3 | 1.9 | 2.1 | 5.5 | 2.2 | 1.5 | 3.8 |
| Benchmark-years weights ............. | 2.1 | 2.3 | 1.9 | 2.2 | 5.4 | 2.2 | 1.5 | 3.8 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights .................... | 3.2 | 3.0 | 2.4 | 2.0 | 2.5 | 3.2 | 2.9 | 2.8 |
| Chain-type annual weights ........... | 3.0 | 2.8 | 2.3 | 2.0 | 2.5 | 3.2 | 2.7 | 2.6 |
| Benchmark-years weights ............. | 3.1 | 2.8 | 2.3 | 1.9 | 2.4 | 3.2 | 2.7 | 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 ..................... | 2.5 | 3.9 | 3.3 | 4.0 | 5.8 | 5.0 | 4.6 | 4.5 |
| Chain-type annual weights ........... | 2.3 | 3.2 | 2.5 | 3.0 | 4.7 | 4.7 | 4.4 | 3.9 |
| Benchmark-years weights ............ | 2.4 | 3.2 | 2.4 | 3.0 | 4.7 | 4.7 | 4.4 | 4.0 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ..................... | 3.2 | 2.8 | 2.6 | 1.6 | 2.4 | 2.5 | 3.2 | 3.4 |
| Chain-type annual weights ........... | 3.0 | 2.6 | 2.5 | 1.6 | 2.4 | 2.5 | 3.1 | 3.1 |
| Benchmark-years weights ............. | 3.1 | 2.6 | 2.5 | 1.6 | 2.4 | 2.6 | 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 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ..................... | 2.5 | 3.7 | 3.3 | 4.5 | 6.0 | 3.9 | 2.0 | 4.8 |
| Chain-type annual weights ...o....... | 2.2 | 3.0 | 2.6 | 3.4 | 5.1 | 3.7 | 1.8 | 4.3 |
| Benchmark-years weights ............. | 2.3 | 3.0 | 2.5 | 3.4 | 5.0 | 3.7 | 1.8 | 4.3 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights ..................... | 3.2 | 2.8 | 2.6 | 1.6 | 2.4 | 2.5 | 3.2 | 3.3 |
| Chain-type annual weights ........... | 3.0 | 2.6 | 2.5 | 1.6 | 2.4 | 2.5 | 3.1 | 3.1 |
| Benchmark-years weights ............ | 3.1 | 2.6 | 2.5 | 1.6 | 2.4 | 2.6 | 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 |
| Quantity indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights .................... | 2.1 | 3.1 | 2.1 | 3.0 | 5.6 | 3.4 | 3.7 | 3.7 |
| Chain-type annual weights ........... | 1.9 | 2.5 | 1.5 | 2.1 | 4.4 | 3.2 | 3.7 | 3.3 |
| Benchmark-years weights ............. | 2.0 | 2.5 | 1.5 | 2.1 | 4.4 | 3.2 | 3.7 | 3.3 |
| Price indexes: |  |  |  |  |  |  |  |  |
| Fixed 1987 weights .................... | 3.2 | 3.0 | 2.4 | 2.0 | 2.4 | 3.1 | 2.9 | 2.8 |
| Chain-type annual weights ........... | 3.0 | 2.8 | 2.3 | 1.9 | 2.5 | 3.2 | 2.7 | 2.6 |
| Benchmark-years weights ............. | 3.1 | 2.8 | 2.3 | 1.9 | 2.4 | 3.2 | 2.7 | 2.6 |
| Command-basis gross national product: |  |  |  |  |  |  |  |  |
| Disposable personal income: |  |  |  |  |  |  |  |  |
| Current dollars .............................. | 6.4 | 4.1 | 7.2 | 1.9 | 6.7 | 4.7 | 6.8 | 6.1 |
| 1987 dollars .................................. | 3.1 | 1.5 | 4.7 | . 8 | 4.3 | 3.4 | 3.5 | 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 fixedweighted 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 benchmarkyears 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
[Dolars]

|  | 1992 | 1993 | Seasonally adiusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | II | III |
| Current dollars: |  |  |  |  |  |  |  |  |
| Gross domestic product $\qquad$ | 23,564 | 24,559 | 24,427 | 24,588 | 24,978 | 25,288 | 25,669 | 25,988 |
| Gross national product |  |  |  | 24,621 | 24,970 | 25,285 | 25,640 | 25,927 |
| Personal income | 20,175 | 20,810 | 20,800 | 20,863 | 21,147 | 21,369 | 21,717 | 21,927 |
| Disposable personal |  |  |  |  |  |  |  |  |
| income ........... | 17,636 | 18,153 | 18,141 | 18,174 | 18,421 | 18,588 | 18,853 | 19,081 |
| Personal |  |  |  |  |  |  |  |  |
| consumption |  |  |  |  |  |  |  |  |
| expenditures ... Durable goods | 16,192 1,928 | 16,951 2,083 | 16,856 | 17,017 | 17,233 2170 | 17,443 2 | 17,598 | 17,824 2,267 |
| Durable goods Nondurable | 1,928 | 2,083 | 2,059 | 2,095 | 2,170 | 2,216 | 2,227 | 2,267 |
| goods .......... | 5,071 | 5,185 | 5,173 | 5,182 | 5,225 | 5,265 | 5,300 | 5,380 |
| Services .......... | 9,193 | 9,683 | 9,623 | 9,740 | 9,838 | 9,961 | 10,071 | 10,178 |
| Constant (1987) dollars: |  |  |  |  |  |  |  |  |
| Gross domestic |  |  |  |  |  |  |  |  |
| Gross national product $\qquad$ | 19,515 | 19,901 | 19,814 | 19,906 | 20,122 | 20,242 | 20,376 | 20,506 |
| Disposable |  |  |  |  |  |  |  |  |
| personal income | 14,279 | 14,341 | 14,351 | 14,338 | 14,451 | 14,535 | 14,625 | 14.691 |
| Personal -.......... |  |  |  |  |  |  |  |  |
| consumption |  |  |  |  |  |  |  |  |
| expenditures ... | 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 |
| Durable goods Nondurable | 1,772 | 1,897 | 1,876 | 1,905 | 1,970 | 2,007 | 2,004 | 2,029 |
| goods ......... | 4,140 | 4,176 | 4,165 | 4,182 | 4,195 | 4,224 | 4,237 | 4,260 |
| Services .......... | 7,199 | 7,318 | 7,294 | 7,338 | 7,354 | 7,409 | 7,410 | 7,435 |
| Population (mid- |  |  |  |  |  |  |  |  |
| period, thousands) | 255,484 | 258,290 | 257,908 | 258,635 | 259,356 | 259,997 | 260,627 | 261,341 |

Tabie 8.3.-Auto Output
[Billions of dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | II | III | IV | 1 | 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 | 139.3 | 137.8 | 140.5 | 146.5 | 154.7 | 149.6 | 152.5 |
| New autos ................................ | 87.4 | 93.4 | 91.5 | 92.3 | 101.3 | 100.1 | 99.1 | 94.4 |
| Net purchases of used autos ........ | 38.6 | 45.9 | 46.3 | 48.2 | 45.2 | 54.6 | 50.5 | 58.2 |
| Producers' durable equipment ........... | 38.0 | 38.8 | 41.3 | 38.8 | 38.8 | 43.4 | 43.9 | 46.4 |
| New autos ................................ | 62.7 | 68.3 | 73.4 | 69.0 | 68.2 | 78.8 | 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 $\qquad$ <br> New $\qquad$ <br> Used $\qquad$ | . 1 | 2.2 | 2.3 | -4.5 | 2.7 | -1.5 | 3.3 | 4.1 |
|  | . 5 | 1.9 | 0 | -4.5 | 1.6 | . 3 | 1.3 | 4.4 |
|  | . | . 3 | 2.4 | -. 1 | 1.1 | -1.8 | 2.0 | -. 3 |
| Addenda: |  |  |  |  |  |  |  |  |
| Domestic output of new autos ${ }^{1}$........ | 104.8 | 112.6 | 112.8 | 103.9 | 119.9 | 133.7 | 126.6 | 133.5 |
| Sales of imported new autos ${ }^{2}$.......... | 60.0 | 65.1 | 66.1 | 68.7 | 65.3 | 66.2 | 69.3 | 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
[Bililions 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 |

Table 8.4.-Auto Output in Constant Dollars
[Billions of 1987 dollars]

|  | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1993 |  |  | 1994 |  |  |
|  |  |  | 1 | III | IV | 1 | 11 | III |
| Auto output .......................... | 117.6 | 121.6 | 123.4 | 114.2 | 127.2 | 135.1 | 125.9 | 128.4 |
| Final sales | 117.2 | 121.1 | 123.7 | 119.4 | 125.2 | 138.3 | 124.5 | 125.8 |
| Personal consumption expenditures .. | 112.8 | 119.3 | 118.8 | 119.1 | 123.2 | 129.8 | 123.8 | 123.7 |
| New autos ................................ | 77.9 | 81.3 | 80.1 | 80.0 | 87.2 | 85.6 | 83.8 | 78.9 |
| Net purchases of used autos ........ | 34.9 | 38.0 | 38.7 | 39.1 | 36.0 | 44.2 | 40.0 | 44.8 |
| Producers' durable equipment .......... | 33.2 | 34.4 | 36.6 | 34.6 | 34.6 | 38.0 | 38.1 | 40.4 |
| New autos .............................. | 55.9 | 59.5 | 64.2 | 59.8 | 58.7 | 67.4 | 66.9 | 71.9 |
| Net purchases of used autos ........ | -22.8 | -25.1 | -27.6 | -25.2 | -24.2 | -29.4 | -28.8 | -31.5 |
| Net exports .................................. | -30.5 | -34.2 | -33.4 | -36.0 | -34.0 | -31.0 | -39.1 | -40.0 |
| Exports .................................... | 12.7 | 12.8 | 13.1 | 12.0 | 13.3 | 14.6 | 14.0 | 15.8 |
| Imports .................................... | 43.3 | 47.0 | 46.5 | 47.9 | 47.3 | 45.6 | 53.1 | 55.8 |
| Government purchases ................... | 1.8 | 1.6 | 1.7 | 1.6 | 1.4 | 1.6 | 1.7 | 1.7 |
| Change in business inventories of new and used autos $\qquad$ <br> New $\qquad$ <br> Used $\qquad$ | . 4 | . 5 | -. 3 | -5.2 | 2.0 | -3.2 | 1.4 | 2.6 |
|  | . 7 | .6 | -2.0 | -4.8 | 1.5 | -1.7 | -. 3 | 2.8 |
|  | -. 3 | -. 1 | 1.7 | -. 4 | . 5 | -1.5 | 1.6 | -. 3 |
| Addenda: |  |  |  |  |  |  |  |  |
| Domestic output of new autos ${ }^{1}$....... | 93.7 | 97.6 | 97.4 | 89.6 | 104.3 | 112.9 | 106.4 | 111.6 |
| Sales of imported new aulos ${ }^{2}$......... | 53.6 | 56.7 | 57.8 | 59.6 | 56.2 | 56.6 | 58.7 | 56.8 |

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 |

[^15]nIPA Charts
REAL GDP AND ITS COMPONENTS: TRENDS AND CYCLES


## SELECTED SERIES: RECENT QUARTERS








[^16]
## 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]

|  | 1991 | 1992 | 1993 | Seasonally adjusted at annual rates |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 1993 | 1994 |  |  |
|  |  |  |  | IV | I | II | IIIP |
| 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 $\qquad$ | . 2 | 0 | 0 | -. 1 | . 5 | 0 | -. 2 |
| Equals: BEA-derlved 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 ${ }^{1}$............................................................................................................... | 1.6 | 2.3 | . 4 | -. 7 | 2.8 | -. 5 | 1.2 |
| Equals: BLS average hourly eamings of production or nonsupervisory workers on private nonfarm payrolls $\qquad$ | 2.9 | 2.4 | 2.5 | 3.2 | 3.1 | 1.8 | 2.2 |
| Addendum: <br> BLS estimates of compensation per hour in the nonfarm business sector ${ }^{2}$ $\qquad$ | 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 inctude 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 | 1988 |  |  |  | 1989 |  |  |  | 1990 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 11 | III | IV | 1 | II | III | IV | 1 | II | III | IV |
| Gross private domestic investment: <br> Quantity indexes: <br> Chain-type annual weights $\qquad$ | 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 | 1988 |  |  |  | 1989 |  |  |  | 1990 |  |  |  | 1991 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 11 | III | IV | 1 | 11 | III | IV | 1 | II | III | IV | 1 |
| Gross private domestic investment: Quantity indexes: <br> Chain-type annual weights $\qquad$ | 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: <br> Price indexes: <br> Fixed 1987 weights $\qquad$ | 138 | 4.0 | 4.5 | 4.7 |

# Selected Monthly Estimates 

Table 1.-Personal Income
[Bilions of doliars; monthly estimates seasonally adjusted at annual rates]

|  | 1992 | 1993 | 1993 |  |  |  | 1994 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July ${ }^{\text {r }}$ | Aug. ${ }^{\text {r }}$ | Sept. ${ }^{\text {r }}$ | Oct. ${ }^{\text {P }}$ |
| 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 $\qquad$ Private industries | $2,974.8$ $2,407.5$ | $3,080.8$ $2,497.0$ | 3.119 .6 2.531 .3 | $\begin{aligned} & 3,138.5 \\ & 2,551.3 \end{aligned}$ | 3,146.0 2,558.6 | $3,160.8$ $2,572.1$ | 3,198.2 2,604,0 | $3,206.7$ $2,610.5$ | $3,220.1$ $2,623.2$ | $3,241.4$ $2,642.0$ | $3,263.4$ $2,659.1$ | 3,267.0 $2,665.1$ | $3,282.6$ $2,679.6$ | $3,289.0$ $2,684.7$ | $\begin{aligned} & 3,308.8 \\ & 2,703,2 \end{aligned}$ | $\begin{aligned} & 3,356.5 \\ & 2,748.8 \end{aligned}$ |
| Commodity-producing industries | 757.6 | 773.8 | 784.7 | 787.3 | 790.8 | 794.9 | 797.6 | 802.6 | 805.4 | 809.3 | 810.7 | 814.9 | -817.9 | 820.8 | 826.2 | 838.2 |
| Manufacturing ...................... | 578.3 | 588.4 | 597.8 | 598.7 | 601.2 | 605.1 | 605.8 | 610.6 | 611.9 | 611.9 | 612.0 | 614.4 | 615.4 | 618.4 | 620.7 | 631.6 |
| Distributive industries | 682.3 | 701.9 | 706.3 | 712.7 | 711.0 | 714.2 | 727.4 | 727.1 | 731.4 | 737.8 | 743.6 | 746.0 | 751.0 | 752.3 | 757.8 | 770.2 |
| Service idustries ......... | 967.6 | 1,021.4 | 1,040.4 | 1,051.3 | 1,056.8 | 1,063.0 | 1,079.0 | 1,080.8 | 1,086.3 | 1,094,9 | 1,104.7 | 1.104.1 | 1,110.7 | 1,111.6 | 1,119.2 | 1,140.4 |
| Government ............................................................ | 567.3 | 583.8 | 588.3 | 587.2 | 587.4 | 588.6 | 594.2 | 596.2 | 596.9 | 599.4 | 604.3 | 601.9 | 603.0 | 604,3 | 605.6 | 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 NA and CCAdj $\qquad$ <br> Farm $\qquad$ | 418.7 44.4 | $\begin{array}{r}441.6 \\ 37.3 \\ \hline\end{array}$ | 427.8 21.8 | $\begin{array}{r}445.9 \\ 31.4 \\ \hline\end{array}$ | 466.3 48.0 | 476.5 53.9 | 461.3 43.1 | $\begin{array}{r}473.8 \\ 49.5 \\ \hline\end{array}$ | 477.9 48.8 | 477.1 46.9 | 471.0 38.8 | $\begin{array}{r}465.8 .8 \\ 32.3 \\ \hline\end{array}$ | $\begin{array}{r}464.2 \\ 29.9 \\ \hline\end{array}$ | $\begin{array}{r}467.1 \\ 29.5 \\ \hline\end{array}$ | 469.2 29.9 | 489.2 46.4 |
| Nonfarm ......................................................................................................... | 374.4 | 404.3 | 406.0 | 414.5 | 418.3 | 422.7 | 418.2 | 424.3 | 429.0 | 430.2 | 432.1 | 433.5 | 434.3 | 437.6 | 439.4 | 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 ....... | 860.2 | 915.4 | 924.6 | 927.5 | 928.8 | 936.8 | 943.2 | 947.4 | 951.5 | 955.9 | 957.1 | 960.0 | 964.9 | 969.8 | 972.6 | 978.3 |
| Old-age, survivors, disability, and health insurance benefits | 414.0 | 444.4 | 448.6 | 449.8 | 450.7 | 455.9 | 461.3 | 463.1 | 466.9 | 469.5 | 470.8 | 471.8 | 474.4 | 476.4 | 478.8 | 481.2 |
| Government unemployment insurance benefits ................. | 38.9 | 33.9 | 34.5 | 32.8 | 32.0 | 33.3 | 29.1 | 28.4 | 26.3 | 25.3 | 22.7 | 22.4 | 21.7 | 21.5 | 20.9 | 20.8 |
| Other ................................................................... | 407.3 | 437.1 | 441.5 | 444.9 | 446.1 | 447.6 | 452.9 | 455.9 | 458.3 | 461.1 | 463.5 | 465.7 | 468.8 | 471.9 | 472.9 | 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: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{array}{r} 5,089.4 \\ 64.9 \end{array}$ | $\begin{array}{r} 5,316.6 \\ 58.5 \end{array}$ | $\begin{array}{r} 5,373.0 \\ 43.3 \end{array}$ | $\begin{array}{r} 5,401.4 \\ 53.0 \end{array}$ | $\begin{array}{r} 5,413.1 \\ 69.6 \end{array}$ | $\begin{array}{r} 5,441.1 \\ 75.7 \end{array}$ | $\begin{array}{r} 5,418.6 \\ 65.2 \end{array}$ | $\begin{array}{r} 5,504.3 \\ 71.7 \end{array}$ | $\begin{array}{r} 5,536.4 \\ 71.1 \end{array}$ | $\begin{array}{r} 5,570.1 \\ 69.3 \end{array}$ | $\begin{array}{r} 5,604.0 \\ 61,4 \end{array}$ | $\begin{array}{r} 5,619.9 \\ 55.0 \end{array}$ | $\begin{array}{r} 5,650.2 \\ 52.7 \end{array}$ | $\begin{array}{r} 5,674,6 \\ 52.4 \\ \hline \end{array}$ | $\begin{gathered} 5,708,3 \\ 52.8 \end{gathered}$ | $\begin{array}{r} 5,772.2 \\ 69.4 \end{array}$ |

- Preliminary.

Source: U.S. Dgpartment of Commerce, Bureau of Economic Analysis.
${ }^{r}$ Revised.
CCAdj: Capital consumption adjustment

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

IVA Inventory valuation adjustment
Table 2.-The Disposition of Personal Income
[Monthly estimates seasonally adjusted at annual rates]


Table 3.-U.S. International Transactions in Goods and Services
[Milions of dollars; monthly estimates seasonaly adjusted]

|  | 1992 | 1993 | 1993 |  |  |  | 1994 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. ${ }^{\text {r }}$ | Sept. ${ }^{\text {P }}$ | Oct. |
| Exports of goods and services ........................................ | 616,924 | 641,677 | 53,300 | 55,086 | 54,465 | 56,728 | 53,625 | 52,886 | 58,386 | 56,402 | 56,397 | 58,363 | 56,327 | 59,944 | 59,673 |  |
| Goods | 440,361 | 456,866 | 37,909 | 39,361 | 39,364 | 40,953 | 38,533 | 37,425 | 42,065 | 40,378 | 40,276 | 42,028 | 40,133 | 44,126 | 43,539 |  |
| Foods, feeds, and beverages .... | 40,270 | 40,688 | 3,411 | 3,458 | 3,476 | 3,665 | 3,346 | 3,163 | 3,405 | 3,087 | 3,268 | 3,088 | $\begin{array}{r}3,052 \\ 1025 \\ \\ \hline 1624\end{array}$ | 3,676 | 3,677 |  |
| Industrial supplies and materiais. | 109,140 +75015 | 111.814 | 9,499 | 9,881 15471 | $\begin{array}{r}9,615 \\ \hline 15491\end{array}$ | 9,630 | ${ }^{8} 8,974$ | 8,721 15318 | 10,604 | 9,625 | 9,914 | 9,820 | 10,254 | 10,739 | 10,332 |  |
| Capital goods, except automotive .- | 175,915 | 181.696 | 14,707 | 15,471 | 15,491 | 16,894 | 16,022 | 15,318 | 17,309 | 16,747 | 16.555 | 17,727 | 16,284 | 17,656 | 17,858 |  |
| Automotve vehicles, engines, and parts............. Consumer goods (nontod), except automotive | 47,028 | 52,404 54,656 | 4,313 4,677 | 4,536 4.647 | 4,679 4.870 | 4,529 4.715 | 4,417 4 4 | 4,417 4,468 | 4,760 4.882 | 4,721 4,659 | 4,543 4.804 | 4,723 5 5 | 4,275 4,859 | 5,204 5,310 | 5,041 <br> 5 |  |
| Other goods ................... | 24,385 | 23,893 | 2,003 | 2,027 | 1,953 | 2,224 | 1,988 | 2,020 | 1,849 | 2,250 | 2,018 | 2,340 | 2,261 | 2,517 | 2,301 |  |
|  | -7,805 | -8,224 | -700 | -658 | -719 | -705 | -714 | -681 | -743 | -711 | -828 | -783 | -852 | -975 | -859 |  |
| Services ............................................................ | 176,563 | 184,811 | 15,391 | 15,725 | 15,100 | 15,774 | 15,092 | 15,440 | 16,322 | 16,024 | 16,121 | 16,334 | 16,194 | 15,817 | 16,134 |  |
| Travel ................................................................. | 54,284 | 57,621 | 4,772 | 5,067 | 4,595 | 5,066 | 4,567 | 4,671 | 5,162 | 5,140 | 5,066 | 5,238 | 5,186 | 4,796 | 5,014 |  |
| Passenger fares | 16,972 | 16,550 | 1,361 | 1,440 | 1,285 | 1,410 | 1,311 | 1,373 | 1,505 | 1,408 | 1,367 | 1,432 | 1,413 | 1,322 | 1,387 |  |
| Other transportation ........ | 22,704 | 23,151 | 1,927 | 1,986 | 1,924 | 1,996 | 1,901 | 1,864 | 2,107 | 2,008 | 2,018 | 2,068 | 1,991 | 2,106 | 2,081 |  |
| Royalties and license fees $\qquad$ Other private services | 19,922 50.992 | 20,398 54,870 | 1.709 4.659 | 1,703 4,640 | 1,698 4,740 | 1,697 4,762 | 1,763 4,678 | 1,780 4.867 | 1,790 4,851 | 1,796 4,713 | 1,798 4.896 | 1,799 4.812 | 1,810 4.818 | 1,812 4,826 | 1,815 4,886 |  |
| Transters under U.S. military agency sal.................................. | 10,828 | 11,413 | 906 | 832 | '801 | 784 | 802 | 816 | 841 | 905 | 928 | 940 | 916 | 899 | 896 |  |
| U.S. Government misceillaneous services ........................ | 861 | 808 | 56 | 56 | 57 | 60 | 70 | 70 | 67 | 53 | 49 | 47 | 60 | 56 | 55 |  |
| Imports of goods and services ...................... | 657,308 | 717,402 | 81,286 | 63,005 | 61,997 | 81,253 | 81,455 | 62,460 | 65,285 | 64,849 | 65,778 | 67,403 | 67,518 | 69,624 | 69,801 |  |
| Goods ........ | 536,458 | 589,441 | 50,440 | 51,895 | 50,886 | 50,068 | 50,501 | 50,968 | 53,511 | 53,715 | 54,547 | 56,047 | 56,081 | 58,220 | 58,143 |  |
| Foods, feeds, and beverages ................................... | 27,610 | 27,867 | 2.422 | 2,551 | 2,328 | 2,339 | 2,440 | 2,364 | 2,543 | 2,492 | 2,531 | 2,593 | 2,624 | 2,699 | 2,720 |  |
| Industrial supplies and materials. | 138,644 | 145,606 | 12,158 | 12,541 | 12,276 | 11,495 | 11,653 | 11,932 | 12,659 | 12,771 | 13,155 | 14,007 | 14,375 | 14,687 | 14,365 |  |
| Capital goods, except automotive ......... | 134,253 | 152,365 | 12,902 | 13,600 | 13,308 | ${ }^{13,888}$ | 14,121 | 14,028 8 8 | 14,467 | 14,727 | 14,883 | 15,129 10 | 15,195 | 15,304 11057 | 16,496 |  |
| Automotive vehicles, engines, and parts | 91,788 | 102,420 | 8,748 | 8,893 | 8,856 | 8,728 | 8,683 | 8,787 | 9,549 | 9,491 | 9,481 | 10,153 | 9,911 | 11,057 | 9,882 |  |
| Consumer goods (nonfood), except automotive ........ | 122,657 | 134,015 | 11,496 | 11,673 | 11,626 | 11,281 | 11,603 | 11,502 | 11,335 | 11,845 | 12,136 | 12,138 | 12.023 | 12,479 | 12,637 |  |
| Other goods <br> Adjustments ${ }^{1}$ | 17,713 3,795 | 18,386 8,783 | 1,500 1,217 | 1,590 | $\begin{array}{r}1,686 \\ \hline 905\end{array}$ | 1,710 | $\begin{array}{r}1,598 \\ \hline\end{array}$ | $\begin{array}{r}1,566 \\ \hline 789\end{array}$ | 1,837 1,120 | 1,808 | 1,801 | $\begin{array}{r}1,820 \\ \hline 208\end{array}$ | $\begin{array}{r}1,701 \\ \hline 252\end{array}$ | 1,632 362 | 1.8221 |  |
| Services. | 120,850 | 127,961 | 10,846 | 11,110 | 11,112 | 11,185 | 10,953 | 11,492 | 11,774 | 11,134 | 11,231 | 11,356 | 11,447 | 11,403 | 11,658 |  |
| Travel | 39,007 | 40,564 | 3,459 | 3,563 | 3,566 | 3,690 | 3,591 | 3,720 | 3,930 | 3,615 | 3,693 | 3.580 | 3,702 | 3,621 | 3,847 |  |
| Passenger fares | 10,608 | 11,416 | 1,006 | 978 | 972 | 992 | 955 | 1,006 | 1,069 | 1,019 | 1,048 | 1,017 | 1,050 | 1,036 | 1,093 |  |
| Other transportation | 23,460 | 24,502 | 2,040 | 2,140 | 2,091 | 2,039 | 1,952 | 1,980 | 2,159 | 2,066 | 2,083 | 2,167 | 2,167 | 2,275 | 2,222 |  |
| Royalities and license fees.. | 4,987 | 4,840 | 417 | 440 | 446 | 448 | 450 | 713 | 444 | 435 | 434 | 473 | 478 | 443 | 445 |  |
| Other private services ........................... | 26,625 | 32,119 | 2,761 | 2,848 | 2,905 | 2,889 | 2,861 | 2,926 | 3,025 | 2,857 | 2,833 | 2,978 | 2,928 | 2,926 | 2,959 |  |
| Direct defense expenditures ${ }^{2}$................................... | 13,862 | 12,176 | 955 | 960 | 954 | 946 | 938 | 932 | 926 | 921 | 918 222 | 917 | ${ }_{205} 907$ | 893 209 | 884 208 |  |
| U.S. Government miscellaneous services ........................ | 2,301 | 2,344 | 209 | 182 | 178 | 181 | 207 | 216 | 221 | 221 | 222 | 223 | 207 | 209 | 208 |  |
| Momoranda: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{gathered} -96,097 \\ -957+3 \end{gathered}$ | $\begin{array}{r} -132,575 \\ -56,850 \end{array}$ | $\begin{array}{r} -12,531 \\ 4,545 \end{array}$ | $\begin{array}{r} -12.533 \\ \hline 6444 \end{array}$ | $\begin{array}{r} -11,521 \\ 3,988 \end{array}$ | $\begin{array}{r} -9,115 \\ \hline 4589 \end{array}$ | $\begin{array}{r} -11,968 \\ 4,138 \end{array}$ | $\begin{array}{r} -13,542 \\ 3,948 \end{array}$ | $\begin{array}{r} -11,446 \\ 4,548 \end{array}$ | $\begin{array}{r} r 3,337 \\ 4,890 \end{array}$ | $\begin{array}{r} -14,271 \\ 4,890 \end{array}$ | $\begin{array}{r} 14,019 \\ 4,979 \end{array}$ | $\begin{array}{r} -15,948 \\ 4,757 \end{array}$ | $\begin{array}{r} -14,094 \\ 4,414 \end{array}$ | $\begin{array}{r} -14,605 \\ 4,476 \end{array}$ |  |
|  | $\begin{array}{r} 55,713 \\ -40,384 \end{array}$ | 56,850 $-75,725$ | 4,545 $-7,986$ | 4,644 $-7,919$ | - $\begin{array}{r}\text { 3,988 } \\ -7,533\end{array}$ | 4,589 $-4,526$ | 4,138 $-7,830$ | 3,948 $-9,594$ | 11,548 $-6,899$ | 4,890 $-8,447$ | 4,898 $-9,381$ | 4,979 $-9,040$ | -11,191 | $\begin{array}{r}4,46 \\ \hline 9,680\end{array}$ | 4,476 $-10,128$ |  |

$p$ Preliminary.
Revised.

1. Reflects adjustments necessary to bring the Census Bureau's component data in line with the concepts and
[^17]
# A Satellite Account for Research and Development 


#### Abstract

bea has prepared a satellite account that arrays information about research and development ( $\mathrm{R} \leftrightarrow \mathrm{D}$ ). First, the satellite account provides estimates of expenditures on ReD that are designed to be used in conjunction with the national income and product accounts measures. Second, it treats RevD expenditures as a form of investment, recognizing the role $R \in D$ 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 RoD 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 RevD satellite account. Comments are welcome.


Carol S. Carson<br>Director, Bureau of Economic Analysis

$\tau$n industrial laboratories, agricultural experiment stations, medical research institutes, and a variety of other settings, the United States undertakes a sizable research and development ( $\mathrm{R} \& \mathrm{D}$ ) 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 $\mathrm{R} \& \mathrm{D}$ 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:

[^18]- 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 $\mathrm{R} \& \mathrm{D}$ ?
- Who is funding the $\mathrm{R} \& \mathrm{D}$ ?


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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 unidentifiedexpenditures 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. ${ }^{3}$

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. ${ }^{4}$ The estimates ex-

[^19]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

## Row 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. ${ }^{5}$ 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, $\mathrm{R} \& \mathrm{D}$ 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

[^20]and services, or to improving substantially those already produced or installed." ${ }^{36}$
$\mathrm{R} \& \mathrm{D}$ 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

[^21]expenditures can be cumulated over time-with or without depreciation-to measure the stock of knowledge.

## Red in economic accounting

RebD 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 $\mathrm{R} \& \mathrm{D}$ 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;
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. ${ }^{9}$ 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

[^22]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.

RetD 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. ${ }^{10}$ 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. ${ }^{11}$ The intangible investment and capital included R\&D, education and

[^23]Table A.-Research and Development in the NIPA's

| Published NIPA components containing R\&D ${ }^{1}$ | R\&D identified in NiPA component | R\&D included in NIPA component |
| :---: | :---: | :---: |
| Gross national product (1.1, 1) |  |  |
| Personal consumption expenditures $(1.1,2)^{2}$ Nonprofit hospitals $(2.4,52)$ $\qquad$ | No ........................ | R\&D funding from nonorofit hospitals |
| Education and research (2.4, 102) | No | RaD funding from monprot hospials |
| Higher education (2.4, 103) ......................................................... | No ..................... | R\&D funding from private universities and colleges |
| Other (2.4, 105) ............................................................... | No ................... | R\&D funding from other nonprofit institutions serving individuals |
| Religious and welfare activities (2.4, 106) ........................................... | No ........................ | Operating expenses for R\&D grants |
| Gross private domestic investment (1.1, 6) ............................................ | $\mathrm{No}^{3}$ |  |
| Net exports of goods and services (1.1, 15) |  |  |
| Exports of services $(4.1,6)$ <br> Imports of services (4.1, 14) |  | R\&D funding from foreign sources to U.S. periormers 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) ........................... | Yes ....................... | R\&D contracted for by the Departments of Defense and Energy ${ }^{4}$ |
| Other ............................................................................... | No ......................... | Defense R\&D periormed in-house |
| Nondefense (1.1, 21) ................................................................ | No ...................... | Nondefense R\&D funding by the Federal Government |
| State and local (1.1, 22) ................................................................... | No ........................ | R\&D funding by State and local governments |
| Addendum: Business current expenses of production .................................. | No ........................ | R\&D funding by business |
| 1. Numbers in parentheses indicate the NiPA table number and the line number of pubilished series. <br> 2. Personal consumplion expenditures are likely to contain some expenditures for R\&D funded by the business and government sections but pertormed by universtites and colleges, nonporft hospitals, and other nonopofit institstions serving indivicuals. <br> 3. Not applicable, business spending on R\&D is considered to be an intermediate expenditure. 4. Includes only the atomic energy research among that contriacted for by the Department of Energy. Nipp's Netional income and product accounts RRO 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. ${ }^{12}$ 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 $1993 .{ }^{13}$ At the outset of the discussion, there was strong support for treating at least some portion of $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$. The explanation of the treatment of business expenditures on $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ 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 prac-
> 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. ${ }^{14}$

Nevertheless, there was strong interest in being able to identify $\mathrm{R} \& \mathrm{D}$ within the economic accounts, and work toward classification systems that would help do so was encouraged. In addition, $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ 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. ${ }^{15}$ More recently, a framework for an R\&D satellite account for the Netherlands was constructed to use such information. ${ }^{16}$ 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.

[^24][^25]
## 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, $\mathrm{R} \& \mathrm{D}$ produced is measured by summing the costs of its production, a technique of measurement used in economic accounting for most nonmarket production. The resulting total is referred to as $\mathrm{R} \& \mathrm{D}$ 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 frrdc'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 "government." "Private" organizations consist of business (labeled "industry"); private universities and colleges, private hospitals, charitable foundations, and other nonprofit institutions serving households; and most frrdc'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

[^26] identified at the level of detail at which the estimates are prepared.
current-dollar components by appropriate price indexes. In the case of $\mathrm{R} \mathrm{\& D}$, 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 $\mathrm{R} \& \mathrm{D}$ )-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 surveybased 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. ${ }^{18}$ Some supporting datain 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 $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ is not financed by the performer. $\mathrm{R} \& D$ by type

[^27]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 $\mathrm{R} \& \mathrm{D}$ by performer are a byproduct of the procedure.)

Constant-dollar estimates derived in this way take into account the changing mix of $\mathrm{R} \& \mathrm{D}$ 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 Rob 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 reb 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. ${ }^{19}$ 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 $\mathrm{R} \& \mathrm{D}$ 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 yet do so.

Others have questioned whether all R\&D, both successful and unsuccessful, should be treated as capital formation. ${ }^{22}$ 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

[^28]with the view that returns from the successes are sufficient overall to pay for the failures.

Allocation of ReD capital and consumption of fixed capital.-In doing analytical work on $\mathrm{R} \& \mathrm{D}$, some researchers have allocated most R\&D capital financed by government and by nonprofit institutions to the business sector. ${ }^{23}$ The Congressional Budget Office allocated all R\&D to the economy at large. ${ }^{24}$ 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 $\mathrm{R} \& \mathrm{D}$ 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. ${ }^{25}$ Researchers have also studied the total lag between R\&D and its peak effects on productivity or profits. ${ }^{26}$ 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-

[^29]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. ${ }^{27}$ Other researchers have assumed that once $\mathrm{R} \& \mathrm{D}$ 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.$^{28}$ In the satellite account, $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ 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. ${ }^{29}$

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 $\mathrm{R} \& \mathrm{D}$ is measured at replacement cost rather than at historical cost. ${ }^{30}$

[^30]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. ${ }^{31}$ James Adams estimated depreciation rates of 0.09 to 0.13 for basic research. ${ }^{32}$ M. Ishaq Nadiri and Ingmar Prucha estimated a rate of 0.12 for industrial R\&D. ${ }^{33}$

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.
appropriateness of the concepts and measurement methods underlying these estimates. Future bea capital stock estimates may be based on somewhat different concepts and measurement methods.
31. See Ariel Pakes and Mark Schankerman [45].
32. See James Adams [1].
33. M. Ishaq Nadiri and Ingmar Prucha [38].

## 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 $\mathrm{R} \& \mathrm{D}$ 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Current-dollar measures |  |  |  |  |  |  |  |  |  |  |  |
| R\&D periormed (percent of expenditures): |  |  |  |  |  |  |  |  |  |  |  |  |
| Industry .................................................................................. | $\begin{array}{r} 77.2 \\ 12.7 \\ 4.9 \\ 5.9 \end{array}$ | $\begin{gathered} 68.2 \\ 5.4 \\ 7.4 \\ 9.0 \end{gathered}$ | $\begin{gathered} 66.7 \\ 5.6 \\ 9.6 \\ 9.7 \end{gathered}$ | 65.615.39.89.3 | $\begin{array}{r} 68.3 \\ 12.4 \\ 9.8 \\ 9.5 \end{array}$ | $\begin{array}{r} 72.5 \\ 10.8 \\ 8.5 \\ 8.5 \end{array}$ | $\begin{gathered} 71.4 \\ 10.5 \\ 9.6 \end{gathered}$ | 70.910.4 | 70.410.410.4 | 70.510.1107 | 70.89.71.8 | 70.69.79.1 |
| Federal Government ....................................................................... |  |  |  |  |  |  |  |  |  |  |  |  |
| Universities and colleges |  |  |  |  |  |  |  | 10.1 | 10.5 | 10.7 | 10.8 |  |
| Other ..................................................................................... |  |  |  |  |  |  | 8.5 | 8.6 | 8.7 | 8.7 | 8.7 | 8.5 |
| R\&D funded (percent of expenditures): |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{array}{r} 33.1 \\ 64.6 \\ 6.5 \\ 1.8 \end{array}$ | $\begin{array}{r} 32.3 \\ 65.0 \\ .6 \\ 2.1 \end{array}$ | 39.557.3.9 .32.3 | $\begin{array}{r} 44.1 \\ 51.7 \\ 1.2 \\ 3.0 \end{array}$ | $\begin{array}{r} 48.7 \\ 47.3 \\ 1.4 \\ 2.6 \end{array}$ | 50.9 <br> 00.2 <br> 1.2 <br> 2.4 <br> 2.4 | $\begin{array}{r} 49.7 \\ 45.9 \\ 1.7 \\ 2.7 \end{array}$ | $\begin{array}{r} 51.0 \\ 44.4 \\ 1.8 \end{array}$ | $\begin{array}{r} 53.1 \\ 42.0 \\ 1.9 \end{array}$ | 54.940.1 | 57.337.6 | ${ }^{58.7}$ |
| Federal Government ..................................................................... |  |  |  |  |  |  |  |  |  |  |  |  |
| Universitios and colleges ............................................................. |  |  |  |  |  |  |  |  |  | 2.0 | 2.1 | 2.1 |
| Other ................................................................................... |  |  |  |  |  |  |  | 2.8 | 3.0 | 3.0 | 3.0 | 3.1 |
| RRDD by type (percent of expenditures): |  |  |  |  |  |  |  |  |  |  |  |  |
| Basic .................................................................................... | 8.921.669.5 | 12.5 <br> 21.3 <br> 18 | 13.2 <br> 22.0 <br> 1 | 13.322.76.9 | 13.3 <br> 21.9 | 12.4 <br> 22.4 | 14.2 | 14.022.3 | 15.2 <br> 23.0 | 16.1 <br> 23.5 | 17.4 <br> 24.5 <br> 8.5 | 23.8 |
|  |  |  |  |  |  |  | 22.3 |  |  |  |  |  |
| Development .......................................................................... |  | 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: <br> Government and nonprofit institutions $\qquad$ <br> Industry $\qquad$ |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 1.8 | $\begin{array}{r}2.0 \\ .9 \\ \hline\end{array}$ | 1.6 <br> 1.0 | 1.3 | 1.2 | 1.4 | $\begin{aligned} & 1.4 \\ & 1.4 \end{aligned}$ | 1.3 | $\begin{aligned} & 1.3 \\ & 1.4 \end{aligned}$ | $\begin{aligned} & 1.2 \\ & 1.5 \end{aligned}$ | 1.2 | 1.2 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | stantcos | measures |  |  |  |  |  |
| R\&D net fixed intangible capital as a percent of government and business net fixed reproducible tangible capital ${ }^{1}$ $\qquad$ | 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 $\qquad$ Private <br> Government $\qquad$ | $\begin{aligned} & 6.5 \\ & 5.9 \\ & 7.9 \end{aligned}$ | $\begin{aligned} & 6.6 \\ & 6.3 \\ & 7.7 \end{aligned}$ | 7.2 | 8.38.3 | 8.99.0 | 88.8 | 88.5 | 8.4 | 8.48.2 | 88.3 | 8.28.18.8 |  |
|  |  |  |  |  |  |  |  |  |  |  |  | 8.2 8.1 8.8 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Indexes, 1960=100 |  |  |  |  |  |  |  |  |  |  |  |
| R\&D expenditures (constant dollars) $\qquad$ <br> R\&D net fixed intangible capital (constant cost) $\qquad$ | $\begin{aligned} & 100 \\ & 100 \end{aligned}$ | $\begin{aligned} & 132 \\ & 155 \end{aligned}$ | $\begin{aligned} & 136 \\ & 209 \end{aligned}$ | $\begin{aligned} & 131 \\ & 233 \end{aligned}$ | $\begin{aligned} & 161 \\ & 247 \end{aligned}$ | $\begin{aligned} & 219 \\ & 287 \end{aligned}$ | $\begin{aligned} & 229 \\ & 313 \\ & \hline \end{aligned}$ | $\begin{aligned} & 234 \\ & 327 \end{aligned}$ | $\begin{aligned} & 237 \\ & 340 \end{aligned}$ | $\begin{aligned} & 245 \\ & 352 \end{aligned}$ | $\begin{aligned} & 252 \\ & 365 \end{aligned}$ | 254 <br> 378 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

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 $\mathrm{R} \& \mathrm{D}$ 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 Red 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 $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ performed by State and local governments, nonprofit institutions, and frrdc's-at $\$ 14.6$ billion-accounted for the remaining share of 9 percent.
For 1992, the Federal Government, in addition to funding all the $\mathrm{R} \mathrm{\& D}$ it performs, funded a majority of the $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& \mathrm{D}$ 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. ${ }^{34}$ 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 $\mathrm{R} \& \mathrm{D}$ 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
34. In the tables showing industry detail, ffrdc's administered by industry are combined with the remainder of industry because source data do not provide PRRDC's administered by industry separately by industry classifications.
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


Soulce: Tabes 21 , 22, and 23
US Deparinent oi Commeroe, Butran of Econcmic Analys
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 (омв)-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 омв 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: |  |  |  |  |  |  |  |
| BEA .................................. | 278 | 429 | 581 | 646 | 686 | 797 | 978 |
| BEA alternative with 11-percent depreciation rate $\qquad$ | 280 | 423 | 551 | 604 | 670 | 810 | 978 |
| Kendrick .......................................... | 441 | 661 |  |  |  |  |  |
| Eisner ....................................... | 298 | 476 | 664 | 835 | 1,096 |  |  |
| OMB ${ }^{1}$....................................................... | 200 | 400 | 600 | 700 | 800 | 1,000 | 1,200 |
| R\&D net federally-funded capital stock: <br> BEA alternative with 11-percent depreciation rate $\qquad$ <br> OMB $\qquad$ |  |  |  |  |  |  |  |
|  | ..... | .......... | 312 | 321 | 338 | 381 | 442 |
|  | ........ | .......... | 384 | 427 | 460 | 509 | 593 |
| R\&D net industry capital stock: |  |  |  |  |  |  |  |
| BEA ....................................... | 189 | 297 | 391 | 425 | 451 | 547 | 698 |
| BLS ................................................................ | 98 | 143 | 202 | 262 | 314 | 392 | .......... |
| Nadiri and Prucha ...................... | 295 | 352 | 401 | 410 | 433 | 521 | .......... |
|  | BEA less other estimates |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| BEA alternative with 11-percent depreciation rate ...................... | -2 |  | 30 | 42 | 16 | -13 | 0 |
| Kendrick ${ }^{2}$................................... | -163 | -232 | -298 |  |  | ......... | .......... |
| Eisner ..................................... | -20 | -47 | -83 | -189 | -410 |  |  |
| OMB ${ }^{1}$...................................... | 0 |  | 0 | -100 | -100 | -200 | -200 |
| RQD net federally funded capital stock: <br> OMB $\qquad$ | ...... | ......... | -72 | -106 | -122 | -128 | -151 |
| R\&D net industry capital slock: |  |  |  |  |  |  |  |
| BLS ...................................... | 91 | 154 | 189 | 163 | 137 | 155 | ......... |
| Nadiri and Prucha ....................... | -106 | -55 | -10 | 15 | 18 | 26 | - |

1. Pubilished 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 Statisicics
OMB Office of Management and Budget
RRD Ressarch and development

## Constant-dollar Red 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 196875. 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, $\mathrm{R} \& \mathrm{D}$ 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 $1960^{\prime}$ '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,

## CHART 2

## Constant-Dollar R\&D Expenditures by Performer



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. ${ }^{35}$ 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 frrdc's administered by nonprofit institutions and by governments grew at average annual rates of 2.5 percent and 2.6 percent, respectively.

## Stock of Reb 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.

[^31]In 1992, constant-dollar fixed tangible investment was $\$ 725$ billion; the constant-cost net stock of fixed reproducible tangible capital of government and business (including nonprofit institutions) was $\$ 12,020$ billion. Adding constantdollar 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 $\mathrm{R} \& \mathrm{D}$ capital grew rapidly until 1970, slowed sharply from 1970 to 1981 , and then grew somewhat more rapidly thereafter (right scale). The ratio of the $\mathrm{R} \& \mathrm{D}$ stock to the fixed reproducible tangible stock increased sharply until 1970, fell until 1981, and has increased thereafter.
The average age of the $\mathrm{R} \& \mathrm{D}$ 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 threequarters of the total stock, showed a very similar

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 $\mathrm{R} \& \mathrm{D}$-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 Rod.-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 $\mathrm{R} \& \mathrm{D}$ capital
allocated to business does not appear because it is intermediate consumption. GDP is increased by the addition of business expenditure on R\&D (which had been intermediate consumption) and the addition of the difference between expenditures on $\mathrm{R} \& \mathrm{D}$ and the consumption of fixed $\mathrm{R} \& \mathrm{D}$ capital that is included in personal consumption expenditures and in government purchases.

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. ${ }^{36}$ In

[^32]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 $\mathrm{R} \& D$ 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 constantdollar 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 $\mathrm{R} \& \mathrm{D}$ 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

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 (nsp): Federal Funds for Research and Development, Federal Support to Universities, Colleges, and Selected Nonprofit Institutions, Academic Science and Engineering: Red Expenditures, and Research and Development in Industry. ${ }^{37}$ 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. ${ }^{38}$ 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

[^33]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. ${ }^{39}$ These data were interpolated and extrapolated to obtain estimates for missing years.

Performer-based estimates.-The R\&D satellite account features estimates of $\mathrm{R} \& \mathrm{D}$ expenditures that are largely based on data reported by performers of the $\mathrm{R} \& \mathrm{D}$ 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

[^34]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 $\mathrm{R} \& \mathrm{D}$ performed by industry, by public and private universities and colleges, and by academically administered, federally funded research and development centers (frrdc's) are prepared from data reported by R\&D performers. In recent years, these performers have accounted for roughly 85 percent of all $\mathrm{R} \& \mathrm{D}$ 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 periormers 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 periorming 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 NPl's Other NPl'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 NP\|'s |
|  | Federal R\&D obligations are converted to expenditures, using statistically estimated phase-out patterns. | Federal Government FFRDC's administered by NPI's Other NPl'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 |

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 $\mathbf{R \& D}$ 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 currentcost 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. ${ }^{40}$ 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 $\mathrm{R} \& \mathrm{D}$, and the expenditures are from Nestor Terleckyj. ${ }^{41}$ 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. ${ }^{44}$ Expenditures on the Manhattan project

[^35](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 red 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, $\mathrm{R} \& \mathrm{D}$ 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 $\mathrm{R} \& D$ 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

[^36]Table D.-Research and Development Expenditures by Performer: Sources and Methods for Constant-Dollar Estimates

| Cost component | Source data for cost component | $\begin{gathered} 1987 \\ \text { (billions } \\ \text { of dollars) } \end{gathered}$ | Method and source data |
| :---: | :---: | :---: | :---: |
| R\&D expenditures | .......... | 127.39 | Sum of detail |
| Industry ......................................................... |  | 93.25 | Sum of detail |
| Compensation of employees .............................. | NSF reported distribution of wages of R\&D personnel by industry. | 38.32 | Sum of detail |
| Scientists and engineers ............................... | Based on a 1975 split ....................................... | 24.43 | Deflation: Proxy prices by industry-annual professional income of engineers from the Engineering Manpower Commission. |
| Support staff .............................................. | Based on a 1975 split ........................................ | 13.89 | Deflation: Proxy prices by industry-indexes of average hourly eamnings of production workers. |
| Materials and supplies ..................................... | NSF reported distribution of costs of materials and supplies by industry. | 16.73 | Deflation: Proxy prices-PPI for industrial commodities less fuel. |
| Overhead less CFC .......................................... | NSF reported distribution of other costs by industry less BEA estimate of depreciation. | 33.25 | Deflation: Proxy prices-median weekly salaries of managers and administrators. |
| CFC for structures and equipment ....................... | 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 | Deflation: Proxy prices-a composite of IPD's for private purchases of new industrial nonresidential structures and producers' durable equipment. |
| Private universities and colleges $\qquad$ Compensation of employees $\qquad$ | Derived from sample of individual schools: Based on direct costs less materials and supplies. | 4.21 1.86 | Sum of detail <br> 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 | Deflation: Proxy prices-fixed weighted price index from academic nonpersonnel costs from the NIH BRDPI. |
| Overhead less CFC ........................................ | R\&D expenditures less direct costs ....................... | 1.28 | Deflation: Proxy prices by school (from a sample of private universities and medical schoois representing 90 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 ........................... | . 17 | 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. | . 17 | Deflation: Proxy prices-NIPA IPD for educational services equipment. |
| FFRDC's administered by private universities and colleges. | Weight of expenditures based on R\&D obligations to individual FFRDC's from four agency categories. | 2.38 | Sum of detail |
| DOD funded ........................................................ |  | . 44 | Deflation: Proxy prices-NIPA IPD for DOD purchases of R\&D. |
| DOE funded. | ........................................... | . 75 | Deflation: Proxy prices-NIPA IPD for DOE purchases of R\&D. |
| NASA funded ................................................ | ................................................................. | . 82 | Deflation: Proxy prices-NIPA IPD for NASA purchases of R\&D. |
| All other funded :....... |  | . 13 | Deflation: Proxy prices-NIPA IPD for Federal other nondefense purchases of R\&D. |
| CFC for structures ......................................... | Expenditures for R\&D structures ........................... | . 15 | 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. | . 09 | Deflation: Proxy prices-NIPA IPD for educational services equipment. |
| FFRDC's administered by other nonprofit institutions . | 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 ................................................ | ......................................................................... | . 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 purchases of R\&D. |
| Other nonprofit institutions .................................... | R\&D expenditures ............................................... | 2.90 | Deflation: Proxy prices-NIPA index for noncommercial R\&D. |
| Federal ............................................................................. |  | 13.33 | Sum of detail |
| Compensation of employees ............................... | Federal obligations for intramural R\&D personnel costs divided into four agency categories. | 4.94 | Sum of detail |
| DOD ......................................................... |  | 2.38 2.55 | Deflation: Proxy prices-NIPA IPD for Federal defense compensation of civilian employees. Deflation: Proxy prices-N-NPA IPD for Federal nondefense compensation of employees. |
| Materials and supplies and overhead excluding CFC. | Expenditures excluding compensation of employees and OMB budget based estimates of equipment. | 6.06 | Sum of detail |
|  |  | . 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. ${ }^{49}$ 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.

[^37] method, see Bureau of Economic Analysis [9], page M-3.

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

| 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 |  | 71 | Sum of detail |
| Compensation of employees, materiais and supplies, and overhead excluding CFC. | R\&D expenditures excluding expenditures on plant ... | . 61 | 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 $\qquad$ Compensation of employees $\qquad$ | Derived from sample of individual schools: Based on direct costs less materials and supplies. | 8.02 4.18 | Sum of detail <br> 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 NHH 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. |
|  | 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 reclassilication 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 ..................................................... |  | . 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 purchases of R\&D. |
| All other funded ............................................. |  | . 03 | Deflation: Proxy prices-NIPA IPD for Federal other nondefense purchases of R\&D. |
| CFC for structures | Expenditures for R\&D structures ........................... | . 09 | 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. |

[^38]NASA National Aeronautics and Space Administration
NIH National Institutes of Healith

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 straightline 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. Ad

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

|  | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Research and development expenditures, totas $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 5,288 \\ 441 \\ 1,260 \\ 3,5777 \\ 35,802 \end{array}$ | $\begin{array}{r} 5,777 \\ 500 \\ 1,364 \\ 3,913 \\ 41,579 \end{array}$ | $\begin{array}{r} 8,397 \\ 561 \\ 9,486 \\ 4,450 \\ 47,976 \end{array}$ | $\begin{array}{r} 8,528 \\ 680 \\ 1,866 \\ 5,982 \\ 56,504 \end{array}$ | $\begin{array}{r} 10,022 \\ 783 \\ 2,360 \\ 6,879 \\ 66,526 \end{array}$ | 10,955 899 2,682 7,374 77,481 | $\begin{array}{r} 12,517 \\ 1,037 \\ 2,848 \\ 8,632 \\ 89,998 \end{array}$ | $\begin{array}{r} 13,735 \\ 1,221 \\ 2,966 \\ 9,548 \\ 103,733 \end{array}$ | $\begin{array}{r} 14,526 \\ 1,400 \\ 3,009 \\ 10,117 \\ 118,259 \end{array}$ | $\begin{array}{r} 15,588 \\ 1,685 \\ 3,611 \\ 10,282 \\ 133,847 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{aligned} & 1,501 \\ & 3,787 \end{aligned}$ | $\begin{array}{r} 392 \\ 5,385 \end{array}$ | $\begin{array}{r} 432 \\ 5,965 \end{array}$ | $\begin{aligned} & 1,871 \\ & 6,657 \end{aligned}$ | $\begin{aligned} & 1,203 \\ & 8,819 \end{aligned}$ | $\begin{array}{r} 576 \\ 10,379 \end{array}$ | $\begin{array}{r} 1,179 \\ 11,338 \end{array}$ | $\begin{array}{r} 859 \\ 12,876 \end{array}$ | $\begin{array}{r} 413 \\ 14,113 \end{array}$ | $\begin{array}{r} 669 \\ \mathbf{~} 4,919 \end{array}$ |
| Consumption of research and development fixed intangible capital $\qquad$ Gross stock of research and development fixed intangible capital $\qquad$ Net stock of research and development fixed intangible capital $\qquad$ | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | n.a. n.a. n.a. nem | n.a. n.a. n.a. n.a. arem | n.a. n.a. n.a. |  | n.a. n.a. n.a. | $\begin{array}{r}5 \\ 5 \\ 92,030 \\ 98,989 \\ \hline 9.799\end{array}$ | $\begin{array}{r} 5,742 \\ 106,334 \\ 68,799 \end{array}$ | $\begin{array}{r} 6,551 \\ \begin{array}{r} 6,864 \\ 78,366 \end{array} \end{array}$ | $\begin{array}{r} 7,410 \\ 136,026 \\ 87,997 \end{array}$ |
| Private research and development expenditures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 3,897 \\ 253 \\ 829 \\ 2,815 \\ 25,216 \end{array}$ | $\begin{array}{r} 4,374 \\ 287 \\ 927 \\ 3,160 \\ 29,590 \end{array}$ | $\begin{array}{r} 4,988 \\ 334 \\ 1,060 \\ 3,604 \\ 34,578 \end{array}$ | $\begin{array}{r} 7,004 \\ 425 \\ 1,402 \\ 5,777 \\ 41,582 \end{array}$ | $\begin{array}{r} 8,314 \\ 485 \\ 1,846 \\ 5,983 \\ 49,896 \end{array}$ |  | $\begin{array}{r} 10,425 \\ 648 \\ 2,219 \\ 7,598 \\ 69,385 \end{array}$ | $\begin{array}{r} 11,440 \\ 768 \\ 2,282 \\ 8,390 \\ 80,825 \end{array}$ | $\begin{array}{r} 11,988 \\ 870 \\ 2,260 \\ 8,858 \\ 92,813 \end{array}$ | $\begin{array}{r} 12,724 \\ 1,056 \\ 2,773 \\ 8,895 \\ 105,537 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development tixed investment $\qquad$ | $\begin{aligned} & 1,082 \\ & 2,815 \end{aligned}$ | 416 3,958 | 506 4,482 | $\begin{aligned} & 1,846 \\ & 5,158 \end{aligned}$ | $\begin{aligned} & 1,095 \\ & 7,219 \end{aligned}$ | 517 8,547 | $\begin{aligned} & 1,004 \\ & 9,421 \end{aligned}$ | $\begin{array}{r} 699 \\ 10,741 \end{array}$ | $\begin{array}{r} 268 \\ 11,720 \end{array}$ | $\begin{array}{r} 406 \\ 12,318 \end{array}$ |
| Consumption of research and development fixed intangibleq capital .. Gross stock of research and development fixed intangible capital ...... Net stock of research and development fixed intangible capital .......... | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | n.a. n.a. n.a. n. | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | n.a. n.a. n.a. | n.a. n.a. n.a. | n.a. n.a. n.a. | $\begin{aligned} & 3,699 \\ & 68,865 \\ & 46,028 \end{aligned}$ | $\begin{aligned} & 4,317 \\ & 80,158 \\ & 53,992 \end{aligned}$ | $\begin{aligned} & 4,992 \\ & 92,324 \\ & 62,109 \end{aligned}$ | $\begin{array}{r} 5,722 \\ 105,119 \\ 70,359 \end{array}$ |
| Government research and deveiopment expenditures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ | $\begin{array}{r} 1,391 \\ 198 \\ 431 \\ 762 \\ 10,586 \end{array}$ | 1,403 213 437 753 11,989 | $\begin{array}{r} 1,409 \\ 227 \\ 436 \\ 746 \\ 13,398 \end{array}$ | 1,524 255 464 805 14,922 | $\begin{array}{r} 1,708 \\ 298 \\ 514 \\ 896 \\ 16,630 \end{array}$ | $\begin{array}{r}1,891 \\ 342 \\ 570 \\ 979 \\ \hline 18,521\end{array}$ | $\begin{array}{r} 2,092 \\ 389 \\ 629 \\ 1,074 \\ 20,613 \end{array}$ | $\begin{array}{r} 2,295 \\ 453 \\ 684 \\ 1,158 \\ 22,908 \end{array}$ | 2,538 230 749 1,299 25,446 | $\begin{array}{r} 2,864 \\ 639 \\ 838 \\ 1,387 \\ 28,310 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{aligned} & 419 \\ & 972 \end{aligned}$ | $\begin{array}{r} -24 \\ 1,427 \end{array}$ | $\begin{array}{r} -74 \\ 1,483 \end{array}$ | $\begin{array}{r} 25 \\ 1,499 \end{array}$ | $\begin{array}{r} 108 \\ 1,600 \end{array}$ | 59 1,832 | $\begin{array}{r} 175 \\ 1,917 \end{array}$ | $\begin{array}{r} 160 \\ 2,135 \end{array}$ | $\begin{array}{r} 145 \\ 2,393 \end{array}$ | $\begin{array}{r} 263 \\ 2,601 \end{array}$ |
| 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 $\qquad$ | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | n.a. n.a. n.a. | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | n.a. n.a.a. n.a. | $\begin{array}{r} 1,331 \\ 24,118 \\ 33,771 \end{array}$ | $\begin{aligned} & 1,425 \\ & 26,176 \\ & 14,907 \end{aligned}$ | $\begin{aligned} & 1,559 \\ & 28,540 \\ & 16,257 \end{aligned}$ | $\begin{array}{r} 1,688 \\ 30,907 \\ 17,638 \end{array}$ |
|  | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 |
| Research and development expenditures, total $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 17,449 \\ 1,982 \\ 1,783 \\ 11,684 \\ 151,296 \end{array}$ | $\begin{array}{r} 19,078 \\ 2,286 \\ 4,105 \\ 12,75 \\ 170,374 \end{array}$ | $\begin{array}{r} 20,343 \\ 2,540 \\ 4,333 \\ 13,470 \\ 190,717 \end{array}$ | $\begin{array}{r} 22,299 \\ 2,888 \\ 4,710 \\ 14,761 \\ 213,016 \end{array}$ | $\begin{array}{r} 23,653 \\ 3,063 \\ 4,925 \\ 15,665 \\ 236,669 \end{array}$ | $\begin{array}{r} 25,133 \\ 3,278 \\ 5,236 \\ 16,619 \\ 261,802 \end{array}$ | $\begin{array}{r} 26,490 \\ 3,410 \\ 55,555 \\ 17,525 \\ 288,292 \end{array}$ | $\begin{array}{r} 26,765 \\ 3,532 \\ 5,882 \\ 17,351 \\ 315,057 \end{array}$ | $\begin{array}{r} 27,476 \\ 3,656 \\ 6.027 \\ 17,793 \\ 342,533 \end{array}$ | $\begin{array}{r} 29,305 \\ 3,801 \\ 6,326 \\ 19,178 \\ 371,838 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 1,415 \\ 16,034 \end{array}$ | $\begin{array}{r} 1,202 \\ 17,876 \end{array}$ | $\begin{array}{r} 735 \\ 19,608 \end{array}$ | 1,193 21,106 | $\begin{array}{r}476 \\ 23,177 \\ \hline\end{array}$ | 2959 24,874 | -31 26,521 | -7,478 | 28,363 | $\begin{array}{r} 268 \\ 29,037 \end{array}$ |
| 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. $\qquad$ ............... | $\begin{array}{r} 8,342 \\ 152,580 \\ 98,174 \end{array}$ | $\begin{array}{r} 9,350 \\ 171,095 \\ 109,494 \end{array}$ | $\begin{gathered} 10,464 \\ 19,432 \\ 122,331 \end{gathered}$ | $\begin{array}{r} 11,820 \\ 216,550 \\ 136,626 \end{array}$ | $\begin{array}{r} 13,274 \\ 244,542 \\ 153,037 \end{array}$ | $\begin{array}{r} 15,022 \\ 276,646 \\ 171,278 \end{array}$ | $\begin{array}{r} 16,944 \\ 31,983 \\ 191,218 \end{array}$ | $\begin{array}{r} 19,196 \\ 353,303 \\ 212,795 \end{array}$ | $\begin{array}{r} 21,453 \\ 392,592 \\ 232,218 \\ 23 \end{array}$ | $\begin{array}{r} 23,675 \\ 435,533 \\ 252,541 \end{array}$ |
| Private research and development expenditures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$............................ | $\begin{array}{r} 14,110 \\ 1,192 \\ 2,824 \\ 10,094 \\ 119,647 \end{array}$ | $\begin{array}{r} 15,185 \\ 1,318 \\ 3,003 \\ 10,664 \\ 134,832 \end{array}$ | $\begin{array}{r} 16,026 \\ 1,458 \\ 3,105 \\ 11,463 \\ 150,858 \end{array}$ | $\begin{array}{r} 17,637 \\ 1,605 \\ 3,348 \\ 12,684 \\ 168,495 \end{array}$ | $\begin{array}{r} 18,651 \\ 1,716 \\ 3,450 \\ 13,458 \\ 187,146 \end{array}$ | $\begin{array}{r} 19,840 \\ 1,802 \\ 3,677 \\ 14,37 \\ 206,992 \end{array}$ | $\begin{array}{r} 20,843 \\ 1,808 \\ 3,850 \\ 15,185 \\ 227,835 \end{array}$ | $\begin{array}{r} 20,715 \\ 1,810 \\ 4,045 \\ 14,860 \\ 248,550 \end{array}$ | $\begin{array}{r} 21,027 \\ 1,827 \\ 4,093 \\ 15,107 \\ 269,577 \end{array}$ | 22,403 1,883 4,226 16,294 291,980 |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 1,026 \\ 13,084 \end{array}$ | $\begin{array}{r} 800 \\ 14,385 \end{array}$ | $\begin{array}{r} 447 \\ 15,579 \end{array}$ | $\begin{array}{r} 998 \\ 16,639 \end{array}$ | $\begin{array}{r} 302 \\ 18,349 \end{array}$ | 320 19,526 | $20,900$ | $\begin{aligned} & -1,309 \\ & 22,024 \end{aligned}$ | $\begin{array}{r} -841 \\ 21,868 \end{array}$ | $\begin{array}{r} 280 \\ 22,123 \end{array}$ |
| 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 .......... | $\begin{array}{r} 6,512 \\ 118,723 \\ 78,749 \end{array}$ | $\begin{array}{r} 7,321 \\ 133,669 \\ 87,815 \end{array}$ | $\begin{array}{r} 8,224 \\ 150,817 \\ 98,003 \end{array}$ | $\begin{array}{r} 9,333 \\ 170,581 \\ 109,388 \end{array}$ | $\begin{array}{r} 10,522 \\ 193,518 \\ 122,262 \end{array}$ | $\begin{array}{r} 111,884 \\ 218,231 \\ 136,155 \end{array}$ | $\begin{gathered} 13,402 \\ 246,000 \\ 151,083 \end{gathered}$ | $\begin{array}{r} 15,068 \\ 276,530 \\ 166,986 \end{array}$ | $\begin{array}{r} 16,787 \\ 306,080 \\ 181,103 \end{array}$ | $\begin{array}{r} 18,443 \\ 338,917 \\ 96,145 \end{array}$ |
| Government research and development expenditures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 3,339 \\ 790 \\ 959 \\ 91,690 \\ 31,649 \end{array}$ | $\begin{array}{r} 3,893 \\ 950 \\ 1,102 \\ 1,841 \\ 35,542 \end{array}$ | $\begin{array}{r} 4,317 \\ 1,082 \\ 1,208 \\ 2,207 \\ 39,859 \end{array}$ | $\begin{aligned} & 4,662 \\ & 1,223 \\ & 1,362 \\ & 2,3077 \\ & 44,521 \end{aligned}$ | $\begin{array}{r} \mathbf{5 , 0 0 2} \\ 1,347 \\ 1,475 \\ 2,480 \\ 49,523 \end{array}$ | $\begin{array}{r} 5,287 \\ 1,476 \\ 1,59 \\ 2,259 \\ 54,810 \end{array}$ | $\begin{array}{r} \mathbf{5 , 6 4 7} \\ \begin{array}{l} 1,602 \\ 1,705 \\ 2,340 \\ 20,457 \end{array} \end{array}$ | $\begin{array}{r} 6,050 \\ 1,722 \\ 1,837 \\ 2,491 \\ 66,507 \end{array}$ | $\begin{array}{r} 6,449 \\ 1,829 \\ 1,964 \\ 2,686 \\ 72,956 \end{array}$ | $\begin{array}{r}6,902 \\ 1,918 \\ 2,100 \\ 2,884 \\ \hline 29858\end{array}$ |
| Change in research and development inventories Research and development fixed investment $\qquad$ | $\begin{array}{r} 389 \\ 2,950 \end{array}$ | $\begin{array}{r} 402 \\ 3,491 \end{array}$ | $\begin{array}{r} 288 \\ 4,029 \end{array}$ | $\begin{array}{r} 195 \\ 4,467 \end{array}$ | $\begin{array}{r} 174 \\ 4 ; 828 \end{array}$ | 5,348 | 5,621 5, | $\begin{aligned} & -169 \\ & 6,219 \end{aligned}$ | $\begin{array}{r} -46 \\ 6,495 \end{array}$ | -12 6.914 |
| 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 .......... | $\begin{array}{r} 1,830 \\ 33,857 \\ 19,425 \end{array}$ | $\begin{array}{r} 2,029 \\ 37,426 \\ 21,679 \end{array}$ | $\begin{array}{r} 2,240 \\ 41,515 \\ 44,328 \end{array}$ | $\begin{array}{r} 2,487 \\ .45,969 \\ 27,238 \end{array}$ | $\begin{aligned} & 2,752 \\ & 51,424 \\ & 30,775 \end{aligned}$ | $\begin{array}{r} 3,138 \\ 58,415 \\ 35,123 \end{array}$ | $\begin{array}{r} 3,540 \\ 66,88 \\ 40,135 \end{array}$ | $\begin{array}{r} 4,128 \\ 76,773 \\ 45,809 \end{array}$ | $\begin{aligned} & 4,666 \\ & 86,512 \\ & 51,115 \end{aligned}$ | $\begin{array}{r} 5,232 \\ 96,616 \\ 56,396 \end{array}$ |

See footnotes at end of table.

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

|  | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Research and development expenditures, total $\qquad$ <br> Basic research <br> Applied research $\qquad$ $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 31,731 \\ 4,038 \\ 6,920 \\ 20,773 \\ 403,569 \end{array}$ | $\begin{array}{r} 34,288 \\ 4,477 \\ 7,611 \\ 22,180 \\ 437,837 \end{array}$ | $\begin{array}{r} 36,794 \\ 4,908 \\ 8,368 \\ 23,518 \\ 474,631 \end{array}$ | $\begin{array}{r} 40,617 \\ 5,324 \\ 9,327 \\ 25,966 \\ 515,248 \end{array}$ | $\begin{array}{r} 44,512 \\ 5,966 \\ 10,034 \\ 28,542 \\ 559,760 \end{array}$ | $\begin{array}{r} 49,882 \\ 6,927 \\ 11,026 \\ 31,929 \\ 609,642 \end{array}$ | $\begin{array}{r} 57,211 \\ 7,786 \\ 12,59 \\ 36,930 \\ 666,853 \end{array}$ | $\begin{array}{r} 65,185 \\ 8,685 \\ 14,305 \\ 42,195 \\ 732,038 \end{array}$ | $\begin{array}{r} 74,488 \\ 9,773 \\ 17,057 \\ 47,656 \\ 806,524 \end{array}$ | $\begin{array}{r} 82,854 \\ 10,667 \\ 19,009 \\ 53,178 \\ 889,378 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | 335 31,378 | $\begin{array}{r} -103 \\ 34,371 \end{array}$ | -845 37,639 | 1,420 39,197 | $\begin{array}{r} 1,429 \\ 43,083 \end{array}$ | $\begin{array}{r} 1,913 \\ 47,969 \end{array}$ | $\begin{array}{r} 3,008 \\ 54,203 \end{array}$ | $\begin{array}{r} 3,104 \\ 62,081 \end{array}$ | $\begin{array}{r} 4,081 \\ 70,405 \end{array}$ | $\begin{array}{r} 3,864 \\ 78,990 \end{array}$ |
| Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangitle capital $\qquad$ Net stock of research and development fixed intangible capital $\qquad$ | $\begin{array}{r} 26,283 \\ 486,919 \\ 277,052 \end{array}$ | $\begin{array}{r} 29,479 \\ 550,106 \\ 307,491 \end{array}$ | $\begin{array}{r} 33,337 \\ 613,511 \\ 337,107 \end{array}$ | $\begin{array}{r} 36,422 \\ 668,449 \\ 361,133 \end{array}$ | $\begin{array}{r} 39,456 \\ 731,197 \\ 389,629 \end{array}$ | $\begin{array}{r} 43,398 \\ 809,843 \\ 426,904 \end{array}$ | $\begin{array}{r} 48,084 \\ 897,483 \\ \hline 469,670 \end{array}$ | $\begin{gathered} 53,182 \\ 992,890 \\ 557,922 \end{gathered}$ | $\begin{array}{r} 58,630 \\ 1,085,968 \\ 566,454 \end{array}$ | $\begin{array}{r} 63,516 \\ 1,171,988 \\ 613,975 \end{array}$ |
| Private ressarch and development expenditures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{\text { }}$ $\qquad$ | $\begin{array}{r} 24,343 \\ 2,014 \\ 4,581 \\ 17,74 \\ 316,323 \end{array}$ | $\begin{array}{r} 26,390 \\ 2,237 \\ 5,117 \\ 19,036 \\ 342,713 \end{array}$ | $\begin{array}{r} 28,160 \\ 2,442 \\ 5,515 \\ 20,200 \\ 370,873 \end{array}$ | $\begin{array}{r} 31,298 \\ 2,658 \\ 6,148 \\ 22,492 \\ 402,171 \end{array}$ | $\begin{array}{r} 34,528 \\ 2998 \\ 6,738 \\ 24,792 \\ 436,699 \end{array}$ | $\begin{array}{r} 38,766 \\ 3,483 \\ 7,547 \\ 27,736 \\ 475,465 \end{array}$ | $\begin{array}{r} 44,654 \\ 3,865 \\ 8,697 \\ 32,692 \\ 520,119 \end{array}$ | $\begin{array}{r} 51,587 \\ 4,333 \\ 10,052 \\ 37,202 \\ 571,706 \end{array}$ | $\begin{array}{r} 59,539 \\ 4,991 \\ 12,43 \\ 42,161 \\ 631,245 \end{array}$ | $\begin{array}{r} 66,592 \\ 5,415 \\ 14,152 \\ 47,025 \\ 697,837 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r}\text { 3 } \\ \text { 23,96 } \\ \hline 897\end{array}$ | -75 26,465 | $\begin{array}{r} -826 \\ 28,986 \end{array}$ | $\begin{array}{r} 1,333 \\ 29,965 \end{array}$ | 1,429 33,099 | $\begin{array}{r}1,552 \\ 37,214 \\ \hline\end{array}$ | $\begin{array}{r} 2,630 \\ 42,024 \end{array}$ | $\begin{array}{r} 3,157 \\ 48,430 \end{array}$ | $\begin{array}{r}3,991 \\ 55,548 \\ \hline\end{array}$ | 3,636 62,956 |
| Consumption of research and development fixed intangible capital ..... Gross stock of research and development fixed intangible capital ...... Net stock ol research and development fixed intangible capital $\qquad$ | $\begin{array}{r} 20,452 \\ 379,342 \\ 215,097 \end{array}$ | $\begin{array}{r} 23,003 \\ 429,064 \\ 238,786 \end{array}$ | $\begin{array}{r} 25,982 \\ 477,799 \\ 261,229 \end{array}$ | $\begin{array}{r} 28,316 \\ 518,972 \\ 278,780 \end{array}$ | $\begin{array}{r} 30,559 \\ 566,486 \end{array}$ $300,130$ | $\begin{array}{r} 33,582 \\ 626,426 \\ 328,562 \end{array}$ | $\begin{array}{r} 37,111 \\ 692,905 \\ 361,158 \end{array}$ | $\begin{gathered} 41,004 \\ 764,977 \\ 398,034 \end{gathered}$ | $\begin{array}{r} 45,105 \\ 834,898 \\ 435,388 \end{array}$ | $\begin{aligned} & 48,784 \\ & 901,216 \\ & 472,918 \end{aligned}$ |
| Government research and development expendiltures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 7,389 \\ 2,04 \\ 2,39 \\ 3,392 \\ 87,246 \end{array}$ | $\begin{array}{r} 7,878 \\ 2,240 \\ 2,494 \\ 3,144 \\ 95,124 \end{array}$ | $\begin{array}{r} 8,634 \\ 2,466 \\ 2,853 \\ 3,315 \\ 103,758 \end{array}$ | $\begin{array}{r} 9,319 \\ 2,666 \\ 3,179 \\ 3,474 \\ 113,077 \end{array}$ | $\begin{array}{r} 9,984 \\ 23,978 \\ 3,296 \\ 3,710 \\ 123,061 \end{array}$ | $\begin{array}{r} 11,1166 \\ 3,444 \\ 3,499 \\ 4,193 \\ 134,177 \end{array}$ | $\begin{array}{r} 12,557 \\ 3,921 \\ 3,898 \\ 4,788 \\ 146,734 \end{array}$ | $\begin{array}{r} 13,596 \\ 4,352 \\ 4,253 \\ 4,933 \\ 160,332 \end{array}$ | $\begin{array}{r} 14,947 \\ 4,832 \\ 4,620 \\ 55495 \\ 175,279 \end{array}$ | $\begin{array}{r} 16,262 \\ 5,252 \\ 4,857 \\ 6,859 \\ 691,541 \\ \hline 91,54 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $7,-39$ | $\begin{array}{r} -28 \\ 7,906 \end{array}$ | $\begin{array}{r} -19 \cdot \\ 8,653 \end{array}$ | $\begin{array}{r} 87 \\ 9,232 \end{array}$ | 9,984 ${ }^{0}$ | $\begin{array}{r} 361 \\ 10,755 \end{array}$ | $\begin{array}{r} 378 \\ 12,179 \end{array}$ | $13,651$ | $\begin{array}{r} 90 \\ 14,857 \end{array}$ | $\begin{array}{r} 228 \\ 16,034 \end{array}$ |
| 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 $\qquad$ | $\begin{array}{r} 5,831 \\ 107,57 \\ 61,955 \end{array}$ | $\begin{array}{r} 6,476 \\ \begin{array}{r} 61,042 \\ 68,702 \end{array} \\ \hline \end{array}$ | $\begin{array}{r} 7,355 \\ 135,712 \\ 75,878 \end{array}$ | $\begin{array}{r} 8,106 \\ 149,477 \\ 82,353 \end{array}$ | $\begin{array}{r} 8,899 \\ 164,711 \\ 89,499 \end{array}$ | $\begin{array}{r} 9,816 \\ 183,417 \\ 98,342 \end{array}$ | $\begin{array}{r} 10,973 \\ 204,578 \\ 108,512 \end{array}$ | $\begin{array}{r} 12,778 \\ 227,93 \\ 119,888 \end{array}$ | $\begin{array}{r} 13,525 \\ 251,070 \\ 131,066 \end{array}$ | $\begin{array}{r} 14,732 \\ 70,772 \\ 140,457 \end{array}$ |
|  | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| Research and development expenditures, total $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures 1 <br> ......................... | $\begin{array}{r} 91,578 \\ 11,79 \\ 20,964 \\ 58,8425 \\ 980,956 \end{array}$ | $\begin{array}{r} 103,597 \\ 13,059 \\ 23,135 \\ 66,403 \\ 1,084,553 \end{array}$ | $\begin{array}{r} 115,435 \\ 14,309 \\ 25,892 \\ 75,234 \\ 1,199,988 \end{array}$ | $\begin{array}{r} 121,224 \\ 16,695 \\ 27,806 \\ 76,723 \\ 1,321,212 \end{array}$ | $\begin{array}{r} 127,390 \\ 18,064 \\ 28,467 \\ 80,859 \\ 1,448,602 \end{array}$ | $\begin{array}{r} 134,880 \\ 18,914 \\ 30,139 \\ 88,827 \\ 1,583,482 \end{array}$ | $\begin{array}{r} 142,918 \\ 21,673 \\ 32,930 \\ 8,9315 \\ 1,786,400 \end{array}$ | $\begin{array}{r} 153,448 \\ 24,671 \\ 36,054 \\ 92,723 \\ 1,879,848 \end{array}$ | $\begin{array}{r} 162,818 \\ 28,346 \\ 39,896 \\ 94,576 \\ 2,042,666 \end{array}$ | $\begin{array}{r} 169,308 \\ 2,908 \\ 40,205 \\ 9,995 \\ 2,211,974 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{gathered} 4,738 \\ 86,840 \end{gathered}$ | $\begin{array}{r} 8,003 \\ 95,594 \end{array}$ | $\begin{array}{r} 8,012 \\ 107,423 \end{array}$ | $\begin{array}{r} 2,807 \\ 118,417 \end{array}$ | $\begin{array}{r} 2,621 \\ 124,769 \end{array}$ | $\begin{array}{r} 3,144 \\ 131,736 \end{array}$ | $\begin{array}{r} 1,982 \\ 140,936 \end{array}$ | $\begin{array}{r} 4,758 \\ 148,690 \end{array}$ | $\begin{array}{r} 4,531 \\ 158,287 \end{array}$ | 1.188 168,120 |
| Consumption of research and development fixed intangible capital $\qquad$ Gross stock of research and development fixed intangible capital $\qquad$ Net stock of research and development fixed intangible capital $\qquad$ | $\begin{array}{r} 68,121 \\ 1,255,274 \\ 660,640 \end{array}$ | $\begin{array}{r} 72,905 \\ 1,340,428 \\ 710,695 \end{array}$ | $\begin{array}{r} 77,769 \\ 1,425,140 \\ 763,511 \end{array}$ | $\begin{array}{r} 82,459 \\ 1,514,514 \\ 821,287 \end{array}$ | $\begin{array}{r} 87,923 \\ 1,616,123 \\ 885,298 \end{array}$ | $\begin{array}{r} 94,144 \\ 1,737,364 \\ 959,412 \end{array}$ | $\begin{array}{r} 101,838 \\ 1,871,842 \\ 1,039,932 \end{array}$ | $\begin{array}{r} 109,645 \\ 2,004,242 \\ 1,117,323 \end{array}$ | $\begin{array}{r} 117,127 \\ 2,134,514 \\ 1,192,648 \end{array}$ | $\begin{array}{r} 125,169 \\ 2,246,959 \\ 1,256,565 \end{array}$ |
| Private research and development expenditures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Deveiopment $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 73,751 \\ 55989 \\ 15,846 \\ 51,966 \\ 771,588 \end{array}$ | $\begin{array}{r} 84,103 \\ 67,766 \\ 17,827 \\ 59,540 \\ 855,691 \end{array}$ | $\begin{array}{r} 94,148 \\ 7,44 \\ 20,394 \\ 66,34 \\ 949,83 \end{array}$ | $\begin{array}{r} 98,373 \\ 9,123 \\ 22,011 \\ 67,239 \\ 1,048,210 \end{array}$ | $\begin{array}{r} 103,336 \\ 9,843 \\ 22,266 \\ 71,227 \\ 1,151,546 \end{array}$ | $\begin{array}{r} 109,042 \\ 10,061 \\ 23,437 \\ 75,544 \\ 1,260,588 \end{array}$ | $\begin{array}{r} 115,098 \\ 12,042 \\ 25,612 \\ 77,444 \\ 1,375,686 \end{array}$ | $\begin{array}{r} 123,782 \\ 14,254 \\ 28,248 \\ 81,280 \\ 1,499,468 \end{array}$ | $\begin{array}{r} 131,774 \\ 17,104 \\ 31,406 \\ 883,264 \\ 1,631,242 \end{array}$ | $\begin{array}{r} 136,922 \\ 17728 \\ 31,210 \\ 88,40 \\ 1,768,164 \end{array}$ |
| Changs in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ |  | 7,129 76,974 | $\begin{array}{r} 7,085 \\ 87,061 \end{array}$ | $\begin{array}{r} 1,998 \\ 96,375 \end{array}$ | $\begin{array}{r} 2,401 \\ 100,935 \end{array}$ | $\begin{array}{r} 2,441 \\ 106,601 \end{array}$ |  | $\begin{array}{r} 4,270 \\ 119,512 \end{array}$ | $\begin{array}{r} 4,556 \\ 127,218 \end{array}$ |  |
| 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 .......... | $\begin{aligned} & 52,434 \\ & 967,669 \\ & 512,151 \end{aligned}$ | $\begin{array}{r} 56,299 \\ 1,035,392 \\ 553,474 \end{array}$ | $\begin{array}{r} 60,183 \\ 1,102,947 \\ 597,223 \end{array}$ | $\begin{array}{r} 63,956 \\ 1,174,007 \\ 644,858 \end{array}$ | $\begin{array}{r} 68,295 \\ 1,254,372 \\ 696,325 \end{array}$ | $\begin{array}{r} 73,270 \\ 1,353,273 \\ 758,293 \end{array}$ | $\begin{array}{r} 79,674 \\ 1,462,947 \\ 824,677 \end{array}$ | $\begin{array}{r} 85,954 \\ 1,567,734 \\ 886,238 \end{array}$ | $\begin{array}{r} 91,807 \\ 1,671,934 \\ 946,631 \end{array}$ | $\begin{array}{r} 98,526 \\ 1,768,32 \\ 1,001,329 \end{array}$ |
| Government research and development expenditures $\qquad$ <br> Basic research $\qquad$ <br> Applied research $\qquad$ <br> Development $\qquad$ <br> Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 17,827 \\ 5,800 \\ 5,118 \\ 6999 \\ 209,968 \end{array}$ | $\begin{array}{r} 19,494 \\ 6,323 \\ 5,308 \\ 7,863 \\ 228,862 \end{array}$ | $\begin{array}{r} 21,289 \\ 6,895 \\ 5,498 \\ 8,986 \\ 250,151 \end{array}$ | $\begin{array}{r} 22,851 \\ 7,572 \\ 5,795 \\ 9.494 \\ 273,002 \end{array}$ | $\begin{array}{r} 24,054 \\ 8,221 \\ 6,201 \\ 9,632 \\ 297,056 \end{array}$ | $\begin{array}{r} 25,838 \\ 8,853 \\ 6,702 \\ 10,283 \\ 322,894 \end{array}$ | $\begin{array}{r} 27,820 \\ 9,631 \\ 7,318 \\ 10,871 \\ 350,714 \end{array}$ | $\begin{array}{r} 29,666 \\ 10,417 \\ 7,806 \\ 11,443 \\ 380,380 \end{array}$ | $\begin{array}{r} 31,044 \\ 11,242 \\ 8,490 \\ 11,32 \\ 411,424 \end{array}$ | 32,386 12,021 8,995 11,370 443,810 |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 747 \\ 17,080 \end{array}$ | $\begin{array}{r} 874 \\ 18,620 \end{array}$ | $\begin{array}{r} 927 \\ 20,362 \end{array}$ | $\begin{array}{r}889 \\ \hline 22,042 \\ \hline\end{array}$ | 23,834 | 703 25,135 | 8666 26,954 | 488 29,178 | -25 31,069 | 367 32,019 |
| 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 | $\begin{array}{r} 15,687 \\ 287,605 \\ 148,489 \end{array}$ | $\begin{array}{r} 16,606 \\ 3050,036 \\ 157,221 \end{array}$ | $\begin{array}{r} 17,586 \\ 322,193 \\ 166,288 \end{array}$ | $\begin{array}{r} 18,503 \\ 340,507 \\ 176,429 \end{array}$ | $\begin{array}{r} 19,628 \\ 361,751 \\ 188,473 \end{array}$ | $\begin{gathered} 20,874 \\ 384,091 \\ 201,119 \end{gathered}$ | $\begin{array}{r} 22,164 \\ .408,895 \\ 215,255 \end{array}$ | $\begin{array}{r} 23,691 \\ 436,508 \\ 231,085 \end{array}$ | $\begin{array}{r} 25,314 \\ 46,580 \\ 246,017 \end{array}$ | $\begin{array}{r} 26,643 \\ 478,637 \\ 255,236 \end{array}$ |

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]

|  | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Research and development expenditures, total $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 27,688 \\ 270,200 \end{array}$ | $\begin{array}{r} 29,475 \\ 299,675 \end{array}$ | $\begin{array}{r} 31,330 \\ 331,005 \end{array}$ | $\begin{array}{r} 39,496 \\ 370,56 \end{array}$ | $\begin{array}{r} 44,736 \\ 415,237 \end{array}$ | $\begin{array}{r} 47,208 \\ 462,445 \end{array}$ | $\begin{array}{r} 52,134 \\ 514,579 \end{array}$ | $\begin{array}{r} 55,697 \\ 570,276 \end{array}$ | $\begin{array}{r} 57,529 \\ 627,805 \end{array}$ | $\begin{array}{r} 60,365 \\ 688,170 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 7,873 \\ 19,815 \end{array}$ | $\begin{array}{r} 1,787 \\ 27,668 \end{array}$ | $\begin{array}{r} 1,855 \\ 29,475 \end{array}$ | 8,166 31,330 | $\begin{array}{r} 5,240 \\ 39,496 \end{array}$ | $\begin{array}{r} 2,472 \\ 44,736 \end{array}$ | 4,926 47,208 | 3,563 52,134 | 1,832 55,697 | $\begin{array}{r} 2,836 \\ 57,529 \end{array}$ |
| Consumption of research and development fixed intangible capital $\qquad$ Gross stock of research and development fixed intangible capital $\qquad$ Net stock of research and development fixed intangible capital $\qquad$ |  | n.a. n.a. n.a. nem | n.a. ni.a. n.a. nem | n.a. n.a. n.a. ne. | n.a. n.a. n.a. n.a. | n.a. n.a. n.a. nema | 21,448 390,712 249,314 | $\begin{array}{r}23,744 \\ 432,582 \\ \hline 277,704\end{array}$ | 26,250 477,102 307,151 | 28,858 522,415 335,822 |
| Private research and developmens expenditures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 18,456 \\ 170,843 \end{array}$ | $\begin{array}{r} 20,398 \\ 191,241 \end{array}$ | 22,708 213,949 | 30,732 244,681 | 35,382 280,063 | 37,553 317,616 | 41,598 359,214 | 44,373 403,587 | 45,517 449,104 | 47,140 496,244 |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 5,095 \\ 13,361 \end{array}$ | $\begin{array}{r} 1,942 \\ 18,456 \end{array}$ | $\begin{array}{r} 2,310 \\ 20,398 \end{array}$ | $\begin{array}{r} 8,024 \\ 22,708 \end{array}$ | $\begin{array}{r} 4,650 \\ 30,732 \end{array}$ | 2,171 35,382 | $\begin{array}{r} 4,045 \\ 37.553 \end{array}$ | $\begin{array}{r} 2,775 \\ 41,598 \end{array}$ | 1,144 44,373 | 1,623 45,517 |
| Consumption of research and development fixed intangible capital <br> Gross stock of research and development fixed intangible capital ...... <br> Net stock of research and development fixed intangible capital $\qquad$ |  |  | n.a. n.a. n.a. n. | n.a. n.a. n.a. n. and |  | n.a. n.a. n.a. nem | 14,760 270,720 180,799 | 16,725 306,128 205,672 | $\begin{gathered} \begin{array}{c} 18,862 \\ 343,799 \\ 231,183 \end{array} \\ \hline 23 \end{gathered}$ | $\begin{array}{r} 21,079 \\ 381,931 \\ 255,621 \end{array}$ |
| Government research and development expenditures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 9,232 \\ 99,357 \end{array}$ | $\begin{array}{r} 9,077 \\ 908,434 \end{array}$ | $\begin{array}{r} 8,622 \\ 117,056 \end{array}$ | $\begin{array}{r} 8,764 \\ 125,820 \end{array}$ | $\begin{array}{r} 9,354 \\ 135,174 \end{array}$ | $\begin{array}{r} 9,655 \\ 144,829 \end{array}$ | $\begin{array}{r} 10,536 \\ 155,365 \end{array}$ | $\begin{array}{r} 11,324 \\ 166,689 \end{array}$ | 12,012 178,701 | $\begin{array}{r} 13,225 \\ 191,926 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{aligned} & 2,778 \\ & 6,454 \end{aligned}$ | $\begin{aligned} & -155 \\ & 9,232 \end{aligned}$ | -455 | $\begin{array}{r} 142 \\ 8,622 \end{array}$ | 590 8,764 | 301 9,354 | 881 9,655 | 788 10,536 | 688 11,324 | 1,213 12,012 |
| Consumption of research and development fixed intangibie capital .... Gross stock of research and development fixed intangible capital ...... Net stock of research and development fixed intangible capital ......... | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | n.a. n.a. n.a. n. | $\begin{aligned} & \text { n.a. } \\ & \text { n.a. } \\ & \text { n.a. } \end{aligned}$ | n.a. n.a. n.a. n.a. | n.a. nn.a. n.a. nem | 6,688 119,992 68,515 | 7,019 126,454 72,032 | 7,388 r 13,363 75,968 | $\begin{array}{r} 7,779 \\ 140,484 \\ 80,201 \end{array}$ |
| Addenda: |  |  |  |  |  |  |  |  |  |  |
| Average age, in years, of R\&D gross fixed intangible capital Private $\qquad$ | n.a. | n.a. | n.a. | n.a. n.a. ni. | n.a. nia. ni. and | n.a. | 6.6 6.0 78 | 6.5 5.9 | 6.5 5.9 | 6.5 6.0 8.0 |
| Government .... | n.a. | ก.a. | n.a. | n.a. | n.a. | n.a. | 7.9 | 7.9 | 8.0 | 8.0 |
| Government and business net fixed reproducible tangible capital ${ }^{2}$........ | 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 expendiltures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 65,886 \\ 754,056 \end{array}$ | $\begin{array}{r} 70,504 \\ 824,560 \end{array}$ | $\begin{array}{r} 73,327 \\ 897,887 \end{array}$ | $\begin{array}{r} 77,442 \\ 975,329 \end{array}$ | $\begin{array}{r} 79,113 \\ 1,054,442 \end{array}$ | $\begin{array}{r} 79,854 \\ \quad 1,134,296 \end{array}$ | $\begin{array}{r} 79,733 \\ 1,214,029 \end{array}$ | $\begin{array}{r} 75,668 \\ 1,289,697 \end{array}$ | $\begin{array}{r} 73,344 \\ 1,363,041 \end{array}$ | $\begin{array}{r} 73,970 \\ 1,437,011 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 5.521 \\ 60,365 \end{array}$ | $\begin{array}{r} 4,618 \\ 65,886 \end{array}$ | 2,823 70,504 | 4,115 73,327 | $\begin{array}{r} 1,671 \\ 77,442 \end{array}$ | $\begin{array}{r} 741 \\ 79,113 \end{array}$ | $\begin{gathered} -121 \\ 79,854 \end{gathered}$ | $\begin{gathered} -4,065 \\ 79,733 \end{gathered}$ | $\begin{aligned} & -2,324 \\ & 75,668 \end{aligned}$ | 626 73,344 |
| Consumption of research and development fixed intangible capital Gross stock of research and development fixed intangible capital $\qquad$ Net stock of research and development fixed intangible capital $\qquad$ | $\begin{array}{r} 31,547 \\ 569,675 \\ 364,640 \end{array}$ | $\begin{array}{r} 34,423 \\ 621,255 \\ 396,103 \end{array}$ | $\begin{array}{r} 37,527 \\ 676,436 \\ 429,080 \end{array}$ | $\begin{aligned} & 40,765 \\ & 732,803 \\ & 461,642 \end{aligned}$ | $\begin{array}{r} 44,085 \\ 791,295 \\ 494,999 \end{array}$ | 47,46 <br> 850,214 <br> 526,651 | $\begin{array}{r} 50,800 \\ 908,392 \\ 955,705 \end{array}$ | 54,020 <br> 964,142 <br> 581,418 | $\begin{array}{r} 56,941 \\ 1,013,144 \\ 600,145 \end{array}$ | $\begin{array}{r} 59,493 \\ 1,057,120 \\ 613,996 \end{array}$ |
| Private research and development expendilures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 50,916 \\ 547,160 \end{array}$ | $\begin{array}{r} 53,811 \\ 600,971 \end{array}$ | $\begin{array}{r} 55,441 \\ 656,412 \end{array}$ | $\begin{gathered} 58,774 \\ 715,186 \end{gathered}$ | $\begin{gathered} 59,744 \\ 774,960 \end{gathered}$ | $\begin{array}{r} 60,737 \\ 835,697 \end{array}$ | $\begin{array}{r} 60,529 \\ 896,226 \end{array}$ | $\begin{array}{r} 56,987 \\ 953,213 \end{array}$ | $\begin{array}{r} 54,794 \\ 1,008,007 \end{array}$ | $\begin{array}{r} 55,451 \\ 1,063,458 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 3,776 \\ 47,140 \end{array}$ | $\begin{array}{r} 2,895 \\ 50,916 \end{array}$ | $\begin{array}{r} 1,630 \\ 53,811 \end{array}$ | $\begin{array}{r} 3,333 \\ 55,441 \end{array}$ | 1,000 58,774 | $\begin{array}{r} 963 \\ 59,774 \end{array}$ | $\begin{array}{r} -208 \\ 60,737 \end{array}$ | $\begin{aligned} & -3,542 \\ & 60,529 \end{aligned}$ | $\begin{array}{r} -2.193 \\ 56,987 \end{array}$ | $\begin{array}{r} 667 \\ 54,794 \end{array}$ |
| 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 $\qquad$ | $\begin{array}{r} 23,341 \\ 421,181 \\ 279,420 \end{array}$ | $\begin{array}{r} 25,717 \\ 469,341 \\ 304,619 \end{array}$ | $\begin{array}{r} 28,233 \\ 507,677 \\ 330,197 \end{array}$ | $\begin{gathered} 30,817 \\ 552,534 \\ 354,821 \end{gathered}$ | $\begin{array}{r} 33,459 \\ 599,413 \\ 380,136 \end{array}$ | $\begin{gathered} 36,132 \\ 645,964 \\ \hline 403,778 \end{gathered}$ | $\begin{array}{r} 38,758 \\ 691,943 \\ 425,757 \end{array}$ | 41,278 735,650 445,008 | $\begin{gathered} 43,634 \\ 773,498 \\ 456,461 \end{gathered}$ | $\begin{array}{r} 45,465 \\ 806,818 \\ 467,790 \end{array}$ |
| Government research and development expenditures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ | $\begin{array}{r} 14,970 \\ 206,896 \end{array}$ | $\begin{array}{r} 16,693 \\ 223,589 \end{array}$ | $\begin{array}{r} 17,888 \\ 241,475 \end{array}$ | $\begin{array}{r} 78,668 \\ 260,143 \end{array}$ | $\begin{array}{r} 19,339 \\ 279,482 \end{array}$ | $\begin{array}{r} 19,117 \\ 298,599 \end{array}$ | $\begin{array}{r} 19,204 \\ 317,803 \end{array}$ | $\begin{array}{r} 18,681 \\ 336,484 \end{array}$ | $\begin{array}{r} 18,550 \\ 355,034 \end{array}$ | $\begin{array}{r} 18,519 \\ 373,553 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 1,745 \\ 13,225 \end{array}$ | $\begin{array}{r} 1,723 \\ 14,970 \end{array}$ | 1,193 16,693 | $\begin{array}{r}782 \\ \hline 17,886\end{array}$ | 671 18,668 | 19,339 | $\begin{array}{r}87 \\ \hline 9,117\end{array}$ | -523 19,204 | 18,681 | -31 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 .......... | $\begin{array}{r} 8,206 \\ \begin{array}{r} 848,494 \\ 85,220 \end{array} \end{array}$ | $\begin{array}{r} 8,706 \\ 1577.914 \\ 91,484 \end{array}$ | $\begin{array}{r} 9,294 \\ 168,759 \\ 98,883 \end{array}$ | $\begin{array}{r} 9,948 \\ 180,269 \\ 106,829 \end{array}$ | $\begin{array}{r} 10,626 \\ 191,882 \\ 114,863 \end{array}$ | $\begin{aligned} & 11,329 \\ & 204,250 \\ & 122,873 \end{aligned}$ | $\begin{array}{r} 12,042 \\ 216,449 \\ 129,948 \end{array}$ | $\begin{array}{r} 12,742 \\ 228,492 \\ 136,410 \end{array}$ | $\begin{array}{r} 13,407 \\ 239,646 \\ 141,684 \end{array}$ | $\begin{array}{r} 14,028 \\ 250,302 \\ 146,206 \end{array}$ |
| Addenda: <br> Average age, in years, of R\&D gross fixed intangible capital Private <br> Government $\qquad$ | $\begin{aligned} & 6.5 \\ & 6.0 \\ & 7.9 \end{aligned}$ | $\begin{aligned} & 6.6 \\ & 6.1 \\ & 7.8 \end{aligned}$ | 6.6 6.3 7.7 | 6.7 6.4 7.6 | 6.8 6.5 7.4 | 6.9 6.7 7.4 | 7.0 6.9 7.4 | 7.2 7.1 7.4 | 7.4 7.3 7.5 | 7.6 7.6 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]

|  | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Research and development expenditures $\qquad$ Cumulative research and development expenditures ${ }^{1}$............................ | $\begin{array}{r} 74,773 \\ 1,511,784 \end{array}$ | $\begin{array}{r} 74,530 \\ 1,586,314 \end{array}$ | $\begin{array}{r} 72,922 \\ 1,659,236 \end{array}$ | $\begin{array}{r} 75,476 \\ 1,734,712 \end{array}$ | $\begin{array}{r} 77,932 \\ 1,812,644 \end{array}$ | $\begin{array}{r} 81,087 \\ 1,893,711 \end{array}$ | $\begin{array}{r} 85,503 \\ 1,979,214 \end{array}$ | $\begin{array}{r} 89,660 \\ 2,068,874 \end{array}$ | $\begin{array}{r} 94,747 \\ 2,163,621 \end{array}$ | $\begin{array}{r} 99,312 \\ 2,262,933 \end{array}$ |
| Change in research and development inventories $\qquad$ <br> Research and development fixed investment $\qquad$ | $\begin{array}{r} 803 \\ 73,970 \end{array}$ | $\begin{aligned} & -243 \\ & 74,773 \end{aligned}$ | $\begin{gathered} -1,608 \\ 74,530 \end{gathered}$ | $\begin{gathered} 2,554 \\ 72,922 \end{gathered}$ | 2,456 75,476 | $\begin{array}{r} 3,135 \\ 77,932 \end{array}$ | $\begin{array}{r} 4,436 \\ 81,067 \end{array}$ | $\begin{array}{r} 4,157 \\ 85,503 \end{array}$ | $\begin{array}{r} 5,087 \\ 89,660 \end{array}$ | 4,565 94,747 |
| Consumption of research and development fixed intangible capital ......... Gross stock of research and development fixed intangible capital <br> Net stock of research and development fixed intangible capital $\qquad$ | $\begin{array}{r} 61,804 \\ 1,098,707 \\ 626,162 \end{array}$ | $\begin{array}{r} 63,954 \\ \mathbf{r}, 137,821 \\ 636,981 \end{array}$ | $\begin{array}{r} 65,915 \\ 1,173,343 \\ 64,596 \end{array}$ | $\begin{array}{r} 67,602 \\ 1,203,353 \\ 650,916 \end{array}$ | $\begin{array}{r} 69,092 \\ 1,232,252 \\ 657,300 \end{array}$ | $\begin{array}{r} 70,514 \\ 1,259,927 \\ 664,718 \end{array}$ | $\begin{array}{r} 71,888 \\ 1,286,892 \\ 63,897 \end{array}$ | $\begin{array}{r} 73,286 \\ 1,314,738 \\ 686,114 \end{array}$ | $\begin{array}{r} 74,758 \\ 1,343,574 \\ 701,016 \end{array}$ | $\begin{array}{r} 76,345 \\ 1,374,495 \\ 719,418 \end{array}$ |
| Private research and development expendiltures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 56,262 \\ 1,119,720 \end{array}$ | $\begin{array}{r} 56,084 \\ 1,175,804 \end{array}$ | $\begin{array}{r} 54,516 \\ 1,230,320 \end{array}$ | $\begin{array}{r} 56,896 \\ 1,287,216 \end{array}$ | $\begin{array}{r} 59,352 \\ 1,346,568 \end{array}$ | $\begin{array}{r} 61,864 \\ 1,408,432 \end{array}$ | $\begin{array}{r} 65,704 \\ 1,474,136 \end{array}$ | $\begin{array}{r} 69,838 \\ 1,544,074 \end{array}$ | $\begin{array}{r} 74,906 \\ 1,688,980 \end{array}$ | $\begin{array}{r} 79,189 \\ 1,698{ }^{1} \times 169 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 811 \\ 55,451 \end{array}$ | $\begin{array}{r} -178 \\ 56,262 \end{array}$ | $\begin{aligned} & -1,568 \\ & 56,084 \end{aligned}$ | $\begin{array}{r} 2,380 \\ 54,516 \end{array}$ | $\begin{array}{r} 2,456 \\ 56,896 \end{array}$ | $\begin{array}{r} 2,512 \\ 59,352 \end{array}$ | $\begin{array}{r} 3,840 \\ 61,864 \end{array}$ | $\begin{array}{r} 4,234 \\ 65,704 \end{array}$ | $\begin{array}{r} 4,968 \\ 69,938 \end{array}$ | $\begin{gathered} 4,283 \\ 74,906 \end{gathered}$ |
| Consumption of research and development fixed intangible capital .... Gross stock of research and development fixed intangible capital Net stock of research and development fixed intangibie capital $\qquad$ | $\begin{array}{r} 47,190 \\ 838,230 \\ 476,051 \end{array}$ | $\begin{array}{r} 48,787 \\ 867,638 \\ 483,526 \end{array}$ | $\begin{array}{r} 50,233 \\ 89,101 \\ 489,377 \end{array}$ | $\begin{array}{r} 51,454 \\ 915,897 \\ 492,439 \end{array}$ | $\begin{array}{r} 52,521 \\ 937,072 \\ 996,814 \end{array}$ | $\begin{array}{r} 53,560 \\ 957,757 \\ 502,606 \end{array}$ | $\begin{array}{r} 54,581 \\ 977,862 \\ 509,889 \end{array}$ | 55,636 999969 519,097 | $\begin{array}{r} 56,796 \\ 1,062,102 \\ 533,099 \end{array}$ | $\begin{array}{r} 58,112 \\ 1,047,870 \\ 549,893 \end{array}$ |
| Government research and development expendilures $\qquad$ Cumulative research and development expenditures ${ }^{3}$ $\qquad$ | $\begin{array}{r} 18,511 \\ 392,064 \end{array}$ | $\begin{array}{r} 18,446 \\ 410,510 \end{array}$ | $\begin{gathered} 18,406 \\ 428,916 \end{gathered}$ | $\begin{array}{r} 18,580 \\ 477,496 \end{array}$ | 18,500 466,076 | 19,203 485,279 | 19,799 505,078 | 19,722 524,800 | 19,841 544,641 | 20,123 564,764 |
| Change in research and development inventories $\qquad$ <br> Research and development fixed investment $\qquad$ | $\begin{array}{r} -8 \\ 18,519 \end{array}$ | $\begin{array}{r} -65 \\ 18,511 \end{array}$ | $18,446$ | $\begin{array}{r} 174 \\ 18,406 \end{array}$ | 18,580 | $\begin{array}{r} 623 \\ 18,580 \end{array}$ | $\begin{array}{r} 596 \\ 19,203 \end{array}$ | 19,799 | 119 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 $\qquad$ | $\begin{gathered} 14,614 \\ 260,477 \\ 150,111 \end{gathered}$ | $\begin{array}{r} 15,167 \\ 270,183 \\ 153,455 \end{array}$ | $\begin{array}{r} 15,682 \\ 279,242 \\ 156,219 \end{array}$ | $\begin{array}{r} 16,148 \\ 287,456 \\ 158,477 \end{array}$ | $\begin{array}{r} 16,571 \\ 295,180 \\ 160,486 \end{array}$ | $\begin{array}{r} 16,954 \\ 302,170 \\ 162,112 \end{array}$ | $\begin{array}{r} 17,307 \\ 309,030 \\ 164,000 \end{array}$ | $\begin{array}{r} 17,650 \\ 315,669 \\ 166,157 \end{array}$ | $\begin{array}{r} 17,962 \\ 321,472 \\ 167,917 \end{array}$ | $\begin{array}{r} 18,233 \\ 326,625 \\ 169,525 \end{array}$ |
| Addenda: |  |  |  |  |  |  |  |  |  |  |
| Average age, in years, of R\&D gross fixed intangible capital $\qquad$ <br> Private <br> Government $\qquad$ | $\begin{aligned} & 7.8 \\ & 7.8 \\ & 7.8 \end{aligned}$ | $\begin{aligned} & 8.0 \\ & 8.1 \\ & 7.9 \end{aligned}$ | $\begin{aligned} & 8.3 \\ & 8.3 \\ & 8.1 \end{aligned}$ | $\begin{aligned} & 8.5 \\ & 8.5 \\ & 8.3 \end{aligned}$ | $\begin{aligned} & 8.6 \\ & 8.7 \\ & 8.4 \end{aligned}$ | $\begin{aligned} & 8.8 \\ & 8.8 \\ & 8.6 \end{aligned}$ | $\begin{aligned} & 8.9 \\ & 8.9 \\ & 8.7 \end{aligned}$ | 8.9 9.0 8.8 | 9.0 9.0 8.9 | 9.0 8.9 9.0 |
| Government and business net fixed reproducible tangible capital ${ }^{2}$........ | 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 $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 104,707 \\ 2,367,640 \end{array}$ | $\begin{array}{r} 113,433 \\ 2,481,073 \end{array}$ | $\begin{array}{r} 121,871 \\ 2,602,944 \end{array}$ | $\begin{array}{r} 124,769 \\ 2,727,713 \end{array}$ | $\begin{array}{r} 127,390 \\ 2,855,103 \end{array}$ | $\begin{array}{r} 130,427 \\ 2,985,530 \end{array}$ | $\begin{array}{r} 132,253 \\ 3,117,783 \end{array}$ | $\begin{array}{r} 136,493 \\ 3,254,276 \end{array}$ | $\begin{array}{r} 140,435 \\ 3,394,711 \end{array}$ | $\begin{array}{r} 141,410 \\ 3,536,121 \end{array}$ |
| Change in research and development inventories $\qquad$ <br> Research and development fixed investment $\qquad$ | $\begin{array}{r} 5,395 \\ 99,312 \end{array}$ | $\begin{array}{r} 8,726 \\ 104,707 \end{array}$ | $\begin{array}{r} 8,438 \\ 113,433 \end{array}$ | $\begin{array}{r} 2,898 \\ 121,871 \end{array}$ | $\begin{array}{r} 2,621 \\ 124,769 \end{array}$ | $\begin{array}{r} 3,037 \\ 127,390 \end{array}$ | $\begin{array}{r} 1,826 \\ 130,427 \end{array}$ | $\begin{array}{r} 4,240 \\ 132,253 \end{array}$ | $\begin{array}{r} 3,942 \\ 136,493 \end{array}$ | $\begin{array}{r} 975 \\ 140,435 \end{array}$ |
| Consumption of research and development fixed intangible capital $\qquad$ Gross stock of research and development fixed intangible capital $\qquad$ Net stock of research and development fixed intangible capital. $\qquad$ | $\begin{array}{r} 78,080 \\ 1,407,407 \\ 740,650 \end{array}$ | $\begin{array}{r} 80,004 \\ 1,443,719 \\ 765,353 \end{array}$ | $\begin{array}{r} 82,266 \\ 1,486,946 \\ 796,520 \end{array}$ | 84,962 $1,536,885$ 833,429 | $\begin{array}{r} 87,923 \\ 1,588,302 \\ 870,275 \end{array}$ | $\begin{array}{r} 90,991 \\ 1,641,320 \\ 906,674 \end{array}$ | $\begin{array}{r} 94,479 \\ 1,696,480 \\ 942,922 \end{array}$ | 97,463 $1,752,683$ 977,712 | $\begin{array}{r} 100,868 \\ 1,812,302 \\ 1,013,337 \end{array}$ | $\begin{array}{r} 104,450 \\ 1,874,989 \\ 1,049,322 \end{array}$ |
| Private research and development expenditures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 83,704 \\ 1,781,873 \end{array}$ | $\begin{array}{r} 91,444 \\ 1,873,317 \end{array}$ | $\begin{array}{r} 98,881 \\ 1,972,198 \end{array}$ | $\begin{array}{r} 100,935 \\ 2,073,133 \end{array}$ | $\begin{array}{r} 103,336 \\ 2,176,469 \end{array}$ | $\begin{array}{r} 105,700 \\ 2,282,169 \end{array}$ | $\begin{array}{r} 106,732 \\ 2,388,901 \end{array}$ | $\begin{array}{r} 110,545 \\ 2,499,446 \end{array}$ | $\begin{array}{r} 114,508 \\ 2,613,954 \end{array}$ | $\begin{array}{r} 115,186 \\ 2,723,140 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 4,515 \\ 79,189 \end{array}$ | $\begin{array}{r} 7,740 \\ 83,704 \end{array}$ | $\begin{array}{r} 7,437 \\ 91,444 \end{array}$ | $\begin{aligned} & 2,054 \\ & 98,881 \end{aligned}$ | $\begin{array}{r} 2,401 \\ 100,935 \end{array}$ | $\begin{array}{r} 2,364 \\ 103,336 \end{array}$ | $\begin{array}{r} 1,032 \\ 105,700 \end{array}$ | $\begin{array}{r} 3,813 \\ 106,732 \end{array}$ | $\begin{array}{r} 3,963 \\ 110,545 \end{array}$ | $\begin{array}{r} 678 \\ 114,508 \end{array}$ |
| 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 ......... | $\begin{array}{r} 59,603 \\ 1,076,064 \\ 569,479 \end{array}$ | $\begin{array}{r} 61,283 \\ 1,109,406 \\ 591,900 \end{array}$ | 63,275 $1,145,278$ 620,069 | 65,668 1,189,429 653,282 | 68,295 $1,234,684$ 685,922 | 71,016 $1,281,684$ 718,242 | 73,845 $1,330,44$ 750,097 | 76,736 $1,379,599$ 780,093 | 79,720 $1,431,89$ 810,918 | 82,877 1.487288 842,549 |
| Government research and development expenditures $\qquad$ Cumulative research and development expenditures ${ }^{1}$ $\qquad$ | $\begin{array}{r} 21,003 \\ 585,767 \end{array}$ | $\begin{array}{r} 21,989 \\ 607,756 \end{array}$ | $\begin{array}{r} 22,990 \\ 630,746 \end{array}$ | $\begin{array}{r} 23,834 \\ 654,580 \end{array}$ | $\begin{array}{r} 24,054 \\ 678,634 \end{array}$ | $\begin{array}{r} 24,727 \\ 703,361 \end{array}$ | $\begin{array}{r} 25,521 \\ 728,882 \end{array}$ | $\begin{array}{r} 25,948 \\ 754,830 \end{array}$ | 25,927 780,757 | $\begin{array}{r} 26,224 \\ 806,981 \end{array}$ |
| Change in research and development inventories $\qquad$ Research and development fixed investment $\qquad$ | $\begin{array}{r} 880 \\ 20,123 \end{array}$ | $\begin{array}{r} 986 \\ 21,003 \end{array}$ | $\begin{array}{r} 1,001 \\ 21,989 \end{array}$ | $\begin{array}{r} 844 \\ 22,990 \end{array}$ | $\begin{array}{r} 220 \\ 23,834 \end{array}$ | $\begin{array}{r} 673 \\ 24,054 \end{array}$ | $\begin{array}{r} 794 \\ 24,727 \end{array}$ | 427 25,521 | 25,248 | 2297 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......... | $\begin{array}{r} 18,477 \\ 331,343 \\ 171,171 \end{array}$ | $\begin{gathered} 18,721 \\ 336,313 \\ 773,453 \end{gathered}$ | $\begin{array}{r} 18,991 \\ 341,668 \\ 176,451 \end{array}$ | $\begin{array}{r} 19,294 \\ 347,456 \\ 180,147 \end{array}$ | $\begin{array}{r} 19,628 \\ 353,618 \\ 184,353 \end{array}$ | $\begin{array}{r} 19,975 \\ 359,636 \\ 188,432 \end{array}$ | $\begin{array}{r} 20,334 \\ 366,066 \\ 192,825 \end{array}$ | 20,727 3737084 197,619 | 21,148 380,411 202,419 | $\begin{array}{r} 21,573 \\ 387,561 \\ 306,773 \end{array}$ |
| Addenda: <br> Average age, in years, of R\&D gross fixed intangible capital Private <br> Government $\qquad$ | $\begin{aligned} & 8.9 \\ & 8.9 \\ & 9.1 \end{aligned}$ | $\begin{aligned} & 8.9 \\ & 8.8 \\ & 9.1 \end{aligned}$ | $\begin{aligned} & 8.8 \\ & 8.7 \\ & 9.1 \end{aligned}$ | 8.6 8.5 9.1 | 8.5 8.4 9.1 | 8.4 8.3 9.0 | 8.4 8.2 9.0 | 8.3 8.1 8.9 | 8.2 8.1 8.8 | 8.2 8.1 8.8 |
| Government and business net fixed reproducible tangible capital ${ }^{2}$........ | 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
[Milions of dollars]

\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \& 1960 \& 1965 \& 1970 \& 1975 \& 1980 \& 1985 \& 1987 \& 1988 \& 1989 \& 1990 \& 1991 \& 1992 \\
\hline Research and development expendliures, 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 \\
\hline 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 \\
\hline By industry \& 10,606 \& 13,883 \& 17,858 \& 24,124 \& 44,507 \& 83,663 \& 90,898 \& 95,590 \& 100,679
74.293 \& 108,246 \& 115,328 \& 119,508 \\
\hline From industry \({ }^{1}\).................................................................. \& 4,465 \& 6,473 \& 10,425 \& 15,975 \& 31,293 \& 57,839 \& 62,033
28,766 \& 67,322 \& 74,293 \& 82,444 \& 91,321 \& 97,296
22,105 \\
\hline \begin{tabular}{l}
From Federal Government \(\qquad\) \\
From State and local governments \(\qquad\)
\end{tabular} \& 6,137 \& 7,406
4 \& 7,420
13 \& 8,114
35 \& \(\begin{array}{r}13,155 \\ \hline 9\end{array}\) \& 25,748
76 \& 28,766
99 \& 28,115
115 \& 26,273
113 \& 25,690
112 \& \(\begin{array}{r}23,898 \\ \hline 109\end{array}\) \& \(\begin{array}{r}22,105 \\ \hline 107\end{array}\) \\
\hline \begin{tabular}{l}
By FFRDC's administered by industry \(\qquad\) \\
From Federal Government \(\qquad\)
\end{tabular} \& n.a.
n.a.

and \& 373
373 \& 473
473 \& 727
727 \& 1,277 \& 1,863
1,863 \& 2,351 \& 2,538
2,538 \& 2,632 \& 2,764
2,764 \& 2,722
2,722 \& 2,746
2,746 <br>
\hline  \& 335
16 \& 674
17 \& 987
27 \& 1,333
47 \& 2,296 \& 3,398

230 \& 4,212 \& 4,639 \& 5,044
370 \& 5,440
400 \& 5,773 \& 6,169
453 <br>
\hline From Federal Government \& 261 \& 558 \& 788 \& 1,030 \& 1,803 \& 2,537 \& 3,093 \& 3,383 \& 3,635 \& 3,882 \& 4,083 \& 4,386 <br>
\hline From State and local governments .... \& 7 \& 11 \& 24 \& , 35 \& 446 \& 73 \& 100 \& 115 \& 128 \& 137 \& 141 \& 136 <br>
\hline From private universities and coileges ............................... \& 17 \& 37 \& 63 \& 83 \& 173 \& 297 \& 374 \& 414 \& 464 \& 523 \& 591 \& 631 <br>
\hline From other ${ }^{2}$....................................................................... \& 34 \& 51 \& 85 \& 138 \& 172 \& 261 \& 342 \& 392 \& 447 \& 498 \& 534 \& 563 <br>
\hline By FFRDC's administered by private universities and colleges ${ }^{3}$............ \& 208 \& 375 \& 462 \& 662 \& 1,380
1
1,377 \& 1,936 \& 2,383
2 \& 2,585 \& 2,683 \& 2,750
2 \& 2,849
2834 \& 2,844 <br>
\hline From Federal Government \& 206
2 \& 375 \& 459
3 \& 658
4 \& 1,377
3 \& $\begin{array}{r}1,919 \\ \hline 17\end{array}$ \& 2,370
13 \& ${ }^{2,572}$ \& 2,672
11 \& $\begin{array}{r}2,739 \\ \hline 11\end{array}$ \& 2,834
15 \& $\begin{array}{r}2,827 \\ \hline 17\end{array}$ <br>
\hline By FFRDC's administered by private nonprofit institutions ..................... \& 68 \& 202 \& 261 \& 241 \& 476 \& 707 \& 590 \& 567 \& 584 \& 652 \& 740 \& 821 <br>
\hline From Federal Government .......................................... \& 67 \& 200 \& 248 \& 224 \& 443 \& 657 \& 549 \& 527 \& 543 \& 607 \& 688 \& 764 <br>
\hline From other ..................................... \& 1 \& 2 \& 13 \& 17 \& 33 \& 50 \& 41 \& 40 \& 41 \& 45 \& 52 \& 57 <br>
\hline By other nonprofit institutions ${ }^{4}$.................................................... \& 223 \& 519 \& 674 \& 1,073 \& 1.651 \& 2.579 \& 2,902 \& 3,123 \& 3.476 \& 3,930 \& 4,362 \& 4,834 <br>
\hline From industry ...................................... \& 48 \& 62 \& 92 \& 123 \& 198 \& 356 \& 467 \& 517 \& 587 \& 655 \& 717 \& 752 <br>
\hline From Federal Government .................. \& 107 \& 335 \& 421 \& 687 \& 1,062 \& 1,569 \& 1,624 \& 1,681 \& 1,849 \& 2,133 \& 2,403 \& 2,752 <br>
\hline From State and local governments ............................................... \& 2 \& 2 \& 4 \& 14 \& 17 \& 19 \& 35 \& 43 \& 39 \& 35 \& 35 \& 35 <br>
\hline From other ............................................................................... \& 66 \& 120 \& 157 \& 249 \& 374 \& 635 \& 776 \& 882 \& 1,001 \& 1,107 \& 1,207 \& 1,295 <br>
\hline Government ................................................................................... \& 2,295 \& 4,317 \& 6,050 \& 8,834 \& 13,598 \& 21,289 \& 24,054 \& 25,838 \& 27,820 \& 29,666 \& 31,044 \& 32,386 <br>
\hline  \& 1,746 \& 3,149 \& 4,170 \& 5,616 \& 8,098 \& 12,513 \& 13,334 \& 14,005 \& 14,818 \& 15,542 \& 15,856 \& 16,340 <br>
\hline By State and local governments (excluding universites and colleges) .... \& 54 \& 87 \& 176 \& 297 \& 446 \& 613 \& 710 \& 816 \& 866 \& 909 \& 946 \& 991 <br>
\hline From Federal Government .......... \& 26 \& 38 \& 82 \& 131 \& 157 \& 175 \& 140 \& 192 \& 234 \& 245 \& 255 \& 267 <br>
\hline From State and local governments .............................................. \& 26 \& 47 \& 90 \& 156 \& 274 \& 426 \& 557 \& 611 \& 615 \& 646 \& 672 \& 704 <br>
\hline From other ................................................................................ \& 2 \& 2 \& 4 \& 10 \& 15 \& 12 \& 13 \& 13 \& 17 \& 18 \& 19 \& 20 <br>
\hline By State and local universities and colleges ................................... \& 335 \& 834 \& 1,411 \& 2,287 \& 4,076 \& 6,432 \& 8,020 \& 8,997 \& 9,973 \& 10,958 \& 11,886 \& 12,740 <br>
\hline From industry ........................................................................ \& 23 \& 23 \& 37 \& 73 \& 157 \& 372 \& 507 \& 570 \& 663 \& 752 \& 811 \& 874 <br>
\hline From Federal Government ......................................................... \& 167 \& 545 \& 893 \& 1,405 \& 2,475 \& 3,517 \& 4,242 \& 4,752 \& 5,230 \& 5,666 \& 6,129 \& 6,707 <br>
\hline From State and local govermments ............................................ \& 79 \& 131 \& 205 \& 313 \& 466 \& 718 \& 931 \& 1,015 \& 1,122 \& 1,234 \& 1,336 \& 1,360 <br>
\hline From State and local universities and coleges ............................... \& 47 \& 91 \& 191 \& 356 \& 729 \& 1,385 \& 1,827 \& 2,019 \& 2,301 \& 2,577 \& 2,807 \& 2,928 <br>
\hline From other ${ }^{2}$..................................................................... \& 19 \& 44 \& 85 \& 140 \& 249 \& 440 \& 513 \& 581 \& 657 \& 729 \& 803 \& 871 <br>
\hline By FFRDC's administered by governments ...................................... \& 160 \& 247 \& 293 \& 434 \& 978 \& 1,731 \& 1,990 \& 2,080 \& 2,163 \& 2,257 \& 2,356 \& 2,315 <br>
\hline From Federal Government .............................................................. \& 160 \& 247 \& 293 \& 432 \& 967 \& 1,706 \& 1,971 \& 2,059 \& 2,135 \& 2,226 \& 2,325 \& 2,285 <br>
\hline From other ............................................................................. \& 0 \& 0 \& 0 \& 2 \& 11 \& 25 \& 19 \& 21 \& 28 \& 31 \& 31 \& 30 <br>
\hline
\end{tabular}

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 administere
by universities and colleges, FFRDC's administered by nonprofit institutions, and other nonprofit institutions.
5. 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, ines preceded by the word "by" are "performers." Within "periormer" categories, lines preceded by the word "from" are "sources."
FFRDC Federaly 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 $\qquad$ | 13,788 | 20,375 | 26,813 | 36,312 | 68,658 | 119,316 | 132,922 | 141,607 | 150,382 | 161,659 | 472,314 | 179,573 |
| Private expenditures ${ }^{1}$...................................................................... | 4,693 | 6,831 | 10,991 | 18,315 | 36,045 | 64,184 | 70,627 | 77,395 | 85,393 | 94,940 | 105,672 | 112,840 |
| From industry .............................................................................. | 4,552 | 6,575 | 10,581 | 17,672 | 35,015 | 62,447 | 68,536 | 75,039 | 82,727 | 91,978 | 102,420 | 109,356 |
| To industry | 4,465 | 6,473 | 10,425 | 15,975 | 31,293 | 57,839 | 62,033 | 67,322 | 74,293 | 82,444 | 91,324 | 97,296 |
| To State and local universities and colleges | 23 | 23 | 37 | 73 | 157 | 372 | 507 | 570 | 663 | 752 | 811 | 874 |
| To private universities and colleges ............ | 16 | 17 | 27 | 47 | 102 | 230 | 303 | 335 | 370 | 400 | 424 | 453 |
| To other private nonprofit institutions ${ }^{2}$.. | 48 | 62 | 92 | 123 | 198 | 356 | 467 | 517 | 587 | 655 | 717 | 752 |
| To foreign affiliates ...................................................................... | n.a. | n.a. | n.a. | 1,454 | 3,265 | 3,650 | 5,226 | 6,295 | 6,814 | 7,727 | 9,147 | 9,981 |
| From private universities and colleges .............................................. | 17 | 37 | 63 | 83 | 173 | 297 | 374 | 414 | 464 | 523 | 591 | 631 |
| To private universities and colleges .............................................. | 17 | 37 | 63 | 83 | 173 | 297 | 374 | 414 | 464 | 523 | 591 | 631 |
| From other ................................................................................... | 124 | 219 | 347 | 560 | 857 | 1,440 | 1,717 | 1,942 | 2,202 | 2,439 | 2,661 | 2,853 |
| To State and local universities and colleges .................................. | 19 | 44 | 85 | 140 | 249 | 440 | 513 | 581 | 657 | 729 | 803 | 871 |
| To private universities and colleges ............................................. | 34 | 51 | 85 | 138 | 172 | 261 | 342 | 392 | 447 | 498 | 534 | 563 |
| To other private nonprofit institutions ............................................ | 66 | 120 | 157 | 249 | 374 | 635 | 776 | 882 | 1,001 | 1,107 | 1,207 | 1,295 |
| To State and local governments $\qquad$ To FFRDC's | 2 | 2 | 4 16 | 10 23 | 15 47 | 12 92 | 13 73 | 13 74 | 17 80 | 18 87 | 19 98 | 20 104 |
| Government expenditures | 9,095 | 13,544 | 15,822 | 19,997 | 32,613 | 55,132 | 62,295 | 64,212 | 64,989 | 66,719 | 66,642 | 66,733 |
| From Federal | 8,930 | 13,258 | 15,295 | 19,088 | 31,022 | 52,435 | 58,746 | 60,294 | 60,671 | 61,978 | 61,542 | 81,463 |
| To industry | 6,137 | 7,406 | 7,420 | 8,114 | 13,155 | 25,748 | 28,766 | 28,153 | 26,273 | 25,690 | 23,898 | 22,105 |
| To Federal Government | 1,746 | 3,149 | 4,170 | 5,616 | 8,098 | 12,513 | 13,334 | 14,005 | 14,818 | 15,542 | 15,856 | 16,340 |
| To State and local governments .................................................. | 26 | 38 | 82 | 131 | 157 | 175 | 140 | 192 | 234 | 245 | 255 | 267 |
| To State and local universities and colleges .................................. | 167 | 545 | 893 | 1,405 | 2,475 | 3,517 | 4,242 | 4,752 | 5,230 | 5,666 | 6,129 | 6,707 |
| To private universities and colleges ............................................. | 261 | 558 | 788 | 1,030 | 1,803 | 2,537 | 3,093 | 3,383 | 3,635 | 3,882 | 4,083 | 4,386 |
| To FFRDC's ............................................................................. | 433 | 1,195 | 1,473 | 2,041 | 4,064 | 6,145 | 7,241 | 7,696 | 7,982 | 8,336 | 8,569 | 8,622 |
| To other private nonprofit institutions ............................................. | 107 | 335 | 421 | 687 | 1,062 | 1,569 | 1,624 | 1,681 | 1,849 | 2,133 | 2,403 | 2,752 |
| To foreign ................................................................................ | 53 | 32 | 48 | 64 | 208 | 231 | 306 | 432 | 650 | 484 | 349 | 284 |
| From State and tocal ${ }^{3}$.................................................................... | 165 | 286 | 527 | 909 | 1,591 | 2,697 | 3,549 | 3,918 | 4,318 | 4,741 | 5,100 | 5,270 |
| To industry .............................................................................. | 4 | 4 | 13 | 35 | 59 | 76 | 99 | 115 | 113 | 112 | 109 | 107 |
| To State and local governments .................................................. | 26 | 47 | 90 | 156 | 274 | 426 | 557 | 611 | 615 | 646 | 672 | 704 |
| To State and local universities and colleges .................................. | 126 | 222 | 396 | 669 | 1,195 | 2,103 | 2,758 | 3,034 | 3,423 | 3,811 | 4,143 | 4,288 |
| To private universities and colleges ................................................ | 7 | 11 | 24 | 35 | 46 | - 73 | 100 | 115 | 128 | -137 | 141 | 136 |
| To other private nonprofit institutions ............................................. | 2 | 2 | 4 | 14 | 17 | 19 | 35 | 43 | 39 | 35 | 35 | 35 |
| Addenda: |  |  |  |  |  |  |  |  |  |  |  |  |
| Total domestic pertormers .............................................................. | 13,735 | 20,343 | 26,765 | 36,794 | 65,185 | 115,435 | 127,390 | 134,880 | 142,918 | 153,448 | 162,818 | 169,308 |
| Total foreign performers ................................................................ | 53 | 32 | 48 | 1,518 | 3,473 | 3,881 | 5,532 | 6,727 | 7.464 | 8,211 | 9,496 | 10,265 |
| Final expenditures ......................................................................... | 9,183 | 13,768 | 16,184 | 20,576 | 33,435 | 56,638 | 64,080 | 66,136 | 67,005 | 69,197 | 69,545 | 69,933 |
| Intermediate expenditures ............................................................... | 4,552 | 6,575 | 10,581 | 16,218 | 31,750 | 58,797 | 63,310 | 68,744 | 75,913 | 84,251 | 93,273 | 99,375 |
| Gross domestic product ................................................................................................................. | 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 |
| Final expenditures as a percent of gross domestic product .................. | 1.79 | 1.96 | 1.60 | 1.30 | 1.23 | 1.40 | 1.41 | 1.35 | 1.28 | 1.25 | 1.21 | 1.16 |
| Intermediate expenditures as a percent of gross domestic product ......... | 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.â. Not available. <br> 1. Includes funds from the rest of world. <br> 2. 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. <br> 3. Includes State and local universities and colleges. <br> 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" categories, lines preceded by the word "to" are "performers." <br> FFRDC Federally funded research and development center |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |

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 | 16,026 | 20,715 | 28,160 | 51,587 | 94,146 | 103,336 | 109,042 | 115,098 | 123,782 | 131,774 | 136,922 |
| Industry ....................................................................................... | 10,606 | 13,883 | 17,858 | 24,124 | 44,507 | 83.663 | 90,898 | 95,590 | 100,679 | 108,246 | 115,328 | 119,508 |
| Private universities and colleges ....................................................... | 335 | 674 | 987 | 1,333 | 2,296 | 3,398 | 4,212 | 4,639 | 5,044 | 5,440 | 5,773 | 6,169 |
| FFRDC's not administered by governments ....................................... | 276 | 950 | 1,196 | 1,630 | 3,133 | 4,506 | 5,324 | 5,690 | 5,899 | 6,166 | 6,311 | 6,411 |
| Other nonprofit institutions ${ }^{1}$............................................................ | 223 | 519 | 674 | 1,073 | 1,651 | 2,579 | 2,902 | 3,123 | 3,476 | 3,930 | 4,362 | 4,834 |
| Government .................................................................................... | 2,295 | 4,317 | 6,050 | 8,634 | 13,598 | 21,289 | 24,054 | 25,838 | 27,820 | 29,666 | 31,044 | 32,306 |
| Federal Government ....................................................................... | 1,746 | 3,149 | 4,170 | 5,616 | 8,098 | 12,513 | 13,334 | 14,005 | 14,818 | 15,542 | 15,856 | 16,340 |
| State and local governments (excluding universities and colleges) ......... | 54 | 87 | 176 | 297 | 446 | 613 | 710 | 816 | 866 | +909 | 946 | 991 |
| State and local universities and colleges .......................................... | 335 | 834 | 1,411 | 2,287 | 4,076 | 6,432 | 8,020 | 8,937 | 9,973 | 10,958 | 11,886 | 12,740 |
| FFRDC's administered by governments ............................................ | 160 | 247 | 293 | 434 | 978 | 1,731 | 1,990 | 2,080 | 2,163 | 2,257 | 2,356 | 2,315 |
| Basic research .............................................................................. | 1,221 | 2,540 | 3,532 | 4,908 | 8,685 | 14,309 | 18,064 | 18,914 | 21,673 | 24,671 | 28,346 | 29,308 |
| Private ....................................................................................... | 768 | 1,458 | 1,810 | 2,442 | 4,333 | 7,414 | 9,843 | 10,061 | 12,042 | 14,254 | 17,104 | 17,287 |
| Industry ................................................................................... | 380 | 565 | 574 | 698 | 1,244 | 2,777 | 4,231 | 3,922 | 5,346 | 6,928 | 9,290 | 9,000 |
| Private universities and colleges .................................................. | 255 | 577 | 840 | 1,091 | 1,723 | 2,589 | 3,147 | 3,198 | 3,444 | 3,712 | 3,952 | 4,212 |
| FFRDC's not administered by governments ..................................... | 57 | 160 | 209 | 359 | 828 | 1,098 | 1,319 | 1,644 | 1,777 | 1.948 | 2,013 | 2,025 |
| Other nomprofit institutions .......................................................... | 76 | 156 | 187 | 294 | 538 | 950 | 1,146 | 1,297 | 1,475 | 1,666 | 1,849 | 2,050 |
| Government ................................................................................ | 453 | 1,082 | 1,722 | 2,466 | 4,352 | 6,895 | 8,221 | 8,853 | 9,631 | 10,417 | 11,242 | 12,021 |
| Federal Government .................................................................. | 193 | 386 | 568 | 757 | 1,232 | 1,860 | 2,021 | 2,081 | 2,238 | 2,386 | 2,494 | 2,600 |
| State and local governments ...................................................... | 14 | 30 | 44 | 73 | 89 | 93 | 88 | 96 | 110 | 119 | 127 | 137 |
| State and local universities and colleges | 202 | 581 | 1,003 | 1,442 | 2,535 | 4,089 | 5,142 | 5,644 | 6,203 | 6,772 | 7,395 | 8,077 |
| FFRDC's administered by governments | 44 | 85 | 107 | 194 | 496 | 853 | 970 | 1,032 | 1,080 | 1,140 | 1,229 | 1,207 |
| Applied research ............................................................................ | 2,966 | 4,333 | 5,882 | 8,368 | 14,305 | 25,892 | 28,467 | 30,139 | 32,930 | 36,054 | 39,896 | 40,205 |
| Private ....................................................................................... | 2,282 | 3,105 | 4,045 | 5,515 | 10,052 | 20,394 | 22,266 | 23,437 | 25,612 | 28,248 | 31,406 | 31,210 |
| Industry ................................................................................... | 2,048 | 2,626 | 3,380 | 4,555 | 8,419 | 17,903 | 19,344 | 20,337 | 22,233 | 24,589 | 27,562 | 27,005 |
| Private universities and colleges ................................................. | 67 | 79 | 117 | 207 | 435 | 623 | 823 | 1,117 | 1,249 | 1,343 | 1,427 | 1,543 |
| FFRDC's not administered by governments ................................... | 83 | 205 | 287 | 328 | 592 | 1,029 | 1,085 | 852 | 894 | 917 | 864 | 941 |
| Other nonprofit institutions .......................................................... | 84 | 195 | 261 | 425 | 606 | 839 | 1,014 | 1,131 | 1,236 | 1,399 | 1,553 | 1,721 |
| Government ................................................................................. | 684 | 1,228 | 1,837 | 2,853 | 4,253 | 5,498 | 6,201 | 6,702 | 7,318 | 7,806 | 8,490 | 8,995 |
| Federal Government .................................................................. | 491 | 903 | 1,339 | 1,885 | 2,646 | 3,022 | 3,238 | 3,339 | 3,514 | 3,658 | 4,064 | 4,392 |
| State and local governments ....................................................... | 27 | 38 | 86 | 156 | . 259 | 396 | 491 | 558 | 583 | 609 | 631 | 657 |
| State and local universities and colleges | 112 | 207 | 326 | 723 | 1,170 | 1,804 | 2,224 | 2,553 | 2,943 | 3,254 | 3,520 | 3,676 |
| FFRDC's administered by governments | 54 | 80 | 86 | 89 | 178 | 276 | 248 | 252 | 278 | 285 | 275 | 270 |
| Development .................................................................................. | 9,548 | 13,470 | 17,351 | 23,518 | 42,195 | 75,234 | 80,859 | 85,827 | 88,315 | 92,723 | 94,576 | 99,795 |
| Private ........................................................................................ | 8,390 | 11,463 | 14,860 | 20,203 | 37,202 | 66,338 | 71,227 | 75,544 | 77,444 | 81,280 | 83,264 | 88,425 |
| Industry .................................................................................... | 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 ................................................. | 13 | 18 | 30 | 35 | 138 | 186 | 242 | 324 | 351 | 385 | 394 | 414 |
| FFRDC's not administered by governments ................................... | 136 | 585 | 700 | 943 | 1,713 | 2,379 | 2,920 | 3,194 | 3,228 | 3,301 | 3,434 | 3,445 |
| Other nonprofit institutions .......................................................... | 63 | 168 | 226 | 354 | 507 | 790 | 742 | 695 | 765 | 865 | 960 | 1,063 |
| Government .................................................................................... | 1,158 | 2,007 | 2,491 | 3,315 | 4,993 | 8,896 | 9,632 | 10,283 | 10,871 | 11,443 | 11,312 | 11,370 |
| Federal Government .................................................................. | 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 ...................................................... | 13 | 19 | 46 | 68 | 98 | 124 | 131 | 162 | 173 | 181 | 188 | 197 |
| State and local universities and colleges .......................................... | 21 62 | 46 82 | 82 100 | 122 151 | 371 304 | 539 602 | 654 772 | 740 796 | 827 805 | 932 832 | 971 852 | 987 838 |

1. Nonprofit institutions are divided into four subgroups: Private universities and colieges, FFRDC's administered
by universities and coileges, FFRDC's administered by nonprofit institutions, and other nonproft 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 ................................. | 13,735 | 20,343 | 26,765 | 36,794 | 65,185 | 115,435 | 127,390 | 134,880 | 142,918 | 153,448 | 462,818 | 869,308 |
| Basic research ........................................................................ | 1,221 | 2,540 | 3,532 | 4,908 | 8,685 | 14,309 | 18,064 | 18,914 | 21,673 | 24,671 | 28,346 | 29,308 |
| Applied research ...................................................................... | 2,966 | 4,333 | 5,882 | 8,368 | 14,305 | 25,892 | 28,467 | 30,139 | 32,930 | 36,054 | 39,896 | 40,205 |
| Development ........................................................................ | 9,548 | 13,470 | 17,351 | 23,518 | 42,195 | 75,234 | 80,859 | 85,827 | 88,315 | 92,723 | 94,576 | 99,795 |
| Private | 11,440 | 16,026 | 20,715 | 28,160 | 51,587 | 94,146 | 103,336 | 109,042 | 115,098 | 123,782 | 431,774 | 136,922 |
| Basic research | 768 | 1,458 | 1,810 | 2,442 | 4,333 | 7,414 | 9,843 | 10,061 | 12,042 | 14,254 | 17,104 | 17,287 |
| Applied research ...... | 2,282 | 3,105 | 4,045 | 5,515 | 10,052 | 20,394 | 22,266 | 23,437 | 25,612 | 28,248 | 31,406 | 31,210 |
| Development ....................................................................... | 8,390 | 11,463 | 14,860 | 20,203 | 37,202 | 66,338 | 71,227 | 75,544 | 77,444 | 81,280 | 83,264 | 88,425 |
| Industry ................................................................................. | 10,606 | 13,883 | 17,858 | 24,124 | 44,507 | 83,663 | 90,898 | 95,590 | 100,679 | 108,246 | 115,328 | 119,508 |
| Basic research ....................................................................... | 380 | 565 | 574 | 698 | 1,244 | 2,777 | 4,231 | 3,922 | 5,346 | 6,928 | 9,290 | 9,000 |
| Applied research .................................................................. | 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 ................................................ | 335 | 674 | 987 | 1,333 | 2,296 | 3,398 | 4,212 | 4,639 | 5,044 | 5,440 | 5,773 | 6.169 |
| Basic research .................................................................. | 255 | 577 | 840 | 1,091 | 1,723 | 2,589 | 3,147 | 3,198 | 3,444 | 3,712 | 3,952 | 4,212 |
| Applied research .......................................................... | 67 | 79 | 117 | 207 | 435 | 623 | 823 | 1,117 | 1,249 | 1,343 | 1,427 | 1,543 |
| Development .................................................................. | 13 | 18 | 30 | 35 | 138 | 186 | 242 | 324 | 351 | 385 | 394 | 414 |
| FFRDC's not administered by governments .................................... | 276 | 950 | 1,196 | 1,630 | 3,133 | 4,506 | 5,324 | 5,690 | 5,899 | 6,166 | 6,311 | 6,417 |
| Basic research ............................................................... | 57 | 160 | 209 | 359 | 828 | 1,098 | 1,319 | 1,644 | 1,777 | 1,948 | 2,013 | 2,025 |
| Applied research ........................................................................ | 83 | 205 | 287 | 328 | 592 | 1,029 | 1,085 | 852 | 894 | 917 | 864 | 941 |
| Development .................................................................. | 136 | 585 | 700 | 943 | 1,713 | 2,379 | 2,920 | 3,194 | 3,228 | 3,301 | 3,434 | 3,445 |
| Other nonprofit institutions ${ }^{1}$.................................................... | 223 | 519 | 674 | 1,073 | 1,651 | 2,579 | 2,902 | 3.123 | 3,476 | 3,930 | 4,362 | 4,834 |
| Basic research ....................................................... | 76 | 156 | 187 | 294 | 538 | 950 | 1,146 | 1.297 | 1,475 | 1,666 | 1,849 | 2,050 |
| Applied research ........................... | 84 | 195 | 261 | 425 | 606 | 839 | 1,014 | 1,131 | 1,236 | 1,399 | 1,553 | 1,721 |
| Development ......................................................................... | 63 | 168 | 226 | 354 | 507 | 790 | 742 | 695 | 765 | 865 | 960 | 1,063 |
| 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 |
| Basic research ............. | 453 | 1,082 | 1,722 | 2,466 | 4,352 | 6,895 | 8,221 | 8,853 | 9,631 | 10,417 | 11,242 | 12,021 |
| Applied research ........................................................................... | 684 | 1,228 | 1,837 | 2,853 | 4,253 | 5,498 | 6,201 | 6,702 | 7,318 | 7,806 | 8.490 | 8,995 |
| Development ............................................................................ | ¢,158 | 2,007 | 2,491 | 3,315 | 4,993 | 8,896 | 9,632 | 10,283 | 10,871 | 11,443 | 11,312 | 11,370 |
| Federal Government .............................................................. | 1,746 | 3,149 | 4,170 | 5,616 | 8,098 | 12,513 | 13,334 | 14,005 | 14,818 | 15,542 | 15,856 | 16,340 |
| Basic research .................................................................. | 193 | 386 | 568 | 757 | 1,232 | 1,860 | 2,021 | 2,081 | 2,238 | 2,386 | 2.491 | 2,600 |
| Appled research ................................................................... | 491 | 903 | 1,339 | 1,885 | 2,646 | 3,022 | 3,238 | 3,339 | 3,514 | 3,658 | 4,064 | 4,392 |
| Development ...................................................................... | 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) ..... | 54 | 87 | 176 | 297 | 446 | 613 | 710 | 816 | 866 | 909 | 946 | 991 |
| Basic research ................................................................ | 14 | 30 | 44 | 73 | 89 | 93 | 88 | 96 | 110 | 119 | 127 | 137 |
| Applied research ..................................................................... | 27 | 38 | 86 | 156 | 259 | 396 | 491 | 558 | 583 | 609 | 631 | 657 |
| Development ............................................................................. | 13 | 19 | 46 | 68 | 98 | 124 | 131 | 162 | 173 | 181 | 188 | 197 |
| State and local universities and colleges .............. | 335 | 834 | 1,411 | 2,287 | 4,076 | 6,432 | 8,020 | 8,937 | 9,973 | 10,958 | 11,886 | 12,740 |
| Basic research .................................. | 202 | 581 | 1,003 | 1,442 | 2,535 | 4,089 | 5,142 | 5,644 | 6,203 | 6,772 | 7,395 | 8,077 |
| Applied research ..................................... | 112 | 207 | 326 | 723 | 1,170 | 1,804 | 2,224 | 2,553 | 2,943 | 3,254 | 3,520 | 3,676 |
| Development ........................................................................... | 21 | 46 | 82 | 122 | 371 | 539 | 654 | 740 | 827 | 932 | 971 | 987 |
| FFRDC's administered by governments ..... | 160 | 247 | 293 | 434 | 978 | 1,731 | 1,990 | 2,080 | 2,163 | 2,257 | 2,356 | 2,315 |
| Basic research .................................................................. | 44 | 85 | 107 | 194 | 496 | 853 | 970 | 1,032 | 1,080 | 1,140 | 1,229 | 1,207 |
| Applied research .................................................................. | 54 | 80 | 86 | 89 | 178 | 276 | 248 | 252 | 278 | 285 | 275 | 270 |
| Development .......................................................................... | 62 | 82 | 100 | 151 | 304 | 602 | 772 | 796 | 805 | 832 | 852 | 838 |

1. 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 Periorming Industry
[Milions of dollars]

|  | 1960 | 1965 | 1970 | 1975 | 1980 | 1985 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Industry research and development expenditures, total ${ }^{1}$..................... | 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 | 78,690 | 85,292 | 87,471 | 89,079 | 89,941 | 89,311 | 91,897 |
| Food and kindred products | 105 | 158 | 235 | 347 | 645 | 1,134 | 1,196 | 1,163 | 1,236 | 1,230 | 1,259 | 1,385 |
| Chemicals and alled 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 producis ................................................ | 89 | 113 | 170 | 243 | 424 | 852 | \$,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 | 29,744 | 34,481 | 35,002 | 34,094 | 31,562 | 27,567 | 26,574 |
| Aircraft and missiles ...... | 3,547 | 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 |
| 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 | 25,256 | 28,378 | 27,390 | 25,123 | 23,951 | 21,057 | 18,909 |
| Food and kindred products ..................................................... | - 9 | 1 | 3 184 | 1 | 1 383 | 234 | ${ }_{192}^{2}$ | $2{ }^{2}$ | ${ }_{2}^{2}$ | 124 | 219 | 0 |
| Chemicals and allied products...... | 174 20 | 192 48 | 184 23 | 244 47 | 383 159 | 234 36 | 192 | 242 | 128 18 180 | $\begin{array}{r}124 \\ 17 \\ \hline\end{array}$ | 211 11 | 293 9 |
| Petroleum refining and extraction ${ }^{\text {2 }}$............ | 20 | 48 | 23 | 47 163 | 159 | 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 | 4,843 | 4,363 | 4,876 | 7,471 | 17,649 | 20,917 | 20,992 | 19,387 | 17,197 | 12,628 | 10,778 |
| 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 equiprnent ............................................. | 218 | 326 | 318 | 375 | 744 | 2,549 | 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 |
| Nonmanutacturing industries ................................................. | 111 | 269 | 489 | 320 | 805 | 2,355 | 2,738 | 3,301 | 3,782 | 4,50: | 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 | 53,434 | 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 | 12,095 | 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 transporiation equipment ............................................ | 673 | 909 | 1,292 | 2,107 | 4,477 | 4,792 | 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 |

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

FFRDC Federally funded research and development center

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 ............................................................ | 27 | 23 | 54 | 75 | 37 | r 27 | 41 | 40 | 66 | 68 |
| Chemicals and allied products ........................................................ | 208 | 269 | 603 | 843 | 1,243 | 1,501 | 1,504 | 1.990 | 2,401 | 2,683 |
| Petroleum refining and extraction ....................................................... | ( ${ }^{1}$ | (1) | 141 | 47 | 47 | 58 | 45 | 71 | 107 | 119 |
| Stone, clay, and glass products ...................................................... | 7 | 7 | 21 | (D) | (D) | (D) | ${ }^{(P)}$ | 263 | 38 | 41 |
| Primary metal industries ................................................................ | 3 | 9 | 11 | (D) | 18 | 24 | 26 | 30 | 20 | 20 |
| Fabricated metal products ............................................................... | (1) | (1) | 33 | 21 | 40 | (D) | 46 | 65 | 86 | 98 |
| Industrial machinery and equipment ................................................. | 258 | 331 | 599 | 689 | 1,233 | 1,364 | 1,515 | 1.580 | 1,476 | 1,450 |
| Electronic and other electric equipment ............................................ | 238 | 245 | 451 | 591 | 432 | 669 | 574 | 671 | 651 | 554 |
| Transportation equipment ............................................................... | 406 | 412 | 1,020 | 1,025 | (D) | 1,801 | (P) | 2,153 | 2,402 | (D) |
| Instruments and related products .................................................... | 39 | 49 | 186 | 169 | 317 | 393 | 449 | +563 | -656 | 700 |
| Other manufacturing industries ........................................................ | 111 | 105 | 139 | 125 | 138 | 145 | 179 | 187 | 467 | (P) |
| Nonmanufacturing industries .............................................................. | 3 | 4 | 7 | 18 | 64 | 95 | 108 | 114 | 778 | 860 |

[^39]NOTE.-Daka on research and development performed outside the United States are not available prior to 1974.

Table 4.1.-Research and Development Expenditures by Performer in Constant Dollars
[Milions of 1987 dollars]

|  | 1960 | 1965 | 1970 | 1975 | 1980 | 1985 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Research and development expendilures, total ....................... | 55,697 | 73,327 | 75,668 | 72,922 | 89,660 | 121,871 | 127,390 | 130,427 | 132,253 | 138,403 | 140,435 | 141,440 |
| Private | 44,373 | 55,441 | 56,987 | 54,516 | 69,938 | 98,881 | 103,336 | 105,700 | 106,732 | 110,545 | 114,508 | 115,186 |
| Industry ${ }^{1}$ | 40,489 | 47,942 | 49,101 | 47,134 | 61,364 | 89,550 | 93,249 | 95,252 |  | 99,392 | 103,045 | 03,405 |
| Private universities and colleges | 2,149 | 3,968 | 4,183 | 3,615 | 3,934 | 3,814 | 4,212 | 4,394 | 4,505 | 4,571 | 4,583 | 4,643 |
| FFRDC's administered by private universities and colleges .................. | 679 | 1,147 | 1,117 | 1,144 | 1,796 | 2,025 | 2,383 | 2,526 | 2,517 | 2.492 | 2,494 | 2,414 |
| FFRDC's administered by private nonprofit institutions .......................... | 213 | ${ }^{556}$ | 604 | 406 | 596 | 730 | 590 | 562 | 562 | 612 | 673 | 726 |
| Other nonprofit institutions ${ }^{2}$........................................................ | 843 | 1,828 | 1,982 | 2,217 | 2,246 | 2,762 | 2,902 | 2,966 | 3,189 | 3,478 | 3,713 | 3,998 |
| Government ........................................................................................... | 11,324 | 17,886 | 18,681 | 18,408 | 19,722 | 22,990 | 24,054 | 24,727 | 25,521 | 25,948 | 25,927 | 26,224 |
| Federal Govemment | 8,720 | 12,539 | 12,118 | 11,286 | 11,138 | 13,202 | 13,334 | 13,494 | 13,803 | 13,905 | 13,684 | 13,763 |
| State and local governments (excluding universities and colleges)......... | 206 | 308 | 516 | 615 | 607 | 657 | 710 | 775 | 795 | 805 | 805 | 819 |
| State and local universities and colleges ......................................... | 1,895 | 4,356 | 5,388 | 5,802 | 6,742 | 7,318 | 8,020 | 8,406 | 8,847 | 9,138 | 9,304 | 9,602 |
| FFRDC's administered by governments ............................................ | 503 | 683 | 659 | 703 | 1,235 | 1,813 | 1,990 | 2,052 | 2,076 | 2,100 | 2,134 | 2,040 |

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

Table 4.2.-Industry Research and Development Expenditures by Performing Industry in Constant Dollars
[Mililions of 1987 dollars]

|  | 1960 | 1965 | 1970 | 1975 | 1980 | 1985 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Industry research and development expenditures, total ${ }^{1}$.......... | 40,489 | 47,942 | 49,101 | 47,134 | 61,364 | 89,550 | 93,249 | 95,252 | 95,959 | 99,392 | 103,045 | 103,405 |
| Manutacturing Industries .............................................................. | 39,814 | 46,581 | 47,086 | 45,614 | 58,696 | 82,427 | 85,292 | 84,909 | 82,683 | 80,327 | 7,762 | 77,602 |
| Food and kindred products | 429 | 561 | 659 | 700 | 908 | 1,176 | 1,197 | 1,131 | 1,159 | 1,123 | 1,115 | 1,186 |
| Chemicals and allied products. | 3,849 | 4,703 | 4,971 | 5,507 | 6,532 | 9,212 | 9,758 | 10,886 | 11,380 | 11,998 | 12,784 | 14,087 |
| Petroleum refining and extraction ${ }^{2}$ | 1,247 | 1.449 | 1,473 | 1,421 | 2,240 | 2,375 | 1,942 | 1,991 | 2,078 | 2,111 | 2,220 | 1,928 |
| Rubber and miscellaneous plastics products | 496 | 578 | 792 | 968 | 953 | 746 | 635 | 827 | 1,002 | 1,354 | 1,231 | 1,290 |
| Stone, clay, and glass products ..................................................... | 362 | 405 | 483 | 487 | 590 | 885 | 1,014 | 699 | 593 | 507 | 418 | 429 |
| Primary metal industries ............................................................... | 670 | 718 | 763 | 867 | 991 | 830 | 738 | 631 | 656 | ${ }_{686}^{686}$ | 644 | 487 |
| Fabricated metal products ............................................................ | 555 | 489 | 567 | 643 | 763 | 874 | 791 | 871 | 863 | 869 | 878 | 926 |
| Industrial machinery and equipment | 3.530 | 3,433 | 4,451 | 5,918 | 7,791 | 13,016 | 11,980 | 13,098 | 13,320 | 12,712 | 12,834 | 12,881 |
| Electronic and other electric equipment .............................................. | 9,480 | 10,399 | 11,077 | 9,658 | 12,444 | 15,470 | 16,025 | 13,804 | 12,371 | 11,901 | 11,711 | 11,507 |
| Transporation equipment .............................................................. | 17.018 | 21,709 | 18,629 | 15,859 | 19,592 | 31,028 | 34,481 | 33,950 | 31,818 | 28,480 | 24,099 | 22,404 |
| Aircratt and missiles ............................................................ | 13,298 | 17,221 | 13,901 | 10,796 | 12,296 | 23,424 | 24,609 | 23,626 | 21.012 | 18,697 | 14,547 | 13,514 |
| Other transportation equipment ...................................................... | 3.720 | 4,488 | 4,728 | 5.063 | 7,296 | 7,604 | 9,872 | 10,324 | 10,806 | 9,783 | 9,552 | 8,890 |
| Instruments and related products ...................................................... | 1,264 | 1,357 | 2,017 | 2,307 | 4,248 | 5,392 | 5,314 | 5,488 | 51778 | 6,584 | 7,809 | 8,417 |
| Other manufacturing industries ......................................................... | 914 | 780 | 1,204 | 1,279 | 1,644 | 1,423 | 1,417 | 1,533 | 1,665 | 2,002 | 2,019 | 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 |

1. 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

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 ${ }^{1}$............................................................................. | 302.1 | 349.4 | 375.6 | 368.9 | 469.2 | 646.8 | 702.2 | 714.4 | 725.6 | 717.5 | 741.7 | 783.2 |
| Manufacturing Industries ............................................................. | (1) | 337.7 | 359.6 | 349.1 | 448.2 | 575.8 | 603.0 | ( 7 | ( 7 | (1) | (7) | 576.4 |
| Food and kindred products . | 5.0 | 6.2 | 6.4 | 6.9 | 7.3 | (s) | (s) | (s) | (s) | 8.0 | 9.6 | 9.9 |
| Chemicals and alliad products ..................................................... | 36.6 | 37.9 | 41.4 | 44.8 | 53.1 | 73.5 | 75.5 | 76.7 | 78.3 | 78.9 | 82.2 | 87.4 |
| Petroleum refining and extraction ................................................ | 9.1 | 8.8 | 9.6 | 8.5 | 11.9 | 12.0 | 9.7 | 9.9 | 10.3 | 10.1 | 10.8 | 11.5 |
| Rubber and miscellaneous plastics products .................................... | 5.4 | 5.8 | 6.9 | 8.5 | T) | ( 7 | ${ }_{8}{ }^{(8)}$ | (8) | (s) | ${ }^{(3)}$ | ${ }^{(5)}$ | 14.9 5 |
|  | 6.9 | 3.5 | 4.4 | 7.6 | 8.5 | 6.4 | 8.6 | 8.6 | ${ }^{8.6}$ | 8.5 | ${ }^{6}$ (s) | 5.0 |
|  | 8.0 | 6.5 | 6.5 | 7.1 | 7.8 | (s) | 10.2 | 10.1 | (s) |  | (s) | 8.5 |
| Industrial machinery and equipment .............................................. | 32.6 | 29.9 | 42.5 | 54.2 | 65.7 | 85.7 | 97.1 | 99.1 | 106.1 | 109.8 | 103.3 | 99.4 |
| Electronic and other electric equipment ........................................... | 75.8 | 89.8 | 96.2 | 81.3 | 100.7 | 115.6 | 131.5 | 136.6 | 139.3 | 137.9 | 114.8 | 91.2 |
| Transportation equipment .................................................................... | 94.0 | 123.6 | 112.0 | 94.5 | 128.6 | 169.8 | 187.8 | 190.6 | 188.4 | 175.8 | 154.5 | 142.9 |
| Aircratt and missiles ............................................................ | 75.5 | 99.3 | 85.2 | 67.2 | 90.6 | 137.5 | 136.4 | 139.4 | 135.4 | 123.2 | 105.4 | 94.0 |
| Other transportation equipment .............................................. | 18.5 | 24.4 | 26.8 | 27.4 | 38.1 | 32.3 | 51.4 | 51.2 | 53.0 | 52.6 | 49.1 | 49.0 |
|  | 10.6 | 12.0 | 15.1 12.1 | 18.4 | 33.8 | (s) | ${ }_{162}$ | r ${ }^{(9)}$ | (s) | (s) | (s) | 79.4 21.3 |
| Nonmanufacturing Industries | (7) | 10.7 | 16.0 | 14.8 | 21.0 | 71.0 | 99.2 | (s) | (5) | (s) | (s) | 206.8 |

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

Table 5.1.-Implicit Price Deflators for Research and Development Expenditures by Performing Group
[lndex 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 .......................................................................................... | 25.8 | 28.9 | 36.4 | 51.7 | 73.8 | 95.2 | 100.0 | 103.2 | 107.8 | 112.0 | 115.1 | 118.9 |
| Industry ${ }^{1}$...................................................................................... | 26.2 | 29.7 | 37.3 | 52.7 | 74.6 | 95.5 | 100.0 | 103.0 | 107.7 | 111.7 | 114.6 | 118.2 |
| Private universities and colleges ......................................................... | 15.6 | 17.0 | 23.6 | 36.9 | 58.4 | 89.1 | 100.0 | 105.6 | 112.0 | 119.0 | 126.0 | 132.9 |
| FFRDC's administered by private universities and colleges ................... | 30.7 | 32.7 | 41.4 | 57.9 | 76.8 | 95.6 | 100.0 | 102.3 | 106.6 | 110.4 | 114.3 | 117.8 |
| FFRDC's administered by private nonprofit institutions ......................... | 32.0 | 36.3 | 43.2 | 59.4 | 79.6 | 96.9 | 100.0 | 100.7 | 103.8 | 106.5 | 109.9 | 113.1 |
| Other nomprofit institutions ............................................................. | 27.5 | 30.2 | 36.1 | 50.1 | 74.8 | 94.1 | 100.0 | 104.6 | 108.2 | 112.0 | 116.3 | 119.7 |
| Government .................................................................................... | 20.3 | 24.1 | 32.4 | 46.9 | 69.0 | 92.6 | 100.0 | 104.5 | 109.0 | 114.3 | 119.7 | 123.5 |
| Federal Government ....................................................................... | 20.0 | 25.1 | 34.4 | 49.8 | 72.7 | 94.8 | 100.0 | 103.8 | 107.4 | 111.8 | 115.9 | 118.7 |
| State and local governments (excluding universities and colleges) .......... | 26.4 | 28.4 | 34.0 | 48.4 | 73.5 | 93.4 | 100.0 | 105.3 | 109.0 | 113.0 | 117.5 | 120.9 |
| State and local universities and colleges | 17.7 | 19.1 | 26.2 | 39.4 | 60.5 | 87.9 | 100.0 | 106.3 | 112.7 | 119.9 | 127.7 | 132.7 |
| FFRDC's administered by governments ............................................ | 31.8 | 36.1 | 44.5 | 61.7 | 79.2 | 95.4 | 100.0 | 101.3 | 104.2 | 107.5 | 110.4 | 113.5 |
| Addendum: <br> Gross domestic product $\qquad$ | 26.0 | 28.4 | 35.2 | 49.2 | 71.7 | 94.4 | 100 | 103.9 | 108.5 | 113.3 | 117.6 | 120.9 |

1. 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 | 11.7 | 114.6 | 188.2 |
| 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 ...................................................................... | 24.5 | 28.2 | 35.7 | 49.6 | 71.0 | 96.2 | 100.0 | 102.8 | 106.6 | 109.5 | 112.9 | 116.8 |
| Chemicals and allied products .................................................... | 25.8 | 29.0 | 36.4 | 51.2 | 73.2 | 94.2 | 100.0 | 102.9 | 107.4 | 112.1 | 115.6 | 119.5 |
|  | 24.1 | 27.6 | 35.8 | 51.2 | 73.0 | 96.7 | 100.0 | 102.6 | 107.4 | 11.7 | 114.5 | 123.0 |
| Rubber and miscellaneous plastics products ..................................... | 24.6 | 28.2 | 35.5 | 49.9 | 71.1 | 96.1 | 100.0 | 103.3 | 107.1 | 110.3 | 113.2 | 17.1 |
| Stone, clay, and glass products ..................................................... | 24.6 | 27.9 | 35.2 | 49.9 | 71.9 | 96.3 | 100.0 | 103.0 | 106.7 | 109.9 | 112.7 | 116.3 |
| Primary metal industries ............................................................. | 26.7 | 29.8 | 36.7 | 52.5 | 75.4 | 96.1 | 100.0 | 101.9 | 105.6 | 108.7 | 111.6 | 114.6 |
| Fabricated metal products ................... | 26.5 | 29.7 | 37.0 | 51.6 | 73.8 | 96.0 | 100.0 | 102.1 | 105.8 | 109.0 | 111.7 | 114.8 |
| Industrial machinery and equipment .............................................. | 27.1 | 31.2 | 39.5 | 56.0 | 78.9 | 96.1 | 100.0 | 102.9 | 109.9 | 115.6 | 116.7 | 118.8 |
| Electronic and other electric equipment ........................................... | 27.0 | 30.9 | 38.6 | 54.2 | 75.7 | 94.6 | 100.0 | 103.4 | 108.9 | 113.7 | 115.5 | 118.5 |
| Transportation equipment ................................................................. | 26.0 | 29.5 | 36.9 | 52.3 | 74.3 | 95.9 | 100.0 | 103.1 | 107.2 | 110.8 | 114.4 | 118.6 |
| Aircratt and missiles ................................................................. | 26.6 | 30.0 | 37.9 | 53.8 | 75.9 | 95.6 | 100.0 | 102.9 | 106.9 | 111.0 | 114.8 | 119.7 |
| Other transportation equipment ................................................. | 24.0 | 27.5 | 34.1 | 49.0 | 71.6 | 96.5 | 100.0 | 103.6 | 107.6 | 110.5 | 113.7 | 116.9 |
| Instruments and related products ................................................ | 26.3 | 29.9 | 37.6 | 52.8 | 74.2 | 95.0 | 100.0 | 102.5 | 105.5 | 108.9 | 112.9 | 115.9 |
| Other manufacturing industries ...................................................... | 24.6 | 27.6 | 35.2 | 49.5 | 70.7 | 96.1 | 100.0 | 103.0 | 106.6 | 109.7 | 113.2 | 117.0 |
| Nonmanufacturing industrles .......................................................... | 25.2 | 28.4 | 35.6 | 49.9 | 70.3 | 96.0 | 100.0 | 103.0 | 107.2 | 110.5 | 113.7 | 117.6 |

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

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ReleaseSubject
Date ${ }^{*}$
Personal Income and Outlays, May 1995 ..... July 3
Composite Indexes of Leading, Coincident, and Lagging ..... July ..... 6Indicators, May 1995.
U.S. International Trade in Goods and Services, ..... $\dagger$ July 18
May 1995.
State Personal Income, 1st quarter 1995 ..... July 26
Gross Domestic Product, 2nd quarter 1995 (advance) ..... July ..... 28
Personal Income and Outlays, June 1995 ..... 31
Composite Indexes of Leading, Coincident, and Lagging Aug. ..... 2
Indicators, June 1995.
U.S. International Trade in Goods and Services, ..... $\dagger$ Aug. 17June 1995.
State Per Capita Personal Income, 1994 (revised) ..... Aug. ..... 23
Gross Domestic Product, 2nd quarter 1995 (preliminary). Aug. ..... 30
Corporate Profits, 2nd quarter 1995 (preliminary) ..... Aug. ..... 30
Personal Income and Outlays, July 1995.
Composite Indexes of Leading, Coincident, and Lagging Sept. 1Indicators, July 1995.
U.S. International Transactions, 2nd quarter 1995 ..... Sept. 12
U.S. International Trade in Goods and Services, ..... $\dagger$ Sept. 20
July 1995.
Gross Domestic Product, 2nd quarter 1995 (final) ..... 29
Corporate Profits, 2nd quarter 1995 (revised) ..... 29
Personal Income and Outlays, August 1995 ..... 2
Composite Indexes of Leading, Coincident, and Lagging Oct. ..... 4
Indicators, August 1995.
U.S. International Trade in Goods and Services, $\dagger$ Oct. 18August 1995.
State Personal Income, 2nd quarter 1995 ..... 25
Gross Domestic Product, 3rd quarter 1995 (advance) ..... Oct. ..... 27
Personal Income and Outlays, September 1995 ..... 30
Composite Indexes of Leading, Coincident, and Lagging ..... Nov. ..... 1 Indicators, September 1995
U.S. International Trade in Goods and Services, ..... $\dagger$ Nov. 21September 1995.
Gross Domestic Product, 3rd quarter 1995 (preliminary) . Dec.Corporate Profits, 3rd quarter 1995 (preliminary)........ . Dec.Personal Income and Outlays, October 1995............... Dec.
Composite Indexes of Leading, Coincident, and Lagging Dec. ..... 6
Indicators, October 1995.
U.S. International Transactions, 3rd quarter 1995 ......... Dec. 12
U.S. International Trade in Goods and Services, ..... $\dagger$ Dec. 20Gross Domestic Product, 3rd quarter 1995 (final) ......... Dec.22
Corporate Profits, 3rd quarter 1995 (revised) ..... 22
Personal Income and Outlays, November 1995 ..... 26
Composite Indexes of Leading, Coincident, and Lagging Dec. ..... 29 Indicators, November 1995.

[^40]
# B U S I N E S S 

## C Y C L E

## I N D I C A T OR S

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Current and historical data for the series shown in the C－pages are available on diskettes，printouts，and the Commerce Department＇s Economic Bulletin Board．For more information，contact the Business Cycle Indicators Branch，Business Outlook Division（be－52），Bureau of Economic Analysis，U．S．Department of Commerce，Washington，DC 20230．（Telephone： （202）606－5366；fax：（202）606－5313．）

Note．－This section of the Survey is prepared by the Business Cycle Indicators Branch．

|  | Series title and timing classification | Year | 1993 |  |  |  | 1994 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| no． |  | 1993 | Sept． | Oct． | Nov． | Dec． | Jan． | Feb． | Mar． | Apr． | May | June | July | Aug． | Sept． | Oct． |

1．COMPOSITE INDEXES

|  | The Leading Index |
| :---: | :---: |
| 910. | Composite index of leading indicators，1987＝100（L，L，L）．．．． <br> Percent change from previous month $\qquad$ <br> Percent change over 3 －month span，AR $\qquad$ |
|  | Leading index componer |
| \％ | Average weekly hours，m Average weekly inital cla |
|  |  |
| 8. | Mifs．＇new orders，consumer goods and materials， bil． $1987 \$$（L，L，L，L）． |
| 32. | Vendor periormance，slower deliveries diffusion index， percent（L，L，L）． |
| 20 。 | Contracts and orders for plant and equipment，bil． $1987 \$$ （L，L，L，L）． |
| 29 ＊ | Index of new private housing units authorized by local builiding permits，1967＝100（L，LLL）． |
| 92 ． | Change in mifs．＇unfilied orders，durable goods，bil． 1987\＄，smoothed（L，LLLL）$\dagger$ ． |
| 99 。 | Change in sensitive materials prices，percent，smoothed （L，L，L）$\dagger$ ． |
| 19 ＊ | Index of stock prices， 500 common stocks，1941－43＝10， NSA（L．L，L）L）． |
| $\begin{array}{r} 106 \text { * } \\ 83 \end{array}$ | Money supply M2，bill． $1987 \$(\mathrm{~L}, \mathrm{~L}, \mathrm{~L})$ $\qquad$ Index of consumer expectations，$U$ ．of Michigan， 1966：Im 100 ，NSA（L，LLL）© ${ }^{2}$ ． |
| 950 | Diftusion index of 11 leading indicator components： <br> Percent rising over 1 －month span $\qquad$ <br> Percent rising over 6 －month span $\qquad$ |
|  | The Colncident Index |
| 920 － | Composite index of coincident incicators， $1987=100(\mathrm{C}, \mathrm{C}, \mathrm{C})$ <br> Percent change from previous month $\qquad$ |
|  | Coincident index components： |
| 41 | Employees on nonagricultural payrolls，thous．（C，C，C）．．．． |
| 51 ． | Personal income less transier payments，bil．1987\＄，AR （ $C, C, C$ ）． |
| $\begin{aligned} & 47 \\ & 57 \end{aligned}$ | Index of industrial production， $1987=100(\mathrm{C}, \mathrm{C}, \mathrm{C})$ ） Manutacturing and trade sales，mil． $1987 \$$（C，C，C）．．．．．．．．．． |
| 951 | Diftusion index of 4 coincident indicator components： |
| － | Percent rising over 1－month span |
|  | The Lagging Index |
| 930 ＊ | Composite index of lagging indicators， $1987=100(\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg})$ Percent change from previous month $\qquad$ |
|  | cent change over 3－month span，AR ．．．．．．．．．．．．．．．．．．．．．．． |
|  | Lagging |
| 77 ． | Ratio，mig．and trade inventories to sales in 1987\＄ （ $\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg}$ ）． |
| 62 ＊ | Change in labor cost per unit of output，mig．，percent， AR，smoothed（Lg．Lg，Lg）$\dagger$ §． |
| 109. | Average prime rate charged by banks，percent．NSA （ $\mathrm{Lg}, \mathrm{Lg}, \mathrm{L}, \mathrm{g})^{*}$ ． |
| 101. | Commercial and industrial loans outstanding，mil．1987\＄ （ $\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg})$ ． |
| 95. | Ratio，consumer installment credit outstanding to personal income，percent（ $\mathrm{L}, \mathrm{L}, \mathrm{Lg}, \mathrm{Lg}$ ）Ş． |
| 120 ＊ | Change in Consumer Price Index for services，percent， AR，smoothed（ $\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg}$ ）$\dagger$ ． |
| 952 | Diffusion index of 7 lagging indicator components： <br> Percent rising over 1 －month span $\qquad$ <br> Percent rising over 6 －month span $\qquad$ |
| 940 | Ratio，coincident index to lagging index，1987＝100（L，L，L） |


Note．－The following current high values were reached before September 1993：May 1991－ $\mathrm{BCl}-106$（2，865．8）；
December 1991－ $\mathrm{BCl}-77(1.65$ ）；January $1992-\mathrm{BCl}-120$ smoothed（4．2）；October $1992-\mathrm{BCl}-62$ smoothed（1．7）； De －
云NA
cember 1992－BC1－83（89．5）；and April 1993－BCl－91（17．7）．
See page $\mathrm{C}-6$ for other footnotes．


## 3. OUTPUT, PRODUCTION, AND CAPACITY UTILIZATION

|  | Output: |
| :---: | :---: |
| 55 * | Gross domestic product, bil, 1987\$, AR (C,C,C) $\qquad$ Percent change from previous quarter, AR |
| 50 | Gross national product, bil. 1987\$, AR (C,C,C) ............. |
| 49 | Value of domestic goods output, bil. 1987\$, AR (C,C,C) |
|  | Industrial production indexes, 19137s\%00: |
| 47 * | Total (C,C,C) § ....................................................... |
| 73 * | Durable manulactures ( $\mathrm{C}, \mathrm{C}, \mathrm{C}$ ) § ................................. |
| 74 * | Nondurable manufactures (C,L,L) \& ............................. |
| 75 | Consumer goods (C,L,C) § ........................................ |
|  | Capacity utilization rates (percent): |
| 124 | Total industry (L,C,U) § ............................................. |
| 82 . | Manufacturing (L,C,U) § ........................................... |



| 5,314,1 | .............. | ............... | r 5,365.0 | .... | ............... |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 4.1 | .............. | ............... | '3.9 | .... | ............... |
| 5,310.5 |  | .............. | p 5,359.0 | .............. |  |
| 2,201.3 |  |  | 2,236.1 | .............. |  |
| ${ }^{1} 117.4$ | r 118.0 | r 118.2 | r 119.1 | r119.1 | P119.8 |
| $r 124.0$ | r124.6 | r125.2 | $r 127.0$ | r127.4 | P128.4 |
| $r 113.4$ | $r 113.4$ | 113.6 | $r 113.9$ | r113.6 | $p 114.3$ |
| r112,8 | $r 113.5$ | $r 113.3$ | 113.7 | r113.0 | P113.3 |
| $r 83.8$ | r 84.1 | r84.1 | r 84.5 | r84.3 | ${ }^{P} 84.6$ |
| r83.2 | '83.2 | r83.3 | '83.8 | r83.6 | $p 84.0$ |

## 4. SALES, ORDERS, AND DELIVERIES

| 57 * | Sales: <br> 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, | r 550,009 | -565 532 | P564 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 - | Sales of retail stores, mil. 1987 ( ${ }^{\text {U }}$ L,L,U) ........................ | 1,758,766 | r147,609 | r 149,739 | 150,675 | 152,566 | 150,500 | 153,034 | 155,456 | 153,754 | 153,469 | 154,498 | 154,021 | r 156,124 | -156,715 | 158,768 |
|  | Orders and deliveries: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 * | Mris.' new orders, durable goods, bil. 1987\$ (L,L,L) ....... | 1,381.61 | 115.01 | 117.87 | 120.10 | 122.20 | 126.86 | 124.58 | 125.24 | 125.61 | 126.94 | 128.04 | 122.89 | ${ }^{1} 130.42$ | ${ }^{1} 130.75$ | ${ }^{\text {p }} 128.63$ |
| 8 * | Mifs.' new orders, consumer goods and materials, bil. $1987 \$(\mathrm{~L}, \mathrm{~L}, \mathrm{~L})$. | 1,304.63 | 108.97 | 111.33 | 112.47 | 114.60 | 116.08 | 115.62 | 118.25 | 117.64 | 118.72 | r117.72 | 115.34 | ${ }^{1} 121.96$ | ${ }^{1} 120.34$ | ${ }^{\text {P } 120.64}$ |
|  | Mrss.' unfilled orders, durable goods, mil. $1987 \$ 0$........... | 362,630 | 370,372 | 368,404 | 366,140 | 362,630 | 364,684 | 363,422 | 361,459 | 361,811 | 361,963 | 362,987 | 360,716 | -358,695 | ${ }^{\text {'359,127 }}$ | P358,184 |
|  | Change from previous month, bil. 19878 , ............ | $-2.88$ | -4.40 | -1.97 | -2.26 | -3.51 | 2.05 | -1.26 | -1.96 |  | . 15 | 1.02 | -2.27 | $r-2.02$ |  | ${ }^{p}-.94$ |
| 92 . | Change from previous month, bil. 1987\$, smoothed (L,L,L) $\dagger$. | -2.87 | -3.23 |  |  | -2.89 |  |  | -1.41 | -1.02 | -. 63 | -. 18 | -. 20 | ${ }^{r}-.45$ | $r-.48$ | ${ }^{P}-.56$ |
| 32 * | Vendor periormance, slower deliveries diffusion index, percent (L,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 CAPITAL INVESTMENT

|  | Formation of business enterprises: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12 . | 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 | ${ }^{r} 122.9$ | r121.5 | $r 120.2$ | 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 | ${ }^{P} 56,380$ | .............. |  |  |
|  | Business investment commitments: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Contracis 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 | r 43.68 | P41.35 |
| 20. | Contracts and orders for plant and equipment, bil. $1987 \$$ (L,L,L,L). | 445.78 | 36.77 | r 38.92 | 41.33 | 40.82 | 42.06 | 42.18 | 43.49 | 42.01 | 42.10 | ${ }^{\text {r }} 44.15$ | 43.23 | ${ }^{\text {r }} 44.67$ | $r 46.46$ | p 45.10 |
| 27 * | Mirs.' new orders, nondefense capital goods, bil. 1987\$ (L,L,L). | 401.86 | 33.09 | 35.28 | 37.99 | 37.60 | 38.43 | 38.50 | 39.27 | 38.98 | 38.58 | 「40.85 | 39.62 | ${ }^{\text {r }} 40.72$ | '42.54 | P 42.17 |
| 9 * | Construction contracts awarded for commercial and industrial buildings, mil. sq. ft. $(\mathrm{L}, \mathrm{C}, \mathrm{U})$ © $)^{4}$. | 535.60 | 45.34 | 46.74 | 47.15 | 52.36 | 52.76 | 49.34 | 61.83 | 50.96 | 53.48 | 51.96 | 62.47 | 57.50 | 57.08 | 59.31 |
| 61 | Business investment expenditures: <br> New plant and equipment expenditures by business, bil. $\$$, AR (C,Lg,Lg)*. | 586.73 |  | - | 604.51 |  | ............... | 619.34 | .............. | .............. | 637.08 | $\ldots . . . .$. | .............. | ${ }^{\text {a }} 651.92$ | .............. | ............... |
| 100 * | New plant and equipment expenditures by business, bil. 1987\$, AR (C,Lg.Lg)'. | 563.40 |  |  | 586.90 |  | ............... | 598.97 | .............. | ............. | 613.16 | .............. | .............. | ${ }^{\text {a }} 628.96$ | .. | ...........". |
| 69 * | Mirs." machinery and equipment sales and business construction expenditures, bil. $\$, \mathrm{AR}(\mathrm{C}, \mathrm{Lg}, \mathrm{Lg})$. | 462.79 | 461.86 | 467.11 | 489.94 | 511.08 | 480.27 | 491.54 | 503.68 | 499.18 | 503.95 | 517.15 | 509.90 | r 525.10 | r 534.44 | - 530.57 |

[^41]|  | Series title and timing classification | Year | 1993 |  |  |  | 1994 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| no. |  | 1993 | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. |

## 5. FIXED CAPITAL INVESTMENT-Continued



6. INVENTORIES AND INVENTORY INVESTMENT

|  | Inventories on hand: |
| :---: | :---: |
| 70 | Mig. and trade inventories, bil. 1987\$ (Lg, Lg, Lg) 0 |
| 77 * | Ratio, mig. and trade inventories to sales in 1987\$ (Lg,Lg,Lg). |
|  | Inventory investment: |
| 30 | Change in business inventories, bil. 1987\$, AR (L,L,L) |
| $31+$ | Change in mfg. and trade inventories, bil. \$, AR (L,L,L心) .. |



7. PRICES
$\begin{array}{r} \\ 100.50 \\ 1.03 \\ .26 \\ 172.15 \\ \\ 182.6 \\ 183.8 \\ 91.1 \\ 74.2 \\ 141.2 \\ 207.4 \\ 123.2 \\ 129.6 \\ 102.4 \\ 136.2 \\ 104.3 \\ 58.1 \\ 263.7 \\ .644 \\ .124 \\ 140.435 \\ 3.286 \\ .492 \\ .265 \\ .64 \\ .750 \\ 3.500 \\ .798 \\ 56.225 \\ .446 \\ .143 \\ \hline\end{array}$



NoTE.-The following current high values were reached before September t993: July 1991-BCl-120 change (5.9); December 1991-BCI-77 (1.65); and January 1992-BCl-120 smoothed (4.2).

See page $\mathrm{C}-6$ for other footnotes.

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| Series no. | Series title and timing classification | Year | 1993 |  |  |  | 1994 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1993 | Sept. | Oct | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sopt. | Oct. |

## 8. PROFITS AND CASH FLOW

|  | Profits and profit margins: |
| :---: | :---: |
| * | Corporate profits atter tax, bil.\$, AR |
| 18 * | Corporate profits after tax, bili. 1987\$, AR |
| 22. | Ratio, corporate domestic profits after tax to corporate domestic income, percent (L,L,L). |
| 81. | Ratio, corporate domestic profits afier tax with IVA and CCAdj to corporate domestic income, percent(U,L,L). |
| 26 * | Ratio, impilicit price deflator to unit labor cost, all persons, nonfarm business sector, $1982=100$ (L,L,L). |
| 35 | Corporate net cash flow, bil. 1987\$, AR (L,L,L) |





9. WAGES, LABOR COSTS, AND PRODUCTIVITY

10. PERSONAL INCOME AND CONSUMER ATTITUDES

| 52 | Personal income: | 4246.4 | 4268 | 428 | 43002 | 4323.4 | 430 |  |  | 4385.2 |  | 43923 |  |  | 4,428 | P4,486.6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 51. | Personal income less transfer payments, bil. 1987\%, AR ( $\mathrm{C}, \mathrm{C}, \mathrm{C}$ ). | 3,523.2 | 3,539.6 | 3,556, | 3,571.8 | 3,589,3 | 3,566.9 | 3,618.9 | 3,629.0 | 3,641.9 | 3,652.7 | 3,649,3 | r $3,653.0$ | r3,662.2 | r3,680.6 | P3,735.3 |
| 58 | Indexes of consumer attitudes: <br> Consumer sentiment, U. of Michigan, 1966:I=100, NSA (L,L,L) © ${ }^{1}$. | 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, 1966:1=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 | Consumer confidence, The Conference Board, $1985=100$ (L,L,LL) ${ }^{2}$. | 65.9 | 63.8 | 60.5 | 71.9 | 79.8 | 82.6 | 79.9 | 86.7 | 92.1 | 88.9 | 92.5 | 91.3 | 90.4 | 89.5 | 89.1 |
| 123 * | Consumer expectations, The Conference Board, 1985=100 (L,L,LL)". | 77.4 | 72.8 | 66.7 | 80.3 | 91.8 | 92.6 | 84.4 | 92.6 | 95.4 | 93.6 | 94.6 | 91.9 | 89.4 | 89.5 | 87.9 |

## 11. SAVING

| 290 | Gross saving bills AR | 787.5 |  |  | 825.8 |  |  | 886.2 |  |  | 923.3 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 295 | Business saving, bil\| $\$_{1}$ AR .................................................. | 789.9 | ............ | .............. | 821.9 | ${ }^{\text {.................. }}$ |  | 861.8 |  |  | 840.4 |  |  | ${ }^{2} 850.3$ |  |  |
| 292 | Personal saving, bil.S. AR ......................................... | 192.6 | . | . | 189.4 | .............. | .............. | 175.5 | - | ${ }^{\text {.............. }}$ | 201.1 | . | ............... | r198.5 |  | ${ }^{\text {............... }}$ |
| 298 * | Government surplus or deficit, bli.\$, AR ............................. | -215.0 | . | . | -185.6 | .............. | ............ | -151.1 | - | ............. | -118.1 | $\cdots$ | .............. | ${ }^{P}-131.0$ |  | $\ldots$ |
| $293+$ | Personal saving rate, percent ....................................... | 4.1 |  |  | 4.0 |  |  | 3.6 |  |  | 4.1 |  |  | 4.0 | $\cdots$ |  |

12. MONEY, CREDIT, INTEREST RATES, AND STOCK PRICES

| 85 | Money: <br> Percent change in money supply MI (L.LLL | . 81 | 89 | . 75 | . 81 | . 53 | .45 | .44 | 33 | -. 11 | 15 | 31 | r. 59 | '-. 17 | r. 08 | ${ }^{p}$ - 30 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 102 | Percent change in money supoly M2 (L,C,U) ..................... | . 14 | . 23 | . 10 | . 35 | . 21 | . 15 | -. 11 | . 40 | . 24 | .11 | -. 19 | . 40 | -. 16 | -. 03 | ${ }_{P} \times-.09$ |
| 105 | Money supply M1, bil. $1987 \$$ (LLL,LL | 848.9 | 866.1 | 869.8 | 874.1 | 876.8 | 880.7 | 882.6 | 882.8 | 880.5 | 879.8 | 880.4 | -882.2 | r878.0 | -876.7 | P873.5 |
| 106 . | Money supply M2, bil. $1987 \$$ (L,L,L) .......................... | 2,774.9 | 2,777.7 | 2,772.0 | 2,772.9 | 2,772,3 | 2,776.4 | 2,767.0 | 2,769.3 | 2,771.8 | 2,768.5 | 2,756.8 | 2,757.2 | -2,744.4 | r2,737.2 | ${ }^{\text {p } 2,732.6}$ |
|  | Velocity of mone |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 107 | Ratio, gross domestic product to money suppy M1 (C,C,C). | 5.880 |  |  | 5.777 |  |  | 777 |  |  | 5.851 |  |  | r 5.891 |  |  |
| 108 | Ratio, personal income to money supply M2 (C,Lg,C) .... | 1.524 | 7.528 | 1.537 | 1.540 | 1.546 | 1.535 | 1.562 | 1.565 | 1.570 | 1.575 | 1.581 | ${ }^{1} 1.583$ | r1.592 | -1.602 | ${ }^{\text {p }} 1.626$ |
|  | Bank rese |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 93 \\ & 94 \end{aligned}$ | Free reserves, mil.S, NSA (L,U,U) $\ddagger$ $\qquad$ Member bank borrowings from the Federal Reserve. | $\begin{aligned} & 901 \\ & 180 \end{aligned}$ | $\begin{aligned} & 662 \\ & 428 \end{aligned}$ | $\begin{aligned} & 804 \\ & 285 \end{aligned}$ | 1,012 89 | 981 82 | 1,375 73 | $\begin{array}{r} 1,070 \\ 70 \end{array}$ | $\begin{array}{r}912 \\ 55 \\ \hline\end{array}$ | $\begin{array}{r} 1,027 \\ 124 \end{array}$ | $\begin{aligned} & 715 \\ & 200 \end{aligned}$ | $\begin{aligned} & 772 \\ & 333 \end{aligned}$ | $\begin{aligned} & 649 \\ & 458 \end{aligned}$ | $\begin{aligned} & 535 \\ & 469 \end{aligned}$ | $\begin{gathered} r \\ \hline 873 \\ 487 \end{gathered}$ | $\begin{aligned} & p 424 \\ & p 380 \end{aligned}$ |
|  | mil. \$, NSA (L,Lg.U). |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Credit flows: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 112 | Net change in business loans, bil. $\$$, AR (L,L,L) ....... | 2.15 | - 4.43 | $-22.73$ | -2.98 | -21.72 | $\begin{array}{r}39.56 \\ \hline\end{array}$ | -34.12 | -21.98 | 35.99 | 68.99 | 50.99 | 89.83 | ${ }^{2} 53.38$ | ${ }^{8} 84.58$ | p80.84 |
| 113 | Net change in consumer instalment crecit, bii. $\$$, AR (L,L,L) §. | 63.20 | r98.56 | r85.74 | r 81.42 | r98.39 | ${ }^{\text {r }} 54.53$ | ${ }^{4} 46.51$ | r132.36 | ${ }^{\text {r } 115.10}$ | ${ }^{1} 163.13$ | r 129.35 | r81.04 | r 181.91 | ${ }^{P} 126.80$ |  |
| 110 * | Funds raised by private nonfinancial borrowers in credit markets, mil.S, AR (L,L,L). | 421,285 |  |  | 422,480 |  |  | 385,504 |  |  | 363,792 |  |  |  | ............... |  |
|  | Credit difficulties: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | Current liabilities of business failures, mil.\$, NSA (L,L,L) $\ddagger$. |  |  |  |  |  |  |  |  |  |  | ${ }^{\text {P } 2,328.6 ~}$ | ${ }^{P}$ 2,111.7 | P $2,459.5$ | P3,533.5 | P3,674. |
| 39 | Percent of consumer installment loans delinquent 30 days and over (LLLLI( $)^{20} \ddagger$. | 1.77 | 1.95 | 1.93 | 1.86 | 1.77 | 1.98 | 1.87 | 1.74 | 1.78 | 1.72 | 1.71 |  |  | $\cdots$ | .............. |

NoIE.-The following current high values were reached before September 1993: May 1991-BCi-106 (2,865.8); 62 index (112.1); October 1992-BC1-62 smoothed (1.7); December 1992-BCl-53 (664.2), BCl-83 (89.5), and BCl-

123 (103.9); May 1993-BCl-85 (1.97) and BCl-102 (0.68); and 3d Q 1993-BCl-110 (512,916).
See page $\mathrm{C}-6$ for other footrotes.

|  | Series title and timing classification | Year | 1993 |  |  |  | 1994 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| no. |  | 1993 | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Och. |

12. MONEY, CREDIT, INTEREST RATES, AND STOCK PRICES-Continued

|  | Outstanding debt: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 66 | Consumer installment credit outstanding, mil.\$ ( $\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg}$ ) $\bigcirc \mathrm{S}$. | 794,300 | r772,171 | -779,316 | -786,101 | '794,300 | '798,844 | '802,720 | -813,750 | '823,342 | r836,936 | -847,715 | r854,469 | '869,628 | P880,194 |  |
| 72 | Commercial and industrial loans outstanding, mil.S, ( $\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg}$ ). | 429,487 | 434,943 | 433,049 | 432,301 | 430,991 | 434,288 | 431,445 | 429,613 | 432,612 | 438,361 | 442,610 | '450,096 | -454,544 | '461,592 | \% 468,329 |
| 101. | Commercial and industrial loans outsianding, mil. 1987\$ (Lg, Lg, Lg). | 371,343 | 376,574 | 373,963 | 374,072 | 373,476 | 375,033 | 371,935 | 369,083 | 371,660 | 375,953 | -377,654 | r 383,714 | r385,534 | '392,510 | P 398,239 |
| 95 | Ratio, consumer installment credit outstanding to personal income, percent ( $\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg}$ ) §. | 14.12 | 14.26 | 14.29 | 14.34 | 14.40 | 14.57 | r 14.40 | r 14.51 | r 14.60 | r 14.77 | -14.94 | r 14.98 | 15.18 | P45.28 |  |
| 119 * | Interest rates (percent, NSA): <br> Federal funds rate ( 1 la)* | 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 | 4.7 |
| 114 * | Discount rate on new 91-day Treasury bills (C,Lg,Lg)* ... | 3.02 | 2.96 | 3.04 | 3.12 | 3.08 | 3.02 | 3.21 | 3.52 | 3.74 | 4.19 | 4.18 | 4.39 | 4.50 | 4.64 | 4.96 |
| 116 * | Yield on new high-grade corporate bonds (Lg,Lg, Lg ${ }^{\text {t }}$..... | 7.34 | 6.88 | 6.88 | 7.17 | 7.22 | 7.16 | 7.27 | 7.64 | 7.95 | 8.17 | 8.16 | 8.30 | 8.25 | 8.48 | 8.76 |
| 115 * | Yield on long-term Treasury bonds (C,Lg,Lg)* | 6.46 | 5.94 | 5.90 | 6.25 | 6.27 | 6.24 | 6.44 | 6.90 | 7.32 | 7.47 | 7.43 | 7.61 | 7.55 | 7.81 | 8.02 |
| 117 | Yield on municipal bonds, 20-bond average (U,L-Lg,Lg) .... | 5.60 | 5.29 | 5.25 | 5.47 | 5.35 | 5.31 | 5.40 | 5.91 | 6.23 | 6.19 | 6.11 | 6.23 | 6.21 | 6.28 | 6.52 |
| 118 | Secondary market yields on FHA mortgages ( $\mathrm{Lg}, \mathrm{Lg}, \mathrm{Lg}$ ) . | 7.46 | 7.03 | 7.08 | 7.51 | 7.52 | 7.05 | 7.59 | 8.57 | 8.63 | 8.63 | 9.03 | 8.65 | 8.66 | 9.10 | 9.23 |
| 109 * | Average prime rate charged by banks (Lg,Lg, LG)* ${ }^{\text {......... }}$ | 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) 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. NATIONAL DEFENSE |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 525 | Defense Department prime contract awards, mil. ............ |  | 11,359 |  |  |  | 10,247 | 9,343 | 10,064 |  |  |  |  | P15,767 |  |  |
| 548 | Manufacturers' new orders, defense products, mil.S ........... | 76,649 | 6,446 | 5,304 | 5,172 | 5,239 | 7738 | 6,136 | 4,902 | 6,280 | 7,180 | 7,050 | 5,546 | '6,147 | 6,861 | 5,699 |
| 557 | Index of industrial production, defense and space equipment, 1987=100 §. | 78.5 | 77.4 |  |  |  |  |  |  |  | r72.4 | r71.3 | $\bigcirc 69.9$ | r69.3 | -68.7 | P68.6 |
| 570 | Employment, defense products industries, thous. ... | $\begin{array}{r} 961 \\ 3067 \end{array}$ | 40 | 933 | 923 | 910 | 901 | 895 | 892 | 887 | 883 | 877 | 870 | $\checkmark 867$ | ${ }^{\text {P } 862}$ |  |

14. EXPORTS AND INPORTS

| 602 | Exports, excluding military aid shipments, mil. \$ | 465,091 | 38,610 | 40,019 | 40,084 | 41.657 | 39,247 | 38,106 | 42,808 | 41,089 | 41,103 | 42.81 | 40,985 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 604 | Exports of domestic agricultural products, mil. ...................... | 41,940 | 3,550 | 3,521 | 3,509 | 3,768 | 3,497 | 3,118 | 3,412 | 3,326 | 3,685 | 3,718 | 3,487 | 4,013 | 3,908 |  |
| 606 | Exports of nonelectrical machinery, mil. ........................... | 99,787 | 8,301 | 8,279 | 8,660 | 8,975 | 8,435 | 8,363 | 9,096 | 9,009 | 9,198 | 9,329 | 9,321 | 10,079 | 9,741 |  |
| 612 | General imports, mil. $\$$.......................... | 580,659 | 49,224 | 50,849 | 49,979 | 49,439 | 50,097 | 50,178 | 52,391 | 53,134 | 53,988 | 55,839 | 55,830 | - 57, 859 | 57,921 |  |
| 614 | Imports of petroeum and petroleum products, mil. \$ ............ | 50,455 | r 3,699 | 3,936 | 3,729 | 3,371 | 2,981 | 3,960 | 4,162 | 3,997 | 3,863 | 4,606 | 5,027 | 4,950 | 4,258 |  |
| 616 | Imports of automobiles and parts, mil. $\$$ | 79,399 | '6,735 | 6,871 | 6,748 | 6,849 | 6,134 | 6,713 | 7,258 | 7,546 | 7,300 | 7,842 | 7,464 | 8,765 | 7,378 |  |
| 618 . | Merchandise exports, adiusted, excluding military, mil. \$ ${ }^{1}$.... | 456,8666 |  |  | 119,679 |  |  | ${ }^{118,018}$ |  |  | ${ }^{p} 122,670$ |  |  |  |  |  |
| 620. | Merchancise imports, adjusted, excluding military, mil.\$1 .... | 589,441 |  |  | 152,848 | ............. |  | 154,980 |  |  | ${ }^{p}$ P164,441 |  |  |  |  |  |
| 622 | Balance on merchancise trade, mi. ${ }^{1}$............................ | -132,575 |  |  | -33,169 |  |  | -36,962 |  |  | $P-41,771$ |  |  |  |  |  |

15. INTERNATIONAL COMPARISONS

| 47 * | Industrial production indexes (1987 $\mathbf{1 0 0}$ ): United States § | 112.0 | ${ }^{1} 112.5$ | r112.7 | r113.7 | r14.7 | $r 114.7$ | r115.6 | r116.6 | ${ }^{1} 16.7$ | $r 117.4$ | $r 118.0$ | r118.2 | ${ }^{1} 119.1$ | r119.1 | p119.8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 721. | OECD, European countries ${ }^{2}$ | 107 | 108 | 108 | 108 | 108 | 107 | 109 | 109 | 111 | 11.1 | 112 |  |  |  |  |
| 728 . | Japan | 111.6 | 111.4 | 108.1 | 109.7 | 109.0 | 109.5 | 109.0 | 113.7 | 111.1 | 110.1 | 113.0 | P111.9 |  |  |  |
| 725 * | Federal Republic of Germany | 107 | 108 | 107 | 107 | 107 | 105 | 107 | 108 | 110 | 110 | $P 111$ |  |  | .-............ | ............ |
| 726 * | France | 107 | 107 | 106 | 107 | 106 | 107 | 107 | 108 | 110 | 110 | ${ }^{P} 109$ |  |  |  |  |
| 722 * | United Kingdom | 105 | 105 | 107 | 107 | 107 | 108 | 108 | 108 | 110 | 110 | 110 | ${ }^{p} 110$ |  |  |  |
|  | Haly | 105.7 | 103.7 | 105.8 | 105.9 | 104.3 | 104.0 | 106.0 | 105.5 | 109.9 | 109.9 | p109.7 |  |  |  |  |
| 723 * | Canada | 103.1 | 104.4 | 104.4 | 104.8 | 104.6 | 105.1 | 104.8 | 106.3 | 107.7 | 108.8 | 109.9 | r110.5 | 111.8 | -111.4 |  |
|  | Consumer price indexes (1982-84=100): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 320 | United States, NSA $\qquad$ Percent change over 6 -month span, AR | $\begin{array}{r} 144.5 \\ 2.6 \end{array}$ | $\begin{array}{r} 145.1 \\ 2.6 \end{array}$ | $145.7$ | $\begin{array}{r} 145.8 \\ 2.4 \end{array}$ | $\begin{array}{r} 145.8 \\ 2.9 \end{array}$ | $\begin{array}{r} 146.2 \\ 2.5 \end{array}$ | $\begin{array}{r} 946.7 \\ 2.3 \end{array}$ | $\begin{array}{r} 147.2 \\ 2.5 \end{array}$ | $\begin{array}{r} 147.4 \\ 3.2 \end{array}$ | $\begin{array}{r} 147.5 \\ 3.3 \end{array}$ | $\begin{array}{r} 148.0 \\ 3.0 \end{array}$ | $\begin{array}{r} 148.4 \\ 2.9 \end{array}$ | 149.0 | 149.4 | 149.5 |
| 738 | Japan, NSA ...... | 118.5 | 119.3 | 119.2 | 118.5 | 118.6 | 118.7 | 118.7 | 119.3 | 119.5 | 119.6 | 119.2 | 118.6 | 119.2 | 19.5 |  |
|  | Percent change over 6 -month span, AR | 1.1 | . 5 | -. 2 | -. 5 | . 7 |  |  |  | -. 2 |  | - |  |  |  |  |
| 735 | Federal Republic of Germany, NSA ........... | 125.6 | 126.1 | 126.4 | 126.7 | 126.9 | 128.0 | 128.5 | 128.7 | 129.0 | 129.3 | 129.5 | 29.6 | 129.7 | 129. | 129.9 |
|  | Percent change over 6 -month span, AR | 3.5 | 2.7 | 2.9 | 3.4 | 14.5 | 3.5 | 3.2 | 3.3 | 2.8 | 2.585 | r2,3 1459 | 2.0 |  |  |  |
| 736 | rance, NSA $\qquad$ Percent change over 6 -month span, AR | $\begin{array}{r} 143.5 \\ 1.9 \end{array}$ | 144.0 1.8 | 144.3 1.5 1.5 | 144.4 1.8 | 144.3 1.7 | $\begin{array}{r}144.5 \\ 1.8 \\ \hline 1\end{array}$ | 144.9 | $\begin{array}{r}145.2 \\ 1.7 \\ \hline 1.7\end{array}$ | $\begin{array}{r}145.6 \\ 1.8 \\ \hline 1\end{array}$ | 145.9 | 145.9 1.5 | $\left.\begin{array}{r} 145.9 \\ 1.5 \end{array} \right\rvert\,$ | 145.9 | 146.3 | 146.7 |
| 732 | United Kingdom, NSA | 165.3 | 166.7 | 166.6 | 166.4 | 166.7 | 166.0 | 167.0 | 167.4 | 169.4 | 170.0 | 170.0 | 169.2 | 170.0 | 170.4 | 170.6 |
|  | Percent change over 6 -month span, AR | 1.9 | 2.6 | 2.4 | 2.4 | 2.2 | 2.8 | 3.1 | 2.7 | 2.3 | 2.4 | 2.3 | 2.0 |  |  |  |
| 737 | ly, NSA .... Percent ch | 186.3 4.2 | $\begin{array}{r}187.4 \\ 3.9 \\ \hline\end{array}$ | 188.6 3.9 | 189.5 3.3 | 189.5 3.5 | $\begin{array}{r}190.6 \\ 3.4 \\ \hline\end{array}$ | $\begin{array}{r}191.3 \\ 3.6 \\ \hline\end{array}$ | $\begin{array}{r}191.7 \\ 3.6 \\ \\ \hline 1\end{array}$ | 192.2 3.2 | 192.9 | 193.3 | 193.6 | 194.2 | 194.2 | 195.8 |
| 733 | anada, NSA | 147.9 | 148.2 | 148.4 | 149.1 | 148.8 | 148.8 | 147.7 | 147.6 | 147.6 | 147.3 | 147.6 | 148.2 | 148.3 | 148.4 | 148.2 |
|  | Percent change over 6 -month span, $A R$ | 1 | 2.6 | 1.5 |  | -1.6 | -1.5 | -2.5 | -2.3 | -1.2 | 1.2 | 1.9 | 1.2 |  |  |  |
|  | Stock price indexes (1967=100, NSA): |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }^{19} 8$ | United S | 491.0 | 499.6 | 504.6 | 503.5 | 506.9 | 514.5 | 513.0 | 504.5 | 486.5 | 490.5 | 494. | 491.0 | 505.0 | 508.0 | 504.5 |
| 745 | Japan | 1,381.4 | 1,306.4 | 1,490.6 | 1,38157 | 1,308.7 | 1,3742 | 1,445.1 | 1,466.9 | 1,407.0 | 1,488.6 | 1, 3731 | 1,498.5 | 1,494 | 1,441.2 | P1,435.2 |
| 746 . | ${ }_{\text {France }}{ }^{\text {rep........................ }}$ | 970.2 | 1,007.1 | 1,047.2 | 1,023.8 | 1,111.5 | ${ }_{P} 1,144.8$ | P1,141.4 | ${ }^{p} 1,095.8$ | P1,072.1 | ${ }^{p} 1,075.8$ | p987.1 | ${ }^{2} 9988.2$ | ${ }^{1} 1,030.6$ | ${ }^{\text {P } 975.9}$ | P943.0 |
| 742 * | United Kingdom* | 1,375.0 | 1,414.1 | 1,440.2 | 1,430.8 | 1,509.1 | 1,584.3 | 1,584.3 | 1,520.6 | 1,488.3 | 1,472.6 | 1,409. | 1,430.8 | 1,503.9 | r1,463.2 | $p 1,425.3$ |
| 747 * | Hily ${ }^{\text {c }}$............. | 575.2 | 633.1 | 617.2 | 575.2 | 622.7 | 646.8 | 703.3 | 699.9 | 815.6 | 823.9 | 757. | 738.5 | 721.2 | 710.2 | ${ }^{\text {P } 668.7}$ |
| 743 * | Canaca* ........................................................... | 44.1 | 450.9 | 480.9 | 472.3 | 488.3 | 514.7 | 499.9 | 489.2 | 482.2 | 488.9 | 454.8 | 472.2 | 491.5 | 492.0 | 484.9 |
| 750 * | Exchange rates: <br> Exchange value of U.S. dollar, index: March $1973=100$, NSA ${ }^{3}$. <br> Foreign currency per U.S. dollar (NSA): | 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 | 88.0 | 86.66 |
| 758 * | Japan (yen)* ... | 111.08 | 105.57 | 107.02 | 107.88 | 109.91 | 111.44 | 106.30 | 105.10 | 103.48 | 103.7 | 102.53 | 98.4 | 99.9 | 98.77 | 98.35 |
| 755 | Federal Repubic | 1.6545 | 1.6219 | 1.6405 | 1.7005 | 1.7105 | 1.7426 | 1.7355 | 1.6909 | 1.6984 | 1.6665 | 1.6271 | 1.5674 | 1.5646 | 1.5491 | 1.5195 |
| 756 * | France (tranc)* | 5.6669 | 5.6724 | 5.7541 | 5.9069 | 5.8477 | 5.9207 | 5.8955 | 5.7647 | 5.8170 | 5.6728 | 5.5597 | 5.3702 | 5.3602 | 5.2975 | 5.2025 |
| 752 * | United Kingdom (pound)* | . 6662 | . 6558 | .66 | . 6753 | . 6706 | 6701 | 6760 | 6703 | . 6746 | . 6648 | . 6552 | . 6465 | . 6484 | . 6385 | 6225 |
| 757 * | Itajy (iira) ${ }^{\star}$....................................................... | 1,573.41 | 1,569.10 | 1,600.93 | 1,666.31 | 1,687.17 | 1,699.45 | 1,685.96 | 1,666.63 | 1,626.07 | 1,594.56 | 1,592.22 | 1,562.31 | 1,582.15 | 1,565.79 | 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. ALTERNATIVE COMPOSITE INDEXES

|  |  | 254.9 | 254.6 | 256.1 | 258.4 | 261.5 | 260.4 | 260.5 | 260.3 | 261.1 |  | '263.1 | 264.7 | '265.1 | r264.4 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 999 |  | 224.3 | 226.4 | 226.9 | 2300 | 230.7 | 232.4 | ${ }^{2} 234.0$ | 237.1 | 237.4 | 238.4 | 239.7 | ${ }^{2} 237.9$ | '243.3 | ${ }^{2} 245.6$ | P245.7 |

[^42]
# FOOTNOTES FOR PAGES C-1 THROUGH C-5 

Anticipated.<br>AR Annual rate.<br>c Corrected.<br>Copyrighted.<br>- Estimated<br>Later data listed in notes.

| NSA | Not seasonally adjusted. |
| :--- | :--- |
| 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.
$\ddagger$ Cycical indicator series denoted by $\ddagger$ are inverted (i.e., the sign is reversed) for cyclical analysis calculations, including classifications, contributions to composite indexes, and current high values.
$\dagger$ Cyclical indicator series denoted by $\dagger$ 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 "BCl-" 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 3 d 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 Surver.

## Page C-1

Note.-Major data revisions:
Index of industrial production (BCl-47)-see note for page $\mathrm{C}-2$.
Change in labor cost per unit of output, manufacturing ( $\mathrm{BCl}-62$ )-see note for page $\mathrm{C}-4$.
Ratio, consumer installment credit to personal income ( $\mathrm{BCl}-95$ )-see note for page $\mathrm{C}-4$.
*Preliminary November 1994 values: $\mathrm{BCl} 32=64.4, \mathrm{BCl}-19=461.01$, and $\mathrm{BCl}-109=8.08$.

1. 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.
2. Copyrighted. This series may not be reproduced without written permission from the University of Michigan, Survey Research Center, P.O. Box 1248, Ann Arbor, MI 48106-1248.
3. Excludes $\mathrm{BCl}-57$, for which data are not available.
4. Excludes $\mathrm{BCl}-77$ and $\mathrm{BCl}-95$, for which data are not available.
5. Data beginning January 1994 are based on the revised Current Population Survey and are not directly comparable with data for earlier periods.

## Page C-2

NoTE,--Major data revisions: Industrial production indexes (BCI-47, -73, -74, -75, -76, and -557) and related measures of capacity utilization ( $\mathrm{BCl}-82$ and $\mathrm{BCl}-124$ ) 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; $\mathrm{BCl}-124$ from 1989 forward; and $\mathrm{BCl}-47,-73,-74,-75,-76$, 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: $\mathrm{BCl}-32=64.4$; anticipated 4th quarter 1994 values: $\mathrm{BCl}-61=$ 645.13 and $\mathrm{BCl}-100=623.89$.

1. Data beginning January 1994 are based on the revised Current Population Survey and are not directly comparable with data for earlier periods.
2. 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: $\mathrm{BCl}-23=329.7$.

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## Page C-4

Note.-Major data revisions:
Series on productivity and costs ( $\mathrm{BCl}-345,-346,-358$, 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: $\mathrm{BCl}-370$ from 1986 forward; $\mathrm{BCl}-345$ from 1990 forward; $\mathrm{BCl}-346$ from 1992 forward; and BCI-358 from 1993 forward. For further information, contact the U.S. Depariment 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 ( $\mathrm{BCl}-62$ ) has been revised from 1991 forward to incorporate revisions in industrial production-see note for page $\mathrm{C}-2$. 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 ( $\mathrm{BCl}-66$ ) and the U.S. Department of Commerce, Bureau of Economic Analysis, Business Outlook Division, Washington, DC 20230 (BCl-95 and BCl-113).
*Preliminary November 1994 values: $\mathrm{BCl}-122=101.3, \mathrm{BCl}-123=96.7$, and $\mathrm{BCl}-85=-0.52$.

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2. Copyrighted. This series may not be reproduced without witten permission from the American Bankers Association, 1120 Connecticut Avenue, NW, Washington, DC 20036.

## Page C-5

Note.-Major data revisions:
Series based on consumer installment credit ( $\mathrm{BCl}-66$ and $\mathrm{BCl}-95$ )-see note for page $\mathrm{C}-4$. Industrial production indexes ( $\mathrm{BCl}-47$ and $\mathrm{BCl}-557$ )-see note for page C -2.
*Preliminary November 1994 values: $\mathrm{BCl}-119=5.06, \mathrm{BCl}-114=5.25, \mathrm{BCl}-116=8.89, \mathrm{BCl}-115$ $=8.17, \mathrm{BCl}-117=6.97, \mathrm{BCl}-109=8.08, \mathrm{BCl}-19(1941-43=10)=461.01, \mathrm{BCl}-19(1967=100)=501.5$, $\mathrm{BCl}-748=1,393.6, \mathrm{BCl}-745=367.7, \mathrm{BCl}-746=970.1, \mathrm{BCl}-742=1,440.9, \mathrm{BCl}-747=668.5, \mathrm{BCl}-743$ $=462.5, \mathrm{BCl}-750=87.71, \mathrm{BCl}-758=98.04, \mathrm{BCl}-755=1.5396, \mathrm{BCl}-756=5.2867, \mathrm{BCl}-752=0.6292$, $\mathrm{BCl}-757=1,583.81$, and $\mathrm{BCl}-753=1.3647$.

1. Balance of payments basis: Excludes transfers under military grants and Department of Defense sales contracts (exports) and Department of Defense purchases (imports).
2. Organisation for Economic Co-operation and Development.
3. This index is the weighted-average exchange value of the U.S. dollar against the currencies of the other G-10 countries plus Switzerland. Each country is weighted by its 1972-76 global trade. For a description of this index, see the August 1978 Federal Reserve Bulletin (p. 700).
4. This index is compiled by the Center for International Business Cycle Research (CIBCR), Graduate School of Business, Columbia University, New York, NY 10027.

## Historical Data for Selected Series

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

## CYCLICAL INDICATORS

Composite Indexes


## CYCLICAL INDICATORS

Composite Indexes: Rates of Change


Composite Indexes: Diffusion



## Composite Indexes: Leading Index Components-Continued



## CYCLICAL INDICATORS

Composite Indexes: Coincident Index Components


## CYCLICAL INDICATORS

Composite Indexes: Lagging Index Components


## CYCLICAL INDICATORS

Employment and Unemployment


## CYCLICAL INDICATORS

Output, Production, and Capacity Utilization


## CYCLICAL INDICATORS

## Sales and Orders



Wages and Consumer Attitudes


## CYCLICAL INDICATORS

## Fixed Capital Investment



## CYCLICAL INDICATORS

Fixed Capital Investment-Continued


## Fixed Capital Investment-Continued



## Inventories and Inventory Investment



## Prices and Profits



## Money, Credit, and Interest Rates



## CYCLICAL INDICATORS

Money, Credit, and Interest Rates-Continued


OTHER IMPORTANT ECONOMIC MEASURES

## Prices



## Other Measures



OTHER IMPORTANT ECONOMIC MEASURES

## International Industrial Production



## OTHER IMPORTANT ECONOMIC MEASURES

International Consumer Prices


## International Stock Prices



## OTHER IMPORTANT ECONOMIC MEASURES

## 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Business formation: |  |  |  | Industrial production index | 47 | 10/94 | C-40 |
| Current liabilities of business failures ..................... | 14 | 11/94 | C-30 | Interest rates: |  |  |  |
| Index of net business formation .......................... | 12 | $11 / 94$ | C-29 | Average prime rate charged by banks. | 109 | 10194 | C-49 |
| New business incorporations .............................. | 13 | 11/94 | C-29 | Corporate bond yield ............................. | 116 | $11 / 94$ | C-40 |
| Business loans: |  |  |  | Federal funds rate | 119 | 11/94 | C-42 |
| Commercial and industrial loans, current dollars ..... | 72 | 11/94 | C-36 | Mortgage yield, secondary market | 118 | $11 / 94$ | C-4 |
| Commercial and industrial loans, 1987 dollars ........ | 101 | $10 / 94$ | C-48 | Municipal bond yield ................... | 117 | 11/94 | C-41 |
| Net change in business loans ............................ | 112 | 11/94 | C-38 | Treasury bill rate ............................................ | 114 | $11 / 94$ | C-39 |
| Capital investment: <br> Contracts and orders for plant and equipment, |  |  |  | Treasury bond yield ........................................... | 115 | 11/94 | C-40 |
| Contracts and orders for plant and equipment, 1987 dollars. | 20 | 1094 | C-38 | Inventories: <br> Manufacturing and trade, 1987 dollars | 70 | 11/94 | C-35 |
| Composite indexes: |  |  |  | Ratio, manutacturing and trade inventories to sales, | 77 | 10/94 | C-43 |
| Coincident indicators (and changes) .......................................... | 920 930 | $\begin{aligned} & 10 / 94 \\ & 10 / 94 \end{aligned}$ | $\mathrm{C}-30-31$ $\mathrm{C}-33-34$ | 1987 dollars. |  |  |  |
| Lagging indicators (and changes) ........................... | 930 910 | $10 / 94$ 1094 1 | C-33-34 $\mathrm{C}-28-29$ | Labor cost per unit of output, manufacturing, index (and changes). | 62 | 10/94 | C-41-42 |
| Ratio, coincident index to lagging index ................ | 940 | 10/94 | C-35 | Money supply: |  |  |  |
| Consumer attitudes: index of consumer | 122 | 11/94 | C-42 | Change in money supply M1 ................................. | 85 | $11 / 94$ | C-36 |
| Index of consumer expectations ${ }^{1}$ | 123 | 11/94 | C-43 | Change in money supply M2 ......................... | 102 | $11 / 94$ | C-37 |
| Index of consumer expectations ${ }^{2}$.. | 83 | 10/94 | C-43 | Money supply M1, 1987 dollars ........................... | 105 | 11/94 | C-38 |
| Index of consumer sentiment ......... | 58 | $11 / 94$ | C-34 | Money supply M2, 1987 dollars .......................... | 106 | $10 / 94$ | C-48 |
| Consumer installment credit: |  |  |  | New orders, consumer goods and materials, 1987 | 8 | 10/94 | C-37 |
| Delinquency rate ............. | 39 | 11/94 | C-31 | dollars. |  |  |  |
| Net change | 113 | 11/94 | C-39 | Prices: |  |  |  |
| Ratio, credit to personal income ......................... | 95 | 10/94 | C-46 | Consumer Price Index, all items (and changes) ...... | 320 | $11 / 94$ | C-43-44 |
| Total outstanding ........................................... | 66 | 11/94 | C-35 | Consumer Price Index for services (and changes) .. | 120 | $10 / 94$ | C-49-50 |
| Diffusion indexes: |  |  |  | Index of producer prices for sensitive crude and | 98 | 11/94 | C-37 |
| Coincident indicator components .......................... | 951 | 10/94 | C-32 | intermediate materials. |  |  |  |
| Lagging indicator components ......... | 952 | 10194 | 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: |  |  |  | Sales: |  |  |  |
| Average weekly hours, manufacturing ..- | 1 | 10/94 | C-36 | Manufacturing and trade, 1987 dollars ................... | 57 | 10194 | C-41 |
| Employees on nonagricultural payrolis ... | 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 | 10194 | C-37 |
| Housing: Index of new private housing units authorized by |  |  |  | Unemployment: |  |  |  |
| Index of new private housing units authorized by local building permits. | 29 | 10/94 | C-38 | Average duration in weeks $\qquad$ Average weokly intial claims for unemployment | 91 5 | $\begin{aligned} & 10 / 94 \\ & 10 / 94 \end{aligned}$ | $\begin{gathered} C-44 \\ C-36 \end{gathered}$ |
| New private housing units started ..................... | 28 | 11/94 | C-31 | Average weekly initial claims for unemployment insurance. |  |  |  |
| income: |  |  |  | Civilian unempioyment rate ... | 43 | 11/94 |  |
| 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 dollars. | 51 | 10/94 |  | changes). Vendor performance, slower deliveries diffusion index | 32 | 10/94 | C-39 |
| Wages and salaries in mining, manufacturing, and construction, 1987 dollars. | 53 | 11/94 | C-33 | Vendor peiformance, slower deliveries dimusion index | 32 | 1094 |  |

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

Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12. Index of net business formation ( $1967=100$ ) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948. | 115.7 90.5 | 107.5 87.0 | $105.0$ | $104.5$ | $103.7$ | $102.7$ | $100.6$ | 97.4 81.0 | ${ }_{81.8}^{96.3}$ | 95.2 83.0 | 93.4 83.6 | 91.7 85.5 | 101.9 |
| 1949 ..............." | 90.5 |  |  |  |  |  |  |  |  |  |  |  | 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 .............. | 86.4 | 86.8 | 87.6 | 86.7 | 85.3 | 85.5 | 85.9 | 85.9 | 86.4 | 87.1 | 88.3 | 88.2 | 86.7 |
| 1952 ............... | 87.8 | 89.3 | 90.3 | 89.1 | 89.4 | 91.5 | 90.6 | 91.9 | 93.0 | 92.7 | 92.1 | 91.9 | 90.8 |
| 1955 ................ | 92.7 | 92.3 | 92.1 | 91.4 | 91.7 | 89.4 | 89.2 | 89.4 | 87.9 | 87.4 | 86.5 | 86.6 | 89.7 |
| 1954 ............... | 86.5 | 86.1 | 85.5 | 86.1 | 87.0 | 87.9 | 88.6 | 88.9 | 89.7 | 92.0 | 33.3 | 93.4 | 88.8 |
| 1955 ............... | 95.1 | 96.9 | 96.9 | 96.2 | 96.9 | 97.9 | 97.2 | 96.7 | 97.1 | 96.2 | 96.1 | 95.9 | 96.6 |
| 1956 ................... | 95.9 | 96.9 | 95.5 | 96.4 | 96.3 | 94.9 | 94.4 | 93.5 | 92.7 | 94.0 | 92.7 | 92.3 | 94.6 |
| 1957 ............... | 91.5 | 91.2 | 91.3 | 91.6 | 9 C .6 | 91.6 | 91.3 | 90.5 | 89.5 | 89.3 | 88.0 | 87.2 | 90.3 |
| 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 | 90.2 |
| $1959 . . . . . . . . . . . . . . . . . . . . ~$ | 97.1 | 97.8 | 99.3 | 99.4 | 99.3 | 97.6 | 97.5 | 97.9 | 97.0 | 96.6 | 97.6 | 98.0 | 97.9 |
| 1960 ............... | 99.0 | 97.3 | 96.7 | 96.2 | 95.5 | 95.2 | 95.1 | 93.7 | 92.8 | 92.7 | 91.0 | 89.3 | 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 ............... | 92.2 | 92.8 | 93.3 | 92.7 | 92.6 | 92.3 | 92.4 | 92.2 | 93.2 | 92.8 | 92.4 | 92.4 | 92.6 |
| 1963 ................ | 92.7 | 93.7 | 94.4 | 93.9 | 93.6 | 94.0 | 94.3 | 95.5 | 95.3 | 95.6 | 94.8 | 95.4 | 94.4 |
| 1964 ............... | 96.1 | 96.8 | 96.6 | 97.4 | 99.0 | 98.2 | 97.5 | 97.0 | 99.6 | 100.4 | 100.0 | 99.6 | 98.2 |
| 1965 ............... | 99.7 | 100.3 | 100.3 | 98.9 | 98.7 | 99.9 | 100.2 | 100.0 | 99.8 | 99.5 | 100.5 | 100.3 | 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 ................ | 96.3 | 96.0 | 97.2 | 97.3 | 98.0 | 99.7 | 100.0 | 102.9 | 102.5 | 102.1 | 103.6 | 104.6 | 100.0 |
| 1968 ............... | 105.2 | 106.1 | 106.0 | 105.0 | 103.8 | 104.6 | 107.0 | 109.4 | 111.1 | 113.2 | 113.9 | 114.6 | 108.3 |
| 1969 ............... | 116.1 | 115.9 | 115.8 | 116.8 | 116.4 | 116.2 | 116.4 | 115.9 | 114.6 | 116.1 | 114.6 | 114.3 | 115.8 |
| 1970 ............... | 114.9 | 114.6 | 111.8 | 110.9 | 109.1 | 107.5 | 106.1 | 105.5 | 105.7 | 105.7 | 107.0 | 106.8 | 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 ............... | 116.1 | 116.0 | 117.2 | 118.9 | 118.7 | 118.8 | 119.4 | 119.0 | 121.0 | 122.3 | 121.7 | 122.6 | 119.3 |
| 1973 ............... | 121.4 | 121.6 | 122.0 | 121.2 | 120.1 | 119.5 | 119.3 | 118.6 | 116.8 | 116.4 | 117.3 | 115.3 | 119.1 |
| 1974 .............. | 114.1 | 113.5 | 113.2 | 116.8 | 116.3 | 115.7 | 118.8 | 117.5 | 113.8 | 107.3 | 105.9 | 105.8 | 113.2 |
| 1975 ............... | 102.8 | 101.9 | 102.9 | 103.7 | 105.1 | 110.3 | 115.2 | 114.7 | 115.4 | 114.4 | 114.4 | 117.6 | 109.9 |
| 1976 ............... | 118.3 | 118.1 | 19.7 | 119.0 | 117.4 | 121.0 | 121.1 | 119.7 | 120.1 | 121.9 | 123.8 | 124.8 | 120.4 |
| 1977 ................ | 126.8 | 127.3 | 128.3 | 127.3 | 128.1 | 130.7 | 131.9 | 133.2 | 132.3 | 134.5 | 134.4 | 135.0 | 130.8 |
| 1978 ................ | 135.0 | 136.8 | 136.6 | 138.9 | 137.2 | 138.4 | 140.0 | 138.0 | 138.3 | 140.4 | 139.7 | 138.2 | 138.1 |
| 1979 ............... | 137.1 | 138.1 | 139.4 | 138.2 | 137.8 | 137.1 | 138.0 | 137.8 | 140.5 | 138.2 | 136.7 | 140.3 | 138.3 |
| 1980 .............. | 137.9 | 137.1 | 134.9 | 129.8 | 128.5 | 125.6 | 125.2 | 127.2 | 128.6 | 126.2 | 128.4 | 129.9 | 129.9 |
| 1981 ............... | 128.0 | 128.3 | 127.9 | 129.0 | 126.5 | 124.9 | 123.8 | 125.6 | 122.7 | 19.2 | 121.6 | 119.8 | 124.8 |
| 1982 ............... | 116.3 | 118.8 | 118.7 | 119.0 | 118.0 | 115.2 | 115.2 | 115.8 | 112.0 | 112.0 | 115.4 | 120.0 | 116.4 |
| 1983 ............... | 114.7 | 113.8 | 115.5 | 116.4 | 117.3 | 118.5 | 117.6 | 118.2 | 118.1 | 120.9 | 120.5 | 118.8 | 117.5 |
| 1984 ............... | 129.2 | 122.6 | 121.6 | 121.4 | 120.4 | 120.7 | 120.5 | 121.6 | 122.5 | 121.4 | 120.0 | 119.5 | 121.3 |
| 1985 .......... | 121.2 | 122.1 | 121.4 | 120.8 | 120.4 | 120.4 | 121.5 | 121.2 | 120.7 | 121.2 | 120.4 | 119.9 | 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 ................ | 118.1 | 120.5 | 122.0 | 120.7 | 119.8 | 120.3 | 120.4 | 121.5 | 122.8 | 121.8 | 122.8 | 123.2 | 121.2 |
| 1988 ................ | 124.0 | 124.1 | 125.4 | 122.7 | 124.3 | 123.7 . | 123.3 | 124.5 | 124.2 | 124.6 | 123.2 | 125.5 | 124.1 |
| 1989 ............... | 125.5 | 125.9 | 126.5 | 125.8 | 125.4 | 125.6 | 124.6 | 123.2 | 123.0 | 123.3 | 123.7 | 124.6 | 124.8 |
| 1990 ............... | 125.9 | 125.1 | 124.7 | 123.3 | 121.6 | 121.1 | 120.0 | 119.7 | 118.6 | 117.2 | 116.1 | 115.2 | 120.7 |
| 1991 ............... | 115.2 | 114.6 | 14.4 | 114.9 | 115.5 | 115.5 | 115.5 | 116.0 | 114.9 | 115.4 | 115.8 | 114.9 | 115.2 |
| 1992 ............... | 117.2 | 116.0 | 116.4 | 115.4 | 113.2 | 117.4 | 116.6 | 144.1 | 118.5 | 116.4 | 115.3 | 119.0 | 116.3 |
| 1993 ................ | 119.3 | 120.9 | 122.0 | 121.0 | 117.6 | 120.8 | 120.7 | 121.1 | 122.3 | 119.2 | 123.5 | 125.3 | 121.1 |
| 13. Number of new business incorporations (number) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ................ | 9,380 | 8,329 | 8,349 | 8,396 | 8,064 | 8,210 | 8,168 | 7,439 | 7,483 | 7,349 | 7.241 | 7.054 | 95,462 |
| 1949 ........... | 7,012 | 6,826 | 6,791 | 6,879 | 7,006 | 6,879 | 7,057 | 7,330 | 7,403 | 7,532 | 7,659 | 7,788 | 86,162 |
| 1950 ............ | 7,830 | 8,275 | 8,078 | 8,132 | 8,403 | 8,394 | 7,898 | 7.684 | 7,092 | 7.176 | 7,059 | 7,007 | 93,028 |
| 1951 ............... | 7,214 | 7,016 | 6,937 | 7,082 | 6,848 | 6,759 | 6,796 | 6,880 | 6,952 | 6,995 | 7.19 | 7,181 | 83,779 |
| 1952 ............... | 7,080 | 7,214 | 7,348 | 7,499 | 7,441 | 7700 | 7,683 | 8,065 | 8,269 | 8,341 | 8,265 | 8,096 | 92,991 |
| 1953 ............... | 8,304 | 8,351 | 8,634 | 8,534 | 8,785 | 8,605 | 8,757 | 8,515 | 8,185 | 8,698 | 8,556 | 8,696 | 102,620 |
| 1954 ............. | 8,638 | 8,937 | 9,155 | 9,276 | 9,158 | 9,436 | 9,772 | 9,882 | 10,085 | 10,730 | 11,212 | 11,604 | 117,885 |
| 1955 ............... | 11,902 | 11,843 | 11,679 | 11,215 | 11.521 | 12,072 | 11,655 | 11.572 | 11,968 | 11,668 | 11,761 | 11,560 | 140,416 |
| 1956 ............... | 11,620 | 12,449 | 11,591 | 11,888 | 12,246 | 11,999 | 11,851 | 11,707 | 11,193 | 11,925 | 11,186 | 11,139 | 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 ............... | 11,042 | 11,049 | 11,042 | 10,636 | 11,752 | 12,032 | 12,504 | 13,644 | 13.933 | 13.669 | 14,599 | 15,577 | 151.479 |
| 1959 ............. | 16,346 | 16,255 | 16,548 | 16,604 | 16,296 | 15,204 | 15,658 | 15,813 | 15,728 | 15,383 | 15,695 | 16,959 | 191,489 |
| 1960 .............. | 16,561 | 15,274 | 15,233 | 15,280 | 15,176 | 15,630 | 15,828 | 15,114 | 15,112 | 15,035 | 14,264 | 14,097 | 182,604 |
| 1961 ............. | 13,607 | 14,570 | 14,658 | 15,327 | 15,298 | 15,431 | 15,492 | 15,277 | 15,402 | 16,035 | 16,149 | 15,881 | 183,127 |
| 1962 ............. | 15,599 | 15,758 | 15,670 | 15,372 | 15,245 | 14,947 | 15,171 | 15,056 | 15,249 | 14,892 | 14,951 | 14,985 | 182,895 |
| 1963 ................ | 14,924 | 15,390 | 15.563 | 15,305 | 15,682 | 15.536 | 15,431 | 16,093 | 15,689 | 16,275 | 15,759 | 15,867 | 187,514 |
| 1964 ......... | 15,993 | 16,326 | 15,917 | 16,132 | 16,473 | 16,282 | 16,550 | 15,692 | 16,948 | 16,728 | 16,804 | 17,021 | 196,866 |
| 1965 ............... | 16.784 | 16.854 | 17,131 | ${ }^{16,664}$ | 16.580 | 17.017 | 16,844 | 16,901 | 17,136 | 96,994 | 17,606 | 17,625 | 204,136 |
| 1966 ................ | 18,087 | 17,451 | 17,266 | 17.057 | 16,644 | 16.577 | 16,074 | 16,343 | 15.764 | 16,233 | 16,206 | 16,583 | 200,285 |
| 1967 ................ | 16,703 | 15,987 | 16,244 | 16,760 | 17,627 | 17,799 | 16,300 | 17,674 | 17,818 | 17,654 | 17,958 | 18,238 | 206,762 |
| 1968 .............. | 18,061 | 18,041 | 18,538 | 18,663 | 18,723 | 18,839 | 19,407 | 19,947 | 20,582 | 21,093 | 20,890 | 20,619 | 233,403 |
| 1969 .............. | 21,364 | 22,105 | 22,083 | 23,262 | 23,118 | 23,439 | 23,366 | 22,871 | 22,594 | 24,263 | 23,125 | 22,404 | 273,994 |
| 1970 ................ | 22,196 | 22,968 | 21,346 | 21,829 | 21,874 | 21,796 | 21,614 | 21,796 | 22,181 | 21,712 | 22,217 | 22,272 | 263,804 |
| 1971 ................ | 22,563 | 21,034 | 22,883 | 22,814 | 23,960 | 24,481 | 24,677 | 25,012 | ${ }^{23,623}$ | 25,356 | 25,510 | 25,634 | 287,547 |
| 1972 ............... | 25,270 | 25,084 | 26,231 | 26,630 | 26,270 |  | 26,789 | 26,365 | 27,168 | 27,529 | 26,234 | 27,699 | 317,444 |
| 1973 ............... | 27,796 | 28,752 | 28,964 | 28,522 | 28,286 | 27,999 | 27,477 | 26,689 | 26,240 | 26,809 | 26,718 | 24,881 | 329,133 |
| 1974 ............. | 26,511 | 27.056 | 26,458 | 29,071 | 27,562 | 25,785 | 27,790 | 26,495 | 26,313 | 25,404 | 25,555 | 25,003 | 319,003 |
| 1975 ................ | 24,809 | 24,931 | 25.076 | 26,708 | 26,632 | 26,307 | 28,655 | 27,810 | 28,359 | 29,079 | 28,634 | 29,282 | 326,282 |
| 1976 ............... | 29,613 | 29,772 | 31,000 | 30,808 | 28,784 | 31,420 | 31,037 | 31,301 | 31,921 | 32,160 | 33,183 | 33,124 | 374,123 |
| 1977 ............... | 34,311 | 33,844 | 35,018 | 34,529 | 35,256 | 36,694 | 36,874 | 38,180 | 37,271 | 38,213 | 38,308 | 38,900 | 437,398 |
| 1978 ............... | 36,414 | 39,434 | 37,847 | 39,585 | 39,059 | 39,860 | 40,152 | 41,007 | 41,553 | 41,437 | 41.423 | 42,179 | 479,950 |
| 1979 .............. | 42,043 | 42,014 | 43,299 | 43,401 | 44,317 | 43,504 | 44,513 | 43,634 | 44,773 | 45,295 | 44,540 | 43,563 | 524,296 |
| 1980 ................ | 44,230 | 44,175 | 43,359 |  | 42,710 | 40,648 | 43,621 | 44,255 | 45,746 | 45,945 | 46,750 | 47.840 | 537,519 |
| $1981 . . . . . . . . . . . . . .$. | 46,039 | 40,588 | 47,972 | 49,413 | 48,866 | 49,172 | 49,038 | 48,631 | 48,450 | 47,947 | 49,413 | 47,556 | 581,085 |
| 1982 ............... | 43,330 | 47,234 | 46,899 | 46,876 | 46,995 | 45,936 | 44,525 | 46,981 | 45,652 | 45,530 | 48,474 | 57.507 | 565,839 |
| 1983 ................ | 49,999 | ${ }^{48,296}$ | 48,032 | 48,903 | 50,211 | 50,992 | 48,601 | 52,828 | 50,445 | 50,441 | 51,642 | 51,557 | 601,947 |
| 1984 ............... | 52,674 | 53,535 | 53,075 | 53,298 | 50,736 | 53,884 | 53,211 | 52,025 | 52,646 | 52,567 | 53,838 | 53,558 | 635,067 |
| 1985 ............... | 55,674 | 55,479 | 55,335 | 55,133 | 55,545 | 55,339 | 54,507 | 56,159 | 56,662 | 58,307 | 57,308 | 58,074 | 669,522 |
| 1986 ............... | 57,636 | 59,114 | 58,870 | 59,156 | 57,747 | 57,446 | 67,717 | 56,299 | 57,942 | 57,120 | 56,652 | 65,691 | 701,390 |
| 1987 ............... | 55,348 | 58,495 | 60,248 | 57.537 | 56,178 | 57,612 | 57,330 | 57,650 | 57,568 | 55,504 | 56,681 | 55,226 | 685,377 |
| 1988 ............... | 56,108 | 56,475 | 60,655 | 54,670 | 58,046 | 55,620 | 56,915 | 59,730 | 55,915 | 56,529 | 54,553 | 58,592 | 683,808 |
| 1989 .............. | 58,253 | 58,560 | 57,383 | 57,631 | 57,326 | 56,950 | 54,948 | 56,500 | 55,390 | 54,651 | 55,116 | 56,945 | 678,653 |
| 1990 ................. | 59.149 | 56,325 | 56,172 | 55,000 | 53,616 | 53,784 | 52,142 | 52,958 | 52.176 | 51,899 | 51,429 | 52,060 | 646,702 |
| 1991 ............... | 51,991 | 50,384 | 51,536 | 52,235 | 52,327 | ${ }_{58,731}$ | 52,767 | 53,313 | 52,284 | 53,892 | 54,163 | 52,923 | ${ }_{669} 68.886$ |
| ${ }_{1993}^{1992}$................ | 58,141 55,625 | 55,092 59,691 | 57,449 61,002 | 54,474 59.648 | 48,688 51,765 | 58,730 60,422 | 56,942 68887 | 51,245 58,209 | 59,179 63,758 | 52,492 55,294 | 65,392 | 61,695 61,873 | 669,519 707,413 |
| 1993 ................ |  | 59,691 | 61,002 | 59,648 | 51,765 | 60,422 | 68,387 | 58,209 | 63,758 | 55,294 | 61,739 | 61,873 | 707,413 |

Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14. Current liabilities of business failures, NSA (mil. \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ............... | 13.0 | 25.6 | 17.5 | 15.3 | 13.8 | 12.2 | 13.9 | 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 | 20.9 | 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 | 85.4 | 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 | 31.9 | 112.7 | 62.8 | 73.7 | 116.4 | 127.1 | 96.8 | 1,144.9 |
| 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 |
| 1974 ............... | 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 |
| 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 | 2,789.7 | 1,968.7 | 2,045.6 | 1,471.3 | 2,763.7 | 2,328.4 | 29,268.6 |
| 1985 ............... | 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 |
| 1987 ............... | 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 | 3,065.6 | 2,316.5 | 2,453.4 | 4,582.8 | 2,291.2 | 3,555.5 | $1,785.0$ | 2,020.0 | 2,026.8 | 35,908.1 |
| 1989 ............... | 2,102.9 | 2,307.7 | 6,242.1 | 6,170.5 | 1,863.6 | 6,318.9 | 3,992.8 | 3,435.1 | 1,585.8 | 2,106.8 | 1,892.1 | 4,310.6 | 42,328.8 |
| 1990 ................ | 6,168.0 | 7,247.4 | 3,579.7 | 6,365.2 | 4,688.1 | 6.911 .8 | 2,143.7 | 3,764.4 | 4,136.2 | 3,635.6 | 3,927.4. | 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 | 5,544.2 | 2,738.0 | 5,552.7 | 7,144.9 | 3,246.9 | 2,531.2 | 2,991.0 | 2,552.3 | 47,811.0 |
| 23. Index of spot market prices, raw industrial materials, NSA (1967-100) © ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ............... | 129.1 | 124.2 | 19.2 | 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 | 108.6 | 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 | 103.3 | 104.7 | 105.4 | 105.5 | 104.4 | 102.7 |
| 1960 ............... | 105.3 | 103.9 | 102.0 | 103.4 | 103.7 | 102.3 | 101.2 | 101.7 | 100.8 | 99.3 | 98.1 | 96.4 | 101.5 |
| $1961 . . . . . . . . . . . . . .$. | 96.9 | 98.9 | 102.7 | 103.7 | 104.0 | 100.6 | 101.3 | 102.5 | 102.5 | 101.9 | 98.5 | 100.6 | 101.2 |
| 1962 ............... | 102.5 | 100.2 | 100.0 | 97.9 | 97.4 | 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 | 94.8 | 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 |
| $1968 . . . . . . . . . . . . . . . ~$ $1969 . . . . . . . . . .$. | 99.4 103.0 | 99.1 105.9 | 99.7 106.5 | 97.9 108.9 | 95.7 110.0 | 111.2 | 94.0 112.0 | 94.5 | 95.7 116.9 | 97.1 115 | 99.9 115.1 | 100.3 | 111.3 |
| 1969 ............... | 103.0 | 105.9 | 106.5 | 108.9 | 110.0 | 11.2 | 12.0 | 14.5 | 16.9 | 15.1 | 15.1 | 16.7 | 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 |
| ${ }_{1} 1973$................ | 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 |
| 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 | 288.5 |
| 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 | 258.2 | 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 | 253.1 | 252.4 | 257.1 | 252.0 | 242.9 | 240.7 | 2398 | 238.0 | 236.9 | 234.5 | 235.0 | 244.9 |
| 1986 ............... | 236.9 | 233.3 | 223.1 | 299.9 | 221.3 | 225.0 | 227.6 | 212.0 | 221.2 | 235.5 | 243.7 | 247.5 | 228.9 |
| 1987 ............... | 252.8 | 247.2 | 246.3 | 253.8 | 272.6 | 276.4 | 284.2 | 288.3 | 292.4 | 294.6 | 292.0 | 293.1 | 274.5 |
| 1988 ............... | 292.5 | 288.9 | 292.3 | 297.3 | 301.6 | 309.5 | 309.0 | 309.9 | 306.4 | 305.0 | 309.7 | 317.2 | 303.3 |
| 1989 .............. | 324.7 | 329.3 | 334.6 | 335.0 | 330.5 | 329.1 | 326.7 | 325.0 | 327.0 | 325.7 | 314.2 | 301.7 | 325.3 |
|  | 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 | 2710 | 269.2 | 283.0 |
| ${ }_{1993} 1992 . . . . . . . . . . . . .$. | 265.6 268.7 | 262.8 2700 | 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

Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 28. New private housing units started (AR, thous.) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ............... | 1,385 | 1,200 | 1,379 | 1,501 | 1,450 | 1,441 | 1,419 | 1,329 | 1,303 | 1,190 | 1,196 | 1,218 | 1,344 |
| 1949 .............. | 1,196 | 1,137 | 1,171 | 1,292 | 1,319 | 1,341 | 1,384 | 1,500 | 1,603 | 1,662 | 1,785 | 1.824 | 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 |
| 1955 .............. | 1,928 | 1,638 | 1,481 | 1,352 | i, 159 | 1,419 | 1,257 | 1,334 | 1,456 | 1,386 | 1,324 | 1,330 | 1,420 |
| 1952 ............... | 1,388 | 1,516 | 1.483 | 1,442 | 1,408 | 1,353 | 1,438 | 1,443 | 1,483 | 1,513 | 1,475 | 1,476 | 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 |
| $1954 . . . . . . . . . . . . .$. | 1,358 | 1,417 | 1,414 | 1,433 | 1,412 | 1,498 | 1,569 | 1,663 | 1,618 | 1,610 | 1,730 | 1,807 | 1.532 |
| 1955 ................ | 1,757 | 1.664 | 1,684 | 1.708 | 1.730 | 1,704 | 9,632 | 1,625 | 1,580 | 1,490 | 1,434 | 1.431 | 1,627 |
| 1956 ............... | 1,449 | 1,444 | 1,401 | 1.408 | 1,375 | 1,325 | 1,289 | 1,313 | 1,234 | 1,266 | 1,212 | 1,184 | 1,325 |
| 1957 ............... | 1,151 | 1,168 | 1,173 | 1,147 | 1,174 | 1,175 | 1,191 | 1,193 | 1,191 | 1,204 | 1,162 | 1,146 | 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 |
| $1959 . . . . . . . . . . . . .$. | 1,657 | 1,667 | 1,620 | 1,590 | 1,498 | 1,503 | 1,547 | 1,430 | 1,540 | 1,355 | 1,416 | 1,601 | 1,517 |
| 1960 ................ | 1.460 | 1,503 | 1,109 | 1,289 | 1,271 | 1,247 | 1,197 | 1,344 | 1,097 | 1,246 | 1,246 | 1,063 | \{,252 |
| 1961 ............... | 1,183 | 1,226 | 1,312 | 1,166 | 1,228 | 1,382 | 1,335 | 1,312 | 1,429 | 1,415 | 1,385 | 1,365 | 1,313 |
| 1962 ................ | 1,361 | 1,278 | 1,443 | 1.524 | 1,483 | 1,404 | 1,450 | 1,517 | 1,324 | 1,533 | 1,622 | 1,564 | 1,463 |
| 1963 ............... | 1,244 | 1,456 | 1,534 | 1.689 | 1,641 | 1,588 | 1,614 | 1,639 | 1,763 | 1,779 | 1,622 | 1,491 | 1,603 |
| 1964 .............. | 1,603 | 1,820 | 1,517 | 1,448 | 1,467 | 1,550 | 1,562 | 1,569 | 1,455 | 1,524 | 1,486 | r,484 | 1,529 |
| ${ }^{1965}$................. | 1,361 | 1,433 | 1,423 | 1,438 | 1,478 | 1,488 | 1,529 | 1,432 | 1,482 | 1,452 | 1,460 | 1,656 | 1,473 |
| 1966 ............... | 1,370 | 1,378 | 1,394 | 1,352 | 1,265 | 1,194 | 1,086 | 1,119 | 1,046 | 843 | 961 | 990 | 1.165 |
| 1967 ............... | 1,067 | 1,123 | 1,056 | 1,091 | 1,304 | 1,248 | 1,364 | 1,407 | 1,421 | 1,491 | 1,538 | 1,308 | 1,292 |
| 1968 ............... | \%,380 | 1,520 | 1,466 | 1,554 | 1,408 | 1,405 | 1,512 | 1,495 | 1,556 | 1,569 | 1,630 | 1,548 | 1,508 |
| 1969 ............... | 1,769 | 1,705 | 1,561 | 1,524 | 1,583 | 1,528 | 1,368 | 1,358 | 1,507 | 1,381 | 1,229 | 1,327 | 1,467 |
| 1970 ............... | 1,085 | 1,305 | 1,319 | 1,264 | 1,290 | 1,385 | 1.517 | 1,399 | 1,534 | 1,580 | 1.647 | 1,893 | 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 ............... | 2.494 | 2,390 | 2,334 | 2,249 | 2,221 | 2,254 | 2,252 | 2,382 | 2,481 | 2,485 | 2,421 | 2,366 | 2,357 |
| 1973 ............... | 2,481 | 2,289 | 2,365 | 2,084 | 2,266 | 2,067 | 2,123 | 2,051 | 1,874 | 1,677 | 1,724 | 1,526 | 2,045 |
| 1974 ............... | 1,451 | 1,752 | 1,555 | 1,607 | 1,426 | 1,513 | 1,316 | 1,142 | 1,150 | 1,070 | 1,026 | 975 | 1,338 |
| 1975 ............... | 1,032 | 904 | 993 | 1,005 | 1,121 | 1,087 | 1,226 | 1,260 | 1,264 | 1,344 | 1,360 | 1,321 | 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 |
| 1977 ............... | 1,527 | 1,943 | 2,063 | 1,892 | 1,971 | 1,893 | 2,058 | 2,020 | 1,949 | 2,042 | 2,042 | 2,142 | 1,987 |
| 1978 ............... | 1,718 | 1,738 | 2,032 | 2,197 | 2,075 | 2,070 | 2,092 | 1,996 | 1,970 | 1,981 | 2,094 | 2,044 | 2,020 |
| $1979 . . . . . . . . . . . . . .$. | 1,630 | 1,520 | 1,847 | 1,748 | 1,876 | 1,913 | 1,760 | 1,778 | 1,832 | 1,681 | 1,524 | 1,498 | 1,745 |
| 1980 ................ | 1,341 | 1,350 | 1,047 | 8,051 | 927 | 1,196 | 1,269 | 1,436 | 1,471 | 1,523 | 1,510 | 1,482 | 1,292 |
| $1981 . . . . . . . . . . . . . .$. | 1,547 | 1,246 | 1,306 | 1,360 | 1,140 | 1,045 | 1,041 | 940 | 911 | 873 | 837 | 910 | 1,084 |
| 1982 ............... | ${ }^{843}$ | 866 | 931 | 917 | 1,025 | 902 | 1,166 | 1,046 | 1,144 | 1,173 | 1,372 | 1,303 | 1,062 |
| 1983 ................ | 1,586 | 1,699 | 1,606 | 1,472 | 1,776 | 1,733 | 1,785 | 1,910 | 1,710 | 1.715 | 1,785 | 1,688 | 1,703 |
| 1984 ................ | 1,897 | 2,260 | 1,663 | 1,859 | 1,774 | 1,843 | 1,732 | 1,586 | 1,698 | 1,590 | 1,689 | 1,612 | 1,750 |
| 1985 ............... | 1,711 | 1,632 | 1,800 | 1,821 | 1,680 | 1.676 | 1,684 | 1,743 | 1,676 | 1,834 | 1,698 | 1,942 | 1,742 |
| 1986 ............... | 1,972 | 1,848 | 1,876 | 1,933 | 1,854 | 1,847 | 1,782 | 1,807 | 1,687 | 1,681 | 1,623 | 1,833 | 1,805 |
| 1987 ............... | 1,774 | 1,784 | 1,726 | 1,614 | 1,628 | 1,594 | 1,575 | 1,605 | 1,695 | 1,515 | 1,656 | 1,400 | 1,620 |
| 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 | 1,425 | 1,422 | 1,339 | 1,331 | 1,397 | 1,427 | 1,332 | 1,279 | 1,410 | 1,351 | 1,251 | 1,376 |
| 1990 ............... | 1,551 | 1,437 | 1,289 | 1,248 | 1,212 | 1,177 | 1,771 | 1,115 | 1,110 | 1,014 | 1,145 | 969 | 1,193 |
| $1991 . . . . . . . . . . . . . .$. | 798 | 965 | 921 | 1,001 | 996 | 1,036 | 1,063 | 1,049 | 1,015 | 1,079 | 1.103 | 1,079 | 1,014 |
| 1992 ............... | 1,144 | 1,245 | 1,324 | 1,094 | 1,223 | 1,129 | 1,132 | 1,216 | 1,207 | 1,239 | 1,221 | 1,258 | 1,200 |
| 1993 ............... | 1,170 | 1,194 | 1,092 | 1,232 | 1,241 | 1,238 | 1,245 | 1,319 | 1,359 | 1,409 | 1.406 | 1,612 | 1,288 |
| 39. Consumer installment loans delinquent 30 days and over, EOP (pct) () ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ................ | 2.31 | 2.11 | 2.49 | 2.34 | 2.21 | 2.29 | 2.17 | 2.22 | 2.20 | 2.23 | 2.37 | 2.02 | 2.02 |
| 1949 .............. | 2.22 | 2.81 | 2.85 | 2.70 | 2.80 | 2.91 | 2.91 | 2.55 | 2.69 | 2.70 | 2.69 | 2.67 | 2.67 |
| 1950 ............... | 2.70 | 2.73 | 2.38 | 2.45 | 2.43 | 2.22 | 2.17 | 2.26 | 2.30 | 2.23 | 1.97 | 2.09 | 2.09 |
| 1951 ............... | 2.20 | 2.08 | 2.10 | 2.31 | 2.09 | 2.06 | 2.17 | 2.11 | 2.09 | 2.05 | 2.23 | 2.15 | 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 ............... | 1.87 | 1.83 | 1.90 | 1.75 | 1.88 | 1.82 | 1.83 | 2.01 | 1.97 | 1.97 | 2.02 | 1.98 | 1.98 |
| 1954 ............... | 2.05 | 2.07 | 1.98 | 1.99 | 1.94 | 1.91 | 1.86 | 1.83 | 1.81 | 1.84 | 1.79 | 1.65 | 1.65 |
| 1955 ............... | 1.61 | 1.62 | 1.53 | 1.55 | 1.55 | 1.50 | 1.49 | 1.44 | 1.47 | 1.47 | 1.44 | 1.50 | 1.50 |
| 1956 ............... | 9.52 | 1.46 | 1.53 | 1.54 | 1.49 | 1.51 | 1.51 | 1.53 | 1.54 | 1.48 | 1.49 | 1.52 | 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 ............... | 1.57 | 1.63 | 1.76 | 1.70 | 1.74 | 1.75 | 1.71 | 1.75 | 1.63 | 1.60 | 1.60 | 1.55 | 1.55 |
| $1959 . . . . . . . . . . . . .$. | +.56 | 1.55 | 1.52 | 1.50 | 1.49 | 1.43 | 1.36 | 1.52 | 1.56 | 1.67 | 1.75 | 1.65 | 1.65 |
| 1960 ............... | 1.71 | 1.60 | 1.60 | 1.64 | 1.64 | 1.68 | 1.73 | 1.70 | 1.71 | 1.79 | 1.78 | 1.76 | 1.76 |
| 1961 ............... | 1.81 | 1.84 | 1.81 | 1.85 | 1.83 | 1.79 | 1.83 | 1.80 | 1.76 | 1.70 | 1.67 | 1.68 | 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 ............... | 1.59 | 1.60 | 1.64 | 1.59 | 1.57 | 1.68 | 1.68 | 1.67 | 1.73 | 1.65 | 1.79 | 1.76 | 1.76 |
| 1964 ............ | 1.69 | 1.68 | 1.66 | 1.59 | 1.68 | 1.63 | 1.63 | 1.71 | 1.65 | 1.71 | .............. | 1.70 | 1.70 |
| 1965 ................ | .................... | 1.79 | ................... | 1.69 | .................. | 1.76 | .......... | 1.82 | $\ldots$ | 1.81 | .......... | 1.65 | 1.65 |
| ${ }^{1966}$................ | .................... | 1.75 | .................... | 1.75 | .................... | 1.76 | .................... | 1.76 | ................. | 1.77 | ............. | 1.74 | 1.74 |
| 1967 ................ | .................... | 1.86 | ................... | 1.87 | .................. | 1.72 | ............... | 1.64 | ..." | 1.67 | ........... | 1.69 | 1.69 |
| ${ }_{1}^{1968}$................ | ................... | 1.57 | $\cdots$ | 1.59 | $\cdots . . . . . . . . . . . . . . . . . . ~$ | 1.56 | ................. | 1.55 | $\ldots$ | 1.48 | .......... | 1.63 | 1.63 |
| 1969 ................ | .................. | 1.57 | .................... | 1.63 | ................... | 1.64 | ................. | 1.68 | .................. | 1.68 | ........... | 1.76 | 1.76 |
| 1970 ................ | ................... |  | $\ldots$ |  | ................ |  | ....... |  | ................... |  | $\ldots$ |  | 1.90 |
| 1971 | ................... | 1.81 1.72 | ................... | 1.72 1.76 | $\cdots$ | 1.78 1.85 | $\cdots$ | 1.75 | $\cdots$ | 1.90 | ............ | 1.72 | 1.72 |
| 1973 ................... | ........................ | 2.01 | ........................ | 2.01 | $\cdots$ | 1.89 | $\cdots$ | 2.03 | .......................... | 2.11 | ............... | 2.27 | 1.96 2.27 |
| 1974 ................ | .................... | 2.54 | $\ldots . . . .$. | 2.56 | ..................... | 2.61 | ................... | 2.63 | ........... | 2.65 | ..................... | 2.80 | 2.80 |
| 1975 ................ | 2.59 | 2.71 | 2.94 | 2.74 | 2.65 | 2.63 | 2.60 | 2.65 | 2.59 | 2.48 | 2.29 | 2.47 | 2.47 |
| 1976 ............... | 2.49 | 2.46 | 2.45 | 2.34 | 2.41 | 2.40 | 2.39 | 2.39 | 2.36 | 2.53 | 2.19 | 2.40 | 2.40 |
| 1977 ............... | 2.37 | 2.37 | 2.37 | 2.40 | 2.43 | 2.38 | 2.41 | 2.34 | 2.36 | 2.41 | 2.24 | 2.36 | 2.36 |
| 1978 ................ | 2.42 | 2.48 | 2.51 | 2.44 | 2.28 | 2.44 | 2.42 | 2.37 | 2.42 | 2.35 | 2.34 | 2.45 | 2.45 |
| $1979 . . . . . . . . . . . . . .$. | 2.12 | 2.31 | 2.33 | 2.43 | 2.37 | 2.45 | 2.45 | 2.47 | 2.59 | 2.45 | 2.50 | 2.64 | 2.64 |
| 1980 ................ | 2.37 | 2.32 | 2.53 | 2.53 | 2.64 | 2.74 | 2.77 | 2.94 | 2.70 | 2.53 | 2.66 | 2.57 | 2.57 |
| 1981 ............... | 2.42 | 2.51 | 2.53 | 2.40 | 2.40 | 2.30 | 2.22 | 2.35 | 2.28 | 2.37 | 2.42 | 2.37 | 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 |
| $1983 . . . . . . . . . . . . . .$. | 2.24 | 2.23 | 2.22 | 2.07 | 2.00 | 1.92 | 1.95 | 1.90 | 1.88 | 1.91 | 1.86 | 1.94 | 1.94 |
| 1984 ............... | 1.84 | 1.78 | 1.85 | 2.06 | 1.96 | 2.02 | 1.96 | 1.93 | 2.10 | 1.91 | 1.97 | 2.09 | 2.09 |
| 1985 ............... | 2.20 | 2.19 | 2.40 | 2.38 | 2.25 | 2.33 | 2.29 | 2.35 | 2.39 | 2.26 | 2.32 | 2.32 | 2.32 |
| 1986 ............... | 2.27 | 2.29 | 2.41 | 2.44 | 2.52 | 2.53 | 2.22 | 2.33 | 2.24 | 2.25 | 2.34 | 2.26 | 2.26 |
| 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 ............... | 2.44 | 2.32 | 2.19 | 2.31 | 2.32 | 2.34 | 2.45 | 2.38 | 2.42 | 2.62 | 2.48 | 2.49 | 2.49 |
| 1989 ............... | 2.32 | 2.42 | 2.39 | 2.35 | 2.34 | 2.30 | 2.86 | 2.73 | 2.88 | 2.71 | 2.63 | 2.64 | 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 |
| $1991 . . . . . . . . . . . . .$. | 2.53 | 2.53 | 2.67 | 2.65 | 2.65 | 2.73 | 2.79 | 2.79 | 2.74 | 2.58 | 2.62 | 2.58 | 2.58 |
| $1992 . . . . . . . . . . . . . . . ~$ | 2.94 2.44 | 2.84 2.39 | 2.86 2.31 | 2.67 | 2.77 | 2.60 2.06 | 2.55 2.08 | 2.60 203 | $\begin{array}{r}2.46 \\ \hline\end{array}$ | ${ }^{2} .51$ | ${ }_{1}^{2.53}$ | $\stackrel{2.43}{ }$ | 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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tion, 1120 Connecticut Avenue, NW. Washington, DC 20036.
AR Annual rate
EOP End of period

Historical Data for Selected Series-Continued


Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 52. Personal income in 1987 dollars (AR, bil. \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ................ | $\begin{aligned} & 950.0 \\ & 956.2 \end{aligned}$ | $\begin{aligned} & 943.7 \\ & 956.5 \end{aligned}$ | $\begin{aligned} & 958.7 \\ & 961.6 \end{aligned}$ | $\begin{aligned} & 958.4 \\ & 961.9 \end{aligned}$ | $\begin{aligned} & 962.3 \\ & 959.5 \end{aligned}$ | $\begin{aligned} & 976.4 \\ & 951.6 \end{aligned}$ | $\begin{aligned} & 974.7 \\ & 944.2 \end{aligned}$ | $\begin{aligned} & 981.2 \\ & 952.1 \end{aligned}$ | $\begin{aligned} & 982.1 \\ & 967.4 \end{aligned}$ | $\begin{aligned} & 985.8 \\ & 945.8 \end{aligned}$ | $\begin{aligned} & 979.4 \\ & 9.4 .4 \end{aligned}$ | $\begin{aligned} & 971.4 \\ & 963.4 \end{aligned}$ | $\begin{aligned} & 968.7 \\ & 956.5 \end{aligned}$ |
| 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 | \$,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 | 1,968.0 |
| 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 | 1,609,4 | 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.\% | \$,766.1 | 1,776.7 | 1,780. 7 | 1,793.8 | 1,808.9 | 1,754.3 |
| 1965 ............... | 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 | 2,063.7 | 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 | 2,206.6 | 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 | 2,766.5 | 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 ............... | 3,789.5 | 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 | 3,771.9 |
| $1981 . . . . . . . . . . . . . .$. | 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 |
| 1983 ............... | 3,278.9 | 3,274.3 | 3,281.1 | 3,291.9 | 3,309.5 | 3,314.8 | 3,322.0 | 3,309.8 | 3,327.8 | 3,360.6 | 3,385.3 | 3,407.1 | 3,321.9 |
| 1984 .............. | 3,427.9 | 3,468.2 | 3,467.7 | 3,493.7 | 3,491.7 | 3,513.6 | 3,529.6 | 3,545.8 | 3,568.9 | 3,553.6 | 3,568.2 | 3,599.1 | 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 | 4,251.9 | 4,238.0 | 4,230.7 | 4,270.8 | 4,268.2 | 4,284.7 | 4,300.2 | 4,323.4 | 4,246.4 |
| 53. Wages and salaries in 1987 dollars, mining, manufacturing, and construction (AR, bil. \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 ............... | 403.0 | 402.5 | 404.6 | 411.8 | 409.3 | 408.8 | 400.8 | 411.2 | 414.9 | 418.6 | 417.8 | 422.6 | 410.5 |
| 1957 ................ | 419.3 | 421.3 | 418.8 | 417.1 | 413.4 | 414.6 | 412.1 | 412.0 | 408.4 | 405.2 | 402.0 | 396.4 | 411.7 |
| 1958 ................ | 388.9 | 380.6 | 378.7 | 371.3 | 371.3 | 375.6 | 379.5 | 385.4 | 389.8 | 387.8 | 400.4 | 403.9 | 384.4 |
| 1959 .... | 405.9 | 408.6 | 416.9 | 420.8 | 426.3 | 427.7 | 426.6 | 413.6 | 412.0 | 408.9 | 413.5 | 426.3 | 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 | 577.0 | 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 | 626.5 | 628.9 | 609.5 |
| 1973 ............... | 636.5 | 642.1 | 839.9 | 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 |
| 1985 ............. | 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 | 651.4 | 650.2 | 662.4 | 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 |

Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 58. Index of consumer sentiment, NSA (1966:1=400) (1) ${ }^{\text {i }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 |  |  |  |  |  | ..................0 | ...................." | ..................." |  |  |  |  |  |
| 1949 ...............00 | .............. | .................... | ..................... | .................... | ..................... | .................... | .. | .................... | .................... | .................... | .................... | ................... | ............ |
| 1950 ......... | .................... | .................... | .................... | .................... | ..................." | ................... | .................... | ................... | .................... | .................... | ................... | .................... | $\ldots$ |
| 1951 ........ | ...... | .................... | .................... | .................... | .................... | .................... | .................... | ................... | .................... | .................... | 96 | .................... | .-......................... |
| 1952 ....... | ..... |  | ......... | ....... |  | ................ | ........... | 80 | ............. | ......... |  | ..... | .....0.0.................... |
| 1953 | ....... | $90.7$ $82.0$ | ......... | ..................... |  | .................... | ............ | 80.8 | ................ | ................ | $80.7$ | ................... | ......................... |
| 1954 | ...... | $82.0$ | ...... | ................... | 82.9 | ...... | ............. |  | .................. | $\ldots . .$. |  | ................... | ......................... |
| 4955 | .................... | 95.9 | ................... | .................." | 99.1 | ...................." | ."................". |  | .................... | ..................." | 99.7 | .................." | ......................... |
| 1956 ......... | o.................. | ................... | .... | ................. | 98.2 | .................... | .................... | 99.9 | .... | .................... | 100.2 | ....... | ........ |
| 1957 ...... | .................... |  | .................... | .................... | 92.9 | .................... | .................... | .................... | ................... | .................... | 83.7 | .................... | ......................... |
| 1958 | ................... | 78.5 | .................. | .................... | 80.9 | .................... | ................... |  |  |  | 90.8 | ................... | ......................... |
| 1959 | ............ |  |  | .................. | 95.3 | .................. | .................... |  |  |  | 93.8 | .................... |  |
| 1960 | ................... | 100.0 | .................... | .................... | 93.3 | .................... | .................... | 97.2 | .................... | ..................." | 90.1 | ................... | ........................... |
| 1961 ... | .................. | 91.6 | .................. | .................. | 92.5 | ................... | .................. | 99.2 | ................... | ................... | 93.0 | .................... | .......................... |
| 1962 ......... | .................... | 99.9 |  | . | 95.4 | .................." | ................... | 91.6 | ................... | .................... | 95.0 | .................... | ...... |
| 1963 ......... | .................... | 98.4 | ..................... | ................... | 91.7 | .................... | .................... | $96.4$ | .................... |  | $94.4$ | .................... | ........................ |
| 1964 | .................... |  | .................... | ..................." |  | .................." | ..................." |  | .................... | ................... |  | ................... | $\ldots . . . . . . . . . . . . . . . . . . . . . . . ~$ |
| 1965. | .................... | 102.0 | ..................... | ................... | 102.2 | .................. |  | 103.4 |  |  | 102.9 |  |  |
| 1966 |  | 100.0 |  | . | 95.7 | ................... |  | 91.2 | $\cdots$ | ................... | 88.3 | .................... | $\ldots . . . . . . . . . . . . . . . . . . . . . . . ~$ |
| 1967 ..... | ..................." | 94.1 | ..................." | ................... | 95.9 | .................." | .................... | 97.0 | ¢.................." | ................... | 92.9 | ................... | ...................... |
| 1968 | .".................. | 97.2 |  | ..................." | 92.4 | .................." |  | 92.4 |  | .................... | 91.7 | ..................." | ........................... |
| 1969 .......... | . ${ }^{\text {........ }}$ | 98.2 | .................... | .................... | 91.5 | ..................... |  | 86.4 |  |  | 79.7 |  |  |
| 1970 ....... | .................." | 78.1 | ................... | ..................." | 75.4 | ..................." | ..................." | 77.6 | .................... | ..................." | 72.4 | .................... | ...........................0 |
| 1971 | ................... | 78.1 | ............. | ............... | 80.2 | ............" | ............. | 82.1 | .................... | .................. | 82.0 | ................... | .......................... |
| 1973 ....................... |  | 92.8 |  |  | 88.6 | .................... |  | 95.2 |  |  | 90.7 |  |  |
| $1974 . . . . . . . . . . . . . . .$. | ......... | 61.8 | ........................ | ...... | 72.1 | 44 |  | 64.4 | ….................... |  | 59.5 |  |  |
| 1975 .... | .................... | 57.6 |  | ................... | 72.8 | ................... | ..................... | 75.7 | ..................... | ..................... | 75.6 | .................. | ..... |
| 1976 | ...... | 84.6 |  |  | 83.3 | ................... |  | 89.7 |  | ................... | 87.0 | ................... |  |
| 1977 |  | 87.1 |  |  | 90.2 |  |  | 89.0 |  |  | 84.4 | .............. |  |
| 1978 ............... | 83.7 | 84.3 | 78.8 | 81.6 | 82.9 | 80.0 | 82.4 | 78.4 | 80.4 | 79.3 | 75.0 | 66.1 | 79.4 |
| 1979 ............... | 72.1 | 73.9 | 68.4 | 66.0 | 68.1 | 65.8 | 60.4 | 64.5 | 66.7 | 62.1 | 63.3 | 61.0 | 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 ..............." | 71.4 | 66.9 | 66.5 | 72.4 | 76.3 | 73.1 | 74.1 | 77.2 | 73.1 | 70.3 | 62.5 | 64.3 | 70.7 |
| 1982 ........ | 71.0 | 66.5 | 62.0 | 65.5 | 67.5 | 65.7 | 65.4 | 65.4 | 69.3 | 73.4 | 72.1 | 71.9 | 68.0 |
| 1983 ........ | 70.4 | 74.6 | 80.8 | 89.1 | 93.3 | 92.2 | 93.9 | 90.9 | 89.9 | 89.3 | 91.1 | 94.2 | 87.5 |
| 1984 ................ | 100.1 | 97.4 | 101.0 | 96.1 | 98.1 | 95.5 | 96.6 | 99.1 | 100.9 | 96.3 | 95.7 | 92.9 | 97.5 |
| 1985 ......... | 96.0 | 93.7 | 93.7 | 94.6 | 91.8 | 96.5 | 94.0 | 92.4 | 92.1 | 88.4 | 90.9 | 93.9 | 93.2 |
| 1986 .... | 95.6 | 95.9 | 95.1 | 96.2 | 94.8 | 99.3 | 97.7 | 94.9 | 91.9 | 95.6 | 91.4 | 89.1 | 94.8 |
| 1987 ............ | 90.4 | 90.2 | 90.8 | 92.8 | 91.1 | 91.5 | 93.7 | 94.4 | 93.6 | 89.3 | 83.1 | 86.8 | 90.6 |
| 1988 ....... | 90.8 | 91.6 | 94.6 | 91.2 | 94.8 | 94.7 | 93.4 | 97.4 | 97.3 | 94.1 | 93.0 | 91.9 | 93.7 |
| 1989 ......... | 97.9 | 95.4 | 94.3 | 91.5 | 90.7 | 90.6 | 92.0 | 89.6 | 95.8 | 93.9 | 90.9 | 90.5 | 92.8 |
| 1990 ...... | 93.0 | 89.5 | 91.3 | 93.9 | 90.6 | 88.3 | 88.2 | 76.4 | 72.8 | 63.9 | 66.0 | 65.5 | 81.6 |
| 1991 .............. | 66.8 | 70.4 | 87.7 | 81.8 | 78.3 | 82.1 | 82.9 | 82.0 | 83.0 | 78.3 | 69.1 | 68.2 | 77.6 |
| 1992 .............. | 67.5 | 68.8 | 76.0 | 77.2 | 79.2 | 80.4 | 76.6 | 76.1 | 75.6 | 73.3 | 85.3 | 91.0 | 77.3 |
| 1993 ................ | 89.3 | 86.6 | 85.9 | 85.6 | 80.3 | 81.5 | 77.0 | 77.3 | 77.9 | 82.7 | 81.2 | 88.2 | 82.8 |
| 59. Sales of retail stores in 1987 doliars (mil. \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ............... | 37,985 | 37,879 | 38,518 | 38,785 | 37,312 | 38,034 | 38,179 | 38,288 | 37,946 | 38,168 | 38,129 | 39,113 | 458,336 |
| 1949 ............... | 37,788 | 38,398 | 38,963 | 39,406 | 39,223 | 41,521 | 38,715 | 39,264 | 39,971 | 39,759 | 40,134 | 39,632 | 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 .............. | 45,685 | 44,438 | 41,648 | 40,828 | 41,166 | 41,060 | 40,561 | 41,472 | 41,214 | 41,691 | 41,491 | 40,629 | 501,883 |
| 1952 ............... | 41,105 | 42,019 | 40,897 | 41,907 | 43,494 | 44,056 | 42,822 | 41,821 | 42,513 | 44,466 | 44,022 | 45,213 | 514,335 |
| 1953 ............... | 45,536 | 45,502 | 45,851 | 45,215 | 45,000 | 44,933 | 44,755 | 44,474 | 44,440 | 44,662 | 44,111 | 43,679 | 538,158 |
| 1954 ............. | 43,656 | 44,750 | 44,637 | 44,597 | 44,539 | 45,597 | 44,856 | 44,976 | 45,435 | 45,517 | 46,564 | 47,421 | 542,545 |
| 1955 ............. | 47,669 | 48,091 | 48,444 | 49,310 | 49,443 | 49,123 | 50,026 | 50,013 | 50,794 | 50,917 | 50,771 | 50,320 | 594,921 |
| 1956 ................ | 50,320 | 49,974 | 50,869 | 50,273 | 50,857 | 50,704 | 50,185 | 50,503 | 50,641 | 50,437 | 50,984 | 51.142 | 606,889 |
| 1957 ............. | 51,452 | 52,119 | 61,549 | 51,557 | 51,626 | 52,342 | 52,100 | 52,382 | 52,053 | 51,328 | 51,499 | 51,223 | 621,830 |
| 1958 ............... | 50,919 | 49,633 | 49,102 | 49,538 | 49,584 | 49,821 | 50,586 | 50,977 | 50,514 | 50,331 | 51,223 | 52,757 | 604,985 |
| 1959 ............... | 53,444 | 53,673 | 54,121 | 53,991 | 54,414 | 54,580 | 54,726 | 54,910 | 54,192 | 54,425 | 53,310 | 53,063 | 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 ...... | 53,751 | 53,560 | 54,126 | 53,327 | 53,967 | 54,368 | 54,003 | 54,761 | 54,531 | 55,679 | 56,071 | 56,092 | 654,236 |
| 1962 .............. | 56,574 | 56,412 | 57,192 | 57,333 | 57,723 | 56,982 | 58,228 | 58,417 | 58,076 | 58,988 | 59,471 | 59,459 | 694,855 |
| 1963 ........ | 59,534 | 59,259 | 59,557 | 59,640 | 59,437 | 59,531 | 60,047 | 59,971 | 59,997 | 60,687 | 60,177 | 61,322 | 719,159 |
| 1964 | 60,827 | 60,756 | 61,372 | 61,879 | 62,715 | 62,764 | 63,075 | 63,963 | 64,379 | 62,429 | 62,832 | 65,189 | 752,180 |
| 1965 ................ | 65,668 | 66,083 | 65,427 | 65,789 | 66,618 | 66,219 | 67,299 | 67,706 | 67,692 | 69,439 | 70,276 | 70,127 | 808,343 |
| 1966 ............... | 70,592 | 70,403 | 71,433 | 70,263 | 69,056 | 70,453 | 70,749 | 71,153 | 71,100 | 70,599 | 70,430 | 69,928 | 846,159 |
| 1967 .... | 66,545 | 65,873 | 66,354 | 66,522 | 66,038 | 67,646 | 67,177 | 66,829 | 68,541 | 67,315 | 68,528 | 70,496 | 807,864 |
| 1968 ............... | 68,856 | 69,484 | 70,971 | 70,622 | 70,700 | 71,858 | 72,380 | 73,138 | 71,210 | 72,829 | 74,438 | 73,369 | 859,855 |
| 1969 ............... | 73,779 | 74,125 | 73,155 | 73,203 | 73,904 | 73,068 | 72,927 | 73,596 | 74,422 | 75,050 | 74,615 | 74,928 | 886,772 |
| 1970 ............... | 74,973 | 74,953 | 74,252 | 74,766 | 75,650 | 76,131 | 76,583 | 76,373 | 76,241 | 76,501 | 74,629 | 76,450 | 907,502 |
| 1971 ................ | 77,910 | 78,520 | 78,259 | 79,526 | 78,874 | 79,793 | 80,224 | 80,297 | 81,872 | 82,668 | 83,433 | 82,995 | 964,371 |
| 1972 .............. | 82,554 | 83,051 | 85,000 | 85,406 | 85,938 | 86.499 | 86,565 | 87,191 | 88,235 | 89,479 | 89,878 | 91,703 | 1,041,499 |
| 1973 ............... | 92,652 | 93,168 | 93,053 | 91,567 | 91,171 | 91,415 | 91,247 | 90,165 | 91,376 | 91,113 | 90,698 | 87,436 | 1,095,061 |
| 1974 ............... | 87,457 | 86,922 | 87,128 | 87,600 | 87,742 | 87,446 | 88,172 | 89,820 | 86,522 | 85,074 | 84,006 | 82,268 | 1,040,157 |
| 1975 .............. | 85,132 | 86,055 | 83,650 | 84,654 | 88,090 | 87,363 | 87,941 | 88,264 | 88,281 | 88,555 | 88,458 | 89,218 | 1,045,661 |
| 1976 ............... | 91,443 | 90,799 | 91,244 | 92,876 | 91,809 | 93,390 | 93,605 | 92,784 | 92,167 | 92,925 | 93,312 | 95,649 | 1,112,003 |
| 1977 ............... | 94,656 | 96,036 | 96,353 | 97,368 | 96,468 | 96,666 | 97,302 | 97,061 | 97,330 | 98,789 | 98,938 | 98,919 | 1,165,886 |
| 1978 ............... | 96,661 | 98,477 | 100,433 | 102,143 | 101,851 | 102,823 | 101,541 | 102,262 | 102,276 | 103,321 | 104,129 | 104,888 | 1,220,805 |
| 1979 ............... | 103,634 | 103,451 | 104,479 | 103,059 | 103,105 | 102,541 | 101,257 | 104,287 | 104,602 | 103,152 | 103,829 | 103,159 | 1,240,555 |
| 1980 ............... | 104,102 | 102,166 | 99,341 | 97,276 | 96,720 | 97,558 | 98,975 | 98,970 | 98,317 | 100,118 | 100,206 | 99,605 | 1,193,354 |
| 1981 ............... | 101,344 | 101,571 | 101,599 | 100,345 | 99,260 | 99,822 | 100,020 | 101,256 | 100,261 | 98,681 | 98,077 | 98,274 | 1,200,500 |
| 1982 .............. | 96,663 | 99,217 | 98,314 | 98,880 | 99,518 | 97,057 | 98,340 | 97,967 | 99,192 | 100,124 | 101,677 | 101,582 | 1,188,531 |
| 1983 ............ | 101,240 | 101,520 | 103,994 | 103,709 | 104,986 | 107,173 | 107,450 | 105,392 | 107,288 | 108,716 | 110,013 | 110,348 | 1,271,829 |
| 1984 ............... | 112,489 | 112,116 | 110,972 | 112,792 | 113,528 | 115,030 | 113,102 | 112,118 | 113,350 | 113,659 | 115,707 | 115,098 | 1,359,961 |
| 1985 ............... | 115,603 | 116,355 | 116,462 | 117,723 | 118,583 | 117,800 | 117,884 | 119,451 | 122,818 | 118,765 | 118,971 | 119,844 | 1,420,259 |
| 1986 ............... | 120,759 | 120,369 | 120,896 | 122,556 | 123,948 | 123,693 | 124,244 | 125,385 | 132,340 | 126,933 | 126,063 | 131,236 | 1,498,442 |
| 1987 ............... | 121,584 | 127.023 | 127.457 | 128,141 | 127,794 | 128,646 | 129,337 | 131,707 | 129,453 | 128,466 | 128,633 | 130,634 | 1,538,875 |
| 1988 ............... | 130,516 | 131,293 | 133,592 | 132,043 | 132,913 | 133,412 | 132,932 | 133,397 | 131,847 | 134,805 | 135,800 | 136,181 | 1,598,731 |
| 1989 ............... | 136,557 | 134,340 | 134,621 | 136,593 | 136,336 | 135,900 | 136,720 | 139,407 | 138,540 | 136,667 | 137,843 | 137,934 | 1,641,458 |
| 1990 ............... | 139,968 | 138,674 | 138,616 | 138,071 | 137,487 | 138,199 | 138,347 | 137,995 | 137,792 | 136,511 | 136,54 ${ }^{1}$ | 134,536 | 1,652,737 |
| 1991 ............... | 131,812 | 134,059 | 135,861 | 135,172 | 135,578 | 136,178 | 135,870 | 135,091 | 135,517 | 134,694 | 134,318 | 134,688 | 1,648,838 |
| 1992 ............... | 137,185 | 138,204 | 137,457 | 137,204 | 137,648 | 137,651 | 137,940 | 139,020 | 140,019 | 142,272 | 142,362 | 143,945 | 1,670,907 |
| 1993 ............... | 144,157 | 143,076 | 141,655 | 144,029 | 145,291 | 145,832 | 146,685 | 147,392 | 147,609 | 149,739 | 150,675 | 152,566 | 1,758,766 |

Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 66. Consumer installment credit outstanding, EOP (mil. \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 7,167 \\ & 9,371 \end{aligned}$ | $\begin{aligned} & 7,342 \\ & 0,520 \end{aligned}$ | $\begin{aligned} & 7,719 \\ & 9,667 \end{aligned}$ | $\begin{aligned} & 7,987 \\ & 9,870 \end{aligned}$ | $\begin{array}{r} 8,197 \\ 10,130 \end{array}$ | $\begin{array}{r} 8,378 \\ 10,373 \end{array}$ | $\begin{array}{r} 8,583 \\ 10,571 \end{array}$ | $\begin{array}{r} 8,786 \\ 10,800 \end{array}$ | $\begin{array}{r} 9,027 \\ 11,054 \end{array}$ | $\begin{array}{r} 9,074 \\ 11,375 \end{array}$ | $\begin{array}{r} 9,167 \\ 11,684 \end{array}$ | $\begin{array}{r} 9,278 \\ 11,946 \end{array}$ | $\begin{array}{r} 9,278 \\ 11,946 \end{array}$ |
| 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 | 31,579 | 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 | 80,579 | 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 | 90,142 |
| 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 | 173,885 | 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 | 176,0+5 | 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 |
| $1981 . . . .{ }^{\text {.......... }}$ | 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 ................ | 748.575 | 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 |
| 70. Manufacturing and trade inventories in 1987 dollars, EOP (bil. \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 326.39 | 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 | 5351.67 |
| 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 |
| 1979 ............... | 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 |
| 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 | 695.42 | 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 |

Historical Data for Selected Series-Continued


Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 98. Index of producer prices for sensitive crude and intermediate materials (1982-100) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ............... | 43.90 42.40 | 45.20 40.80 | 44.80 40.10 | $\begin{aligned} & 46.10 \\ & 37.70 \end{aligned}$ | $\begin{aligned} & 47.50 \\ & 36.20 \end{aligned}$ | $\begin{aligned} & 47.20 \\ & 35.80 \end{aligned}$ | $\begin{aligned} & 46.60 \\ & 35.10 \end{aligned}$ | $\begin{aligned} & 45.10 \\ & 35.30 \end{aligned}$ | $\begin{aligned} & 44.80 \\ & 37.30 \end{aligned}$ | $\begin{aligned} & 44.10 \\ & 37.30 \end{aligned}$ | $\begin{aligned} & 43.70 \\ & 39 \end{aligned}$ | 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 |
| 1951 ................ | 57.40 | 57.80 | 58.10 | 56.60 | 57.50 | 58.50 | 57.40 | 50.50 | 49.40 | 48.20 | 47.20 | 46.80 | 53.77 |
| 1952 ................... | 46.30 | 46.30 | 45.90 | 45.90 | 45.50 | 45.40 | 45.00 | 45.60 | 46.30 | 45.70 | 45.20 | 45.80 | 45.74 |
| 1953 ............... | 45.30 | 45.90 | 46.50 | 46.60 | 46.50 | 46.30 | 46.60 | 46.10 | 45.10 | 44.30 | 43.50 | 42.40 | 45.43 |
| 1954 .................. | 41.60 | 41.50 | 41.30 | 41.40 | 42.10 | 42.10 | 42.50 | 41.90 | 42.30 | 43.40 | 44.20 | 43.60 | 42.33 |
| 1955 ............... | 44.40 | 44.90 | 45.30 | 45.30 | 45.70 | 46.40 | 47.70 | 48.00 | 48.20 | 48.10 | 48.80 | 50.00 | 46.90 |
| 1956 ................ | 50.60 | 50.50 | 51.00 | 51.90 | 51.60 | 49.60 | 48.30 | 48.90 | 49.20 | 48.50 | 49.10 | 49.80 | 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 | 41.20 | 43.88 |
| 1958 ............... | 40.70 | 41.40 | 41.00 | 40.40 | 40.70 | 41.10 | 41.50 | 42.40 | 43.20 | 44.10 | 44.40 | 43.50 | 42.03 |
| 1959 ................... | 44.00 | 44.80 | 45.40 | 45.20 | 44.90 | 45.60 | 45.20 | 44.80 | 45.00 | 45.70 | 45.70 | 45.30 | 45.13 |
| 1960 .........a..... | 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 |
| $1961 . . . . . . . . . . . . . . . ~$ | 37.20 | 37.50 | 37.90 | 38.70 | 38.80 | 39.20 | 39.30 | 39.30 | 39.50 | 39.80 | 38.80 | 39.10 | 38.76 |
| 1962 ............... | 39.50 | 39.40 | 39.00 | 38.50 | 38.20 | 37.80 | 37.70 | 37.80 | 37.70 | 37.60 | 37.40 | 37.60 | 38.18 |
| 1963 ............... | 37.60 | 37.80 | 37.90 | 37.70 | 37.90 | 37.90 | 38.50 | 38.70 | 38.30 | 38.50 | 38.60 | 38.70 | 38.18 |
| 1964 ............... | 38.80 | 38.70 | 39.00 | 39.60 | 39.60 | 39.90 | 40.20 | 40.70 | 40.50 | 41.00 | 41.20 | 41.60 | 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 |
| 1966 ............... | 42.70 | 43.00 | 43.90 | 44.10 | 44.20 | 44.30 | 44.30 | 42.20 | 41.80 | 41.60 | 41.10 | 40.40 | 42.80 |
| 1967 .............. | 39.90 | 39.20 | 38.80 | 38.50 | 38.80 | 39.50 | 39.80 | 40.00 | 40.60 | 40.50 | 41.10 | 41.60 | 39.86 |
| 1968 ............... | 41.50 | 41.60 | 42.10 | 42.00 | 41.80 | 42.60 | 43.30 | 43.60 | 44.10 | 45.10 | 45.60 | 46.70 | 43.33 |
| 1969 .............. | 47.70 | 48.30 | 49.40 | 48.70 | 48.30 | 47.50 | 47.00 | 47.50 | 47.80 | 47.80 | 48.60 | 48.60 | 48.10 |
| 1970 ............... | 48.40 | 47.80 | 47.50 | 47.30 | 47.60 | 47.50 | 46.90 | 46.60 | 46.40 | 46.50 | 45.10 | 44.70 | 46.86 |
| $1971 . . . . . . . . . . . . . . .$. | 45.00 | 45.40 | 45.70 | 46.30 | 46.10 | 46.60 | 47.80 | 48.60 | 48.70 | 48.90 | 49.10 | 49.80 | 47.33 |
| 1972 ............... | 50.50 | 50.70 | 51.20 | 51.40 | 51.80 | 52.70 | 53.60 | 54.20 | 54.10 | 55.60 | 56.60 | 57.30 | 53.39 |
| 1973 ............... | 58.30 | 60.50 | 62.10 | 64.80 | 67.20 | 68.60 | 68.10 | 70.50 | 74.00 | 77.30 | 82.50 | 84.90 | 69.90 |
| 1974 ............... | 83.70 | 85.70 | 88.90 | 92.40 | 84.90 | 85.40 | 86.60 | 85.20 | 83.60 | 79.90 | 77.60 | 70.80 | 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 |
| 1976 ............... | 75.50 | 76.50 | 78.30 | 80.30 | 81.10 | 82.40 | 86.20 | 86.00 | 86.30 | 84.80 | 85.00 | 86.30 | 82.39 |
| 1977 ............... | 85.80 | 85.70 | 87.90 | 87.30 | 86.70 | 85.60 | 86.80 | 89.00 | 90.40 | 89.50 | 88.90 | 92.00 | 87.97 |
| 1978 ............... | 94.30 | 95.30 | 95.30 | 95.70 | 97.30 | 100.60 | 101.60 | 103.20 | 104.10 | 106.40 | 109.70 | 109.40 | 101.08 |
| 1979 ............... | 110.30 | 112.50 | 118.20 | 118.10 | 118.50 | 121.80 | 119.60 | 118.50 | 118.50 | 120.40 | 120.00 | 118.20 | 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 |
| 1981 ............... | 116.50 | 112.90 | 113.60 | 114.90 | 114.90 | 114.40 | 113.30 | 113.10 | 110.50 | 109.10 | 106.20 | 105.30 | 112.06 |
| 1982 ............... | 105.20 | 103.50 | 102.40 | 101.20 | 100.80 | 99.30 | 99.50 | 97.90 | 97.80 | 97.60 | 97.10 | 97.70 | 100.00 |
| 1983 ............... | 99.90 | 103.00 | 105.20 | 104.70 | 106.80 | 109.90 | 113.80 | 116.70 | 116.60 | 117.80 | 119.40 | 120.70 | 111.21 |
| 1984 ............... | 120.40 | 122.10 | 122.50 | 121.90 | 121.30 | 119.70 | 117.10 | 115.00 | 115.20 | 113.80 | 113.20 | 112.70 | 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 |
| 1986 ............... | 108.09 | 107.39 | 108.25 | 110.07 | 110.56 | 111.04 | 112.15 | 109.90 | 111.12 | 112.51 | 113.67 | 113.48 | 110.69 |
| 1987 ............... | 113.72 | 114.31 | 115.14 | 115.61 | 117.60 | 119.89 | 122.07 | 123.90 | 127.87 | 131.45 | 133.29 | 133.79 | 122.39 |
| 1988 ............... | 134.05 | 135.73 | 137.22 | 136.27 | 135.47 | 135.74 | 137.69 | 137.32 | 137.08 | 137.02 | 138.04 | 138.91 | 136.71 |
| 1989 ............... | 140.27 | 141.09 | 141.75 | 141.36 | 141.70 | 141.06 | 140.59 | 139.77 | 140.40 | 142.39 | 140.94 | 139.27 | 140.88 |
| $1990 . . . . . . . . . . . . .$. | 138.11 | 137.34 | +38.28 | 140.67 | 141.56 | 141.12 | 141.67 | 142.46 | 142.22 | 141.89 | 140.49 | 139.95 | 140.48 |
| 1998 ............... | 138.86 | 137.19 | 135.95 | 135.39 | 135.67 | 136.16 | 136.86 | 135.04 | 135.08 | 135.97 | 136.21 | 136.34 | 136.22 |
| 1992 ............... | 136.19 | 138.75 | 140.45 | 140.82 | 140.88 | 141.06 | 141.56 | 141.93 | 143.70 | 144.18 | 145.05 | 149.40 | 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 |
| 102. Change in money supply M2 (pct.) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ............... | . 24 | 0 | $-.38$ | -. 20 | -. 15 | 0 | . 15 | . 15 | -. 10 | -. 05 | -. 15 | -. 20 | -.06 |
| 1949 ............... | -. 15 | 0 | 0 | . 15 | . 20 | -. 05 | -. 05 | -. 15 | -. 10 | 0 | . 10 | . 15 | . 01 |
| 1950 ................ | . 20 | . 54 | . 24 | . 54 | . 49 | . 24 | . 29 | . 19 | . 05 | . 29 | . 19 | . 24 | . 29 |
| 1951 ............... | . 33 | . 19 | . 33 | . 19 | . 33 | . 33 | . 51 | . 47 | . 69 | . 46 | . 73 | . 55 | . 43 |
| 1952 ............... | . 41 | . 50 | . 22 | . 31 | . 36 | . 44 | . 31 | . 40 | . 61 | . 31 | . 48 | . 30 | . 39 |
| 1953 ............... | . 13 | . 17 | . 52 | . 30 | . 30 | 13 | . 21 | . 25 | . 08 | . 30 | . 17 | . 25 | . 23 |
| 1954 ............... | . 29 | . 29 | . 29 | -. 08 | . 87 | . 29 | . 49 | . 49 | . 20 | . 45 | . 36 | . 16 | . 34 |
| 1955 ................ | . 52 | . 60 | -. 12 | . 28 | . 40 | 0 | . 24 | 0 | . 28 | . 16 | -. 04 | . 24 | . 21 |
| 1956 .............. | . 08 | 0 | . 24 | . 27 | -. 08 | .27 | . 12 | 0 | . 43 | . 12 | . 27 | . 19 | . 16 |
| 1957 ............... | . 39 | . 19 | . 38 | . 15 | . 30 | . 11 | . 30 | . 26 | . 04 | . 11 | . 11 | 0 | . 20 |
| 1958 ............... | -. 11 | 1.21 | . 82 | . 74 | . 66 | . 91 | . 40 | . 65 | . 29 | . 36 | . 53 | . 18 | . 55 |
| 1959 ............... | . 99 | . 38 | . 45 | . 35 | . 76 | . 55 | . 48 | . 37 | . 03 | . 03 | 20 | . 20 | . 40 |
| 1960 ............... | . 17 | . 07 | . 23 | . 30 | . 30 | . 40 | . 66 | . 85 | . 46 | . 45 | . 45 | . 42 |  |
| 1961 ............... | . 61 | . 76 | . 47 | . 57 | . 75 | . 56 | . 49 | . 58 | . 52 | . 58 | . 69 | . 60 | . 60 |
| 1962 ................ | . 63 | .77 | . 79 | . 79 | . 55 | . 46 | . 52 | . 54 | . 51 | . 76 | . 73 | . 78 | . 65 |
| 1963 ............... | . 74 | . 71 | . 68 | . 76 | . 75 | . 56 | . 79 | . 63 | . 56 | . 70 | . 82 | . 41 | . 68 |
| 1964 ............... | . 58 | . 56 | . 48 | . 55 | . 62 | . 62 | . 84 | . 78 | . 77 | . 62 | . 72 | . 62 | . 65 |
| 1965 ............... | . 71 | . 61 | . 60 | . 58 | . 37 | . 62 | . 70 | . 63 | . 79 | . 80 | . 71 | . 72 | . 65 |
| 1966 ............... | . 67 | . 45 | . 52 | . 54 | . 13 | . 19 | 0 | . 36 | . 57 | . 15 | . 32 | . 52 | . 37 |
| 1967 ............... | . 40 | . 62 | . 91 | . 59 | 1.00 | . 97 | . 92 | . 89 | . 72 | . 74 | . 50 | . 61 | . 74 |
| 1968 ............... | . 57 | . 53 | . 49 | . 58 | . 58 | . 67 | . 63 | . 71 | . 71 | . 78 | . 75 | . 73 | . 64 |
| 1969 ............... | . 53 | . 40 | . 40 | . 37 | . 10 | . 31 | . 24 | . 12 | . 31 | . 26 | . 53 | . 44 | . 33 |
| 1970 ............... | . 29 | $-.44$ | . 12 | . 19 | . 54 | . 59 | . 55 | . 95 | 1.04 | . 85 | . 76 | . 93 | . 53 |
| 1971 ............... | . 96 | 1.34 | 1.35 | 1.41 | 1.26 | . 90 | . 96 | . 91 | 1.00 | . 86 | . 93 | . 82 | 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 | . 53 | . 12 | . 55 | . 85 | . 83 | . 47 | . 31 | . 11 | . 46 | . 71 | . 76 | . 56 |
| 1974 ................ | . 52 | . 55 | . 71 | . 31 | 23 | . 40 | . 38 | . 34 | . 46 | . 56 | . 59 | . 33 | . 45 |
| 1975 ............... | . 42 | . 85 | 1.23 | 1.08 | 1.35 | 1.58 | 1.21 | . 89 | . 89 | . 62 | 1.01 | . 83 | 1.00 |
| 1976 ............... | - 1.05 | 1.34 | . 88 | 1.08 | 1.25 | . 41 | . 83 | 1.26 | 1.07 | 1.35 | 1.12 | 1.30 | 1.08 |
| 1977 ............... | - 1.16 | . 95 | . 93 | . 98 | . 85 | . 70 | . 88 | . 76 | . 80 | . 76 | . 65 | . 65 | . 84 |
| 1978 ............... | . 75 | . 39 | . 56 | . 65 | . 68 | . 55 | . 64 | . 61 | . 99 | . 68 | . 50 | . 66 | . 64 |
| 1979 ................ | . 48 | . 47 | . 74 | 1.01 | . 53 | 1.00 | . 86 | . 69 | . 80 | . 38 | . 14 | . 44 | . 63 |
| 1980 ............... | . 72 | . 86 | . 43 | -. 21 | . 56 | 1.29 | 1.36 | 1.06 | . 89 | . 77 | . 75 | . 02 | . 71 |
| $1981 . . . . . . . . . . . . . . .$. | . 66 | . 73 | 1.14 | 1.25 | . 31 | . 50 | . 77 | . 94 | . 63 | . 84 | . 93 | . 93 | . 80 |
| 1982 ................ | 1.08 | . 18 | . 69 | . 77 | . 64 | . 59 | . 63 | 1.00 | . 79 | . 80 | . 69 | . 72 | . 72 |
| 1983 ............... | 2.86 | 1.88 | . 94 | . 79 | . 83 | . 55 | . 59 | . 40 | . 57 | . 98 | . 55 | . 48 | . 95 |
| 1984 ............... | . 69 | . 85 | . 70 | . 72 | . 66 | . 53 | . 46 | . 42 | . 71 | . 54 | 1.05 | 1.05 | . 70 |
| 1985 ................ | 1.08 | . 99 | . 47 | . 14 | . 64 | 1.07 | . 65 | ,70 | . 61 | . 41 | . 53 | . 70 | . 67 |
| 1986 ............... | . 19 | . 39 | . 82 | 1.01 | . 99 | . 78 | 1.01 | . 82 | . 71 | . 85 | . 58 | . 90 | . 75 |
| 1987 ............... | . 66 | . 01 | . 16 | . 51 | . 17 | . 07 | . 22 | . 48 | . 53 | . 55 | . 07 | . 15 | . 30 |
| 1988 ............... | . 84 | . 64 | . 60 | . 76 | . 59 | . 41 | . 24 | . 11 | . 10 | . 31 | . 55 | . 25 | . 45 |
| 1989 ............... | . 13 | 0 | . 25 | . 13 | . 06 | . 56 | . 87 | . 57 | . 55 | . 63 | . 62 | . 65 | . 42 |
| $1990 . . . . . . . . . . . . . .$. | . 40 | . 44 | . 37 | . 35 | . 09 | . 35 | . 30 | . 47 | . 42 | . 07 | -. 07 | 24 | . 29 |
| 1991 ............... | . 31 | . 49 | . 54 | . 32 | 29 | . 23 | -. 01 | . 03 | 0 | . 14 | . 38 | . 29 | . 25 |
| 1992 ............... | 25 | . 56 | . 08 | -. 13 | . 01 | -. 12 | . 08 | ,25 | . 21 | . 31 | . 09 | -. 04 | . 13 |
| 1993 ............... | -. 18 | -. 25 | . 02 | . 09 | . 68 | . 19 | . 14 | . 07 | . 23 | .10 | . 35 | . 21 | . 14 |

Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 105. Money supply M1 in 1987 dollars (bild \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 599.0 |
| 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 |
| 1954 ................ | 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 |
| 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 | 540.2 | 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 | 561.7 | 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 |
| 1979 ............... | 614.0 | 617.6 | 621.6 | 623.2 | 627.1 | 627.8 | 628.2 | 628.4 | 6350.9 | 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 | 595.6 | 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. | ${ }_{5}^{697.6}$ | 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 ................ | ${ }_{5626}^{562.5}$ | 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 | 679.8 | 687.2 | 696.1 | 705.3 | 710.9 | 717.2 | 727.7 | 743.8 | 690.9 |
| 1987 ............... | 744.3 | 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 ............... | 742.7 | 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 ............... | 737.0 | 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 |
| 112. Net change in business loans (AR, bil. \$) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ................ | 3.11 | -. 79 | . 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 |
| 1954 .............. | -.70 | . 77 | -.34 | -.83 | -1.87 | -1.93 | . 01 | -10.16 | -. 61 | -. 42 | 2.84 | 4.31 | -. 74 |
| 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 | ${ }_{6}^{6.86}$ | 9.14 | 13.07 | 11.94 | 13.64 | 7.08 | 7.54 5 | 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 14.78 | 11.51 | 10.02 | 14.65 | 11.87 | 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 |
| $1971 . . . . . . . . . . . . . .$. | -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 | 16.49 | 4.26 | 8.95 | 9.78 | 15.00 | $-1.56$ | 16.25 | 7.61 | 15.91 | 13.18 | 13.20 | 10.15 |
| 1978 ............... | 9.43 | 6.00 | 34.54 | 25.01 | $28.9 \dagger$ | 30.22 | 16.68 | 10.26 | 11.72 | 20.78 | 23.82 | 4.61 | 18.50 |
| 1979 ............... | 43.40 | 28.39 | 23.93 | 65.50 | 29.23 | 40.73 | 44.36 | 44.36 | 57.28 | 7.31 | -12.06 | 36.59 | 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 | -65.43 | 16.85 |
| 1983 ................ | 46.25 |  | 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 |
| ${ }_{1} 1986$................ | 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 |
| $1991 . . . . .{ }_{\text {, }}$........ | -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 |

Historical Data for Selected Series-Continued


Historical Data for Selected Series-Continued


Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 117. Yield on municipal bonds, 20-bond average, NSA (pct.) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ................ | 0 | 2.47 | 2.45 | 2.37 | 2.39 | 2.24 | 2.27 | 2.37 | 2.41 | 2.42 | 2.38 | 2.26 | 2.16 |
| 1949 ............... | 2.16 | 2.20 | 2.18 | 2.14 | 2.14 | 2.20 | 2.16 | 2.12 | 2.14 | 2.16 | 2.12 | 2.09 | 2.15 |
| 1950 ................ | 2.06 | 2.03 | 2.01 | 2.03 | 2.00 | 1.99 | 2.01 | 1.83 | 1.84 | 1.79 | 1.74 | 1.72 | 1.92 |
| 1951 .................... | 1.61 | 1.58 | 1.74 | 1.94 | 2.00 | 2.19 | 2.15 | 2.02 | 2.01 | 2.06 | 2.05 | 2.09 | 1.95 |
| 1952 ................ | 2.09 | 2.07 | 2.08 | 2.04 | 2.06 | 2.13 | 2.15 | 2.24 | 2.30 | 2.38 | 2.38 | 2.38 | 2.19 |
| 1955 ............... | 2.43 | 2.55 | 2.65 | 2.65 | 2.78 | 2.99 | 2.98 | 2.90 | 2.90 | 2.75 | 2.62 | 2.60 | 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 ................ | 2.40 | 2.44 | 2.44 | 2.41 | 2.38 | 2.48 | 2.54 | 2.60 | 2.58 | 2.51 | 2.46 | 2.57 | 2.48 |
| ${ }^{1956}$............... | 2.50 | 2.44 | 2.57 | 2.70 | 2.68 | 2.54 | 2.65 | 2.80 | 2.94 | 2.95 | 3.16 | 3.22 | 2.76 |
| 1957 ................ | 3.18 | 3.00 | 3.10 | 3.13 | 3.27 | 3.41 | 3.40 | 3.54 | 3.54 | 3.42 | 3.37 | 3.04 | 3.28 |
| 1958 ................... | 2.91 | 3.02 | 3.06 | 2.96 | 2.92 | 2.97 | 3.09 | 3.36 | 3.54 | 3.45 | 3.32 | 3.34 | 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 ............... | 3.72 | 3.60 | 3.56 | 3.56 | 3.60 | 3.55 | 3.50 | 3.34 | 3.42 | 3.53 | 3.40 | 3.40 | 3.52 |
| 1961 ................. | 3.40 | 3.31 | 3.45 | 3.50 | 3.43 | 3.52 | 3.52 | 3.52 | 3.53 | 3.42 | 3.41 | 3.47 | 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 ............... | 3.10 | 3.15 | 3.05 | 3.10 | 3.11 | 3.21 | 3.22 | 3.13 | 3.20 | 3.20 | 3.30 | 3.27 | 3.17 |
| 1964 ............... | 3.22 | 3.14 | 3.28 | 3.28 | 3.20 | 3.20 | 3.18 | 3.19 | 3.23 | 3.25 | 3.18 | 3.13 | 3.21 |
| 1965 ................ | 3.06 | 3.09 | 3.18 | 3.15 | 3.17 | 3.24 | 3.27 | 3.24 | 3.35 | 3.40 | 3.46 | 3.54 | 3.26 |
| 1966 ............... | 3.52 | 3.64 | 3.72 | 3.56 | 3.65 | 3.77 | 3.95 | 4.12 | 4.12 | 3.94 | 3.86 | 3.86 | 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 ................ | 4.29 | 4.31 | 4.54 | 4.34 | 4.54 | 4.50 | 4.33 | 4.21 | 4.38 | 4.49 | 4.60 | 4.82 | 4.45 |
| 1969 ................ | 4.85 | 4.98 | 5.26 | 5.19 | 5.33 | 5.76 | 5.75 | 6.90 | 6.26 | 6.09 | 6.30 | 6.82 | 5.72 |
| 1970 ................ | 6.65 | 6.36 | 6.03 | 6.49 | 7.00 | 6.96 | 6.53 | 6.20 | 6.25 | 6.39 | 5.93 | 5.46 | 6.35 |
| 1971 ................ | 5.36 | 5.23 | 5.17 | 5.37 | 5.90 | 5.95 | 6.06 | 5.82 | 5.37 | 5.06 | 5.20 | 5.21 | 5.48 |
| 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 ............... | 5.05 | 5.13 | 5.29 | 5.15 | 5.14 | 5.18 | 5.40 | 5.48 | 5.10 | 5.05 | 5.18 | 5.12 | 5.19 |
| 1974 ............... | 5.22 | 5.20 | 5.40 | 5.73 | 6.02 | 6.13 | 6.68 | 6.71 | 6.76 | 6.57 | 6.61 | 7.05 | 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 ................ | 7.07 | 6.94 | 6.92 | 6.60 | 6.87 | 6.87 | 6.79 | 6.61 | 6.59 | 6.30 | 6.29 | 5.94 | 6.64 |
| 1977 ................ | 5.87 | 5.89 | 5.89 | 5.73 | 5.75 | 5.62 | 5.63 | 5.62 | 5.51 | 5.64 | 5.49 | 5.57 | 5.68 |
| 1978 ............... | 5.71 | 5.62 | 5.61 | 5.80 | 6.03 | 6.22 | 6.28 | 6.12 | 6.09 | 6.13 | 6.19 | 6.50 | 6.03 |
| 1979 ................ | 6.47 | 6.31 | 6.33 | 6.29 | 6.25 | 6.13 | 6.13 | 6.20 | 6.52 | 7.08 | 7.30 | 7.22 | 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 ............... | 9.68 | 10.10 | 10.16 | 10.62 | 10.78 | 10.67 | 11.14 | 12.26 | 12.92 | 12.83 | 11.89 | 12.91 | 11.33 |
| 1982 ................ | 13.28 | 12.97 | 12.82 | 12.59 | 11.95 | 12.45 | 12.28 | 11.23 | 10.66 | 9.69 | 10.06 | 9.96 | 11.66 |
| 1983 ................ | 9.50 | 9.58 | 9.20 | 9.05 | 9.11 | 9.52 | 9.53 | 9.72 | 9.58 | 9.66 | 9.75 | 9.89 | 9.51 |
| 1984 ............... | 9.63 | 9.64 | 9.93 | 9.96 | 10.49 | 10.67 | 10.42 | 9.99 | 10.10 | 10.25 | 10.17 | 9.95 | 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 ............... | 8.08 | 7.44 | 7.08 | 7.20 | 7.54 | 7.87 | 7.51 | 7.21 | 7.11 | 7.08 | 6.85 | 6.86 | 7.32 |
| 1987 ................ | 6.61 | 6.61 | 6.66 | 7.55 | 8.00 | 7.79 | 7.72 | 7.82 | 8.26 | 8.70 | 7.95 | 7.96 | 7.64 |
| 1988 ............... | 7.69 | 7.49 | 7.74 | 7.81 | 7.91 | 7.78 | 7.76 | 7.79 | 7.66 | 7.47 | 7.46 | 7.61 | 7.68 |
| 1989 ............... | 7.35 | 7.44 | 7.59 | 7.49 | 7.25 | 7.02 | 6.96 | 7.06 | 7.26 | 7.22 | 7.14 | 6.98 | 7.23 |
| 1990 ................ | 7.10 | 7.22 | 7.29 | 7.39 | 7.35 | 7.24 | 7.19 | 7.32 | 7.43 | 7.49 | 7.18 | 7.09 | 7.27 |
| 1991 ............... | 7.08 | 6.91 | 7.10 | 7.02 | 6.95 | 7.13 | 7.05 | 6.90 | 6.80 | 6.68 | 6.73 | 6.69 | 6.92 |
| 1992 ............... | 6.54 | 6.74 | 6.76 | 6.67 | 6.57 | 6.49 | 6.13 | 6.16 | 6.25 | 6.41 | 6.36 | 6.22 | 6.44 |
| 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 | 5.60 |
| 118. Secondary market yields on FHA morigages, NSA (pci.) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1948 ............... |  | 435 | 435 |  | 434 | 435 | 434 | 434 |  |  |  |  |  |
| $1949 . . . . . . . . . . . . . .$. | 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 | 4.31 | 4.30 |  |  | 4.09 | 4.07 | 4.07 | 4.07 | 4.07 | 4.07 | 4.07 |  |
| $1951 . . . . . . . . . . . . . . . ~$ | 4.07 | 4.07 | 4.12 | 4.19 | 4.27 | 4.29 | 4.31 | 4.31 | 4.30 | 4.27 | 4.27 | 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 ............... | 4.34 | 4.34 | 4.34 |  |  | 4.67 | 4.74 | 4.82 | 4.86 | 4.82 | 4.81 | 4.78 |  |
| 1954 ................ | 4.75 | 4.69 | 4.64 | 4.62 | 4.59 | 4.57 | 4.56 | 4.56 | 4.56 | 4.56 | 4.56 | 4.56 | 4.60 |
| 1955 ................ | 4.56 | 4.56 | 4.59 | 4.60 | 4.63 | 4.63 | 4.64 | 4.67 | 4.70 | 4.73 | 4.75 | 4.73 | 4.65 |
| 1956 ................ | 4.73 | 4.70 | 4.68 | 4.71 | 4.78 | 4.81 | 4.81 | 4.87 | 4.92 | 4.95 | ........... |  | .................. |
| 1957 ................ |  | 5.36 | 5.35 | 5.35 | 5.32 | 5.35 | 5.38 |  |  | 5.63 | 5.63 | 5.62 |  |
| 1958 ............... | 5.59 | 5.57 | 5.51 | 5.44 | 5.39 | 5.37 | 5.35 | 5.37 | 5.50 | 5.58 | 5.60 | 5.60 | 5.49 |
| 1959 ................ | 5.60 | 5.59 | 5.58 | 5.59 | 5.64 | 5.71 | 5.75 | 5.81 |  |  | 6.23 | 6.23 |  |
| 1960 ................ | 6.25 | 6.23 | 6.22 | 6.21 | 6.20 | 6.19 | 6.17 | 6.14 | 6.11 | 6.09 | 6.07 | 6.04 | 6.16 |
| 1961 ................ | 6.02 | 5.86 | 5.80 | 5.77 |  |  | 5.68 | 5.68 | 5.69 | 5.70 | 5.70 | 5.69 |  |
| 1962 ................ | 5.69 | 5.68 | 5.65 | 5.64 | 5.60 | 5.59 | 5.58 | 5.57 | 5.56 | 5.55 | 5.54 | 5.53 | 5.60 |
| 1963 ............... | 5.52 | 5.48 | 5.47 | 5.46 | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.46 |
| 1964 ............... | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.46 | 5.46 | 5.46 | 5.45 | 5.45 | 5.45 | 5.45 |
| 1965 ................ | 5.45 | 5.45 | 5.45 | 5.45 | 5.45 | 5.44 | 5.44 | 5.45 | 5.46 | 5.49 | 5.51 | 5.62 | 5.47 |
| 1966 ................ | 5.70 | 6.4 | 6.00 | 620 | 6.32 | 6.45 | 6.51 | 6.58 | 6.63 | -............ | 6.81 | 6.77 | ................... |
| 1967 ................ | 6.62 | 6.46 | 6.35 | 6.29 | 6.44 | 6.51 | 6.63 | 6.60 | 6.63 | 6.65 | 6.77 | 6.81 | 6.56 |
| 1968 ................ | 6.81 | 6.78 | 6.83 | 6.94 | $\cdots$ | 7.52 | 7.42 | 7.35 | 7.28 | 7.29 | 7.36 | 7.50 | ................ |
| 1969 ................ | ....... | 7.99 | 8.05 | 8.06 | 8.06 | 8.35 | 8.36 | 8.36 | 8.40 | 8.48 | 8.48 | 8.62 | ................... |
| 1970 ................ | ........." | 9.29 | 9.20 | 9.10 | 9.17 | 9.16 | 9.11 | 9.07 | 9.01 | 8.97 | 8.90 | 8.40 | .................... |
| $1971 . . . . . . . . . . . . . . .$. |  |  | 7.32 | 7.37 | 7.75 | 7.89 | 7.97 | 7.92 | 7.84 | 7.75 | 7.62 | 7.59 | $\ldots$ |
| 1972 ............... | 7.49 | 7.46 | 7.45 | 7.50 | 7.53 | 7.54 | 7.64 | 7.55 | 7.56 | 7.57 | 7.57 | 7.56 | 7.53 |
| 1973 ............... | 7.55 | 7.56 | 7.63 | 7.73 | 7.79 | 7.89 | 8.19 |  | 9.18 | 8.97 | 8.86 | 8.78 | ................ |
| 1974 ............... | ............ | 8.54 | 8.66 | 9.17 | 9.46 | 9.46 | 9.85 | 10.30 | 10.38 | 10.13 | ....... | 9.51 | ................... |
| 1975 ................ | 8.99 | 8.84 | 8.69 |  | 9.16 | 9.06 | 9.13 | 9.32 | 9.74 | 9.53 | 9.41 | 9.32 | .................. |
| 1976 ................ | 9.06 | 9.04 |  | 8.82 | 9.03 | 9.05 | 8.99 | 8.97 | 8.82 | 8.55 | 8.45 | 8.28 | .................... |
| 1977 ................ | 8.45 | 8.55 | 8.65 | 8.64 | ................ | 8.77 | 8.77 | 8.77 | 8.74 | 8.81 | 8.81 | 8.96 | ...... |
| 1978 ............... | 9.18 |  | 9.35 | 9.44 | 9.74 | $1 . . .1 . .$. | 9.96 | 9.81 | 9.81 | 9.98 | 10.04 | 10.23 | ........ |
| 1979 ................ | 10.24 | 10.24 | 10.26 | $\ldots . . . . . . . . . . . . .$. | 10.61 | 10.49 | 10.46 | 10.58 | 11.37 | ................ | 12.41 | 12.24 | $\cdots$ |
| 1980 ............... | 12.60 |  | 14.63 | 13.45 | 11.99 | 11.85 | 12.39 | 13.54 | 14.26 | 14.38 | 14.47 | 14.08 |  |
| 1981 ................ | 14.23 | 14.79 | 15.04 | 15.91 | 16.33 | 16.31 | 16.76 | 17.96 | 18.55 | 17.43 | 15.98 | 16.43 | 16.31 |
| 1982 ............... | 17.38 | 17.10 | 16.41 | 16.31 | 16.19 | 16.73 | 16.29 | 14.61 | 14.03 | 12.99. | 12.82 | 12.80 | 15.31 |
| 1983 ............... | 12.87 | 12.65 | 12.68 | 12.50 | 12.41 | 12.96 | 14.23 | 13.78 | 13.55 | 13.23 . | 13.23 | 13.25 | 13.11 |
| 1984 ................ | 13.08 | 13.20 | 13.68 | 13.80 | 15.01 | 14.91 | 14.58 | 14.21 | 13.99 | 13.43 | 12.90 | 12.99 | 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 ............... | 10.78 | 10.59 | 9.77 | 9.80 | 10.07 | 9.98 | 10.01 | 9.80 | 9.90 | 9.80 | 9.26 | 9.21 | 9.91 |
| 1987 ............... | 8.79 | 8.81 | 8.94 | 10.02 | 10.61 | 10.33 | 10.38 | 10.55 | 11.22 | 10.90 | 10.76 | 10.63 | 10.16 |
| 1988 ............... | 10.17 | 9.86 | 10.28 | 10.46 | 10.84 | 10.65 | 10.66 | 10.74 | 10.58 | 10.23 | 10.63 | 10.81 | 10.49 |
| 1989 ............... | 10.69 | 10.88 | 11.16 | 10.88 | 10.55 | 10.08 | 9.61 | 9.95 | 9.94 | 9.73 | 9.69 | 9.72 | 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 ............... | 9.58 | 9.57 | 9.61 | 9.61 | 9.62 | 9.71 | 9.59 | 9.14 | 9.06 | 8.71 | 8.69 | 8.10 | 9.25 |
| 1992 ............... | 8.72 | 8.74 | 8.85 | 8.79 | 8.66 | 8.56 | 8.12 | 8.08 | 8.06 | 8.29 | 8.54 | 8.12 | 8.46 |
| 1993 ................ | 8.04 | 7.55 | 7.57 | 7.56 | 7.58 | 7.52 | 7.51 | 7.02 | 7.03 | 7.08 | 7.51 | 7.52 | 7.46 |

NSA Not seasonally adjusted

Historical Data for Selected Series-Continued


NSA Not seasonally adjusted

Historical Data for Selected Series-Continued

| YEAR | Jan, | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 123. Index of consumer expectations (1985*100) |  |  |  |  |  |  |  |  |
| $\begin{aligned} & 1948 \text {.................................. } \\ & 1949 \end{aligned}$ | $\cdots$ | ...................... | .................... | $\ldots$ | $\cdots$ | ${ }^{\text {.................................... }}$ | ................................ | $\ldots$ | ....................... | ....................... | ........................ | .............................. | ............................... |
| 1950 ................ | .................... | .................... | .................... | ....................0 | .................... | ..................... | .................... | .................... | ...................." | .................... | .................... | ....................0 | ................... |
| 1951 ............... | .................... | .................. | ................ | ................... | ..................." | ".................. | .............. | .................... | .... | ... | ................... | .................... | .......................... |
| 1952 ................ | ................ | ............ | .................... | ... | .... | .... | ........ | ..... | .................... | .................... | .................... | . | $\cdots$ |
| 1953 ................ | ........... | . | ................... |  |  |  | ............ | ..... |  |  |  | ............ | $\ldots$ |
| 1954 ................ |  |  | ................... |  |  | .................... | .................... | ................... | ...................." | ................... |  | .................... | ................." |
| 1955 ......... | .................... | .................... |  | ................... | .................... | .................... | $\cdots$ | ................... | ................... | ................... | ................... | -.................. |  |
| 1956 ........ | .................... | .................... | .................... | ................... | ................... | .................... | .................... | $\ldots$ | ................... | ................... | .................... | .................... | ........................ |
| 1958 ................... |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4959 .................... | .......................... | .................. | ....... | ................... | .......................". | ........................ | ..................." | .................... | ..". | $\ldots$ | .............. | .................... | ....................... |
| 1960 ............... | ................... | ..................." | .................... | .................... | ............." | .................... | .................... |  |  |  |  |  |  |
| 1961 ............. | .................. | .................. | ................. | ................. | ................ | ................ | .................. | ................... | ${ }^{\text {.................... }}$ | ....................... | ..................... | ....................... | ...................... |
| ${ }^{1962}$....... | .................... | .................... | .................... | .................... |  | .................... | ..................." | .................... | .................... | ..................". | .................." | ..................." | .......................... |
| 1964 .................... | $\ldots$ | ....................". |  |  |  |  |  |  |  |  |  |  | ................. |
| 1965 ............... | ................... | ...................." | ..................... | ................ | ................ | ..................... | .................... | ........ |  | ..................." | .... |  |  |
| 1966 ............... | .................. | .......... | ................... | .................... | ..... | ................... | ................... | ................. | ............ | ..... | ............ | ......... | ..................... |
| 1968 ................... | $\cdots$ |  |  |  | ..................... |  | .... | .................." | .................." | ................... | ............ |  | ......................... |
| 1969 .................. | ... | 19.1 | ....................... | 114.5 |  | 117.4 | ….................. | 111.0 | $\cdots$ | 103.2 | $\cdots$ | 102.9 | $\cdots$ |
| 1970 | $\ldots$ | 88.8 | .............. | 92.1 | .................... | 90.0 | ..................... | 101.0 | $\ldots$ | 97.5 | .................... | 94.8 | $\cdots$ |
| 1971. | .................... | 98.9 | ................... | 98.5 | ................... | 104.6 | ................... | 103.4 | ................... | 100.9 | ..... | 107.1 |  |
| 1972 .............. | $\ldots$ | 111.0 | .................." | 108.8 | ................... | 107.5 | .................... | 110.7 | ..... | 113.3 | .................. | 114.9 | .... |
| 1974 ..................... | $\ldots$ | 110.8 53.9 |  | 94.4 91.2 | …............... | ${ }_{86} 92$ | ……............. | 76.4 | .................... | ${ }_{4}^{95.6}$ | ..................... | 45.2 | ........................... |
| 1975 ............... | $\ldots$ | 69.5 | $\ldots$ | 88.9 |  | 97.8 | ................ | 107.6 |  | 95.2 |  | 112.1 |  |
| 1976 ....... | ................... | 117.9 | ......... | 100.1 | ... | 103.8 |  | 105.1 |  | 99.7 |  | 116.3 | ......................... |
| 1977 ............ |  | 115.5 |  | 100.9 | .................. | 99.4 | 100.6 | 100.5 | 95.3 | 97.9 | 103.2 | 113.9 | , |
| 1978 ................ | 109.4 | 108.2 | 107.1 | 108.6 | 99.4 | 101.0 | 93.3 | 97.4 | 95.3 | 97.7 | 82.4 | 86.1 | 98.8 |
| 1979 ............... | 82.2 | 88.8 | 78.0 | 77.9 | 78.5 | 73.3 | 63.1 | 60.7 | 66.9 | 74.1 | 73.0 | 74.8 | 74.3 |
| 1980 ................ | 71.4 | 74.9 | 70.5 | 50.0 | 50.0 | 62.3 | 75.4 | 85.0 | 93.8 | 99.6 | 102.9 | 91.1 | 77.2 |
| 1981 ................ | 85.9 | 78.4 | 88.1 | 93.1 | 96.3 | 94.0 | 94.1 | 96.5 | 86.6 | 84.7 | 77.0 | 82.8 | 88.1 |
| 1982 ............... | 82.5 | 78.2 | 72.4 | 77.6 | 83.2 | 80.1 | 89.2 | 80.2 | 86.1 | 78.6 | 84.7 | 88.6 | 81.8 |
| 1983 ................ | 87.7 | 101.1 | 116.5 | 119.7 | 124.3 | 121.0 | 119.2 | 119.3 | 117.3 | 117.6 | 119.5 | 123.2 | 115.5 |
| 1984 .............. | 122.4 | 114.7 | 113.1 | 19.1 | 114.7 | 110.6 | 104.2 | 105.1 | 101.4 | 102.0 | 107.4 | 98.7 | 109.5 |
| 1985. | 102.5 | 103.9 | 95.9 | 105.1 | 99.6 | 102.7 | 102.5 | 102.1 | 96.3 | 94.5 | 96.8 | 98.2 | 100.0 |
| 1986 ............... | 96.3 | 94.4 | 95.5 | 99.0 | 99.4 | 99.7 | 96.4 | 92.0 | 89.4 | 86.1 | 92.0 | 92.2 | 94.4 |
| 1987 ................ | 85.6 | 91.8 | 96.8 | 100.5 | 105.6 | 98.2 | 105.6 | 107.5 | 112.5 | 108.9 | 90.9 | 99.6 | 100.3 |
| 1988 ............... | 102.2 | 105.5 | 104.9 | 112.8 | 114.4 | 108.6 | 103.7 | 109.4 | 100.1 | 109.3 | 102.0 | 105.6 | 806.5 |
| 1989 ............... | 104.1 | 108.3 | 104.9 | 101.8 | 103.0 | 105.1 | 106.6 | 103.7 | 106.1 | 106.4 | 103.7 | 104.4 | 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 | 63.6 | 100.7 | 99.7 | 95.5 | 100.9 | 100.3 | 96.8 | 95.4 | 79.5 | 69.7 | 72.6 | 85.8 |
| 1992 ................ | 68.7 | 63.5 | 76.7 | 89.7 | 96.9 | 95.9 | 80.1 | 78.3 | 74.2 | 70.7 | 85.7 | 103.9 | 82.0 |
| 1993 ............... | 98.0 | 84.7 | 77.3 | 81.1 | 73.1 | 69.6 | 66.8 | 66.8 | 72.8 | 66.7 | 80.3 | 91.8 | 77.4 |
|  |  |  |  | 320. | Consumer Price In | dex for all urban | consumers, all it | ms, NSA (1982 | 84=100) |  |  |  |  |
| 1948 .............. | 23.7 | 23.5 | 23.4 | 23.8 | 23.9 | 24.1 | 24.4 | 24.5 | 24.5 | 24.4 | 24.2 | 24.1 | 24.1 |
| 1949 ....... | 24.0 | 23.8 | 23.8 | 23.9 | 23.8 | 23.9 | 23.7 | 23.8 | 23.9 | 23.7 | 23.8 | 23.6 | 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 ...... | 25.4 | 25.7 | 25.8 | 25.8 | 25.9 | 25.9 | 25.9 | 25.9 | 26.1 | 26.2 | 26.4 | 26.5 | 26.0 |
| 1952 ................ | 26.5 | 26.3 | 26.3 | 26.4 | 26.4 | 26.5 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.5 |
| 1953 ................ | 26.6 | 26.5 | 26.6 | 26.6 | 26.7 | 26.8 | 26.8 | 26.9 | 26.9 | 27.0 | 26.9 | 26.9 | 26.7 |
| 1954 ................ | 26.9 | 26.9 | 26.9 | 26.8 | 26.9 | 26.9 | 26.9 | 26.9 | 26.8 | 26.8 | 26.8 | 26.7 | 26.9 |
| 1955 ............... | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.7 | 26.8 | 26.8 | 26.9 | 26.9 | 26.9 | 26.8 | 26.8 |
| 1956 ............... | ${ }_{276} 26$ | 26.8 | ${ }^{26.8}$ | 26.9 | 27.0 | 27.2 | 27.4 | 27.3 | 27.4 | 27.5 | 27.5 | ${ }_{2}^{27.6}$ | 27.2 |
| 1957 ............... | 27.6 | 27.7 | 27.8 | 27.9 | 28.0 | 28.1 | 28.3 | 28.3 | 28.3 | 28.3 | 28.4 | 28.4 | 28.1 |
| $1959 . . . . . . . . . . . . . . . . . . . . . ~$ | 290 | 28.6 | 28.8 28.9 | 28.9 29.0 | 28.9 29.0 | 29.1 | 29.0 29.2 | 28.9 29.2 | 28.9 29.3 | 28.9 29.4 | 29.0 | 28.9 | 28.9 |
| 1960 |  |  |  |  |  |  |  |  |  |  |  |  | 29.1 |
| 1960 1961 | 29.3 | 29.4 | 29.4 | 29.5 | 29.5 | 29.6 | 29.6 | 29.6 | 29.6 | 29.8 | 29.8 | 29.8 | 29.6 |
| 1962 ..................... | 30.0 | 30. | 30.1 | 30.6 | 30.6 | 30.2 | 30.3 | 303 | 30.4 | 30.4 | 30.4 | 304 | 29.9 |
| 1963 ................ | 30.4 | 30.4 | 30.5 | 30.5 | 30.5 | 30.6 | 30.7 | 30.7 | 30.7 | 30.8 | 30.8 | 30.9 | 30.6 |
| 1964 ........... | 30.9 | 30.9 | 30.9 | 30.9 | 30.9 | 31.0 | 31.1 | 31.0 | 31.1 | 31.1 | 31.2 | 31.2 | 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 ............... | 31.8 | 32.0 | 32.1 | 32.3 | 32.3 | 32.4 | 32.5 | 32.7 | 32.7 | 32.9 | 32.9 | 32.9 | 32.4 |
| 1967 ................ | 32.9 | 32.9 | 33.0 | 33.7 | 33.2 | 33.3 | 33.4 | 33.5 | 33.6 | 33.7 | 33.8 | 33.9 | 33.4 |
| 1969 .................... | 35.6 | 34.8 | 34.1 | 34.4 36.3 | 34.5 36.4 | 34.7 36.6 | 34.9 | 35.0 | 37.1 | 35.3 37.3 | 35.4 37.5 | 35.5 | 34.8 36.7 |
| 1970 ............... | 37.8 | 38.0 | 38.2 | 38.5 | 38.6 | 38.8 | 39.0 | 39.0 | 39.2 | 39.4 | 39.6 | 39.8 | 38.8 |
| 1971 ............... | 39.8 | 39.9 | 40.0 | 40.1 | 40.3 | 40.6 | 40.7 | 40.8 | 40.8 | 40.9 | 40.9 | 41.1 | 40.5 |
| 1972 ............... | 41.1 | 41.3 | 41.4 | 41.5 | 41.6 | 41.7 | 41.9 | 42.0 | 42.1 | 42.3 | 42.4 | 42.5 | 41.8 |
| 1973 ............... | ${ }_{46}^{42.6}$ | 42.9 | 43.3 | 43.6 | 43.9 | 44.2 | 44.3 | 45.1 | 45.2 | 45.6 | 45.9 | 46.2 | 44.4 |
| 1974 ............... | 46.6 | 47.2 | 47.8 | 48.0 | 48.6 | 49.0 | 49.4 | 50.0 | 50.6 | 51.1 | 51.5 | 51.9 | 49.3 |
| 1975 ............... | 52.1 | 52.5 | 52.7 55 | 52.9 | 53.2 | 53.6 | 54.2 | 54.3 | 54.6 | 54.9 | 55.3 | 55.5 | 53.8 |
| 1976 ............... | 55.6 | 55.8 | 55.9 | 56.1 | 56.5 | 56.8 | 57.1 | 57.4 | 57.6 | 57.9 | 58.0 | 58.2 | 56.9 |
| 1977 ............... | 58.5 | 59.1 | 59.5 | 60.0 | 60.3 | 60.7 | 61.0 | 61.2 | 61.4 | 61.6 | 61.9 | 62.1 | 60.6 |
| 1978 ............... | 62.5 | 62.9 | 63.4 | 63.9 | 64.5 | 65.2 | 65.7 | 66.0 | 66.5 | 67.1 | 67.4 | 67.7 | 65.2 |
| 1979 ................ | 68.3 | 69.1 | 69.8 | 70.6 | 71.5 | 72.3 | 73.1 | 73.8 | 74.6 | 75.2 | 75.9 | 76.7 | 72.6 |
| 1980 ................ | 77.8 | 78.9 | 80.1 | 81.0 | 81.8 | 82.7 | 82.7 | 83.3 | 84.0 | 84.8 | 85.5 | 86.3 | 82.4 |
| $1981 . . . . . . . . . . . . . . .$. | 87.0 | 87.9 | 88.5 | 89.1 | 89.8 | 90.6 | 91.6 | 92.3 | 93.2 | 93.4 | 93.7 | 94.0 | 90.9 |
| 1982 ............... | 94.3 | 94.6 | 94.5 | 94.9 | 95.8 | 97.0 | 97.5 | 97.7 | 97.9 | 98.2 | 98.0 | 97.6 | 96.5 |
| 1983 ................ | 97.8 | 97.9 | 97.9 | 98.6 | 99.2 | 99.5 | 99.9 | 100.2 | 100.7 | 101.0 | 101.2 | 101.3 | 99.6 |
| 1984 ................ | 101.9 | 102.4 | 102.6 | 103.7 | 103.4 | 103.7 | 104.1 | 104.5 | 105.0 | 105.3 | 105.3 | 105.3 | 103.9 |
| 1985 ............... | 105.5 | 106.0 | 106.4 | 106.9 | 107.3 | 107.6 | 107.8 | 108.0 | 108.3 | 108.7 | 109.0 | 109.3 | 107.6 |
| 1986 ............... | 109.6 | 109.3 | 108.8 | 108.6 | 108.9 | 109.5 | 109.5 | 109.7 | 110.2 | 110.3 | 110.4 | 110.5 | 109.6 |
| 1987 ................ | 111.2 | 111.6 | 112.1 | 112.7 | 113.1 | 113.5 | 113.8 | 114.4 | 115.0 | 115.3 | 115.4 | 115.4 | 113.6 |
| 1988 ............... | 115.7 | 116.0 | 116.5 | 117.1 | 117.5 | 118.0 | 118.5 | 119.0 | 119.8 | 120.2 | 120.3 | 120.5 | 118.3 |
| 1989 ............... | 121.1 | 121.6 | 122.3 | 123.1 | 123.8 | 124.9 | 124.4 | 124.6 | 125.0 | 125.6 | 125.9 | 126.1 | 124.0 |
| 1990 ............... | 127.4 | 128.0 | 128.7 | 128.9 | 129.2 | 129.9 | 130.4 | 131.6 | 132.7 | 133.5 | 133.8 | 133.8 | 130.7 |
| $1991 . . . . . . . . . . . . . .$. | 134.6 | 134.8 | 135.0 | 135.2 | 135.6 | 136.0 | 136.2 | 136.6 | 137.2 | 137.4 | 137.8 | 137.9 | 136.2 |
| 1992 ............... | 138.1 | 138.6 | 139.3 | 139.5 | 139.7 | 140.2 | 140.5 | 140.9 | 141.3 | 141.8 | 142.0 | 141.9 | 140.3 |
| 1993 ............... | 142.6 | 143.1 | 143.6 | 144.0 | 144.2 | 144.4 | 144.4 | 144.8 | 145.1 | 145.7 | 145.8 | 145.8 | 144.5 |

NSA Not seasonally adjusted

Historical Data for Selected Series-Continued

| YEAR | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Annual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 320c. Consumer Price Index for all urban consumers, all items, change over 1 -month 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 | . 8 | . 7 | . 4 | 1.5 | . 5 |
| 1951 ................ | 1.6 | 1.8 | . 2 | . 2 | . 3 | -. 2 | -. 1 | -. 2 | . 7 | . 5 | . 6 | . 6 | . 5 |
| 1952 ................... | -. 1 | -. 2 | -. 1 | 3 | 0 | . 2 | . 6 | 0 | -. 2 | . 2 | 0 | . 1 | . 1 |
| 1953 ............... | -. 3 | -. 2 | . 2 | 2 | 0 | . 3 | .1 | . 2 | . 1 | . 2 | -. 4 | . 1 | 0 |
| 1954 ............... | . 3 | . 2 | -. 2 | -. 3 | . 3 | 0 | -. 3 | 0 | -. 1 | -. 3 | . 2 | 0 | 0 |
| 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 | 0 | . 1 | . 4 | 1 |
| 1959 ............... | . 1 | 0 | -. 1 | 0 | . 2 | . 2 | . | . 1 | . 2 | . 3 | 0 | 2 | . 1 |
| 1960 ............... | -. 1 | . 1 | 0 | 4 | 1 | . 1 | -. 2 | 2 | 0 | . 5 | .1 | 1 | d |
| 1961 ............... | . 1 | 0 | 0 | -. 1 | . 1 | 0 | 3 | 1 | . 1 | 0 | 0 | .1 | . 1 |
| 1962 ............... | . | . 2 | 2 | . 1 | . 1 | -. 1 | 0 | . 2 | . 5 | -. 1 | 0 | 0 | . 1 |
| 1963 ............... | . 2 | . 1 | . 1 | -1 | . 9 | 3 | . 3 | . 2 | -. 1 | .1 | . 1 | 3 | 1 |
| 1964 ............... | . 2 | -. 1 | . 1 | 0 | . 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 ............... | -. 1 | . 3 | 0 | . 3 | 0 | . 6 | 3 | . 3 | 3 | . 3 | . 6 | . 3 | . 3 |
| 1968 .................. | . 3 | . 3 | . 3 | . 3 | . 3 | . 6 | . 6 | . 3 | . 3 | . 6 | . 3 | . 6 | . 4 |
| 1969 ............... | . 3 | . 3 | . 8 | . 6 | . 3 | . 5 | . 5 | . 3 | . 5 | . 5 | . 5 | . 5 | . 5 |
| 1970 .............." | ${ }^{5}$ | ${ }^{5}$ | ${ }^{.} 5$ | ${ }^{5}$ |  |  |  |  |  |  |  |  |  |
| 1971 ............... | 3 | ${ }_{5}$ | 0.3 | . 3 | . 5 | . 5 | $\frac{2}{2}$ | $.2$ | $.2$ | . 2 | . 2 | . 2 | 3 |
| ${ }_{1} 1972$................ | . 2 | 7 | 0 | . 7 | . 2 | 2 | .$^{2}$ | . 2 | . 5 | . 2 | ${ }^{5}$ | . 2 | 3 |
| 1973 .............. | . 5 | . 7 | 1.9 | . 7 | . ${ }^{5}$ | . 8 | ${ }_{6}$ | ${ }_{1.8}^{1.8}$ | . 4 | 8 | 1.0 | 8 | 1.0 |
| 1975 ................... | 8 | 6 | 4 | 4 | . | 8 | 9 | 4 | 7 | . 5 | 7 | 5 | 1.0 |
| 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 | 1.1 | . 8 | 1.0 | . 3 | . 4 | . 3 | . 7 |
| 1982 ............... | . 3 | . 3 | 0 | 3 | . 9 | 1.1 | . 5 | . 2 | 0 | . 4 | -. 1 | -. 3 | . 3 |
| 1983 ..............." | . 2 | . 1 | . 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 ............... | . 4 | -. 2 | -. 5 | -. 4 | . 3 | . 4 | . 9 | . 1 | . 4 | 2 | . 2 | 4 | . 1 |
| 1987 ................ | . 6 | . 4 | . 4 | . 4 | 3 | . 4 | . 3 | . 4 | . 3 | 3 | . 3 | . 2 | . 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 |
| $1990 . . . . . . . . . . . . . .$. | . 8 | . 4 | . 5 | 2 | 2 | . 6 | . 5 | 8 | . 7 | . 6 | . 4 | 3 |  |
| 1991 ................ | . 4 | . 1 | . 1 | . 2 | 3 | . 2 | . 3 | . 2 | . 3 | . 1 | . 4 | 3 | . 2 |
| 1992 ............... | 1 | . | 4 | . 2 | 2 | 4 | . 2 | 3 | . 1 | . 4 | 3 | 2 | . 2 |
| 1993 ................ | . 2 | . 4 | 2 | . 3 | 2 | . 1 | . 1 | . 3 | . 1 | . 3 | . 3 | . 2 | . 2 |
| 320c. Consumer Price index for all urban consumers, all items, change over 6-month span (AR, pct.) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 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 | 1.5 | 1.4 | 1.2 | 1.4 | 1.4 | 1.4 | 1.4 | 1.4 | 2.0 | 1.6 | 1.6 | 1.5 |
|  | . 4 | 4 | 2 | . 5 | 7 | . 9 | 1.1 | . 9 | 1.1 | . 8 | 1.1 | 1.3 | . 8 |
| 1962 ............... | 1.5 | 1.7 | 1.3 | 1.2 | 1.1 | 1.7 | 1.1 | . 9 | 1.1 | 1.5 | 1.3 | 6 | 1.3 |
| 1963 ............... | . 7 | . 9 | 1.5 | 1.6 | 1.8 | 1.4 | 1.8 | 1.8 | 1.8 | 1.6 | 1.0 | 1.4 | 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 ................ | 1.7 | 1.7 | 2.3 | 1.9 | 1.7 | 2.0 | 1.7 | 1.7 | 1.5 | 1.9 | 3.4 | 3.6 | 2.1 |
| 1966 ................ | 4.0 | 3.8 | 3.4 | 3.6 | 3.6 | 3.6 | 3.6 | 3.3 | 3.4 | 2.8 | 2.2 | 1.5 | 3.2 |
| 1967 ................. | 1.5 | 1.3 | 2.3 | 3.1 | 3.1 | 3.7 | 3.7 | 4.9 | 4.2 | 4.2 | 4.2 | 4.2 | 3.4 |
| 1968 ............... | 4.2 | 3.6 | 4.2 | 4.7 | 4.7 | 4.7 | 5.3 | 5.3 | 5.3 | 4.6 | 4.6 | 5.8 | 4.8 |
| $1969 . . . . . . . . . . . . . . . . . ~$ | 5.7 | 5.7 | 5.7 | 6.3 | 6.2 | 5.6 | 5.6 | 6.1 | 6.1 | 6.1 | 6.6 | 6.6 | 6.0 |
| 1970 ................ | 6.5 | 6.0 | 5.9 | 5.3 | 4.8 | 4.8 | 4.7 | 5.2 | 5.2 | 5.2 | 4.7 | 4.1 | 5.2 |
| 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 | 3.5 |
| 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 | 3.7 |
| 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 |
| 1992 ............... | 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 | - 5.2 | -4.7 | - 4. | 1.7 | 2.8 | 2.6 | 2.6 | 3.7 | 4.2 | 4.2 | 1.8 |
| ${ }_{1} 1987$................ | 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 ................ | 5.7 | 5.3 | 5.8 | 4.9 | 5.9 | 6.2 | 6.9 | 7.4 | 6.7 | 6.5 | 4.9 | 3.7 | 5.8 |
| 1991 ................ | 2.9 | 2.7 | 2.5 | 2.4 | 2.7 | 3.1 | 3.0 | 3.3 | 3.4 | 3.0 | 2.8 | 3.1 | 2.9 |
| 1992 ................ | 3.2 | 2.8 | 2.9 | 3.2 | 3.5 | 2.9 | 3.2 | 3.3 | 3.0 | 3.0 | 3.1 | 3.3 | 3.1 |
| 1993 ................ | 3.3 | 3.1 | 2.8 | 2.7 | 2.5 | 2.2 | 2.2 | 2.4 | 2.6 | 2.4 | 2.4 | 2.9 | 2.6 |

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Corporate Profits, 4th quarter 1994 ..... Mar. 31


[^0]:    1. Quarterly estimates in the national income and product accounts are expressed at seasonally adjusted annual rates, and quarterly changes are differences between these rates. Quarter-to-quarter percent changes are annualized.

    Real, or constant-dollar, estimates are expressed in 1987 dollars and are based on 1987 weights.

[^1]:    NoTE.-Most series are found in NIPA tabie 1.4. Output of motor vehicles is the sum of auto output and truck output from tables 8.4 and 8.6 , respectively).

[^2]:    NOTE.-Doliar levels are found in NIPA table 3.8B, and percent changes are found in table

[^3]:    In the NIPA's, sales by the government are deducted from purchases; for more detail, see the section "Government Sector."

[^4]:    3. 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.
[^5]:    4. 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 6.16 C as "corporate profits with inventory valuation and capital consumption adjustments."
[^6]:    NoTE,-Levels of these and other profits series are found in NIPA tables 1.14, 1.16, 6.16C

[^7]:    5. 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.
[^8]:    NOTE.-Doilar levels are found in NIPA tables 3.2 and 3.3 .

[^9]:    1. 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 in the published NIPA estimates.
    2. For additional information about the concepts, definitions, data 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.
    3. 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.
[^10]:    1. Includes utilities, communications, rental payments, maintenance and repair, and payments to contractors to operate installations.
    2. Includes depot maintenance and contractual services for weapons systems, other than research and development.
[^11]:    1. Includes utilities, communications, rental payments, maintenance and repair, and payments to contractors to
[^12]:    1. Includes new computers and peripheral equipment only.
[^13]:    1. Inventories are as of the end of the quarter. Quarter-to-quarier changes calculated from this table are at
[^14]:    1. Exports and imports of certain goods, primarily military equipment purchased and sold by the Federal Government, are included in services.
    2. Consists largely of receipts by U.S. residents of interest and dividends and reinvested earnings of foreign atililites of U.S. corporations.
    3. Consists largely of payments to foreign residents of interest and dividends and reinvested earnings of U.S. affiliates of foreign corporations.
[^15]:    1. Includes new trucks only.
[^16]:    i. Fercent change a annilalite tompreceding duariej based on seas onaly adusied estimates.
    
    S. Fersomat saving as percentage of disposable petsomalinooniog based on seasonaly a justed estimates.

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[^17]:    defintions 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

[^18]:    1. National Science Board, National Science Foundation [39], page 89 .
[^19]:    2. 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 NIPN 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].
    4. See, for example, National Science Board, National Science Foundation [39].
[^20]:    5. 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.
[^21]:    6. The definitions of ram and the three types of activities that are found elsewhere-for example, in financial accounting standards and in Nsf's specific surveys-are similar to these definitions but place emphasis on elements of the definitions that are relevant to the context.
    7. See James Adams [1] and [2].
[^22]:    8. John Kendrick [33], pp. 79-81.
    9. See Eric Schiff [51], pp. 434-435 and George Jaszi [31], pp. 454-455.
[^23]:    10. See Nancy Ruggles and Richard Ruggles [50], especially page 99.
    11. See John Kendrick [32], especially pp. 1-21.
[^24]:    14. See System of National Accounts [52], paragraph 6.163
    15. See Michael Braibant [5].
    16. See Fritz Bos, et. al. [4].
[^25]:    12. See Robert Eisner [24], especially pp. 8-20.
    13. See [52].
[^26]:    17. In BEA's input-output accounts, neither current expenses nor receipts for R\&D are identified at the published level of detail. A portion of R\&D is
[^27]:    18. See Nestor Terleckyj [54] and Vannevar Bush [12].
[^28]:    19. See, for example, Federal Republic of Germany, Federal Statistical Office [26].
    20. See, for example, Zvi Griliches [28].
    21. See, for example, John Kendrick [32].
    22. Eric Schiff [51] and Fritz Bos, et. al. [4].
[^29]:    23. See, for example, Robert Eisner [24] and John Kendrick [32].
    24. See Congressional Budget Office [14].
    25. See John Kendrick [32], John Rapoport [46], and Lenore Wagner [57].
    26. 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].
[^30]:    27. 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].
    28. See, for example, Bureau of Labor Statistics [11], Congressional Budget Office [14], Robert Eisner [24], and M. Ishaq Nadiri and Ingmar Prucha [38]. 29. See Ariel Pakes and Mark Schankerman [45].
    29. 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
[^31]:    35. 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].
[^32]:    36. See Jack E. Triplett [56].
[^33]:    37. See Division of Science Resource Studies, National Science Foundation [15], [16], [17], [18], [20], and [22] for more information.
    38. Beginning in 1992, the industry samples will be redrawn annually.
[^34]:    39. See Division of Science Resources Studies, National Science Foundation [20] and [22] for more information.
[^35]:    40. See John Kendrick [32].
    41. See Nestor Terleckyj [54].
    42. See Vanevar Bush [12].
    43. See Research and Development Board, Department of Defense [54].
    44. See Derver Research Institute [15].
[^36]:    45. See Richard Hewlett and Oscar Anderson, Jr. [29]
[^37]:    49. For a more complete description of the NIPA perpetual inventory
[^38]:    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

[^39]:    - 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.

[^40]:    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.

[^41]:    NoTE:-The following current high values were reached before September 1993: July 1991-BCl-92 change (6.72) and April 1993-BCl-91 (17.7).
    See page $\mathrm{C}-6$ for other footnotes.

[^42]:    See footnotes on page C-6.

