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## INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production, which had edged down in September when Hurricane Floyd slowed activity along the eastern seaboard, increased 0.7 percent in October. In the recovery after the storm, output rebounded at electric utilities and in a number of manufacturing industries. At 136.1 percent of its 1992 average, industrial production in October was 2.8 percent higher than in October 1998. The rate of capacity utilization for total industry rose 0.3 percentage point, to 80.7 percent, a level 1.4 percentage points below its 1967–98 average.

Market Groups

The output of consumer goods rose 1.4 percent in October after having dropped 0.8 percent in September. The output of durable consumer goods increased 2.1 percent as the production of both automotive products and other durable goods, particularly goods for the home such as appliances, increased sharply. After having declined 0.3 percent in September, the production of nondurable consumer goods advanced 1.1 percent. The output of energy products

(over)

### INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION: SUMMARY

Seasonally adjusted

| | Index, 1992=100 | | | | Percent change | | | | |
|---|---|---|---|---|---|---|---|---|---|
| **Industrial Production** | 1999 July[r] | Aug.[r] | Sept.[r] | Oct.[p] | 1999 July[r] | Aug.[r] | Sept.[r] | Oct.[p] | Oct. 98 to Oct. 99 |
| **Total index** | 135.0 | 135.3 | 135.2 | 136.1 | .6 | .3 | –.1 | .7 | 2.8 |
| Previous estimates | 135.0 | 135.5 | 135.0 | | .6 | .4 | –.3 | | |
| Major market groups: | | | | | | | | | |
| Products, total | 125.7 | 126.4 | 126.0 | 127.0 | .0 | .6 | –.4 | .8 | 1.7 |
| Consumer goods | 115.8 | 116.7 | 115.8 | 117.4 | –.3 | .7 | –.8 | 1.4 | 1.9 |
| Business equipment | 172.2 | 172.8 | 172.4 | 172.4 | .7 | .4 | –.2 | .0 | 2.0 |
| Construction supplies | 132.8 | 132.6 | 133.0 | 134.0 | 1.1 | –.2 | .3 | .7 | 4.3 |
| Materials | 150.3 | 150.0 | 150.5 | 151.3 | 1.4 | –.2 | .4 | .5 | 4.7 |
| Major industry groups: | | | | | | | | | |
| Manufacturing | 139.0 | 139.4 | 139.6 | 140.4 | .4 | .3 | .1 | .6 | 3.2 |
| Durable | 167.5 | 167.9 | 167.9 | 168.9 | 1.2 | .3 | .0 | .6 | 4.8 |
| Nondurable | 110.7 | 111.1 | 111.4 | 112.1 | –.5 | .4 | .3 | .6 | 1.1 |
| Mining | 98.4 | 99.5 | 99.2 | 99.4 | .7 | 1.1 | –.2 | .1 | –2.6 |
| Utilities | 121.5 | 120.2 | 117.2 | 119.5 | 2.8 | –1.1 | –2.5 | 2.0 | 2.5 |

| | Percent of capacity | | | | | | | | Capacity growth |
|---|---|---|---|---|---|---|---|---|---|
| **Capacity Utilization** | Average 1967–98 | 1982 Low | 1988–89 High | 1998 Oct. | 1999 July[r] | Aug.[r] | Sept.[r] | Oct.[p] | Oct. 98 to Oct. 99 |
| **Total industry** | 82.1 | 71.1 | 85.4 | 81.3 | 80.6 | 80.6 | 80.4 | 80.7 | 3.6 |
| Previous estimates | | | | | 80.6 | 80.7 | 80.3 | | |
| Manufacturing | 81.1 | 69.0 | 85.7 | 80.3 | 79.5 | 79.5 | 79.4 | 79.7 | 3.9 |
| Advanced processing | 80.5 | 70.4 | 84.2 | 79.6 | 78.4 | 78.4 | 78.3 | 78.5 | 4.7 |
| Primary processing | 82.4 | 66.2 | 88.9 | 82.4 | 82.7 | 82.9 | 82.8 | 83.1 | 2.1 |
| Mining | 87.5 | 80.3 | 88.0 | 84.7 | 81.1 | 81.9 | 81.7 | 81.7 | 1.0 |
| Utilities | 87.4 | 75.9 | 92.6 | 92.0 | 95.5 | 94.5 | 92.1 | 93.9 | .5 |

rebounded 2.1 percent from declines that totaled 3 percent over August and September, and the output of nonenergy consumer nondurables rose 1.0 percent, led by gains in foods and consumer chemicals.

The production of business equipment, which had eased 0.2 percent in September, was flat in October. Sharp declines in the output of transit equipment, particularly commercial aircraft, and other equipment offset gains in the production of information processing equipment and industrial equipment. Within the information processing group, the output of computers has risen more slowly in recent months than earlier in the year. The output of defense equipment in October recouped about half of its 1.6 percent decline in September .

The production of construction supplies rose 0.7 percent in October, after a smaller increase in the previous month, to a level 4.3 percent higher than in October 1998. The output of materials increased 0.5 percent, a bit more than in September. The increases in the output of durable goods materials, which were strong over the past year, slowed to 0.3 percent in October, while growth in the output of nondurable goods materials accelerated to 0.7 percent. The production of energy materials reversed most of the 1 percent drop in September.

Industry Groups

Manufacturing output advanced 0.6 percent in October after a gain of only 0.1 percent in September. The increase in the output of durables was led by gains at makers of iron and steel, light trucks, computers, semiconductors, and miscellaneous manufactures; however, the gains in hi-tech industries, such as computers and related parts, while still rapid, have on balance been smaller in recent months. While most other durable industries recorded fractional increases, the output indexes for commercial aircraft and parts and for farm machinery declined noticeably. The ongoing contraction in the output of commercial aircraft and parts brought its index in October to a level about 20 percent below the level of October 1998. The output of farm machinery, which had dropped sharply to a low in August, remained more than 40 percent below its high in the summer 1998. Production in nondurable manufacturing increased for a third month after earlier weakness. Among nondurables, gains in October were widespread, except for rubber and plastics products and leather and products. The tobacco, textile, and apparel products industries, which had suffered setbacks in the preceding two or three months, reversed a portion of those losses in October. The output of printing and publishing, chemicals and products, petroleum products, and foods advanced again.

The factory operating rate rose 0.3 percentage point, to 79.7 percent, with increases in both durable and nondurable industries. While the utilization rate for durable manufacturing was a bit above its 1967–98 average, the rates for nondurable manufacturing industries other than petroleum products were below their averages.

The output at utilities, which had fallen back more than 3-1/2 percent in August and September, increased 2.0 percent; utilization at utilities recovered and moved up, to 93.9 percent. Mine production edged up after having eased a bit in September; utilization at mines remained at 81.7 percent.

## Revision of Industrial Production and Capacity Utilization

On November 30, 1999, the Federal Reserve Board will publish a revision to the index of industrial production (IP) and the related measures of capacity and capacity utilization for the period January 1992 to October 1999. The updated measures will reflect both the incorporation of newly available, more comprehensive source data typical of annual revisions and, for some series, the introduction of improved methods for compiling the series. The new source data are for recent years, primarily 1997 and 1998, and the modified methods affect data from 1992 onward. In addition, the supplementary series on the gross value of products leaving the industrial sector will be expressed in 1996 dollars; these series begin in 1977.

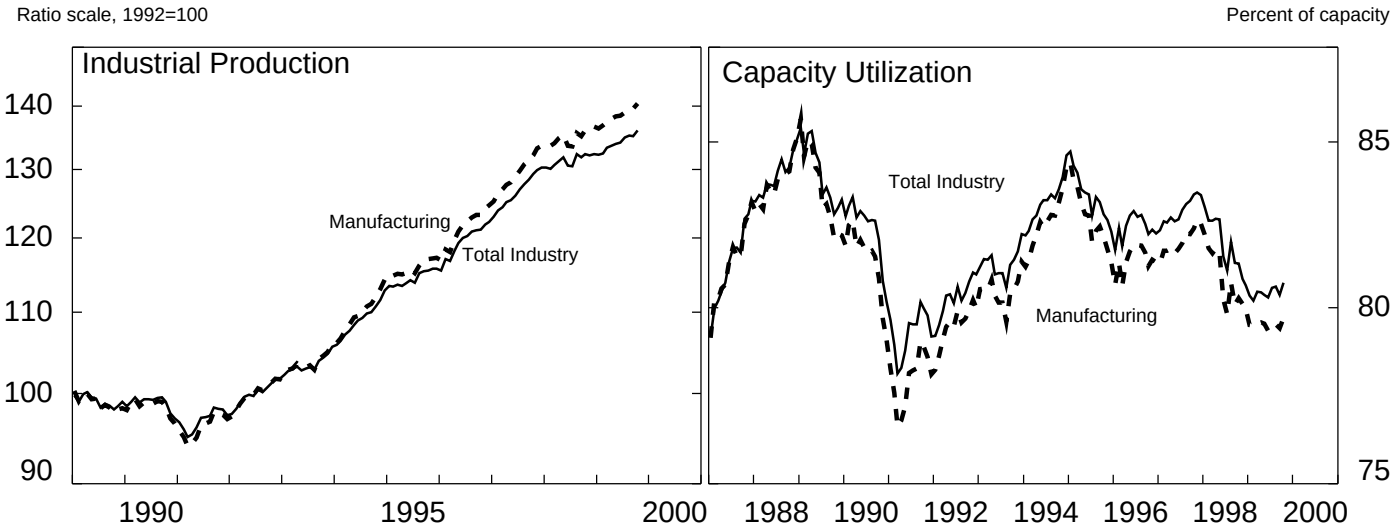
The updated IP measures will include some annual data from the Bureau of the Census's 1997 Census of Manufactures and from selected editions of its 1998 Current Industrial Reports. Annual data from the U.S. Geological Survey on metallic and nonmetallic minerals (except fuels) for 1997 and 1998 will also be introduced. The updating will also include revisions to the monthly indicator for each industry (either physical product data, production worker hours, or electric power usage) and revised seasonal factors.

The revision will introduce improved measures of production for computers and office equipment (SIC 357) and for motor vehicles (SIC 3711, 3). The new monthly production measure for computers is derived from detailed information on the major products produced by the industry. For example, from 1994 to 1998, quarterly data on the physical quantity and average unit value of about 1,100 distinct models of personal computers, notebooks, servers, and workstations are used to construct the new IP index for computers; previously, monthly electric power use by the industry was used as the within-year indicator of production. The new measures of motor vehicle production incorporate price weights for the different models of light vehicles; previously, all autos and light trucks were weighted equally in compiling an aggregate figure. In addition, the monthly production indicators for bolts and fasteners (SIC 345) and for metalworking machinery (SIC 354) will be changed from electric power use to production worker hours.

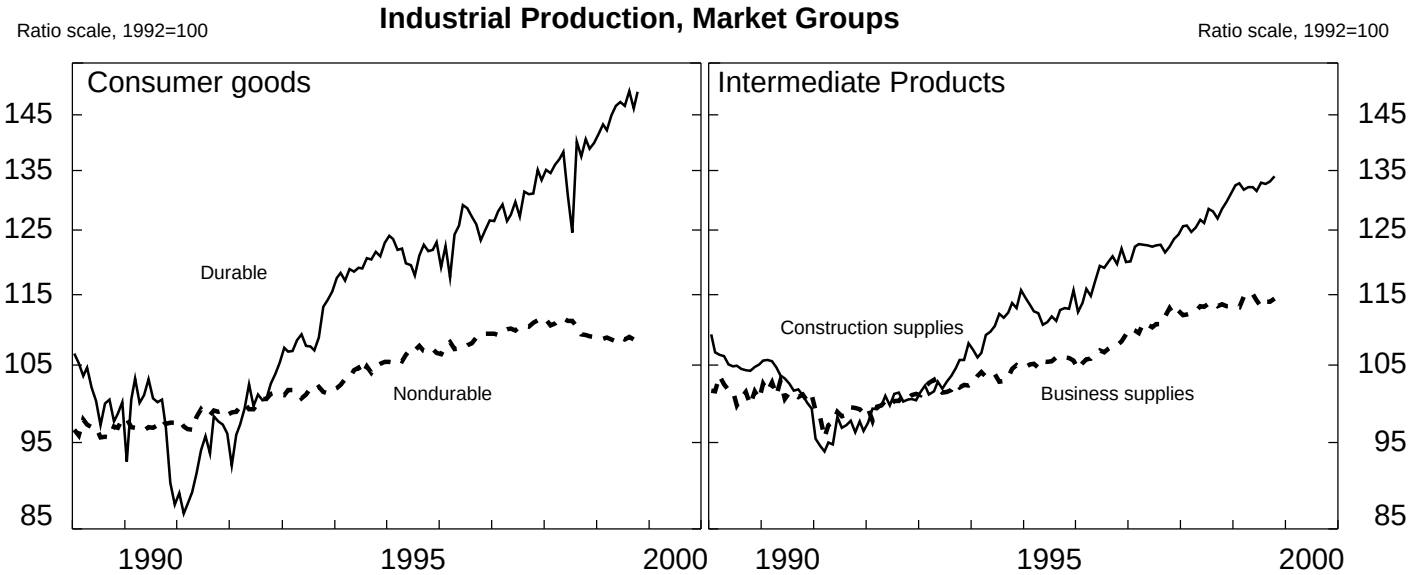
Capacity and capacity utilization rates will be revised to incorporate preliminary data from the 1998 Survey of Plant Capacity of the Bureau of the Census, which covers manufacturing, along with other new data on capacity from the U.S. Geological Survey, the Department of Energy, and other organizations.

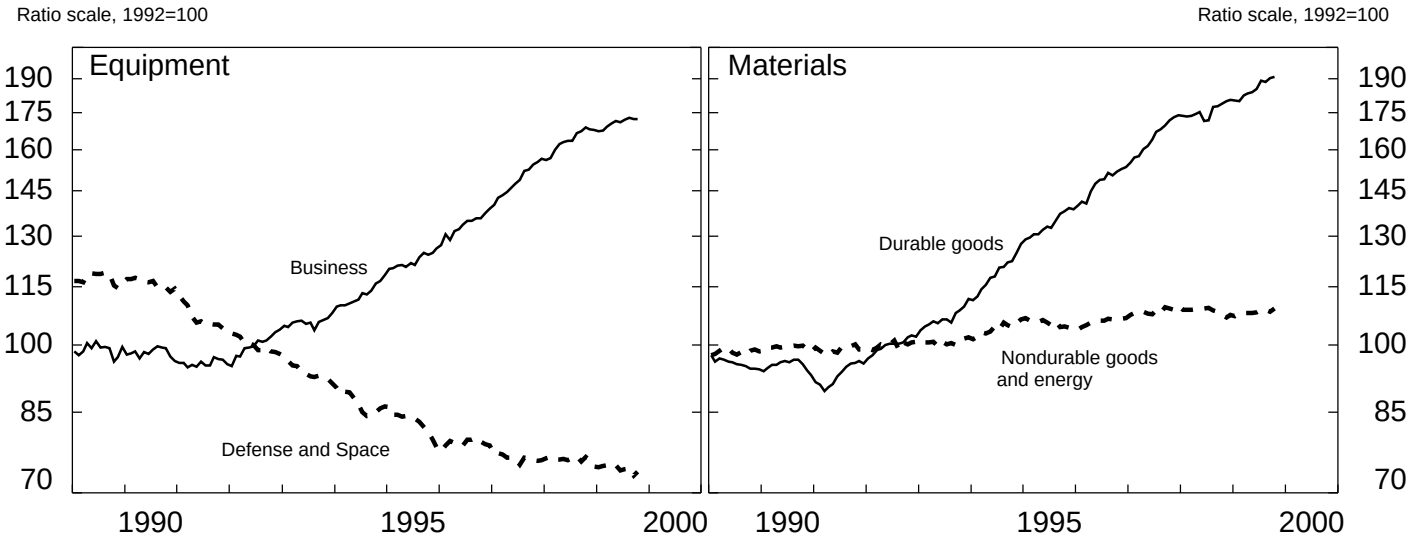
Once the revision is published, it will also be made available on the Board's web site, at www.federalreserve.gov/releases/g17, and on diskettes from Publications Services (telephone 202-452-3245). The revised data will also be available through the STAT-USA web site of the Department of Commerce (www.stat-usa.gov). Further information on these revisions is available from the Board's Industrial Output Section (telephone 202-452-3197).

## Industrial Production and Capacity Utilization
(October data, seasonally adjusted)




## Industrial Production, Market Groups



## Table 1A
## INDUSTRIAL PRODUCTION: MARKET GROUPS

| Item | 1998 IP Proportion[1] | Index, 1992=100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Seasonally Adjusted | | | | | | Not seasonally adjusted | | | | | |
| | | 1999 May | June | July[r] | Aug.[r] | Sept.[r] | Oct.[p] | 1999 May | June | July[r] | Aug.[r] | Sept.[r] | Oct.[p] |
| **Total index** | 100.00 | 134.0 | 134.2 | 135.0 | 135.3 | 135.2 | 136.1 | 132.3 | 137.0 | 133.0 | 139.2 | 139.6 | 138.2 |
| **Products, total** | 61.26 | 125.8 | 125.7 | 125.7 | 126.4 | 126.0 | 127.0 | 123.6 | 127.8 | 124.8 | 131.1 | 130.5 | 129.3 |
| **Final products** | 46.12 | 127.2 | 127.3 | 127.4 | 128.2 | 127.5 | 128.6 | 125.0 | 129.2 | 125.1 | 132.8 | 132.0 | 130.7 |
| **Consumer goods** | 27.67 | 115.6 | 116.2 | 115.8 | 116.7 | 115.8 | 117.4 | 112.9 | 117.5 | 114.2 | 121.6 | 120.2 | 119.2 |
| **Durable** | 6.01 | 146.7 | 147.4 | 146.7 | 149.6 | 146.3 | 149.4 | 150.9 | 148.8 | 126.7 | 150.4 | 149.0 | 155.4 |
| Automotive products | 2.66 | 144.8 | 146.4 | 140.8 | 149.1 | 143.6 | 146.1 | 151.2 | 149.8 | 106.9 | 151.9 | 149.8 | 158.1 |
| Autos and trucks | 1.58 | 154.6 | 158.8 | 146.7 | 163.4 | 152.9 | 156.9 | 166.6 | 163.0 | 88.8 | 167.4 | 160.0 | 175.7 |
| Autos | .54 | 108.8 | 112.4 | 107.2 | 114.2 | 114.3 | 114.7 | 117.4 | 121.1 | 67.5 | 118.6 | 118.1 | 128.5 |
| Trucks | 1.04 | 197.2 | 202.0 | 184.0 | 208.9 | 189.8 | 196.8 | 212.3 | 202.8 | 109.3 | 212.6 | 199.7 | 220.0 |
| Auto parts and allied goods | 1.08 | 130.7 | 128.8 | 131.5 | 129.0 | 130.0 | 130.6 | 129.8 | 131.2 | 128.4 | 130.5 | 135.1 | 133.9 |
| Other durable goods | 3.36 | 147.9 | 147.9 | 151.4 | 149.6 | 148.2 | 151.8 | 150.3 | 147.7 | 143.3 | 148.8 | 148.0 | 152.8 |
| Appliances and electronics | .95 | 248.0 | 250.8 | 267.5 | 261.7 | 257.0 | 270.9 | 245.4 | 258.3 | 257.4 | 263.0 | 263.6 | 279.4 |
| Appliances and air cond. | .48 | 131.8 | 132.2 | 138.2 | 135.4 | 126.1 | 136.5 | 133.4 | 138.3 | 124.0 | 126.5 | 121.8 | 139.9 |
| Home electronics | .46 | 450.3 | 458.4 | 498.3 | 486.8 | 501.3 | 516.4 | 436.6 | 465.5 | 510.3 | 521.9 | 539.9 | 536.0 |
| Carpeting and furniture | .84 | 120.3 | 120.7 | 123.4 | 122.1 | 121.8 | 122.9 | 117.0 | 123.7 | 120.4 | 127.7 | 125.8 | 127.2 |
| Miscellaneous | 1.57 | 117.3 | 116.2 | 115.8 | 115.1 | 114.2 | 115.7 | 123.6 | 111.3 | 105.8 | 109.8 | 109.2 | 111.9 |
| **Nondurable** | 21.66 | 108.3 | 108.8 | 108.5 | 108.9 | 108.5 | 109.8 | 104.0 | 110.0 | 110.9 | 114.7 | 113.3 | 110.7 |
| Nonenergy | 18.90 | 107.5 | 107.7 | 106.7 | 107.3 | 107.3 | 108.4 | 105.1 | 111.0 | 109.6 | 114.5 | 114.3 | 112.0 |
| Foods and tobacco | 9.68 | 108.4 | 108.1 | 106.9 | 106.6 | 106.6 | 107.4 | 105.9 | 111.9 | 108.2 | 114.3 | 114.3 | 112.6 |
| Clothing | 1.81 | 91.5 | 91.4 | 89.8 | 89.8 | 88.9 | 89.5 | 92.3 | 95.7 | 89.9 | 94.6 | 93.1 | 92.3 |
| Chemical products | 4.59 | 117.4 | 118.2 | 116.9 | 119.4 | 118.4 | 120.3 | 112.8 | 123.0 | 127.2 | 131.0 | 130.5 | 124.2 |
| Paper products | 2.83 | 101.0 | 102.4 | 103.0 | 104.3 | 106.1 | 107.3 | 100.2 | 101.4 | 102.6 | 104.9 | 105.4 | 105.7 |
| Energy products | 2.76 | 113.5 | 116.2 | 120.7 | 120.0 | 117.1 | 119.5 | 96.5 | 103.5 | 120.3 | 116.3 | 106.7 | 101.9 |
| Fuels | .94 | 111.5 | 110.1 | 111.4 | 110.7 | 111.6 | 113.9 | 112.9 | 112.6 | 113.0 | 111.7 | 113.6 | 114.0 |
| Utilities | 1.82 | 114.0 | 118.8 | 125.1 | 124.3 | 119.4 | 121.9 | 87.3 | 98.2 | 123.6 | 118.1 | 102.5 | 95.0 |
| **Equipment, total** | 18.45 | 148.0 | 147.4 | 148.4 | 149.1 | 148.7 | 149.0 | 147.1 | 150.6 | 145.0 | 153.2 | 153.7 | 151.8 |
| **Business equipment** | 15.36 | 171.4 | 171.0 | 172.2 | 172.8 | 172.4 | 172.4 | 170.1 | 175.0 | 167.7 | 178.0 | 178.8 | 175.6 |
| Information processing & related | 5.92 | 240.1 | 242.2 | 249.7 | 252.5 | 253.7 | 256.3 | 233.4 | 247.1 | 257.2 | 262.6 | 264.3 | 257.9 |
| Computer and office | 1.38 | 870.1 | 877.3 | 914.7 | 934.3 | 951.2 | 966.4 | 845.0 | 908.6 | 985.1 | 997.7 | 1013.6 | 966.2 |
| Industrial | 4.81 | 137.2 | 137.0 | 138.4 | 138.0 | 138.0 | 138.3 | 135.8 | 139.8 | 136.3 | 141.8 | 143.4 | 140.3 |
| Transit | 3.16 | 135.9 | 133.7 | 130.8 | 130.9 | 126.7 | 124.8 | 140.3 | 138.4 | 110.5 | 131.8 | 129.2 | 130.7 |
| Autos and trucks | 1.24 | 137.7 | 139.2 | 135.1 | 141.1 | 136.0 | 136.9 | 147.1 | 147.4 | 89.9 | 144.9 | 140.9 | 153.3 |
| Other | 1.47 | 133.3 | 128.9 | 122.9 | 122.5 | 125.5 | 122.7 | 133.2 | 131.2 | 118.5 | 127.5 | 130.6 | 125.5 |
| **Defense and space equipment** | 2.07 | 74.8 | 73.9 | 74.1 | 74.3 | 73.1 | 73.7 | 74.0 | 73.5 | 72.5 | 73.7 | 72.9 | 73.8 |
| Oil and gas well drilling | .78 | 100.3 | 100.4 | 103.1 | 108.2 | 111.6 | 115.0 | 99.7 | 100.8 | 105.0 | 109.6 | 113.8 | 115.6 |
| Manufactured homes | .24 | 145.2 | 142.8 | 133.6 | 133.0 | 132.5 | 130.0 | 151.8 | 153.8 | 124.2 | 147.1 | 140.6 | 144.4 |
| **Intermediate products** | 15.13 | 121.4 | 120.6 | 120.5 | 120.9 | 121.1 | 121.7 | 119.4 | 123.5 | 123.9 | 126.2 | 126.0 | 125.1 |
| Construction supplies | 6.06 | 132.1 | 131.4 | 132.8 | 132.6 | 133.0 | 134.0 | 133.3 | 138.7 | 135.9 | 139.2 | 139.4 | 139.3 |
| Business supplies | 9.07 | 115.0 | 114.2 | 113.1 | 113.9 | 113.9 | 114.4 | 111.2 | 114.6 | 116.8 | 118.6 | 118.0 | 116.7 |
| **Materials** | 38.74 | 147.3 | 148.1 | 150.3 | 150.0 | 150.5 | 151.3 | 146.6 | 152.4 | 146.2 | 152.1 | 154.6 | 152.9 |
| **Durable** | 23.55 | 184.0 | 185.4 | 189.2 | 188.6 | 190.3 | 190.9 | 183.4 | 192.4 | 180.4 | 191.5 | 198.6 | 194.6 |
| Consumer parts | 4.42 | 145.5 | 147.4 | 152.6 | 145.6 | 153.5 | 152.5 | 150.7 | 154.8 | 126.5 | 149.5 | 156.4 | 159.3 |
| Equipment parts | 8.64 | 305.5 | 309.9 | 318.5 | 322.4 | 322.0 | 324.9 | 298.1 | 326.1 | 307.9 | 323.4 | 347.2 | 326.9 |
| Semiconductors, printed circuit boards, and oth. elec. comps. | 2.98 | 1063.7 | 1102.8 | 1160.1 | 1179.1 | 1189.6 | 1213.2 | 994.0 | 1208.2 | 1029.2 | 1145.2 | 1397.5 | 1188.4 |
| Other | 10.50 | 130.0 | 129.9 | 131.0 | 131.4 | 131.2 | 131.6 | 129.6 | 132.2 | 130.1 | 133.6 | 134.2 | 133.6 |
| Basic metals | 3.35 | 118.6 | 120.2 | 121.9 | 123.2 | 120.6 | 123.0 | 119.0 | 121.0 | 118.2 | 120.9 | 121.8 | 123.4 |
| **Nondurable** | 8.48 | 112.9 | 113.6 | 113.8 | 114.1 | 114.1 | 114.9 | 112.8 | 114.9 | 112.5 | 114.1 | 114.6 | 116.8 |
| Textile | .91 | 102.7 | 103.2 | 102.6 | 102.5 | 101.2 | 101.5 | 106.0 | 104.5 | 96.4 | 104.6 | 101.5 | 104.9 |
| Paper | 1.80 | 114.6 | 118.5 | 116.5 | 116.9 | 118.7 | 119.0 | 113.6 | 119.0 | 116.5 | 117.5 | 118.1 | 118.6 |
| Chemical | 3.92 | 114.3 | 115.0 | 115.8 | 115.9 | 116.1 | 116.9 | 114.6 | 115.8 | 115.3 | 115.1 | 116.8 | 116.9 |
| Other | 1.86 | 113.6 | 111.0 | 112.5 | 113.3 | 111.9 | 113.5 | 111.4 | 114.3 | 110.7 | 113.3 | 112.9 | 120.7 |
| **Energy** | 6.71 | 103.1 | 103.0 | 104.0 | 103.6 | 102.6 | 103.4 | 100.9 | 103.7 | 105.3 | 105.4 | 100.9 | 99.4 |
| Primary | 4.28 | 99.3 | 101.0 | 101.8 | 102.1 | 100.7 | 101.1 | 98.3 | 102.0 | 101.0 | 102.1 | 98.5 | 96.8 |
| Converted fuel | 2.43 | 110.5 | 107.0 | 108.3 | 106.6 | 106.3 | 108.0 | 106.1 | 107.3 | 113.7 | 111.9 | 105.5 | 104.6 |
| **SPECIAL AGGREGATES** | | | | | | | | | | | | | |
| **Total excluding:** | | | | | | | | | | | | | |
| Autos and trucks | 97.18 | 133.6 | 133.8 | 134.8 | 134.9 | 135.0 | 135.9 | 131.5 | 136.5 | 134.2 | 138.6 | 139.3 | 137.4 |
| Motor vehicles and parts | 94.86 | 133.2 | 133.3 | 134.2 | 134.5 | 134.3 | 135.2 | 130.8 | 135.7 | 134.5 | 138.2 | 138.6 | 136.6 |
| Computers | 97.75 | 128.6 | 128.8 | 129.4 | 129.7 | 129.5 | 130.3 | 127.0 | 131.4 | 127.2 | 133.2 | 133.6 | 132.4 |
| Computers and semiconductors[2] | 94.29 | 119.0 | 119.0 | 119.4 | 119.6 | 119.4 | 120.1 | 117.6 | 120.9 | 117.4 | 122.7 | 122.3 | 121.8 |
| **Consumer goods excluding:** | | | | | | | | | | | | | |
| Autos and trucks | 26.09 | 113.6 | 114.0 | 114.2 | 114.3 | 113.8 | 115.3 | 110.2 | 115.1 | 115.3 | 119.2 | 118.1 | 116.3 |
| Energy | 24.91 | 115.9 | 116.2 | 115.3 | 116.3 | 115.7 | 117.1 | 114.8 | 119.1 | 113.6 | 122.2 | 121.8 | 121.2 |
| **Business equipment excluding:** | | | | | | | | | | | | | |
| Autos and trucks | 14.11 | 175.2 | 174.5 | 176.4 | 176.3 | 176.5 | 176.4 | 172.6 | 177.9 | 176.9 | 181.6 | 183.0 | 177.9 |
| Computer and office equipment | 13.98 | 145.1 | 144.5 | 145.0 | 145.3 | 144.6 | 144.3 | 144.3 | 147.5 | 139.5 | 148.8 | 149.3 | 147.1 |
| **Materials excluding:** | | | | | | | | | | | | | |
| Energy | 32.03 | 161.1 | 162.3 | 164.8 | 164.5 | 165.6 | 166.3 | 161.0 | 167.7 | 159.0 | 166.8 | 171.5 | 169.8 |

1. The IP proportion data are estimates of the industries' relative contributions to overall IP growth in the following year.
2. Semiconductors include related electronic components.

## Table 1B
## INDUSTRIAL PRODUCTION: MARKET GROUPS

Percent change

| Item | 1997 Q4 to 1998 Q4 | Seasonally adjusted annual rate | | | | Seasonally adjusted | | | | Not seasonally adjusted | | | | Oct. 98 to Oct. 99 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1998 Q4 | 1999 Q1 | Q2 | Q3[r] | 1999 July[r] | Aug.[r] | Sept.[r] | Oct.[p] | 1999 July[r] | Aug.[r] | Sept.[r] | Oct.[p] | |
| **Total index** | 1.9 | 2.2 | 1.3 | 3.8 | 3.7 | .6 | .3 | –.1 | .7 | –3.0 | 4.7 | .3 | –1.0 | 2.8 |
| **Products, total** | 2.1 | 1.5 | .6 | 3.0 | 1.2 | .0 | .6 | –.4 | .8 | –2.3 | 5.0 | –.5 | –.9 | 1.7 |
| **Final products** | 2.0 | 1.3 | –.5 | 3.3 | 1.9 | .1 | .6 | –.6 | .9 | –3.2 | 6.1 | –.6 | –1.0 | 1.5 |
| **Consumer goods** | –.4 | .1 | .9 | 1.9 | 1.1 | –.3 | .7 | –.8 | 1.4 | –2.8 | 6.4 | –1.1 | –.8 | 1.9 |
| **Durable** | 4.9 | 18.0 | 7.6 | 11.8 | 3.3 | –.5 | 1.9 | –2.2 | 2.1 | –14.8 | 18.7 | –.9 | 4.3 | 6.3 |
| Automotive products | 3.9 | 41.9 | .0 | 11.5 | 1.2 | –3.8 | 5.9 | –3.7 | 1.7 | –28.6 | 42.2 | –1.4 | 5.5 | 3.5 |
| Autos and trucks | 3.1 | 77.5 | –1.2 | 16.5 | –.5 | –7.6 | 11.4 | –6.4 | 2.6 | –45.5 | 88.6 | –4.4 | 9.8 | 4.1 |
| Autos | .7 | 27.6 | –18.6 | 2.9 | 2.1 | –4.6 | 6.5 | .1 | .3 | –44.3 | 75.8 | –.4 | 8.8 | –4.3 |
| Trucks | 5.0 | 112.4 | 8.8 | 23.3 | –1.4 | –8.9 | 13.5 | –9.1 | 3.7 | –46.1 | 94.5 | –6.1 | 10.2 | 8.7 |
| Auto parts and allied goods | 6.0 | 2.5 | 1.7 | 4.2 | 3.6 | 2.1 | –1.9 | .8 | .5 | –2.2 | 1.7 | 3.5 | –.9 | 2.5 |
| Other durable goods | 5.6 | 1.9 | 14.3 | 12.0 | 5.1 | 2.3 | –1.2 | –1.0 | 2.4 | –3.0 | 3.9 | –.6 | 3.2 | 8.7 |
| Appliances and electronics | 19.5 | 25.5 | 33.0 | 22.8 | 20.6 | 6.7 | –2.2 | –1.8 | 5.4 | –.4 | 2.2 | .2 | 6.0 | 25.9 |
| Appliances and air cond. | 11.3 | 17.1 | 11.0 | –3.0 | –2.7 | 4.6 | –2.0 | –6.9 | 8.3 | –10.4 | 2.0 | –3.7 | 14.9 | 5.8 |
| Home electronics | 27.8 | 34.7 | 58.4 | 51.0 | 46.0 | 8.7 | –2.3 | 3.0 | 3.0 | 9.6 | 2.3 | 3.4 | –.7 | 47.6 |
| Carpeting and furniture | 3.6 | 5.1 | 8.1 | –1.9 | 8.3 | 2.2 | –1.1 | –.2 | .9 | –2.7 | 6.1 | –1.5 | 1.1 | 2.1 |
| Miscellaneous | –1.2 | –12.3 | 6.4 | 12.7 | –5.7 | –.4 | –.6 | –.8 | 1.3 | –5.0 | 3.8 | –.6 | 2.6 | 1.8 |
| **Nondurable** | –1.8 | –4.4 | –.9 | –.9 | .5 | –.3 | .4 | –.3 | 1.1 | .8 | 3.4 | –1.2 | –2.3 | .6 |
| Nonenergy | –1.6 | –.6 | –2.6 | –2.1 | –2.0 | –.9 | .5 | .0 | 1.0 | –1.3 | 4.4 | –.2 | –2.0 | .1 |
| Foods and tobacco | .6 | 5.6 | 3.0 | –5.0 | –6.5 | –1.1 | –.3 | .0 | .7 | –3.2 | 5.6 | .0 | –1.5 | –.6 |
| Clothing | –5.7 | –11.3 | –8.5 | –3.6 | –10.2 | –1.8 | .0 | –.9 | .7 | –6.1 | 5.2 | –1.6 | –.8 | –6.2 |
| Chemical products | –2.4 | –4.4 | –5.7 | 2.8 | 2.5 | –1.1 | 2.1 | –.8 | 1.6 | 3.4 | 3.1 | –.4 | –4.8 | 2.7 |
| Paper products | –4.7 | –7.3 | –12.6 | 1.8 | 13.2 | .6 | 1.3 | 1.7 | 1.1 | 1.1 | 2.3 | .5 | .3 | 2.0 |
| Energy products | –3.4 | –26.9 | 11.4 | 7.5 | 17.6 | 3.9 | –.6 | –2.4 | 2.1 | 16.2 | –3.4 | –8.3 | –4.5 | 4.0 |
| Fuels | –.6 | –7.2 | 11.4 | –3.0 | .3 | 1.2 | –.6 | .8 | 2.0 | .3 | –1.1 | 1.6 | .3 | 5.1 |
| Utilities | –4.9 | –35.2 | 11.4 | 13.2 | 27.3 | 5.3 | –.6 | –4.0 | 2.1 | 26.0 | –4.5 | –13.2 | –7.3 | 3.4 |
| **Equipment, total** | 5.7 | 3.2 | –2.6 | 5.5 | 3.2 | .6 | .5 | –.3 | .2 | –3.8 | 5.7 | .3 | –1.3 | 1.0 |
| **Business equipment** | 8.3 | 6.2 | –.7 | 7.2 | 3.4 | .7 | .4 | –.2 | .0 | –4.1 | 6.1 | .4 | –1.8 | 2.0 |
| Information processing & related | 14.4 | 11.2 | 7.1 | 29.1 | 25.0 | 3.1 | 1.1 | .5 | 1.0 | 4.1 | 2.1 | .6 | –2.4 | 17.1 |
| Computer and office | 54.7 | 46.4 | 33.7 | 40.3 | 34.5 | 4.3 | 2.1 | 1.8 | 1.6 | 8.4 | 1.3 | 1.6 | –4.7 | 34.8 |
| Industrial | 1.5 | –2.9 | –6.1 | –2.6 | .9 | 1.0 | –.2 | .0 | .2 | –2.5 | 4.0 | 1.2 | –2.2 | –2.4 |
| Transit | 12.1 | 19.1 | –8.4 | –5.5 | –16.9 | –2.1 | .1 | –3.2 | –1.5 | –20.1 | 19.2 | –2.0 | 1.2 | –11.9 |
| Autos and trucks | 5.2 | 58.4 | –5.3 | 12.2 | –2.6 | –3.0 | 4.4 | –3.6 | .7 | –39.0 | 61.1 | –2.7 | 8.8 | .6 |
| Other | –1.4 | –8.2 | 3.3 | –15.1 | –24.5 | –4.6 | –.3 | 2.5 | –2.2 | –9.7 | 7.5 | 2.5 | –3.9 | –13.0 |
| **Defense and space equipment** | –.2 | –2.4 | –4.6 | –1.5 | –3.1 | .3 | .2 | –1.6 | .9 | –1.4 | 1.7 | –1.1 | 1.3 | –3.5 |
| Oil and gas well drilling | –25.3 | –39.6 | –37.1 | –3.7 | 38.1 | 2.7 | 4.9 | 3.2 | 3.0 | 4.2 | 4.3 | 3.8 | 1.6 | –3.7 |
| Manufactured homes | 9.1 | 16.8 | 3.5 | –23.4 | –29.8 | –6.4 | –.5 | –.4 | –1.9 | –19.3 | 18.4 | –4.4 | 2.7 | –13.8 |
| **Intermediate products** | 2.4 | 1.8 | 3.9 | 2.0 | –1.2 | –.1 | .3 | .2 | .5 | .3 | 1.9 | –.2 | –.7 | 2.2 |
| Construction supplies | 5.1 | 5.9 | 8.3 | –1.2 | 3.0 | 1.1 | –.2 | .3 | .7 | –2.0 | 2.4 | .1 | –.1 | 4.3 |
| Business supplies | .7 | –.8 | 1.0 | 4.3 | –4.0 | –.9 | .7 | .0 | .4 | 1.9 | 1.6 | –.5 | –1.1 | .8 |
| **Materials** | 1.6 | 3.5 | 2.3 | 5.1 | 7.9 | 1.4 | –.2 | .4 | .5 | –4.0 | 4.0 | 1.6 | –1.1 | 4.7 |
| **Durable** | 3.8 | 9.5 | 2.7 | 7.5 | 11.6 | 2.0 | –.3 | .9 | .3 | –6.3 | 6.2 | 3.7 | –2.0 | 6.8 |
| Consumer parts | –1.5 | 9.3 | –1.5 | 3.4 | 12.4 | 3.5 | –4.6 | 5.4 | –.6 | –18.3 | 18.2 | 4.6 | 1.8 | 4.3 |
| Equipment parts | 11.9 | 17.7 | 6.2 | 17.0 | 21.1 | 2.8 | 1.2 | –.1 | .9 | –5.6 | 5.1 | 7.4 | –5.9 | 13.2 |
| Semiconductors, printed circuit boards, and oth. elec. comps. | 29.7 | 61.2 | 18.9 | 43.7 | 47.2 | 5.2 | 1.6 | .9 | 2.0 | –14.8 | 11.3 | 22.0 | –15.0 | 34.1 |
| Other | –.8 | 3.1 | 1.6 | 1.4 | 3.9 | .9 | .3 | –.2 | .3 | –1.6 | 2.8 | .4 | –.4 | 2.5 |
| Basic metals | –5.7 | –9.1 | 1.2 | 5.9 | 9.0 | 1.5 | 1.0 | –2.1 | 2.0 | –2.3 | 2.3 | .8 | 1.3 | 4.0 |
| **Nondurable** | –2.8 | –3.2 | 2.1 | 1.3 | 3.2 | .2 | .3 | .0 | .7 | –2.1 | 1.5 | .4 | 1.9 | 2.9 |
| Textile | –7.2 | –12.9 | –15.0 | 9.9 | –3.5 | –.6 | –.1 | –1.3 | .3 | –7.7 | 8.5 | –3.0 | 3.4 | –6.8 |
| Paper | –2.6 | –6.2 | 7.5 | .1 | 3.0 | –1.8 | .4 | 1.5 | .2 | –2.2 | .9 | .6 | .4 | 2.7 |
| Chemical | –3.7 | –2.7 | 3.4 | 3.0 | 5.8 | .7 | .1 | .2 | .6 | –.4 | –.1 | 1.5 | .0 | 5.2 |
| Other | 1.3 | 3.8 | 2.9 | –4.3 | 1.3 | 1.3 | .7 | –1.2 | 1.4 | –3.2 | 2.4 | –.4 | 6.9 | 2.8 |
| **Energy** | –.7 | –8.1 | 1.0 | 1.1 | .8 | 1.0 | –.4 | –1.0 | .8 | 1.6 | .1 | –4.3 | –1.4 | –.3 |
| Primary | .1 | –4.7 | –1.0 | –3.9 | 7.7 | .8 | .3 | –1.4 | .4 | –.9 | 1.1 | –3.5 | –1.8 | –1.5 |
| Converted fuel | –2.2 | –13.8 | 4.7 | 10.4 | –10.1 | 1.3 | –1.6 | –.3 | 1.6 | 6.0 | –1.6 | –5.7 | –.8 | 1.8 |
| **SPECIAL AGGREGATE** | | | | | | | | | | | | | | |
| **Total excluding:** | | | | | | | | | | | | | | |
| Autos and trucks | 1.8 | .7 | 1.4 | 3.5 | 3.9 | .8 | .0 | .1 | .6 | –1.7 | 3.3 | .5 | –1.3 | 2.9 |
| Motor vehicles and parts | 1.9 | .6 | 1.5 | 3.5 | 3.6 | .7 | .3 | –.2 | .7 | –.9 | 2.8 | .3 | –1.4 | 2.8 |
| Computers | .9 | 1.3 | .5 | 2.8 | 2.9 | .5 | .2 | –.1 | .6 | –3.3 | 4.7 | .3 | –.9 | 2.0 |
| Computers and semiconductors[1] | –.1 | –.3 | –.1 | 1.4 | 1.6 | .3 | .2 | –.2 | .6 | –2.9 | 4.6 | –.4 | –.4 | 1.0 |
| **Consumer goods excluding:** | | | | | | | | | | | | | | |
| Autos and trucks | –.6 | –3.4 | 1.1 | 1.0 | 1.2 | .2 | .1 | –.4 | 1.3 | .2 | 3.4 | –.9 | –1.5 | 1.7 |
| Energy | .0 | 3.7 | –.1 | 1.3 | –.6 | –.8 | .9 | –.6 | 1.3 | –4.7 | 7.6 | –.4 | –.5 | 1.6 |
| **Business equipment excluding:** | | | | | | | | | | | | | | |
| Autos and trucks | 8.5 | 2.5 | –.3 | 6.8 | 4.0 | 1.1 | .0 | .1 | –.1 | –.6 | 2.7 | .7 | –2.8 | 2.1 |
| Computer and office equipment | 4.2 | 2.7 | –4.1 | 3.7 | .5 | .4 | .2 | –.5 | –.2 | –5.4 | 6.7 | .3 | –1.4 | –1.2 |
| **Materials excluding:** | | | | | | | | | | | | | | |
| Energy | 2.0 | 6.0 | 2.6 | 5.9 | 9.3 | 1.5 | –.2 | .7 | .4 | –5.2 | 4.9 | 2.8 | –1.0 | 5.7 |

Note—Percent changes shown in the first and last columns are based on seasonally adjusted data.
1. Semiconductors include related electronic components.

## Table 2A
## INDUSTRIAL PRODUCTION: INDUSTRY GROUPS

| Item | SIC | 1998 IP Proportion[1] | Index, 1992=100 Seasonally Adjusted 1999 May | June | July[r] | Aug.[r] | Sept.[r] | Oct.[p] | Not seasonally adjusted 1999 May | June | July[r] | Aug.[r] | Sept.[r] | Oct.[p] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total index** | | 100.00 | 134.0 | 134.2 | 135.0 | 135.3 | 135.2 | 136.1 | 132.3 | 137.0 | 133.0 | 139.2 | 139.6 | 138.2 |
| **Manufacturing** | | 88.55 | 138.4 | 138.4 | 139.0 | 139.4 | 139.6 | 140.4 | 137.6 | 142.2 | 136.4 | 143.7 | 145.3 | 144.1 |
| **Primary processing** | | 27.97 | 121.8 | 121.9 | 122.6 | 122.9 | 123.0 | 123.7 | 121.6 | 124.2 | 121.3 | 124.6 | 125.1 | 126.1 |
| **Advanced processing** | | 60.59 | 146.7 | 146.8 | 147.3 | 147.7 | 147.9 | 148.9 | 145.3 | 151.0 | 143.7 | 153.2 | 155.3 | 152.9 |
| **Durable** | | 49.28 | 165.0 | 165.6 | 167.5 | 167.9 | 167.9 | 168.9 | 164.8 | 170.5 | 159.8 | 171.3 | 174.3 | 172.6 |
| Lumber and products | 24 | 2.12 | 122.9 | 121.4 | 120.1 | 119.1 | 118.4 | 118.6 | 121.7 | 126.0 | 118.8 | 123.3 | 122.9 | 124.1 |
| Furniture and fixtures | 25 | 1.41 | 123.5 | 123.4 | 124.6 | 125.7 | 126.9 | 126.2 | 121.0 | 125.3 | 123.9 | 134.4 | 132.9 | 127.3 |
| Stone, clay, and glass products | 32 | 2.43 | 128.3 | 127.5 | 128.8 | 129.5 | 129.8 | 130.0 | 128.9 | 132.0 | 130.6 | 134.9 | 135.1 | 134.8 |
| Primary metals | 33 | 3.60 | 122.8 | 125.4 | 127.3 | 129.4 | 126.3 | 129.3 | 123.5 | 126.4 | 122.1 | 126.7 | 127.6 | 130.0 |
| Iron and steel | 331,2 | 1.91 | 119.6 | 122.6 | 125.8 | 128.7 | 124.1 | 129.2 | 120.3 | 123.8 | 121.5 | 124.6 | 125.7 | 130.4 |
| Raw steel | | .09 | 113.4 | 110.9 | 112.6 | 116.8 | 112.9 | 119.4 | 114.0 | 111.1 | 106.9 | 113.1 | 112.4 | 118.1 |
| Nonferrous | 333–6,9 | 1.69 | 126.5 | 128.7 | 129.2 | 130.5 | 129.1 | 129.7 | 127.2 | 129.5 | 122.9 | 129.2 | 130.0 | 129.7 |
| Fabricated metal products | 34 | 5.55 | 126.9 | 127.8 | 128.6 | 128.6 | 128.8 | 129.6 | 125.6 | 129.8 | 128.2 | 131.6 | 132.4 | 132.2 |
| Industrial machinery and equipment | 35 | 9.98 | 219.3 | 218.5 | 221.4 | 222.5 | 224.2 | 225.0 | 219.8 | 223.8 | 220.8 | 227.4 | 231.8 | 225.2 |
| Computer and office equip. | 357 | 2.25 | 878.6 | 889.9 | 929.7 | 952.2 | 971.9 | 989.6 | 853.1 | 921.7 | 1001.2 | 1016.7 | 1035.7 | 989.3 |
| Electrical machinery | 36 | 8.56 | 326.9 | 332.2 | 346.3 | 348.9 | 348.1 | 354.2 | 317.2 | 348.8 | 332.5 | 354.0 | 379.4 | 360.8 |
| Semiconductors and related electronic components | 3672–9 | 3.46 | 872.4 | 900.7 | 942.6 | 955.2 | 962.9 | 978.5 | 828.6 | 986.8 | 856.7 | 941.1 | 1117.9 | 971.7 |
| Transportation equipment | 37 | 9.43 | 125.1 | 125.4 | 124.5 | 124.2 | 124.2 | 123.5 | 130.0 | 129.9 | 100.2 | 126.1 | 126.1 | 130.0 |
| Motor vehicles and parts | 371 | 5.14 | 150.7 | 153.1 | 151.7 | 152.4 | 155.0 | 155.2 | 161.1 | 162.0 | 102.6 | 157.9 | 159.2 | 169.6 |
| Autos and light trucks | | 2.55 | 141.4 | 145.3 | 134.9 | 149.2 | 141.2 | 144.3 | 152.4 | 150.4 | 82.2 | 153.2 | 147.4 | 161.6 |
| Aerospace and misc. | 372–6,9 | 4.30 | 100.3 | 98.7 | 98.3 | 97.2 | 94.8 | 93.3 | 100.3 | 99.4 | 96.1 | 95.9 | 94.8 | 92.9 |
| Instruments | 38 | 4.88 | 117.9 | 117.7 | 118.6 | 117.8 | 117.7 | 118.5 | 115.4 | 119.5 | 120.5 | 120.8 | 121.0 | 119.0 |
| Miscellaneous | 39 | 1.32 | 119.4 | 118.4 | 119.0 | 119.0 | 118.7 | 120.7 | 118.5 | 118.9 | 115.7 | 119.5 | 120.4 | 124.4 |
| **Nondurable** | | 39.28 | 111.7 | 111.3 | 110.7 | 111.1 | 111.4 | 112.1 | 110.0 | 113.6 | 112.1 | 115.7 | 115.9 | 115.2 |
| Foods | 20 | 9.00 | 110.8 | 110.0 | 108.6 | 108.5 | 109.1 | 109.6 | 108.5 | 112.3 | 111.4 | 115.3 | 116.7 | 114.6 |
| Tobacco products | 21 | 1.29 | 97.2 | 96.3 | 97.9 | 96.4 | 92.6 | 94.6 | 91.0 | 106.4 | 84.4 | 104.0 | 97.1 | 103.0 |
| Textile mill products | 22 | 1.56 | 111.0 | 111.8 | 112.2 | 110.9 | 109.6 | 110.4 | 113.4 | 117.2 | 110.0 | 115.7 | 113.2 | 116.9 |
| Apparel products | 23 | 1.73 | 93.1 | 92.3 | 91.3 | 89.8 | 88.8 | 89.6 | 93.0 | 94.2 | 89.7 | 92.7 | 91.4 | 90.9 |
| Paper and products | 26 | 3.50 | 114.2 | 115.9 | 114.9 | 116.4 | 117.0 | 117.1 | 112.4 | 116.9 | 114.8 | 117.3 | 116.9 | 119.1 |
| Printing and publishing | 27 | 6.79 | 104.2 | 103.4 | 102.5 | 103.5 | 104.2 | 105.0 | 101.6 | 103.8 | 105.5 | 107.7 | 108.5 | 107.9 |
| Chemicals and products | 28 | 9.78 | 115.4 | 115.2 | 114.1 | 115.5 | 115.7 | 117.0 | 113.7 | 118.0 | 118.8 | 120.5 | 121.4 | 118.9 |
| Petroleum products | 29 | 1.59 | 113.0 | 111.4 | 113.3 | 113.1 | 113.6 | 114.5 | 115.0 | 116.2 | 118.3 | 118.5 | 118.7 | 115.8 |
| Rubber and plastics products | 30 | 3.83 | 137.6 | 136.0 | 138.0 | 137.6 | 139.8 | 138.8 | 137.3 | 138.1 | 133.3 | 138.9 | 139.0 | 140.5 |
| Leather and products | 31 | .21 | 70.6 | 71.0 | 68.8 | 70.1 | 69.9 | 68.8 | 71.4 | 73.0 | 66.2 | 71.3 | 70.7 | 69.6 |
| **Mining** | | 5.19 | 97.9 | 97.7 | 98.4 | 99.5 | 99.2 | 99.4 | 98.0 | 99.3 | 98.7 | 101.3 | 101.2 | 100.8 |
| Metal mining | 10 | .36 | 98.6 | 93.3 | 92.6 | 94.1 | 92.0 | 93.0 | 98.6 | 96.6 | 93.0 | 95.5 | 95.5 | 93.4 |
| Coal mining | 12 | .82 | 106.1 | 106.5 | 109.6 | 110.6 | 109.5 | 108.7 | 103.4 | 107.0 | 102.6 | 111.9 | 111.6 | 111.1 |
| Oil and gas extraction | 13 | 3.38 | 92.4 | 92.8 | 93.4 | 94.7 | 94.7 | 95.2 | 91.9 | 92.2 | 92.7 | 93.8 | 94.5 | 94.6 |
| Stone and earth minerals | 14 | .64 | 124.1 | 122.6 | 121.8 | 121.4 | 121.5 | 120.1 | 136.1 | 142.7 | 142.4 | 145.0 | 140.1 | 137.4 |
| **Utilities** | | 6.25 | 115.4 | 118.2 | 121.5 | 120.2 | 117.2 | 119.5 | 103.1 | 112.7 | 125.6 | 122.1 | 110.1 | 105.5 |
| Electric | 491,3pt | 5.28 | 117.8 | 120.3 | 124.2 | 122.5 | 119.1 | 121.8 | 109.2 | 124.2 | 140.6 | 136.7 | 122.1 | 112.9 |
| Gas | 492,3pt | .97 | 104.3 | 108.9 | 109.3 | 109.4 | 108.4 | 108.5 | 78.0 | 62.5 | 59.3 | 57.9 | 57.5 | 75.3 |
| **SPECIAL AGGREGATES** | | | | | | | | | | | | | | |
| Computers, communications eq. and semiconductors[2] | | 7.81 | 636.7 | 650.5 | 681.2 | 694.1 | 700.0 | 710.7 | 614.9 | 686.4 | 671.6 | 709.8 | 765.5 | 714.7 |
| **Manufacturing excluding:** | | | | | | | | | | | | | | |
| Motor vehicles and parts | | 83.41 | 137.7 | 137.6 | 138.3 | 138.7 | 138.7 | 139.6 | 136.1 | 141.0 | 138.3 | 142.8 | 144.4 | 142.5 |
| Computer and office equipment | | 86.30 | 132.2 | 132.2 | 132.5 | 132.9 | 132.9 | 133.7 | 131.5 | 135.7 | 129.7 | 136.8 | 138.2 | 137.2 |
| Computers and semiconductors[2] | | 82.84 | 120.9 | 120.7 | 120.8 | 121.1 | 121.1 | 121.8 | 120.4 | 123.3 | 118.3 | 124.6 | 125.0 | 124.9 |
| Computers, communications eq. and semiconductors[2] | | 80.74 | 119.0 | 118.7 | 118.7 | 118.9 | 118.9 | 119.6 | 118.6 | 121.4 | 116.3 | 122.5 | 122.9 | 122.7 |
| **Memo: Motor vehicle assemblies[3]** | | | | | | | | | | | | | | |
| Total | | | 13.1 | 13.4 | 12.5 | 13.7 | 12.9 | 13.2 | 13.6 | 14.1 | 7.8 | 14.2 | 13.7 | 14.3 |
| Autos | | | 5.5 | 5.6 | 5.4 | 5.7 | 5.7 | 5.7 | 5.7 | 6.2 | 3.4 | 6.0 | 6.0 | 6.2 |
| Trucks | | | 7.6 | 7.7 | 7.1 | 7.9 | 7.2 | 7.5 | 7.9 | 7.9 | 4.4 | 8.2 | 7.7 | 8.1 |
| Light | | | 7.2 | 7.3 | 6.7 | 7.6 | 6.9 | 7.1 | 7.5 | 7.5 | 4.0 | 7.8 | 7.3 | 7.7 |
| Heavy and medium | | | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.5 | 0.4 | 0.4 | 0.4 | 0.4 |

1. The IP proportion data are estimates of the industries' relative contributions to overall IP growth in the following year.
2. Semiconductors include related electronic components.
3. Millions of units at an annual rate.
Note—Primary processing manufacturing includes textile mill products, paper and products, industrial chemicals, synthetic materials, and fertilizers, petroleum products, rubber and plastics products, lumber and products, primary metals, fabricated metals, and stone, clay, and glass products. Advanced processing manufacturing includes foods, tobacco products, apparel products, printing and publishing, chemical products and other agricultural chemicals, leather and products, furniture and fixtures, industrial machinery and equipment, electrical machinery, transportation equipment, instruments, and miscellaneous manufactures.

## Table 2B
## INDUSTRIAL PRODUCTION: INDUSTRY GROUPS

Percent change

| Item | SIC | 1997 Q4 to 1998 Q4 | Seasonally adjusted annual rate 1998 Q4 | 1999 Q1 | Q2 | Q3[r] | Seasonally adjusted 1999 July[r] | Aug.[r] | Sept.[r] | Oct.[p] | Not seasonally adjusted 1999 July[r] | Aug.[r] | Sept.[r] | Oct.[p] | Oct. 98 to Oct. 99 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total index** | | 1.9 | 2.2 | 1.3 | 3.8 | 3.7 | .6 | .3 | –.1 | .7 | –3.0 | 4.7 | .3 | –1.0 | 2.8 |
| **Manufacturing** | | 2.5 | 4.9 | 1.5 | 3.9 | 3.1 | .4 | .3 | .1 | .6 | –4.1 | 5.4 | 1.1 | –.8 | 3.2 |
| **Primary processing** | | –.3 | 1.2 | 3.8 | .3 | 3.4 | .6 | .3 | .1 | .6 | –2.3 | 2.7 | .4 | .8 | 3.0 |
| **Advanced processing** | | 3.9 | 6.6 | .5 | 5.6 | 3.0 | .3 | .3 | .1 | .6 | –4.9 | 6.6 | 1.4 | –1.5 | 3.2 |
| **Durable** | | 5.3 | 8.6 | 2.1 | 7.2 | 7.2 | 1.2 | .3 | .0 | .6 | –6.2 | 7.2 | 1.7 | –1.0 | 4.8 |
| Lumber and products | 24 | 4.2 | 5.4 | 8.2 | –.2 | –7.5 | –1.1 | –.8 | –.6 | .1 | –5.8 | 3.8 | –.3 | 1.0 | .5 |
| Furniture and fixtures | 25 | 3.4 | 9.6 | 2.4 | –2.8 | 7.3 | .9 | .9 | .9 | –.5 | –1.1 | 8.5 | –1.1 | –4.2 | 1.3 |
| Stone, clay, and glass products | 32 | 5.0 | 12.7 | 6.7 | –11.8 | 3.6 | 1.0 | .5 | .3 | .2 | –1.1 | 3.3 | .1 | –.2 | 1.3 |
| Primary metals | 33 | –7.1 | –9.7 | 3.8 | 10.7 | 14.3 | 1.5 | 1.7 | –2.4 | 2.4 | –3.4 | 3.8 | .8 | 1.9 | 7.2 |
| Iron and steel | 331,2 | –11.7 | –18.2 | 9.5 | 18.0 | 20.7 | 2.6 | 2.3 | –3.6 | 4.1 | –1.8 | 2.6 | .9 | 3.7 | 12.9 |
| Raw steel | | –12.9 | –37.7 | 14.0 | 16.5 | 9.3 | 1.5 | 3.8 | –3.4 | 5.8 | –3.8 | 5.8 | –.6 | 5.1 | 8.8 |
| Nonferrous | 333–6,9 | –1.7 | .5 | –2.0 | 3.2 | 7.5 | .4 | 1.0 | –1.0 | .4 | –5.1 | 5.1 | .6 | –.2 | 1.3 |
| Fabricated metal products | 34 | .6 | 3.2 | –1.5 | .5 | 3.9 | .6 | .0 | .1 | .6 | –1.2 | 2.7 | .6 | –.1 | 2.1 |
| Industrial machinery and equipment | 35 | 12.9 | 7.4 | 5.6 | 8.7 | 6.7 | 1.3 | .5 | .8 | .4 | –1.4 | 3.0 | 1.9 | –2.8 | 6.6 |
| Computer and office equip. | 357 | 53.0 | 45.9 | 34.1 | 44.6 | 39.1 | 4.5 | 2.4 | 2.1 | 1.8 | 8.6 | 1.5 | 1.9 | –4.5 | 37.7 |
| Electrical machinery | 36 | 11.4 | 17.7 | 7.4 | 23.4 | 27.7 | 4.2 | .8 | –.2 | 1.7 | –4.7 | 6.5 | 7.2 | –4.9 | 17.1 |
| Semiconductors and related electronic components | 3672–9 | 25.7 | 51.7 | 16.4 | 38.3 | 41.0 | 4.7 | 1.3 | .8 | 1.6 | –13.2 | 9.8 | 18.8 | –13.1 | 29.4 |
| Transportation equipment | 37 | 3.1 | 17.3 | –6.1 | .3 | –2.7 | –.7 | –.2 | .0 | –.6 | –22.9 | 25.9 | .0 | 3.1 | –3.8 |
| Motor vehicles and parts | 371 | .7 | 37.3 | –2.9 | 10.2 | 5.2 | –1.0 | .5 | 1.7 | .1 | –36.7 | 53.9 | .8 | 6.6 | 3.3 |
| Autos and light trucks | | 2.6 | 67.9 | –4.2 | 14.2 | –.1 | –7.2 | 10.6 | –5.4 | 2.2 | –45.3 | 86.4 | –3.8 | 9.6 | 2.7 |
| Aerospace and misc. | 372–6,9 | 6.6 | –3.0 | –10.0 | –11.3 | –12.5 | –.4 | –1.2 | –2.4 | –1.6 | –3.4 | –.1 | –1.2 | –2.1 | –12.7 |
| Instruments | 38 | 1.9 | 3.4 | .1 | 10.1 | 3.5 | .8 | –.7 | –.1 | .6 | .8 | .3 | .1 | –1.7 | 3.4 |
| Miscellaneous | 39 | –3.4 | –8.4 | 2.2 | 10.4 | .8 | .5 | .0 | –.2 | 1.6 | –2.7 | 3.3 | .7 | 3.4 | 4.1 |
| **Nondurable** | | –.9 | .3 | .7 | –.2 | –1.9 | –.5 | .4 | .3 | .6 | –1.3 | 3.1 | .2 | –.6 | 1.1 |
| Foods | 20 | 1.8 | 8.8 | 5.2 | –4.2 | –6.9 | –1.3 | .0 | .5 | .5 | –.8 | 3.5 | 1.2 | –1.8 | .5 |
| Tobacco products | 21 | –8.7 | –18.1 | –12.8 | –2.8 | –3.6 | 1.6 | –1.5 | –4.0 | 2.1 | –20.7 | 23.3 | –6.7 | 6.1 | –7.2 |
| Textile mill products | 22 | –2.9 | –6.5 | –1.9 | 6.4 | –1.7 | .4 | –1.2 | –1.2 | .8 | –6.1 | 5.1 | –2.1 | 3.2 | –1.7 |
| Apparel products | 23 | –6.1 | –12.0 | –9.7 | –2.1 | –13.1 | –1.2 | –1.6 | –1.2 | 1.0 | –4.7 | 3.3 | –1.4 | –.6 | –7.9 |
| Paper and products | 26 | –1.2 | –2.4 | 7.2 | –4.9 | 4.3 | –.8 | 1.3 | .5 | .1 | –1.8 | 2.2 | –.3 | 1.9 | 1.5 |
| Printing and publishing | 27 | –1.8 | –.3 | –4.5 | .9 | –2.0 | –.8 | .9 | .7 | .7 | 1.7 | 2.1 | .8 | –.6 | .7 |
| Chemicals and products | 28 | –2.3 | –1.6 | .2 | 4.3 | –.4 | –.9 | 1.2 | .1 | 1.1 | .7 | 1.4 | .8 | –2.1 | 3.4 |
| Petroleum products | 29 | 1.5 | –2.9 | 13.1 | –8.3 | 1.5 | 1.7 | –.2 | .5 | .7 | 1.8 | .2 | .2 | –2.4 | 3.7 |
| Rubber and plastics products | 30 | 3.4 | 7.1 | 1.6 | 3.8 | 5.6 | 1.5 | –.3 | 1.6 | –.8 | –3.5 | 4.2 | .1 | 1.0 | 4.0 |
| Leather and products | 31 | –7.4 | –4.6 | –13.9 | –.2 | –5.7 | –3.0 | 1.8 | –.2 | –1.6 | –9.3 | 7.7 | –.8 | –1.6 | –5.5 |
| **Mining** | | –4.9 | –10.8 | –7.4 | –3.3 | 4.6 | .7 | 1.1 | –.2 | .1 | –.6 | 2.6 | –.1 | –.4 | –2.6 |
| Metal mining | 10 | –1.2 | 14.9 | –11.4 | –28.1 | –22.6 | –.7 | 1.6 | –2.2 | 1.1 | –3.7 | 2.7 | .0 | –2.3 | –18.1 |
| Coal mining | 12 | 3.0 | –5.2 | –15.4 | –1.0 | 13.6 | 2.9 | .9 | –1.0 | –.8 | –4.1 | 9.1 | –.2 | –.5 | –1.9 |
| Oil and gas extraction | 13 | –8.5 | –17.7 | –7.6 | .8 | 8.5 | .6 | 1.4 | .1 | .5 | .5 | 1.2 | .8 | .1 | –1.6 |
| Stone and earth minerals | 14 | 3.5 | 7.2 | 7.9 | –10.4 | –9.0 | –.6 | –.3 | .1 | –1.1 | –.2 | 1.8 | –3.4 | –1.9 | 1.1 |
| **Utilities** | | –1.1 | –20.5 | 4.8 | 7.9 | 11.3 | 2.8 | –1.1 | –2.5 | 2.0 | 11.5 | –2.8 | –9.8 | –4.2 | 2.5 |
| Electric | 491,3pt | 1.4 | –14.1 | –1.1 | 8.4 | 11.1 | 3.2 | –1.3 | –2.8 | 2.3 | 13.2 | –2.8 | –10.6 | –7.6 | 1.3 |
| Gas | 492,3pt | –13.4 | –47.7 | 43.6 | 5.1 | 12.2 | .3 | .1 | –1.0 | .2 | –5.1 | –2.5 | –.7 | 31.1 | 9.9 |
| **SPECIAL AGGREGATES** | | | | | | | | | | | | | | | |
| Computers, communications eq. and semiconductors[1] | | 26.7 | 32.2 | 17.2 | 39.7 | 40.2 | 4.7 | 1.9 | .9 | 1.5 | –2.2 | 5.7 | 7.9 | –6.6 | 28.7 |
| **Manufacturing excluding:** | | | | | | | | | | | | | | | |
| Motor vehicles and parts | | 2.6 | 3.1 | 1.8 | 3.5 | 3.0 | .5 | .3 | .0 | .7 | –1.9 | 3.2 | 1.1 | –1.3 | 3.2 |
| Computer and office equipment | | 1.4 | 3.9 | .7 | 2.8 | 2.2 | .3 | .3 | .0 | .6 | –4.4 | 5.5 | 1.1 | –.7 | 2.3 |
| Computers and semiconductors[1] | | .3 | 2.2 | .0 | 1.3 | .7 | .1 | .2 | .0 | .5 | –4.1 | 5.3 | .4 | –.1 | 1.1 |
| Computers, communications eq. and semiconductors[1] | | .2 | 2.4 | –.1 | .5 | –.2 | .0 | .2 | .0 | .5 | –4.3 | 5.3 | .4 | –.2 | .7 |

1. Semiconductors include related electronic components.
Note—Percent changes shown in the first and last columns are based on seasonally adjusted data.

## Table 3
## CAPACITY UTILIZATION: MANUFACTURING, MINING, AND UTILITIES

Percent of capacity, seasonally adjusted

| Item | SIC | 1998 Proportion | 1967-1998 Ave. | 1978-1980 High | 1982 Low | 1988-1989 High | 1990-1991 Low | 1994-1995 High | 1998 Oct. | 1999 May | June | July[r] | Aug.[r] | Sept.[r] | Oct.[p] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total industry** | | 100.00 | 82.1 | 87.3 | 71.1 | 85.4 | 78.1 | 84.7 | 81.3 | 80.4 | 80.3 | 80.6 | 80.6 | 80.4 | 80.7 |
| **Manufacturing** | | 89.41 | 81.1 | 86.9 | 69.0 | 85.7 | 76.6 | 84.4 | 80.3 | 79.5 | 79.3 | 79.5 | 79.5 | 79.4 | 79.7 |
| **Primary processing** | | 27.08 | 82.4 | 88.1 | 66.2 | 88.9 | 77.7 | 89.2 | 82.4 | 82.5 | 82.4 | 82.7 | 82.9 | 82.8 | 83.1 |
| **Advanced processing** | | 62.33 | 80.5 | 86.7 | 70.4 | 84.2 | 76.1 | 82.3 | 79.6 | 78.6 | 78.3 | 78.4 | 78.4 | 78.3 | 78.5 |
| **Durable** | | 50.51 | 79.5 | 87.7 | 63.9 | 84.6 | 73.1 | 84.1 | 80.6 | 79.5 | 79.5 | 80.1 | 80.0 | 79.7 | 79.9 |
| Lumber and products | 24 | 2.11 | 82.5 | 87.9 | 60.8 | 93.6 | 75.5 | 88.0 | 81.6 | 83.6 | 82.3 | 81.2 | 80.4 | 79.7 | 79.6 |
| Furniture and fixtures | 25 | 1.46 | 81.3 | 85.5 | 68.9 | 86.6 | 72.5 | 84.3 | 79.7 | 78.3 | 78.1 | 78.7 | 79.3 | 79.9 | 79.3 |
| Stone, clay, and glass products | 32 | 2.40 | 78.3 | 88.0 | 64.3 | 83.5 | 69.7 | 83.3 | 83.1 | 82.1 | 81.4 | 81.9 | 82.1 | 82.1 | 82.0 |
| Primary metals | 33 | 3.33 | 81.3 | 94.2 | 45.1 | 92.7 | 73.7 | 93.8 | 83.7 | 84.1 | 85.8 | 87.1 | 88.5 | 86.3 | 88.3 |
| Iron and steel | 331,2 | 1.83 | 81.2 | 95.8 | 37.0 | 95.2 | 71.8 | 96.4 | 78.4 | 80.4 | 82.3 | 84.4 | 86.2 | 83.0 | 86.3 |
| Raw steel | | .09 | 81.0 | 95.8 | 35.2 | 92.7 | 71.5 | 98.7 | 77.8 | 78.7 | 76.9 | 78.0 | 80.9 | 78.1 | 82.5 |
| Nonferrous | 333–6,9 | 1.50 | 81.5 | 91.1 | 60.1 | 89.3 | 74.2 | 91.2 | 90.4 | 88.9 | 90.4 | 90.6 | 91.5 | 90.5 | 90.9 |
| Primary copper | 3331 | .05 | 75.6 | 81.5 | 42.1 | 86.3 | 73.5 | 102.4 | 87.6 | 72.5 | 70.1 | 66.5 | 69.3 | 65.2 | |
| Primary aluminum | 3334 | .11 | 88.4 | 97.6 | 58.6 | 100.4 | 97.3 | 83.7 | 88.3 | 89.5 | 89.7 | 89.8 | 91.3 | 90.4 | |
| Fabricated metal products | 34 | 5.86 | 78.0 | 83.9 | 63.7 | 82.0 | 71.9 | 85.5 | 75.7 | 75.0 | 75.6 | 76.1 | 76.1 | 76.3 | 76.8 |
| Industrial machinery and equipment | 35 | 9.77 | 81.4 | 93.2 | 64.0 | 85.4 | 72.3 | 87.5 | 84.9 | 82.1 | 81.1 | 81.7 | 81.5 | 81.6 | 81.3 |
| Computer and office equip. | 357 | 2.46 | 81.2 | 92.6 | 65.5 | 86.9 | 66.9 | 86.8 | 80.7 | 78.2 | 77.1 | 78.6 | 78.5 | 78.2 | 77.6 |
| Electrical machinery | 36 | 9.49 | 81.0 | 89.4 | 71.6 | 84.0 | 75.0 | 90.2 | 77.2 | 76.9 | 77.3 | 79.9 | 79.8 | 78.9 | 79.6 |
| Semiconductors and related electronic components | 3672–9 | 4.09 | 80.0 | 91.6 | 75.7 | 81.1 | 75.6 | 95.2 | 78.5 | 78.1 | 79.0 | 81.2 | 80.7 | 79.9 | 79.6 |
| Transportation equipment | 37 | 9.77 | 75.9 | 84.8 | 57.2 | 85.8 | 68.5 | 77.9 | 81.8 | 79.2 | 79.4 | 78.9 | 78.7 | 78.7 | 78.2 |
| Motor vehicles and parts | 371 | 5.53 | 76.8 | 95.0 | 45.5 | 89.1 | 55.9 | 87.9 | 80.9 | 80.6 | 81.8 | 81.0 | 81.3 | 82.7 | 82.7 |
| Autos and light trucks[1] | | 2.58 | | 94.6 | 40.6 | 92.3 | 53.3 | 92.5 | 88.8 | 89.2 | 91.9 | 85.4 | 94.6 | 89.6 | 91.6 |
| Aerospace and misc. | 372–6,9 | 4.24 | 75.2 | 81.9 | 66.6 | 87.3 | 79.2 | 69.1 | 83.3 | 77.9 | 76.7 | 76.5 | 75.6 | 73.9 | 72.7 |
| Instruments | 38 | 4.95 | 81.6 | 92.7 | 78.4 | 81.4 | 77.2 | 77.5 | 80.9 | 81.8 | 81.4 | 81.8 | 81.0 | 80.7 | 81.0 |
| Miscellaneous | 39 | 1.38 | 75.7 | 79.4 | 65.4 | 79.0 | 71.7 | 79.7 | 76.2 | 77.6 | 76.8 | 77.1 | 77.0 | 76.7 | 77.8 |
| **Nondurable** | | 38.90 | 83.4 | 87.5 | 76.4 | 87.3 | 80.7 | 84.8 | 80.3 | 80.0 | 79.6 | 79.1 | 79.4 | 79.5 | 79.9 |
| Foods | 20 | 8.95 | 83.0 | 84.6 | 79.1 | 85.4 | 82.7 | 84.4 | 80.5 | 80.5 | 79.9 | 78.8 | 78.6 | 78.9 | 79.2 |
| Textile mill products | 22 | 1.54 | 85.6 | 91.2 | 72.3 | 90.4 | 77.7 | 93.0 | 83.2 | 82.4 | 83.1 | 83.5 | 82.6 | 81.7 | 82.5 |
| Apparel products | 23 | 1.90 | 80.9 | 87.5 | 77.5 | 85.1 | 75.5 | 85.5 | 72.9 | 70.4 | 69.9 | 69.2 | 68.2 | 67.5 | 68.2 |
| Paper and products | 26 | 3.24 | 89.1 | 96.1 | 80.6 | 93.5 | 85.0 | 93.0 | 86.7 | 84.6 | 85.7 | 84.8 | 85.7 | 86.0 | 85.9 |
| Pulp and paper | 261–3 | 1.27 | 92.4 | 98.3 | 82.0 | 98.0 | 89.9 | 97.0 | 92.4 | 90.8 | 92.6 | 91.4 | 92.8 | 93.3 | |
| Printing and publishing | 27 | 6.64 | 85.7 | 93.9 | 82.0 | 91.7 | 79.6 | 82.2 | 80.8 | 79.9 | 79.3 | 78.6 | 79.3 | 79.9 | 80.6 |
| Chemicals and products | 28 | 10.16 | 79.5 | 84.6 | 69.9 | 86.2 | 79.3 | 80.4 | 75.7 | 76.5 | 76.3 | 75.6 | 76.4 | 76.4 | 77.2 |
| Plastics materials | 2821 | .73 | 86.7 | 90.9 | 63.4 | 97.0 | 74.8 | 102.7 | 89.1 | 90.4 | 89.5 | 91.7 | 88.4 | | |
| Synthetic fibers | 2823,4 | .33 | 85.0 | 98.6 | 64.4 | 99.7 | 77.6 | 90.3 | 81.7 | 83.4 | 86.9 | 83.5 | 84.7 | 80.1 | |
| Petroleum products | 29 | 1.33 | 86.9 | 90.0 | 66.8 | 88.5 | 85.1 | 93.1 | 94.4 | 96.0 | 94.5 | 96.0 | 95.8 | 96.1 | 96.8 |
| Rubber and plastics products | 30 | 3.69 | 84.5 | 91.2 | 72.7 | 89.6 | 77.4 | 91.0 | 83.8 | 84.0 | 82.7 | 83.5 | 82.9 | 83.9 | 82.8 |
| Leather and products | 31 | .26 | 80.3 | 92.1 | 75.8 | 83.3 | 76.1 | 85.4 | 61.8 | 61.3 | 62.1 | 60.6 | 62.2 | 62.5 | 61.9 |
| **Mining** | | 4.98 | 87.5 | 96.0 | 80.3 | 88.0 | 87.0 | 88.9 | 84.7 | 80.8 | 80.5 | 81.1 | 81.9 | 81.7 | 81.7 |
| Metal mining | 10 | .33 | 79.4 | 87.9 | 44.4 | 89.4 | 79.9 | 89.4 | 92.6 | 80.3 | 75.9 | 75.3 | 76.5 | 74.7 | 75.5 |
| Coal mining | 12 | .80 | 86.6 | 99.4 | 76.6 | 91.5 | 83.4 | 90.8 | 85.3 | 80.8 | 81.0 | 83.2 | 83.8 | 82.9 | 82.1 |
| Oil and gas extraction | 13 | 3.25 | 88.5 | 97.3 | 82.3 | 88.2 | 88.7 | 89.5 | 84.1 | 80.1 | 80.5 | 81.0 | 82.1 | 82.2 | 82.6 |
| Oil and gas well drilling | 138 | .84 | 74.3 | 104.3 | 50.9 | 69.3 | 60.0 | 73.8 | 66.8 | 56.1 | 56.2 | 57.8 | 60.8 | 62.8 | 64.8 |
| Stone and earth minerals | 14 | .60 | 84.8 | 92.7 | 63.3 | 89.0 | 79.4 | 91.6 | 80.8 | 82.3 | 81.0 | 80.3 | 79.7 | 79.5 | 78.3 |
| **Utilities** | | 5.60 | 87.4 | 89.1 | 75.9 | 92.6 | 83.4 | 93.6 | 92.0 | 90.8 | 93.0 | 95.5 | 94.5 | 92.1 | 93.9 |
| Electric | 491,3pt | 4.53 | 89.4 | 88.2 | 78.9 | 95.0 | 87.1 | 96.3 | 96.9 | 94.5 | 96.4 | 99.5 | 98.2 | 95.4 | 97.5 |
| Gas 492,3pt | | 1.07 | 82.1 | 93.7 | 69.1 | 85.0 | 67.1 | 87.8 | 71.5 | 74.9 | 78.1 | 78.3 | 78.3 | 77.4 | 77.5 |
| **SPECIAL AGGREGATES** | | | | | | | | | | | | | | | |
| Computers, communications eq. and semiconductors[2] | | 8.90 | 80.3 | 90.9 | 77.3 | 81.9 | 72.4 | 89.7 | 77.6 | 76.9 | 77.0 | 79.3 | 79.4 | 78.8 | 78.6 |
| Manufacturing ex. computers, communications eq., and semiconductors[2] | | 80.51 | 81.2 | 87.0 | 68.0 | 86.1 | 76.8 | 83.9 | 80.8 | 80.1 | 79.9 | 79.8 | 79.9 | 79.8 | 80.2 |

1. Series begins in 1977.
2. Semiconductors include related electronic components.

Note—Primary processing manufacturing includes textile mill products, paper and products, industrial chemicals, synthetic materials, and fertilizers, petroleum products, rubber and plastic products, lumber and products, primary metals, fabricated metals, and stone, clay, and glass products.
Advanced processing manufacturing includes foods, tobacco products, apparel products, printing and publishing, chemical products and other agricultural chemicals, leather and products, furniture and fixtures, industrial machinery and equipment, electrical machinery, transportation equipment, instruments, and miscellaneous manufactures.

## Table 4
## INDUSTRIAL CAPACITY: MANUFACTURING, MINING, AND UTILITIES

| Item | SIC | Percent change: Annual rate 1967 1999 Ave. | Annual rate 1967 1975 Ave. | Annual rate 1975 1999 Ave. | Fourth quarter to fourth quarter 1995 | 1996 | 1997 | 1998 | 1999p | Capacity indexes, Percent of 1992 output: 1998 Oct. | 1999 May | June | July | Aug. | Sept. | Oct. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total industry** | | 3.1 | 3.8 | 2.9 | 5.4 | 5.7 | 5.1 | 5.0 | 3.4 | 162.8 | 166.7 | 167.1 | 167.5 | 167.9 | 168.3 | 168.6 |
| **Manufacturing** | | 3.4 | 4.0 | 3.2 | 6.0 | 6.4 | 5.8 | 5.6 | 3.8 | 169.6 | 174.0 | 174.5 | 174.9 | 175.4 | 175.8 | 176.2 |
| **Primary processing** | | 2.3 | 4.1 | 1.7 | 3.3 | 3.8 | 3.9 | 3.0 | 2.0 | 145.8 | 147.7 | 147.9 | 148.1 | 148.3 | 148.6 | 148.8 |
| **Advanced processing** | | 4.0 | 4.0 | 4.0 | 7.4 | 7.4 | 6.4 | 6.6 | 4.5 | 181.1 | 186.7 | 187.4 | 187.9 | 188.5 | 189.0 | 189.6 |
| **Durable** | | 4.0 | 3.7 | 4.1 | 9.5 | 9.7 | 8.6 | 7.9 | 5.5 | 200.0 | 207.4 | 208.3 | 209.1 | 209.8 | 210.6 | 211.4 |
| Lumber and products | 24 | 2.1 | 2.9 | 1.7 | 3.0 | 3.9 | 4.2 | 2.9 | 3.1 | 144.6 | 147.1 | 147.5 | 147.8 | 148.2 | 148.6 | 149.0 |
| Furniture and fixtures | 25 | 3.1 | 4.5 | 2.5 | 2.5 | 5.9 | 5.1 | 1.9 | 1.9 | 156.2 | 157.7 | 158.0 | 158.2 | 158.5 | 158.8 | 159.0 |
| Stone, clay, and glass products | 32 | 1.6 | 2.5 | 1.3 | 5.7 | 4.9 | 2.9 | .6 | 2.9 | 154.5 | 156.2 | 156.7 | 157.1 | 157.6 | 158.1 | 158.6 |
| Primary metals | 33 | .5 | 1.7 | .0 | 2.7 | 3.6 | 3.4 | 3.4 | 1.5 | 144.0 | 145.9 | 146.1 | 146.2 | 146.3 | 146.4 | 146.5 |
| Iron and steel | 331,2 | –.1 | .7 | –.4 | 1.9 | 5.0 | 3.9 | 5.1 | 2.2 | 145.9 | 148.8 | 149.0 | 149.2 | 149.3 | 149.5 | 149.6 |
| Raw steel | | –.4 | .3 | –.7 | 3.1 | 2.8 | 5.8 | 6.8 | 2.2 | 141.0 | 144.1 | 144.3 | 144.4 | 144.5 | 144.6 | 144.7 |
| Nonferrous | 333–6,9 | 1.6 | 3.8 | .8 | 3.5 | 2.0 | 2.8 | 1.4 | .7 | 141.6 | 142.4 | 142.4 | 142.5 | 142.6 | 142.6 | 142.7 |
| Primary copper | 3331 | .2 | 1.8 | –.4 | 2.0 | –4.8 | –.6 | .8 | .4 | 123.0 | 123.4 | 123.4 | 123.4 | 123.5 | 123.5 | 123.5 |
| Primary aluminum | 3334 | 1.2 | 5.2 | –.3 | .1 | .4 | .1 | .0 | .0 | 104.2 | 104.2 | 104.2 | 104.2 | 104.2 | 104.2 | 104.2 |
| Fabricated metal products | 34 | 2.0 | 3.1 | 1.6 | 5.2 | 5.5 | 6.5 | 4.3 | .3 | 167.7 | 169.2 | 169.2 | 169.1 | 169.0 | 168.9 | 168.8 |
| Industrial machinery and equipment | 35 | 6.0 | 4.7 | 6.5 | 11.5 | 13.0 | 12.1 | 14.6 | 10.8 | 248.7 | 267.0 | 269.2 | 271.1 | 272.9 | 274.8 | 276.8 |
| Computer and office equip. | 357 | 22.6 | 12.0 | 26.7 | 34.7 | 46.1 | 43.2 | 59.4 | 41.3 | 890.0 | 1123.7 | 1153.7 | 1183.4 | 1213.1 | 1243.5 | 1274.9 |
| Electrical machinery | 36 | 9.0 | 5.9 | 10.2 | 28.8 | 30.3 | 23.6 | 18.3 | 13.3 | 391.6 | 424.9 | 429.6 | 433.3 | 437.2 | 441.1 | 445.2 |
| Semiconductors and related electronic components | 3672–9 | 20.1 | 13.1 | 22.8 | 58.7 | 56.6 | 46.7 | 33.4 | 27.4 | 963.0 | 1116.5 | 1140.3 | 1161.4 | 1183.3 | 1205.8 | 1229.3 |
| Transportation equipment | 37 | 2.6 | 3.0 | 2.4 | 4.3 | 2.5 | 2.0 | 2.1 | .4 | 157.0 | 157.8 | 157.9 | 157.9 | 157.9 | 157.9 | 157.9 |
| Motor vehicles and parts | 371 | 3.2 | 4.4 | 2.8 | 8.4 | 3.9 | 3.2 | 2.5 | .9 | 185.7 | 187.1 | 187.2 | 187.3 | 187.4 | 187.5 | 187.6 |
| Autos and light trucks[1] | | | | | 4.5 | –.5 | .8 | 2.8 | –.7 | 158.2 | 158.4 | 158.2 | 158.0 | 157.8 | 157.6 | 157.5 |
| Aerospace and misc. | 372–6,9 | 1.5 | 1.1 | 1.7 | –.4 | .5 | .2 | 1.4 | –.2 | 128.4 | 128.7 | 128.7 | 128.6 | 128.5 | 128.4 | 128.3 |
| Instruments | 38 | 4.6 | 7.6 | 3.5 | 2.6 | .1 | 1.3 | 2.4 | 3.3 | 141.7 | 144.1 | 144.5 | 145.0 | 145.4 | 145.8 | 146.2 |
| Miscellaneous | 39 | 2.1 | 4.4 | 1.3 | 1.7 | 1.9 | 1.9 | 1.9 | 2.0 | 152.1 | 153.8 | 154.1 | 154.4 | 154.6 | 154.9 | 155.1 |
| **Nondurable** | | 2.7 | 4.3 | 2.1 | 2.1 | 2.3 | 2.0 | 2.6 | 1.4 | 138.1 | 139.6 | 139.7 | 139.9 | 140.0 | 140.1 | 140.2 |
| Foods | 20 | 2.3 | 3.0 | 2.1 | 2.2 | 2.0 | 1.2 | 2.8 | 2.0 | 135.6 | 137.5 | 137.7 | 137.9 | 138.1 | 138.3 | 138.4 |
| Textile mill products | 22 | 2.1 | 4.4 | 1.3 | 2.0 | 2.2 | 4.6 | .9 | –1.0 | 135.2 | 134.7 | 134.5 | 134.4 | 134.2 | 134.1 | 133.9 |
| Apparel products | 23 | 1.1 | 2.3 | .7 | 2.3 | .7 | 1.8 | –.7 | –1.6 | 133.5 | 132.3 | 132.2 | 132.0 | 131.8 | 131.6 | 131.4 |
| Paper and products | 26 | 2.8 | 3.9 | 2.4 | 2.4 | 2.9 | 2.4 | 3.0 | 2.4 | 133.1 | 135.0 | 135.3 | 135.5 | 135.8 | 136.1 | 136.3 |
| Pulp and paper | 261–3 | 2.3 | 2.9 | 2.1 | 2.9 | 1.6 | 1.5 | 1.7 | 1.1 | 122.6 | 123.5 | 123.6 | 123.7 | 123.8 | 123.9 | 124.0 |
| Printing and publishing | 27 | 2.6 | 3.0 | 2.5 | .7 | .3 | .1 | 3.1 | .7 | 129.1 | 130.4 | 130.4 | 130.4 | 130.4 | 130.4 | 130.3 |
| Chemicals and products | 28 | 3.6 | 6.8 | 2.5 | 2.8 | 3.5 | 2.7 | 2.4 | 1.3 | 149.4 | 150.8 | 150.9 | 151.1 | 151.2 | 151.3 | 151.5 |
| Plastics materials | 2821 | 6.3 | 12.7 | 4.0 | 5.0 | 5.7 | 4.1 | 3.6 | 3.4 | 142.7 | 145.6 | 146.1 | 146.5 | 146.9 | 147.3 | 147.7 |
| Synthetic fibers | 2823,4 | 3.7 | 9.7 | 1.6 | .4 | –.3 | 2.5 | 2.9 | 3.6 | 125.8 | 128.3 | 128.7 | 129.1 | 129.5 | 129.9 | 130.3 |
| Petroleum products | 29 | 1.5 | 4.2 | .5 | –.2 | .8 | 1.3 | 1.1 | 1.1 | 117.0 | 117.7 | 117.8 | 118.0 | 118.1 | 118.2 | 118.3 |
| Rubber and plastics products | 30 | 5.5 | 8.4 | 4.4 | 4.4 | 4.9 | 5.1 | 4.8 | 5.3 | 159.1 | 163.8 | 164.5 | 165.3 | 166.0 | 166.7 | 167.5 |
| Leather and products | 31 | –2.9 | –1.5 | –3.5 | 3.4 | 3.5 | –3.3 | –.4 | –6.4 | 117.9 | 115.1 | 114.4 | 113.5 | 112.7 | 111.9 | 111.1 |
| **Mining** | | .2 | –.1 | .4 | –.4 | .4 | 1.5 | 1.0 | .9 | 120.4 | 121.2 | 121.3 | 121.3 | 121.4 | 121.5 | 121.6 |
| Metal mining | 10 | 1.3 | .5 | 1.6 | .7 | 1.6 | 2.9 | .8 | .5 | 122.7 | 122.9 | 122.9 | 123.0 | 123.0 | 123.1 | 123.2 |
| Coal mining | 12 | 2.4 | 2.4 | 2.3 | .6 | 1.7 | 1.7 | 1.7 | 2.0 | 129.8 | 131.3 | 131.5 | 131.7 | 131.9 | 132.2 | 132.4 |
| Oil and gas extraction | 13 | –.4 | –1.0 | –.2 | –1.0 | –.2 | 1.0 | .4 | .1 | 115.1 | 115.4 | 115.4 | 115.3 | 115.3 | 115.3 | 115.3 |
| Oil and gas well drilling | 138 | .6 | .8 | .6 | –1.5 | –1.2 | .9 | 1.9 | –1.0 | 178.8 | 178.9 | 178.6 | 178.3 | 178.1 | 177.8 | 177.5 |
| Stone and earth minerals | 14 | 1.5 | 2.6 | 1.2 | 2.4 | 3.5 | 4.4 | 4.1 | 4.2 | 147.1 | 150.7 | 151.2 | 151.7 | 152.2 | 152.8 | 153.3 |
| **Utilities** | | 2.6 | 6.1 | 1.3 | 1.7 | 1.9 | .3 | .7 | .5 | 126.6 | 127.1 | 127.2 | 127.2 | 127.2 | 127.3 | 127.3 |
| Electric | 491,3pt | 3.6 | 7.8 | 2.0 | 2.2 | 1.9 | –.1 | .6 | .6 | 124.2 | 124.7 | 124.7 | 124.8 | 124.8 | 124.9 | 125.0 |
| Gas 492,3pt | | .5 | 2.3 | –.2 | .5 | 2.1 | 1.9 | 1.5 | 1.4 | 138.1 | 139.2 | 139.4 | 139.6 | 139.7 | 139.9 | 140.1 |
| **SPECIAL AGGREGATES** | | | | | | | | | | | | | | | | |
| Computers, communications eq. and semiconductors[2] | | 16.5 | 9.5 | 19.3 | 41.0 | 46.3 | 37.4 | 34.8 | 26.3 | 711.7 | 828.4 | 844.4 | 859.0 | 873.7 | 888.8 | 904.4 |
| Manufacturing ex. computers, communications eq., and semiconductors[2] | | 2.4 | 3.7 | 1.9 | 3.2 | 2.9 | 2.7 | 2.6 | 1.4 | 147.0 | 148.5 | 148.6 | 148.8 | 148.9 | 149.0 | 149.1 |

p. Preliminary estimate for current year.
1. Series begins in 1977.
2. Semiconductors include related electronic components.

## Table 5A
## INDUSTRIAL PRODUCTION, CAPACITY AND UTILIZATION FOR TOTAL INDUSTRY: HISTORICAL DATA

Seasonally adjusted

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Q1 | Q2 | Q3 | Q4 | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industrial Production, Percent Change[1]** | | | | | | | | | | | | | | | | | |
| 1987 | –.6 | 1.2 | .4 | .4 | .4 | .9 | .6 | .1 | –.1 | 1.4 | .3 | .6 | 4.2 | 6.7 | 5.6 | 7.1 | 4.6 |
| 1988 | .1 | .3 | .0 | .6 | .1 | .1 | .7 | .5 | –.4 | .3 | .8 | .5 | 3.2 | 3.1 | 3.9 | 3.6 | 4.5 |
| 1989 | .6 | –.8 | .9 | .2 | –.6 | –.2 | –1.0 | .4 | –.2 | –.5 | .4 | .5 | 3.8 | .5 | –4.4 | –.1 | 1.8 |
| 1990 | –.5 | .5 | .5 | –.6 | .4 | .0 | .0 | .2 | .1 | –.6 | –1.3 | –.6 | 2.0 | .6 | 1.0 | –5.8 | –.2 |
| 1991 | –.5 | –.8 | –.9 | .3 | .8 | 1.2 | .1 | .1 | 1.0 | –.1 | –.1 | –.6 | –8.3 | 1.5 | 6.2 | 1.1 | –2.0 |
| 1992 | .2 | .6 | .7 | .7 | .2 | –.1 | .8 | –.3 | .4 | .6 | .5 | .1 | 1.3 | 6.1 | 2.7 | 4.6 | 3.1 |
| 1993 | .5 | .5 | .2 | .4 | –.5 | .2 | .2 | –.4 | 1.0 | .4 | .5 | .8 | 4.3 | 1.5 | 1.2 | 6.4 | 3.5 |
| 1994 | .2 | .5 | .7 | .4 | .7 | .5 | .3 | .5 | .2 | .7 | .8 | 1.1 | 6.1 | 7.1 | 5.2 | 7.6 | 5.4 |
| 1995 | .5 | –.1 | .2 | –.1 | .3 | .4 | –.3 | 1.1 | .3 | .0 | .2 | .0 | 6.3 | 1.3 | 3.5 | 3.0 | 4.9 |
| 1996 | –.2 | 1.3 | –.2 | 1.2 | .9 | .7 | .2 | .5 | .1 | .1 | .6 | .3 | 2.8 | 9.6 | 5.5 | 3.5 | 4.5 |
| 1997 | .5 | .7 | .4 | .6 | .3 | .5 | .7 | .6 | .5 | .6 | .5 | .3 | 6.6 | 6.0 | 7.2 | 6.6 | 6.0 |
| 1998 | .0 | –.1 | .4 | .5 | .4 | –.9 | –.1 | 1.4 | –.4 | .4 | –.2 | .1 | 1.6 | 2.8 | .9 | 2.2 | 3.6 |
| 1999 | .0 | .1 | .7 | .3 | .2 | .2 | .6 | .3 | –.1 | .7 | | | 1.3 | 3.8 | 3.7 | | |
| **Industrial Production** | | | | | | | | | | | | | | | | | |
| 1987 | 90.2 | 91.2 | 91.6 | 92.0 | 92.4 | 93.2 | 93.7 | 93.8 | 93.7 | 95.0 | 95.3 | 95.9 | 91.0 | 92.5 | 93.8 | 95.4 | 93.2 |
| 1988 | 95.9 | 96.2 | 96.3 | 96.8 | 96.9 | 97.0 | 97.6 | 98.1 | 97.8 | 98.0 | 98.8 | 99.3 | 96.1 | 96.9 | 97.8 | 98.7 | 97.4 |
| 1989 | 99.8 | 99.0 | 100.0 | 100.2 | 99.6 | 99.4 | 98.4 | 98.8 | 98.6 | 98.2 | 98.6 | 99.0 | 99.6 | 99.7 | 98.6 | 98.6 | 99.1 |
| 1990 | 98.6 | 99.1 | 99.6 | 99.0 | 99.4 | 99.3 | 99.3 | 99.5 | 99.6 | 99.1 | 97.7 | 97.2 | 99.1 | 99.2 | 99.5 | 98.0 | 98.9 |
| 1991 | 96.7 | 95.9 | 95.0 | 95.4 | 96.1 | 97.2 | 97.3 | 97.4 | 98.4 | 98.3 | 98.1 | 97.5 | 95.9 | 96.2 | 97.7 | 98.0 | 97.0 |
| 1992 | 97.7 | 98.2 | 98.9 | 99.6 | 99.9 | 99.7 | 100.5 | 100.2 | 100.6 | 101.2 | 101.7 | 101.8 | 98.3 | 99.8 | 100.4 | 101.5 | 100.0 |
| 1993 | 102.3 | 102.7 | 102.9 | 103.3 | 102.7 | 103.0 | 103.2 | 102.8 | 103.9 | 104.3 | 104.8 | 105.7 | 102.6 | 103.0 | 103.3 | 104.9 | 103.5 |
| 1994 | 105.9 | 106.4 | 107.2 | 107.6 | 108.4 | 108.9 | 109.3 | 109.8 | 110.0 | 110.8 | 111.6 | 112.9 | 106.5 | 108.3 | 109.7 | 111.7 | 109.1 |
| 1995 | 113.4 | 113.4 | 113.6 | 113.4 | 113.8 | 114.3 | 113.9 | 115.1 | 115.4 | 115.5 | 115.7 | 115.8 | 113.5 | 113.8 | 114.8 | 115.7 | 114.4 |
| 1996 | 115.5 | 117.0 | 116.8 | 118.2 | 119.2 | 120.0 | 120.3 | 120.9 | 121.1 | 121.2 | 121.9 | 122.3 | 116.5 | 119.2 | 120.8 | 121.8 | 119.5 |
| 1997 | 123.0 | 123.9 | 124.4 | 125.1 | 125.5 | 126.1 | 127.0 | 127.8 | 128.5 | 129.3 | 129.9 | 130.3 | 123.7 | 125.6 | 127.8 | 129.8 | 126.8 |
| 1998 | 130.3 | 130.2 | 130.7 | 131.3 | 131.9 | 130.6 | 130.5 | 132.4 | 131.9 | 132.4 | 132.2 | 132.3 | 130.4 | 131.3 | 131.6 | 132.3 | 131.3 |
| 1999 | 132.3 | 132.5 | 133.3 | 133.7 | 134.0 | 134.2 | 135.0 | 135.3 | 135.2 | 136.1 | | | 132.7 | 134.0 | 135.2 | | |
| **Capacity** | | | | | | | | | | | | | | | | | |
| 1987 | 114.0 | 114.1 | 114.2 | 114.3 | 114.4 | 114.5 | 114.6 | 114.7 | 114.9 | 115.0 | 115.1 | 115.2 | 114.1 | 114.4 | 114.7 | 115.1 | 114.6 |
| 1988 | 115.3 | 115.5 | 115.6 | 115.7 | 115.8 | 115.9 | 116.0 | 116.2 | 116.3 | 116.4 | 116.5 | 116.7 | 115.5 | 115.8 | 116.2 | 116.5 | 116.0 |
| 1989 | 116.8 | 117.0 | 117.2 | 117.4 | 117.6 | 117.8 | 118.0 | 118.2 | 118.4 | 118.6 | 118.8 | 119.0 | 117.0 | 117.6 | 118.2 | 118.8 | 117.9 |
| 1990 | 119.2 | 119.3 | 119.5 | 119.7 | 119.9 | 120.1 | 120.2 | 120.4 | 120.6 | 120.8 | 121.0 | 121.2 | 119.3 | 119.9 | 120.4 | 121.0 | 120.2 |
| 1991 | 121.4 | 121.6 | 121.7 | 121.9 | 122.1 | 122.2 | 122.4 | 122.6 | 122.7 | 122.9 | 123.0 | 123.2 | 121.6 | 122.1 | 122.6 | 123.0 | 122.3 |
| 1992 | 123.4 | 123.6 | 123.8 | 124.0 | 124.2 | 124.5 | 124.7 | 124.9 | 125.1 | 125.3 | 125.5 | 125.7 | 123.6 | 124.2 | 124.9 | 125.5 | 124.5 |
| 1993 | 125.9 | 126.2 | 126.4 | 126.6 | 126.9 | 127.1 | 127.4 | 127.6 | 127.8 | 128.1 | 128.3 | 128.6 | 126.2 | 126.9 | 127.6 | 128.3 | 127.2 |
| 1994 | 128.9 | 129.3 | 129.7 | 130.1 | 130.5 | 130.9 | 131.3 | 131.7 | 132.1 | 132.6 | 133.0 | 133.4 | 129.3 | 130.5 | 131.7 | 133.0 | 131.1 |
| 1995 | 133.9 | 134.5 | 135.1 | 135.7 | 136.4 | 137.0 | 137.6 | 138.2 | 138.8 | 139.5 | 140.1 | 140.8 | 134.5 | 136.4 | 138.2 | 140.1 | 137.3 |
| 1996 | 141.4 | 142.1 | 142.8 | 143.4 | 144.1 | 144.8 | 145.5 | 146.1 | 146.8 | 147.4 | 148.1 | 148.8 | 142.1 | 144.1 | 146.1 | 148.1 | 145.1 |
| 1997 | 149.4 | 150.1 | 150.7 | 151.3 | 152.0 | 152.6 | 153.2 | 153.8 | 154.4 | 155.0 | 155.7 | 156.3 | 150.1 | 152.0 | 153.8 | 155.7 | 152.9 |
| 1998 | 157.0 | 157.6 | 158.3 | 158.9 | 159.6 | 160.3 | 160.9 | 161.5 | 162.2 | 162.8 | 163.5 | 164.1 | 157.6 | 159.6 | 161.5 | 163.5 | 160.5 |
| 1999 | 164.6 | 165.2 | 165.7 | 166.2 | 166.7 | 167.1 | 167.5 | 167.9 | 168.3 | 168.6 | | | 165.2 | 166.7 | 167.9 | | |
| **Utilization** | | | | | | | | | | | | | | | | | |
| 1987 | 79.1 | 80.0 | 80.2 | 80.5 | 80.7 | 81.4 | 81.8 | 81.8 | 81.6 | 82.6 | 82.8 | 83.2 | 79.8 | 80.8 | 81.7 | 82.9 | 81.3 |
| 1988 | 83.2 | 83.4 | 83.3 | 83.7 | 83.7 | 83.6 | 84.1 | 84.5 | 84.1 | 84.2 | 84.8 | 85.1 | 83.3 | 83.7 | 84.2 | 84.7 | 84.0 |
| 1989 | 85.4 | 84.6 | 85.3 | 85.3 | 84.7 | 84.4 | 83.4 | 83.6 | 83.3 | 82.8 | 83.0 | 83.2 | 85.1 | 84.8 | 83.4 | 83.0 | 84.1 |
| 1990 | 82.7 | 83.0 | 83.3 | 82.7 | 82.9 | 82.7 | 82.6 | 82.6 | 82.6 | 82.0 | 80.8 | 80.2 | 83.0 | 82.8 | 82.6 | 81.0 | 82.3 |
| 1991 | 79.6 | 78.9 | 78.1 | 78.2 | 78.7 | 79.6 | 79.5 | 79.5 | 80.2 | 80.0 | 79.8 | 79.2 | 78.9 | 78.8 | 79.7 | 79.6 | 79.3 |
| 1992 | 79.2 | 79.5 | 79.9 | 80.3 | 80.4 | 80.1 | 80.6 | 80.2 | 80.4 | 80.8 | 81.0 | 81.0 | 79.5 | 80.3 | 80.4 | 80.9 | 80.3 |
| 1993 | 81.2 | 81.4 | 81.4 | 81.5 | 81.0 | 81.0 | 81.0 | 80.6 | 81.3 | 81.4 | 81.7 | 82.2 | 81.3 | 81.2 | 81.0 | 81.8 | 81.3 |
| 1994 | 82.1 | 82.3 | 82.6 | 82.7 | 83.1 | 83.2 | 83.2 | 83.4 | 83.3 | 83.5 | 83.9 | 84.6 | 82.4 | 83.0 | 83.3 | 84.0 | 83.2 |
| 1995 | 84.7 | 84.3 | 84.1 | 83.5 | 83.4 | 83.4 | 82.7 | 83.3 | 83.1 | 82.8 | 82.6 | 82.3 | 84.3 | 83.5 | 83.1 | 82.6 | 83.4 |
| 1996 | 81.7 | 82.4 | 81.8 | 82.4 | 82.7 | 82.9 | 82.7 | 82.8 | 82.5 | 82.2 | 82.3 | 82.2 | 82.0 | 82.7 | 82.7 | 82.2 | 82.4 |
| 1997 | 82.3 | 82.6 | 82.5 | 82.7 | 82.6 | 82.6 | 82.9 | 83.1 | 83.2 | 83.4 | 83.4 | 83.4 | 82.5 | 82.6 | 83.1 | 83.4 | 82.9 |
| 1998 | 83.0 | 82.6 | 82.6 | 82.6 | 82.6 | 81.5 | 81.1 | 82.0 | 81.3 | 81.3 | 80.8 | 80.7 | 82.7 | 82.3 | 81.5 | 80.9 | 81.8 |
| 1999 | 80.3 | 80.2 | 80.5 | 80.4 | 80.4 | 80.3 | 80.6 | 80.6 | 80.4 | 80.7 | | | 80.3 | 80.4 | 80.5 | | |

1. Quarterly percent changes are at annual rates. Annual percent changes are calculated from annual averages.

## Table 5B
## INDUSTRIAL PRODUCTION, CAPACITY AND UTILIZATION FOR MANUFACTURING: HISTORICAL DATA

Seasonally adjusted

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Q1 | Q2 | Q3 | Q4 | Annual |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Industrial Production, Percent Change[1]** | | | | | | | | | | | | | | | | | |
| 1987 | –.8 | 1.6 | .2 | .5 | .3 | 1.0 | .7 | –.2 | .1 | 1.3 | .5 | .6 | 5.0 | 7.0 | 5.5 | 7.6 | 5.3 |
| 1988 | –.2 | .4 | –.1 | 1.0 | –.1 | .0 | .7 | .3 | .2 | .2 | .9 | .6 | 2.3 | 4.1 | 3.7 | 5.2 | 4.7 |
| 1989 | .9 | –1.2 | .8 | .1 | –.7 | .0 | –1.1 | .3 | –.3 | –.6 | .4 | .1 | 4.3 | –.7 | –4.5 | –1.4 | 1.9 |
| 1990 | –.2 | .9 | .3 | –.8 | .4 | –.1 | .0 | .3 | –.1 | –.6 | –1.3 | –.6 | 2.9 | –.1 | .8 | –6.3 | –.5 |
| 1991 | –.9 | –.7 | –1.1 | .3 | .7 | 1.4 | .2 | .2 | 1.1 | –.1 | –.2 | –.5 | –9.7 | 1.2 | 7.8 | 1.7 | –2.4 |
| 1992 | .3 | .7 | .8 | .6 | .4 | .0 | .7 | –.2 | .3 | .5 | .6 | –.1 | 2.7 | 6.8 | 3.4 | 4.0 | 4.0 |
| 1993 | .9 | .2 | .2 | .6 | –.4 | .0 | .2 | –.5 | 1.2 | .4 | .5 | .9 | 4.9 | 2.1 | .5 | 6.9 | 3.7 |
| 1994 | .1 | .6 | .9 | .7 | .8 | .2 | .5 | .6 | .3 | .8 | .9 | 1.1 | 6.3 | 8.8 | 5.8 | 9.2 | 6.0 |
| 1995 | .6 | –.2 | .2 | –.1 | .1 | .5 | –.5 | .9 | .7 | .1 | .1 | .1 | 6.7 | 1.1 | 2.9 | 3.8 | 5.4 |
| 1996 | –.3 | 1.3 | –.3 | 1.4 | 1.0 | .8 | .5 | .5 | .2 | .0 | .7 | .4 | 2.1 | 10.6 | 7.0 | 3.9 | 4.7 |
| 1997 | .5 | .9 | .5 | .6 | .3 | .7 | .7 | .8 | .4 | .6 | .8 | .3 | 7.2 | 6.6 | 7.7 | 7.5 | 6.8 |
| 1998 | .1 | –.1 | .3 | .6 | .3 | –1.2 | –.1 | 1.6 | –.4 | .7 | .2 | .2 | 2.4 | 2.5 | .4 | 4.9 | 4.2 |
| 1999 | –.2 | .3 | .4 | .4 | .3 | .0 | .4 | .3 | .1 | .6 | | | 1.5 | 3.9 | 3.1 | | |
| **Industrial Production** | | | | | | | | | | | | | | | | | |
| 1987 | 89.6 | 91.0 | 91.2 | 91.6 | 91.9 | 92.8 | 93.4 | 93.3 | 93.4 | 94.6 | 95.1 | 95.6 | 90.6 | 92.1 | 93.4 | 95.1 | 92.8 |
| 1988 | 95.4 | 95.8 | 95.7 | 96.7 | 96.6 | 96.6 | 97.3 | 97.5 | 97.7 | 97.9 | 98.9 | 99.4 | 95.6 | 96.6 | 97.5 | 98.7 | 97.1 |
| 1989 | 100.3 | 99.1 | 99.9 | 100.0 | 99.4 | 99.4 | 98.3 | 98.7 | 98.4 | 97.8 | 98.2 | 98.3 | 99.8 | 99.6 | 98.5 | 98.1 | 99.0 |
| 1990 | 98.1 | 99.0 | 99.3 | 98.6 | 99.0 | 98.9 | 98.8 | 99.1 | 99.0 | 98.4 | 97.2 | 96.6 | 98.8 | 98.8 | 99.0 | 97.4 | 98.5 |
| 1991 | 95.8 | 95.1 | 94.1 | 94.4 | 95.0 | 96.3 | 96.6 | 96.8 | 97.8 | 97.8 | 97.6 | 97.1 | 95.0 | 95.2 | 97.0 | 97.5 | 96.2 |
| 1992 | 97.4 | 98.1 | 98.9 | 99.5 | 99.9 | 99.9 | 100.6 | 100.4 | 100.7 | 101.2 | 101.8 | 101.7 | 98.1 | 99.7 | 100.6 | 101.6 | 100.0 |
| 1993 | 102.6 | 102.8 | 103.0 | 103.6 | 103.2 | 103.2 | 103.4 | 102.9 | 104.1 | 104.5 | 105.1 | 106.0 | 102.8 | 103.3 | 103.5 | 105.2 | 103.7 |
| 1994 | 106.1 | 106.7 | 107.6 | 108.4 | 109.3 | 109.5 | 110.1 | 110.7 | 111.1 | 112.0 | 113.0 | 114.3 | 106.8 | 109.1 | 110.7 | 113.1 | 109.9 |
| 1995 | 115.0 | 114.8 | 115.1 | 115.0 | 115.1 | 115.7 | 115.1 | 116.2 | 117.0 | 117.1 | 117.2 | 117.3 | 115.0 | 115.3 | 116.1 | 117.2 | 115.9 |
| 1996 | 116.9 | 118.4 | 118.1 | 119.7 | 120.9 | 121.8 | 122.4 | 123.0 | 123.3 | 123.3 | 124.2 | 124.7 | 117.8 | 120.8 | 122.9 | 124.1 | 121.4 |
| 1997 | 125.3 | 126.4 | 127.0 | 127.7 | 128.1 | 129.0 | 129.8 | 130.8 | 131.4 | 132.2 | 133.3 | 133.7 | 126.2 | 128.3 | 130.7 | 133.1 | 129.7 |
| 1998 | 133.8 | 133.7 | 134.1 | 134.9 | 135.4 | 133.7 | 133.6 | 135.7 | 135.2 | 136.1 | 136.4 | 136.7 | 133.8 | 134.7 | 134.8 | 136.4 | 135.1 |
| 1999 | 136.4 | 136.9 | 137.5 | 138.0 | 138.4 | 138.4 | 139.0 | 139.4 | 139.6 | 140.4 | | | 136.9 | 138.3 | 139.3 | | |
| **Capacity** | | | | | | | | | | | | | | | | | |
| 1987 | 113.2 | 113.4 | 113.6 | 113.8 | 113.9 | 114.1 | 114.2 | 114.4 | 114.6 | 114.7 | 114.9 | 115.0 | 113.4 | 113.9 | 114.4 | 114.9 | 114.1 |
| 1988 | 115.2 | 115.3 | 115.4 | 115.6 | 115.7 | 115.8 | 116.0 | 116.1 | 116.3 | 116.5 | 116.6 | 116.8 | 115.3 | 115.7 | 116.1 | 116.6 | 115.9 |
| 1989 | 117.0 | 117.3 | 117.5 | 117.8 | 118.0 | 118.3 | 118.5 | 118.7 | 119.0 | 119.2 | 119.5 | 119.7 | 117.3 | 118.0 | 118.7 | 119.5 | 118.4 |
| 1990 | 119.9 | 120.1 | 120.3 | 120.5 | 120.7 | 120.9 | 121.1 | 121.3 | 121.5 | 121.7 | 122.0 | 122.2 | 120.1 | 120.7 | 121.3 | 122.0 | 121.0 |
| 1991 | 122.4 | 122.6 | 122.8 | 123.0 | 123.1 | 123.3 | 123.5 | 123.7 | 123.8 | 124.0 | 124.2 | 124.3 | 122.6 | 123.1 | 123.7 | 124.2 | 123.4 |
| 1992 | 124.5 | 124.8 | 125.0 | 125.2 | 125.5 | 125.7 | 125.9 | 126.2 | 126.4 | 126.6 | 126.9 | 127.1 | 124.8 | 125.5 | 126.2 | 126.9 | 125.8 |
| 1993 | 127.4 | 127.6 | 127.9 | 128.2 | 128.4 | 128.7 | 129.0 | 129.3 | 129.5 | 129.8 | 130.1 | 130.3 | 127.6 | 128.4 | 129.3 | 130.1 | 128.8 |
| 1994 | 130.7 | 131.1 | 131.6 | 132.0 | 132.5 | 132.9 | 133.4 | 133.8 | 134.3 | 134.8 | 135.2 | 135.7 | 131.1 | 132.5 | 133.8 | 135.2 | 133.2 |
| 1995 | 136.3 | 137.0 | 137.7 | 138.4 | 139.1 | 139.8 | 140.5 | 141.2 | 141.9 | 142.6 | 143.4 | 144.2 | 137.0 | 139.1 | 141.2 | 143.4 | 140.2 |
| 1996 | 144.9 | 145.7 | 146.4 | 147.2 | 148.0 | 148.8 | 149.5 | 150.3 | 151.0 | 151.8 | 152.5 | 153.3 | 145.7 | 148.0 | 150.3 | 152.5 | 149.1 |
| 1997 | 154.1 | 154.8 | 155.5 | 156.2 | 157.0 | 157.8 | 158.4 | 159.1 | 159.9 | 160.6 | 161.3 | 162.1 | 154.8 | 157.0 | 159.1 | 161.3 | 158.1 |
| 1998 | 162.8 | 163.5 | 164.3 | 165.1 | 165.8 | 166.6 | 167.3 | 168.1 | 168.8 | 169.6 | 170.3 | 171.0 | 163.5 | 165.8 | 168.1 | 170.3 | 166.9 |
| 1999 | 171.7 | 172.3 | 172.9 | 173.4 | 174.0 | 174.5 | 174.9 | 175.4 | 175.8 | 176.2 | | | 172.3 | 174.0 | 175.4 | | |
| **Utilization** | | | | | | | | | | | | | | | | | |
| 1987 | 79.1 | 80.2 | 80.3 | 80.6 | 80.7 | 81.4 | 81.8 | 81.5 | 81.5 | 82.5 | 82.8 | 83.1 | 79.9 | 80.9 | 81.6 | 82.8 | 81.3 |
| 1988 | 82.9 | 83.1 | 82.9 | 83.7 | 83.5 | 83.4 | 83.8 | 84.0 | 84.0 | 84.1 | 84.8 | 85.1 | 83.0 | 83.5 | 83.9 | 84.7 | 83.8 |
| 1989 | 85.7 | 84.5 | 85.0 | 85.0 | 84.2 | 84.1 | 83.0 | 83.1 | 82.7 | 82.1 | 82.2 | 82.1 | 85.1 | 84.4 | 82.9 | 82.1 | 83.6 |
| 1990 | 81.8 | 82.5 | 82.6 | 81.8 | 82.0 | 81.8 | 81.6 | 81.7 | 81.5 | 80.9 | 79.7 | 79.0 | 82.3 | 81.9 | 81.6 | 79.9 | 81.4 |
| 1991 | 78.2 | 77.5 | 76.6 | 76.8 | 77.1 | 78.1 | 78.2 | 78.2 | 79.0 | 78.9 | 78.6 | 78.1 | 77.5 | 77.3 | 78.5 | 78.5 | 77.9 |
| 1992 | 78.2 | 78.6 | 79.1 | 79.4 | 79.6 | 79.5 | 79.9 | 79.6 | 79.7 | 79.9 | 80.2 | 80.0 | 78.6 | 79.5 | 79.7 | 80.1 | 79.5 |
| 1993 | 80.5 | 80.6 | 80.5 | 80.8 | 80.4 | 80.1 | 80.1 | 79.6 | 80.4 | 80.5 | 80.8 | 81.4 | 80.5 | 80.4 | 80.0 | 80.9 | 80.5 |
| 1994 | 81.2 | 81.4 | 81.8 | 82.2 | 82.5 | 82.4 | 82.6 | 82.8 | 82.7 | 83.1 | 83.6 | 84.2 | 81.5 | 82.4 | 82.7 | 83.6 | 82.5 |
| 1995 | 84.4 | 83.8 | 83.6 | 83.1 | 82.8 | 82.7 | 81.9 | 82.3 | 82.4 | 82.1 | 81.7 | 81.3 | 83.9 | 82.9 | 82.2 | 81.7 | 82.7 |
| 1996 | 80.7 | 81.3 | 80.6 | 81.3 | 81.7 | 81.9 | 81.9 | 81.8 | 81.6 | 81.2 | 81.4 | 81.3 | 80.9 | 81.6 | 81.8 | 81.3 | 81.4 |
| 1997 | 81.3 | 81.7 | 81.7 | 81.7 | 81.6 | 81.7 | 81.9 | 82.2 | 82.2 | 82.3 | 82.6 | 82.5 | 81.6 | 81.7 | 82.1 | 82.5 | 82.0 |
| 1998 | 82.2 | 81.8 | 81.6 | 81.7 | 81.6 | 80.2 | 79.8 | 80.7 | 80.1 | 80.3 | 80.1 | 80.0 | 81.8 | 81.2 | 80.2 | 80.1 | 80.8 |
| 1999 | 79.5 | 79.5 | 79.5 | 79.6 | 79.5 | 79.3 | 79.5 | 79.5 | 79.4 | 79.7 | | | 79.5 | 79.5 | 79.5 | | |

1. Quarterly percent changes are at annual rates. Annual percent changes are calculated from annual averages.

## Table 6
## INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

| Item | SIC | 1998 IP Proportion | Index, 1992 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasonally adjusted | | | | | | Not seasonally adjusted | | | | | |
| | | | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] |
| **Metal mining** | **10** | .36 | 105.2 | 98.6 | 93.3 | 92.6 | 94.1 | 92.0 | 103.5 | 98.6 | 96.6 | 93.0 | 95.5 | 95.5 |
| Iron ore | 101 | .06 | 116.1 | 115.2 | 104.9 | 107.8 | 76.7 | 67.7 | 106.0 | 117.7 | 110.4 | 110.9 | 83.2 | 72.9 |
| Nonferrous ores | 102–4,8,9 | .30 | 103.5 | 95.8 | 91.3 | 90.0 | 97.8 | 97.0 | 103.4 | 95.3 | 94.3 | 89.9 | 98.3 | 100.3 |
| Copper | 102 | .08 | 112.5 | 78.0 | 65.9 | 55.0 | 72.0 | | 111.7 | 76.9 | 69.4 | 55.4 | 74.0 | |
| **Coal mining** | **12** | .82 | 106.8 | 106.1 | 106.5 | 109.6 | 110.6 | 109.5 | 106.3 | 103.4 | 107.0 | 102.6 | 111.9 | 111.6 |
| **Oil and gas extraction** | **13** | 3.38 | 91.8 | 92.4 | 92.8 | 93.4 | 94.7 | 94.7 | 91.8 | 91.9 | 92.2 | 92.7 | 93.8 | 94.5 |
| Crude oil and natural gas | 131 | 2.43 | 92.7 | 92.7 | 92.9 | 92.9 | 93.5 | 92.7 | 92.7 | 92.3 | 92.2 | 91.7 | 92.1 | 92.0 |
| Crude oil, total | | 1.28 | 80.7 | 80.7 | 80.0 | 80.4 | 80.8 | 79.1 | 81.0 | 80.3 | 79.2 | 79.0 | 79.6 | 79.0 |
| Natural gas | | 1.16 | 109.4 | 109.5 | 110.9 | 110.2 | 111.1 | 111.7 | 109.0 | 108.9 | 110.2 | 109.2 | 109.5 | 110.0 |
| Natural gas liquids | 132 | .16 | 104.4 | 105.1 | 109.5 | 112.5 | 110.7 | 111.1 | 105.8 | 105.0 | 108.8 | 112.0 | 109.9 | 112.4 |
| Oil and gas well drilling | 138 | .78 | 97.2 | 100.3 | 100.4 | 103.1 | 108.2 | 111.6 | 97.3 | 99.7 | 100.8 | 105.0 | 109.6 | 113.8 |
| **Stone and earth minerals** | **14** | .64 | 126.7 | 124.1 | 122.6 | 121.8 | 121.4 | 121.5 | 124.7 | 136.1 | 142.7 | 142.4 | 145.0 | 140.1 |
| **Foods** | **20** | 9.00 | 111.4 | 110.8 | 110.0 | 108.6 | 108.5 | 109.1 | 107.5 | 108.5 | 112.3 | 111.4 | 115.3 | 116.7 |
| Meat products | 201 | 1.18 | 122.3 | 120.4 | 122.5 | 122.0 | 120.9 | 121.0 | 121.5 | 120.0 | 124.7 | 117.9 | 123.2 | 123.2 |
| Beef | | .37 | 116.4 | 113.2 | 114.0 | 115.6 | 114.4 | 114.4 | 112.6 | 114.8 | 121.3 | 115.5 | 120.7 | 118.9 |
| Pork | | .32 | 113.7 | 108.1 | 117.0 | 112.4 | 114.0 | 111.3 | 113.8 | 101.1 | 110.5 | 101.9 | 109.3 | 113.0 |
| Poultry | | .48 | 135.5 | 137.7 | 135.7 | 136.7 | 133.3 | 135.9 | 135.6 | 139.6 | 139.3 | 133.1 | 136.7 | 135.2 |
| Miscellaneous meats | | .01 | 70.4 | 71.9 | 68.7 | 72.3 | 75.0 | 71.9 | 72.3 | 68.0 | 66.7 | 66.7 | 72.3 | 72.3 |
| Dairy products | 202 | .77 | 109.5 | 109.2 | 108.7 | 107.6 | 111.9 | 112.9 | 118.7 | 118.9 | 118.5 | 110.1 | 109.2 | 105.0 |
| Butter | 2021 | .01 | 89.7 | 100.6 | 99.7 | 95.9 | 86.5 | 91.8 | 104.8 | 105.3 | 84.6 | 73.0 | 65.0 | 77.5 |
| Cheese | 2022 | .17 | 120.6 | 117.2 | 119.9 | 120.4 | 122.5 | 118.7 | 124.0 | 120.6 | 124.0 | 116.5 | 116.2 | 117.9 |
| Concentrated milk | 2023 | .14 | 107.0 | 108.1 | 107.2 | 101.8 | 118.8 | 122.5 | 128.8 | 129.0 | 119.7 | 99.2 | 102.2 | 95.8 |
| Frozen desserts | 2024 | .15 | 120.1 | 119.6 | 117.3 | 118.2 | 120.8 | 122.8 | 132.5 | 136.7 | 150.3 | 145.2 | 139.8 | 118.4 |
| Milk and misc. dairy products | 2026 | .31 | 102.1 | 102.1 | 101.0 | 100.5 | 101.5 | 102.8 | 106.5 | 106.8 | 104.1 | 99.5 | 98.9 | 99.2 |
| Canned and frozen food | 203 | 1.21 | 102.6 | 99.3 | 102.2 | 100.3 | 101.4 | 101.5 | 93.6 | 93.0 | 100.3 | 103.5 | 117.0 | 123.6 |
| Grain mill products | 204 | .98 | 102.7 | 102.7 | 100.0 | 101.0 | 98.5 | 98.3 | 99.8 | 100.2 | 98.1 | 100.5 | 99.7 | 102.0 |
| Bakery products | 205 | 1.04 | 105.5 | 103.0 | 102.0 | 101.3 | 100.9 | 103.0 | 99.3 | 99.9 | 106.6 | 110.3 | 112.1 | 115.1 |
| Sugar and confectionery | 206 | .63 | 109.1 | 114.3 | 110.9 | 108.7 | 104.5 | 101.4 | 95.9 | 99.6 | 100.5 | 96.5 | 100.4 | 105.6 |
| Fats and oils | 207 | .23 | 106.1 | 108.8 | 106.5 | 108.5 | 114.0 | 113.4 | 105.4 | 103.9 | 102.7 | 100.2 | 106.7 | 109.8 |
| Beverages | 208 | 1.81 | 118.3 | 118.5 | 115.8 | 113.2 | 112.9 | 115.1 | 117.0 | 119.3 | 124.6 | 122.4 | 124.0 | 123.6 |
| Beer and ale | 2082,3 | .55 | 102.8 | 107.7 | 103.1 | | | | 112.6 | 117.5 | 117.2 | | | |
| Soft drinks | 2086,7 | 1.02 | 129.9 | 127.2 | 125.6 | 122.8 | 123.5 | 124.9 | 122.2 | 124.2 | 133.3 | 137.3 | 141.1 | 143.5 |
| Coffee and miscellaneous | 209 | 1.16 | 118.7 | 118.1 | 117.2 | 113.6 | 114.3 | 114.6 | 110.4 | 113.8 | 119.1 | 121.4 | 125.4 | 124.6 |
| Roasted coffee | 2095 | .19 | 95.6 | 97.4 | 107.1 | 92.6 | 95.1 | | 87.9 | 93.3 | 94.7 | 85.8 | 95.0 | |
| **Tobacco products** | **21** | 1.29 | 96.0 | 97.2 | 96.3 | 97.9 | 96.4 | 92.6 | 92.2 | 91.0 | 106.4 | 84.4 | 104.0 | 97.1 |
| **Textile mill products** | **22** | 1.56 | 111.4 | 111.0 | 111.8 | 112.2 | 110.9 | 109.6 | 115.2 | 113.4 | 117.2 | 110.0 | 115.7 | 113.2 |
| Fabrics | 221–4 | .37 | 98.3 | 96.2 | 98.7 | 97.3 | 97.3 | 95.5 | 101.1 | 99.4 | 99.5 | 90.7 | 98.7 | 94.9 |
| Cotton and synthetic | 221,2 | .31 | 100.0 | 97.2 | 100.5 | 99.0 | 99.0 | 97.0 | 102.5 | 100.2 | 100.1 | 91.4 | 101.0 | 96.7 |
| Narrow fabrics | 224 | .04 | 117.3 | 117.8 | 115.7 | 115.9 | 116.5 | 116.3 | 116.2 | 118.2 | 119.0 | 112.0 | 117.8 | 118.0 |
| Knit goods | 225 | .45 | 124.7 | 123.1 | 125.1 | 124.9 | 125.7 | 125.0 | 125.8 | 127.9 | 138.8 | 127.0 | 136.3 | 136.0 |
| Knit garments | 2253,4,7–9 | .32 | 130.0 | 127.2 | 130.5 | 130.6 | 131.4 | 131.0 | 125.0 | 130.8 | 142.1 | 136.3 | 151.8 | 148.2 |
| Fabric finishing | 226 | .14 | 82.8 | 84.8 | 82.5 | | | | 86.8 | 89.1 | 81.8 | | | |
| Carpeting | 227 | .21 | 121.3 | 123.4 | 123.4 | 130.0 | 119.0 | 115.9 | 137.4 | 117.4 | 130.6 | 136.8 | 123.5 | 119.9 |
| Yarns and miscellaneous | 228,9 | .40 | 116.7 | 117.2 | 116.7 | 116.8 | 116.8 | 116.1 | 118.1 | 119.9 | 119.3 | 111.6 | 119.2 | 118.1 |
| Cotton and synthetic yarns | 2281,2,4 | .17 | 102.6 | 104.1 | 102.2 | 100.9 | 99.2 | 99.6 | 104.6 | 108.7 | 104.2 | 93.9 | 102.1 | 101.2 |
| **Apparel products** | **23** | 1.73 | 94.0 | 93.1 | 92.3 | 91.3 | 89.8 | 88.8 | 92.1 | 93.0 | 94.2 | 89.7 | 92.7 | 91.4 |
| **Lumber and products** | **24** | 2.12 | 120.4 | 122.9 | 121.4 | 120.1 | 119.1 | 118.4 | 120.8 | 121.7 | 126.0 | 118.8 | 123.3 | 122.9 |
| Logging and lumber | 241,2 | .82 | 109.4 | 117.4 | 113.8 | 111.8 | 110.5 | 110.7 | 107.7 | 112.9 | 119.7 | 109.6 | 115.0 | 116.9 |
| Logging | 241 | .28 | 89.8 | 90.5 | 92.5 | 90.1 | 91.5 | 89.5 | 81.2 | 86.6 | 95.2 | 94.7 | 98.4 | 96.2 |
| Lumber products | 243–5,9 | 1.29 | 128.7 | 127.2 | 127.1 | 126.3 | 125.6 | 124.3 | 130.6 | 128.5 | 131.0 | 125.7 | 129.6 | 127.5 |
| Millwork and plywood | 243 | .69 | 127.3 | 126.5 | 126.3 | 126.6 | 127.3 | 125.8 | 126.3 | 127.7 | 129.9 | 129.6 | 131.3 | 128.8 |
| Plywood | 2435,6 | .12 | 99.8 | 101.1 | 99.2 | 99.9 | 97.3 | 97.2 | 101.2 | 104.0 | 102.9 | 99.3 | 100.7 | 99.2 |
| Manufactured homes | 245 | .24 | 148.0 | 145.2 | 142.8 | 133.6 | 133.0 | | 157.6 | 151.8 | 153.8 | 124.2 | 147.1 | |

1. The IP proportion data are estimates of the industries' relative contributions to overall IP growth in the following year.

## Table 6 (continued)
## INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

| Item | SIC | 1998 IP Proportion[1] | Index, 1992 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasonally adjusted | | | | | | Not seasonally adjusted | | | | | |
| | | | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] |
| **Furniture and fixtures** | **25** | 1.41 | 123.6 | 123.5 | 123.4 | 124.6 | 125.7 | 126.9 | 122.0 | 121.0 | 125.3 | 123.9 | 134.4 | 132.9 |
| Household furniture | 251 | .63 | 118.2 | 119.2 | 119.7 | 121.1 | 123.1 | 123.8 | 119.4 | 116.8 | 121.3 | 114.7 | 129.1 | 127.8 |
| **Paper and products** | **26** | 3.50 | 114.6 | 114.2 | 115.9 | 114.9 | 116.4 | 117.0 | 115.7 | 112.4 | 116.9 | 114.8 | 117.3 | 116.9 |
| Pulp and paper | 261–3 | 1.46 | 113.7 | 112.2 | 114.5 | 113.1 | 114.8 | 115.6 | 113.5 | 110.9 | 115.2 | 113.4 | 115.5 | 115.2 |
| Wood pulp | 261 | .10 | 95.1 | 100.1 | 101.3 | 96.9 | 99.5 | 97.7 | 95.6 | 97.4 | 100.9 | 99.8 | 100.7 | 97.2 |
| Paper | 262 | .91 | 110.2 | 110.3 | 112.8 | 111.5 | 112.1 | 115.7 | 110.5 | 108.6 | 112.9 | 111.1 | 112.8 | 114.5 |
| Paperboard | 263 | .45 | 126.2 | 119.5 | 121.6 | 120.8 | 124.6 | 120.2 | 124.4 | 118.9 | 123.6 | 121.6 | 125.0 | 120.8 |
| Paper products | 265,7 | 2.04 | 115.2 | 115.6 | 116.8 | 116.2 | 117.6 | 117.9 | 117.2 | 113.5 | 118.1 | 115.7 | 118.5 | 118.1 |
| Paperboard containers | 265 | .73 | 118.5 | 119.4 | 117.0 | 119.8 | 120.8 | 116.9 | 122.5 | 114.8 | 121.3 | 118.6 | 122.1 | 119.4 |
| Converted paper products | 267 | 1.31 | 113.5 | 113.6 | 116.9 | 114.3 | 115.9 | 118.6 | 114.2 | 112.7 | 116.3 | 114.0 | 116.4 | 117.3 |
| **Printing and publishing** | **27** | 6.79 | 104.3 | 104.2 | 103.4 | 102.5 | 103.5 | 104.2 | 103.5 | 101.6 | 103.8 | 105.5 | 107.7 | 108.5 |
| Newspapers | 271 | 1.63 | 99.7 | 98.9 | 98.0 | 97.2 | 98.1 | 97.9 | 104.8 | 96.6 | 96.2 | 94.2 | 93.1 | 98.5 |
| Periodicals, books, and cards | 272,3,7 | 2.03 | 99.5 | 100.0 | 101.8 | 102.8 | 104.5 | 107.2 | 101.2 | 99.5 | 100.8 | 102.6 | 105.5 | 106.1 |
| Job printing | 274–6,8,9 | 3.12 | 109.7 | 109.6 | 107.2 | 105.1 | 105.5 | 105.6 | 104.0 | 105.6 | 109.8 | 113.7 | 117.4 | 115.7 |
| **Chemicals and products** | **28** | 9.78 | 115.1 | 115.4 | 115.2 | 114.1 | 115.5 | 115.7 | 113.3 | 113.7 | 118.0 | 118.8 | 120.5 | 121.4 |
| Industrial chemicals and synthetic materials | 281,2,6 | 3.49 | 112.5 | 112.8 | 111.0 | 111.4 | 112.1 | 113.3 | 115.0 | 113.1 | 111.8 | 110.9 | 111.0 | 113.7 |
| Basic chemicals | 281 | .77 | 95.3 | 95.7 | 86.9 | 82.8 | 83.3 | 86.7 | 96.9 | 95.6 | 88.7 | 81.4 | 83.7 | 87.4 |
| Alkalies and chlorine | 2812 | .09 | 118.4 | 124.6 | 116.4 | 116.6 | 114.5 | 118.9 | 116.8 | 120.5 | 117.3 | 117.5 | 116.0 | 119.1 |
| Inorganic pigments | 2816 | .09 | 100.7 | 97.5 | 106.9 | 98.0 | 110.7 | 105.9 | 106.1 | 97.5 | 110.6 | 98.3 | 107.2 | 104.0 |
| Inorganic chemicals, nec | 2819 | .46 | 91.0 | 91.1 | 76.9 | 71.5 | 70.4 | 75.7 | 92.9 | 91.4 | 79.0 | 69.5 | 71.2 | 76.7 |
| Acids and other | | .35 | 106.2 | 104.8 | 107.3 | 102.4 | | | 107.1 | 101.8 | 110.5 | 100.2 | | |
| Synthetic materials | 282 | 1.27 | 122.7 | 123.0 | 123.7 | 124.6 | 122.7 | 121.4 | 126.7 | 123.4 | 125.0 | 123.7 | 119.9 | 122.4 |
| Plastics materials | 2821 | .81 | 130.7 | 131.6 | 130.7 | 134.3 | 129.9 | | 135.8 | 132.6 | 131.5 | 132.6 | 126.9 | |
| Synthetic fibers | 2823,4 | .35 | 108.5 | 107.0 | 111.8 | 107.8 | 109.7 | 104.0 | 109.5 | 105.4 | 113.1 | 108.2 | 106.5 | 105.0 |
| Industrial organic chemicals | 286 | 1.45 | 115.0 | 115.3 | 116.0 | 119.0 | 122.0 | 123.7 | 116.8 | 115.6 | 115.7 | 119.3 | 121.1 | 123.3 |
| Chemical products | 283–5,9 | 5.62 | 117.3 | 117.6 | 118.3 | 116.6 | 118.9 | 118.3 | 112.1 | 114.3 | 123.1 | 125.8 | 129.1 | 128.6 |
| Drugs and medicines | 283 | 3.02 | 117.3 | 117.5 | 117.4 | 116.1 | 119.4 | 118.5 | 109.1 | 113.3 | 123.6 | 126.8 | 132.4 | 131.4 |
| Soap and toiletries | 284 | 1.57 | 115.6 | 117.1 | 119.5 | 118.2 | 119.0 | 118.0 | 109.8 | 111.6 | 121.5 | 127.6 | 128.1 | 128.4 |
| Paints | 285 | .42 | 110.1 | 107.7 | 106.7 | 108.0 | 108.2 | 108.2 | 120.8 | 118.6 | 122.5 | 113.2 | 113.7 | 110.1 |
| Agricultural chemicals | 287 | .67 | 110.2 | 110.4 | 111.5 | 108.3 | 105.9 | 106.3 | 113.5 | 111.3 | 109.3 | 105.4 | 104.1 | 106.4 |
| **Petroleum products** | **29** | 1.59 | 114.3 | 113.0 | 111.4 | 113.3 | 113.1 | 113.6 | 112.5 | 115.0 | 116.2 | 118.3 | 118.5 | 118.7 |
| Petroleum refining and misc. | 291,9 | 1.40 | 111.8 | 110.7 | 108.7 | 110.4 | 110.1 | 110.7 | 111.0 | 112.6 | 113.1 | 114.5 | 114.2 | 114.5 |
| Miscellaneous petroleum products | | .30 | 112.1 | 110.0 | 107.2 | 111.2 | 112.4 | 113.0 | 113.6 | 117.8 | 121.1 | 126.2 | 128.0 | 124.1 |
| Distillate fuel oil | | .27 | 114.9 | 115.6 | 113.1 | 120.0 | 115.6 | | 114.2 | 116.3 | 114.0 | 118.6 | 115.3 | |
| Residual fuel oil | | .04 | 81.8 | 85.1 | 83.3 | 87.2 | 79.7 | | 76.2 | 81.2 | 79.7 | 82.0 | 78.5 | |
| Aviation fuel and kerosene | | .13 | 121.2 | 116.1 | 111.8 | 110.0 | 112.3 | | 115.7 | 110.2 | 110.9 | 111.3 | 113.7 | |
| Automotive gasoline | | .66 | 111.0 | 110.0 | 109.0 | 108.1 | 108.9 | | 110.6 | 111.9 | 112.3 | 111.0 | 110.6 | |
| Paving and roofing materials | 295 | .19 | 134.6 | 131.5 | 132.8 | 136.6 | 137.1 | 137.0 | 124.4 | 134.2 | 141.7 | 149.4 | 154.6 | 153.9 |
| **Rubber and plastics products** | **30** | 3.83 | 136.2 | 137.6 | 136.0 | 138.0 | 137.6 | 139.8 | 136.1 | 137.3 | 138.1 | 133.3 | 138.9 | 139.0 |
| Tires | 301 | .32 | 125.9 | 137.1 | 121.8 | 126.1 | 128.3 | 127.2 | 127.0 | 134.8 | 126.0 | 108.8 | 131.6 | 128.6 |
| Other rubber products | 302,5,6 | .61 | 124.9 | 125.6 | 124.2 | 128.2 | 126.8 | 129.0 | 123.0 | 123.5 | 127.4 | 128.4 | 134.1 | 134.4 |
| Plastics products, nec | 308 | 2.90 | 140.3 | 140.7 | 140.7 | 142.0 | 141.5 | 144.1 | 140.4 | 141.0 | 142.3 | 137.5 | 141.1 | 141.6 |
| **Leather and products** | **31** | .21 | 70.3 | 70.6 | 71.0 | 68.8 | 70.1 | 69.9 | 70.9 | 71.4 | 73.0 | 66.2 | 71.3 | 70.7 |
| Shoes | 314 | .07 | 63.0 | 62.2 | 61.1 | 55.9 | 59.2 | 58.2 | 61.9 | 62.6 | 63.1 | 54.2 | 61.6 | 59.5 |
| **Stone, clay, and glass products** | **32** | 2.43 | 128.8 | 128.3 | 127.5 | 128.8 | 129.5 | 129.8 | 128.6 | 128.9 | 132.0 | 130.6 | 134.9 | 135.1 |
| Pressed and blown glass | 322 | .32 | 110.0 | 107.5 | 109.2 | 109.3 | 108.7 | 108.7 | 112.1 | 108.8 | 111.7 | 111.5 | 112.8 | 109.8 |
| Glass containers | 3221 | .12 | 81.5 | 80.7 | 81.1 | 80.8 | 81.5 | 81.0 | 85.2 | 83.3 | 85.4 | 84.1 | 85.5 | 78.8 |
| Cement | 324 | .21 | 131.2 | 130.8 | 128.7 | 125.3 | 127.9 | | 133.4 | 143.9 | 155.1 | 145.0 | 155.6 | |
| Structural clay products | 325 | .11 | 123.7 | 122.4 | 121.7 | 124.8 | 127.2 | 130.0 | 127.3 | 128.1 | 129.9 | 120.9 | 134.2 | 133.4 |
| Concrete and miscellaneous | 326–9 | 1.46 | 131.9 | 132.1 | 130.4 | 132.8 | 133.3 | 133.9 | 131.0 | 130.9 | 132.9 | 132.5 | 136.1 | 137.6 |

1. The IP proportion data are estimates of the industries' relative contributions to overall IP growth in the following year.

## Table 6 (continued)
## INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

| Item | SIC | 1998 IP Proportion[1] | Index, 1992 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasonally adjusted | | | | | | Not seasonally adjusted | | | | | |
| | | | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] |
| **Primary metals** | **33** | 3.60 | 122.4 | 122.8 | 125.4 | 127.3 | 129.4 | 126.3 | 125.1 | 123.5 | 126.4 | 122.1 | 126.7 | 127.6 |
| Iron and steel | 331,2 | 1.91 | 118.9 | 119.6 | 122.6 | 125.8 | 128.7 | 124.1 | 122.4 | 120.3 | 123.8 | 121.5 | 124.6 | 125.7 |
| Basic steel and mill products | 331 | 1.45 | 117.8 | 119.5 | 121.6 | 125.6 | 130.6 | 125.5 | 121.2 | 120.4 | 123.2 | 122.0 | 126.5 | 126.8 |
| Basic iron and steel | | .29 | 100.3 | 101.5 | 98.3 | 101.4 | 103.0 | 100.3 | 100.8 | 101.4 | 98.3 | 97.6 | 100.5 | 100.7 |
| Pig iron | | .16 | 98.5 | 99.4 | 95.1 | 99.6 | 100.3 | 97.6 | 97.9 | 99.2 | 95.3 | 95.8 | 97.6 | 98.2 |
| Raw steel | | .09 | 110.5 | 113.4 | 110.9 | 112.6 | 116.8 | 112.9 | 113.2 | 114.0 | 111.1 | 106.9 | 113.1 | 112.4 |
| Steel mill products | | 1.16 | 123.0 | 124.8 | 128.4 | 132.7 | 138.8 | 132.9 | 127.2 | 125.9 | 130.5 | 129.2 | 134.1 | 134.5 |
| Consumer durable steel | | .18 | 136.5 | 137.3 | 144.4 | 138.1 | 152.3 | 144.0 | 143.4 | 144.9 | 145.3 | 112.3 | 147.1 | 150.0 |
| Equipment steel | | .12 | 98.8 | 100.1 | 97.1 | 107.6 | 112.3 | 108.4 | 102.7 | 100.0 | 99.1 | 102.5 | 108.0 | 109.8 |
| Construction steel | | .15 | 149.2 | 150.1 | 157.4 | 162.7 | 164.1 | 154.5 | 149.9 | 151.9 | 162.4 | 164.1 | 163.0 | 158.2 |
| Can and closure steel | | .04 | 106.4 | 102.8 | 105.6 | 99.6 | 102.8 | 99.5 | 104.2 | 101.9 | 105.0 | 101.7 | 105.7 | 103.2 |
| Miscellaneous steel | | .67 | 120.6 | 123.3 | 126.7 | 133.2 | 138.4 | 133.3 | 125.1 | 122.9 | 128.6 | 134.3 | 132.5 | 133.1 |
| Iron and steel foundries | 332 | .46 | 122.5 | 120.1 | 126.1 | 126.6 | 122.4 | 119.5 | 126.2 | 120.2 | 125.7 | 119.8 | 118.6 | 122.2 |
| Nonferrous metals | 333–6,9 | 1.69 | 126.6 | 126.5 | 128.7 | 129.2 | 130.5 | 129.1 | 128.5 | 127.2 | 129.5 | 122.9 | 129.2 | 130.0 |
| Primary nonferrous metals | 333 | .23 | 103.9 | 102.2 | 101.5 | 100.8 | 102.9 | 100.5 | 105.3 | 101.6 | 99.5 | 98.9 | 99.4 | 99.9 |
| Copper | 3331 | .05 | 98.2 | 89.5 | 86.5 | 82.1 | 85.6 | 80.5 | 99.2 | 85.4 | 84.0 | 80.4 | 82.0 | 81.2 |
| Aluminum | 3334 | .12 | 93.1 | 93.2 | 93.5 | 93.5 | 95.2 | 94.2 | 93.2 | 93.2 | 93.5 | 93.3 | 94.5 | 93.6 |
| Nonferrous products | 335,6 | 1.20 | 127.9 | 127.9 | 130.1 | 131.6 | 132.4 | 132.1 | 129.6 | 129.3 | 131.6 | 124.2 | 132.1 | 132.7 |
| Nonferrous mill products | 335 | .88 | 121.1 | 120.8 | 123.5 | 124.9 | 126.9 | 126.9 | 123.5 | 122.8 | 125.5 | 118.8 | 127.3 | 127.6 |
| Aluminum | 3353–5 | .33 | 110.5 | 109.7 | 117.8 | 113.6 | 118.9 | 117.9 | 116.5 | 112.2 | 122.1 | 108.5 | 120.3 | 120.3 |
| Nonferrous foundries | 336 | .31 | 150.5 | 151.4 | 151.9 | 153.8 | 150.0 | 149.0 | 150.1 | 150.7 | 151.9 | 142.0 | 147.8 | 149.1 |
| **Fabricated metal products** | **34** | 5.55 | 127.6 | 126.9 | 127.8 | 128.6 | 128.6 | 128.8 | 125.1 | 125.6 | 129.8 | 128.2 | 131.6 | 132.4 |
| Metal containers | 341 | .18 | 101.7 | 101.8 | 105.9 | 104.4 | 105.8 | 107.2 | 101.1 | 112.1 | 124.9 | 116.4 | 119.4 | 112.1 |
| Hardware, tools, and cutlery | 342 | .59 | 129.4 | 129.2 | 130.8 | 130.4 | 133.5 | 134.6 | 125.9 | 126.1 | 133.6 | 132.0 | 139.3 | 142.3 |
| Hardware and tools | 3423,5,9 | .50 | 129.1 | 128.4 | 130.2 | 130.6 | 133.1 | 134.7 | 125.6 | 125.2 | 133.3 | 133.0 | 139.8 | 143.8 |
| Structural metal products | 344 | 1.52 | 128.9 | 127.9 | 127.3 | 128.1 | 127.3 | 127.7 | 126.1 | 126.7 | 128.7 | 129.1 | 129.6 | 128.3 |
| Other fabricated metal products | 345–9 | 3.05 | 128.2 | 128.1 | 129.1 | 130.9 | 130.2 | 130.3 | 127.5 | 127.3 | 130.3 | 128.8 | 131.6 | 132.8 |
| Fasteners, stampings, etc. | 345–7 | 1.75 | 137.2 | 137.3 | 138.9 | 140.7 | 139.6 | 139.9 | 136.0 | 136.2 | 140.8 | 139.5 | 142.9 | 146.2 |
| **Industrial machinery and equipment** | **35** | 9.98 | 219.5 | 219.3 | 218.5 | 221.4 | 222.5 | 224.2 | 220.4 | 219.8 | 223.8 | 220.8 | 227.4 | 231.8 |
| Engines and turbines | 351 | .54 | 145.4 | 145.6 | 144.7 | 142.0 | 150.9 | 149.2 | 144.5 | 145.8 | 144.4 | 136.4 | 145.5 | 149.0 |
| Farm | 352 | .56 | 152.6 | 147.7 | 135.2 | 116.5 | 115.0 | 122.3 | 186.6 | 180.5 | 119.6 | 75.6 | 91.6 | 99.6 |
| Construction and allied | 353 | 1.07 | 172.8 | 166.2 | 161.5 | 168.1 | 168.6 | 169.6 | 174.7 | 169.3 | 170.2 | 147.5 | 161.8 | 172.4 |
| Metalworking | 354 | 1.16 | 137.7 | 135.4 | 138.5 | 137.8 | 137.8 | 137.2 | 133.6 | 131.6 | 141.1 | 144.4 | 149.1 | 148.3 |
| Special industry machinery | 355 | .97 | 148.9 | 147.0 | 147.9 | 149.5 | 148.6 | 147.7 | 148.6 | 147.1 | 147.6 | 144.6 | 145.6 | 144.5 |
| General industrial machinery | 356 | 1.18 | 120.4 | 120.4 | 119.5 | 121.0 | 120.7 | 121.2 | 118.6 | 118.8 | 121.3 | 122.5 | 126.5 | 126.9 |
| Bearings and gears | 3562,6,8 | .33 | 107.5 | 106.0 | 105.1 | 108.2 | 108.3 | 109.0 | 107.7 | 106.0 | 105.3 | 103.6 | 106.5 | 106.8 |
| Equipment | 3561,3–5,7,9 | .85 | 125.9 | 126.6 | 125.7 | 126.5 | 126.0 | 126.4 | 123.2 | 124.3 | 128.2 | 130.7 | 135.2 | 135.6 |
| Computer and office equip. | 357 | 2.25 | 859.3 | 878.6 | 889.9 | 929.7 | 952.2 | 971.9 | 833.4 | 853.1 | 921.7 | 1001.2 | 1016.7 | 1035.7 |
| Service industry machines | 358 | .89 | 152.7 | 153.1 | 153.9 | 160.3 | 155.1 | 155.8 | 166.5 | 160.7 | 164.2 | 148.3 | 142.8 | 151.0 |
| Refrig. and heating equip. | 3585 | .62 | 156.9 | 157.8 | 159.6 | 167.5 | 161.9 | 161.7 | 177.2 | 168.7 | 174.4 | 151.8 | 143.9 | 155.8 |
| Miscellaneous machinery | 359 | 1.37 | 159.8 | 160.5 | 156.8 | 156.5 | 156.3 | 156.6 | 155.3 | 156.7 | 160.7 | 165.5 | 168.9 | 169.1 |
| **Electrical machinery** | **36** | 8.56 | 322.2 | 326.9 | 332.2 | 346.3 | 348.9 | 348.1 | 312.3 | 317.2 | 348.8 | 332.5 | 354.0 | 379.4 |
| Major electrical and parts | 361,2 | 1.02 | 119.9 | 117.4 | 118.2 | 117.9 | 120.5 | 120.0 | 117.3 | 115.8 | 121.3 | 122.6 | 127.4 | 127.3 |
| Electric distribution equip. | 361 | .33 | 121.6 | 120.9 | 122.0 | 119.3 | 119.5 | 119.9 | 115.1 | 116.1 | 124.4 | 124.7 | 131.8 | 132.3 |
| Household appliances | 363 | .45 | 134.0 | 128.5 | 124.7 | 128.6 | 126.6 | 119.6 | 133.2 | 127.8 | 129.4 | 120.2 | 128.1 | 122.8 |
| Cooking equipment | 3631 | .06 | 131.0 | 134.5 | 123.8 | 128.9 | 112.7 | 114.3 | 127.9 | 134.4 | 123.3 | 120.7 | 119.8 | 118.7 |
| Refrigerators and freezers | 3632 | .11 | 151.1 | 151.7 | 142.2 | 150.5 | 145.4 | 128.7 | 157.4 | 161.3 | 159.5 | 149.4 | 149.6 | 131.4 |
| Laundry | 3633 | .09 | 172.3 | 151.0 | 149.3 | 151.9 | 158.0 | 144.2 | 174.6 | 145.6 | 155.9 | 129.4 | 156.3 | 150.1 |
| Miscellaneous | 3634,5,9 | .20 | 113.1 | 107.8 | 107.6 | 110.0 | 110.4 | 107.1 | 109.2 | 104.3 | 108.1 | 103.0 | 110.1 | 109.3 |
| Electrical housewares | 3634 | .04 | 98.8 | 93.2 | 91.1 | 97.1 | 95.3 | 93.7 | 92.7 | 91.5 | 92.6 | 92.6 | 97.0 | 99.1 |
| Appliances, nec | 3639 | .09 | 107.1 | 99.2 | 98.9 | 100.8 | 102.2 | 96.4 | 105.4 | 98.6 | 100.3 | 87.2 | 97.6 | 95.6 |
| Audio and video equipment | 365 | .09 | 87.4 | 83.0 | 82.3 | 102.0 | 81.6 | 84.9 | 81.3 | 79.2 | 74.9 | 84.3 | 86.5 | 92.9 |
| Communication equipment | 366 | 2.10 | 227.9 | 236.5 | 239.5 | 251.7 | 257.1 | 256.0 | 226.0 | 230.2 | 236.8 | 244.3 | 256.6 | 254.9 |
| Electronic components | 367 | 3.53 | 815.8 | 836.6 | 862.4 | 904.4 | 915.1 | 922.0 | 767.2 | 795.9 | 942.6 | 824.4 | 906.9 | 1070.6 |
| Semiconductors and related electronic components | 3672–9 | 3.46 | 852.1 | 872.4 | 900.7 | 942.6 | 955.2 | 962.9 | 800.7 | 828.6 | 986.8 | 856.7 | 941.1 | 1117.9 |
| Misc. electrical supplies | 369 | .69 | 133.0 | 134.9 | 132.8 | 139.0 | 132.3 | 130.3 | 130.7 | 130.4 | 133.9 | 130.7 | 133.4 | 136.9 |
| Storage batteries | 3691 | .11 | 133.2 | 135.9 | 122.2 | 147.3 | 125.0 | | 117.1 | 116.4 | 127.6 | 134.3 | 131.9 | |
| **Transportation equipment** | **37** | 9.43 | 124.9 | 125.1 | 125.4 | 124.5 | 124.2 | 124.2 | 129.6 | 130.0 | 129.9 | 100.2 | 126.1 | 126.1 |
| Motor vehicles and parts | 371 | 5.14 | 149.4 | 150.7 | 153.1 | 151.7 | 152.4 | 155.0 | 158.7 | 161.1 | 162.0 | 102.6 | 157.9 | 159.2 |
| Autos | | 1.15 | 106.2 | 102.3 | 105.7 | 100.9 | 107.4 | 107.5 | 109.6 | 110.7 | 114.1 | 63.6 | 111.8 | 111.3 |
| Trucks and truck trailers | | 1.78 | 192.1 | 201.1 | 203.1 | 191.8 | 207.9 | 191.4 | 201.8 | 214.2 | 206.6 | 124.7 | 210.9 | 200.2 |
| Trucks and buses | | 1.67 | 191.1 | 200.5 | 202.9 | 190.4 | 208.1 | 190.9 | 201.2 | 214.0 | 206.3 | 120.5 | 211.4 | 199.7 |
| Consumer trucks | | 1.04 | 185.7 | 197.2 | 202.0 | 184.0 | 208.9 | 189.8 | 195.8 | 212.3 | 202.8 | 109.3 | 212.6 | 199.7 |
| Business trucks | | .63 | 198.5 | 204.2 | 202.7 | 199.5 | 205.1 | 191.2 | 208.9 | 215.6 | 211.1 | 138.6 | 208.2 | 198.4 |
| Motor vehicle parts | 3714 | 2.13 | 153.9 | 153.1 | 154.9 | 163.6 | 148.3 | 166.7 | 166.4 | 163.3 | 168.7 | 116.6 | 156.8 | 167.6 |
| Motor homes | 3716 | .07 | 139.8 | 151.1 | 155.9 | 147.2 | 151.0 | 164.4 | 169.0 | 149.1 | 149.5 | 132.5 | 142.8 | 167.4 |
| Aerospace and miscellaneous transportation equipment | 372–6,9 | 4.30 | 101.1 | 100.3 | 98.7 | 98.3 | 97.2 | 94.8 | 101.8 | 100.3 | 99.4 | 96.1 | 95.9 | 94.8 |
| Aircraft and parts | 372 | 3.10 | 108.1 | 107.0 | 104.1 | 103.6 | 101.4 | 98.4 | 108.2 | 106.5 | 104.5 | 100.8 | 100.1 | 98.9 |
| Ships and boats | 373 | .39 | 87.0 | 84.2 | 85.7 | 86.4 | 91.3 | 89.7 | 87.6 | 85.1 | 85.1 | 83.8 | 89.3 | 88.8 |
| Railroad and miscellaneous | 374–6,9 | .81 | 85.7 | 86.5 | 87.5 | 87.1 | 86.3 | 85.6 | 88.1 | 87.7 | 89.5 | 86.4 | 85.4 | 84.2 |

1. The IP proportion data are estimates of the industries' relative contributions to overall IP growth in the following year.

## Table 6 (continued)
## INDUSTRIAL PRODUCTION: INDUSTRY SUBTOTALS AND INDIVIDUAL SERIES

| Item | SIC | 1998 IP Proportion[1] | Index, 1992 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasonally adjusted | | | | | | Not seasonally adjusted | | | | | |
| | | | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[r] |
| **Instruments** | **38** | 4.88 | 115.6 | 117.9 | 117.7 | 118.6 | 117.8 | 117.7 | 113.9 | 115.4 | 119.5 | 120.5 | 120.8 | 121.0 |
| Scientific and medical | 381–4 | 4.09 | 117.3 | 118.2 | 118.1 | 118.3 | 117.6 | 117.0 | 115.1 | 115.4 | 120.3 | 120.9 | 121.3 | 120.5 |
| Medical instruments | 384 | 1.60 | 130.2 | 131.6 | 133.1 | 132.0 | 132.0 | 132.4 | 124.5 | 125.9 | 139.8 | 143.4 | 144.5 | 144.8 |
| **Misc. manufactures** | **39** | 1.32 | 118.2 | 119.4 | 118.4 | 119.0 | 119.0 | 118.7 | 117.9 | 118.5 | 118.9 | 115.7 | 119.5 | 120.4 |
| Consumer goods | 391,3,4,6 | .62 | 107.9 | 110.2 | 108.2 | 107.0 | 107.7 | 106.9 | 108.7 | 109.1 | 107.5 | 101.7 | 106.8 | 108.3 |
| Business supplies | 395,9 | .70 | 129.0 | 129.1 | 129.1 | 131.6 | 130.8 | 131.2 | 127.4 | 128.0 | 130.4 | 130.0 | 132.6 | 132.7 |
| **Electric utilities** | **491,3pt** | 5.28 | 118.2 | 117.8 | 120.3 | 124.2 | 122.5 | 119.1 | 105.5 | 109.2 | 124.2 | 140.6 | 136.7 | 122.1 |
| Generation | | 1.97 | 115.5 | 113.9 | 117.5 | 120.1 | 118.4 | 115.0 | 104.8 | 109.9 | 124.7 | 132.9 | 128.5 | 113.1 |
| Fossil fuel | | .95 | 121.1 | 114.3 | 114.4 | 118.2 | 115.8 | | 104.8 | 105.9 | 120.9 | 137.6 | 132.5 | |
| Hydro and nuclear | | 1.02 | 110.2 | 113.2 | 120.2 | 121.7 | 120.5 | | 104.5 | 113.3 | 127.9 | 128.8 | 125.1 | |
| Sales | | 3.31 | 120.0 | 120.2 | 122.0 | 126.8 | 125.2 | 121.7 | 106.0 | 109.0 | 124.1 | 145.6 | 141.9 | 127.9 |
| Residential | | 1.39 | 121.3 | 121.3 | 125.1 | 132.8 | 132.3 | | 99.3 | 99.1 | 123.2 | 162.1 | 155.6 | |
| Nonresidential | | 1.92 | 119.0 | 119.4 | 119.8 | 122.4 | 120.2 | 118.6 | 110.8 | 115.9 | 124.8 | 134.2 | 132.4 | 125.2 |
| Commercial and other | | 1.19 | 125.4 | 125.5 | 126.5 | 129.2 | 127.5 | | 113.6 | 119.1 | 132.5 | 147.0 | 144.1 | |
| Industrial | | .73 | 109.7 | 110.5 | 110.0 | 112.5 | 109.5 | | 106.7 | 111.3 | 113.4 | 115.6 | 115.6 | |
| **Gas utilities** | **492,3pt** | .97 | 104.5 | 104.3 | 108.9 | 109.3 | 109.4 | 108.4 | 106.5 | 78.0 | 62.5 | 59.3 | 57.9 | 57.5 |
| Residential | | .43 | 97.0 | 95.2 | 102.7 | 105.4 | 104.1 | 102.5 | 103.5 | 61.1 | 39.2 | 32.5 | 29.0 | 32.9 |
| Commercial and other | | .16 | 108.4 | 112.7 | 116.7 | 118.7 | 121.9 | 122.0 | 112.9 | 81.1 | 63.4 | 61.7 | 61.5 | 60.9 |
| Gas transmission | | .32 | 111.6 | 111.6 | 112.2 | 108.3 | 109.5 | 108.5 | 107.9 | 96.5 | 88.0 | 88.2 | 88.8 | 83.0 |

1. The IP proportion data are estimates of the industries' relative contributions to overall IP growth in the following year.

## Table 7
## INDUSTRIAL PRODUCTION: GROSS VALUE OF PRODUCTS

Billions of 1992 dollars at annual rates, seasonally adjusted

| Item | 1992 | 1998 | 1998 Q2 | Q3 | Q4 | 1999 Q1 | Q2 | Q3[r] | 1999 May | June | July[r] | Aug.[r] | Sept.[r] | Oct.[p] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Products, total** | 2001.9 | 2489.8 | 2486.2 | 2493.6 | 2515.1 | 2530.2 | 2549.3 | 2555.8 | 2549.8 | 2550.7 | 2549.1 | 2566.0 | 2552.3 | 2573.8 |
| **Final products** | 1552.1 | 1958.0 | 1955.3 | 1956.0 | 1976.1 | 1984.9 | 2001.0 | 2008.6 | 2000.0 | 2005.3 | 2003.3 | 2018.9 | 2003.6 | 2023.1 |
| Consumer goods | 1049.6 | 1212.3 | 1217.2 | 1206.9 | 1214.9 | 1226.9 | 1233.4 | 1236.8 | 1230.9 | 1238.6 | 1233.9 | 1243.8 | 1232.6 | 1250.4 |
| Durable | 238.3 | 321.0 | 318.6 | 314.6 | 332.6 | 339.8 | 350.3 | 352.8 | 351.0 | 353.9 | 349.8 | 359.1 | 349.6 | 357.6 |
| Automotive products | 123.8 | 165.8 | 162.8 | 159.3 | 175.9 | 175.7 | 181.0 | 181.4 | 181.6 | 184.6 | 175.7 | 188.1 | 180.4 | 183.8 |
| Other durable goods | 114.4 | 155.3 | 156.2 | 155.7 | 156.2 | 164.1 | 169.3 | 171.6 | 169.4 | 169.2 | 175.0 | 170.7 | 169.3 | 174.1 |
| Nondurable | 811.3 | 892.7 | 899.5 | 893.2 | 884.9 | 890.1 | 886.9 | 887.9 | 883.9 | 888.7 | 887.8 | 889.3 | 886.7 | 896.9 |
| Equipment, total | 502.5 | 746.9 | 741.4 | 753.2 | 765.7 | 761.9 | 771.9 | 776.3 | 773.5 | 770.8 | 773.8 | 779.4 | 775.6 | 776.7 |
| Business and defense | 483.9 | 722.2 | 715.1 | 729.7 | 744.4 | 742.5 | 753.8 | 757.8 | 755.2 | 752.6 | 756.1 | 761.0 | 756.5 | 757.2 |
| Business | 399.2 | 659.0 | 653.9 | 668.5 | 683.7 | 682.8 | 694.6 | 699.0 | 695.8 | 693.8 | 697.1 | 701.7 | 698.2 | 698.4 |
| Defense and space | 84.7 | 63.9 | 63.9 | 64.1 | 63.7 | 62.8 | 62.4 | 62.2 | 62.7 | 62.1 | 62.3 | 62.7 | 61.6 | 62.2 |
| **Intermediate products** | 449.9 | 533.6 | 532.0 | 538.1 | 539.9 | 545.9 | 549.0 | 548.2 | 550.3 | 546.5 | 546.8 | 548.4 | 549.4 | 551.7 |
| Construction supplies | 177.2 | 224.9 | 223.0 | 226.1 | 229.2 | 233.9 | 233.8 | 235.8 | 234.8 | 233.3 | 236.1 | 235.2 | 236.1 | 237.7 |
| Business supplies | 272.7 | 308.3 | 308.6 | 311.7 | 310.3 | 311.4 | 314.7 | 311.9 | 315.1 | 312.7 | 310.2 | 312.8 | 312.9 | 313.5 |
| Commercial energy products | 70.4 | 82.7 | 82.5 | 86.0 | 83.4 | 84.3 | 85.6 | 86.1 | 85.3 | 85.1 | 86.1 | 86.4 | 85.8 | 86.2 |

## Table 8
## DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION

Percent

| Year | Jan. | Feb. | Mar. | Apr. | May | June | July | Aug. | Sept. | Oct. | Nov. | Dec. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **One Month Earlier** | | | | | | | | | | | | |
| 1997 | 53.4 | 65.7 | 53.7 | 51.3 | 53.7 | 56.3 | 58.8 | 49.8 | 55.6 | 55.8 | 61.4 | 50.9 |
| 1998 | 55.8 | 47.2 | 50.2 | 53.7 | 49.1 | 39.3 | 54.7 | 46.8 | 39.7 | 56.2 | 48.3 | 52.1 |
| 1999 | 49.6 | 52.8 | 50.9 | 56.6 | 53.6 | 51.3 | 59.7 | 54.5 | 43.4 | | | |
| **Three Months Earlier** | | | | | | | | | | | | |
| 1997 | 58.2 | 65.7 | 59.0 | 62.7 | 54.9 | 55.6 | 60.2 | 60.9 | 59.0 | 58.1 | 65.5 | 63.7 |
| 1998 | 59.6 | 52.1 | 54.3 | 49.1 | 55.4 | 44.2 | 46.8 | 44.6 | 45.7 | 47.6 | 49.1 | 52.1 |
| 1999 | 49.4 | 48.7 | 51.3 | 59.2 | 54.7 | 53.9 | 53.6 | 59.0 | 49.4 | | | |
| **Six Months Earlier** | | | | | | | | | | | | |
| 1997 | 65.3 | 65.7 | 63.8 | 61.6 | 58.4 | 62.7 | 67.3 | 62.8 | 63.5 | 66.9 | 68.8 | 65.0 |
| 1998 | 63.7 | 63.3 | 61.0 | 58.1 | 56.6 | 48.3 | 46.8 | 46.4 | 43.3 | 47.6 | 46.4 | 48.7 |
| 1999 | 52.8 | 51.3 | 55.4 | 59.2 | 55.1 | 56.9 | 57.3 | 54.7 | 52.8 | | | |

Note—The diffusion indexes are calculated as the percentage of series that increased over the indicated span (one, three, or six months) plus one–half the percentage that were unchanged.

## Table 9
## ELECTRIC POWER USE: MANUFACTURING AND MINING

| Item | 1987 SIC | 1992 Billion KWH | Index, 1992 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasonally adjusted | | | | | | Not seasonally adjusted | | | | | |
| | | | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[p] | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[p] |
| **Total** | | 934.1 | 107.1 | 107.2 | 105.0 | 104.2 | 104.1 | 104.7 | 106.1 | 106.8 | 106.6 | 105.4 | 107.3 | 108.1 |
| **MAJOR INDUSTRY GROUPS** | | | | | | | | | | | | | | |
| **Manufacturing** | | 854.0 | 107.7 | 107.8 | 105.2 | 104.3 | 104.2 | 105.0 | 106.5 | 107.3 | 107.1 | 105.8 | 107.8 | 108.7 |
| **Durable** | | 365.8 | 107.4 | 106.7 | 106.9 | 107.9 | 107.5 | 107.1 | 106.5 | 106.4 | 108.8 | 108.8 | 110.5 | 110.3 |
| **Nondurable** | | 488.3 | 107.9 | 108.7 | 103.8 | 101.4 | 101.6 | 103.3 | 106.5 | 108.1 | 105.7 | 103.4 | 105.7 | 107.3 |
| **Mining** | | 80.1 | 99.5 | 99.9 | 101.5 | 102.5 | 102.1 | 100.4 | 100.4 | 99.6 | 100.5 | 99.1 | 100.5 | 100.6 |
| **INDUSTRY GROUPS and SERIES** | | | | | | | | | | | | | | |
| **Metal mining** | **10** | 18.6 | 115.0 | 113.9 | 114.5 | 113.2 | 110.3 | 109.3 | 114.2 | 114.6 | 111.1 | 112.0 | 112.8 | 109.6 |
| Iron ore | 101 | 7.3 | 112.1 | 113.7 | 117.8 | 106.9 | 99.0 | 104.8 | 111.9 | 117.0 | 112.8 | 105.1 | 101.2 | 103.3 |
| Copper ore | 102 | 6.6 | 127.7 | 123.6 | 120.2 | 126.8 | 127.7 | 119.5 | 126.6 | 122.3 | 116.7 | 125.8 | 131.5 | 122.0 |
| **Coal mining** | **12** | 12.7 | 92.1 | 91.8 | 95.2 | 100.7 | 97.4 | 95.7 | 96.5 | 88.8 | 91.3 | 85.0 | 90.4 | 92.5 |
| **Oil and gas extraction** | **13** | 36.0 | 88.7 | 90.5 | 93.1 | 91.5 | 94.4 | 91.7 | 88.7 | 89.9 | 94.0 | 91.9 | 92.1 | 92.5 |
| Crude oil and natural gas | 131 | 31.0 | 88.2 | 89.1 | 92.4 | 89.2 | 92.1 | 90.1 | 88.3 | 89.0 | 93.2 | 89.4 | 89.0 | 90.7 |
| Natural gas liquids | 132 | 3.6 | 77.7 | 84.9 | 85.1 | 96.2 | 101.4 | 88.6 | 77.8 | 84.2 | 86.7 | 97.7 | 104.4 | 91.2 |
| **Stone and earth minerals** | **14** | 12.8 | 110.5 | 111.1 | 109.5 | 114.1 | 113.6 | 113.8 | 111.6 | 113.2 | 111.6 | 114.3 | 114.6 | 116.1 |
| Crushed stone | 142 | 3.5 | 156.4 | 154.6 | 152.9 | 153.9 | 152.1 | 153.8 | 154.1 | 163.3 | 161.9 | 161.9 | 161.2 | 165.1 |
| Sand and gravel | 144 | 2.7 | 108.1 | 109.2 | 104.9 | 103.6 | 105.9 | 108.2 | 105.2 | 114.3 | 112.3 | 113.4 | 115.9 | 118.5 |
| Chemical and fertilizer materials | 147 | 4.7 | 97.2 | 97.5 | 95.8 | 105.2 | 103.0 | 102.2 | 101.8 | 97.6 | 95.1 | 100.4 | 99.5 | 100.2 |
| **Foods** | **20** | 58.8 | 121.3 | 118.1 | 117.3 | 116.4 | 117.0 | 116.2 | 114.9 | 114.1 | 120.1 | 123.0 | 126.4 | 127.2 |
| Meat products | 201 | 10.3 | 133.8 | 129.3 | 127.4 | 125.8 | 126.4 | 126.2 | 126.5 | 125.3 | 133.1 | 135.8 | 137.4 | 138.0 |
| Dairy products | 202 | 6.8 | 110.9 | 109.1 | 108.9 | 111.6 | 108.3 | 108.9 | 107.0 | 107.8 | 115.9 | 122.3 | 118.2 | 118.6 |
| Canned and frozen food | 203 | 8.1 | 116.4 | 112.8 | 117.3 | 113.6 | 115.6 | 113.6 | 106.1 | 105.4 | 115.5 | 117.5 | 131.1 | 136.4 |
| Grain mill products | 204 | 11.4 | 141.8 | 139.4 | 138.6 | 138.5 | 138.9 | 135.7 | 140.7 | 138.6 | 140.6 | 141.1 | 144.4 | 142.9 |
| Bakery products | 205 | 3.5 | 115.5 | 112.0 | 111.8 | 112.0 | 112.4 | 113.7 | 108.8 | 108.6 | 116.8 | 121.6 | 124.2 | 126.4 |
| Sugar and confectionery | 206 | 4.0 | 119.6 | 103.1 | 102.9 | 97.2 | 104.3 | 106.6 | 103.8 | 90.9 | 97.4 | 94.2 | 99.1 | 100.9 |
| Fats and oils | 207 | 3.9 | 100.1 | 105.5 | 98.6 | 105.2 | 109.2 | 105.3 | 99.2 | 100.5 | 95.5 | 99.0 | 101.3 | 102.7 |
| Beverages | 208 | 6.1 | 109.1 | 106.7 | 104.9 | 104.0 | 104.0 | 103.5 | 102.6 | 104.1 | 111.9 | 116.4 | 119.0 | 119.0 |
| Coffee and miscellaneous | 209 | 4.7 | 110.8 | 109.7 | 106.2 | 105.8 | 106.2 | 106.4 | 103.1 | 105.6 | 109.4 | 113.5 | 116.1 | 116.2 |
| **Tobacco products** | **21** | 1.5 | 91.3 | 90.4 | 91.6 | 95.5 | 91.2 | 92.1 | 87.0 | 85.4 | 91.2 | 97.8 | 98.2 | 101.6 |
| **Textile mill products** | **22** | 31.5 | 107.5 | 109.9 | 112.9 | 114.4 | 110.0 | 109.4 | 105.4 | 112.4 | 120.5 | 113.5 | 121.1 | 119.1 |
| Fabrics | 221–4 | 11.8 | 101.8 | 103.8 | 108.9 | 108.0 | 107.2 | 104.7 | 99.6 | 106.4 | 116.8 | 107.6 | 118.5 | 114.6 |
| Knit goods | 225 | 4.1 | 118.9 | 122.8 | 122.7 | 119.0 | 121.3 | 119.4 | 114.4 | 126.4 | 136.2 | 124.6 | 139.6 | 137.5 |
| Fabric finishing | 226 | 2.5 | 107.5 | 104.2 | 101.4 | 101.8 | 101.4 | 96.8 | 107.6 | 106.0 | 106.3 | 97.6 | 102.9 | 100.6 |
| Yarn and thread | 228 | 8.3 | 88.4 | 97.5 | 104.2 | 109.0 | 96.9 | 100.2 | 86.7 | 100.4 | 110.2 | 103.1 | 107.7 | 108.0 |
| Miscellaneous textiles | 229 | 3.4 | 129.9 | 127.3 | 126.6 | 128.5 | 127.5 | 126.7 | 128.7 | 128.8 | 130.2 | 129.7 | 132.0 | 130.9 |
| **Apparel products** | **23** | 8.2 | 98.8 | 95.1 | 91.5 | 89.8 | 89.3 | 90.4 | 90.8 | 92.3 | 98.8 | 99.8 | 105.1 | 104.1 |
| Men's outerwear | 231,2 | 2.0 | 86.3 | 81.7 | 77.6 | 77.3 | 75.3 | 73.5 | 78.7 | 79.7 | 86.2 | 87.3 | 91.4 | 86.0 |
| Women's outerwear | 233 | 2.5 | 116.4 | 112.7 | 108.4 | 104.4 | 109.8 | 114.6 | 106.2 | 109.1 | 118.2 | 116.5 | 130.4 | 132.8 |
| **Lumber and products** | **24** | 19.8 | 121.6 | 120.2 | 121.3 | 122.7 | 121.3 | 120.3 | 123.2 | 119.2 | 121.1 | 120.6 | 121.7 | 121.0 |
| Lumber | 242 | 7.7 | 120.4 | 120.3 | 120.7 | 126.0 | 122.5 | 121.4 | 123.2 | 120.1 | 120.1 | 122.1 | 121.8 | 121.0 |
| Millwork and plywood | 243 | 5.6 | 123.8 | 121.7 | 126.9 | 126.8 | 128.4 | 128.2 | 125.2 | 120.6 | 126.7 | 124.7 | 129.0 | 129.0 |
| **Furniture and fixtures** | **25** | 6.0 | 117.0 | 117.2 | 118.1 | 119.4 | 121.4 | 121.1 | 115.7 | 114.6 | 120.8 | 119.4 | 128.1 | 127.3 |
| Household furniture | 251 | 3.2 | 112.0 | 112.6 | 115.1 | 117.2 | 118.8 | 119.0 | 113.1 | 110.4 | 118.0 | 113.3 | 123.5 | 122.5 |
| **Paper and products** | **26** | 113.3 | 103.3 | 103.8 | 102.0 | 102.3 | 101.2 | 100.6 | 101.9 | 102.2 | 102.8 | 103.5 | 103.2 | 102.8 |
| Wood pulp | 261 | 8.8 | 102.8 | 99.5 | 102.6 | 109.2 | 108.0 | 111.5 | 98.4 | 96.2 | 103.1 | 104.6 | 106.1 | 109.0 |
| Paper | 262 | 62.3 | 100.6 | 100.7 | 98.1 | 97.4 | 96.1 | 96.2 | 99.4 | 99.1 | 99.0 | 98.4 | 98.0 | 97.5 |
| Paperboard | 263 | 28.3 | 120.4 | 118.2 | 120.0 | 120.9 | 118.6 | 113.0 | 119.6 | 118.0 | 119.8 | 121.9 | 118.2 | 116.1 |
| Paperboard containers | 265 | 5.1 | 102.1 | 104.2 | 101.8 | 101.0 | 101.1 | 103.0 | 100.5 | 102.4 | 103.1 | 105.2 | 106.9 | 108.2 |
| Converted paper products | 267 | 8.9 | 102.2 | 108.8 | 106.0 | 109.6 | 109.1 | 106.8 | 100.4 | 107.9 | 107.3 | 113.0 | 113.8 | 112.7 |
| **Printing and publishing** | **27** | 17.3 | 115.7 | 114.3 | 111.3 | 109.5 | 110.4 | 111.3 | 107.9 | 109.1 | 114.6 | 120.3 | 124.1 | 123.8 |
| Newspapers | 271 | 3.6 | 105.4 | 100.8 | 100.1 | 99.0 | 100.1 | 103.4 | 97.5 | 97.6 | 104.4 | 109.4 | 110.8 | 114.3 |
| Commercial printing | 275 | 9.2 | 123.1 | 123.3 | 119.8 | 117.1 | 118.5 | 118.9 | 117.1 | 119.1 | 125.0 | 131.1 | 136.5 | 135.0 |
| **Chemicals and products** | **28** | 171.7 | 102.2 | 103.4 | 92.9 | 88.4 | 88.9 | 93.6 | 102.5 | 104.5 | 93.6 | 89.4 | 90.3 | 94.6 |
| Basic chemicals | 281 | 78.9 | 94.8 | 98.5 | 79.2 | 74.4 | 74.2 | 83.1 | 96.3 | 100.5 | 78.8 | 73.4 | 73.4 | 81.6 |
| Alkalies and chlorine | 2812 | 14.9 | 83.8 | 81.3 | 81.3 | 79.4 | 82.8 | 89.7 | 86.5 | 83.1 | 83.0 | 81.0 | 84.5 | 87.7 |
| Inorganic chemicals, nec | 2819 | 38.3 | 94.3 | 99.1 | 62.7 | 57.0 | 56.9 | 70.8 | 97.3 | 103.9 | 61.0 | 53.3 | 54.2 | 66.8 |
| Acid and fertilizer materials | | 14.0 | 90.6 | 98.0 | 100.3 | 99.4 | 97.5 | 92.1 | 89.8 | 97.2 | 98.9 | 99.9 | 99.7 | 92.2 |
| Nuclear materials, nondefense | | 24.3 | 96.1 | 99.6 | 44.3 | 36.2 | 36.9 | 60.4 | 101.1 | 107.2 | 42.5 | 30.5 | 32.0 | 54.4 |

## Table 9 (continued)
## ELECTRIC POWER USE: MANUFACTURING AND MINING

| Item | 1987 SIC | 1992 Billion KWH | Index, 1992 = 100 | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Seasonally adjusted | | | | | | Not seasonally adjusted | | | | | |
| | | | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[p] | 1999 Apr. | May | June | July[r] | Aug.[r] | Sept.[p] |
| **Chemicals and Products (cont.)** | | | | | | | | | | | | | | |
| Synthetic materials | 282 | 29.2 | 107.4 | 103.9 | 106.0 | 101.8 | 103.5 | 102.2 | 107.1 | 104.8 | 108.8 | 105.2 | 107.6 | 105.6 |
| Plastics materials | 2821 | 18.3 | 131.9 | 130.6 | 133.1 | 127.6 | 129.8 | 126.5 | 132.8 | 130.5 | 135.9 | 131.0 | 132.8 | 131.0 |
| Drugs and medicines | 283 | 6.7 | 130.4 | 128.6 | 127.7 | 124.5 | 130.0 | 125.4 | 121.5 | 124.1 | 134.7 | 133.0 | 140.5 | 136.5 |
| Soap and toiletries | 284 | 3.0 | 111.2 | 111.9 | 113.5 | 111.8 | 113.1 | 107.6 | 105.7 | 106.7 | 117.3 | 121.1 | 123.1 | 118.5 |
| Industrial organic chemicals | 286 | 39.2 | 104.8 | 100.9 | 108.9 | 103.3 | 100.8 | 101.8 | 103.8 | 100.8 | 109.6 | 107.2 | 106.3 | 108.5 |
| Agricultural chemicals | 287 | 9.7 | 118.0 | 118.5 | 120.0 | 115.8 | 112.8 | 115.1 | 120.0 | 120.3 | 119.9 | 115.4 | 113.1 | 114.1 |
| **Petroleum products** | **29** | 47.0 | 109.5 | 113.4 | 112.1 | 105.7 | 109.5 | 108.5 | 109.0 | 111.4 | 111.8 | 106.9 | 112.3 | 111.2 |
| **Rubber and plastics products** | **30** | 38.0 | 128.6 | 127.8 | 127.5 | 129.2 | 129.0 | 129.8 | 127.9 | 127.3 | 131.9 | 131.0 | 133.4 | 135.5 |
| Tires | 301 | 4.3 | 116.6 | 116.0 | 111.6 | 116.1 | 119.3 | 116.6 | 114.8 | 113.1 | 114.1 | 118.0 | 125.5 | 123.6 |
| Rubber products, nec | 306 | 3.2 | 116.7 | 117.5 | 115.9 | 120.3 | 117.8 | 120.1 | 114.9 | 115.4 | 119.0 | 120.1 | 123.9 | 125.5 |
| Plastics products, nec | 308 | 28.9 | 133.6 | 132.5 | 133.2 | 133.9 | 133.3 | 134.6 | 133.2 | 132.8 | 138.2 | 136.0 | 137.1 | 140.2 |
| **Leather and products** | **31** | 1.0 | 76.7 | 75.2 | 75.3 | 75.5 | 74.5 | 75.3 | 74.9 | 73.9 | 78.7 | 77.4 | 80.6 | 81.1 |
| Shoes | 314 | .3 | 72.7 | 69.8 | 71.5 | 70.3 | 72.1 | 70.8 | 68.8 | 67.9 | 75.6 | 74.5 | 80.9 | 79.4 |
| **Stone, clay, & glass products** | **32** | 33.8 | 113.6 | 110.8 | 109.9 | 112.3 | 110.7 | 110.8 | 112.7 | 111.8 | 112.1 | 113.6 | 113.5 | 113.7 |
| Flat glass | 321 | 1.5 | 112.2 | 112.5 | 111.1 | 110.7 | 113.1 | 111.1 | 109.9 | 112.4 | 114.1 | 113.5 | 114.0 | 115.3 |
| Pressed and blown glass | 322 | 7.3 | 105.7 | 102.5 | 104.6 | 104.8 | 103.3 | 103.5 | 105.9 | 102.2 | 105.6 | 105.1 | 105.2 | 106.0 |
| Cement | 324 | 9.6 | 117.4 | 111.6 | 110.8 | 117.6 | 109.5 | 111.6 | 113.4 | 115.6 | 114.5 | 120.7 | 115.2 | 113.9 |
| Structural clay products | 325 | 1.4 | 98.5 | 94.3 | 96.3 | 97.7 | 100.8 | 99.2 | 98.4 | 96.0 | 99.0 | 100.0 | 103.1 | 102.6 |
| Concrete products | 327 | 4.7 | 129.3 | 127.5 | 125.3 | 128.6 | 129.5 | 130.7 | 127.6 | 127.5 | 127.6 | 129.1 | 132.0 | 134.4 |
| **Primary metals** | **33** | 150.9 | 98.9 | 98.6 | 100.9 | 100.5 | 99.9 | 99.8 | 100.1 | 99.7 | 101.2 | 98.9 | 99.5 | 99.4 |
| Basic steel and mill products | 331 | 57.0 | 105.8 | 106.4 | 109.7 | 108.8 | 108.7 | 108.4 | 108.3 | 109.1 | 109.9 | 105.2 | 107.9 | 108.2 |
| Iron and steel foundries | 332 | 9.9 | 118.1 | 116.0 | 122.0 | 122.8 | 116.9 | 113.1 | 121.6 | 116.1 | 121.4 | 115.4 | 111.0 | 114.7 |
| Primary nonferrous metals | 333 | 66.2 | 80.9 | 81.1 | 81.7 | 80.5 | 80.3 | 82.0 | 80.5 | 81.5 | 82.3 | 82.5 | 81.8 | 80.3 |
| Aluminum | 3334 | 60.3 | 71.7 | 70.1 | 71.0 | 69.8 | 69.4 | 71.0 | 71.6 | 72.1 | 71.8 | 71.8 | 71.3 | 71.0 |
| Nonferrous foundries | 336 | 2.7 | 134.6 | 132.9 | 137.6 | 140.6 | 135.3 | 135.5 | 134.5 | 130.0 | 135.4 | 132.2 | 132.0 | 137.7 |
| **Fabricated metal products** | **34** | 31.4 | 115.9 | 115.0 | 116.3 | 116.0 | 117.3 | 117.4 | 114.2 | 113.4 | 117.9 | 117.0 | 120.3 | 121.3 |
| Metal containers | 341 | 2.9 | 102.5 | 101.8 | 102.7 | 103.7 | 107.3 | 106.4 | 102.8 | 101.6 | 105.6 | 106.7 | 109.1 | 108.7 |
| Hardware, tools, and cutlery | 342 | 2.7 | 113.7 | 113.4 | 114.8 | 114.4 | 118.8 | 119.6 | 110.6 | 110.6 | 116.5 | 115.4 | 122.5 | 125.2 |
| Structural metal products | 344 | 5.4 | 119.6 | 118.2 | 117.8 | 115.7 | 119.6 | 120.4 | 117.2 | 116.4 | 118.9 | 118.7 | 124.5 | 125.1 |
| Fasteners | 345 | 1.7 | 113.4 | 117.1 | 115.7 | 116.0 | 115.5 | 116.6 | 111.0 | 114.2 | 118.4 | 118.2 | 120.3 | 122.6 |
| Metal stampings | 346 | 6.7 | 129.5 | 128.4 | 131.9 | 135.1 | 131.5 | 132.1 | 128.9 | 128.3 | 132.2 | 130.0 | 131.4 | 133.7 |
| **Industrial machinery and equipment** | **35** | 33.2 | 115.1 | 114.6 | 112.3 | 113.5 | 113.8 | 112.9 | 112.5 | 112.5 | 116.1 | 118.9 | 122.0 | 121.0 |
| Engines and turbines | 351 | 2.6 | 104.2 | 110.6 | 105.4 | 108.8 | 102.9 | 104.3 | 104.7 | 109.5 | 109.0 | 104.3 | 106.9 | 109.3 |
| Farm | 352 | 2.0 | 83.6 | 85.4 | 89.0 | 95.4 | 93.8 | 88.1 | 87.7 | 87.2 | 89.2 | 94.7 | 95.6 | 92.1 |
| Construction and allied | 353 | 3.8 | 148.2 | 142.6 | 130.3 | 131.6 | 133.2 | 137.3 | 141.9 | 141.0 | 134.3 | 139.4 | 143.3 | 146.3 |
| Metalworking | 354 | 4.1 | 122.3 | 120.1 | 122.6 | 123.1 | 123.2 | 121.0 | 118.6 | 116.7 | 126.1 | 129.3 | 132.8 | 130.9 |
| Special industry | 355 | 2.4 | 120.2 | 118.7 | 118.7 | 118.4 | 129.7 | 125.1 | 116.2 | 114.8 | 122.1 | 125.4 | 140.7 | 136.5 |
| General industrial | 356 | 5.2 | 115.1 | 115.7 | 114.8 | 115.4 | 114.9 | 113.9 | 112.6 | 113.6 | 118.9 | 119.6 | 122.5 | 121.6 |
| Computer and office equip. | 357 | 5.1 | 91.0 | 90.4 | 88.3 | 90.4 | 88.9 | 87.2 | 88.4 | 87.9 | 91.3 | 97.1 | 95.3 | 93.9 |
| Service industry machines | 358 | 3.5 | 111.2 | 109.4 | 107.0 | 108.8 | 111.6 | 110.4 | 110.0 | 109.8 | 113.5 | 115.5 | 120.0 | 116.9 |
| **Electrical machinery** | **36** | 33.0 | 108.3 | 107.0 | 106.3 | 106.6 | 106.9 | 106.9 | 105.0 | 105.4 | 109.7 | 112.0 | 113.4 | 114.1 |
| Electrical distribution | 361 | 1.3 | 96.2 | 95.4 | 97.0 | 93.9 | 94.7 | 91.8 | 91.0 | 91.7 | 97.9 | 99.9 | 103.5 | 101.0 |
| Electrical industrial | 362 | 4.0 | 87.6 | 84.9 | 85.3 | 85.8 | 88.5 | 87.7 | 87.2 | 84.9 | 87.6 | 89.5 | 91.5 | 90.7 |
| Household appliances | 363 | 2.4 | 99.7 | 95.6 | 95.6 | 94.5 | 93.3 | 93.2 | 97.3 | 97.4 | 101.6 | 101.1 | 102.6 | 99.5 |
| Lighting and wiring products | 364 | 3.0 | 117.0 | 114.1 | 115.3 | 117.6 | 124.5 | 120.0 | 115.5 | 114.3 | 118.6 | 121.0 | 127.5 | 126.6 |
| TV and radio sets | 365 | .8 | 114.4 | 119.1 | 122.1 | 124.7 | 120.9 | 122.5 | 109.6 | 117.8 | 126.1 | 128.8 | 130.5 | 129.8 |
| Communication equipment | 366 | 3.3 | 103.4 | 106.3 | 101.1 | 103.6 | 102.1 | 100.8 | 99.3 | 102.3 | 105.2 | 112.8 | 110.3 | 111.0 |
| Electronic components | 367 | 14.5 | 117.7 | 116.4 | 115.2 | 114.8 | 114.8 | 116.3 | 114.2 | 114.4 | 119.4 | 121.1 | 122.0 | 123.9 |
| **Transportation equipment** | **37** | 39.6 | 111.1 | 110.7 | 108.1 | 113.1 | 112.2 | 110.1 | 108.2 | 109.5 | 112.5 | 113.3 | 117.6 | 117.2 |
| Motor vehicles and parts | 371 | 22.8 | 123.0 | 122.1 | 118.4 | 127.0 | 125.8 | 121.9 | 119.7 | 121.2 | 124.7 | 125.5 | 131.5 | 130.3 |
| Aircraft and parts | 372 | 10.7 | 91.9 | 92.1 | 90.9 | 91.2 | 90.6 | 91.1 | 89.2 | 90.7 | 92.2 | 93.4 | 95.5 | 96.6 |
| Ships and boats | 373 | 2.2 | 111.1 | 112.5 | 111.0 | 110.6 | 109.5 | 108.7 | 110.2 | 109.4 | 113.3 | 111.2 | 109.2 | 108.8 |
| **Instruments** | **38** | 13.7 | 103.5 | 106.5 | 100.7 | 101.0 | 100.3 | 98.3 | 98.5 | 102.2 | 104.2 | 108.4 | 108.5 | 105.2 |
| Photographic equip. & supplies | 386 | 1.8 | 96.3 | 90.6 | 90.4 | 86.5 | 85.0 | 82.0 | 90.8 | 87.9 | 92.4 | 92.9 | 90.0 | 84.3 |
| **Miscellaneous manufactures** | **39** | 4.5 | 123.1 | 123.4 | 126.7 | 128.1 | 129.9 | 134.0 | 120.6 | 121.7 | 130.0 | 134.8 | 139.5 | 141.3 |
| **SUPPLEMENTARY GROUPS** | | | | | | | | | | | | | | |
| Total, excluding nuclear nondefense | | 909.8 | 107.6 | 107.6 | 107.7 | 107.3 | 107.1 | 106.7 | 106.3 | 106.8 | 109.6 | 108.8 | 110.7 | 110.6 |
| Utility sales to industry | | 835.3 | 107.3 | 107.2 | 105.1 | 104.7 | 104.5 | 105.3 | 106.5 | 107.1 | 106.9 | 105.3 | 107.4 | 108.8 |
| Industrial generation | | 98.8 | 101.2 | 104.3 | 105.5 | 103.7 | 103.2 | 99.0 | 99.5 | 101.8 | 102.6 | 105.6 | 105.5 | 97.7 |

**Explanatory Note**

The statistical release of **Industrial Production and Capacity Utilization** reports measures of output, capacity, and capacity utilization in manufacturing, mining, and the electric and gas utilities industries. The release also includes monthly indexes on the use of electric power in manufacturing and mining. Files containing data in the release and historical data are available under statistical releases at **http://www.federalreserve.gov**, the Board's World Wide Web site. For paid access to these files through the Department of Commerce's Economic Bulletin Board or World Wide Web site, please call STAT-USA at 1-800-STAT-USA or (202) 452-1986. Diskettes containing historical data and the data published in this release are available from the Board of Governors of the Federal Reserve System, Publications Services, (202) 452-3245.

### *Industrial Production*

**Coverage.** The industrial production (IP) index measures output in the manufacturing, mining, and electric and gas utilities industries; the reference period for the index is 1992. For the period since 1992, the total IP index has been constructed from 267 individual series based on the 1987 Standard Industrial Classification (SIC). These individual series are classified in two ways: (1) market groups (shown in table 1), such as consumer goods, equipment, intermediate products, and materials; and (2) industry groups (shown in tables 2 and 6), such as two-digit SIC industries and major aggregates of these industries—for example, durable and nondurable manufacturing, mining, and utilities.

**Market groups.** For purposes of analysis, the individual IP series are grouped into final products, intermediate products, and materials. Final products are assumed to be purchased by consumers, businesses, or government for final use. Intermediate products are expected to become inputs in nonindustrial sectors, such as construction, agriculture, and services. Materials are industrial output requiring further processing within the industrial sector. Total products comprise final and intermediate products, and final products are divided into consumer goods and equipment.

**Timing.** The first estimate of output for a month is published around the 15th of the following month. The estimate is preliminary (denoted by the superscript "p" in tables) and subject to revision in each of the subsequent three months as new source data become available. (Revised estimates are denoted by the superscript "r" in tables.) After the fourth month, indexes are not revised further until the time of an annual revision or a benchmark revision. The last three benchmark revisions were published in 1990, 1985, and 1976.

**Source data.** In annual or benchmark revisions, the individual IP indexes are constructed from a variety of source data, such as the quinquennial *Censuses of Manufactures and Mineral Industries* and the *Annual Survey of Manufactures*, prepared by the Bureau of the Census; the *Minerals Yearbook*, prepared by the Department of the Interior; and publications of the Department of Energy. On a monthly basis, the individual indexes of industrial production are constructed from two main types of source data: (1) output measured in physical units and (2) data on inputs to the production process, from which output is inferred. Data on physical products, such as tons of steel or barrels of oil, are obtained from private trade associations as well as from government agencies including those listed above; data of this type are used to estimate monthly IP where possible and appropriate. When suitable data on physical product are unavailable, estimates of output are based on either production-worker hours or electric power use by industry. Data on hours worked by production workers are collected in the monthly establishment survey conducted by the Bureau of Labor Statistics. The data on electric power use are described below. The factors used to convert inputs into estimates of production are based on historical relationships between the inputs and the comprehensive data used to benchmark the IP indexes; these factors also may be influenced by technological or cyclical developments. Especially for the first and second estimates for a given month, the available source data are limited and subject to revision.

**Weights.** In the index, series that measure the output of an individual industry are weighted according to their proportion in the total value-added output of all industries. The industrial production index, which extends back to 1919, is built as an annually weighted chain-type index since 1977. The components of IP are combined using estimates of value added per unit of output. For months from January to June, the weights are drawn from the year containing the month being estimated and the preceding year; for months from July to December, the weights are drawn from the current and following year. The IP proportions shown in column 1 of tables 1A, 2A, and 6 are estimates of the industries' relative contributions to overall growth in the following year. For example, a 1 percent increase in durable goods manufacturing in 1997 would account for an increase in total IP of nearly 1/2 percent.

**Seasonal adjustment.** Individual series are seasonally adjusted by the X–11 ARIMA method, developed at Statistics Canada. For series based on production-worker hours, the current seasonal factors were estimated with data through October 1998; for other series, the factors were estimated with data through at least June 1998. Series are preadjusted for the effects of holidays or the business cycle where appropriate. For the data since 1977, all seasonally adjusted aggregate indexes are calculated by aggregating the seasonally adjusted indexes of the individual series.

**Reliability.** The average revision to the *level* of the total IP index, without regard to sign, between the first and the fourth estimates was 0.28 percent during the 1987–97 period. The average revision to the *percent change* in total IP, without regard to sign, from the first to the fourth estimates was 0.21 percentage point during the 1987–97 period. In most cases (about 83 percent), the direction of change in output indicated by the first estimate for a given month is the same as that shown by the fourth estimate.

**Rounding.** The published percent changes are calculated from unrounded indexes, and may not be the same as percent changes calculated from the rounded indexes shown in the release.

### *Capacity Utilization*

**Definition.** Capacity utilization is calculated for the manufacturing, mining, and electric and gas utilities industries. For a given industry, the utilization rate is equal to an output index divided by a capacity index. Output is measured by seasonally adjusted indexes of industrial production. The capacity indexes attempt to capture the concept of sustainable practical capacity, which is defined as the greatest level of output that a plant can maintain within the framework of a realistic work schedule, taking account of normal downtime, and assuming sufficient availability of inputs to operate the machinery and equipment in place. The 76 individual capacity indexes are based on a variety of data, including capacity data measured in physical units compiled by trade associations, surveys of utilization rates and investment, and estimates of growth of the capital input.

**Groups.** Estimates of capacity and utilization are available for a variety of groups, including primary and advanced processing industries within manufacturing, durable and nondurable manufacturing, total manufacturing, mining, utilities, and total industry. Component industries of the primary and advanced processing groups within manufacturing are listed in the note on tables 2 and 3 of the release.

**Weights.** Although each utilization rate is the result of dividing an IP series by a corresponding capacity index, aggregate utilization rates are equivalent to combinations of individual utilization rates aggregated with proportions that reflect current capacity levels of output valued in current-period value added per unit of actual output. The implied proportions of individual industry operating rates in the rate for total industry for the most recent year are shown in the first column of table 3.

**Perspective.** The historical highs and lows in capacity utilization shown in the tables above are specific to each series and did not all occur in the same month. Industrial plants usually operate at capacity utilization rates that are well below 100 percent: none of the broad aggregates has ever reached 100 percent. For total industry and total manufacturing, utilization rates have exceeded 90 percent only in wartime.

### *Electric Power*

Data on electric power (expressed in kilowatt hours) are collected by the Federal Reserve District Banks from electric utilities and also from manufacturing and mining establishments that generate electric power for their own use (cogenerators). The indexes of power use shown in table 9 are sums of kilowatt hours used by an industry or industry group expressed as a percentage of that industry's or group's usage in 1992. The first column of the table shows, for reference, electric power use in billions of kilowatt hours as reported by manufacturing and mining industries in the 1992 censuses of those industries. The supplementary group, "Total, less nuclear nondefense," is shown separately because the value-added proportion for the nondefense nuclear material series (part of SIC 2819) in total IP is considerably smaller than its share of total electric power use. Excluding this component from total power use facilitates comparisons with total IP.

### *References*

The annual revision published on November 24, 1998 is described more completely in the *Federal Reserve Bulletin*, vol.85 (January 1999).

A description of the aggregation methods for industrial production and capacity utilization is included in an article in the *Federal Reserve Bulletin*, vol. 83 (February 1997), pp. 67–92. *Industrial Production—1986 Edition* contains a more detailed description of the other methods used to compile the industrial production index, plus a history of its development, a glossary of terms, and a bibliography. To obtain *Industrial Production—1986 Edition* ($9.00 per copy), write to Board of Governors of the Federal Reserve System, Publications Services, Washington, DC 20551. The major revisions to the IP indexes and capacity utilization since 1990 have been described in the *Federal Reserve Bulletin* (April 1990, June 1990, June 1993, March 1994, January 1995, and January 1996, February 1997, February 1998, January 1999). The basic methodology used to estimate capacity and utilization is discussed in the June 1990 *Federal Reserve Bulletin*.

### *Release Schedule for 1999 and 2000*

At 9:15 a.m. on:

1999: January 15, February 17, March 16, April 16, May 14, June 16, July 16, August 17, September 16, October 15, November 16, and December 15

2000: January 14, February 15, March 15, April 14, May 15, June 15, July 14, August 15, September 15, October 17, November 15, and December 15