# **FEDERAL RESERVE statistical release**



G.17 (419)

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### INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production increased 0.3 percent in November; the change in production over the previous three months was revised down, on net, an average of 0.1 percentage point per month. At 113.9 percent of its 2002 average, total industrial production in November was 2.1 percent above its year-earlier level. Output in the manufacturing sector increased 0.4 percent in November. The output of utilities dropped 1.3 percent because of a

(over)

# INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION: SUMMARY

		2002=	100				Percent cl	nange	
	2007				2007				Nov. '06 to
Industrial production	Aug. <sup>r</sup>	Sept. <sup>r</sup>	Oct.r	Nov. <sup>p</sup>	Aug. <sup>r</sup>	Sept. <sup>r</sup>	Oct.r	Nov. <sup>p</sup>	Nov. '07
Total index	114.1	114.4	113.6	113.9	1	2	7	2	2.1
				113.9	1	.3 .2	7	.3	2.1
Previous estimates	114.4	114.6	114.0		.1	.2	5		
Major market groups									
Final Products	115.0	115.1	114.2	114.5	3	.1	8	.2	1.5
Consumer goods	109.6	109.4	108.5	108.3	2	1	8	2	.7
Business equipment	133.1	134.3	133.4	134.7	6	.9	6	.9	4.0
Nonindustrial supplies	111.3	111.7	110.7	110.5	.0	.4	9	2	.9
Construction	109.5	109.1	108.5	108.5	3	4	6	1	1.0
Materials	114.3	114.7	114.0	114.6	.0	.4	6	.5	3.2
Witterfals	114.5	114.7	114.0	114.0	.0		0	.5	3.2
Major industry groups									
Manufacturing (see note below)	115.9	116.1	115.3	115.8	6	.2	6	.4	2.2
Previous estimates	116.1	116.3	115.8		4	.2	4		
Mining	100.5	102.4	101.7	102.9	8	1.9	7	1.1	2.1
Utilities	111.5	111.1	109.6	108.1	5.0	4	-1.3	-1.3	1.2
	111.0		10).0	100.1		• •	1.0	1.0	1.2
					1				Capacity
			P	ercent of ca	pacity				growth
	Average	1994-95	2001-02	2006	2007				Nov. '06 to
Capacity utilization	1972–2006	high	low	Nov.	Aug. <sup>r</sup>	Sept. <sup>r</sup>	Oct.r	Nov. <sup>p</sup>	Nov. '07
Total industry	81.0	85.1	73.6	81.3	82.0	82.1	81.4	81.5	1.8
Previous estimates	81.0	83.1	/3.0	81.3			81.7	81.3	1.0
Previous estimates					82.2	82.2	81./		
Manufacturing (see note below)	79.8	84.6	71.6	79.8	80.4	80.4	79.7	79.9	2.1
Previous estimates	77.0	04.0	71.0	77.0	80.5	80.5	80.1	17.7	2.1
Mining	87.4	88.9	84.8	90.7	90.2	91.9	91.3	92.3	.4
Utilities	86.7	93.7	83.8	85.4	88.1	87.7	86.4	85.2	1.5
Offities	80.7	93.7	03.0	83.4	00.1	07.7	80.4	63.2	1.3
Stage-of-process groups									
Crude	86.5	89.5	82.0	88.7	89.0	90.4	89.4	90.5	.5
Primary and semifinished	82.2	88.2	74.6	82.0	82.9	82.7	82.0	81.9	2.3
Finished	77.8	80.5	70.0	78.1	78.6	78.6	78.0	78.1	1.9
1 IIIIoilea	77.0	00.5	70.0	70.1	70.0	70.0	70.0	70.1	1./

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Note. The statistics in this release cover output, capacity, and capacity utilization in the U.S. industrial sector, which is defined by the Federal Reserve to comprise manufacturing, mining, and electric and gas utilities. Mining is defined as all industries in sector 21 of the North American Industry Classification System (NAICS); electric and gas utilities are those in NAICS sectors 2211 and 2212. Manufacturing comprises NAICS manufacturing industries (sector 31-33) plus the logging industry and the newspaper, periodical, book, and directory publishing industries. Logging and publishing are classified elsewhere in NAICS (under agriculture and information respectively), but historically they were considered to be manufacturing and were included in the industrial sector under the Standard Industrial Classification (SIC) system. In December 2002 the Federal Reserve reclassified all its industrial output data from the SIC system to NAICS.

decline in electric utilities; the output at mines increased 1.1 percent. Capacity utilization for total industry edged up, to 81.5 percent, a rate slightly above its year-earlier level and 0.5 percentage point above its 1972–2006 average.

## Market Groups

The output of consumer goods declined 0.2 percent in November; the decreases were concentrated in nondurables. The output of durable consumer goods advanced 0.9 percent, as the production of automotive products moved up 1.9 percent after having declined for three consecutive months. The gain in automotive products in November reflected an increase of 0.3 million units in the assemblies of light motor vehicles, to 10.4 million units (annual rate). The production index for home electronics moved up 1.5 percent, but the production indexes for appliances, furniture, and carpeting and for miscellaneous durable goods were unchanged. For a second consecutive month, the production index for nondurable non-energy consumer goods fell. The indexes for consumer chemical products, paper products, and foods and tobacco all registered declines. After having dropped 1.1 percent in October, the index for consumer energy goods fell 0.7 percent in November, as the residential use of electricity decreased.

The index for business equipment moved up 0.9 percent. All of its major components posted gains. The output of transit equipment rose 1 percent, an increase led by a bounceback in assemblies of medium and heavy trucks. The index for information processing equipment increased 2.3 percent; the gains were widespread across components. The index for industrial and other equipment moved up 0.2 percent, and the output of defense and space equipment advanced 1.3 percent.

The index for construction supplies moved down 0.1 percent, its fifth consecutive monthly decline; nevertheless, the index remained 1.0 percent above its year-earlier level. The index for business supplies edged down 0.2 percent.

The production of materials increased 0.5 percent after having decreased a similar amount in October. Within non-energy materials, the index for durable materials advanced 0.9 percent in November, and the gains were widespread across components. Small gains in consumer parts and in other durable materials were accompanied by a more sizable gain in equipment parts. The output of nondurable materials moved up 0.4 percent; gains in chemical materials more than offset decreases in textile and paper materials. The index for energy materials decreased 0.1 percent after having dropped 0.8 percent in October.

### **Industry Groups**

Manufacturing output increased 0.4 percent in November after having decreased 0.6 percent in October. The factory operating rate rose 0.2 percentage point in November, to 79.9 percent, a rate that is about equal to its 1972–2006 average. The production of durable goods moved up 0.8 percent. Many categories of durable goods showed production gains, notably computer and electronic products, motor vehicles and parts, and primary metals. Small decreases in output were recorded in wood products, nonmetallic mineral products, fabricated metal products, and miscellaneous manufacturing. The production of nondurable goods increased 0.1 percent after having decreased 0.7 percent in October. Significant declines in November were registered for textile and product mills, paper, and petroleum and coal products. However, the production of plastics and rubber products rose 1.3 percent, and the output of chemicals advanced 0.5 percent. The output of non-NAICS industries (publishing and logging) fell 1.0 percent.

The output of mines increased 1.1 percent in November, and the capacity utilization rate for mining increased to 92.3 percent, a rate 4.9 percentage points above its long-run average. The output of utilities

decreased 1.3 percent. The output of natural gas utilities increased 1.0 percent, but that of electric utilities dropped 1.7 percent. The operating rate at utilities declined 1.2 percentage points, to 85.2 percent, a rate below its 1972–2006 average.

Capacity utilization by stage of processing changed as follows: For industries at the crude stage, utilization increased 1.1 percentage points, to 90.5 percent, a rate 4 percentage points above its 1972–2006 average. For industries at the primary and semifinished stages, utilization decreased 0.1 percentage point, to 81.9 percent, a rate 0.3 percentage point below its long-run average. For industries at the finished stage, utilization moved up 0.1 percentage point, to 78.1 percent, 0.3 percentage point above its long-run average.

### **Tables**

- 1. Industrial Production: Market and Industry Group Summary; percent change
- 2. Industrial Production: Special Aggregates and Selected Detail; percent change
- 3. Motor Vehicle Assemblies
- 4. Industrial Production: Market and Industry Group Summary; indexes
- 5. Industrial Production: Special Aggregates and Selected Detail; indexes
- 6. Diffusion Indexes of Industrial Production
- 7. Capacity Utilization
- 8. Industrial Capacity
- 9. Gross Value of Products and Nonindustrial Supplies
- 10. Gross-Value-Weighted Industrial Production: Stage-of-Process Groups
- 11. Historical Statistics: Total Industry
- 12. Historical Statistics: Manufacturing
- 13. Historical Statistics: Total Industry Excluding Selected High-Technology Industries
- 14. Historical Statistics: Manufacturing Excluding Selected High-Technology Industries

Further detail is available on the Board's website (www.federalreserve.gov/releases/G17/).

### **Revision of Industrial Production and Capacity Utilization**

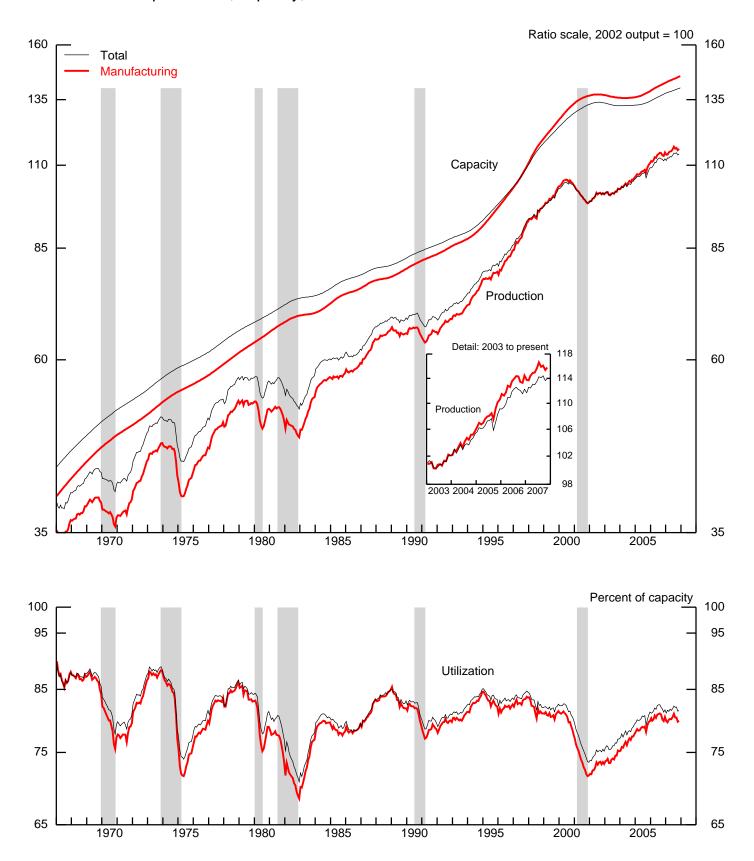
The Federal Reserve Board plans to issue an annual revision to the index of industrial production (IP) and the related measures of capacity and capacity utilization around the end of March 2008. The revised IP indexes will incorporate data from the 2006 Annual Surveys of Manufacturers and data from selected editions of the 2006 Current Industrial Reports, all from the U.S. Census Bureau. Annual data from the U.S. Geological Survey regarding metallic and nonmetallic minerals (except fuels) for 2006 will also be incorporated. The updating will include revisions to the monthly indicator (either product data or input data) and to seasonal factors for each industry as well as changes in the estimation methods for some series. Any changes to methods for estimating the output of an industry will affect the index from 1972 to the present.

After the publication of the revision, later monthly releases will include new or revised indexes for a six-month reporting window: one month of new data and revisions to the previous five months of data. The new longer reporting window will allow the incorporation of additional lagging data before an annual revision. The longer reporting window will cause the latest month of data shown for a few indexes to be as many as five months earlier than the latest value for aggregate industrial production; data for detailed production indexes are not shown in the supplement to the G.17 until either the underlying data are available or the reporting window is closed. Currently, the data issued for only a few of the published indexes would be affected by this change.

Capacity and capacity utilization will be revised to incorporate data from the Census Bureau's 2006 Survey of Plant Capacity, which covers manufacturing, along with new data on capacity from the U.S. Geological Survey, the Department of Energy, and other organizations.

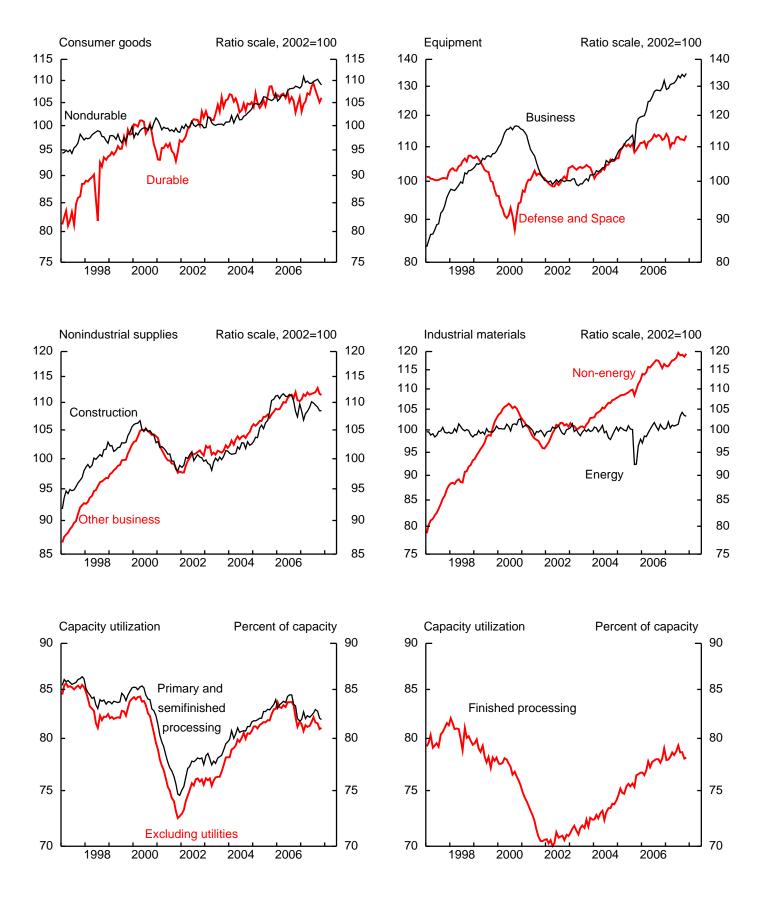
Once the revision is published, it will be available on the Board's website at www.federalreserve.gov/releases/G17. The revised data will also be available through the website of the Department of Commerce. Further information on these revisions can be obtained from the Board's Industrial Output Section (telephone number 202-452-3197).

# 1. Industrial production, capacity, and utilization

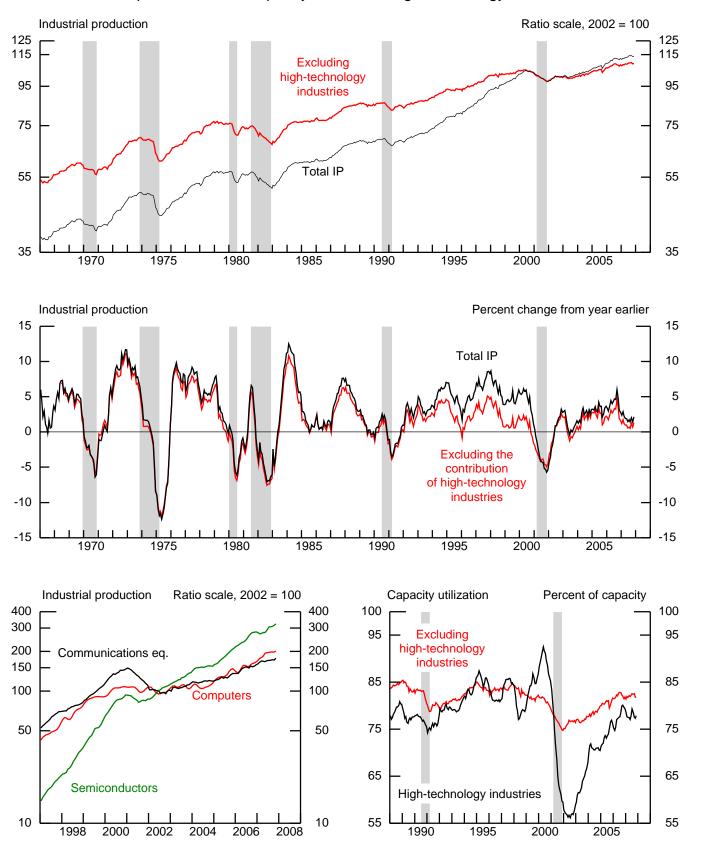


Notes: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER). See note on cover page.

# 2. Industrial production and capacity utilization



### 3. Industrial production and capacity utilization, high-technology industries



Notes: High-technology industries are defined as semiconductors and related electronic components (NAICS 334412-9), computers (NAICS 3341), and communications equipment (NAICS 3342).

The shaded areas are periods of business recession as defined by the NBER.

Table 1
INDUSTRIAL PRODUCTION: MARKET AND INDUSTRY GROUP SUMMARY

Percent change, seasonally adjusted			Fou	ırth quart	er to	Ι				Ι				
*.		2005	I .	urth quar		2006	Annua	al rate		2007	Month	ly rate		Nov. '06
Item		2006 proportion <sup>1</sup>	2004	2005	2006	2006 Q4	2007 Q1	Q2	Q3 <sup>r</sup>	2007 Aug. <sup>r</sup>	Sept.r	Oct.r	Nov. <sup>p</sup>	to Nov. '07
Total IP		100.00	3.0	3.2	3.5	-1.5	1.1	3.5	3.9	1	.3	7	.3	2.1
MARKET GROUPS														
Final products and nonindustrial supplies	1	57.43	2.6	4.8	2.6	3	1.5	2.9	2.6	2	.2	8	.1	1.3
Consumer goods		29.36	1.8	2.7	1.1	1	3.4	2.3	1.7	2	1	8	2	.7
Durable Automotive products		7.16 3.33	2 -3.2	2.3	-2.5 -4.6	-4.0 -3.4	7 .4	12.8 20.2	1.3	-1.3 -2.4	-1.4 -2.2	-1.3 -1.1	.9 1.9	1.5 3.2
Automotive products Home electronics		.36	14.2	16.8	13.1	8.1	40.8	21.6	-2.0	-2.4	-2.2	-2.2	1.5	13.4
Appliances, furniture, carpeting		1.23	2.2	3.1	-4.7	-8.4	-8.2	4.2	-4.5	2	-1.3	-1.5	.0	-4.5
Miscellaneous goods		2.24	2.1	6.4	6	-4.4	-4.0	5.4	4.7	3	4	-1.2	.0	.4
Nondurable		22.19	2.6	2.9	2.2	1.2	4.7	8	1.8	.2	.3	7	5	.4
Non-energy		16.90	2.2	3.4	2.7	4.4	2.1	1.2	.8	7	.3	5	4	.3
Foods and tobacco		9.18	2.3	4.8	2.2	7.0	4.3	2.9	.4	9	.4	5	3	.9
Clothing		.59	-10.5	3	.7	-2.6	1.3	-1.5	-7.1	-2.2	6	-1.2	.0	-3.8
Chemical products Paper products		4.83 1.79	3.8	.9 2.2	3.8	-1.4 9.8	-2.2 2.2	-3.3 3.9	2.9	1 9	3 1.1	2 -1.5	5 9	6 2
Energy		5.29	3.7	1.7	.7	-8.0	13.5	-7.5	5.4	3.5	.1	-1.3	9 7	1.0
Lifelgy		3.2)	3.7	1.7	.,	-0.0	13.3	-7.5	3.4	3.3	.1	-1.1	/	1.0
Business equipment		9.95	5.3	11.2	9.7	5.0	-1.3	5.8	7.3	6	.9	6	.9	4.0
Transit		2.03	6.0	20.5	16.9	11.2	-1.2	-1.3	10.0	.5	.3	9	1.0	1.2
Information processing		2.78	7.2	13.7	10.1	7.7	9.3	10.8	5.4	2	.4	.1	2.3	9.3
Industrial and other		5.14 1.75	3.9 2.5	6.7 3.8	6.9	1.2 -3.1	-6.9 -1.2	6.0 -2.0	7.3	-1.2 7	1.4	9 3	1.3	2.3
Defense and space equipment		1./3	2.3	3.8	2.3	-3.1	-1.2	-2.0	3.0	/	.0	3	1.3	1.3
Construction supplies Business supplies		4.55 11.02	1.6 2.9	8.0 3.4	-2.1 2.4	-8.9 -1.0	-2.8 .9	5.6 2.0	1.2 1.7	3 .1	4 .7	6 -1.0	1 2	1.0
Materials		42.57	3.4	1.1	4.7	-3.1	.5	4.2	5.6	.0	.4	6	.5	3.2
Non-energy		30.80	4.8	3.5	4.5	-4.0	.3	5.5	4.9	6	.2	5	.7	3.4
Durable		19.15	5.4	7.0	5.6	-3.9	1	7.3	8.6	2	.0	3	.9	5.1
Consumer parts		3.30	.2	1.7	-3.2	-9.8	-1.9	7.6	4	1	-2.1	-1.1	.6	5
Equipment parts		6.64	9.4	16.0	19.4	10.3	-1.9	5.2	17.2	1	.4	.7	1.4	7.4
Other		9.21	4.5	2.7	7	-11.6	1.9	8.8	5.8	3	.4	7	.6	5.5
Nondurable		11.64	3.8	-2.1	2.6	-4.2	1.0	2.7	9	-1.2	.5	9	.4	.7
Textile		.60 2.30	-3.4 3.9	.2 2	-7.3 2.5	-13.3 2.8	-9.8 -3.9	7 -4.5	-20.9	-3.9	1.0	6	-2.0	-10.6 -2.9
Paper Chemical		5.49	7.7	-6.5	4.7	-10.2	7.5	4.3	-1.2 -1.7	.1 -1.6	-1.0	3 8	4 1.2	3.7
Energy		11.77	2	-4.2	5.4	7	1.0	.6	7.6	1.8	.9	8	1	2.7
INDUSTRY GROUPS														
Manufacturing		81.86	3.4	4.4	3.4	-1.7	.8	4.3	3.6	6	.2	6	.4	2.2
Manufacturing (NAICS)	31–33	77.70	3.5	4.6	3.6	-2.1	1.0	4.4	3.9	6	.1	6	.5	2.5
Durable manufacturing	224	41.46	3.7	7.9	4.7	-1.5	4	7.3	6.3	5	2	5	.8	3.6
Wood products	321	1.39	1.8	10.5	-14.5	-25.5	-5.4	8.3	-4.9	-1.7	-2.2	-3.2	4	-4.7
Nonmetallic mineral products Primary metal	327 331	2.43 3.25	3.8 7.4	5.8	-1.9 -3.5	-9.3 -28.2	-5.3 10.1	4.5 13.5	9.3	-1.1	.0 -2.5	9 .0	2 1.0	1.5 6.9
Fabricated metal products	332	5.63	1.6	6.1	3.8	-26.2	2	5.2	4.4	-1.1	-2.3 .4	.2	1	2.9
Machinery	333	5.12	5.0	8.2	5.3	-3.1	-9.4	3.0	6.3	-1.8	2.0	-1.3	.5	1.3
Computer and electronic products	334	7.51	10.2	18.3	18.3	14.6	3.1	8.5	14.7	.1	.2	.9	2.1	10.0
Electrical equip., appliances,														
and components	335	2.03	2.0	3.8	2.4	-3.3	5.4	6.9	.9	-1.1	.6	-1.6	.6	3.1
Motor vehicles and parts	3361–3	5.54	-1.6	.2	-3.8	-4.0	-7.5	13.3	1.1	-1.3	-3.2	-1.5	1.7	-1.5
Aerospace and miscellaneous	2264.0	2.76	2.0	15.0	147	0.0	10.2	4.0	11.2	7	1.0	1	_	7.5
transportation equipment	3364–9	3.76	2.0	15.0	14.7	9.0	10.3	4.0	11.3	.7	1.0	1	.6	7.5 -2.1
Furniture and related products Miscellaneous	337 339	1.57 3.22	3.5	1.7 8.7	-1.2 4.8	-6.9 7.9	-8.6 1.6	.7 8.8	6.2 2.6	.3 5	-1.8 1.4	8 -1.1	.4 1	2.6
Wiscendicous	337	3.22	2.2	0.7	4.0	1.7	1.0	0.0	2.0	5	1.4	-1.1	1	2.0
Nondurable manufacturing		36.24	3.2	.9	2.3	-2.9	2.6	1.2	1.3	7	.5	7	.1	1.3
Food, beverage, and tobacco products	311,2	10.80	1.2	5.3	2.6	7.4	3.9	4.0	1.5	8	.6	5	3	1.5
Textile and product mills	313,4	1.05	7	2.0	-7.7	-14.6	-8.4	2.7	-18.0	-3.2	3	6	-2.2	-9.7
Apparel and leather	315,6	.64	-9.6	.4	1	-3.9	.3	-2.0	-7.4	-2.1	3	-1.0	1	-3.9
Paper Printing and support	322 323	2.61 2.05	3.0	1 1.9	1 5.2	4 8.4	-6.0 3.1	-1.5 -8.9	8 -3.0	3	4 .7	-1.5 -1.0	5 .2	-3.7 -1.9
Petroleum and coal products	323	3.83	10.0	-3.6	2.6	-13.4	8.8	-8.9 -7.1	3.3	.1	.3	.3	6	1.8
Chemical	325	11.81	6.1	-2.5	3.8	-7.5	1.3	1.8	2.7	9	.6	7	.5	2.3
Plastics and rubber products	326	3.46	.8	3.0	.2	-8.9	6.7	8.6	5.1	6	1.1	-1.0	1.3	6.7
Other manufacturing (non-NAICS)	1133,5111	4.16	2.6	.6	.2	7.5	-1.9	2.3	-2.0	-1.0	1.0	-1.6	-1.0	-2.9
Mining	21	8.58	8	-5.5	8.0	3.0	-4.8	.1	5.1	8	1.9	7	1.1	2.1
Utilities Electric	2211,2	9.55	1.6	2.1	.3	-3.6	8.7	-1.0	4.8	5.0	4	-1.3	-1.3	1.2
Electric Natural gas	2211 2212	8.04 1.51	2.2 -1.4	3.4 -3.4	.0 1.9	-2.9 -7.3	7.9 13.3	5 -3.7	5.9 -1.3	4.6 6.9	.5 -5.5	4 -6.6	-1.7 1.0	2.6 -6.2
ivaturai gas	2212	1.31	-1.4	-3.4	1.9	-1.5	13.3	-3./	-1.3	0.9	-5.5	-0.0	1.0	-0.2

NOTE. Under the industry groups, the figures to the right of the series descriptions are 2002 North American Industry Classification System (NAICS) codes. The abbreviation pt denotes part of a NAICS code. Additional industry detail is available on the Board's web site (www.federalreserve.gov/releases/G17). Under market groups, in the products category, miscellaneous consumer nondurables, oil and gas drilling, and manufactured homes are not shown separately; in the nondurable materials category, containers and miscellaneous nondurable materials are not shown

<sup>1.</sup> The proportion data are estimates of the relative contribution of each series to the growth of total industrial production in the following year.

Table 2
INDUSTRIAL PRODUCTION: SPECIAL AGGREGATES AND SELECTED DETAIL
Percent change, seasonally adjusted
Fourth quarter to

Percent change, seasonally adjusted				rth quart urth quar			Annua	l rate			Month	ly rate		Nov. '06
Item		2006 proportion	2004	2005	2006	2006 Q4	2007 Q1	Q2	Q3 <sup>r</sup>	2007 Aug. <sup>r</sup>	Sept.r	Oct.r	Nov. <sup>p</sup>	to Nov. '07
Total industry		100.00	3.0	3.2	3.5	-1.5	1.1	3.5	3.9	1	.3	7	.3	2.1
Energy		20.53	1.5	-1.8	4.0	-2.8	4.8	-1.4	6.1	2.2	.6	9	3	2.1
Consumer products		5.29	3.7	1.7	.7	-8.0	13.5	-7.5	5.4	3.5	.1	-1.1	7	1.0
Commercial products		2.74	4.5	.5	2.3	-2.5	4.0	3.6	3.2	2.4	.2	5	-1.4	2.3
Oil and gas well drilling	213111	.72	8.3	11.8	14.7	.5	8.6	-6.3	-1.5	5	2	-3.8	3.7	.7
Converted fuel Primary materials		3.79 7.98	2.1 -1.3	-2.5 -4.9	2.2 6.8	-8.9 3.4	5.3 -1.0	5.9 -1.9	9.5 6.6	6.8 7	6 1.7	-1.5 4	7 .2	4.8 1.7
Non-energy		79.47	3.3	4.6	3.3	-1.1	.1	4.7	3.3	7	.2	7	.4	2.1
Selected high-technology industries Computers and peripheral equipment	3341	4.84 1.20	10.4 6.6	28.1 30.4	24.6 12.1	24.7 24.4	9.2 32.8	16.6 39.4	25.8 14.0	.4 .3	.4 .2	1.1	2.3 1.7	16.9 22.9
Communications equipment	3342	1.06	6.2	12.9	14.8	9.6	27.7	8.3	8.2	3	1.1	5	3.3	14.6
Semiconductors and related electronic components	334412–9	2.58	13.7	33.8	34.8	31.1	-6.9	9.5	42.2	.7	.2	2.5	2.1	15.4
Excluding selected high-technology industries		74.63	2.8	3.1	1.9	-2.7	5	3.9	2.0	7	.2	8	.3	1.2
Motor vehicles and parts	3361-3	5.54	-1.6	.2	-3.8	-4.0	-7.5	13.3	1.1	-1.3	-3.2	-1.5	1.7	-1.5
Motor vehicles Motor vehicle parts	3361 3363	2.41 2.72	-3.0 -1.1	-2.5 1.3	-6.0 2	-5.2 -3.4	-10.6 -4.0	23.1 8.8	2.1 4.0	-3.6 .7	-5.1 -1.9	-1.9 -1.1	3.3	-1.7 .3
Excluding motor vehicles and parts		69.09	3.2	3.4	2.4	-2.6	.1	3.2	2.0	7	.4	7	.2	1.4
Consumer goods		20.91	2.4	3.6	1.8	2.0	1.0	1.8	.8	7	.2	7	3	.1
Business equipment Construction supplies		7.81 4.52	4.4 1.5	8.9 8.0	10.2 -2.2	4.0 -9.1	-3.3 -3.0	4.4 5.6	7.5	5 3	1.3	6 6	.5 1	3.1
Business supplies		7.93	2.1	3.1	1.0	-1.8	.0	1.2	.0	6	1.0	-1.3	.1	2
Materials		26.14	4.4	.7	2.3	-7.0	1.1	4.6	2.2	8	.4	7	.5	2.6
Measures excluding selected high-technology industries														
Total industry		95.16	2.5	1.9	2.4	-2.7	.6	2.8	2.8	1	.3	8	.2	1.4
Manufacturing <sup>1</sup> Durable		77.02 36.79	3.0 2.8	2.9 5.2	2.0 2.0	-3.3 -4.7	.3 -1.6	3.6 6.1	2.3 3.8	7 7	.2 2	8 7	.3 .6	1.3 1.9
Measures excluding motor vehicles and parts														
Total industry		94.46	3.3	3.4	3.9	-1.3	1.6	2.9	4.0	.0	.5	7	.2	2.3
Manufacturing <sup>1</sup> Durable		76.32 36.09	3.9 4.8	4.7 9.3	3.9 6.0	-1.5 -1.0	1.4	3.7 6.4	3.8 7.0	6 4	.4 .3	6 4	.3 .7	2.5 4.4
Measures excluding selected high-technology industries														
and motor vehicles and parts Total industry		89.62	2.9	2.1	2.8	-2.7	1.1	2.2	2.9	1	.5	8	.1	1.6
Manufacturing <sup>1</sup>		71.48	3.4	3.1	2.5	-3.2	.9	2.9	2.4	6	.4	7	.2	1.6
Stage-of-process components of non-energy materials, measures of the input to Finished processors Primary and semifinished processors		12.85 17.95	5.2	8.3 1	9.0	2.6	-2.6 2.5	3.7 6.9	7.3 3.2	2 9	5 .6	.0	.7 .7	2.7 3.9
Timary and scinning processors		17.93	7.7	1	1.3	-0.0	2.3	0.7	3.2	9	.0	)	. /	3.)

Table 3 MOTOR VEHICLE ASSEMBLIES Millions of units, seasonally adjusted annual rate

willions of units, seasonarry adjusted annual rate									
	2006	2006	2007			2007			
Item	average	Q4	Q1	Q2	Q3	Aug.	Sept.	Oct.	Nov.
Total	11.26	10.96	10.58	11.07	10.90	10.94	10.37	10.32	10.63
Autos	4.37	4.38	3.97	3.89	3.91	3.94	3.64	3.92	3.94
Trucks	6.89	6.57	6.61	7.18	6.99	7.00	6.73	6.41	6.69
Light	6.43	6.13	6.25	6.91	6.74	6.76	6.48	6.19	6.43
Medium and heavy	.46	.45	.36	.27	.25	.24	.25	.22	.26
Memo									
Autos and light trucks	10.80	10.51	10.22	10.80	10.65	10.70	10.12	10.10	10.37

NOTE. Seasonal factors and underlying data for auto, light truck, and medium and heavy truck production are available on the Board's web site, www.federalreserve.gov/releases/G17/mvsf.htm

r Revised. p Preliminary.

1. Refer to note on cover page.

 Table 4

 INDUSTRIAL PRODUCTION INDEXES: MARKET AND INDUSTRY GROUP SUMMARY

 2002 = 100, seasonally adjusted

002 = 100, seasonally adjusted											
Item		2006 proportion	2007 Mar.	Apr.	May	June	July	Aug.r	Sept.r	Oct. <sup>r</sup>	Nov. <sup>p</sup>
Total IP		100.00	112.4	113.1	113.0	113.5	114.2	114.1	114.4	113.6	113.9
Market Groups											
Final products and nonindustrial supplies		57.43	112.8	113.4	113.1	113.7	114.3	114.0	114.2	113.3	113.4
Consumer goods		29.36	108.6	109.2	108.8	109.2	109.7	109.6	109.4	108.5	108.3
Durable		7.16	105.2	107.1	106.7	108.7	109.3	107.9	106.4	105.0	106.0
Automotive products		3.33	99.7	102.3	101.1	104.1	105.3	102.8	100.6	99.4	101.3
Home electronics		.36	191.1	200.8	199.4	200.3	200.4	199.1	197.8	193.4	196.3
Appliances, furniture, carpeting Miscellaneous goods		1.23 2.24	99.8 107.1	100.4 107.6	101.3 108.1	101.1 109.4	100.3 110.0	100.1 109.7	98.9 109.2	97.4 107.9	97.4 107.9
Nondurable		22.19	107.1	107.8	108.1	109.4	10.0	110.0	110.3	107.9	107.9
Non-energy		16.90	109.9	110.3	109.4	110.0	110.7	10.0	110.3	109.6	109.0
Foods and tobacco		9.18	112.7	113.1	112.8	113.3	113.7	112.7	113.2	112.6	112.2
Clothing		.59	78.7	79.4	79.7	78.8	79.2	77.4	77.0	76.1	76.1
Chemical products		4.83	110.5	110.9	109.9	109.5	111.1	110.9	110.6	110.3	109.8
Paper products		1.79	105.5	105.6	105.1	105.8	106.0	105.1	106.2	104.6	103.6
Energy		5.29	108.9	108.7	108.3	107.4	107.0	110.8	110.9	109.7	108.9
Business equipment		9.95	130.6	130.9	131.1	132.2	133.9	133.1	134.3	133.4	134.7
Transit		2.03	144.3	143.7	142.1	145.5	146.6	147.3	147.7	146.4	147.8
Information processing Industrial and other		2.78 5.14	147.5 117.3	148.6 117.5	149.8 117.8	151.0 118.1	151.8 120.4	151.4 118.9	152.1 120.6	152.2 119.5	155.7 119.7
Defense and space equipment		1.75	109.8	117.5	117.8	118.1	120.4	118.9	112.3	119.5	119.7
Describe and space equipment		1.73	107.0	111.1	111.0	112.7	113.0	112.2	112.3	112.0	113.3
Construction supplies		4.55	107.9	108.3	109.1	110.2	109.9	109.5	109.1	108.5	108.5
Business supplies		11.02	111.2	111.9	111.5	111.7	111.8	111.9	112.8	111.6	111.4
Materials		42.57	112.0	112.7	112.7	113.2	114.2	114.3	114.7	114.0	114.6
Non-energy		30.80	116.8	117.5	117.7	118.2	119.6	118.9	119.1	118.5	119.3
Durable		19.15	124.9	126.0	126.5	127.4	129.4	129.1	129.1	128.8	129.9
Consumer parts		3.30	98.3	98.6	99.1	99.8	99.8	99.7	97.7	96.6	97.1
Equipment parts		6.64	169.5	170.5	170.5	173.4	178.4	178.1	178.8	180.1	182.6
Other Nondurable		9.21 11.64	108.3 104.5	109.7 104.7	110.4 104.4	110.4 104.6	111.8 105.0	111.4 103.7	111.9 104.2	111.2 103.2	111.9
Textile		.60	80.9	80.8	81.3	80.7	78.1	75.1	75.8	75.4	73.9
Paper		2.30	100.7	100.3	99.6	98.4	99.4	99.5	98.5	98.2	97.7
Chemical		5.49	111.4	111.1	111.2	111.6	111.8	110.0	110.7	109.9	111.2
Energy		11.77	100.5	101.1	100.9	101.2	101.4	103.3	104.2	103.4	103.3
INDUSTRY GROUPS											
Manufacturing		81.86	114.4	114.8	114.9	115.7	116.6	115.9	116.1	115.3	115.8
Manufacturing (NAICS)	31–33	77.70	115.4	115.8	115.9	116.7	117.7	117.0	117.1	116.4	117.0
Durable manufacturing	•••	41.46	122.3	123.2	123.4	124.7	126.2	125.5	125.3	124.6	125.6
Wood products	321	1.39	98.3	98.2	100.3	101.9	100.8	99.1	96.9	93.8	93.4
Nonmetallic mineral products Primary metal	327 331	2.43 3.25	108.3 108.8	108.5 111.3	109.2 112.1	110.6 110.6	111.7 114.0	112.0 112.8	112.0 110.0	111.0 109.9	110.7 111.0
Fabricated metal products	332	5.63	110.6	111.3	110.8	112.1	112.5	112.3	112.8	113.0	112.9
Machinery	333	5.12	118.0	117.2	117.6	117.5	119.9	117.7	120.1	118.5	119.1
Computer and electronic products	334	7.51	182.3	184.2	184.4	187.7	191.6	191.8	192.3	193.9	198.0
Electrical equip., appliances,											
and components	335	2.03	107.9	109.3	108.7	109.3	109.9	108.7	109.3	107.6	108.3
Motor vehicles and parts	3361–3	5.54	99.4	100.8	100.3	102.8	103.6	102.2	99.0	97.5	99.1
Aerospace and miscellaneous transportation equipment	3364–9	3.76	130.2	131.1	131.1	133.5	134.4	135.3	136.7	136.5	137.3
Furniture and related products	337	1.57	101.0	100.4	101.2	102.2	103.2	103.6	101.7	100.9	101.3
Miscellaneous	339	3.22	121.6	122.5	123.1	123.4	123.6	123.0	124.7	123.4	123.2
Nondurable manufacturing		36.24	107.8	107.7	107.8	107.9	108.5	107.7	108.3	107.5	107.6
Food, beverage, and tobacco products	311,2	10.80	113.0	107.7	107.8	113.9	114.5	113.5	114.1	113.5	113.2
Textile and product mills	313,4	1.05	86.5	87.3	87.8	87.9	85.3	82.6	82.3	81.8	80.1
Apparel and leather	315,6	.64	79.5	80.0	80.3	79.4	79.5	77.9	77.7	76.9	76.9
Paper	322	2.61	97.2	97.3	96.7	96.1	96.8	96.5	96.1	94.7	94.3
Printing and support	323	2.05	105.6	104.7	103.1	102.1	101.7	102.5	103.2	102.2	102.4
Petroleum and coal products	324	3.83	111.7	107.9	110.6	110.1	110.3	110.4	110.7	111.0	110.4
Chemical Plastics and rubber products	325 326	11.81 3.46	110.4 107.1	110.5 108.0	110.6 108.5	110.8 109.0	111.8 109.9	110.9 109.3	111.5 110.5	110.7 109.3	111.3
Other manufacturing (non-NAICS)	1133,5111		99.1	99.5	99.0	99.4	99.1	98.1	99.1	97.5	
	ŕ	4.16									96.5
Mining Utilities	21 2211,2	8.58 9.55	100.2 106.6	100.2 109.7	99.9 108.0	100.4 107.3	101.3 106.2	100.5 111.5	102.4 111.1	101.7 109.6	102.9 108.1
Electric	2211	8.04	109.2	110.7	110.4	109.9	108.4	113.4	114.0	113.5	111.6

r Revised. p Preliminary. NOTE. Refer to notes on table 1.

 Table 5

 INDUSTRIAL PRODUCTION INDEXES: SPECIAL AGGREGATES

 2002 = 100, seasonally adjusted

2002 = 100, seasonarry adjusted											
Item		2006 proportion	2007 Mar.	Apr.	May	June	July	Aug.r	Sept. <sup>r</sup>	Oct.r	Nov. <sup>p</sup>
Total industry		100.00	112.4	113.1	113.0	113.5	114.2	114.1	114.4	113.6	113.9
Energy		20.53	105.3	106.0	105.6	105.6	105.5	107.9	108.5	107.5	107.2
Consumer products		5.29	108.9	108.7	108.3	107.4	107.0	110.8	110.9	109.7	108.9
Commercial products		2.74	113.7	116.6	115.9	115.6	115.0	117.8	118.0	117.4	115.7
Oil and gas well drilling	213111	.72	173.0	170.6	168.4	171.9	170.3	169.5	169.1	162.8	168.8
Converted fuel		3.79	103.1	106.3	105.8	105.6	103.9	110.9	110.2	108.6	107.9
Primary materials		7.98	99.1	98.6	98.5	99.0	100.2	99.5	101.2	100.8	101.0
Non-energy		79.47	114.3	114.9	114.9	115.6	116.5	115.8	116.0	115.2	115.7
Selected high-technology industries		4.84	223.2	226.4	228.5	234.4	242.4	243.4	244.3	247.1	252.7
Computers and peripheral equipment	3341	1.20	179.9	185.2	193.2	195.0	196.9	197.6	198.0	197.9	201.2
Communications equipment	3342	1.06	168.8	168.0	167.3	169.7	171.4	170.9	172.9	171.9	177.7
Semiconductors and related											
electronic components	334412–9	2.58	273.7	277.8	277.0	288.1	305.2	307.4	308.0	315.8	322.5
Excluding selected high-technology industries		74.63	108.9	109.4	109.3	109.8	110.5	109.7	109.9	109.1	109.4
Motor vehicles and parts	3361-3	5.54	99.4	100.8	100.3	102.8	103.6	102.2	99.0	97.5	99.1
Motor vehicles	3361	2.41	97.6	100.6	99.1	103.1	105.7	101.9	96.7	94.9	98.0
Motor vehicle parts	3363	2.72	99.1	99.5	100.1	101.6	101.6	102.3	100.3	99.2	99.8
Excluding motor vehicles and parts		69.09	109.7	110.2	110.1	110.4	111.1	110.4	110.8	110.0	110.2
Consumer goods		20.91	109.1	109.6	109.2	109.6	110.1	109.4	109.6	108.8	108.5
Business equipment		7.81	123.5	123.8	123.7	124.4	126.1	125.4	127.0	126.3	126.8
Construction supplies		4.52	107.3	107.7	108.5	109.5	109.3	108.9	108.5	107.9	107.8
Business supplies		7.93	106.2	106.1	105.8	106.0	106.1	105.4	106.4	105.1	105.1
Materials		26.14	108.2	108.8	108.9	109.0	110.0	109.0	109.5	108.7	109.3
Measures excluding selected high-technology industries											
Total industry		95.16	108.1	108.6	108.5	108.9	109.4	109.3	109.6	108.7	108.9
Manufacturing <sup>1</sup>		77.02	109.2	109.5	109.5	110.0	110.8	110.0	110.2	109.3	109.6
Durable		36.79	111.8	112.5	112.6	113.5	114.5	113.8	113.5	112.7	113.3
Measures excluding motor vehicles and parts											
Total industry		94.46	113.3	113.9	113.8	114.2	114.9	114.9	115.4	114.6	114.9
Manufacturing <sup>1</sup>		76.32	115.7	116.0	116.2	116.7	117.7	117.0	117.5	116.8	117.2
Durable		36.09	126.6	127.3	127.6	128.7	130.3	129.8	130.2	129.7	130.5
Measures excluding selected high-technology											
industries and motor vehicles and parts		1									
Total industry		89.62	108.6	109.1	109.0	109.3	109.8	109.7	110.2	109.4	109.5
Manufacturing <sup>1</sup>		71.48	110.0	110.2	110.3	110.6	111.3	110.6	111.1	110.3	110.5
Stage-of-process components of non-energy materials, measures of the input to		12.05	120.0	120.2	120.2	120.2	122.2	122.0	121 4	121 4	122.4
Finished processors		12.85	128.8	129.2	129.3	130.3	132.3	132.0	131.4	131.4	132.4
Primary and semifinished processors		17.95	108.1	108.9	109.2	109.5	110.5	109.5	110.2	109.2	110.0

Table 6
DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
One month earlier												
2005	54.8	50.5	52.1	52.5	56.4	56.1	56.8	51.2	61.1	58.4	58.4	52.1
2006	63.4	48.2	58.7	60.4	50.2	61.1	59.4	51.2	46.5	41.6	43.2	59.4
2007	46.9	53.6	57.8	59.1	51.2	57.4	55.1	43.6	56.4	40.4		
Three months earlier												
2005	58.7	61.4	54.8	53.1	57.8	60.1	57.8	57.8	56.8	56.1	56.4	57.8
2006	61.4	56.8	63.0	59.7	56.1	61.1	58.1	57.4	52.5	43.2	36.6	45.5
2007	45.2	53.5	50.2	61.1	60.1	61.4	59.7	53.5	52.8	43.6		
Six months earlier												
2005	58.7	57.4	59.7	58.1	62.7	59.1	61.1	55.8	62.4	63.0	59.4	56.4
2006	59.1	57.4	64.0	63.0	62.0	64.0	61.4	64.4	59.4	47.5	44.2	46.9
2007	36.3	42.2	42.9	54.1	57.1	57.4	65.7	57.8	61.7	51.2		

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.

r Revised. p Preliminary.

1. Refer to note on cover page.

Table 7
CAPACITY UTILIZATION
Percent of capacity, seasonally adjusted

ercent of capacity, seasonarry adjusted			1072	1000	1004	2001					_			
Item		2006	1972- 2006	1988- 89	1994- 95	2001- 02	2006	2007			2007			
Item		proportion	ave.	high	high	low	Q4	Q1	Q2	Q3 <sup>r</sup>	Aug.r	Sept.r	Oct.r	Nov.
Total industry		100.00	81.0	85.0	85.1	73.6	81.5	81.3	81.7	82.1	82.0	82.1	81.4	81.:
Manufacturing <sup>1</sup>		82.52	79.8	85.4	84.6	71.6	80.1	79.8	80.3	80.6	80.4	80.4	79.7	79.9
Manufacturing (NAICS)	31–33	78.53	79.6	85.3	84.7	71.0	79.9	79.6	80.0	80.4	80.2	80.4	79.5	79.
Daniel I among for trade		40.55	70.0	04.5	04.2	co 1	70.5	77.7	70.4	70.0	70.0	70.5	77.0	78.
Durable manufacturing Wood products	321	42.55 1.41	78.0 80.2	84.5 88.2	84.2 87.7	68.1 71.0	78.5 74.3	77.7 73.1	78.4 74.6	79.0 73.8	78.9 73.9	78.5 72.3	77.9 70.0	/8. 69.
Nonmetallic mineral products	327	2.34	79.5	85.1	84.1	75.8	79.6	78.0	78.6	80.1	80.2	80.1	79.3	79.
Primary metal	331	2.34	80.8	93.8	95.6	68.5	82.2	84.4	87.0	87.5	87.9	85.6	85.4	86.
Fabricated metal products	332	5.63	77.3	81.6	85.1	69.2	80.2	79.9	80.6	81.2	81.1	81.3	81.4	81.
Machinery	333	5.14	78.7	85.2	87.6	63.7	80.2	78.4	78.6	79.4	78.4	79.8	78.7	78.
Computer and electronic products	334	8.43	78.3	81.4	84.3	58.6	77.3	75.3	74.3	74.4	74.4	73.7	73.5	74
Electrical equip., appliances,	334	0.43	76.5	01.4	04.3	36.0	11.3	13.3	74.3	/4.4	/4.4	13.1	13.3	/4
and components	335	1.90	83.2	89.1	93.1	71.8	84.3	85.0	86.2	86.2	85.8	86.2	84.7	85.
Motor vehicles and parts	3361–3	5.92	77.5	89.7	89.0	68.9	74.7	73.6	76.7	77.8	78.3	76.1	75.3	76.
Aerospace and miscellaneous	3301-3	3.72	11.5	07.7	07.0	00.7	, 4.7	13.0	70.7	77.0	70.3	70.1	15.5	, 0
transportation equipment	3364–9	3.96	72.5	87.1	68.5	62.8	78.8	80.3	80.6	82.4	82.3	83.0	82.7	83
Furniture and related products	337	1.61	78.5	82.2	82.9	67.8	78.3	76.6	76.7	77.8	78.4	77.0	76.4	76
Miscellaneous	339	3.36	76.7	82.5	81.3	70.6	78.8	78.3	79.1	78.6	78.1	78.9	77.8	77
Nondurable manufacturing		35.98	81.7	86.8	85.4	74.9	81.6	82.0	82.0	82.1	81.8	82.2	81.5	81
Food, beverage, and tobacco products	311,2	10.67	81.6	85.9	84.1	75.6	82.2	82.6	83.0	83.0	82.6	82.9	82.4	82
Textile and product mills	311,2	1.09	82.3	91.2	91.4	68.8	75.8	74.6	75.6	72.5	71.8	71.7	71.5	70
Apparel and leather	315,4	.70	78.7	84.3	87.1	59.5	74.1	74.0	75.2	74.4	73.9	73.9	73.4	73
Paper Paper	322	2.46	87.8	92.5	92.0	78.9	85.5	84.3	84.1	84.1	84.1	83.8	82.7	82
Printing and support	323	2.08	83.7	91.8	86.4	72.7	80.5	80.6	78.4	77.4	77.5	77.9	77.0	77
Petroleum and coal products	324	3.77	86.2	89.0	90.6	83.7	90.1	92.3	90.7	91.3	91.3	91.5	91.7	91
Chemical	325	12.01	78.3	85.1	81.4	70.2	77.7	77.8	78.0	78.4	78.0	78.4	77.8	78
Plastics and rubber products	326	3.20	83.9	89.8	91.9	75.1	84.8	85.4	86.7	87.2	86.7	87.5	86.5	87
Other manufacturing (non-NAICS)	1133,5111	3.99	84.7	91.0	83.3	81.3	84.6	84.0	84.3	83.7	83.2	84.0	82.5	81
Mining	21	8.25	87.4	86.1	88.9	84.8	91.3	90.0	89.9	91.0	90.2	91.9	91.3	92
Utilities	2211,2	9.23	86.7	92.7	93.7	83.8	85.0	86.4	85.8	86.6	88.1	87.7	86.4	85
Selected high-technology industries	22.15	5.48	78.0	80.8	87.4	56.2	79.7	77.9	77.4	78.4	78.4	77.6	77.3	77
Computers and peripheral equipment	3341	1.39	78.1	79.9	84.2	62.8	78.3	82.3	85.2	83.0	83.0	81.5	79.8	79
Communications equipment	3342	1.29	75.4	80.8	86.6	40.2	73.3	77.6	78.6	79.6	79.2	79.9	79.3	81
Semiconductors and related	224412 0	2.00	00.6	00.0	02.5	50.1	00.5	75.6	72.6	75.6	7	74.5	75.0	
electronic components	334412–9	2.80	80.6	82.9	93.5	58.1	82.7	75.6	72.9	75.6	75.7	74.6	75.2	75
Measures excluding selected high-technology industries														
Total industry		94.52	81.2	85.4	85.0	74.7	81.8	81.7	82.1	82.5	82.4	82.5	81.8	81
Manufacturing <sup>1</sup>		77.04	79.9	85.9	84.5	72.8	80.3	80.2	80.7	81.0	80.7	80.8	80.1	80.
CTLOT OF PROGRESS CROWNS														
STAGE-OF-PROCESS GROUPS		10.41	06.5	88.1	90 F	92.0	89.1	007	90.2	90.9	89.0	00.4	90.4	90
Crude		12.41	86.5		89.5	82.0		88.7	89.2	89.8		90.4	89.4	
Primary and semifinished		48.00 39.59	82.2 77.8	86.5	88.2	74.6	82.3	82.2	82.2	82.7	82.9	82.7	82.0	81.
Finished		39.59	//.8	82.8	80.5	70.0	78.2	78.0	78.6	78.9	78.6	78.6	78.0	78.
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r Revised. p Preliminary.

1. Refer to note on cover page.

Table 8 INDUSTRIAL CAPACITY

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Percent	change

	1	Average a	nnual rate		Fourth	quarter t	to fourth	quarter		Annua	al rate		Monthly rate
Item	1972-	1980-	1989-	1995-					2007				2007
	79	88	94	2007	2004	2005	2006	2007	Q1	Q2	Q3	Q4	Nov.
Total industry	3.1	2.0	2.3	3.3	.1	1.1	2.4	1.8	2.1	1.8	1.7	1.8	.2
Manufacturing <sup>1</sup>	3.3	2.3	2.6	3.7	.0	1.7	2.7	2.1	2.3	2.1	2.1	2.1	.2
Mining Utilities	.8 4.3	.1 2.1	9 1.6	5 2.2	3 2.6	-1.7 .0	.6 2.1	.4 1.5	.9 2.1	.3 1.5	.2 1.2	.3 1.2	.0 .1
Selected high-technology industries	20.9	19.1	17.3	27.2	4.3	18.3	19.6	19.6	19.5	19.5	19.6	19.7	1.5
Manufacturing <sup>1</sup> ex. selected high-technology industries	2.6	1.3	1.6	1.6	2	.6	1.4	1.0	1.1	.9	.9	1.0	.1
STAGE-OF-PROCESS GROUPS Crude Primary and semifinished Finished	1.7 3.0 3.9	.3 1.4 3.5	4 2.6 2.7	1 3.9 3.4	1 .4 .5	-1.1 1.4 2.0	.3 3.0 2.3	.5 2.3 1.9	.5 2.8 2.0	.3 2.2 1.9	.4 2.1 1.9	.6 2.1 2.0	.1 .2 .2

Table 9
GROSS VALUE OF FINAL PRODUCTS AND NONINDUSTRIAL SUPPLIES
Billions of 2000 dollars at annual rate, seasonally adjusted

illions of 2000 dollars at annual rate, seasor	arry adjusted										
			2006		2007			2007			
Item	2000	2006	Q3	Q4	Q1	Q2	Q3 <sup>r</sup>	Aug. <sup>r</sup>	Sept. <sup>r</sup>	Oct.r	Nov.
Final products and nonindustrial											
supplies	2,812.5	3,043.0	3,075.0	3,060.2	3,072.1	3,089.6	3,112.1	3,109.3	3,110.4	3,086.8	3,093.
Final products	2,112.0	2,302.3	2,327.4	2,321.5	2,332.3	2,344.1	2,364.3	2,362.1	2,360.8	2,342.9	2,351.5
Consumer goods	1,480.7	1,606.0	1,619.6	1,610.7	1,627.7	1,636.9	1,647.4	1,648.3	1,643.1	1,631.6	1,631.3
Durable	471.7	504.6	503.1	498.2	496.8	514.1	515.5	515.8	506.3	500.1	505.9
Automotive products	278.9	296.1	293.1	291.1	290.4	304.7	306.2	306.3	298.1	295.0	300.8
Other durable goods	192.9	208.2	209.6	206.7	206.0	209.2	209.2	209.4	208.0	204.9	205.
Nondurable	1,009.0	1,097.5	1,111.5	1,107.0	1,124.1	1,118.6	1,127.4	1,127.9	1,130.9	1,125.2	1,120.6
Equipment, total	631.3	706.0	718.4	722.2	714.5	716.9	727.3	723.8	728.3	721.7	731.0
Business and defense	614.9	689.1	701.3	706.0	697.3	699.8	710.8	707.1	712.6	706.8	715.4
Business	556.8	619.8	631.4	637.4	628.3	631.1	641.8	638.1	644.0	638.1	645.
Defense and space	58.2	71.4	72.2	71.4	71.5	71.3	71.9	71.7	71.6	71.6	72.5
Nonindustrial supplies	700.5	741.1	748.1	739.6	740.8	746.4	749.0	748.4	750.6	744.9	743.:
Construction supplies	197.2	207.8	209.2	204.0	202.8	205.8	206.1	206.3	205.0	203.6	203.
Business supplies	503.3	533.2	538.9	535.7	538.2	540.6	543.1	542.2	546.0	541.6	540.
Commercial energy products	136.0	154.7	157.7	156.3	157.5	158.1	159.2	160.3	160.0	159.8	157.

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Table 10 GROSS-VALUE-WEIGHTED INDUSTRIAL PRODUCTION: STAGE-OF-PROCESS GROUPS Percent change, seasonally adjusted

		Fou	rth quart	er to									
		fo	urth quar	ter		Annual	rate			Month	ly rate		Nov. '06
Item	2006				2006	2007			2007				to
	gross value <sup>1</sup>	2004	2005	2006	Q4	Q1	Q2	Q3 <sup>r</sup>	Aug.r	Sept.r	Oct.r	Nov. <sup>p</sup>	Nov. '07
Finished	1980.5	2.4	5.6	3.4	2.3	-1.2	4.6	3.3	-1.0	2	7	.5	1.2
Semifinished	1754.9	2.4	6.2	2.5	-2.7	.2	3.7	4.5	.2	.4	5	.0	2.2
Primary	992.6	4.5	8	.1	-13.3	7.2	.6	5.1	1.3	6	-1.1	1	2.8
Crude	420.0	5.2	-8.3	7.1	-3.4	.9	4.3	3.2	-1.3	1.8	-1.0	1.3	3.8
Crude	420.0	3.2	-0.5	7.1	-3.4	.,	7.5	3.2	-1.5	1.0	-1.0	1.5	

r Revised. p Preliminary.

p Preliminary.

1. Refer to note on cover page.

<sup>1.</sup> Billions of 2000 dollars.

Table 11 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Total Industry

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) <sup>1</sup>																	
1985	3	.4	.2	2	.1	.1	6	.5	.4	4	.3	1.0	1.2	.7	5	2.7	1.4
1986	.5	8	6	.1	.2	3	.6	2	.2	.4	.5	.9	2.4	-2.4	1.7	4.6	1.1
1987	3	1.3	.2	.6	.7	.5	.6	.7	.3	1.5	.5	.5	5.4	7.2	7.3	9.9	5.1
1988	.0	.4	.3	.5	1	.2	.2	.5	3	.6	.2	.4	3.4	3.4	2.1	3.3	5.1
1989	.2	5	.3	.0	7	.0	9	1.0	3	1	.3	.7	1.5	-1.8	-2.4	1.8	.9
1990	6	.9	.5	1	.2	.3	2	.3	.2	7	-1.2	7	3.0	2.8	1.4	-5.9	1.0
1991	5	7	5	.2	1.0	1.0	.0	.2	.9	2	1	3	-7.6	2.7 7.1	5.7	1.0	-1.5
1992 1993	5 .5	.7 .3	.8 .0	.7 .3	.4 4	.1 .3	.8 .4	5 .0	.2 .5	.7 .8	.4 .4	.1 .6	3 3.7	1.1	3.1 2.4	4.0 6.4	2.9 3.4
1994	.5	.0	1.0	.5	.5	.7	.2	.5	.3	.9	.7	1.1	5.6	7.3	5.1	8.3	5.5
1995	.4	.1	.1	1	.2	.3	4	1.3	.4	2	.3	.3	6.0	1.0	3.8	3.5	5.0
1996	8	1.5	2	.9	.7	.9	2	.7	.5	.0	.9	.7	2.0	8.4	5.2	6.1	4.3
1997	.2	1.2	.8	1	.6	.4	.5	1.3	.9	.8	1.0	.4	8.3	5.5	9.0	11.1	7.2
1998	.5	.1	.0	.5	.7	5	3	2.2	2	.7	1	.4	4.7	3.3	3.8	5.3	6.1
1999	.6	.5	.2	.2	.8	1	.7	.5	4	1.3	.6	.9	4.9	4.0	4.4	8.2	4.7
2000	.1	.4	.4	.8	.3	.1	3	3	.5	5	.0	4	5.3	5.9	5	-1.6	4.5
2001	7	6	4	3	7	6	4	4	4	6	5	.0	-5.7	-5.4	-5.6	-5.1	-3.5
2002	.5	.1	.8	.4	.4	.9	3	.2	.1	3	.4	4	2.7	6.4	2.3	4	.0
2003	.6	.3	2	8	1	.2 7	.4	1 .2	.5 2	1 .7	.8	.0	2.3	-3.2	2.5	3.3	1.1
2004	.2	./	6	.6	.6	/	.6	.2	2	./	.2	.6	3.3	2.5	1.8	4.3	2.5
2005	.3	.6	1	.1	.4	.6	.0	.3	-1.6	1.2	1.1	.8	4.6	2.8	.8	4.7	3.2
2006	.0	.3	.5	.9	1	.9	.4	.2	3	2	4	.6	5.0	6.5	4.0	-1.5	3.9
2007	5	.8	1	.6	1	.5	.6	1	.3	7	.3		1.1	3.5	3.9		
<b>IP</b> (2002=100)																	
2005	105.6	106.2	106.1	106.2	106.6	107.3	107.3	107.6	105.8	107.1	108.2	109.1	106.0	106.7	106.9	108.1	106.9
2006 2007	109.1 111.7	109.4 112.5	110.0 112.4	110.9 113.1	110.9 113.0	111.9 113.5	112.3 114.2	112.5 114.1	112.2 114.4	112.0 113.6	111.5 113.9	112.2	109.5 112.2	111.2 113.2	112.3 114.2	111.9	111.1
Capacity (percent of 2002 output) 2005 2006 2007	132.7 134.6 137.8	132.7 134.8 138.0	132.8 135.1 138.2	132.9 135.4 138.4	133.0 135.7 138.6	133.1 136.0 138.8	133.2 136.2 139.0	133.4 136.5 139.2	133.6 136.8 139.4	133.8 137.0 139.6	134.1 137.3 139.8	134.3 137.5	132.7 134.9 138.0	133.0 135.7 138.6	133.4 136.5 139.2	134.1 137.3	133.3 136.1
2007	137.6	136.0	136.2	136.4	136.0	136.6	139.0	139.2	139.4	139.0	139.6		136.0	136.0	139.2		
Utilization																	
(percent) 1985	80.0	80.1	80.0	79.7	79.6	79.4	78.7	78.9	79.1	78.6	78.8	79.5	80.0	79.6	78.9	79.0	79.4
1986	79.8	79.0	78.4	78.4	78.4	78.1	78.5	78.3	78.3	78.6	78.8	79.4	79.1	78.3	78.4	78.9	78.7
1987	79.0	79.9	79.9	80.2	80.5	80.8	81.1	81.6	81.6	82.7	83.0	83.3	79.6	80.5	81.4	83.0	81.1
1988	83.2	83.5	83.6	84.0	83.9	84.0	84.1	84.5	84.2	84.6	84.7	84.9	83.4	84.0	84.2	84.7	84.1
1989	85.0	84.5	84.6	84.4	83.7	83.6	82.6	83.3	82.8	82.6	82.7	83.1	84.7	83.9	82.9	82.8	83.6
1990	82.4	83.0	83.2	82.9	82.9	83.0	82.7	82.8	82.8	82.1	80.9	80.2	82.9	82.9	82.7	81.1	82.4
1991	79.7	79.0	78.5	78.6	79.3	79.9	79.8	79.8	80.4	80.1	79.9	79.5	79.1	79.3	80.0	79.9	79.6
1992	79.0	79.4	79.9	80.3	80.4	80.3	80.8	80.3	80.3	80.8	80.9	80.8	79.4	80.3	80.5	80.8	80.3
1993	81.1 82.6	81.3 82.4	81.1 83.1	81.3 83.3	80.9 83.5	81.0 83.8	81.2 83.7	81.1 83.8	81.4 83.8	81.8 84.2	82.0 84.4	82.3 85.1	81.2 82.7	81.1 83.5	81.2 83.8	82.1 84.6	81.4 83.6
100/	02.0	02.4	03.1	05.5	65.5	65.6			03.0	04.2	04.4	05.1			03.0	04.0	65.0
1994							83.2	84.0	84.0	83.5	83.4	83.3	84.8	84.0	83.7	83.4	84.0
1995	85.1	84.8	84.6	84.1	84.0	83.9		00.0				83.5	82.7				
1995 1996	82.3	83.2	82.6	83.0	83.2	83.6	83.0	83.2	83.3	83.0	83.3			83.3	83.2	83.3	83.1
1995 1996 1997	82.3 83.3	83.2 83.8	82.6 84.1	83.0 83.6	83.2 83.6	83.6 83.5	83.0 83.5	84.0	84.3	84.4	84.7	84.5	83.7	83.6	83.9	84.5	83.9
1995 1996	82.3	83.2	82.6	83.0	83.2	83.6	83.0										
1995 1996 1997 1998 1999	82.3 83.3 84.3 82.1	83.2 83.8 83.9 82.1	82.6 84.1 83.3 81.9	83.0 83.6 83.2 81.8	83.2 83.6 83.2 82.1	83.6 83.5 82.3 81.6	83.0 83.5 81.6 81.8	84.0 82.9 81.9	84.3 82.3 81.3	84.4 82.5 82.0	84.7 82.0 82.2	84.5 81.9 82.6	83.7 83.8 82.0	83.6 82.9 81.8	83.9 82.3 81.7	84.5 82.2 82.3	83.9 82.8 81.9
1995 1996 1997 1998	82.3 83.3 84.3	83.2 83.8 83.9	82.6 84.1 83.3	83.0 83.6 83.2	83.2 83.6 83.2	83.6 83.5 82.3	83.0 83.5 81.6	84.0 82.9	84.3 82.3	84.4 82.5	84.7 82.0	84.5 81.9	83.7 83.8	83.6 82.9	83.9 82.3	84.5 82.2	83.9 82.8
1995 1996 1997 1998 1999 2000 2001 2002	82.3 83.3 84.3 82.1 82.3 79.2 73.8	83.2 83.8 83.9 82.1 82.3 78.5 73.8	82.6 84.1 83.3 81.9 82.3 78.0 74.3	83.0 83.6 83.2 81.8 82.6 77.5 74.5	83.2 83.6 83.2 82.1 82.5 76.8 74.7	83.6 83.5 82.3 81.6 82.3 76.2 75.4	83.0 83.5 81.6 81.8 81.8 75.7 75.1	84.0 82.9 81.9 81.3 75.3 75.2	84.3 82.3 81.3 81.4 74.8 75.3	84.4 82.5 82.0 80.8 74.2 75.1	84.7 82.0 82.2 80.5 73.7 75.5	84.5 81.9 82.6 79.9	83.7 83.8 82.0 82.3 78.5 74.0	83.6 82.9 81.8 82.5 76.9 74.9	83.9 82.3 81.7 81.5 75.3 75.2	84.5 82.2 82.3 80.4	83.9 82.8 81.9
1995 1996 1997 1998 1999 2000 2001 2002 2003	82.3 83.3 84.3 82.1 82.3 79.2 73.8 75.7	83.2 83.8 83.9 82.1 82.3 78.5 73.8 76.0	82.6 84.1 83.3 81.9 82.3 78.0 74.3 75.9	83.0 83.6 83.2 81.8 82.6 77.5 74.5	83.2 83.6 83.2 82.1 82.5 76.8 74.7 75.4	83.6 83.5 82.3 81.6 82.3 76.2 75.4 75.7	83.0 83.5 81.6 81.8 81.8 75.7 75.1 76.0	84.0 82.9 81.9 81.3 75.3 75.2 76.0	84.3 82.3 81.3 81.4 74.8 75.3 76.4	84.4 82.5 82.0 80.8 74.2 75.1 76.4	84.7 82.0 82.2 80.5 73.7 75.5 77.1	84.5 81.9 82.6 79.9 73.6 75.2 77.1	83.7 83.8 82.0 82.3 78.5 74.0 75.9	83.6 82.9 81.8 82.5 76.9 74.9 75.5	83.9 82.3 81.7 81.5 75.3 75.2 76.1	84.5 82.2 82.3 80.4 73.8 75.3 76.8	83.9 82.8 81.9 81.7 76.1 74.8 76.1
1995 1996 1997 1998 1999 2000 2001 2002	82.3 83.3 84.3 82.1 82.3 79.2 73.8	83.2 83.8 83.9 82.1 82.3 78.5 73.8	82.6 84.1 83.3 81.9 82.3 78.0 74.3	83.0 83.6 83.2 81.8 82.6 77.5 74.5	83.2 83.6 83.2 82.1 82.5 76.8 74.7	83.6 83.5 82.3 81.6 82.3 76.2 75.4	83.0 83.5 81.6 81.8 81.8 75.7 75.1	84.0 82.9 81.9 81.3 75.3 75.2	84.3 82.3 81.3 81.4 74.8 75.3	84.4 82.5 82.0 80.8 74.2 75.1	84.7 82.0 82.2 80.5 73.7 75.5	84.5 81.9 82.6 79.9 73.6 75.2	83.7 83.8 82.0 82.3 78.5 74.0	83.6 82.9 81.8 82.5 76.9 74.9	83.9 82.3 81.7 81.5 75.3 75.2	84.5 82.2 82.3 80.4 73.8 75.3	83.9 82.8 81.9 81.7 76.1 74.8
1995 1996 1997 1998 1999 2000 2001 2002 2003	82.3 83.3 84.3 82.1 82.3 79.2 73.8 75.7	83.2 83.8 83.9 82.1 82.3 78.5 73.8 76.0	82.6 84.1 83.3 81.9 82.3 78.0 74.3 75.9	83.0 83.6 83.2 81.8 82.6 77.5 74.5	83.2 83.6 83.2 82.1 82.5 76.8 74.7 75.4	83.6 83.5 82.3 81.6 82.3 76.2 75.4 75.7	83.0 83.5 81.6 81.8 81.8 75.7 75.1 76.0	84.0 82.9 81.9 81.3 75.3 75.2 76.0	84.3 82.3 81.3 81.4 74.8 75.3 76.4	84.4 82.5 82.0 80.8 74.2 75.1 76.4	84.7 82.0 82.2 80.5 73.7 75.5 77.1	84.5 81.9 82.6 79.9 73.6 75.2 77.1	83.7 83.8 82.0 82.3 78.5 74.0 75.9	83.6 82.9 81.8 82.5 76.9 74.9 75.5	83.9 82.3 81.7 81.5 75.3 75.2 76.1	84.5 82.2 82.3 80.4 73.8 75.3 76.8	83.9 82.8 81.9 81.7 76.1 74.8 76.1
1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	82.3 83.3 84.3 82.1 82.3 79.2 73.8 75.7 77.2	83.2 83.8 83.9 82.1 82.3 78.5 73.8 76.0 77.8	82.6 84.1 83.3 81.9 82.3 78.0 74.3 75.9 77.3	83.0 83.6 83.2 81.8 82.6 77.5 74.5 75.4 77.8	83.2 83.6 83.2 82.1 82.5 76.8 74.7 75.4 78.2	83.6 83.5 82.3 81.6 82.3 76.2 75.4 75.7	83.0 83.5 81.6 81.8 81.8 75.7 75.1 76.0 78.1	84.0 82.9 81.9 81.3 75.3 75.2 76.0 78.3	84.3 82.3 81.3 81.4 74.8 75.3 76.4 78.2	84.4 82.5 82.0 80.8 74.2 75.1 76.4 78.7	84.7 82.0 82.2 80.5 73.7 75.5 77.1 78.9	84.5 81.9 82.6 79.9 73.6 75.2 77.1 79.4	83.7 83.8 82.0 82.3 78.5 74.0 75.9 77.5	83.6 82.9 81.8 82.5 76.9 74.9 75.5 77.9	83.9 82.3 81.7 81.5 75.3 75.2 76.1 78.2	84.5 82.2 82.3 80.4 73.8 75.3 76.8 79.0	83.9 82.8 81.9 81.7 76.1 74.8 76.1 78.1

<sup>1.</sup> Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

Table 12 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing <sup>1</sup> Seasonally adjusted

easonally adjusted Year	Jan.	Ech	Mar.	A n.e.	More	Luna	I.i.lv	Δ.11.α	Cont	Oat	Nov.	Dec.	01	02	Q3	04	I Annu
Teal	Jan.	Feb.	wiai.	Apr.	May	June	July	Aug.	Sept.	Oct.	INOV.	Dec.	Q1	Q2	Ų3	Q4	Annu
IP (percent change) <sup>2</sup>																	
.985	4	3	.8	3	.1	.2	6	.6	.1	2	.7	.4	.3	1.1	.3	2.5	1
1986	1.1	7	3	.4	.2	3	.5	.3	.2	.4	.5	.9	4.6	.0	2.5	5.0	2
.987	3	1.4	.1	.5	.8	.4	.7	.5	.6	1.6	.6	.6	6.0	7.0	7.2	11.4	5
1988 1989	2 .7	.1 -1.0	.3 1	.8	1 8	.1	.1 -1.1	1.0	.4 3	.6 2	.3	.4	2.4	4.3 -3.2	1.4 -2.9	5.0	5
990	2	1.4	.4	2	.1	.2	2	.3	.0	8	-1.1	7	4.5	2.6	.8	-6.5	
.991	8	7	6	.3	.7	1.1	.2	.3	1.1	2	2	1	-9.0	2.3	7.4	1.8	-]
.992	5	.8	.9	.5	.6	.3	.8	4	.1	.6	.4	1	.7	8.1	4.2	2.8	3
993	1.1	.1	2	.6	1	1	.3	1	.6	.8	.4	.6	4.6	1.6	1.7	7.2	3
994	.3	.1	1.3	.8	.7	.3	.5	.7	.4	1.0	.8	1.2	5.5	9.2	6.0	10.1	(
995	.4	.0	.2	2	.0	.4	6	1.2	.9	1	.1	.3	6.4	.4	3.1	4.4	:
.996 .997	9 .1	1.5	3 1.1	1.1 3	.7	1.1	.3	.6 1.5	.7	.0	.9 1.2	.9	1.1 9.8	9.6 6.6	7.6	6.5 12.1	4
1998	.8	.0	2	5	.5	6	4	2.6	3	.9	.2	.5	6.3	2.8	4.1	7.5	
.999	.4	.8	1	.3	1.0	3	.5	.7	3	1.6	.8	.8	5.4	4.5	4.1	9.9	'
2000	.2	.3	.7	.7	.0	.2	1	6	.5	4	4	7	5.8	5.8	7	-3.2	4
2001	6	6	4	3	7	6	3	7	3	7	3	.2	-6.6	-5.7	-6.2	-5.0	-4
2002	.4	.1	.8	.1	.6	1.1	4	.4	.1	5	.4	4	3.1	5.8	3.1	8	
2003	.5	.0	.2	9	1	.6	.1	2	.7	1	1.0	1	1.7	-2.3	2.2	3.7	
2004	.0	.7	1	.6	.6	7	.8	.6	3	.7	.0	.6	2.9	3.7	3.5	3.7	:
2005	.5	.6	2	.2	.6	.4	.1	.4	8	1.5	.9	.4	5.1	3.1	1.9	7.5	:
2006	.8	2	.4	1.0	2	.9	.4	.4	.0	8	2	1.1	5.5	5.5	4.4	-1.7	4
2007	6	1	.7	.4	.1	.6	.8	6	.2	6	.4		.8	4.3	3.6		
<b>P</b> (2002=100)	106.4	107.0	106.7	106.9	107.6	108.0	108.1	108.4	107.5	109.2	110.1	110.6	106.7	107.5	108.0	110.0	108
2006	111.5	111.2	111.7	112.8	112.6	113.5	113.9	114.3	114.3	113.4	113.2	114.4	111.5	113.0	114.2	113.7	113
007	113.7	113.6	114.4	114.8	114.9	115.7	116.6	115.9	116.1	115.3	115.8	114.4	113.9	115.1	116.2	113.7	11.
Capacity (percent of 2002 output) 2005	136.0	136.2	136.3	136.5	136.6	136.9	137.1	137.3	137.6	137.9	138.2	138.6	136.2	136.6	137.4	138.2	131
2006 2007	138.9 142.5	139.2 142.7	139.5 143.0	139.9 143.2	140.2 143.5	140.5 143.7	140.8 143.9	141.1 144.2	141.3 144.4	141.6 144.7	141.9 144.9	142.2	139.2 142.7	140.2 143.5	141.1 144.2	141.9	140
U <b>tilization</b> (percent)																	
1985	79.1	78.6	79.0	78.5	78.4	78.3	77.7	78.0	77.9	77.6	77.9	78.2	78.9	78.4	77.9	77.9	78
.986	78.9	78.3	78.0	78.2	78.3	77.9	78.2	78.3	78.4	78.5	78.8	79.3	78.4	78.1	78.3	78.9	78
1987	78.9	79.9	79.7	79.9	80.4	80.5	80.9	81.1	81.4	82.5	82.9	83.2	79.5	80.3	81.1	82.9	80
.988	83.0	83.0	83.2	83.9	83.7	83.8	83.8	83.9	84.1	84.5	84.7	84.9	83.1	83.8	83.9	84.7	8
989	85.4	84.4	84.2	84.1	83.2	83.2	82.1	82.6	82.2	81.9	81.9	81.8	84.7	83.5	82.3	81.9	8
990	81.5	82.5	82.6	82.2	82.2	82.2	81.9	81.9	81.8	81.0	79.9	79.2	82.2	82.2	81.8	80.0	8
991	78.4	77.7	77.1	77.2	77.7	78.4	78.5	78.6	79.3	79.0	78.7	78.5	77.7	77.8	78.8	78.8	7
992 993	78.0 80.3	78.5 80.3	79.0 80.0	79.3 80.3	79.6 80.1	79.7 79.9	80.2 80.1	79.7 79.9	79.5 80.2	79.8 80.8	79.9 80.9	79.6 81.3	78.5 80.2	79.5 80.1	79.8 80.0	79.8 81.0	7 8
994	81.3	81.2	82.1	82.5	82.7	82.7	82.8	83.1	83.1	83.6	83.9	84.6	81.5	82.6	83.0	84.0	8
995	84.6	84.2	84.0	83.5	83.1	83.1	82.2	82.7	83.1	82.6	82.3	82.1	84.3	83.2	82.7	82.3	8
996	81.0	81.8	81.2	81.7	81.8	82.3	82.0	82.1	82.3	81.8	82.2	82.5	81.3	81.9	82.2	82.2	8
997	82.1	82.8	83.3	82.5	82.7	82.7	82.4	83.2	83.3	83.4	83.8	83.6	82.8	82.6	83.0	83.6	8:
998	83.6	83.0	82.3	82.2	82.1	81.0	80.2	81.8	81.1	81.4	81.1	81.1	83.0	81.8	81.0	81.2	8
999	81.0	81.2	80.8	80.7	81.1	80.5	80.5	80.7	80.0	80.9	81.1	81.4	81.0	80.7	80.4	81.1	80
000	81.1	81.0	81.2	81.4	81.0	80.8	80.4	79.6	79.7	79.0	78.4	77.6	81.1	81.1	79.9	78.3	8
	76.9	76.2	75.7	75.3	74.6	73.9	73.5	72.9	72.5	71.9	71.6	71.7	76.3	74.6	73.0	71.7	7
001	71.9	71.9	72.4	72.4	72.8	73.6	73.2	73.5	73.6	73.3	73.6	73.3	72.0	72.9	73.5	73.4	7.
001 002	72.7	73.8	74.1 75.7	73.5 76.2	73.5 76.6	74.0 76.1	74.1 76.7	74.0 77.2	74.6 76.9	74.5 77.4	75.3 77.4	75.2 77.8	73.9 75.6	73.6 76.3	74.2 76.9	75.0 77.6	7
2001 2002 2003	73.7 75.3	75.8	13.1										I				
2001 2002 2003 2004	75.3			78.4	79.7	78.0	78 8	70.0	79.1	70.2	70.7	70 8	78.4	79.7	78.6	70.6	7
2001 2002 2003 2004	75.3 78.2	78.6	78.3	78.4 80.7	78.7 80.3	78.9 80.8	78.8 80.9	79.0 81.1	78.1 80.9	79.2 80.1	79.7 79.8	79.8 80.5	78.4 80.1	78.7 80.6	78.6 80.9	79.6 80.1	7 8
2001 2002 2003 2004 2005 2006 2007	75.3			78.4 80.7 80.2	78.7 80.3 80.1	78.9 80.8 80.5	78.8 80.9 81.0	79.0 81.1 80.4	78.1 80.9 80.4	79.2 80.1 79.7	79.7 79.8 79.9	79.8 80.5	78.4 80.1 79.8	78.7 80.6 80.3	78.6 80.9 80.6	79.6 80.1	

Refer to note on cover page.
 Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

Table 13
HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Total Industry Excluding Selected High-Technology Industries

Seasonally adjusted

Very Very 1014 Apr. Apr. May 1224 Apr. 1224 Apr.

Property	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
1985																		
1965		3	.5	.2	1	.1	.0	5	.4	.5	4	.3	1.1	.9	1.1	2	2.6	1.0
1988	1986				.0	.1			2		.4		.8		-2.7			.9
1990																		
1990																		L
1991	1989	.3	5	.3	1	7	.0	-1.1	.9	3	2	.3	.7	1.8	-2.0	-3.3	1.0	.6
1995		1												I .				
1995																		
1995	1993	.5	.3	1	.3	4	.2	.3	1	.4	.7	.3	.5	3.0	.4	1.6	5.1	2.5
1996	1994	.4	.0	.9	.3	.4	.6	.1	.3	.0	.6	.4	.9	4.2	5.4	3.3	5.5	4.0
1997																		
1998														I .				
1999																		
2001   -7   -5   -7   -5   -7   -7   -5   -7   -7																		
2002   7	2000	3	.0	.1	.4	.0	1	5	4	.4	6	2	5	.7	1.7	-2.9	-3.0	1.1
100   100																		
2004   1.1		1																
100   100		Į.																
100   100	2005	.2	.5	2	1	.3	.6	1	.2	-1.9	1.0	1.0	.8	3.8	1.5	5	3.0	2.5
Properties   Pro			.2	.4	.7		.8	.3	.1	5	3	5	.6	4.5	5.2	2.9	-2.7	
104.5   104.5   104.6   104.2   104.2   104.4   105.1   105.0   105.2   103.2   104.2   105.3   106.2   104.6   104.4   105.2   104.5	2007	5	.8	2	.5	2	.4	.5	1	.3	8	.2		.6	2.8	2.8		
107.5   106.1   106.3   106.8   107.6   107.4   108.3   108.5   108.9   109.6   108.7   108.2   107.9   107.4   108.0   106.4   107.7   108.5   107.8   107.5	,	102.0	104.4	1012	1012	104.4	107.1	105.0	105.2	102.2	1012	105.2	1062	1042	1046	104.4	105.0	104.6
Capacity (percent)  Capaci		L																
Conting   Cont		I .											100.0	I .			107.8	107.5
130.0   130.0   130.4   130.5   130.7   130.8   131.0   131.2   131.3   131.5   131.6   131.8   131.9   130.4   130.8   131.3   131.8   131.1	(percent of 2002 output)																	
Description   Continue		L																
		I .											131.9	l .			131.8	131.1
1986   80.2   79.4   78.8   78.8   78.8   78.6   78.8   78.5   78.6   78.8   79.1   79.6   79.5   78.7   78.6   79.2   79.0     1987   79.2   80.1   80.1   80.4   80.8   81.1   81.4   81.8   81.9   83.0   83.3   83.6   79.8   80.8   81.7   83.3   81.4     1988   83.6   83.9   84.0   84.4   84.2   84.3   84.4   84.8   84.4   84.8   84.8   84.8   84.8     1989   85.4   84.9   85.1   84.9   84.2   84.0   83.0   83.6   83.2   82.9   83.0   83.4   85.1   84.3   84.3   84.5     1990   82.7   83.3   83.5   83.2   83.2   83.3   83.0   83.1   83.1   82.4   81.2   80.5   83.2   83.2   83.3   83.1     1991   80.0   79.3   78.7   78.8   79.5   80.1   80.1   80.0   80.6   80.4   80.1   79.6   79.4   79.5   80.2   80.1     1992   79.0   79.4   79.9   80.4   80.5   80.3   80.9   80.3   80.4   80.8   81.0   80.9   79.4   80.4   80.5   80.9     1993   81.2   81.4   81.3   81.4   81.0   81.1   81.3   81.3   81.2   81.4   81.3   81.2   81.3   81.2     1994   82.6   82.5   83.1   83.2   83.5   83.8   83.8   83.9   83.8   84.2   84.4   85.0   82.7   83.5   83.8   84.5     1995   85.0   84.7   84.4   84.0   83.8   83.8   83.2   83.9   83.8   84.2   84.4   85.0   82.7   83.5   83.8   84.5     1996   82.2   83.2   82.7   83.2   83.4   83.8   83.2   83.9   83.8   84.2   84.4   84.5   83.8     1997   83.4   83.9   84.1   83.5   83.4   83.8   83.2   83.8   83.1   84.4   84.4   84.5   83.8     1998   84.3   84.5   83.8   83.8   83.8   83.8   83.8   83.1   83.6   83.8   83.4   83.7   84.5     1999   82.2   82.1   81.8   81.5   81.8   81.3   81.4   81.5   81.0   80.6   80.8   80.2   80.0   79.5   81.7   81.6   81.3   81.9     2000   81.8   81.7   81.6   81.8   81.7   81.5   81.0   80.6   80.8   80.2   80.0   79.5   81.7   81.6   81.3   81.9     2001   78.8   78.3   77.9   77.8   77.3   76.9   76.6   76.3   75.8   75.3   74.9   74.7   78.4   77.3   76.2   75.0   76.7     2002   75.2   75.2   75.7   75.9   76.2   76.9   76.6   76.3   75.8   75.3   74.9   74.7   78.4   77.3   76.2   75.0   75.0     2003   76.9   77.1   77.0   76.4   76.4   7																		
1987         79.2         80.1         80.1         80.4         80.8         81.1         81.4         81.9         83.0         83.3         83.6         79.8         80.8         81.7         83.3         81.4           1988         83.6         83.9         84.0         84.4         84.2         84.4         84.8         84.4         84.8         84.9         85.2         83.8         84.3         84.5         85.0         84.4           1989         85.6         83.9         84.0         84.2         84.0         83.0         83.6         83.2         83.0         83.4         85.1         84.3         84.5         85.0         84.4           1990         82.7         83.3         83.5         83.2         83.3         83.0         83.1         81.1         81.2         81.2         80.5         83.2         83.1         84.0           1991         80.0         79.4         79.9         80.4         80.0         80.6         80.4         80.1         79.6         79.4         79.5         80.2         80.1         79.8           1992         79.0         79.4         79.9         80.4         80.3         80.0         80.8							79.5			79.4								
1988         83.6         83.9         84.0         84.4         84.2         84.8         84.4         84.8         84.9         85.2         83.8         84.3         84.5         85.0         84.4           1989         85.4         84.9         85.1         84.9         84.2         84.0         83.0         83.6         83.2         82.9         83.0         83.4         85.1         84.3         83.3         83.1         84.0           1990         82.7         83.3         83.5         83.2         83.3         83.0         83.1         83.1         82.4         81.2         80.5         83.2         83.1         81.4         82.7           1991         80.0         79.3         78.7         78.8         79.5         80.1         80.1         80.0         80.4         80.1         79.6         79.4         79.5         80.2         80.1         79.8           1992         79.0         79.4         79.9         80.4         80.3         80.4         80.8         81.0         80.9         79.4         79.5         80.2         80.1         80.9         80.3         80.4         81.9         82.1         82.1         82.4         81.2																		
1989       85.4       84.9       85.1       84.9       84.2       84.0       83.0       83.6       83.2       82.9       83.0       83.4       85.1       84.3       83.3       83.1       84.0         1990       82.7       83.3       83.5       83.2       83.2       83.3       83.0       83.1       82.4       81.2       80.5       83.2       83.1       81.4       82.7         1991       80.0       79.3       78.7       78.8       79.5       80.1       80.1       80.6       80.4       80.1       79.6       79.4       79.5       80.2       80.1       79.8         1992       79.0       79.4       79.9       80.4       80.5       80.3       80.9       80.3       80.4       80.8       81.0       80.9       79.4       80.4       80.5       80.9       80.3         1993       81.2       81.4       81.0       81.1       81.3       81.2       81.4       81.9       82.1       82.4       81.3       81.2       81.3       82.1       81.5       81.3       82.1       82.4       81.3       82.1       82.4       82.3       83.8       83.8       83.8       83.8       83.8 <td< td=""><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></td<>		1												1				
1991         80.0         79.3         78.7         78.8         79.5         80.1         80.0         80.6         80.4         80.1         79.6         79.4         79.5         80.2         80.1         79.8           1992         79.0         79.4         79.9         80.4         80.5         80.3         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.5         80.5         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.5         80.5         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.5         80.5         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.2         80.5         80.1         80.9         80.3         80.4         80.8         81.0         80.9         80.3         80.4         80.9         82.1         82.4         81.3         81.5         81.5         81.5         81.8         81.5         81.8         83.8         83.2         83.9         83.3         83.2         83.2         83.4         83.5         83.8         83.2         83.3         83.3         83																		
1991         80.0         79.3         78.7         78.8         79.5         80.1         80.0         80.6         80.4         80.1         79.6         79.4         79.5         80.2         80.1         79.8           1992         79.0         79.4         79.9         80.4         80.5         80.3         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.5         80.5         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.5         80.5         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.5         80.5         80.9         80.3         80.4         80.8         81.0         80.9         79.4         80.2         80.5         80.1         80.9         80.3         80.4         80.8         81.0         80.9         80.3         80.4         80.9         82.1         82.4         81.3         81.5         81.5         81.5         81.8         81.5         81.8         83.8         83.2         83.9         83.3         83.2         83.2         83.4         83.5         83.8         83.2         83.3         83.3         83	1990	82.7	83.3	83.5	83.2	83.2	83.3	83.0	83.1	83.1	82.4	81.2	80.5	83.2	83.2	83.1	81.4	82.7
1993       81.2       81.4       81.3       81.4       81.0       81.1       81.3       81.2       81.4       81.9       82.1       82.4       81.3       81.2       81.3       82.1       81.5         1994       82.6       82.5       83.1       83.2       83.5       83.8       83.9       83.8       84.2       84.4       85.0       82.7       83.5       83.8       84.5       83.6         1995       85.0       84.7       84.4       84.0       83.8       83.8       83.2       83.9       83.3       83.2       83.2       83.2       83.9       83.9       83.3       83.2       83.2       83.4       83.4       83.5       83.1       83.6       83.8       82.7       83.4       83.5       83.3       83.8       84.1       84.4       84.7       84.5       83.4       83.5       83.3       83.8       84.1       84.4       84.7       84.5       83.8       83.2       83.9       83.3       83.8       84.1       84.4       84.7       84.5       83.8       83.4       83.5       83.3       83.8       84.1       84.4       84.7       84.5       83.8       83.4       83.7       84.5       83.3 <td>1991</td> <td></td> <td></td> <td></td> <td>78.8</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>80.4</td> <td>80.1</td> <td>79.6</td> <td></td> <td>79.5</td> <td></td> <td>80.1</td> <td></td>	1991				78.8						80.4	80.1	79.6		79.5		80.1	
1994         82.6         82.5         83.1         83.2         83.5         83.8         83.9         83.8         84.2         84.4         85.0         82.7         83.5         83.8         84.5         83.6           1995         85.0         84.7         84.4         84.0         83.8         83.8         83.2         83.9         83.3         83.2         84.7         83.9         83.6         83.2         83.9           1996         82.2         83.2         82.7         83.2         83.4         83.8         83.2         83.4         83.5         83.4         83.5         83.4         83.8         83.2         83.4         83.6         83.8         83.2         83.4         83.5         83.4         83.3         83.3         83.8         84.1         84.4         84.7         84.5         83.4         83.3         83.3         83.8         84.1         84.4         84.7         84.5         83.8         83.2         83.9         83.3         83.8         82.4         82.2         84.0         83.4         83.7         84.5         83.9           1998         84.3         84.0         83.6         83.8         82.8         82.0         83.3 <td></td>																		
1996       82.2       83.2       82.7       83.2       83.4       83.8       83.2       83.4       83.5       83.1       83.6       83.8       82.7       83.4       83.5       83.3         1997       83.4       83.9       84.1       83.5       83.4       83.3       83.8       84.1       84.4       84.7       84.5       83.8       83.7       84.5       83.9         1998       84.3       84.0       83.6       83.6       83.8       82.8       82.0       83.3       82.6       82.8       82.4       82.2       84.0       83.4       82.7       82.5       83.1         1999       82.2       82.1       81.8       81.5       81.8       81.3       81.4       81.5       81.0       81.8       81.9       82.2       82.1       81.6       81.3       81.7         2000       81.8       81.7       81.6       81.8       81.7       81.5       81.0       80.6       80.8       80.2       80.0       79.5       81.7       81.7       80.8       79.9       76.6       76.3       75.8       75.3       74.9       74.7       78.4       77.3       76.2       75.9       76.2       76.9 <td< td=""><td></td><td>1</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>		1																
1996       82.2       83.2       82.7       83.2       83.4       83.8       83.2       83.4       83.5       83.1       83.6       83.8       82.7       83.4       83.5       83.3         1997       83.4       83.9       84.1       83.5       83.4       83.3       83.8       84.1       84.4       84.7       84.5       83.8       83.7       84.5       83.9         1998       84.3       84.0       83.6       83.6       83.8       82.8       82.0       83.3       82.6       82.8       82.4       82.2       84.0       83.4       82.7       82.5       83.1         1999       82.2       82.1       81.8       81.5       81.8       81.3       81.4       81.5       81.0       81.8       81.9       82.2       82.1       81.6       81.3       81.7         2000       81.8       81.7       81.6       81.8       81.7       81.5       81.0       80.6       80.8       80.2       80.0       79.5       81.7       81.7       80.8       79.9       76.6       76.3       75.8       75.3       74.9       74.7       78.4       77.3       76.2       75.9       76.2       76.9 <td< td=""><td>1995</td><td>85.0</td><td>847</td><td>84.4</td><td>84.0</td><td>83.8</td><td>83.8</td><td>83.2</td><td>83.9</td><td>83.9</td><td>83.3</td><td>83.2</td><td>83.2</td><td>84.7</td><td>83.9</td><td>83.6</td><td>83.2</td><td>83.9</td></td<>	1995	85.0	847	84.4	84.0	83.8	83.8	83.2	83.9	83.9	83.3	83.2	83.2	84.7	83.9	83.6	83.2	83.9
1997         83.4         83.9         84.1         83.5         83.4         83.3         83.3         83.8         84.1         84.4         84.7         84.5         83.8         83.7         84.5         83.9           1998         84.3         84.0         83.6         83.6         83.8         82.8         82.0         83.3         82.6         82.8         82.4         82.2         84.0         83.4         82.7         82.5         83.1           1999         82.2         82.1         81.8         81.5         81.8         81.3         81.4         81.5         81.0         81.8         81.9         82.2         82.1         81.6         81.3         81.7         81.5         81.0         80.6         80.8         80.2         80.0         79.5         81.7         81.6         81.3         81.0         81.8         81.9         82.2         82.1         81.6         81.3         81.7         81.6         81.8         81.7         81.5         81.0         80.6         80.8         80.2         80.0         79.5         81.7         81.7         80.8         79.9         81.0           2001         78.8         78.3         77.9         77.8 <td></td> <td>1</td> <td></td> <td>l .</td> <td></td> <td></td> <td></td> <td></td>		1												l .				
1998       84.3       84.0       83.6       83.6       83.8       82.8       82.0       83.3       82.6       82.8       82.4       82.2       84.0       83.4       82.7       82.5       83.1         1999       82.2       82.1       81.8       81.5       81.8       81.3       81.4       81.5       81.0       81.8       81.9       82.2       82.1       81.6       81.3       81.9       81.7         2000       81.8       81.7       81.6       81.8       81.7       81.5       81.0       80.6       80.8       80.2       80.0       79.5       81.7       81.6       81.8       81.7         2001       78.8       78.3       77.9       77.8       77.3       76.9       76.6       76.3       75.3       74.9       74.7       78.4       77.3       76.2       75.0       76.7       76.8       76.5       76.8       76.5       76.8       76.4       76.3       76.0       76.5       76.8       76.5       76.8       76.4       75.3       76.4       76.7       76.6       76.3       77.1       77.7       77.0       76.6       76.7       76.7       76.8       76.5       76.8       76.4 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>																		
2000         81.8         81.7         81.6         81.8         81.7         81.5         81.0         80.6         80.8         80.2         80.0         79.5         81.7         81.7         80.8         79.9         81.0           2001         78.8         78.3         77.9         77.8         77.3         76.9         76.6         76.3         75.8         75.3         74.9         74.7         78.4         77.3         76.2         75.0         76.7           2002         75.2         75.2         75.7         75.9         76.2         76.9         76.7         76.8         76.5         76.8         76.4         76.4         76.6         76.8         76.8         76.4         75.3         76.4         76.6         76.3         77.1         77.7         77.0         76.4         76.6         76.8         76.8         77.1         77.7         77.0         76.4         76.6         76.8         76.8         77.1         77.7         77.0         76.4         76.6         76.8         76.8         77.1         77.7         77.0         76.4         76.6         76.8         76.8         77.2         77.1         77.7         77.0         76.4         76.9<		1					82.8	82.0			82.8			1				
2001       78.8       78.3       77.9       77.8       77.3       76.9       76.6       76.3       75.8       75.3       74.9       74.7       78.4       77.3       76.2       75.0       76.7         2002       75.2       75.2       75.7       75.9       76.2       76.9       76.7       76.8       76.5       76.8       76.4       75.3       76.4       76.7       76.6       76.8         2003       76.9       77.1       77.0       76.4       76.4       76.6       76.8       77.2       77.1       77.7       77.0       76.4       76.9       77.5       77.0         2004       77.7       78.2       77.7       78.2       78.7       78.1       78.6       78.8       78.6       79.2       79.4       79.9       77.9       78.4       78.7       79.5       78.6         2005       80.1       80.5       80.4       80.3       80.6       81.1       80.9       81.1       79.5       80.2       81.0       81.6       80.3       80.6       81.8       82.1         2006       81.5       81.5       81.8       82.3       82.1       82.8       82.8       82.3       82.0	1999	82.2	82.1	81.8	81.5	81.8	81.3	81.4	81.5	81.0	81.8	81.9	82.2	82.1	81.6	81.3	81.9	81.7
2002       75.2       75.2       75.7       75.9       76.2       76.9       76.7       76.8       76.5       76.8       76.4       75.3       76.4       76.7       76.6       76.3         2003       76.9       77.1       77.0       76.4       76.4       76.6       76.8       77.2       77.1       77.7       77.0       76.4       76.9       77.5       77.0         2004       77.7       78.2       77.7       78.2       78.7       78.1       78.6       78.8       78.6       79.2       79.4       79.9       77.9       78.4       78.7       79.5       78.6         2005       80.1       80.5       80.4       80.3       80.6       81.1       80.9       81.1       79.5       80.2       81.0       81.6       80.3       80.6       80.5       80.9       80.6         2006       81.5       81.5       81.8       82.3       82.1       82.8       82.8       82.3       82.0       81.5       81.6       82.3       82.6       81.8       82.1																		
2003       76.9       77.1       77.0       76.4       76.4       76.6       76.8       76.8       77.2       77.1       77.7       77.0       76.4       76.9       77.5       77.0         2004       77.7       78.2       77.7       78.2       78.7       78.1       78.6       78.8       78.6       79.2       79.4       79.9       77.9       78.4       78.7       79.5       78.6         2005       80.1       80.5       80.4       80.3       80.6       81.1       80.9       81.1       79.5       80.2       81.0       81.6       80.3       80.6       80.5       80.9       80.6         2006       81.5       81.5       81.8       82.3       82.1       82.8       82.8       82.3       82.0       81.5       81.6       82.3       82.6       81.8       82.1																		
2004       77.7       78.2       77.7       78.2       78.7       78.1       78.6       78.8       78.6       79.2       79.4       79.9       77.9       78.4       78.7       79.5       78.6         2005       80.1       80.5       80.4       80.3       80.6       81.1       80.9       81.1       79.5       80.2       81.0       81.6       80.3       80.6       80.5       80.9       80.6         2006       81.5       81.5       81.8       82.3       82.1       82.8       82.8       82.3       82.0       81.5       81.9       81.6       82.3       82.6       81.8       82.1																		
2006 81.5 81.5 81.8 82.3 82.1 82.7 82.8 82.8 82.3 82.0 81.5 81.9 81.6 82.3 82.6 81.8 82.1		L.																
2007 81.4 81.9 81.8 82.1 81.9 82.2 82.6 82.4 82.5 81.8 81.9 81.7 82.1 82.5													81.9				81.8	82.1
	2007	81.4	81.9	81.8	82.1	81.9	82.2	82.6	82.4	82.5	81.8	81.9		81.7	82.1	82.5		

<sup>1.</sup> Selected high-technology industries are computers, communications equipment, and semiconductors and related electronic components.

2. Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

Table 14
HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing Excluding Selected High-Technology Industries Seasonally adjusted

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) <sup>3</sup>																	
1985	5	3	.9	2	.1	.1	4	.6	.2	3	.6	.4	2	1.7	.7	2.5	1.4
1986	1.2	7	3	.4	.1	2	.2	.2	.2	.3	.4	.8	4.7	3	1.2	4.3	2.2
1987	5	1.4	.1	.4	.7	.3	.6	.3	.5	1.5	.5	.5	4.7	5.9	5.7	10.4	4.6
1988	2	.2	.2	.8	2	.0	.0	.1	.3	.5	.3	.4	1.9	3.5	.5	4.6	4.4
1989	.8	-1.1	1	.0	9	.1	-1.3	.9	3	3	.1	.1	2.0	-3.6	-4.0	4	.4
1990	3	1.4	.3	3	.1	.2	2	.3	1	8	-1.2	8	3.7	2.0	.3	-7.2	.0
1991	8	8	8	.4	.6	1.1	.3	.2	1.1	2	3	3	-9.8	1.5	7.1	1.0	-2.6
1992	8	.8	.9	.4	.5	.1	.7	5	.0	.4	.3	2	-1.2	6.9	2.6	1.5	2.6
1993	1.1	.0	3	.5	1	2	.3	2	.5	.7	.3	.5	3.8	.8	.6	5.7	2.6
1994	.1	.0	1.2	.6	.5	.2	.3	.5	.1	.7	.6	.9	3.9	7.1	3.9	6.7	4.4
1995	.2	3	1	4	2	.2	8	.9	.6	4	1	.1	3.0	-2.5	.3	.8	2.5
1996	-1.2	1.3	5	1.0	.4	.8	1	.4	.5	4	.8	.7	-1.7	6.8	4.1	3.2	1.5
1997	2	1.0	.9	7	.5	.4	.1	1.3	.7	.6	.9	.2	6.0	2.6	6.6	8.8	4.9
1998	.5	1	3	.4	.4	-1.1	9	2.4	7	.7	1	.2	3.0	.0	6	4.0	3.5
1999	.0	.5	5	1	.8	7	.0	.6	5	1.4	.4	.4	.9	.2	.4	6.9	1.4
2000	3	1	.3	.3	4	.0	4	8	.4	6	6	9	.5	.9	-3.5	-5.0	.8
2001	6	5	4	1	6	5	1	7	4	7	3	.1	-7.5	-4.1	-4.7	-5.2	-4.9
2002	.5	.0	.8	.1	.6	1.0	5	.3	.0	6	.3	6	3.4	5.4	2.4	-2.0	.1
2003	.4	2	.2	-1.0	1	.5	.0	3	.7	2	1.0	3	.1	-3.1	1.2	3.0	.0
2004	2	.6	2	.7	.6	7	.8	.6	4	.7	.0	.5	1.3	3.9	3.3	3.4	2.2
2005	.4	.5	3	.0	.5	.3	1	.2	-1.1	1.4	.8	.4	4.1	1.6	.4	5.5	3.0
2006	.8	3	.3	.8	4	.8	.3	.2	3	9	2	1.1	4.9	3.8	3.0	-3.3	3.2
2007	7	1	.7	.3	.0	.5	.6	7	.2	8	.3		.3	3.6	2.3		
<b>IP</b> (2002=100)																	
2005	104.3	104.8	104.5	104.5	105.0	105.3	105.3	105.5	104.3	105.8	106.6	107.0	104.5	104.9	105.0	106.5	105.2
2006	107.9	107.5	107.8	108.7	108.3	109.2	109.5	109.7	109.4	108.4	108.2	109.3	107.7	108.7	109.5	108.6	108.6
2007	108.5	108.4	109.2	109.5	109.5	110.0	110.8	110.0	110.2	109.3	109.6		108.7	109.7	110.3		
Capacity (percent of																	
2002 output)	122.6	122.6	122.7	122.7	122.0	122.0	122.0	122.0	122.1	122.2	122.4	122.6	122.6	122.0	122.0	122.4	122.0
2005	132.6	132.6	132.7	132.7	132.8	132.8	132.9	133.0	133.1	133.3	133.4	133.6	132.6	132.8	133.0	133.4	133.0
2006 2007	133.7 135.5	133.9 135.6	134.0 135.7	134.2 135.8	134.3 135.9	134.5 136.0	134.7 136.1	134.8 136.2	135.0 136.3	135.1 136.4	135.2 136.5	135.4	133.9 135.6	134.3 135.9	134.8 136.2	135.2	134.6
Utilization (percent)																	
1985	78.6	78.3	78.8	78.5	78.4	78.3	77.9	<b>70.0</b>									
1986	79.4	78.8	78.4						78.2	77.0	78.3	78.5	78.6	78.4	78.1	78.2	78.3
1987	79.1			78.7	78.7			78.2 78.6	78.2 78.7	77.9 78.8	78.3 79.0	78.5 79.6	78.6 78.9	78.4 78.6	78.1 78.6	78.2 79.1	78.3 78.8
1988				78.7 80.2	78.7 80.7	78.4	78.5	78.6	78.7	78.8	79.0	79.6	78.9	78.6	78.6	79.1	78.8
1989		80.1	80.0	80.2	80.7	78.4 80.8	78.5 81.2	78.6 81.4	78.7 81.7	78.8 82.9	79.0 83.3	79.6 83.6	78.9 79.7	78.6 80.6	78.6 81.4	79.1 83.2	78.8 81.2
1,0,	83.4 85.9					78.4	78.5	78.6	78.7	78.8	79.0	79.6	78.9	78.6	78.6	79.1	78.8
	83.4 85.9	80.1 83.5 84.9	80.0 83.7 84.7	80.2 84.3 84.6	80.7 84.1 83.7	78.4 80.8 84.2 83.7	78.5 81.2 84.1 82.4	78.6 81.4 84.2 83.0	78.7 81.7 84.4 82.7	78.8 82.9 84.8 82.2	79.0 83.3 85.0 82.2	79.6 83.6 85.3 82.2	78.9 79.7 83.5 85.2	78.6 80.6 84.2 84.0	78.6 81.4 84.2 82.7	79.1 83.2 85.0 82.2	78.8 81.2 84.3 83.5
1990	83.4 85.9 81.8	80.1 83.5 84.9	80.0 83.7 84.7 82.9	80.2 84.3 84.6 82.6	80.7 84.1 83.7 82.5	78.4 80.8 84.2 83.7 82.5	78.5 81.2 84.1 82.4	78.6 81.4 84.2 83.0 82.3	78.7 81.7 84.4 82.7	78.8 82.9 84.8 82.2 81.3	79.0 83.3 85.0 82.2	79.6 83.6 85.3 82.2 79.5	78.9 79.7 83.5 85.2 82.5	78.6 80.6 84.2 84.0	78.6 81.4 84.2 82.7	79.1 83.2 85.0 82.2 80.3	78.8 81.2 84.3 83.5
1990 1991	83.4 85.9 81.8 78.7	80.1 83.5 84.9 82.8 77.9	80.0 83.7 84.7 82.9 77.2	80.2 84.3 84.6 82.6 77.4	80.7 84.1 83.7 82.5 77.8	78.4 80.8 84.2 83.7 82.5 78.6	78.5 81.2 84.1 82.4 82.2 78.7	78.6 81.4 84.2 83.0 82.3 78.7	78.7 81.7 84.4 82.7 82.1 79.5	78.8 82.9 84.8 82.2 81.3 79.3	79.0 83.3 85.0 82.2 80.2 78.9	79.6 83.6 85.3 82.2 79.5 78.6	78.9 79.7 83.5 85.2 82.5 78.0	78.6 80.6 84.2 84.0 82.5 77.9	78.6 81.4 84.2 82.7 82.2 79.0	79.1 83.2 85.0 82.2 80.3 78.9	78.8 81.2 84.3 83.5 81.9 78.4
1990 1991 1992	83.4 85.9 81.8 78.7 77.9	80.1 83.5 84.9 82.8 77.9 78.4	80.0 83.7 84.7 82.9 77.2 79.0	80.2 84.3 84.6 82.6 77.4 79.3	80.7 84.1 83.7 82.5 77.8 79.6	78.4 80.8 84.2 83.7 82.5 78.6 79.7	78.5 81.2 84.1 82.4 82.2 78.7 80.2	78.6 81.4 84.2 83.0 82.3 78.7 79.7	78.7 81.7 84.4 82.7 82.1 79.5 79.6	78.8 82.9 84.8 82.2 81.3 79.3 79.8	79.0 83.3 85.0 82.2 80.2 78.9 80.0	79.6 83.6 85.3 82.2 79.5 78.6 79.7	78.9 79.7 83.5 85.2 82.5 78.0 78.4	78.6 80.6 84.2 84.0 82.5 77.9 79.5	78.6 81.4 84.2 82.7 82.2 79.0 79.8	79.1 83.2 85.0 82.2 80.3 78.9 79.8	78.8 81.2 84.3 83.5 81.9 78.4 79.4
1990 1991 1992 1993	83.4 85.9 81.8 78.7 77.9 80.4	80.1 83.5 84.9 82.8 77.9 78.4 80.4	80.0 83.7 84.7 82.9 77.2 79.0 80.1	80.2 84.3 84.6 82.6 77.4 79.3 80.4	80.7 84.1 83.7 82.5 77.8 79.6 80.2	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7	79.0 83.3 85.0 82.2 80.2 78.9 80.0 80.9	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4
1990 1991 1992 1993 1994	83.4 85.9 81.8 78.7 77.9 80.4 81.2	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9 83.1	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5	79.0 83.3 85.0 82.2 80.2 78.9 80.0 80.9 83.8	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8
1990 1991 1992 1993 1994	83.4 85.9 81.8 78.7 77.9 80.4 81.2	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9 83.1	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5	79.0 83.3 85.0 82.2 80.2 78.9 80.0 80.9 83.8	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8
1990 1991 1992 1993 1994	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9 83.1 82.6 82.3	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5	79.0 83.3 85.0 82.2 80.2 78.9 80.0 80.9 83.8	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8
1990 1991 1992 1993 1994 1995 1996 1997	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9 83.1 82.6 82.3 82.9	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5	79.0 83.3 85.0 82.2 80.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0 82.4	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8
1990 1991 1992 1993 1994 1995 1996 1997 1998	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 81.4	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.0 82.2 82.1 80.5	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9 83.1 82.6 82.3 82.9 82.1	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6	79.0 83.3 85.0 82.2 80.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0 82.4	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 82.4 81.4 80.0	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8	78.6 81.4 84.2 83.0 82.3 78.7 79.9 83.1 82.6 82.3 82.9 82.1	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0 82.4 82.2 80.3	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 82.4 81.4 80.0	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8	78.6 81.4 84.2 83.0 82.3 78.7 79.9 83.1 82.6 82.3 82.9 82.1 80.2	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0 82.4 82.2 80.3	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 82.4 81.4 80.0	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8	78.6 81.4 84.2 83.0 82.3 78.7 79.9 83.1 82.6 82.3 82.9 82.1 80.2	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5 78.8 73.5	78.8 82.9 84.8 82.2 81.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 82.0 82.0 82.4 82.2 80.3	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0 80.4 76.3 73.3	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2 80.2 75.8 73.3	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3 80.4 75.4 73.9	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7 79.9 74.9	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 81.4 80.0 79.8 74.5 75.2	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8 79.3 74.4 74.8	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9 83.1 82.6 82.3 82.9 82.1 80.2 78.6 73.8 75.1	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5 78.8 73.5 75.2	78.8 82.9 84.8 82.2 81.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7 77.7 72.8 75.0	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 82.0 82.0 82.4 82.2 80.3	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8 78.9 73.9	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7 77.6 72.9 74.8	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 82.4 81.4 80.0	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8	78.6 81.4 84.2 83.0 82.3 78.7 79.9 83.1 82.6 82.3 82.9 82.1 80.2	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5 78.8 73.5	78.8 82.9 84.8 82.2 81.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 82.0 82.0 82.4 82.2 80.3	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0 80.4 76.3 73.3 75.0	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2 75.8 73.3 74.9 76.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6	80.2 84.3 84.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3 80.4 75.4 75.6	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7 79.9 74.9 74.4 77.1	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 81.4 80.0 79.8 74.5 75.2 74.9 76.5	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8 79.3 74.4 74.9 77.2	78.6 81.4 84.2 83.0 82.3 78.7 79.9 83.1 82.6 82.3 82.9 82.1 80.2 78.6 73.8 75.1 74.7	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5 78.8 73.5 75.3 77.3	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5 78.2 73.0 74.8 75.2 77.9	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7 77.7 72.8 75.0 76.0 77.9	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8 76.9 72.9 74.6 75.8 78.3	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9 80.3 75.9 73.5 75.0	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0 82.4 82.2 80.3 80.0 74.9 74.5 74.6	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8 75.0 75.0	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7 77.6 72.9 74.8 75.7 78.1	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4 79.2 74.4 74.5 75.1
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0 80.4 76.3 75.0 75.7	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2 75.8 73.3 74.9 76.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6 80.3 75.5 73.9 75.1 76.0	80.2 84.3 84.6 82.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3 80.4 75.4 73.9 74.5 76.6	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7 79.9 74.9 74.4 77.1	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 82.4 81.4 80.0 79.8 74.5 75.2 74.9 76.5	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8 74.4 74.8 74.9 77.2	78.6 81.4 84.2 83.0 82.3 78.7 79.7 79.9 83.1 82.6 82.3 82.9 82.1 80.2 78.6 73.8 75.1 74.7 77.6	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5 78.8 73.5 75.2 75.3 77.3	78.8 82.9 84.8 82.2 81.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5 78.2 73.0 74.8 75.2 77.9	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7 77.7 72.8 75.0 76.0 77.9	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8 76.9 72.9 74.6 75.8 78.3	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9 80.3 75.9 73.5 75.0 76.0	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0 82.4 82.2 80.3 80.0 74.9 74.5 74.6 76.7	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8 75.0 77.4	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7 77.6 72.9 74.8 75.7 78.1	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4 79.2 74.4 74.5 75.1 77.0
1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	83.4 85.9 81.8 78.7 77.9 80.4 81.2 84.4 80.8 82.2 83.5 81.0 80.4 76.3 73.3 75.0	80.1 83.5 84.9 82.8 77.9 78.4 80.4 81.2 84.0 81.7 82.8 83.1 81.2 75.8 73.3 74.9 76.2	80.0 83.7 84.7 82.9 77.2 79.0 80.1 82.0 83.7 81.1 83.2 82.5 80.6	80.2 84.3 84.6 77.4 79.3 80.4 82.4 83.2 81.7 82.3 82.6 80.3 80.4 75.4 75.6	80.7 84.1 83.7 82.5 77.8 79.6 80.2 82.7 82.9 81.9 82.4 82.6 80.7 79.9 74.9 74.4 77.1	78.4 80.8 84.2 83.7 82.5 78.6 79.7 80.0 82.7 82.9 82.4 81.4 80.0 79.8 74.5 75.2 74.9 76.5	78.5 81.2 84.1 82.4 82.2 78.7 80.2 80.1 82.8 82.0 82.2 82.1 80.5 79.8 79.3 74.4 74.9 77.2	78.6 81.4 84.2 83.0 82.3 78.7 79.9 83.1 82.6 82.3 82.9 82.1 80.2 78.6 73.8 75.1 74.7	78.7 81.7 84.4 82.7 82.1 79.5 79.6 80.2 83.1 82.9 82.4 83.1 81.3 79.5 78.8 73.5 75.3 77.3	78.8 82.9 84.8 82.2 81.3 79.3 79.8 80.7 83.5 82.3 81.9 83.2 81.6 80.5 78.2 73.0 74.8 75.2 77.9	79.0 83.3 85.0 82.2 78.9 80.0 80.9 83.8 82.0 82.3 83.6 81.3 80.7 77.7 72.8 75.0 76.0 77.9	79.6 83.6 85.3 82.2 79.5 78.6 79.7 81.2 84.5 81.9 82.6 83.5 81.2 80.8 76.9 72.9 74.6 75.8 78.3	78.9 79.7 83.5 85.2 82.5 78.0 78.4 80.3 81.5 84.0 81.2 82.7 83.1 80.9 80.3 75.9 73.5 75.0	78.6 80.6 84.2 84.0 82.5 77.9 79.5 80.2 82.6 83.0 82.0 82.4 82.2 80.3 80.0 74.9 74.5 74.6	78.6 81.4 84.2 82.7 82.2 79.0 79.8 80.1 83.0 82.5 82.3 82.7 81.3 79.8 75.0 75.0	79.1 83.2 85.0 82.2 80.3 78.9 79.8 81.0 83.9 82.1 82.3 83.4 81.4 80.7 77.6 72.9 74.8 75.7 78.1	78.8 81.2 84.3 83.5 81.9 78.4 79.4 80.4 82.8 82.9 81.9 82.8 82.0 80.4 79.2 74.4 74.5 75.1

<sup>1.</sup> Refer to note on cover page.
2. Selected high-technology industries are computers, communications equipment, and semiconductors and related electronic components.
3. Quarterly changes are at annual rates. Annual changes are calculated from annual averages.

The Industrial Production and Capacity Utilization statistical release, which is published around the middle of the month, reports measures of output, capacity, and capacity utilization in manufacturing, mining, and the electric and gas utilities industries. More detailed descriptions of industrial production and capacity utilization are available at www.federalreserve.gov/releases/G17 at the Board's World Wide Web site. In addition, files containing data shown in the release, more detailed series that were published in the G.17 prior to December 2000, and historical data are available at the Board's Web site. Instructions for searching for and downloading specific series are provided as well. For paid access to the data 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 also 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 the real output of the manufacturing, mining, and electric and gas utilities industries; the reference period for the index is 2002. Manufacturing consists of those industries included in the North American Industry Classification System, or NAICS, definition of manufacturing plus those industries-logging and newspaper, periodical, book and directory publishing-that have traditionally been considered to be manufacturing and included in the industrial sector. For the period since 1997, the total IP index has been constructed from 300 individual series based on the 2002 North American Industrial Classification System (NAICS) codes. These individual series are classified in two ways: (1) market groups, and (2) industry groups. Market groups consist of products and materials. Total products are the aggregate of final products, such as consumer goods and equipment, and nonindustrial supplies (which are inputs to nonindustrial sectors). Materials are inputs in the manufacture of products. Major industry groups include three-digit NAICS industries and aggregates of these industries—for example, durable and nondurable manufacturing, mining, and utilities. A complete description of the market and industry structures, including details regarding series classification, relative importance weights, and data sources, is available on the Board's web site (www.federalreserve.gov/releases/G17/About.html). Changes in

(www.federalreserve.gov/releases/G17/About.html). Changes in output for the market and industry groups are summarized in table 1 and the levels of output (in index form) are shown in table 4. Special aggregates, that highlight the relative importance and contributions of several key industries, such as high-technology and motor vehicles, are summarized in tables 2 and 5. For a detailed description of the contents of the statistical tables, see below.

**Source data.** 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 and from government agencies; data of this type are used to estimate monthly IP wherever possible and appropriate. Production indexes for a few industries are derived by dividing estimated nominal output (calculated using unit production or sales and unit values) by a corresponding Fisher price index; the most notable of these fall within the high-technology grouping and include computers, communications equipment, and semiconductors. When suitable data on physical product are not available, estimates of output are based on production-worker hours by industry. Data on hours worked by production workers are collected in the monthly establishment survey conducted by the Bureau of Labor Statistics. The factors used to convert inputs into estimates of production are based on historical relationships between the inputs and the comprehensive annual data used to benchmark the IP indexes; these factors also may be influenced by technological or cyclical developments. The annual data used in benchmarking 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 United States Geological Survey of the Department of the Interior; and publications of the Department of Energy.

Aggregation Methodology and Weights. The aggregation method for the IP index is a version of the Fisher-ideal index formula. (For a detailed discussion of the aggregation method, see *Federal Reserve Bulletin* February 1997 and March 2001.) In the IP index, series that measure the output of an individual industry are combined using weights derived from their proportion in the total value-added output of all industries. The IP index, which extends back to 1919, is built as a chain-type index since 1972. The current formula for the growth in monthly IP (or any of the sub-aggregates) since 1972 is the geometric mean of the change in output (I), and, as can be seen below, is computed using the unit value added estimate for the current month  $(p_m)$  and the estimate for previous month:

$$\frac{I_{m}^{A}}{I_{m-1}^{A}} = \sqrt{\frac{\sum I_{m}p_{m-1}}{\sum I_{m-1}p_{m-1}}} \times \frac{\sum I_{m}p_{m}}{\sum I_{m-1}p_{m}}$$

The IP proportions (typically shown in the first column of the relevant tables in the G.17 release) are estimates of the industries' relative contributions to overall growth in the following year. For example, the relative importance weight of the motor vehicles and parts industry is about 8 percent. If output in this industry increased 10 percent in a month, then this gain would boost growth in total IP by 8/10 percentage point ( $0.08 \times 10\% = 0.8\%$ ). To assist users with calculations, the Federal Reserve's web site provides supplemental monthly statistics that represent the exact proportionate contribution of a monthly change in a component index to the monthly change in the total index (www.federalreserve.gov/releases/G17/ipdisk/ipweights.sa).

**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.) For the first estimate of output for a given month, about 70 percent of the source data (in value-added terms) are available; the fraction of available source data increases to about 84 percent for estimates in the second month that the estimate is published, 96 percent in the third month, and 97 percent in the fourth month. Data availability by data type is summarized in the table below:

**Availability of Monthly IP Data in Publication Window** (Percent of value added in 2005)

	Month of estimate										
Type of data	1st	2nd	3rd	4th							
Physical product	27	42	54	54							
Production-worker hours	43	43	43	43							
IP data received	70	84	96	97							
IP data estimated	30	16	4	3							

The physical product group includes series based on either monthly or quarterly data. As can be seen in the first line of the table, in the first month, a physical product indicator is available for about half of the series (in terms of value added) that ultimately are based on physical product data (25 percent out of total of 52 percent). Of the 25 percent, about two-thirds (17 percent of total IP) include series that are derived from weekly physical product data and for which actual monthly data may lag up to several months. On average, quarterly product data are received for the third estimate of industrial production. Specifically, quarterly data are available for the second estimate of the last month of a quarter, the third estimate of the second month of a quarter, and the fourth estimate of the first month of a quarter. About 3 percent of the source data for monthly IP—all physical product measures—are available too late for direct inclusion in the current index and are incorporated at the time of an annual historical revision.

**Seasonal adjustment.** Individual series are seasonally adjusted using Census X-12 ARIMA. For series based on production-worker hours, the current seasonal factors were estimated with data through

September 2006; for other series, the factors were estimated with data through at least June 2006. Series are pre-adjusted for the effects of holidays or the business cycle when appropriate. For the data since 1972, 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 0.27 percent during the 1987–2005 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 1987–2005 period. In most cases (about 86 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

Overview. The Federal Reserve Board constructs estimates of capacity and capacity utilization for industries in manufacturing, mining, and electric and gas utilities. For a given industry, the capacity utilization rate is equal to an output index (seasonally adjusted) divided by a capacity index. The Federal Reserve Board's capacity indexes attempt to capture the concept of *sustainable maximum output*—the greatest level of output a plant can maintain within the framework of a realistic work schedule, after factoring in normal downtime and assuming sufficient availability of inputs to operate the capital in place.

Coverage. Capacity indexes are constructed for 87 detailed industries (69 in manufacturing, 16 in mining, and 2 in utilities), which mostly correspond to industries at the three- and four-digit NAICS level. Estimates of capacity and utilization are available for a variety of groups, including durable and nondurable manufacturing, total manufacturing, mining, utilities, and total industry. Manufacturing consists of those industries included in the North American Industry Classification System, or NAICS, definition of manufacturing *plus* those industries—logging and newspaper, periodical, book and directory publishing—that have traditionally been considered to be manufacturing and included in the industrial sector. Also, special aggregates are available, such as high-tech industries and manufacturing excluding high-tech industries.

**Source Data.** The monthly rates of capacity utilization are designed to be consistent with both the monthly data on production and the periodically available data on capacity and utilization. Because there is no direct monthly information on overall industrial capacity or utilization rates, the Federal Reserve first estimates annual capacity indexes from the source data. Capacity data reported in physical units from government sources (primarily from the U.S. Geological Survey and the Department of Energy's Energy Information Administration) and trade sources are available for portions of several industries in manufacturing (e.g., paper, industrial chemicals, petroleum refining, motor vehicles), as well as for electric utilities and mining; these industries represent about 24 percent of total industrial capacity. When physical product data are unavailable for manufacturing industries, capacity indexes are based on responses to the Bureau of the Census's Survey of Plant Capacity (SPC); these industries account for a bit less than 72 percent of total industry capacity. In the absence of utilization data for a few mining and petroleum series, capacity is based on trends through peaks in production (roughly 4 percent of total industry capacity). A detailed description of the methodology used to construct the capacity indexes is available on the Board's web site (www.federalreserve.gov/releases/G17/cap\_notes.html).

Aggregation Methodology. Monthly capacity aggregates are calculated in three steps: (1) utilization aggregates are calculated on an annual basis through the most recent full year as capacity-weighted aggregates of individual utilization rates; (2) the annual aggregate capacity is derived from the corresponding production and utilization aggregates; (3) the monthly capacity aggregate is obtained by interpolating with a Fisher index of its constituent monthly capacity series. Utilization rates for the individual series and aggregates are calculated by dividing the pertinent monthly production index by the

related capacity index.

**Consistency.** A major aim is that the Federal Reserve utilization rates be consistent over time so that, for example, a rate of 85 percent means about the same degree of tightness that it meant in the past. A major task for the Federal Reserve in developing reasonable and consistent time series of capacity and utilization is dealing with inconsistencies between the movements of the industrial production index and the survey-based utilization rates. The McGraw-Hill/DRI Survey, now discontinued, was the primary source of manufacturing utilization rates for many years. This was a survey of large companies that reported, on average, higher utilization rates than those reported by establishments covered by the SPC (currently the primary source of factory operating rates) for the fourteen years they overlapped. Adjustments have been made to keep the industry utilization rates currently reported by the Federal Reserve roughly in line with rates formerly reported by McGraw-Hill. As a consequence, the rates reported by the Federal Reserve tend to be higher than the rates reported in the SPC.

**Perspective.** Over the 1972–2005 period, the average total industry utilization rate is 81.0 percent; for manufacturing, the average factory operating rate has been 79.8 percent. 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. The highs and lows in capacity utilization shown in table 7 are specific to each series and do not all occur in the same month.

### REFERENCES AND RELEASE DATES

**References.** The annual revision published in November 2005 is described in an article published in the *Federal Reserve Bulletin*, vol. 92, pp. A39–A58. 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. The Federal Reserve methodology for constructing industry-level measures of capital is detailed in "Capital Stock Estimates for Manufacturing Industries: Methods and Data" by Mike Mohr and Charles Gilbert (1996), which can be obtained at: **www.federalreserve.gov/releases/g17/capital\_stock\_doc-latest.pdf.** 

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. 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, January 1996, February 1997, February 1998, January 1999, March 2000, March 2001, March 2002, April 2003, Winter 2004, Winter 2005).

### Release Schedule

At 9:15 a.m. on

**2007**: January 17, February 15, March 16, April 17, May 16, June 15, July 17, August 15, September 14, October 16, November 16, and December 14.

**2008**: January 16, February 15, March 17, April 16, May 15, June 17, July 16, August 15, September 15, October 16, November 17, and December 15.