# **FEDERAL RESERVE statistical release**



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## INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production increased 0.7 percent in February after a decrease of 0.3 percent in January. The output of utilities jumped 7.9 percent in February, as the weather moved closer to seasonal norms after January's warm temperatures. Mining output decreased 0.5 percent in February, and manufacturing production was unchanged after a gain of 0.8 percent in January. At 110.9 percent of its 2002 average, overall industrial output in February was 3.3 percent above its February 2005 level. Because of the jump in utilities output, the rate of capacity utilization for total industry

(over)

## INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION: SUMMARY

Seasonally adjusted

		200	)2=100			P	ercent change	e	
	2005		2006		2005		2006		Feb. '05 to
Industrial production	Nov.r	Dec.r	Jan. <sup>r</sup>	Feb.p	Nov.r	Dec.r	Jan. <sup>r</sup>	Feb.p	Feb. '06
Total index	109.4	110.4	110.2	110.9	.9	1.0	3	.7	3.3
Previous estimates	109.5	110.5	110.3		1.1	.9	2		
Major market groups									
Final Products	111.6	112.3	112.1	112.7	.1	.7	2 7	.6	4.2
Consumer goods	105.7	106.6	105.8	106.6	8	.8	7 1.2	.8	1.8
Business equipment	125.8	126.4	127.9 109.4	128.0	2.2	.4	1.2	.1	10.4 3.8
Nonindustrial supplies Construction	110.4 113.4	111.1 113.2	113.3	110.3 113.0	1.0	.7 2	-1.5 .1	.8	6.2
Materials	106.9	108.3	108.5	109.3	1.9	1.4	.2	2 .7	2.2
Machais	100.5	100.5	100.5	105.5	1.5	1.7	.2	• /	2.2
Major industry groups									
Manufacturing (see note below)	111.7	112.2	113.1	113.1	.8	.4	.8	.0	4.2
Previous estimates	111.7	112.2	113.0		.7	.5	.7		
Mining	93.1	95.7	97.8	97.3	4.5	2.8	2.3	5	-3.5
Utilities	104.8	108.9	96.4	104.0	-1.0	3.9	-11.5	7.9	2.2
									Capacity
				Percent of	capacity				growth
	Average	1994-95	2001-02	2005	2005		2006		Feb. '05 to
Capacity utilization	1972-2005	high	low	Feb.	Nov.r	Dec.r	Jan. <sup>r</sup>	Feb.p	Feb. '06
Total industry	81.0	85.0	73.9	80.0	80.5	81.2	80.8	81.2	1.8
Previous estimates					80.6	81.2	80.9		
Manufacturing (see note below)	79.8	84.5	72.0	78.9	79.9	80.1	80.5	80.4	2.3
Previous estimates			0		79.8	80.1	80.5		
Mining	87.3	89.0	85.6	89.9	83.2	85.5	87.5	87.1	4
Utilities	86.7	93.7	83.7	82.7	85.4	88.7	78.5	84.7	2
Stage-of-process groups									
Crude	86.4	89.4	83.2	88.8	81.8	84.1	86.1	86.0	7
Primary and semifinished	82.1	88.1	74.6	81.4	82.5	83.2	81.3	82.2	2.7
Finished Parlimina	77.9	80.5	70.8	76.4	78.3	78.5	79.1	79.1	1.4

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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.

rose 0.4 percentage point, to 81.2 percent, a level just above its 1972-2005 average of 81.0 percent. Capacity utilization in manufacturing edged down in February to 80.4 percent, a rate 0.6 percentage point above its 1972-2005 average.

## Market Groups

The output of consumer goods climbed 0.8 percent in February; the increase was driven primarily by a jump of 6.0 percent in the production of consumer energy goods. The production of consumer durables increased 0.1 percent. The production gains for appliances, furniture, and carpeting and for miscellaneous goods were mostly offset by a decline of 1.8 percent in the index for home electronics; the output of automotive products was unchanged. The output of non-energy nondurable consumer goods decreased 0.2 percent; the indexes for paper products, chemical products, and clothing all moved down.

After having risen more substantially in January, the production of business equipment edged up 0.1 percent in February to stand 10.4 percent above its year-ago level. Among the major categories of business equipment, the production of information processing equipment climbed for a second consecutive month, but the indexes for transit equipment and for industrial and other equipment turned down. The index for defense and space equipment increased further, with a gain of 0.5 percent that reflected the settlement of a strike at a producer of guided missiles and space vehicles. The production of business supplies rose 1.2 percent and was bolstered by a rebound in the output of commercial energy products; the production of non-energy business supplies was little changed. The index for construction supplies decreased 0.2 percent. Production gains for construction supplies have moderated so far this year after strong advances in the fourth quarter of last year.

The production of industrial materials rose 0.7 percent. The output of energy materials gained 1.6 percent. Among non-energy materials, the output of both nondurables and durables rose 0.3 percent, with gains of more than 1 percent in the indexes for equipment parts (in durables) and paper materials (in nondurables).

## **Industry Groups**

Manufacturing production was unchanged in February, and the factory operating rate edged down to 80.4 percent. The output of durable goods increased 0.2 percent. The largest gains were in aerospace and miscellaneous transportation equipment, furniture and related products, computer and electronic products, and fabricated metal products. The durable goods industries in which output decreased included wood products, which declined a good bit for a second consecutive month; motor vehicles and parts; electrical equipment, appliances, and components; and machinery. The production of nondurable goods edged down 0.1 percent. Output in both the petroleum and coal products industry and the textile and product mills industry declined more than 1 percent, and smaller decreases occurred in apparel and leather, chemicals, and plastics and rubber products. Printing and support was the only major nondurable industry in which output climbed by more than 1 percent; smaller production increases came in the paper industry and in the food, beverage, and tobacco product industry. Production in the non-NAICS manufacturing industries (logging and publishing) decreased 0.2 percent in February after having declined 1.1 percent in January.

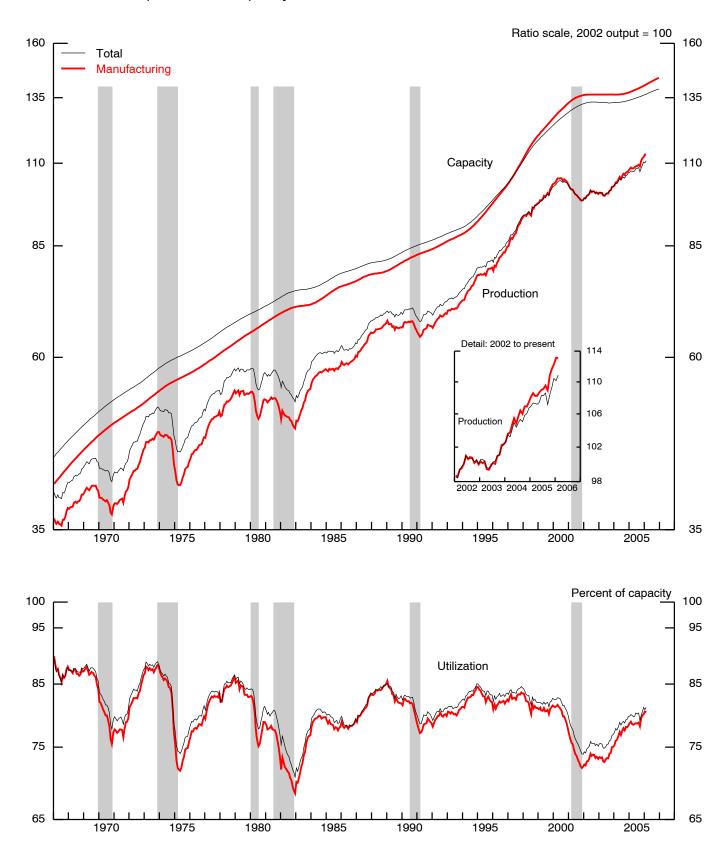
Capacity utilization for industries in the crude stage of processing was little changed at 86.0 percent, a rate 0.4 percentage point below its 1972-2005 average. For industries in the primary and semifinished stages, the utilization rate increased 0.9 percentage point, to 82.2 percent, as a result of the rebound in utilities output. For producers in the finished stage, the utilization rate was unchanged at 79.1 percent, a rate 1.2 percentage points above its 1972-2005 average of 77.9 percent.

## **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

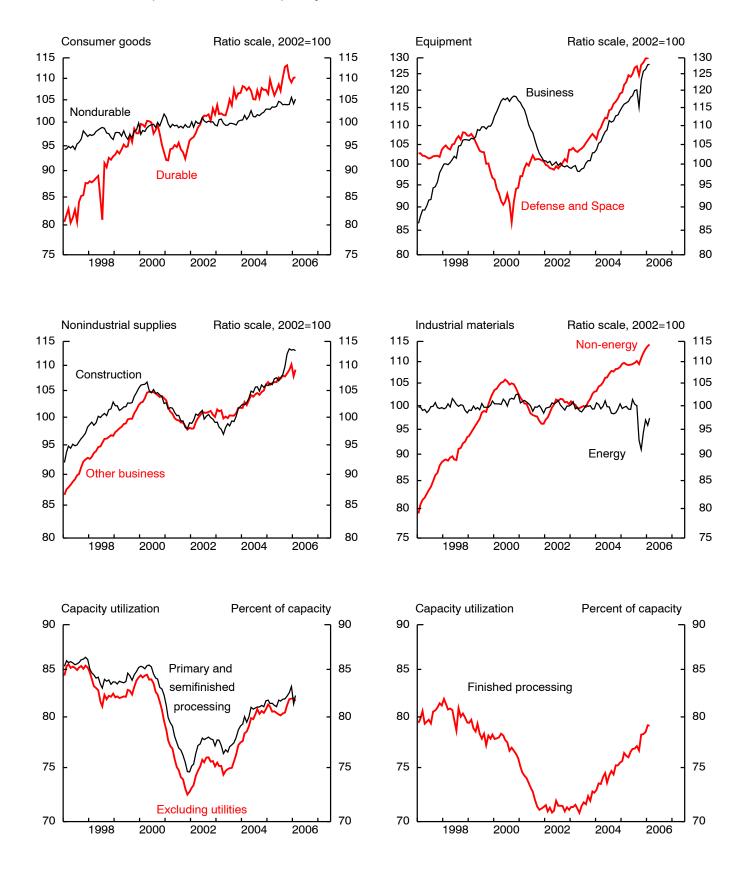
Further detail is available on the Board's web site (www.federalreserve.gov/releases/G17/).

# 1. Industrial production, capacity, and utilization

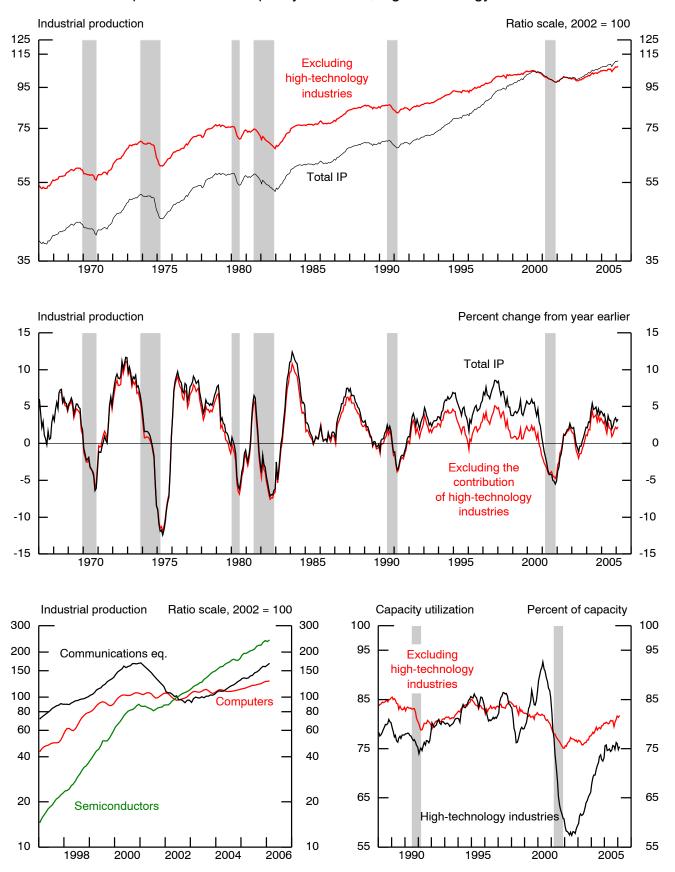


Notes: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER). See note on cover page.

# 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

Item				rth quarte urth quart			Annua	ıl rate			Month	ıly rate		Feb. '05
item		2005 proportion <sup>1</sup>	2003	2004	2005	2005 Q1	Q2	Q3	Q4r	2005 Nov. <sup>r</sup>	Dec.r	2006 Jan. <sup>r</sup>	Feb.p	to Feb. '06
Total IP		100.00	1.5	4.3	3.0	3.8	1.6	1.4	5.3	.9	1.0	3	.7	3.3
MARKET GROUPS							• •				_			
Final products and nonindustrial suppli	es	57.59 29.69	1.7	4.3 2.0	4.8 2.4	4.3 2.4	3.0 1.5	3.5 3.7	8.3 1.9	.3 8	.7	6 7	.6 .8	4.1 1.8
Consumer goods Durable		8.35	4.3	1.3	3.1	1.7	-2.5	10.8	2.8	-2.7	.8 -1.0	1.0	.o .1	1.8
Automotive products		4.55	6.5	.4	2.5	2.0	-4.2	16.7	-3.1	-4.8	-1.5	1.9	.0	-1.6
Home electronics		.25	18.5	-3.7	17.2	3.5	31.8	-17.7	68.1	5.4	1.0	5	-1.8	13.4
Appliances, furniture, carpeting		1.35	2.2	2.4	2.2	2.2	-2.2	10.3	-1.1	-2.0	-1.4	1.0	.6	1.9
Miscellaneous goods		2.19	7	3.0	3.1	.4	-2.9	3.0	12.7	.3	.1	6	.2	2.4
Nondurable		21.35	.1	2.3	2.1	2.7	3.1	1.0	1.5	.0	1.6 .9	-1.4	1.0	2.3
Non-energy Foods and tobacco		16.93 9.15	.6 2.1	2.5 1.8	2.2	3.2	2.4	7 1.2	4.1 6.0	.1	1.0	.5 .4	2 .0	2.4 3.9
Clothing		.68	-9.3	-2.8	-1.2	-6.7	-8.0	6.3	4.3	1.0	.3	1.0	3	1.6
Chemical products		4.69	1.0	3.0	.4	4.0	2.2	-4.4	.3	2	.7	1.2	3	.0
Paper products		1.90	-3.5	5.9	3.7	13.9	2.7	-5.3	4.6	3	1.4	6	6	.6
Energy		4.42	-1.9	1.7	1.5	.8	5.9	8.3	-8.3	3	4.3	-8.8	6.0	2.0
Business equipment		10.15	2.8	10.8	10.5	9.5	6.7	2.4	24.6	2.2	.4	1.2	.1	10.4
Transit Information processing		1.99 2.82	3.6 6.5	9.7 14.6	15.0 19.4	15.7 17.7	15.7 12.7	-28.2 23.0	81.8 24.4	5.2 2.6	1.1	4.1 1.2	4 1.2	16.8 18.2
Industrial and other		5.35	.4	9.2	4.4	3.2	.5	5.4	8.5	.9	.5	.0	4	3.9
Defense and space equipment		2.05	5.4	9.7	9.3	12.0	11.5	5.8	8.0	.6	1.0	.1	.5	7.4
Construction supplies Business supplies		4.45 10.63	1.7 .9	4.6 3.9	6.6 3.7	.9 4.2	4.1 2.2	4.7 2.7	17.6 5.8	1.0 .6	2 1.1	.1 -2.2	2 1.2	6.2 2.9
Materials		42.41	1.2	4.3	.7	3.2	3	-1.5	1.3	1.9	1.4	.2	.7	2.2
Non-energy		29.43	1.7	6.0	3.3	4.1	8	1.7	8.3	1.1	.8	.7	.3	4.1
Durable		18.76	3.8	7.6	7.0	6.8	1.2	7.0	13.4	.7	.7	.5	.3	6.6
Consumer parts		3.54	-1.2	2.0	2.1	2.0	-3.4	6.8	3.4	-2.2	1	1.1	5	.2
Equipment parts Other		6.68 8.54	11.8	14.1 4.9	16.2 2.0	20.2 -1.0	10.4 -4.0	13.7 1.9	20.9 11.9	2.7	1.5 .5	.1 .6	1.4 3	14.3 3.3
Nondurable		10.67	-1.7	3.2	-3.1	5	-4.3	-7.1	4	2.0	.9	1.1	.3	3
Textile		.61	-6.5	-6.4	-4.5	-6.5	-9.8	4.1	-5.1	8	-1.3	2.3	9	-1.9
Paper		2.30	-6.5	4.6	8	2.3	-6.0	-4.3	5.2	7	1.7	1.1	1.1	1.6
Chemical		4.42	1.6	5.3	-8.5	-5.4	-5.3	-15.7	-7.3	5.9	1.0	1.2	.2	-4.0
Energy		12.98	1	2	-5.4	1.0	1.1	-8.6	-14.1	3.8	2.7	-1.2	1.6	-2.3
INDUSTRY GROUPS										_				
Manufacturing		80.78	1.7	5.1 5.2	4.2	4.5 4.2	1.3	2.0	9.2 9.5	.8 .8	.4 .4	.8 .9	.0	4.2
Manufacturing (NAICS)  Durable manufacturing		76.37 42.90	4.0	7.1	7.8	6.8	2.6	2.6 7.0	15.2	.5	.1	.7	.1	4.4 6.8
Wood products	321	1.54	4.0	3.0	7.6	3.4	-5.2	1.3	35.1	1.1	.0	-1.9	8	5.1
Nonmetallic mineral products	327	2.28	2.2	5.1	2.9	-3.6	.2	1.4	14.6	2.6	-1.8	2.1	2	4.9
Primary metal	331	2.44	1.0	3.9	-1.5	-9.0	-17.2	1.8	22.5	.9	.9	1.8	1	4.2
Fabricated metal products	332	5.76	7	5.2	4.0	2.0	1.5	3.4	9.2	.0	5	1.0	.6	4.9
Machinery Computer and electronic products	333 334	5.33 7.87	1.0 15.7	11.5 16.1	6.3 23.0	3.4 27.0	1.8 16.2	3.1 22.3	17.8 26.9	.9 3.5	1.4 1.0	-1.6 .1	5 1.2	4.5 19.0
Electrical equip., appliances,	334	/.0/	13./	10.1	23.0	2/.0	10.2	44.3	20.9	3.3	1.0	.1	1.2	19.0
and components	335	2.10	7	5.2	7.0	1.6	1.9	12.4	12.6	4	.1	2.4	-1.7	7.3
Motor vehicles and parts	3361-3	7.09	4.7	2.6	2.3	3.5	-4.4	13.5	-2.3	-4.6	-1.3	2.4	8	-2.1
Aerospace and miscellaneous			١.											
transportation equipment	3364-9	3.66	4	5.3	11.9	10.7	16.2	-15.3	43.9	3.7	1.7	1.2	1.7	14.6
Furniture and related products Miscellaneous	337 339	1.63 3.18	.3	2.2 3.9	-2.0 4.8	6.5	-7.7 1.7	2.1 7.0	-2.2 4.1	3 3	8 4	1 .3	1.3	-1.5 3.4
Nondurable manufacturing Food, beverage, and tobacco products	311,2	33.47 10.67	4 1.7	2.8 1.7	.0 3.4	.9 2.6	4 3.1	-2.8 1.7	2.5 6.2	1.3	.8 1.0	1.1 .6	1 .1	1.5 4.4
Textile and product mills	311,2	1.09	-4.2	-3.9	3	.3	-7.6	9.3	-2.5	-1.7	-2.0	2.5	-1.3	8
Apparel and leather	315,6	.73	-9.4	-2.2	4	-7.1	-7.1	7.7	5.6	1.2	.2	1.0	4	2.4
Paper	322	2.68	-6.0	4.5	7	2.7	-8.4	-4.7	8.6	-1.5	2.1	1.6	.4	1.6
Printing and support	323	2.01	-3.0	1.5	1.7	1.7	-1.8	4.1	2.8	.1	.1	1.5	1.3	4.2
Petroleum and coal products Chemical	324 325	2.51 10.19	.3 .7	6.2 4.2	-6.0 -3.4	.4 9	2.2 4	-14.2 -9.9	-11.4 -2.1	6.8 2.6	2 .8	3.2 1.2	-1.8 2	-4.1 -1.3
Plastics and rubber products	325	3.59	2	3.2	3.9	1.7	-1.8	5.4	10.7	1.1	.8	3	2 1	4.0
Other manufacturing (non-NAICS)	1133,5111	4.42	-3.0	3.7	1.8	10.0	1.8	-6.9	3.2	3	1.1	-1.1	2	5
Mining	21	9.75	.5	4 1.2	-6.8 2.8	4.2 -1.9	1 6.4	-14.9 13.8	-14.8	4.5 -1.0	2.8 3.9	2.3 -11.5	5 7.9	-3.5 2.2
	2211.2													
Utilities Electric	<b>2211,2</b> 2211	9.46 7.73	.7 1.9	1.2 2.0	3.8	-3.0	5.9	17.8	-6.1 -4.1	-2.0	2.5	-11.3 -9.0	6.9	3.9

Revised. p Preliminary.

NOTE. Under 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 separately.

1. 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

Item			ırth quart ourth quar			Annua	ıl rate			Month	ly rate		Feb. '05
nem	2005 proportion	2003	2004	2005	2005 Q1	Q2	Q3	Q4r	2005 Nov. <sup>r</sup>	Dec.r	2006 Jan. <sup>r</sup>	Feb.p	to Feb. '06
Total industry	100.00	1.5	4.3	3.0	3.8	1.6	1.4	5.3	.9	1.0	3	.7	3.3
Energy	20.37	.5	.7	-2.5	.9	2.9	-2.8	-10.5	2.3	2.9	-3.9	3.1	6
Consumer products	4.42	-1.9	1.7	1.5	.8	5.9	8.3	-8.3	3	4.3	-8.8	6.0	2.0
Commercial products	2.49	5.1	2.4	2.8	-1.8	6.9	5.2	1.0	.5	2.1	-9.8	5.9	1.0
Oil and gas well drilling	.49	21.2	8.3	11.8	19.1	1.8	19.9	7.5	9	-1.0	1.8	3.4	11.5
Converted fuel Primary materials	3.81 9.17	.6 4	1.6 -1.0	-2.2 -6.7	1 1.5	6.1 -1.0	1.5 -12.6	-15.0 -13.8	1.4 4.9	1.8 3.1	-4.5 .2	4.2 .6	.0 -3.4
Non-energy	79.63	1.7	5.1	4.4	4.5	1.3	2.5	9.5	.6	.5	.6	.1	4.3
Selected high-technology industries	4.80	21.1	18.4	25.7	32.8	16.4	27.0	27.0	3.7	1.6	.0	2.3	21.8
	.79	5.8	4.6	12.0	10.9	14.0	8.8	14.5	2.0	1.4	.4	.3	11.7
	342 1.21	9.9	22.3	25.4	24.4	12.1	33.3	33.1	2.8	5	2.3	3.0	25.3
Semiconductors and related electronic components 33441	2-9 2.79	34.1	21.4	29.9	43.8	18.9	30.0	28.0	4.6	2.6	-1.1	2.5	23.2
Excluding selected high-technology industries	74.83	.5	4.2	3.0	2.8	.3	1.0	8.4	.4	.4	.7	1	3.1
Motor vehicles and parts 336	7.09	4.7	2.6	2.3	3.5	-4.4	13.5	-2.3	-4.6	-1.3	2.4	8	-2.1
	3.53	10.4	1.6	2	.8	-6.4	21.1	-13.1	-8.3	-3.9	5.1	.0	-5.0
Motor vehicle parts 3	3.09	-1.5	2.2	3.3	4.7	9	7.8	2.0	-2.1	.0	1.0	8	.4
Excluding motor vehicles and parts	67.74	.0	4.4	3.1	2.7	.8	3	9.6	.9	.6	.5	.0	3.7
Consumer goods Business equipment	21.02 8.01	.7 .5	2.3 9.0	2.3 9.6	2.9 7.3	1.5 7.4	.0 -1.8	4.9 27.4	.1 2.9	.7 .6	.4 .6	1 .0	2.3 9.9
Construction supplies	4.41	1.7	4.6	6.5	.8	3.9	4.6	17.5	.9	2	.1	3	6.1
Business supplies	7.75	-1.6	3.3	2.7	4.2	2	.4	6.3	.5	.7	.2	2	2.4
Materials	24.41	8	4.7	.6	.2	-2.8	-1.6	7.0	1.1	.7	.9	.2	2.6
Measures excluding selected high-technology industries													
Total industry	95.20	.5	3.6	1.9	2.4	.8	.1	4.2	.8	.9	3	.6	2.3
Manufacturing <sup>1</sup>	75.99	.4	4.2	2.9	2.8	.3	.5	8.1	.6	.4	.8	1	3.1
Durable	38.29	1.7	5.6	5.5	3.5	.7	4.5	13.6	.0	1	.8	1	4.8
Measures excluding motor vehicles and parts	92.91	1.3	4.5	3.1	3.9	2.1	.5	5.9	1.4	1.1	5	.8	3.7
Total industry Manufacturing <sup>1</sup>	73.69	1.3	5.4	4.4	4.6	1.8	1.0	10.4	1.4	.6	5 .6	.8	4.8
Durable	36.00	3.8	8.0	8.8	7.4	3.9	5.7	18.9	1.5	.4	.4	.4	8.5
Measures excluding selected high-technology industries and motor vehicles and parts													
Total industry Manufacturing <sup>1</sup>	88.11 68.90	.0	3.6 4.4	1.8 2.9	2.3 2.7	1.3	9 7	4.7 9.2	1.2	1.1	5 .7	.7	2.7 3.6
Stage-of-process components of non-energy materials, measures of the input to	10.10		7.0	0.2	10.5	2.7	6.1	10.0		4.0		-	
Finished processors	13.13	3.6	7.9	8.3	10.6	2.7	8.1	12.0	.6	1.0	.6	.8	7.4
Primary and semifinished processors	16.30	.2	4.3	7	9	-3.7	-3.3	5.3	1.5	.7	.8	.0	1.3

Table 3 MOTOR VEHICLE ASSEMBLIES

Millions of units, seasonally adjusted annual rate

Item	2005	2005				2005		2006	
Hem	average	Q1	Q2	Q3	Q4	Nov.	Dec.	Jan.	Feb.
Total	11.95	12.12	11.75	12.16	11.76	11.65	11.19	11.78	11.43
Autos	4.32	4.39	4.22	4.31	4.38	4.44	4.30	4.63	4.41
Trucks	7.63	7.73	7.53	7.85	7.38	7.21	6.89	7.15	7.02
Light	7.20	7.29	7.11	7.44	6.96	6.81	6.49	6.63	6.55
Medium and heavy	.42	.44	.42	.41	.42	.40	.40	.51	.47
Мемо									
Autos and light trucks	11.52	11.67	11.33	11.75	11.34	11.25	10.79	11.26	10.96

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. See note on cover page.

Table 4 INDUSTRIAL PRODUCTION INDEXES: MARKET AND INDUSTRY GROUP SUMMARY

2002 = 100, seasonally adjusted

Item		2005 proportion	2005 June	July	Aug.	Sept.	Oct.	Nov.r	Dec.r	2006 Jan. <sup>r</sup>	Feb.p
Total IP		100.00	108.3	108.3	108.6	107.2	108.4	109.4	110.4	110.2	110.9
Market Groups											
Final products and nonindustrial supplie	s	57.59	109.0	109.1	109.5	109.1	111.0	111.3	112.0	111.4	112.1
Consumer goods		29.69	105.8	105.2	105.6	106.4	106.5	105.7	106.6	105.8	106.6
Durable		8.35	108.5	107.1	110.1	112.7	113.1	110.1	109.0	110.1	110.2
Automotive products Home electronics		4.55	111.7	109.5 116.1	114.4 113.6	117.8	117.3	111.7 132.1	110.0 133.4	112.1 132.8	112.1 130.4
Appliances, furniture, carpeting		.25 1.35	120.4 105.6	105.2	113.0	113.5 108.5	125.3 108.4	106.2	104.7	105.8	130.4
Miscellaneous goods		2.19	102.5	102.3	103.1	104.9	106.4	106.6	104.7	105.5	106.3
Nondurable		21.35	104.7	104.4	103.9	103.9	103.9	103.9	105.6	104.1	105.1
Non-energy		16.93	104.0	103.8	103.2	103.7	104.2	104.4	105.3	105.8	105.6
Foods and tobacco		9.15	104.7	104.7	103.8	104.5	105.3	105.7	106.7	107.1	107.1
Clothing		.68	82.9	84.7	85.0	85.7	85.4	86.2	86.5	87.3	87.1
Chemical products		4.69	105.2	104.2	103.8	104.2	104.1	103.8	104.5	105.8	105.5
Paper products		1.90 4.42	105.6	104.7 107.1	104.4 106.5	103.9	105.3 102.7	104.9	106.4 106.8	105.8 97.3	105.2
Energy		4.42	107.2	107.1	100.5	105.0	102.7	102.3	100.8	97.3	103.2
Business equipment		10.15	118.4	120.0	120.1	115.1	123.1	125.8	126.4	127.9	128.0
Transit		1.99	119.3	118.5	118.7	88.9	121.5	127.9	129.3	134.6	134.0
Information processing		2.82	131.0	133.9	136.1	138.1	141.3	144.9	144.8	146.5	148.3
Industrial and other		5.35	111.6	113.4	112.5	113.1	114.5	115.5	116.0	116.1	115.0
Defense and space equipment		2.05	124.9	126.8	127.4	124.6	127.8	128.6	129.8	129.9	130.5
Construction supplies		4.45	106.9	107.5	108.2	109.8	112.4	113.4	113.2	113.3	113.0
Business supplies		10.63	107.6	107.4	107.9	107.8	108.4	109.1	110.2	107.8	109.1
Materials		42.41	107.3	107.2	107.4	104.5	104.9	106.9	108.3	108.5	109.3
Non-energy		29.43	109.5	109.8	110.2	109.4	110.9	112.1	113.0	113.8	114.2
Durable		18.76 3.54	115.5 102.4	115.9 101.1	117.0 101.6	118.8	120.1 104.4	120.9 102.1	121.8 102.0	122.4 103.2	122.8
Consumer parts Equipment parts		6.68	102.4	143.4	145.7	103.3 147.2	149.1	153.1	155.3	155.5	102.7 157.7
Other		8.54	103.0	103.2	104.0	105.8	107.0	107.2	107.8	108.4	108.1
Nondurable		10.67	99.7	100.0	99.3	94.8	96.4	98.3	99.2	100.3	100.7
Textile		.61	84.4	85.3	84.5	84.3	84.4	83.7	82.6	84.6	83.8
Paper		2.30	97.2	96.1	96.0	95.7	97.1	96.4	98.0	99.1	100.2
Chemical		4.42	102.9	103.3	102.1	90.8	92.9	98.4	99.3	100.5	100.7
Energy		12.98	101.3	100.3	100.0	92.8	90.9	94.3	96.9	95.8	97.3
INDUSTRY GROUPS											
Manufacturing		80.78	109.0	109.1	109.5	108.9	110.9	111.7	112.2	113.1	113.1
Manufacturing (NAICS)		76.37	109.4	109.6	110.1	109.5	111.5	112.4	112.8	113.8	113.9
Durable manufacturing	221	42.90	115.5	115.9	117.3	117.5	120.7	121.2	121.4	122.3	122.5
Wood products Nonmetallic mineral products	321 327	1.54 2.28	104.4 106.4	104.9 105.9	104.0 105.9	107.2 107.2	112.7 108.8	114.0 111.6	114.1 109.6	111.9 111.9	111.0 111.6
Primary metal	331	2.44	95.5	95.3	98.2	107.2	103.3	103.5	109.0	106.3	106.2
Fabricated metal products	332	5.76	105.6	106.1	106.6	106.8	109.0	109.1	108.5	109.7	110.4
Machinery	333	5.33	115.0	116.3	114.1	116.1	119.0	120.2	121.8	119.8	119.2
Computer and electronic products	334	7.87	153.6	156.5	160.1	162.1	165.0	170.7	172.5	172.6	174.7
Electrical equip., appliances,											
and components	335	2.10	105.1	106.3	107.2	108.8	110.9	110.5	110.6	113.2	111.3
Motor vehicles and parts	3361-3	7.09	111.4	109.2	113.1	116.3	116.3	110.9	109.4	112.0	111.1
Aerospace and miscellaneous	2264 0	2.66	110.2	110.0	111.7	04.2	112.2	116 /	110 2	119.8	121 (
transportation equipment Furniture and related products	3364-9 337	3.66 1.63	110.2 99.9	110.9 99.8	111.7 100.2	94.2 101.7	112.2 100.5	116.4 100.2	118.3 99.4	99.3	121.8 100.6
Miscellaneous	339	3.18	109.7	109.7	111.6	111.9	112.6	112.2	111.7	112.1	112.6
		0.10	10,1,	10,17	111.0	11117	112.0	112.2	1111,	112.1	112.
Nondurable manufacturing		33.47	102.1	102.1	101.5	100.1	100.7	102.0	102.8	103.9	103.7
Food, beverage, and tobacco products	311,2	10.67	104.5	104.8	103.9	104.6	105.5	105.8	106.8	107.4	107.5
Textile and product mills	313,4	1.09	90.8	91.9 85.5	91.9	92.6	93.2	91.6	89.8	92.0	90.8
Apparel and leather	315,6	.73	83.6	85.5	85.9	86.7	86.5	87.5	87.7	88.6	101.3
Paper Printing and support	322 323	2.68 2.01	97.8 96.5	96.6 97.9	96.2 97.2	96.5 97.9	98.8 98.2	97.2 98.3	99.3 98.4	100.8 99.9	101.2 101.1
Petroleum and coal products	323	2.51	107.9	105.6	104.2	98.5	95.4	101.9	101.7	105.0	101.1
Chemical	325	10.19	103.9	103.7	102.7	97.5	98.8	101.3	102.2	103.4	103.2
Plastics and rubber products	326	3.59	102.9	103.2	104.1	106.5	106.2	107.4	108.3	108.0	107.8
Other manufacturing (non-NAICS)	1133,5111	4.42	102.0	101.0	100.9	100.4	101.4	101.1	102.2	101.1	100.9
Mining	21	9.75	100.8	99.8	99.2	90.3	89.1	93.1	95.7	97.8	97.3
Utilities	2211,2	9.46	108.3	108.1	108.4	108.1	105.9	104.8	108.9	96.4	104.0
Electric	2211	7.73	109.7	109.6	110.1	110.5	109.5	107.3	110.0	100.1	107.0
Natural gas	2212	1.73	101.2	100.9	100.4	96.5	89.6	93.0	102.7	80.1	90.4

r Revised. p Preliminary. NOTE. See notes to table 1.

Table 5 INDUSTRIAL PRODUCTION INDEXES: SPECIAL AGGREGATES

2002 = 100, seasonally adjusted

					_	_		_	2006	
	proportion	June	July	Aug.	Sept.	Oct.	Nov.r	Dec.r	Jan.r	Feb.p
	100.00	108.3	108.3	108.6	107.2	108.4	109.4	110.4	110.2	110.9
	20.37	104.8	103.9	103.7	98.6	96.8	99.0	101.9	98.0	101.0
	4.42	107.2	107.1	106.5	105.0	102.7	102.3	106.8	97.3	103.2
	2.49	113.7	111.5	112.4	111.6	111.0	111.5	113.9	102.7	108.8
	.49	140.6	143.6	146.2	146.0	149.3	147.9	146.4	149.0	154.0
	3.81	107.2	105.9	105.3	101.1	98.4	99.8	101.6	97.1	101.
	9.17	98.7	97.8	97.5	89.2	87.6	91.9	94.7	94.9	95.:
	79.63	109.0	109.2	109.7	109.2	111.3	111.9	112.5	113.2	113.
	4.80	167.9	171.6	176.7	179.6	181.3	188.0	191.0	191.0	195.4
3341	.79	120.1	120.0	121.0	122.1	123.0	125.4	127.2	127.7	128.
3342	1.21	139.7	145.3	147.2	151.2	156.3	160.6	159.7	163.4	168
334412-9	2.79	205.7	209.9	218.9	221.9	221.9	232.2	238.2	235.5	241.5
	74.83	105.7	105.7	106.0	105.4	107.4	107.9	108.3	109.0	109.0
3361-3	7.09	111.4	109.2	113.1	116.3	116.3	110.9	109.4	112.0	111.3
3361	3.53	117.1	113.2	120.3	124.7	123.7	113.4	108.9	114.4	114.4
3363	3.09	103.6	103.3	104.4	105.8	106.5	104.3	104.3	105.3	104.5
5	67.74	105.1	105.4	105.3	104.3	106.5	107.5	108.2	108.7	108.
	21.02	103.8	103.6	103.3	103.9	104.6	104.6	105.3	105.8	105.
										122.
										112.
	7.75 24.41	102.5 102.8	102.7 103.0	102.9 102.9	102.9 101.7	103.9 103.3	104.4 104.4	105.1 105.2	105.3 106.2	105. 106.
ology										
	05.20	105.5	105.4	105.5	104.0	105.2	106.0	107.0	106.7	107.3
										107
	38.29	109.4	109.5	110.6	110.5	113.7	113.8	113.7	114.6	114.
parts	00.04	100.0	100.2	100.2	1007	107.0	100.2	110.5	110.0	110
										110.
	36.00	108.8	109.1 117.2	109.2 118.1	108.2 117.6	110.4 121.5	111.8	112.5 123.8	113.2 124.3	113. 124.
ology parts										
	88.11 68.90	105.0 105.1	105.1 105.3	104.9 105.1	103.0 104.0	104.3 106.2	105.6 107.4	106.8 107.9	106.2 108.6	107.0 108.0
ergy	13.13	118.1	118.3	119.3	120.4	121.9	122.6	123.8	124.6	125
	3342 334412-9 3361-3 3361 3363 sology	20.37 4.42 2.49 3.81 9.17 79.63 4.80 3341 .79 3342 1.21 334412-9 2.79 74.83 3361 3.53 3363 3.09 8 67.74 21.02 8.01 4.41 7.75 24.41  10logy 1 parts 92.91 73.69 36.00 10logy parts 88.11	100.00   108.3   100.00   108.3   100.00   108.3   100.00   108.3   107.2   104.8   14.42   107.2   107.2   104.6   107.2		Proportion   June   July   Aug.			Proportion   June   July   Aug.   Sept.   Oct.   Nov.r		

Table 6

**DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION** 

Percent

-												
Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
One month earlier												
2004	61.0	62.7	53.0	66.7	58.7	46.3	66.0	56.0	47.0	61.0	53.7	58.7
2005	54.7	47.3	49.7	52.7	54.0	56.7	54.3	52.0	55.3	60.0	59.3	56.5
2006	63.3											
Three months earlier												
2004	66.0	61.3	65.0	68.3	66.7	62.3	57.7	56.3	56.3	57.7	56.7	64.3
2005	58.3	59.0	52.0	47.3	51.8	57.0	57.0	55.0	54.3	57.7	58.5	61.0
2006	65.5											
Six months earlier												
2004	68.3	73.3	68.0	77.0	72.0	65.3	67.3	67.0	62.0	61.3	58.7	64.0
2005	62.0	60.0	60.7	52.3	52.7	55.0	57.0	53.3	56.3	60.0	60.0	57.7
2006	62.0											

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. See note on cover page.

Table 7 CAPACITY UTILIZATION

Percent of capacity, seasonally adjusted

B1.2 80.8  80.1 80.5  79.7 80.2  79.0 79.3  87.6 86.0  82.8 84.4  84.3 85.9  75.8 76.5  84.5 83.1  78.6 77.7  87.7 89.8  77.3 79.0	Feb. 88. 81. 85. 80. 22. 80. 85. 85. 85. 85. 86. 85. 86. 85. 86. 86. 87. 77.
81.2 80.8 80.1 80.5 79.7 80.2 79.0 79.3 87.6 86.0 82.8 84.4 84.3 85.9 75.8 76.5 84.5 83.1 78.6 77.7 87.7 89.8	8 81. 5 80. 2 80. 3 79. 3 85. 4 84. 4 84. 9 85. 5 76. 1 82. 7 77.
80.1 80.5 79.7 80.2 79.0 79.3 87.6 86.0 82.8 84.4 84.3 85.9 75.8 76.5 84.5 83.1 78.6 77.7	5 80. 2 80. 3 79. 85. 4 84. 9 85. 76. 1 82. 7 77.
79.7 80.2  79.0 79.3 87.6 86.0 82.8 84.4 84.3 85.9 75.8 76.5 84.5 83.1 78.6 77.7  87.7 89.8	2 80. 3 79. 80 85. 4 84. 84. 85. 76. 1 82. 77.
79.0 79.3 87.6 86.0 82.8 84.4 84.3 85.9 75.8 76.5 84.5 83.1 78.6 77.7	3 79. 85. 4 84. 9 85. 7 76.
87.6 86.0 82.8 84.4 84.3 85.9 75.8 76.5 84.5 83.1 78.6 77.7 87.7 89.8	85. 4 84. 85. 76. 1 82. 77.
82.8 84.4 84.3 85.9 75.8 76.5 84.5 83.1 78.6 77.7 87.7 89.8	4 84. 9 85. 5 76. 1 82. 7 77.
84.3 85.9 75.8 76.5 84.5 83.1 78.6 77.7 87.7 89.8	9 85. 5 76. 1 82. 7 77.
75.8 76.5 84.5 83.1 78.6 77.7 87.7 89.8	5 76. I 82. 7 77.
84.5 83.1 78.6 77.7 87.7 89.8	1 82. 7 77.
78.6 77.7 87.7 89.8	7 77.
87.7 89.8	
77.3 79.0	88.
73.2 74.0	75.
72.9 72.8	
77.9 77.9	
80.8 81.6	5 81.
90.0 89.7	
86.6 85.7	7 85.
055 075	5 87.
76.0 74.8	
81.3 81.2	2 81.
74.6 76.3	3 78.
75.4 72.6	5 72.
81.7 81.4	4 81.
80.6 81.2	
	-
84.1 86.1	1 86.
78.5 79.1	
	80.8 81.6 82.5 82.9 75.9 78.0 81.4 82.7 85.8 87.1 77.4 78.6 89.1 91.9 90.0 89.7 86.6 85.7 86.6 85.7 76.0 74.8 81.3 81.2 75.4 72.6 81.7 81.4 80.6 81.2

Table 8 INDUSTRIAL CAPACITY

Percent change

		Average a	ınnual rate		Fourt	h quarter	to fourth	quarter		Annual	rate		Monthly rate
Item	1972-	1980-	1989-	1995-					2005			2006	2006
	79	88	94	2006	2003	2004	2005	2006p	Q2	Q3	Q4	Q1	Feb.
Total industry	3.0	1.9	2.2	3.4	2	.6	1.6	2.0	1.6	1.7	1.8	2.0	.2
Manufacturing <sup>1</sup>	3.2	2.2	2.5	3.8	1	.5	2.1	2.5	2.0	2.2	2.3	2.5	.2
Mining Utilities	.7 4.3	.1 2.1	9 1.6	6 2.2	-1.0 3.1	6 2.6	6 .0	9 .7	7 .0	4 4	2 4	5 .2	1 .0
Selected high-technology industries	18.5	17.0	15.8	27.1	8.0	6.8	20.8	12.7	20.2	23.0	24.3	21.1	1.4
Manufacturing <sup>1</sup> ex. selected high-technology industries	2.6	1.3	1.6	1.8	5	.1	.6	1.7	.6	.7	.7	1.1	.1
STAGE-OF-PROCESS GROUPS Crude Primary and semifinished	1.7	.3 1.4	3 2.6	5 4.2	-2.1 1	-1.1 .9	9 2.5	7 2.1	-1.0 2.4	7 2.6	6 2.8	6 2.7	1 .2
Finished	3.7	3.3	2.5	3.3	.6	.8	1.2	2.7	1.2	1.3	1.3	1.9	.2

r Revised. p Preliminary.

1. See note on cover page.

p Preliminary.
1. See note on cover page.

Table 9 GROSS VALUE OF FINAL PRODUCTS AND NONINDUSTRIAL SUPPLIES

Billions of 2000 dollars at annual rate, seasonally adjusted

			2004	2005				2005		2006	
Item	2000	2005	Q4	Q1	Q2	Q3	Q4r	Nov.r	Dec.r	Jan.r	Feb.p
Final products and nonindustrial supplies	2,815.1	2,990.4	2,920.6	2,951.0	2,967.7	2,988.2	3,039.6	3,038.5	3,057.5	3,051.3	3,063.7
Final products	2,114.0	2,264.0	2,206.9	2,233.6	2,244.5	2,262.4	2,299.5	2,297.5	2,311.2	2,317.3	2,323.0
Consumer goods	1,480.7	1,593.1	1,569.2	1,581.5	1,583.6	1,597.5	1,600.7	1,596.5	1,606.4	1,603.3	1,610.6
Durable	471.7	538.1	527.0	530.2	526.3	540.7	544.7	541.3	535.2	543.0	541.6
Automotive products	279.5	339.9	331.8	334.5	330.3	343.2	341.1	337.4	332.0	339.9	338.6
Other durable goods	192.1	198.5	195.4	196.1	196.3	197.9	203.9	204.1	203.3	203.3	203.2
Nondurable	1,009.1	1,056.6	1,043.4	1,052.3	1,057.7	1,058.7	1,058.2	1,057.1	1,071.6	1,062.2	1,070.3
Equipment, total	633.2	675.0	639.8	655.1	664.4	668.2	705.2	707.8	711.6	721.9	719.8
Business and defense	616.9	658.0	624.5	639.1	648.9	651.8	684.9	686.6	692.0	703.7	702.0
Business	558.7	578.7	549.9	562.5	570.2	571.8	604.3	606.3	610.9	623.1	620.7
Defense and space	58.1	78.3	73.7	75.7	77.6	78.7	80.0	79.8	80.6	80.6	81.0
Nonindustrial supplies	701.2	726.7	713.9	717.6	723.5	726.2	740.4	741.2	746.6	734.6	741.2
Construction supplies	198.0	205.9	200.7	201.2	203.2	205.7	214.2	214.9	214.6	214.8	214.3
Business supplies	503.2	520.7	513.2	516.5	520.3	520.4	525.8	526.0	531.7	519.4	526.6
Commercial energy products	136.0	151.4	151.2	149.9	153.0	151.9	151.9	152.2	154.4	142.9	149.7

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Table 10 GROSS-VALUE-WEIGHTED INDUSTRIAL PRODUCTION: STAGE-OF-PROCESS GROUPS

Percent change, seasonally adjusted

		Fourt four				Annua	ıl rate			Month	ly rate		Feb. '05
Item	2005 gross value <sup>1</sup>	2003	2004	2005	2005 Q1	Q2	Q3	Q4r	2005 Nov. <sup>r</sup>	Dec.r	2006 Jan. <sup>r</sup>	Feb.p	to Feb. '06
Finished	1,932.2	3.0	4.8	5.4	5.9	1.9	4.1	10.0	.0	.2	1.3	2	4.6
Semifinished	1,746.9	1.6	5.0	6.3	4.2	3.5	8.3	9.1	4	.7	-1.5	1.3	5.5
Primary	945.6	2	2.8	-2.4	-1.0	-2.4	-4.5	-1.6	3.3	1.5	-1.2	1.0	2
Crude	391.7	-1.6	3.7	-10.1	.3	-4.1	-20.9	-14.1	4.6	2.2	3.0	3	-5.2

r Revised. p Preliminary. 1. 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
<b>IP</b> (percent change) <sup>1</sup>																	
1984 1985	2.1	.5	.5	.6 2	.5	.0	.3 6	.1	2 .4	1 4	.4	.1	12.4 1.1	6.4	2.9	.4	9.0
1986	3 .5	.4 8	.2 6	.0	.1	3	0 .6	.3 2	.2	4 .4	.s .5	1.0 .9	2.3	.0 -2.4	6 1.7	2.5 4.5	1.3 1.0
1987	3	1.2	.2	.6	.7	.5	.6	.7	.3	1.5	.5	.5	5.4	7.0	7.1	9.9	5.1
1988	.1	.3	.3	.5	.0	.2	.2	.5	3	.6	.2	.4	3.4	3.2	2.1	3.3	5.0
1989 1990	.3 6	5 .9	.3	1 .0	7 .1	.0	9 1	.9	3 .2	1 7	.3 -1.2	.7 7	1.5 2.9	-1.9 2.9	-2.5 1.3	1.8 -5.9	.9 .9
1991	5	7	5	.2	1.0	1.0	.0	.2	.9	2	1	3	-7.6	2.7	5.7	1.0	-1.5
1992 1993	5 .5	.7	.7	.7	.4 4	.0	.8	5 .0	.2 .5	.7 .7	.4	.1	3 3.7	6.9 1.0	2.8 2.4	3.9 6.1	2.9 3.3
1994	.5	.0	1.0	.5	.6	.7	.2	.5	.2	.9	.6	1.1	5.3	7.5	5.3	7.9	5.4
1995	.3	.0	.2	.0	.2	.3	4	1.4	.4	2	.3	.4	5.3	1.1	3.7	3.5	4.8
1996 1997	8 .2	1.5 1.2	2 .8	.9 1	.7 .6	.8 .5	2 .5	.7 1.2	.6 .9	.0 .7	1.0	.7	1.8 8.5	8.4 5.7	5.1 8.9	6.2 10.6	4.2 7.3
1998	.4	.1	.1	.5	.6	5	3	2.2	2	.7	1	.3	4.4	3.1	3.6	5.6	5.9
1999	.5	.5	.2	.2	.8	1	.7	.5	4	1.3	.6	.9	4.1	4.2	4.3	7.7	4.5
2000 2001	.2 8	.4 7	.4 3	.7 1	.3 8	.1 5	3 4	3 3	.4 4	3 5	.0 4	4 .0	5.4 -6.6	5.2 -4.9	9 -5.1	-1.3 -4.5	4.3 -3.5
2002	.6	1	.9	.4	.4	.9	3	.1	.0	4	.3	5	2.9	6.1	1.7	-1.6	.1
2003	.5	.0	2	8	1	.3	.5	.1	.7	.1	.9	.2	.8	-3.3	3.6	5.1	.6
2004 2005	.4	.8 .4	3 .0	.8 1	.9	6 .8	.6 .0	.3	2 -1.3	.7 1.1	.2	.7 1.0	5.3 3.8	5.2 1.6	2.6 1.4	4.2 5.3	4.1 3.3
2006	3	.7							1.0	111	.,	1.0	0.0	1.0		0.0	0.0
<b>IP</b> (2002=100)																	
2004	102.7	103.5	103.2	104.0	105.0	104.4	105.0	105.3	105.1	105.8	106.0	106.7	103.1	104.4	105.1	106.2	104.7
2005 2006	106.9 110.2	107.4 110.9	107.3	107.2	107.4	108.3	108.3	108.6	107.2	108.4	109.4	110.4	107.2	107.6	108.0	109.4	108.2
Capacity (percent of																	
2002 output) 2004	133.0	133.0	133.0	133.1	133.1	133.2	133.3	133.4	133.5	133.6	133.7	133.9	133.0	133.1	133.4	133.7	133.3
2004	134.0	134.2	134.3	134.5	133.1	134.9	135.1	135.4	135.5	135.7	135.7	136.1	134.2	134.7	135.4	135.7	135.0
2006	136.3	136.6															
Utilization (percent)																	
1984	79.5	79.7	80.0	80.4	80.7	80.8	80.9	80.9	80.6	80.3	80.5	80.3	79.7	80.7	80.8	80.4	80.4
1985	79.9	80.1	80.0	79.7	79.6	79.4	78.7	78.9	79.1	78.6	78.8	79.4	80.0	79.6	78.9	78.9	79.4
1986 1987	79.7 79.0	79.0 79.8	78.4 79.8	78.3 80.1	78.4 80.6	78.0 80.8	78.4 81.2	78.2 81.6	78.3 81.7	78.5 82.8	78.7 83.1	79.3 83.4	79.0 79.6	78.2 80.5	78.3 81.5	78.9 83.1	78.6 81.2
1988	83.4	83.6	83.7	84.1	84.0	84.2	84.3	84.6	84.3	84.7	84.8	85.0	83.6	84.1	84.4	84.8	84.2
1989 1990	85.1 82.4	84.6 82.9	84.7 83.2	84.5 83.0	83.8 82.9	83.6 82.9	82.7 82.7	83.3 82.8	82.8 82.8	82.6 82.0	82.7 80.9	83.1 80.2	84.8 82.8	84.0 82.9	82.9 82.7	82.8 81.1	83.6 82.4
1991	79.7	79.1	78.6	78.6	79.3	80.0	79.9	79.9	80.5	80.2	80.0	79.7	79.1	79.3	80.1	80.0	79.6
1992	79.1	79.5	80.0	80.4	80.6	80.5	81.0	80.4	80.5	80.9	81.0	81.0	79.6	80.5	80.6	81.0	80.4
1993	81.2	81.4	81.3	81.4	81.0	81.1	81.2	81.1	81.4	81.8	82.0	82.3	81.3	81.1	81.2	82.0	81.4
1994	82.5	82.3	83.0	83.2	83.5	83.8	83.8	83.9	83.8	84.2	84.5	85.0	82.6	83.5	83.8	84.6	83.6
1995 1996	85.0 82.1	84.7 83.0	84.5 82.5	84.1 82.9	83.9 83.1	83.8 83.5	83.1 83.0	83.9 83.2	83.8 83.3	83.3 82.9	83.2 83.3	83.2 83.5	84.7 82.5	83.9 83.2	83.6 83.1	83.2 83.3	83.9 83.0
1997	83.3	83.9	84.1	83.6	83.6	83.5	83.5	84.0	84.3	84.3	84.6	84.4	83.7	83.6	83.9	84.4	83.9
1998	84.2	83.7	83.3	83.1	83.1	82.2	81.5	82.8	82.3	82.5	82.1	81.9	83.7	82.8	82.2	82.2	82.7
1999 2000	82.0 82.5	82.0 82.5	81.8 82.5	81.7 82.7	82.0 82.7	81.7 82.5	81.9 82.0	82.0 81.4	81.3 81.5	82.1 80.9	82.2 80.7	82.6 80.1	81.9 82.5	81.8 82.6	81.7 81.6	82.3 80.6	81.9 81.8
2001	79.2	78.4	77.9	77.6	76.9	76.3	75.9	75.4	75.0	74.5	74.0	73.9	78.5	76.9	75.4	74.2	76.3
2002	74.3	74.1	74.7	74.9	75.2	75.8	75.6	75.6	75.6	75.3	75.5	75.2	74.4	75.3	75.6	75.3	75.1
2003	75.5	75.6	75.4	74.9	74.9	75.1	75.4	75.5	76.0	76.1	76.8	76.9	75.5	74.9	75.6	76.6	75.7
2004	77.2	77.8	77.6	78.1	78.8	78.4	78.8	79.0	78.7	79.2	79.3	79.7	77.5	78.4	78.8	79.4	78.6
2005	79.8	80.0	79.9	79.7	79.8	80.3	80.2	80.3	79.1	79.9	80.5	81.2	79.9	79.9	79.8	80.5	80.0
2006	80.8	81.2															l

<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>

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) <sup>2</sup> 1984	1.9	1.1	.5	.5	.2	.4	.5	.2	2	.4	.3	.3	12.8	6.3	3.7	2.8	9.9
1985	4	3	.8	3	.1	.1	6	.6	.1	3	.6	.4	.1	1.1	.1	2.3	1.8
1986	1.2	3 7	.o 3	3 .4	.2	.1 4	0 .5	.3	.2	s .3	.5	.9	4.4	1	2.5	4.9	2.2
1987	3	1.4	.1	.5	.7	4	.7	.5	.6	1.6	.6	.6	6.0	6.7	6.9	11.3	5.5
1988	2	.1	.3	.8	1	.1	.1	.1	.3	.7	.3	.4	2.4	4.1	1.4	5.0	5.2
1989	.8	-1.0	1	.1	8	.1	-1.1	.9	3	2	.2	.2	1.7	-3.4	-3.0	.5	.8
1990	2	1.4	.4	1	.0	.2	2	.3	.0	8	-1.1	8	4.4	2.7	.6	-6.5	.7
1991	8	7	6	.3	.7	1.1	.3	.3	1.0	2	2	1	-9.1	2.2	7.4	1.8	-2.0
1992	5	.9	.9	.5	.7	.3	.8	4	.0	.6	.4	1	.7	7.9	3.9	2.7	3.7
1993	1.0	.1	1	.5	1	1	.3	1	.6	.8	.4	.6	4.6	1.5	1.6	6.9	3.5
1994 1995	.3 .4	.1 1	1.3	.8 1	.7 .0	.3 .4	.5 6	.7 1.2	.3 .9	1.0 1	.8 .1	1.1 .4	5.2 5.7	9.5 .6	6.2 3.0	9.6 4.4	6.0 5.3
1996	-1.0	1.5	3	1.2	.7	1.0	0	.7	.7	1	1.0	.9	.8	9.5	7.5	6.5	4.6
1997	.2	1.4	1.2	3	.8	.7	.3	1.5	.9	.7	1.2	.5	10.1	6.8	9.9	11.4	8.5
1998	.7	.1	1	.6	.5	6	4	2.6	3	1.0	.1	.5	6.0	2.5	3.9	7.8	6.7
1999	.3	.8	1	.4	1.0	2	.5	.7	4	1.5	.7	.8	4.6	4.8	4.0	9.3	5.2
2000	.3	.3	.6	.7	.0	.2	1	7	.4	3	3	7	6.1	5.0	-1.2	-2.9	4.6
2001	8	7	4	1	8	6	2	7	3	6	2	.3	-7.5	-5.1	-5.6	-4.2	-4.2
2002	.5	1	.8	.1	.5	1.0	4	.3	.0	6	.3	5	3.5	5.3	2.2	-2.1	.1
2003	.4	2	.2	9	1	.6	.3	1	.9	.1	1.1	.1	.3	-2.7	3.3	6.1	.5
2004	.3	.9	.2	.8	.8	6	.8	.7	4	.8	.0	.5	5.7	6.6	4.1	4.0	4.8
2005	.5	.5	3	.0	.4	.3	.1	.4	5	1.8	.8	.4	4.5	1.3	2.0	9.2	4.0
2006	.8	.0															
<b>IP</b> (2002=100)																	
2004	102.6	103.6	103.7	104.6	105.5	104.9	105.7	106.4	106.0	106.9	106.9	107.5	103.3	105.0	106.1	107.1	105.4
2005	108.1	108.6	108.2	108.3	108.7	109.0	109.1	109.5	108.9	110.9	111.7	112.2	108.3	108.6	109.2	111.6	109.6
2006	113.1	113.1															
Capacity (percent of 2002 output)																	
2004	136.3	136.3	136.3	136.4	136.4	136.5	136.5	136.6	136.7	136.9	137.0	137.2	136.3	136.4	136.6	137.0	136.6
2005	137.4	137.6	137.8	138.1	138.3	138.6	138.8	139.1	139.3	139.6	139.9	140.1	137.6	138.3	139.1	139.9	138.7
2006	140.4	140.7															
Utilization																	
(percent)	70.1	79.0	70.1	70.4	70.5	70.6	70.9	79.8	79.4	79.5	70.6	70.6	70 7	70.5	70.7	70.6	70.4
1984 1985	78.1 79.1	78.9 78.6	79.1 79.0	79.4 78.6	79.5 78.5	79.6 78.4	79.8 77.7	78.0	77.9	77.6	79.6 77.9	79.6 78.1	78.7 78.9	79.5 78.5	79.7 77.9	79.6 77.9	79.4 78.3
1986	78.9	78.2	77.9	78.1	78.2	77.8	78.1	78.2	78.3	78.4	78.7	79.2	78.4	78.0	78.2	78.8	78.3
1987	78.9	79.8	79.7	79.9	80.4	80.5	80.9	81.1	81.5	82.6	83.0	83.4	79.5	80.3	81.2	83.0	81.0
1988	83.2	83.2	83.4	84.0	83.9	84.0	84.0	84.0	84.2	84.7	84.8	85.0	83.3	84.0	84.1	84.8	84.0
1989	85.5	84.5	84.3	84.2	83.3	83.2	82.1	82.7	82.2	81.9	81.9	81.8	84.8	83.6	82.4	81.9	83.1
1990	81.5	82.4	82.6	82.3	82.1	82.2	81.8	81.9	81.7	81.0	79.9	79.2	82.2	82.2	81.8	80.0	81.6
1991	78.4	77.7	77.1	77.3	77.7	78.5	78.6	78.7	79.4	79.1	78.9	78.7	77.7	77.8	78.9	78.9	78.3
1992	78.1	78.6	79.2	79.4	79.8	79.8	80.3	79.8	79.7	80.0	80.1	79.8	78.6	79.7	79.9	79.9	79.6
1993	80.5	80.4	80.2	80.4	80.2	80.0	80.1	79.9	80.3	80.7	80.9	81.2	80.4	80.2	80.1	81.0	80.4
1994	81.3	81.1	82.0	82.4	82.8	82.8	82.9	83.2	83.1	83.6	84.0	84.5	81.4	82.6	83.1	84.0	82.8
1995	84.5	84.1	83.9	83.4	83.0	82.9	82.0	82.6	82.9	82.4	82.1	82.0	84.1	83.1	82.5	82.2	83.0
1996 1997	80.8	81.6	81.0 83.3	81.5 82.5	81.7 82.7	82.1 82.7	81.9	82.1	82.2 83.3	81.8	82.1 83.6	82.4 83.4	81.1 82.8	81.8 82.6	82.1 83.0	82.1 83.4	81.8 83.0
1998	82.2 83.4	82.8 82.9	82.2	82.3	81.9	80.9	82.4 80.1	83.1 81.7	81.0	83.3 81.4	81.1	81.1	82.8 82.8	81.7	80.9	81.2	81.7
1999	80.9	81.1	80.7	80.6	81.1	80.5	80.6	80.8	80.1	80.9	81.2	81.5	80.9	80.7	80.5	81.2	80.8
2000	81.3	81.2	81.4	81.6	81.2	81.0	80.6	79.8	79.8	79.2	78.7	77.8	81.3	81.3	80.0	78.6	80.3
2001	77.0	76.2	75.7	75.4	74.6	74.0	73.7	73.1	72.7	72.2	72.0	72.1	76.3	74.7	73.2	72.1	74.1
2002	72.5	72.3	72.9	73.0	73.3	74.0	73.7	73.9	73.9	73.4	73.6	73.3	72.6	73.4	73.8	73.4	73.3
2003	73.5	73.4	73.5	72.9	72.8	73.2	73.4	73.4	74.0	74.1	75.0	75.1	73.5	73.0	73.6	74.7	73.7
2004	75.3	76.0	76.1	76.7	77.3	76.9	77.4	77.9	77.5	78.1	78.0	78.3	75.8	77.0	77.6	78.2	77.1
2005	78.6	78.9	78.5	78.4	78.6	78.7	78.6	78.8	78.2	79.4	79.9	80.1	78.7	78.5	78.5	79.8	78.9
2006	80.5	80.4															
2006  1. See note on co																	

See 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

		•	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
2.0	.3	.4	.5	.4	.2	.2	.0	2	2	.3	.1	11.4	5.0	1.6	3	7.9
3	.5	.2	.0	.1	.0	5	.5	.5	4	.3	1.1	.9	1.2	2	2.6	1.0
.6	8	7	.0	.1	2	.3	2	.2	.4	.4	.8	2.3	-2.7	.6	4.0	.9
5	1.2	.2	.5	.6	.4	.5	.6	.2	1.4	.5	.4	4.5	6.3	6.0	9.1	4.2
.0	.3	.2	.4	1	.2	.1	.5	4	.6	.2	.4	3.1	2.6	1.5	2.9	4.4
.3	5	.4	1	7	.0	-1.1	.9	4	2	.3	.7	1.8	-2.1	-3.3	1.0	.6
																.3
																-2.0
6	.3	.0	.0	.3 4	.2	.3	3 1	.4	.6	.3	.5	3.0	.4	1.6	5.2	1.9 2.5
.4	1	.8	.3	.4	.6	.1	.3	.0	.7	.4	.9	4.2	5.3	3.4	5.5	4.0
.2	2	1	2	.0	.1	5	1.2	.1	4	.1	.2	3.0	-1.4	1.3	.5	2.4
-1.0	1.4	4	.8	.5	.7	5	.4	.4	2	.8	.4	3	6.1	2.1	3.5	1.7
1	.8	.5	4	.3	.3	.3	1.0	.8	.6	.7	.1	4.9	2.1	6.1	8.3	4.2
.1	.0	1	.2	.5	9	8	2.0	6	.5	3	.1	1.6	1.0	3	2.3	3.1
.2	.2	1	2	.6	4	.3	.4	5	1.2	.3	.6	.9	.3	1.2	5.6	1.2
																1.1
																-4.1
.8	1 2	3	8	.4 1	.2	3 .4	.0	1 .6	5 .0	.2	0	6	-4.3	2.6	-2.4 4.4	.3 3
3	.7	4	.8	.9	7	.5	.2.	3	.8	. 2.	.6	4.3	4.6	1.6	3.8	3.2
																2.3
3	.6							110			.,					2.0
101.2	101.9	101.6	102.4	103.3	102.6	103.1	103.3	103.0	103.8	104.0	104.6	101.6	102.7	103.1	104.1	102.9
104.5 106.7	104.9 107.3	104.8	104.6	104.7	105.5	105.4	105.5	104.0	105.2	106.0	107.0	104.7	104.9	105.0	106.1	105.3
130.1	130.1	130.1	130.1	130.2	130.2	130.2	130.3	130.3	130.4	130.4	130.4	130.1	130.2	130.3	130.4	130.2
130.5 131.1	130.5 131.3	130.6	130.6	130.7	130.7	130.8	130.8	130.9	130.9	131.0	131.0	130.5	130.7	130.8	131.0	130.7
79.2	79.4	79.7	80.1	80.3	80.4	80.5	80.4	80.1	79.9	80.1	80.0	79.5	80.3	80.4	80.0	80.0
79.6	79.9	79.8	79.7	79.6	79.4	78.9	79.1	79.3	78.9	79.0	79.7	79.8	79.6	79.1	79.2	79.4
80.1	79.3	78.7	78.7	78.7	78.5	78.7	78.4	78.5	78.7	79.0	79.6	79.4	78.6	78.5	79.1	78.9
79.2	80.0	80.1	80.4	80.8	81.1	81.4	81.9	81.9	83.1	83.4	83.7	79.8	80.8	81.7	83.4	81.4
83.7	84.0	84.1	84.4	84.3	84.5	84.5	84.9	84.5	84.9	85.0	85.3	83.9	84.4	84.6	85.1	84.5
85.5	85.0	85.2	84.9	84.2	84.1	83.0	83.6	83.2	82.9	83.0	83.4	85.2	84.4	83.3	83.1	84.0
																82.7
																79.8
81.3	79.5 81.5	81.3	80.5	80.6	81.2	81.0	80.5	80.5	80.9	81.1	81.0	79.5 81.4	80.5	81.3	81.0	80.4 81.5
82.6	82.5	83.1	83.2	83.5	83.9	83.8	83.9	83.8	84.2	84.4	85.0	82.7	83.5	83.8	84.5	83.6
85.0	84.6	84.4	84.0	83.8	83.7	83.1	83.8	83.7	83.2	83.1	83.1	84.6	83.8	83.5	83.1	83.8
82.1	83.1	82.6	83.1	83.3	83.7	83.1	83.3	83.5	83.1	83.5	83.7	82.6	83.4	83.3	83.4	83.2
83.4	83.8	84.0	83.4	83.4	83.3	83.2	83.8	84.1	84.3	84.6	84.4	83.7	83.4	83.7	84.5	83.8
84.2	83.9	83.6	83.6	83.7	82.8	81.9	83.3	82.6	82.8	82.3	82.2	83.9	83.4	82.6	82.5	83.1
82.2	82.1	81.9	81.5	81.9	81.4	81.4	81.6	81.0	81.9	82.0	82.3	82.1	81.6	81.4	82.1	81.8
																81.2
																76.9
76.7	76.6	76.1 76.4	75.8	75.8	76.0	76.3	76.3	76.9 76.8	76.8	77.5	77.6	76.6	75.9	76.4	77.3	76.5 76.5
77.8	78.4	78.1	78.7	79.3	78.8	79.2	79.3	79.0	79.6	79.7	80.2	78.1	78.9	79.2	79.8	79.0
	3 .65 .0 .3758 .54 .2 -1.01 .1 .238 .8 .4 .3 .03 -101.2 104.5 106.7  130.1 130.5 131.1  79.2 79.6 80.1 79.2 83.7 85.5 82.7 80.1 79.0 81.3 82.6 85.0 82.1 83.4 84.2 82.2 81.9 75.6	3	3	3	3	-3	3         5.5         2.2         .0         .1         -0         -5           .6        8        7         .0         .1         -2         .3           .5         1.2         2.2         .5         .6         .4         .5           .0         .3         .2         .4        1         .2         .1           .3        5         .4        1         .0         .2        2           .5         .8         .4        1         .0         .2        2           .5         .8         .6         .2         1.0         1.0         .0           .8         .7         .7         .6         .3        2         .7           .5         .3         .0         .2        4         .2         .3           .4        1         .8         .3         .4         .6         .1           .2         .2        1        2         .0         .1        5          1         .8         .5         .7        5        1           .1         .4         .1         .0         .5        1	-3	-6         -8         -7         0         1         0         -5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         5         6         2         2         2         2         3         -2         2         2         2         3         -1         5         -4         3         -2         1         5         -4         3         3         -2         1         5         -4         3         3         -2         1         1         9         -4         -4         -7         8         4         -1         0         0         -1         9         -4         -7         -8         4         -1         0         0         1         9         -4         -4         1         8         6         2         10         11         0         1         1         2         1         -2         1         -2         1         -2         1         -2         1         -2         1         -2         1         -2         1         -2         1         -2         1         -2         1	1.0	1-3	1.1	1.0	-3	-3	

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

Note. Selected high-technology industries are computers, communications equipment, and semiconductors and related electronic components.

Table 14 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing 1 Excluding Selected High-Technology Industries

Seasonally adjusted

	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
1984																		
1986		1.8	.9		.4	.1	.3	.4	.1	3	.4	.3	.3	11.4	4.4	2.0	1.9	8.4
1988																		
1988																		
1999																		
1990																		
1995																		
1994		1																
1995																		
1996	1994	.1	.0	1.1	.5	.6	.2	.3	.5	.0	.8	.6	.9	3.9	7.0	4.0	6.8	4.4
1995																		
1998																		
2000		1																
2000	1999	1	.5	5	1	.8	7	.0	.7	- 6	1.4	.4	4	.8	.3	.4	7.1	1.4
2001   -7   -6   -4   1   -8   -4   0   -7   -3   -7   -7   2   -2   -78   -41   4.3   -45   -4.9   2002   -7   -1   -9   -1   -5   -1   0   -4   -1   -1   -7   -1   -6   -4   -1   -5   -3   -5   -2   -3   -6																		
2004	2001		6	4	.1			.0	7		7	2	.2				-4.5	-4.9
1004																		
2005   3	2003	.3	4	.1	9	2	.5	.1	3		.0	1.2	.0	-1.5	-3.9	2.1	5.3	6
Processes   Proc																		
Properties   Pro				4	1	.3	.2	.0	.2	7	1.8	.6	.4	2.8	.3	.5	8.1	2.8
2004   1009   101.7   101.8   102.7   103.5   102.7   103.5   104.1   103.5   104.5   104.5   104.9   101.5   103.0   103.7   104.6   103.2   2006   109.0   108.8		.8	1															
2005   105.2   105.6   105.2   105.1   105.2   105.1   105.4   105.7   105.6   105.9   105.2   107.1   107.7   108.1   105.3   105.4   105.6   107.6   106.1		100.0	101.7	101.0	100.7	102.5	100.7	102.5	1041	102.5	104.5	104.5	1010	101.5	102.0	102.7	1016	102.2
Capacity (percent of color of																		
Conting   Cont		1		103.2	105.1	105.4	105.7	105.0	105.9	103.2	107.1	107.7	100.1	105.5	105.4	105.0	107.0	100.1
2004   133.0   133.0   133.0   133.0   133.0   133.0   133.0   133.0   133.0   133.1   133.1   133.1   133.2   133.0   133.0   133.0   133.0   133.0   133.6   133.6   133.0	(percent of																	
133.2   133.3   133.4   133.5   133.5   133.6   133.7   133.8   133.9   134.0   134.1   133.3   133.5   133.8   134.0   133.6   133.6   133.6   133.8   133.9   134.0   134.1   133.3   133.5   133.8   134.0   133.6   133.6   133.6   133.6   133.6   133.6   133.8   133.9   134.0   134.1   133.3   133.5   133.8   134.0   133.6   133.		133.0	133.0	133.0	133.0	133.0	133.0	133.0	133.0	133 1	133 1	133 1	133.2	133.0	133.0	133.0	133.1	133.0
Utilization (percent) 1984																		
(percent)         1984         77.7         78.4         78.6         78.9         78.9         79.0         79.2         79.1         78.7         78.9         79.0         79.0         78.8         1985         78.6         78.2         78.5         78.4         78.5         78.4         78.5         78.4         78.5         78.4         78.5         78.4         78.5         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.7         78.5         78.3         78.9         79.0         79.5         78.7         78.5         78.5         78.3         78.7         78.9         79.0         79.5         78.7         78.5         78.5         78.1         78.1         78.1         78.1         78.1         78.1         78.1         78.1         78.1         78.1         78.1         78.1         78.5         78.5         78.5         78.5         78.5         78.5         78.5         78.5         79.5         82.5         83.3         83.7         82.7         82.5         83.1         82.6         82.2         82.2         82.3	2006	134.2	134.4															
1984         77.7         78.4         78.6         78.9         79.0         79.1         78.7         78.9         79.0         79.1         78.5         78.4         78.5         78.4         78.3         77.8         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.2         78.4         78.5         78.5         78.1         78.2         78.4         88.2         88.2         88.2         88.2         88.2         88.2         88.1 <th< 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></th<>																		
1985       78.6       78.2       78.7       78.5       78.4       78.3       77.8       78.2       78.2       77.8       78.2       78.4       78.5       78.4       78.1       78.1       78.3       78.4       78.5       78.5       78.3       78.4       78.5       78.6       78.7       78.5       78.5       79.1       78.7       78.5       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       79.1       78.7       78.5       78.5       79.1       78.7       78.5       78.5       79.1       78.7       78.5       78.5       78.5       78.2       78.2       88.2       88.3       88.2       88.1       88.4       88.2       88.3       88.2       88.1       88.2       88.1       88.2       88.2       88.2       88.2		77.7	78.4	78.6	78.9	78.9	79.0	79.2	79.1	78.7	78.9	79.0	79.1	78.3	78.9	79.0	79.0	78.8
1987         79.1         80.1         80.0         80.2         80.7         80.8         81.2         81.4         81.7         82.9         83.3         83.7         79.7         80.6         81.4         83.3         81.3           1988         83.6         83.6         83.8         84.4         84.3         84.3         84.3         84.5         85.0         85.1         85.4         83.7         84.3         84.4         85.2         84.4           1989         86.0         85.0         84.8         84.7         83.8         83.7         82.5         83.1         82.6         82.2         82.1         85.3         84.1         82.7         82.2         83.6           1990         81.8         82.8         82.9         82.6         82.5         82.2         82.3         82.1         81.3         80.2         79.5         78.0         78.0         77.4         77.9         78.6         78.8         78.8         79.6         79.0         78.5         199.0         78.5         199.0         78.5         199.0         78.5         79.9         79.9         79.9         79.9         79.9         79.9         79.5         79.9         80.1         79.9<																		
1988       83.6       83.6       83.8       84.4       84.3       84.3       84.3       84.5       85.0       85.1       85.4       83.7       84.3       84.4       85.2       84.4         1989       86.0       85.0       84.8       84.7       83.8       83.7       82.5       83.1       82.6       82.2       82.1       85.3       84.1       82.7       82.2       83.6         1990       81.8       82.8       82.9       82.6       82.5       82.5       82.2       82.3       82.1       81.3       80.2       79.5       82.5       82.2       80.3       81.9         1991       78.7       78.0       77.3       77.4       77.9       78.6       78.8       78.8       79.6       79.3       79.0       78.7       78.0       78.0       79.1       79.0       78.5         1992       78.0       78.6       79.2       79.4       79.8       79.8       80.3       79.7       79.9       80.1       79.8       78.6       79.7       79.9       79.9       79.9       79.9       79.9       79.9       79.9       79.9       79.9       79.9       79.9       79.9       79.9       80.1 <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><td></td><td></td></td<>																		
1990         81.8         82.8         82.9         82.6         82.5         82.2         82.3         82.1         81.3         80.2         79.5         82.5         82.2         80.3         81.9           1991         78.7         78.0         77.3         77.4         77.9         78.6         78.8         78.8         79.6         79.3         79.0         78.7         78.0         78.0         78.0         79.4         79.8         79.8         79.8         79.7         79.9         80.1         79.7         79.9         79.0         78.6         79.7         79.9         80.1         79.7         79.9         79.0         78.6         79.7         79.9         79.9         80.1         79.8         79.7         79.9         80.1         79.7         79.9         79.9         79.9         79.5         79.7         79.9         79.0         79.9         79.9         79.0         79.9         79.9         79.9         80.1         79.8         79.7         79.9         80.1         79.7         79.9         79.9         79.9         79.9         79.9         79.9         80.2         80.7         80.9         81.0         80.1         81.0         80.1         80																		
1990         81.8         82.8         82.9         82.6         82.5         82.2         82.3         82.1         81.3         80.2         79.5         82.5         82.2         80.3         81.9           1991         78.7         78.0         77.3         77.4         77.9         78.6         78.8         78.8         79.6         79.3         79.0         78.7         78.0         78.0         78.0         79.4         79.8         79.8         79.8         79.7         79.9         80.1         79.7         79.9         79.0         78.6         79.7         79.9         80.1         79.7         79.9         79.0         78.6         79.7         79.9         79.9         80.1         79.8         79.7         79.9         80.1         79.7         79.9         79.9         79.9         79.5         79.7         79.9         79.0         79.9         79.9         79.0         79.9         79.9         79.9         80.1         79.8         79.7         79.9         80.1         79.7         79.9         79.9         79.9         79.9         79.9         79.9         80.2         80.7         80.9         81.0         80.1         81.0         80.1         80	1989	86.0	85.0	84.8	84.7	83.8	83.7	82.5	83.1	82.6	82.2	82.2	82.1	85.3	84.1	82.7	82.2	83.6
1992       78.0       78.6       79.2       79.4       79.8       79.8       80.3       79.8       79.7       79.9       80.1       79.8       78.6       79.7       79.9       79.9       80.1       79.8       79.7       79.9       79.9       80.2       80.7       80.9       81.2       80.4       80.2       80.1       81.0       80.4         1994       81.3       81.2       82.0       82.3       82.7       82.7       82.9       83.2       83.0       83.9       84.4       81.5       82.6       83.0       83.9       82.8         1995       84.4       84.0       83.7       83.2       82.8       82.8       81.9       82.5       82.7       82.2       81.9       81.8       84.0       82.9       82.3       81.9       82.8         1996       80.6       81.6       80.9       81.6       81.8       82.3       82.0       82.2       82.4       81.8       82.3       82.5       81.0       81.9       82.2       82.2       81.8         1997       82.2       82.7       83.1       82.2       82.3       82.1       82.8       83.1       83.2       83.6       83.4       82.7 <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></td></td<>																		
1993         80.5         80.4         80.2         80.5         80.3         80.0         80.1         79.9         80.2         80.7         80.9         81.2         80.4         80.2         80.1         81.0         80.4           1994         81.3         81.2         82.0         82.3         82.7         82.9         83.2         83.0         83.5         83.9         84.4         81.5         82.6         83.0         83.9         82.8           1995         84.4         84.0         83.7         83.2         82.8         82.8         81.9         82.5         82.7         82.2         81.9         81.8         84.0         82.9         83.2         81.9         82.2         81.9         82.2         81.9         82.2         82.2         82.3         81.9         82.8         82.8         82.8         82.8         82.8         82.8         82.8         82.8         82.8         82.8         82.2         82.2         82.2         82.3         82.1         82.2         82.4         81.8         82.3         82.1         82.8         83.1         83.2         83.6         83.4         82.7         82.3         82.6         83.4         82.7         82.3<	1991		78.0	77.3	77.4	77.9		78.8					78.7	78.0	78.0			
1994         81.3         81.2         82.0         82.3         82.7         82.9         83.2         83.0         83.5         83.9         84.4         81.5         82.6         83.0         83.9         82.8           1995         84.4         84.0         83.7         83.2         82.8         82.8         81.9         82.5         82.7         82.2         81.9         81.8         84.0         82.9         82.3         81.9         82.8           1996         80.6         81.6         80.9         81.6         81.8         82.3         82.0         82.2         82.4         81.8         82.3         82.2         82.4         81.8         82.3         82.2         82.4         81.8         82.3         82.2         82.4         81.8         82.3         82.5         81.8         82.2         82.4         81.8         82.3         82.5         82.2         82.2         82.4         81.8         82.3         82.5         82.2         82.2         82.4         81.8         82.3         82.5         82.6         83.4         82.7         82.3         82.2         82.2         82.8         83.1         83.2         83.6         83.4         82.7         82.3<																		
1995       84.4       84.0       83.7       83.2       82.8       82.8       81.9       82.5       82.7       82.2       81.9       81.8       84.0       82.9       82.3       81.9       82.8         1996       80.6       81.6       80.9       81.6       81.8       82.3       82.0       82.2       82.4       81.8       82.3       82.5       81.0       81.9       82.2       82.2       81.8         1997       82.2       82.7       83.1       82.2       82.3       82.3       82.1       82.8       83.1       83.2       83.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       82.6       83.4       82.7       82.3       <																		
1996         80.6         81.6         80.9         81.6         81.8         82.3         82.0         82.2         82.4         81.8         82.3         82.2         82.3         82.2         82.3         82.2         82.2         82.2         82.3         82.2         82.3         82.1         82.8         83.1         83.2         83.6         83.4         82.7         82.3         82.6         83.4         82.7           1998         83.4         83.1         82.5         82.5         82.5         81.4         80.4         82.1         81.3         81.6         81.3         83.0         82.1         81.3         81.9           1999         81.0         81.2         80.6         80.3         80.8         80.1         79.9         80.2         79.6         80.6         80.8         81.0         80.9         80.4         79.9         80.8         80.5           2000         80.6         80.3         80.4         80.6         80.1         80.0         79.6         78.8         78.9         78.4         77.9         77.1         80.4         80.2         79.1         77.8         79.4           2001         76.5         76.0         75.6		1																
1997       82.2       82.7       83.1       82.2       82.3       82.1       82.8       83.1       83.2       83.4       82.7       82.3       82.6       83.4       82.7         1998       83.4       83.1       82.5       82.5       82.5       82.5       81.4       80.4       82.1       81.3       81.6       81.3       81.3       83.0       82.1       81.3       81.4       81.9         1999       81.0       81.2       80.6       80.3       80.8       80.1       79.9       80.2       79.6       80.6       80.8       81.0       80.9       80.4       79.9       80.8       80.5         2000       80.6       80.3       80.4       80.6       80.1       80.0       79.6       78.8       78.9       78.4       77.9       77.1       80.4       80.2       79.1       77.8       79.4         2001       76.5       76.0       75.6       75.6       75.0       74.6       74.5       74.0       73.7       73.2       73.1       73.3       76.0       75.0       74.1       73.2       74.6       74.5       74.0       73.7       73.2       73.1       73.3       76.0       75.0 <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></td></td<>																		
1998     83.4     83.1     82.5     82.5     82.5     81.4     80.4     82.1     81.3     81.6     81.3     81.3     83.0     82.1     81.3     81.4     81.9       1999     81.0     81.2     80.6     80.3     80.8     80.1     79.9     80.2     79.6     80.6     80.8     81.0     80.9     80.4     79.9     80.8     80.5       2000     80.6     80.3     80.4     80.6     80.1     80.0     79.6     78.8     78.9     78.4     77.9     77.1     80.4     80.2     79.1     77.8     79.4       2001     76.5     76.0     75.6     75.6     75.0     74.6     74.5     74.0     73.7     73.2     73.1     73.3     76.0     75.0     74.1     73.2     74.6       2002     73.8     73.7     74.3     74.4     74.8     75.5     75.2     75.3     75.3     74.8     74.9     74.5     73.9     74.8     74.7       2003     74.7     74.4     74.5     73.9     73.8     74.2     74.3     74.1     74.8     74.8     75.7     75.8     74.6     73.9     74.4     75.4     74.6       2004     75.9																		
2000       80.6       80.3       80.4       80.6       80.1       80.0       79.6       78.8       78.9       78.4       77.9       77.1       80.4       80.2       79.1       77.8       79.4         2001       76.5       76.0       75.6       75.6       75.0       74.6       74.5       74.0       73.7       73.2       73.1       73.3       76.0       75.0       74.1       73.2       74.6         2002       73.8       73.7       74.3       74.4       74.8       75.5       75.2       75.3       75.3       74.8       74.9       74.5       73.9       74.9       75.3       74.8       74.7       74.4       74.5       73.9       73.8       74.2       74.3       74.1       74.8       75.7       75.8       74.6       73.9       74.4       75.4       74.6         2004       75.9       76.5       76.6       77.2       77.8       77.3       77.8       78.2       77.8       78.5       78.5       78.5       78.8       76.3       77.4       78.0       78.6       77.6         2005       78.9       79.2       78.8       79.0       79.1       79.0       79.2       78.6 <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></td></td<>																		
2001       76.5       76.0       75.6       75.6       75.0       74.6       74.5       74.0       73.7       73.2       73.1       73.3       76.0       75.0       74.1       73.2       74.6         2002       73.8       73.7       74.3       74.4       74.8       75.5       75.2       75.3       75.3       74.8       74.9       74.5       73.9       74.9       75.3       74.8       74.7         2003       74.7       74.4       74.5       73.9       73.8       74.2       74.3       74.1       74.8       74.8       75.7       75.8       74.6       73.9       74.4       75.4       74.6         2004       75.9       76.5       76.6       77.2       77.8       77.3       77.8       78.2       77.8       78.5       78.5       78.8       76.3       77.4       78.0       78.6       77.6         2005       78.9       79.2       78.8       79.0       79.1       79.0       79.2       78.6       80.0       80.4       80.6       79.0       78.9       78.9       80.3       79.3																		
2002       73.8       73.7       74.3       74.4       74.8       75.5       75.2       75.3       74.8       74.9       74.5       73.9       74.9       75.3       74.8       74.7         2003       74.7       74.4       74.5       73.9       73.8       74.2       74.3       74.1       74.8       74.8       75.7       75.8       74.6       73.9       74.4       75.4       75.4       74.6         2004       75.9       76.5       76.6       77.2       77.8       77.3       77.8       78.2       77.8       78.5       78.5       78.5       78.8       76.3       77.4       78.0       78.6       77.6         2005       78.9       79.2       78.8       79.0       79.1       79.0       79.2       78.6       80.0       80.4       80.6       79.0       78.9       78.9       80.3       79.3		1																l .
2003       74.7       74.4       74.5       73.9       73.8       74.2       74.3       74.1       74.8       74.8       75.7       75.8       74.6       73.9       74.4       75.4       74.6         2004       75.9       76.5       76.6       77.2       77.8       77.3       77.8       78.2       77.8       78.5       78.5       78.8       76.3       77.4       78.0       78.6       77.6         2005       78.9       79.2       78.8       79.0       79.1       79.0       79.2       78.6       80.0       80.4       80.6       79.0       78.9       78.9       80.3       79.3																		
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2006 81.2 81.0		75.9	76.5	76.6	77.2	77.8	77.3	77.8	78.2	77.8	78.5	78.5	78.8	76.3	77.4	78.0	78.6	77.6
	2004																	

See note on cover page.
 Quarterly changes are at annual rates. Annual changes are calculated from annual averages.
 Note. Selected high-technology industries are computers, communications equipment, and semiconductors and related electronic components.

### **EXPLANATORY NOTE**

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 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 x 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 85 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 2004)

	Month of estimate									
Type of data	1st	2nd	3rd	4th						
Physical product	25	40	51	52						
Production-worker hours	45	45	45	45						
IP data received	70	85	96	97						
IP data estimated	30	15	4	3						

NOTE—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 2005; for other series, the factors were estimated with data through at least June 2005. 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 1987-2004 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 1987-2004 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 85 detailed industries (67 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 21 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 75 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 1972–2004 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 will be described in an article published in an upcoming *Federal Reserve Bulletin*. 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

**2005**: January 14, February 16, March 16, April 15, May 17, June 15, July 15, August 16, September 14, October 14, November 17, and December 15.

**2006**: January 17, February 15, March 17, April 14, May 16, June 15, July 17, August 16, September 15, October 17, November 16, and December 15.