FEDERAL RESERVE statistical release



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INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production was unchanged in October after having fallen 0.2 percent in September. For the manufacturing sector, output gained 0.5 percent in October after having risen 0.1 percent in September. Factory production in September was initially reported to have decreased 0.2 percent, but incoming data on steel,

INDUSTRIAL PRODUCTION Seasonally adjusted	ON AND (CAPACI	TY UTI	LIZATI	ON: SU	MMAR	RY						
			2007=	100						Percent	change		
	2010						2010						Oct. '09 to
Industrial production	May	June ^r	July ^r	Aug. ^r	Sept. ^r	Oct. ^p	May	June ^r	July	Aug. ^r	Sept. ^r	Oct. ^p	Oct. '10
Total index	92.6	92.6	93.3	93.5	93.4	93.4	1.2	.0	.8	.2	2	.0	5.3
Previous estimates	92.5	92.6	93.2	93.4	93.2		1.1	.1	.7	.2	2		
Major market groups													
Final Products	94.4	94.4	95.5	95.1	94.9	95.2	2.0	.1	1.1	3	2	.4	4.9
Consumer goods	94.4	94.4	95.5	95.0	94.6	94.6	2.3	.0	1.2	5	5	.0	2.6
Business equipment	93.0	93.6	94.3	94.5	94.7	95.8	2.0	.6	.7	.2	.3	1.1	10.4
Nonindustrial supplies	85.2	85.2	85.2	85.5	84.7	84.3	.6	.0	.0	.3	9	5	2.7
Construction	79.3	79.3	78.8	79.6	79.3	79.4	1	.0	6	1.0	4	.2	7.7
Materials	93.5	93.5	94.2	94.8	95.0	94.9	.6	.0	.7	.7	.2	1	6.7
Major industry groups													
Manufacturing (see note below)	90.3	90.0	90.7	90.7	90.8	91.3	1.2	3	.7	.0	.1	.5	6.1
Previous estimates	90.2	90.0	90.6	90.7	90.6		1.1	3	.6	.1	2		
Mining	100.0	99.8	100.8	103.1	103.2	103.2	8	2	1.0	2.3	.1	1	7.5
Utilities	99.2	101.6	102.5	101.5	99.3	95.9	4.1	2.5	.9	-1.0	-2.2	-3.4	-2.6
													Capacity
					Perce	nt of cap	acity						growth
	Average	1988-	1990-	1994-	2008-								_
	1972-	89	91	95	09	2009	2010						Oct. '09 to
Capacity utilization	2009	high	low	high	low	Oct.	May	June ^r	July ^r	Aug. ^r	Sept. ^r	Oct.p	Oct. '10

						nt of cap	acity						growth
	Average	1988-	1990-	1994-	2008-								
	1972-	89	91	95	09	2009	2010						Oct. '09 to
Capacity utilization	2009	high	low	high	low	Oct.	May	June ^r	July	Aug. ^r	Sept. ^r	Oct. ^p	Oct. '10
Total industry	80.6	85.2	78.7	85.1	68.2	70.7	74.2	74.2	74.8	74.9	74.8	74.8	4
Previous estimates							74.1	74.2	74.7	74.8	74.7		
Manufacturing (see note below)	79.2	85.6	77.2	84.6	65.4	68.2	72.0	71.7	72.2	72.2	72.3	72.7	3
Previous estimates							71.9	71.7	72.2	72.3	72.2		
Mining	87.4	86.4	83.6	88.9	79.6	81.8	85.4	85.2	86.1	88.0	88.0	87.9	.0
Utilities	86.7	92.9	84.3	93.3	77.6	79.9	79.6	81.5	82.1	81.3	79.4	76.6	1.6
Stage-of-process groups													
Crude	86.5	87.8	84.2	90.0	78.3	81.2	84.6	84.5	85.2	86.6	87.2	87.3	8
Primary and semifinished	81.6	86.6	77.9	87.9	65.7	67.9	71.6	71.9	72.2	72.1	71.5	71.0	6
Finished	77.5	83.4	77.3	80.5	67.5	70.7	73.5	73.2	73.9	73.9	74.0	74.5	.7

r Revised. p Preliminary.

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.

fabricated metal products, machinery, and chemicals helped boost the index. The output of utilities dropped 3.4 percent in October, as unseasonably warm temperatures reduced demand for heating. Production at mines fell 0.1 percent. At 93.4 percent of its 2007 average, total industrial production in October was 5.3 percent above its year-earlier level. The capacity utilization rate for total industry was flat at 74.8 percent, a rate 6.6 percentage points above the low in June 2009 and 5.8 percentage points below its average from 1972 to 2009.

Market Groups

The output of consumer goods was unchanged in October. The production of consumer durables rose 0.8 percent. Within durables, the indexes for automotive products and for appliances, furniture, and carpeting each increased 1.1 percent. Gains in the production of miscellaneous goods and of home electronics were smaller, at 0.2 percent and 0.3 percent, respectively. The production of nondurable consumer goods declined 0.2 percent; a fall of 3.2 percent for the energy category, which primarily resulted from a decrease in the index for residential utilities, more than offset an increase of 0.7 percent for the non-energy category. Within non-energy nondurables, the index for clothing advanced 2.0 percent, and the indexes for foods and tobacco and for chemical products moved up at lesser rates; the index for paper products moved down.

The output of business equipment moved up 1.1 percent in October; it was 10.4 percent above its year-earlier level. The indexes for information processing equipment and for industrial and other equipment each advanced 1.2 percent, while the index for transit equipment rose 0.7 percent after two months of small declines.

In October, the index for defense and space equipment increased 0.7 percent and retraced most of its losses of the previous two months.

The production of construction supplies moved up 0.2 percent in October after having declined 0.4 percent in September. The index for business supplies decreased 0.8 percent in October; a decline of 3.2 percent in commercial energy products was partly offset by a gain of 0.2 percent in non-energy supplies.

The production of materials fell 0.1 percent in October. An increase in the output of durable materials, for which all major categories advanced, was offset by a small decline for nondurable materials and a somewhat larger decrease for energy materials. Within nondurable materials, the indexes for textiles and chemicals declined, and the index for paper advanced.

Industry Groups

Production in manufacturing rose 0.5 percent in October, and the factory operating rate moved up to 72.7 percent, a rate 6.5 percentage points below its average from 1972 to 2009. The output of durable goods increased 0.9 percent, with increases in most major categories. After having declined the previous four months, the output of wood products jumped 2.5 percent; the indexes for nonmetallic mineral products and for electrical equipment, appliances, and components also increased by 2.0 percent or more. Within durable manufacturing, only the index for primary metals fell, at a rate of 0.4 percent.

The production of nondurable goods moved up 0.2 percent in October after having risen 0.4 percent in September. The output of apparel and leather increased by the largest proportion, and the production of food, beverage, and tobacco products, of paper, and of plastics and rubber products also rose. The indexes for printing, for petroleum and coal products, and for chemicals declined. The index for other manufacturing (non-NAICS), which consists of publishing and logging, was unchanged after having declined in the previous four months. Mining production edged down 0.1 percent in October, and its utilization rate fell to 87.9 percent, a rate 0.5 percentage point above its average from 1972 to 2009. The index for utilities dropped 3.4 percent; the output

of electric utilities declined for a third consecutive month, while the output of natural gas utilities fell for a second month in a row. The operating rate for utilities decreased 2.8 percentage points, to 76.6 percent.

In October, capacity utilization rates at industries grouped by stage of process were as follows: For the crude stage, the operating rate increased 0.1 percentage point, to 87.3 percent, a rate that was 0.8 percentage point above its average from 1972 to 2009; for the primary and semifinished stages, utilization declined 0.5 percentage point, to 71.0 percent, a rate 10.6 percentage points below its long-run average; and for the finished stage, utilization increased 0.5 percentage point, to 74.5 percent, a rate 3.0 percentage points below its long-run average.

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

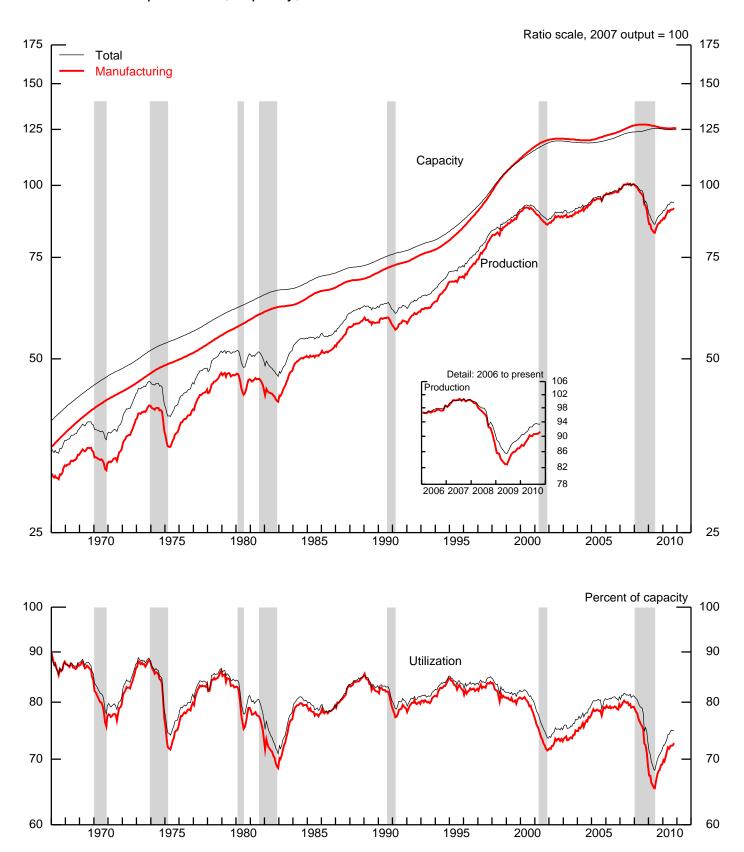
Revision of Industrial Production and Capacity Utilization

The Federal Reserve Board plans to issue its annual revision to the index of industrial production (IP) and the related measures of capacity utilization in late March 2011. The revised IP indexes will incorporate detailed data from the 2009 Annual Survey of Manufactures, conducted by the U.S. Census Bureau. Data from selected editions of the Census Bureau's 2009 Current Industrial Reports and annual data from the U.S. Geological Survey regarding metallic and nonmetallic minerals (except fuels) for 2009 will also be incorporated. The update will include revisions to the monthly indicator (either product data or input data) and to seasonal factors for each industry. In addition, the estimation methods for some series may be changed. Any modifications to the methods for estimating the output of an industry will affect the index from 1972 to the present.

Capacity and capacity utilization will be revised to incorporate data from the Census Bureau's Quarterly 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.

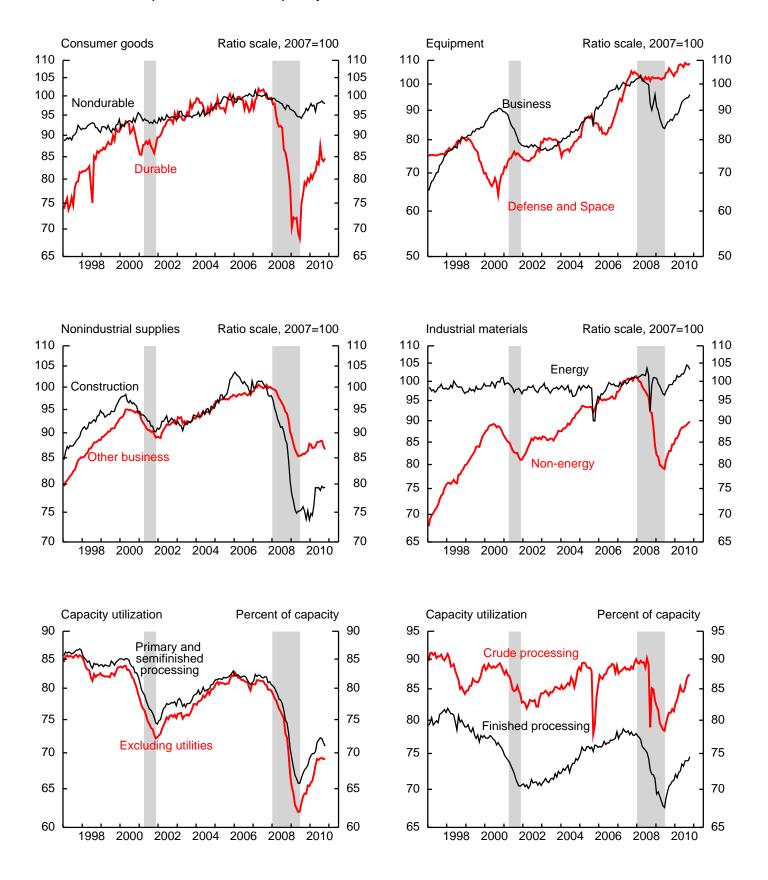
Once the revision is published, it will be available on the Board's website at www.federalreserve.gov/releases/G17. The revised data will also be available through the website of the Department of Commerce. Further information on the revision can be obtained from the Board's Industrial Output Section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

1. Industrial production, capacity, and utilization

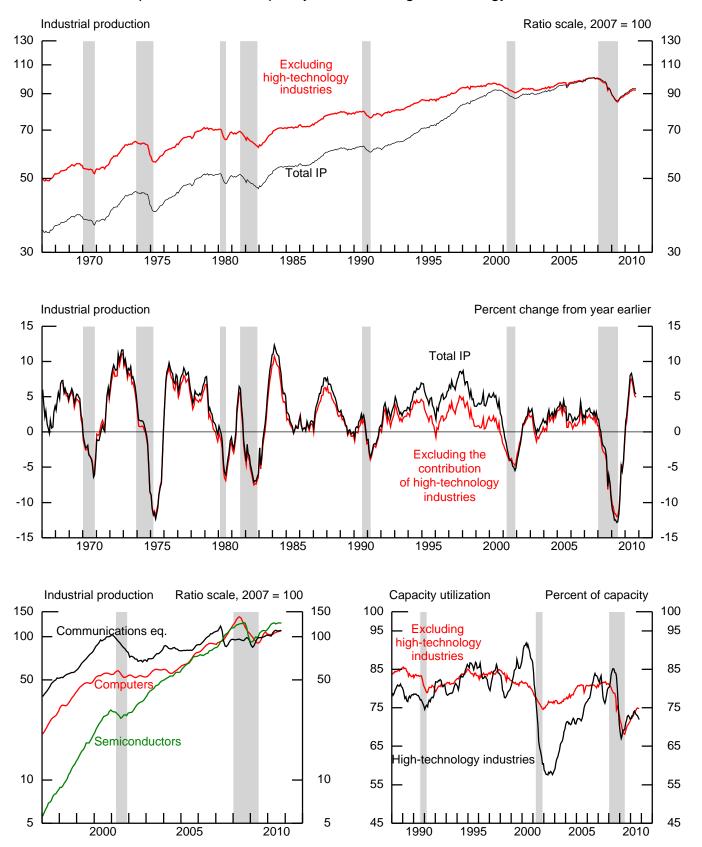


Note: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER).

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

Manker Groups	ercent change, seasonally adjusted				th quarte rth quar		Aı	nual rat	e			Month	nly rate			Oct. '09
MARKET GROUPS	Item			2007	2008	2009		Q2 ^r	Q3 ^r		June ^r	July	Aug.r	Sept.r	Oct.p	to Oct. '10
Final products and monimularidal supplies	Total IP		100.00	2.3	-7.6	-3.8	7.1	7.1	5.2	1.2	.0	.8	.2	2	.0	5.3
Communic goods																
Definition		S														4.3
Automative products 2,72 72, 2,741 50, 145, 548 2,57 41 -50 9,3 5,8 -6, 11 11																2.6
Home electronics																7.5 11.0
Appliances fundamers, carpoining 96 44 188 195 29 125 32. 21. 6. 8. 5. 1.1 1.1 3.																-6.6
Miscrating mark 195 3.8 3.11 3.99 5.9 20.3 2.3 2.3 3.7 1.2 3.1 3.3 3.5 3										I						1.7
Non-tenergy				1			l									7.4
Post sand obsecce Post P																1.3
Chemical products	Non-energy		18.14	-2.4	-3.0	4	2.0	2.0	1.2	1.6	9	4	1.1	.2	.7	2.8
Chemical products																6.7
Page products	e			1			l									8.3
Busines equipment																-1.2
Business equipment	* *															-4.6
Tensit T	Energy		4.89	2.6	1.6	9	12.9	-12.3	16.2	4.4	4.1	2.0	-2.1	-2.6	-3.2	-4.2
Tensit T	Rusiness equipment		9.76	2.8	-83	-6.4	9.0	18.6	83	2.0	6	7	2	3	1.1	10.4
Information processing																1.4
Defection and passe equipment 5,02 25 6.4 -14.3 15.0 22.3 3.4 1.3 9 -6 2 2 7 7 7 7 7 7 7 7																13.9
Construction supplies				1												11.7
Construction supplies 4.4.9 1.7 1.4.2 1.1.8 4.8 24.5 5.5 5.1 0.0 0.6 1.0 0.4 2.0																3.1
Materials																
Non-energy 26.75 5.0 -12.6 -4.8 10.6 10.1 4.0 7. 1.0 7. 1.1 1.0 7. 1.1 1.0 7. 1.0 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0 7. 1.0																7.7 .7
Non-energy 20.75 5.0 -12.6 -4.8 10.6 10.1 4.0 7. 1.0 7. 1.1 1.0 1.7 1.0	Materials		43 68	4.0	-8.2	-32	8.9	7.5	5.8	6	0	7	7	2	- 1	6.7
Durable																8.2
Consumer parts				1			1									10.7
Equipment parts 6.11 15.9 5.7 8.1 17.3 14.4 5.9 .7 3. 3. 4. 9. 0. 3.	Consumer parts		2.07	-2.9	-23.6	-7.7		19.9	11.0	4.0	.2	4.8	-5.2	.2	2.1	11.2
Nondurable 11.06 32 -13.5 2.1 5.2 8 2.9 4 .0 .0 .6 1.4 1 Paper 2.19 -7 -11.3 -5.6 1.5 4.7 -2.5 5	•		6.11	15.9	-5.7	-8.1	17.3	14.4	5.9	.7	.3	.4	.9	.0	.3	10.2
Testile	Other		7.51		-13.1	-10.4	14.3		2.2	1.2	4	2	1.1	2	.7	11.1
Paper																4.7
Transfer Series				1												9.2
Industry Groups																1.9
Namufacturing (NAICS) 31-33 71.66 28 -10.0 -4.1 6.2 9.3 3.7 1.2 -3 7. 0.0 1.1 5.5																6.2 4.1
Manufacturing (NAICS) 31-33 71.66 2.8 -10.0 -3.7 71. 9.8 4.2 1.1 -2.2 7. 7. 9.0 2. 6.0																
Durable manufacturing 37,47 5.2 -11.3 -6.3 9.3 15.4 6.0 1.5 0.0 1.3 -5 1.1 9.9	Manufacturing		75.40	2.6	-10.0	-4.1	6.2	9.3	3.7	1.2	3	.7	.0	.1	.5	6.1
Mood products 321 99	Manufacturing (NAICS)	31–33	71.66	2.8	-10.0	-3.7			4.2		2	.7	.0	.2		6.7
Nonmetallic mineral products 327 1.87 -2.4 -1.59 -1.18 -2.2 22.3 5.3 -3 4 1.2 1.1 -3 2.0 Primary metal 331 1.97 10.9 -23.2 -3.1 33.7 18.7 -16.5 .3 .5 -5.6 .1 2.2 -4 Fabricated metal products 332 5.77 3.3 -7.1 -1.17 7.1 18.1 15.5 1.7 1.2 1.4 1.3 2.2 .3 Machinery 333 4.81 3.0 -8.2 -19.1 20.8 28.8 5.4 2.4 1.3 -2 -1.1 1.1 1.4 Computer and electronic products 334 7.20 15.4 -2.6 1.7 14.6 19.6 7.6 1.7 -1. 1.2 4 -3 7.7 Electrical equip., appliances, and components 335 1.96 3.2 -5.6 -10.4 11.4 12.9 1.9 -1.4 5.5 -2 1.6 -8 2.2 Motor vehicles and parts 3364-9 4.62 17.5 -13.2 2.6 -4.6 -1.4 3.5 -8 0.0 1.2 -1.1 -1. 2. Furniture and related products 337 1.29 -1.4 -1.63 -1.52 -1.3 16.1 -1.2 7 2. 1.1 -1.1 1.6 -1.5 Nondurable manufacturing 34.20 0.0 -8.5 -6 4.8 3.8 2.2 7 -6 1.7 -1.8 1.1 -1.1 6 5.5 Nondurable manufacturing 34.20 0.0 -8.5 -6 4.8 3.8 2.2 7 -6 1.1 7 7 4 2.2 Food, beverage, and tobacco products 311.2 11.38 -1.2 -3.3 0.5 5.4 6.6 8.0 1.7 -9 2.3 -3.3 -4 -2.2 Apparel and leather 315.6 3.4 -23.1 -14.9 -13.9 25.7 -3.3 -5 -3 -1.1 -1.1 3.4 -2.6 -2.4 Paper 322 2.54 -3 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.7 -9 -9 2.3 -3.3 -4 -2.2 Printing and support 323 1.81 4 -9.2 -14.0 -7.4 6.2 -2.4 -1.9 -7 -8 -3 -1.5 -1.5 -2.2 -7 -7 -8 -7 Petroleum and coal products 326 2.70 -6 -15.0 -8.8 13.4 17.0 -7 10.2 4.1 2.5 -9 -1.0 -2.2 -5 -2.4 -0 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.1 -2 -6.1 2.4 -1.5 -2.5 -5 -2.4 -0.0 Mining 21 12.96 1.1 -3.3 -4.5 7.7 11.0 -0.2 -6.1 2.4 -1.5							1									9.1
Primary metal 331 1.97 10.9 -23.2 -3.1 33.7 18.7 -16.5 3.3 5.5 -5.6 1.1 2.2 -4.8 Fabricated metal products 332 5.77 3.3 -7.1 -11.7 7.1 18.1 15.5 1.7 1.2 1.4 1.3 2 3.3 Machinery 333 4.81 3.0 -8.2 -1.91 20.8 28.8 5.4 2.4 1.3 -2.2 -1.1 1.4 Computer and electronic products 334 7.20 15.4 -2.6 1.7 14.6 19.6 7.6 1.7 -1.1 1.2 .4 -3.3 7.7 Electrical equip., appliances, and components 335 1.96 3.2 -5.6 -10.4 11.4 12.9 1.9 -1.4 5.5 -2.2 1.6 -8.8 2.2 Motor vehicles and parts 3361-3 3.54 -2.7 -27.5 1.4 13.7 9.2 27.6 5.6 -9 9.6 -6.2 0.0 1.6 Aerospace and miscellaneous transportation equipment 3364-9 4.62 17.5 -13.2 2.6 -4.6 -1.4 3.5 -8 0.0 1.2 -1.1 -1.1 2.5 Furniture and related products 337 1.29 -1.4 -16.3 -15.2 -1.3 16.1 -1.2 7 2.2 -1.1 -1.2 7 3.8 Miscellaneous 339 3.47 -1.6 -2.2 -2.9 -2.2 8.0 -5 1.7 -1.8 1.1 -1.1 6 5.5 Nondurable manufacturing 34.20 0.0 -8.5 -6.6 4.8 3.8 2.2 7 -6.6 1.1 7, 7.4 4.2 Food, beverage, and tobaccop products 311.2 11.38 -1.2 -3.3 0.0 5.4 6.4 7.0 2.3 -5. 0.0 1.7 5. 8.8 Fextile and product mills 313.4 7.3 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.7 -9 2.3 -3.3 -4 -2.2 Apparel and leather 315.6 3.4 -2.1 -1.3 -1.1 -7 -6 6.8 3.0 -2.2 -1 -1.5 -7 -6 -7 Petroleum and coal products 324 2.43 7, -4.4 -1.5 -6.9 26.8 4.8 4.4 4.2 2.3 -1.2 -1.4 -7 Chemical 325 12.28 32.2 -10.4 3.9 5.4 -5.2 -9 -7 -8 -1.1 1.5 -1.7 -6 Petroleum and coal products 326 2.70 -6 -6 -1.0 -8 8 1.3 1.70 -4 -9 -1.4 1.1 -1.1 0.0 -1.5 2.2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.1 -2 -6.1 2.4 -1.5 -2.																1.8
Fabricated metal products 332 5.77 3.3 -7.1 -11.7 7.1 18.1 15.5 1.7 1.2 1.4 1.3 2.2 3.3	•															8.2
Machinery 333 4.81 3.0 -8.2 -19.1 20.8 28.8 5.4 2.4 1.3 -2 1 1.1 1.4 Computer and electronic products 334 7.20 15.4 -2.6 1.7 14.6 19.6 7.6 1.7 -1 1.2 A -3 7 Electrical equip, appliances, and components 335 1.96 3.2 -5.6 -10.4 11.4 12.9 1.9 -1.4 .5 -2 1.6 -8 2.2 Motor vehicles and parts 3361-3 3.54 -2.7 -27.5 1.4 13.7 9.2 27.6 5.6 -9 9.6 -6.2 0.0 1.6 Aerospace and miscellaneous transportation equipment 3364-9 4.62 17.5 -13.2 2.6 -4.6 -1.4 3.5 8 0.0 1.2 -1.1 -1.2 7 8. Miscellaneous 339 3.47 -1.6 -2.2 -2.9 -2.2 <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>14.1</td></th<>	•															14.1
Computer and electronic products 334 7.20 15.4 -2.6 1.7 14.6 19.6 7.6 1.7 -1.1 1.2 .4 -3.3 .7				1			l									11.7 15.2
Electrical equip,, appliances, and components 335 1.96 3.2 -5.6 -10.4 11.4 12.9 1.9 -1.4 .52 1.68 2.2 Motor vehicles and parts 3361-3 3.54 -2.7 -27.5 1.4 13.7 9.2 27.6 5.69 9.6 -6.2 .0 1.6 Aerospace and miscellaneous transportation equipment 3364-9 4.62 17.5 -13.2 2.6 -4.6 -1.4 3.58 1.0 1.211 2. Furniture and related products 337 1.29 -1.4 -16.3 -15.2 -1.3 16.1 -1.2 7. 21 -1.2 7. 8 Miscellaneous 339 3.47 -1.62 -2.9 -2.2 8.05 1.7 -1.8 1.1 -1.1 .6 5.5 .5 Nondurable manufacturing 34.20 0.0 -8.56 4.8 3.8 2.2 7.76 1.1 7.7 1.8 1.1 -1.1 .6 5.5 Nondurable manufacturing 313,4 7.3 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.79 2.35 0.0 1.7 5.8 Textile and product mills 313,4 7.3 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.79 2.3342 Apparel and leather 315.6 3.4 -23.1 -14.9 -13.9 25.7 -3.3531 -1.3 3.4 -2.6 2.4 Paper 322 2.543 -13.23 6.8 3.0 -2.2 1.1 5.549 2.2 6.0 Printing and support 323 1.81 4. 9.2 -14.0 -7.4 6.2 2.4 1.98 -1.1 1.5 -1.76 Petroleum and coal products 324 2.43 7.7 -4.4 -1.5 -6.9 26.8 4.8 -4 4. 4 2.3 -1.2 -1.4 -7 Phastics and rubber products 326 2.70 -6 -15.0 -8.8 13.4 17.0 -4 9 -1.4 1.1 1.0 -1.5 -2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.12 -6.1 2.4 -1.5 -2 2.5 9 -1.0 -2.2 -3.4 Electric 2211, 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 8 -1.4 -2.0 -3.3 Electric 2211, 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 8 -1.0 -2.2 -3.4 Electric 2211, 200 -1.0 -3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 8 -1.0 -2.2 -3.4 Electric 2211, 200 -1.4 -1.7 13.6 -1.7 13.6 -1.7 13.6 -1.7 13.6 -1.7 13.6 -1.7 13.6 -1.7 13.6 -1.7 13.6 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 13.8 -1.1 13.5 -1.7 1	•															11.8
and components 335 1.96 3.2 -5.6 -10.4 11.4 12.9 1.9 -1.4 5.5 2 1.6 8 2.2 Motor vehicles and parts 3361-3 3.54 -2.7 -27.5 1.4 13.7 9.2 27.6 5.6 9 9.6 -6.2 .0 1.6 Aerospace and miscellaneous transportation equipment 3364-9 4.62 17.5 -13.2 2.6 -4.6 -1.4 3.5 8 .0 1.2 1 -1.1 .2 Furniture and related products 337 1.29 -1.4 -16.3 -15.2 -1.3 16.1 -1.2 .7 2 -1 -1.2 .7 .8 Miscellaneous 339 3.47 -1.6 -2 -2.9 -2.2 8.0 -5 1.7 -1.8 1.1 -1.1 .6 .5 Nondurable manufacturing 34.20 .0 -8.5 6 4.8 3.8 2.2 .7		334	7.20	13.4	-2.0	1./	17.0	17.0	7.0	1./	1	1.2		ر	.,	11.0
Motor vehicles and parts 3361-3 3.54 -2.7 -27.5 1.4 13.7 9.2 27.6 5.6 9 9.6 -6.2 .0 1.6 Aerospace and miscellaneous transportation equipment 3364-9 4.62 17.5 -13.2 2.6 4.6 -1.4 3.5 8 .0 1.2 1 -1 2 Furniture and related products 337 1.29 -1.4 -16.3 -15.2 -1.3 16.1 -1.2 .7 .2 1 -1.2 .7 .8 Miscellaneous 339 3.47 -1.6 -2 -2.9 -2.2 8.0 -5 1.7 -1.8 1.1 -1.1 .6 .5 Nondurable manufacturing 34.20 .0 -8.5 6 4.8 3.8 2.2 .7 6 1.1 .7 .4 2.2 Food, beverage, and tobacco products 311,2 11.38 -1.2 -3.3 .0 5.4 6.8 8.0 <td< td=""><td></td><td>335</td><td>1.96</td><td>3.2</td><td>-5.6</td><td>-10.4</td><td>11.4</td><td>12.9</td><td>1.9</td><td>-1.4</td><td>.5</td><td>2</td><td>1.6</td><td>8</td><td>2.2</td><td>8.5</td></td<>		335	1.96	3.2	-5.6	-10.4	11.4	12.9	1.9	-1.4	.5	2	1.6	8	2.2	8.5
Aerospace and miscellaneous transportation equipment 3364–9																13.4
Furniture and related products 337 1.29 -1.4 -16.3 -15.2 -1.3 16.1 -1.2 .7 .2 1 -1.2 .7 .8 Miscellaneous 339 3.47 -1.6 -2.2 -2.9 -2.2 8.0 -5.5 1.7 -1.8 1.1 -1.1 .6 .5 Nondurable manufacturing 34.20 .0 -8.5 6 4.8 3.8 2.2 .7 6 .1 .7 .4 .2 Food, beverage, and tobacco products 311,2 11.38 -1.2 -3.3 .0 5.4 6.4 7.0 2.3 5 .0 1.7 .5 8 Textile and product mills 313,4 .73 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.7 9 2.3 3 4 2 Apparel and leather 315,6 .34 -23.1 -14.9 -13.9 25.7 -3.3 5 3 1 -1.3 3.4 -2.6 2.4 Paper 322 2.54 3 -13.2 3 6.8 3.0 -2.2 1 .5 4 9 2. 6.6 Printing and support 323 1.81 .4 -9.2 -14.0 -7.4 6.2 -2.4 1.9 8 -1.1 1.5 -1.7 6 Petroleum and coal products 324 2.43 .7 -4.4 -1.5 -6.9 26.8 4.8 4 .4 2.3 -1.2 -1.4 7 Chemical 325 12.28 3.2 -10.4 3.9 5.4 -5.2 9 7 8 3 6 1.5 1 Plastics and rubber products 326 2.70 6 -15.0 -8.8 13.4 17.0 4 .9 -1.4 1.1 .0 -1.5 2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.1 -2 -6.1 2.4 -1.5 -2 -5 -2.4 .0 Mining 21 12.96 .1 3 -4.5 7.7 11.0 9.0 8 2 1.0 2.3 .1 1 Utilities 2211, 211.64 3.1 3 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3	Aerospace and miscellaneous															
Miscellaneous 339 3.47 -1.6 -2 -2.9 -2.2 8.0 5 1.7 -1.8 1.1 -1.1 .6 .5 Nondurable manufacturing 34.20 .0 -8.5 6 4.8 3.8 2.2 .7 6 .1 .7 .4 .2 Food, beverage, and tobacco products 311,2 11.38 -1.2 -3.3 .0 5.4 6.4 7.0 2.3 5 .0 1.7 .5 .8 Textile and product mills 313,4 .73 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.7 -9 2.3 3 -4 -2 Apparel and leather 315,6 .34 -23.1 -14.9 -13.9 25.7 -3.3 5 3 1 -1.3 3.4 -2.6 2.4 Paper 322 2.54 3 -13.2 3 6.8 3.0 -2.2 .1 1.5 -1.7							l									-2.1
Nondurable manufacturing 34.20 .0 -8.5 6 4.8 3.8 2.2 .7 6 .1 .7 .4 .2 Food, beverage, and tobacco products 311,2 11.38 -1.2 -3.3 .0 5.4 6.4 7.0 2.3 5 .0 1.7 .5 .8 Textile and product mills 313,4 .73 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.7 -9 2.3 3 4 2 Apparel and leather 315,6 .34 -23.1 -14.9 -13.9 25.7 -3.3 5 3 1 -1.3 3.4 -2.6 2.4 Paper 322 2.54 3 -13.2 3 6.8 3.0 -2.2 .1 .5 4 9 .2 .6 Printing and support 323 1.81 .4 -9.2 -14.0 -7.4 6.2 -2.4 1.9 8 -1.1																3.9
Food, beverage, and tobacco products 311,2 11.38 -1.2 -3.3 .0 5.4 6.4 7.0 2.35 .0 1.7 .5 8.8 Textile and product mills 313,4 .73 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.79 2.3342 Apparel and leather 315,6 .34 -23.1 -14.9 -13.9 25.7 -3.3531 -1.3 3.4 -2.6 2.4 Paper 322 2.543 -13.23 6.8 3.0 -2.2 1.1 .549 2.2 6.6 Printing and support 323 1.81	Miscellaneous	339	3.47	-1.6	2	-2.9	-2.2	8.0	5	1.7	-1.8	1.1	-1.1	.6	.5	2.7
Food, beverage, and tobacco products 311,2 11.38 -1.2 -3.3 .0 5.4 6.4 7.0 2.35 .0 1.7 .5 8.8 Textile and product mills 313,4 .73 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.79 2.3342 Apparel and leather 315,6 .34 -23.1 -14.9 -13.9 25.7 -3.3531 -1.3 3.4 -2.6 2.4 Paper 322 2.543 -13.23 6.8 3.0 -2.2 1.1 .549 2.2 6.6 Printing and support 323 1.81 .4 -9.2 -14.0 -7.4 6.2 -2.4 1.98 -1.1 1.5 -1.76 Petroleum and coal products 324 2.43 .7 -4.4 -1.5 -6.9 26.8 4.84 .4 2.3 -1.2 -1.47 Chemical 325 12.28 3.2 -10.4 3.9 5.4 -5.29783 .6 1.51 Plastics and rubber products 326 2.706 -15.0 -8.8 13.4 17.04 .9 -1.4 1.1 .0 -1.5 .2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.12 -6.1 2.4 -1.525 -2.4 .0 Utilities 2211,2 11.64 3.13 -4.5 7.7 11.0 9.08 -2 1.0 2.3 .11 Utilities 2211,2 11.64 3.13 -1.4 11.7 -9.7 10.2 4.1 2.5 .9 -1.0 -2.2 -3.4 Electric 2211 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3	N 1 11 0 1		24.50	_	0 -			2 0		_	_	_	_		_	
Textile and product mills 313,4 .73 -11.3 -15.1 -5.5 4.2 6.6 8.0 1.7 9 2.3 3 4 2 Apparel and leather 315,6 .34 -23.1 -14.9 -13.9 25.7 -3.3 5 3 1 -1.3 3.4 -2.6 2.4 Paper 322 2.54 3 -13.2 3 6.8 3.0 -2.2 .1 .5 4 9 .2 .6 Printing and support 323 1.81 .4 -9.2 -14.0 -7.4 6.2 -2.4 1.9 8 -1.1 1.5 -1.7 6 Petroleum and coal products 324 2.43 .7 -4.4 -1.5 -6.9 26.8 4.8 -4 .4 2.3 -1.2 -1.4 7 Chemical 325 12.28 3.2 -10.4 3.9 5.4 -5.2 9 7 8 -		211.0														4.1
Apparel and leather Paper Pape				1												6.5 6.4
Paper 322 2.543 -13.23 6.8 3.0 -2.2 1.1 .549 .2 6.6 Printing and support 323 1.81 .4 -9.2 -14.0 -7.4 6.2 -2.4 1.98 -1.1 1.5 -1.76 Petroleum and coal products 324 2.43 .7 -4.4 -1.5 -6.9 26.8 4.84 .4 2.3 -1.2 -1.47 Chemical 325 12.28 3.2 -10.4 3.9 5.4 -5.29783 .6 1.51 Plastics and rubber products 326 2.706 -15.0 -8.8 13.4 17.04 .9 -1.4 1.1 .0 -1.5 .2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.12 -6.1 2.4 -1.525 -2.4 .0 Mining 21 12.96 .13 -4.5 7.7 11.0 9.082 1.0 2.3 .11 Utilities 2211,2 11.64 3.13 -1.4 11.7 -9.7 10.2 4.1 2.5 .9 -1.0 -2.2 -3.4 Electric 2211 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3	*															7.9
Printing and support 323 1.81 .4 -9.2 -14.0 -7.4 6.2 -2.4 1.9 8 -1.1 1.5 -1.7 6 Petroleum and coal products 324 2.43 .7 -4.4 -1.5 -6.9 26.8 4.8 4 .4 2.3 -1.2 -1.4 7 Chemical 325 12.28 3.2 -10.4 3.9 5.4 -5.2 9 7 8 3 .6 1.5 1 Plastics and rubber products 326 2.70 6 -15.0 -8.8 13.4 17.0 4 .9 -1.4 1.1 .0 -1.5 .2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.1 2 -6.1 2.4 -1.5 2 5 -2.4 .0 Mining 21 12.96 .1 3 -4.5 7.7 11.0 9.0																4.0
Petroleum and coal products 324 2.43 .7 -4.4 -1.5 -6.9 26.8 4.84 .4 2.3 -1.2 -1.47 Chemical 325 12.28 3.2 -10.4 3.9 5.4 -5.29783 .6 1.51 Plastics and rubber products 326 2.706 -15.0 -8.8 13.4 17.04 .9 -1.4 1.1 .0 -1.5 .2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.12 -6.1 2.4 -1.525 -2.4 .0 Mining 21 12.96 .13 -4.5 7.7 11.0 9.082 1.0 2.3 .11 Utilities 2211,2 11.64 3.13 -1.4 11.7 -9.7 10.2 4.1 2.5 .9 -1.0 -2.2 -3.4 Electric 2211 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3																-2.8
Chemical Plastics and rubber products 325 326 12.28 2.70 3.2 -10.4 3.9 5.4 -5.29783 .6 1.51 9 -1.4 1.1 .0 -1.5 .2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.12 -6.1 2.4 -1.52 -5 -2.4 .0 Mining 21 12.96 1.6 3.13 -4.5 7.7 11.0 9.0 -8.8 -2 1.0 2.3 1.11 Utilities 11.64 3.13 -1.4 11.7 -9.7 10.2 4.1 2.5 9.9 -1.0 -2.2 -3.4 Electric 11.64 3.13 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 8. 2.9 2.7 81.4 -2.0 -3.3																1.9
Plastics and rubber products 326 2.70 6 -15.0 -8.8 13.4 17.0 4 .9 -1.4 1.1 .0 -1.5 .2 Other manufacturing (non-NAICS) 1133,5111 3.74 -2.4 -9.1 -11.3 -10.1 2 -6.1 2.4 -1.5 2 5 -2.4 .0 Mining 21 12.96 .1 3 -4.5 7.7 11.0 9.0 8 2 1.0 2.3 .1 1 Utilities 2211,2 11.64 3.1 3 -1.4 11.7 -9.7 10.2 4.1 2.5 .9 -1.0 -2.2 -3.4 Electric 2211 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3																2.3
Mining 21 12.96 .1 3 -4.5 7.7 11.0 9.0 8 2 1.0 2.3 .1 1 Utilities 2211,2 11.64 3.1 3 -1.4 11.7 -9.7 10.2 4.1 2.5 .9 -1.0 -2.2 -3.4 Electric 2211 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3	Plastics and rubber products															7.3
Utilities 2211,2 11.64 3.1 3 -1.4 11.7 -9.7 10.2 4.1 2.5 .9 -1.0 -2.2 -3.4 Electric 2211 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3	Other manufacturing (non-NAICS)	1133,5111	3.74	-2.4	-9.1	-11.3	-10.1	2	-6.1	2.4	-1.5	2	5	-2.4	.0	-4.7
Electric 2211 10.00 3.4 -1.4 -1.7 13.6 -6.2 7.8 2.9 2.7 .8 -1.4 -2.0 -3.3	Mining		12.96	.1	3	-4.5	7.7	11.0	9.0	8	2	1.0	2.3	.1	1	7.5
																-2.6
				1						!						3
Natural gas 2212 1.64 1.6 4.9 .6 .5 -29.1 27.0 12.6 1.5 1.3 1.7 -3.6 -4.0	Natural gas	2212	1.64	1.6	4.9	.6	.5	-29.1	27.0	12.6	1.5	1.3	1.7	-3.6	-4.0	-14.8

r Revised. p Preliminary.

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

^{1.} The proportion data are the relative weights for the rates of change for each series in the computation of the change in 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																
			1	rth quarte												
To		2000	fo	urth quar	ter		nnual rat	e	2010		Montl	hly rate			Oct. '09	
Item		2009 proportion	2007	2008	2009	2010 Q1	$Q2^{r}$	Q3 ^r	2010 May ^r	June ^r	July	Aug.r	Sept.r	Oct.p	Oct. '10	
		Proposition				- (-		- C-				8-	~-F			
Total industry		100.00	2.3	-7.6	-3.8	7.1	7.1	5.2	1.2	.0	.8	.2	2	.0	5.3	
Energy		25.33	2.2	.0	-2.0	8.9	.3	9.4	1.2	.9	1.2	.6	9	-1.5	2.5	
Consumer products		4.89	2.6	1.6	9	12.9	-12.3	16.2	4.4	4.1	2.0	-2.1	-2.6	-3.2	-4.2	
Commercial products		3.07	2.3	5	1	5.3	-1.5	4.7	1	2.0	.4	.1	-1.7	-3.2	-1.9	
Oil and gas well drilling	213111	.44	-1.0	6.9	-42.3	131.4	51.3	2.9	.8	-4.7	1.1	3.3	1.4	1.8	51.7	
Converted fuel		4.32	5.9	-5.1	5	12.6	6	6.9	3.4	.4	1.5	7	-2.1	-3.2	1.4	
Primary energy		12.61	.9	.8	-1.1	3.6	4.8	9.1	3	1	.9	2.0	.2	2	4.8	
Non-energy		74.67	2.3	-10.2	-4.4	6.5	9.5	3.7	1.2	3	.6	.1	.1	.6	6.3	
Selected high-technology industries		3.92	21.4	-5.2	4.0	13.8	19.7	4.7	1.2	1	.4	.6	.2	.0	10.1	
Computers and peripheral equipment	3341	.92	27.5	-4.9	-2.0	-9.5	8.3	12.4	1.7	1.4	.7	.8	.6	.7	4.1	
Communications equipment	3342	1.00	-11.5	2.2	5.1	1.3	31.5	4.3	2.9	1.1	8	.0	.4	.5	10.9	
Semiconductors and related																
electronic components	334412–9	2.00	37.7	-8.2	6.5	33.1	19.3	1.9	.2	-1.3	.8	.8	1	5	12.5	
Excluding selected high-technology															l	
industries		70.75	1.2	-10.5	-4.9	6.1	9.0	3.7	1.2	3	.6	.1	.1	.6	6.1	
mustiks		10.13	1.2	-10.5	-4.7	0.1	7.0	5.7	1.2	3	.0	.1	.1	.0	0.1	
Motor vehicles and parts	3361-3	3.54	-2.7	-27.5	1.4	13.7	9.2	27.6	5.6	9	9.6	-6.2	.0	1.6	13.4	
Motor vehicles	3361	1.48	-1.6	-31.5	5.2	16.0	7.5	55.1	8.1	-1.6	17.0	-9.4	.8	1.6	19.3	
Motor vehicle parts	3363	1.81	-3.6	-20.7	-2.9	9.3	6.2	7.5	2.5	8	3.8	-3.9	1.1	1.4	7.4	
Excluding motor vehicles and parts		67.22	1.5	-9.3	-5.3	5.6	8.9	2.3	.9	3	.1	.5	.1	.5	5.7	
Consumer goods		21.54	-2.1	-5.3	-2.3	2.7	4.3	1.0	1.5	9	1	.6	.1	.6	3.3	
Business equipment		8.24	5.3	-8.3	-6.1	9.4	16.7	6.0	1.4	.6	.3	.4	.3	1.3	9.4	
Construction supplies		4.45	-1.8	-14.3	-12.0	4.8	24.5	5	1	.0	6	1.0	4	.2	7.6	
Business supplies		7.08	.4	-10.2	-8.8	3 8.9	4.6	9	1.4	8	.2	.0	-1.0	.2	1.4 7.7	
Materials		23.70	3.2	-11.9	-5.7	8.9	9.3	3.8	.5	.1	.1	.6	.5	.3	/./	
Measures excluding selected																
high-technology industries																
Total industry		96.08	1.4	-7.8	-4.1	6.8	6.6	5.2	1.2	.0	.8	.2	2	.0	5.1	
Manufacturing ¹		71.48	1.5	-10.3	-4.5	5.8	8.7	3.7	1.2	3	.7	.0	.1	.6	5.9	
Durable		33.69	3.3	-12.1	-7.5	8.8	14.9	6.1	1.5	.0	1.4	7	.1	1.0	8.9	
Measures excluding motor vehicles																
and parts																
Total industry		96.46	2.6	-6.6	-4.0	6.8	7.0	4.3	1.0	.1	.4	.5	2	1	5.0	
Manufacturing ¹		71.86	2.9	-8.8	-4.4	5.8	9.3	2.5	.9	3	.2	.4	.1	.5	5.7	
Durable		34.07	6.4	-9.0	-7.1	8.8	16.2	3.5	1.0	.1	.3	.2	.1	.8	8.5	
Measures excluding selected																
high-technology industries																
and motor vehicles and parts		02.54	1.7	67	1.1	6.5	6.5	1.2	1.0	1			2	1	1.0	
Total industry Manufacturing 1		92.54	1.7	-6.7	-4.4	6.5	6.5	4.3	1.0	.1	.4	.5	2	1	4.8	
Manufacturing ¹		67.95	1.8	-9.0	-4.9	5.3	8.7	2.4	.9	3	.2	.4	.1	.5	5.5	
Stage-of-process components																
of non-energy materials,																
measures of the input to																
Finished processors		10.78	6.8	-11.4	-7.3	11.6	13.5	5.5	1.2	.3	1.4	9	.0	.6	8.7	
Primary and semifinished processors		15.96	3.8	-13.5	-3.0	9.9	7.9	3.0	.3	2	2	1.1	.8	.2	7.9	

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

willions of units, seasonally adjusted aimual fate												
	2009	2009	2010			2010						
Item	average	Q4	Q1	Q2	Q3	May	June	July	Aug.	Sept.	Oct.	
Total	5.71	7.23	7.47	7.57	8.20	7.83	7.67	8.69	7.90	8.01	8.20	
Autos	2.20	2.76	2.79	2.88	2.72	3.05	2.83	2.76	2.74	2.66	2.63	
Trucks	3.51	4.47	4.68	4.69	5.48	4.78	4.84	5.93	5.16	5.34	5.57	
Light	3.38	4.32	4.55	4.56	5.32	4.65	4.70	5.78	5.00	5.18	5.42	
Medium and heavy	.13	.15	.13	.13	.16	.13	.14	.15	.15	.17	.16	
Memo												
Autos and light trucks	5.58	7.08	7.34	7.44	8.04	7.70	7.54	8.54	7.75	7.84	8.05	

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

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1. Refer to note on cover page.

 Table 4

 INDUSTRIAL PRODUCTION INDEXES: MARKET AND INDUSTRY GROUP SUMMARY

 2007 = 100, seasonally adjusted

007 = 100, seasonally adjusted											
Item		2009 proportion	2010 Feb.	Mar.	Apr.	May ^r	June ^r	July ^r	Aug.r	Sept.r	Oct. ^p
Total IP		100.00	90.5	91.0	91.5	92.6	92.6	93.3	93.5	93.4	93.4
		100.00	70.5	71.0	71.0	,2.0	72.0	70.0	75.5	,,,,	,,,,
MARKET GROUPS Final products and nonindustrial supplies		56.32	89.4	90.1	90.3	91.8	91.9	92.6	92.5	92.1	92.2
Consumer goods		29.00	93.0	93.4	90.3	91.8	91.9	95.5	92.3	94.6	94.6
Durable		5.97	80.2	81.3	81.6	83.8	83.3	87.5	84.4	84.0	84.6
Automotive products		2.72	81.7	82.7	81.4	84.7	84.2	92.1	86.7	86.2	87.2
Home electronics		.34	97.2	96.3	98.3	100.4	101.5	102.5	102.1	103.0	103.2
Appliances, furniture, carpeting		.96	71.6	73.7	75.4	74.2	73.6	74.0	72.7	71.9	72.7
Miscellaneous goods		1.95	79.5	80.4	82.6	84.5	83.9	84.8	83.9	83.7	83.9
Nondurable		23.04	97.3	97.5	95.9	98.0	98.1	98.3	98.6	98.2	98.0
Non-energy		18.14	95.5	96.2	95.8	97.3	96.4	96.0	97.1	97.2	97.9
Foods and tobacco		9.55	96.4	97.6	97.1	99.9	99.1	99.1	100.6	101.2	102.0
Clothing		.28	79.8	79.4	79.7	80.0	79.5	77.7	80.7	78.4	79.
Chemical products		5.90	97.7	97.9	97.4	96.9	96.1	95.2	96.0	96.0	96.
Paper products		1.84	86.1	85.8	85.3	86.7	85.5	84.7	84.4	83.6	83.
Energy		4.89	103.8	102.1	95.8	100.1	104.2	106.2	104.0	101.3	98.0
Business equipment		9.76	88.4	89.3	91.2	93.0	93.6	94.3	94.5	94.7	95.
Transit Information processing		1.82 2.92	79.7 103.9	81.2 105.3	79.7 107.6	82.5 110.1	82.5 110.6	85.2 112.2	85.1 112.6	85.1 112.2	85.° 113.0
Information processing Industrial and other		5.02	83.5	84.0	87.0	88.1	88.9	88.4	88.6	89.2	90.
Defense and space equipment		2.20	105.1	107.8	108.3	107.9	107.1	108.9	108.3	108.1	108.
2 mo and space equipment		2.20	105.1	107.0	100.5	107.7	107.1	100.7	100.5	100.1	100.
Construction supplies		4.49	74.4	76.1	79.4	79.3	79.3	78.8	79.6	79.3	79.
Business supplies		10.39	86.9	87.0	87.3	88.1	88.1	88.3	88.4	87.3	86.
Materials		43.68	91.7	92.1	92.9	93.5	93.5	94.2	94.8	95.0	94.
Non-energy		26.75	85.8	86.6	87.8	88.4	88.4	88.7	89.0	89.4	89.
Durable		15.69	83.4	84.6	86.3	87.5	87.5	88.1	88.2	88.1	88.
Consumer parts		2.07	68.8	70.1	70.4	73.3	73.4	76.9	72.9	73.0	74
Equipment parts Other		6.11 7.51	94.6 80.3	96.1 81.3	97.6 83.6	98.3 84.6	98.6 84.3	99.0 84.1	99.8 85.0	99.8 84.8	100. 85.
Nondurable		11.06	89.6	89.7	90.0	89.7	89.7	89.7	90.2	91.4	91.
Textile		.41	79.2	79.1	80.4	82.0	81.7	84.2	84.2	82.8	82.0
Paper		2.19	83.8	84.9	85.3	84.9	85.2	85.3	84.3	84.2	84.0
Chemical		5.08	91.4	91.5	92.1	91.0	90.8	91.1	91.4	94.5	93.
Energy		16.93	101.6	101.1	101.4	102.0	102.0	103.1	104.5	104.2	103.
INDUSTRY GROUPS											
Manufacturing		75.40	87.5	88.5	89.3	90.3	90.0	90.7	90.7	90.8	91
Manufacturing (NAICS)	31–33	71.66	88.1	89.1	90.0	91.0	90.8	91.4	91.5	91.7	92.
Durable manufacturing		37.47	85.5	86.7	88.2	89.5	89.6	90.7	90.2	90.3	91.
Wood products	321	.97	67.2	68.6	72.3	72.8	69.9	68.7	68.2	67.3	69.0
Nonmetallic mineral products	327	1.87	70.8	72.0	75.7	75.5	75.7	76.6	76.7	76.5	78.
Primary metal	331	1.97	82.5	84.5	86.3	86.5	87.0	82.1	82.2	84.0	83.0
Fabricated metal products	332	5.77	83.3	84.3	85.9	87.3	88.4	89.6	90.7	90.9	91.
Machinery Computer and electronic products	333 334	4.81 7.20	78.4 108.5	78.7 110.3	81.9 112.4	83.9 114.3	84.9 114.1	84.7 115.5	84.6 116.0	84.7 115.6	85. 116.
Computer and electronic products Electrical equip., appliances,	334	7.20	106.3	110.5	112.4	114.3	114.1	113.3	110.0	113.0	110.
and components	335	1.96	85.7	87.2	89.8	88.5	88.9	88.8	90.2	89.5	91.
Motor vehicles and parts	3361–3	3.54	71.7	73.2	72.0	76.0	75.3	82.5	77.4	77.4	78.
Aerospace and miscellaneous											
transportation equipment	3364-9	4.62	91.9	92.9	92.5	91.8	91.8	92.9	92.8	92.7	92.
Furniture and related products	337	1.29	70.0	72.1	72.8	73.3	73.5	73.4	72.5	73.0	73.
Miscellaneous	339	3.47	96.0	96.6	97.9	99.6	97.8	98.9	97.8	98.4	98.
Nondurable manufacturing		34.20	91.2	91.9	92.1	92.7	92.2	92.3	92.9	93.3	93.:
Food, beverage, and tobacco products	311,2	11.38	96.7	97.7	97.2	99.4	98.9	98.9	100.6	101.1	101.
Textile and product mills	313,4	.73	77.1	77.0	77.6	78.9	78.2	80.0	79.8	79.5	79.
Apparel and leather	315,6	.34	70.2	69.6	69.8	69.6	69.5	68.6	70.9	69.1	70.
Paper	322	2.54	88.3	89.3	88.7	88.8	89.2	88.9	88.1	88.2	88.
Printing and support	323	1.81	76.0	75.6	76.6	78.1	77.4	76.6	77.7	76.4	75.
Petroleum and coal products	324	2.43	91.6	95.6	97.7	97.3	97.7	99.9	98.7	97.4	96.
Chemical Plastics and rubber products	325 326	12.28 2.70	94.2 79.1	94.2 80.1	94.1 82.3	93.4 83.1	92.6 81.9	92.4 82.8	92.9 82.8	94.3 81.5	94. 81.
Other manufacturing (non-NAICS)	1133,5111	3.74	76.4	76.8	76.3	78.1	76.9	76.7	76.4	74.5	74.:
Mining	21	12.96	97.5	98.9	100.8	100.0	99.8	100.8	103.1	103.2	103.2
Utilities	2211,2	12.96	102.6	98.9	95.3	99.2	101.6	100.8	103.1	99.3	95.9
Utilities											
Electric	2211	10.00	102.1	98.9	96.4	99.2	101.8	102.6	101.2	99.2	95.9

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 Table 5

 INDUSTRIAL PRODUCTION INDEXES: SPECIAL AGGREGATES

 2007 = 100, seasonally adjusted

007 = 100, scasonarry adjusted											
Item		2009 proportion	2010 Feb.	Mar.	Apr.	May ^r	June ^r	July ^r	Aug. ^r	Sept.r	Oct. ^p
Total industry		100.00	90.5	91.0	91.5	92.6	92.6	93.3	93.5	93.4	93.4
Energy		25.33	101.3	100.7	99.7	101.0	101.9	103.1	103.7	102.7	101.2
Consumer products		4.89	103.8	102.1	95.8	100.1	104.2	106.2	104.0	101.3	98.0
Commercial products		3.07	101.7	100.8	100.4	100.1	102.3	102.7	102.8	101.1	97.8
Oil and gas well drilling	213111	.44	74.9	79.8	83.9	84.6	80.5	81.4	84.1	85.2	86.8
Converted fuel	213111	4.32	100.1	97.3	96.3	99.6	100.0	101.5	100.8	98.6	95.5
Primary energy		12.61	101.8	102.2	102.9	102.6	102.5	103.4	105.5	105.8	105.6
Non-energy		74.67	86.9	87.8	88.7	89.8	89.5	90.1	90.2	90.2	90.8
Selected high-technology industries		3.92	111.2	112.4	115.1	116.5	116.4	116.8	117.5	117.7	117.7
Computers and peripheral equipment	3341	.92	104.1	103.2	104.1	105.8	107.3	108.1	109.0	109.6	110.4
Communications equipment	3342	1.00	101.8	101.5	106.6	109.7	110.9	110.1	110.1	110.5	111.1
Semiconductors and related											
electronic components	334412-9	2.00	119.4	122.3	124.6	124.9	123.3	124.3	125.3	125.1	124.4
Excluding selected high-technology industries		70.75	85.6	86.4	87.3	88.3	88.0	88.6	88.7	88.7	89.3
Motor vehicles and parts	3361-3	3.54	71.7	73.2	72.0	76.0	75.3	82.5	77.4	77.4	78.6
Motor vehicles	3361	1.48	69.1	72.2	69.5	75.1	73.9	86.5	78.4	79.0	80.3
Motor vehicle parts	3363	1.81	75.2	75.6	75.6	77.5	76.9	79.8	76.7	77.6	78.7
Excluding motor vehicles and parts		67.22	86.7	87.5	88.5	89.3	89.1	89.1	89.6	89.7	90.1
Consumer goods		21.54	91.8	92.6	92.6	93.9	93.1	93.0	93.6	93.7	94.3
Business equipment		8.24	89.5	90.3	92.2	93.6	94.1	94.3	94.7	94.9	96.1
Construction supplies		4.45	74.1	75.8	79.1	79.0	79.0	78.5	79.3	78.9	79.1
Business supplies Materials		7.08 23.70	80.9 84.8	81.2 85.5	81.8 86.6	82.9 87.1	82.2 87.2	82.4 87.3	82.4 87.8	81.6 88.2	81.8 88.5
Measures excluding selected high-technology industries											
Total industry		96.08	89.6	90.1	90.5	91.6	91.6	92.3	92.5	92.4	92.4
Manufacturing ¹								89.2			89.8
Durable		1 71.48	86.2	87.1	87.9	88.9	88.6	89.2	89.2	89.3	
		71.48 33.69	86.2 82.6	87.1 83.9	87.9 85.3	88.9 86.6	88.6 86.6		89.2 87.2	89.3 87.3	
		33.69	86.2 82.6	87.1 83.9	87.9 85.3	88.9 86.6	88.6 86.6	89.2 87.8	89.2 87.2	89.3 87.3	
Measures excluding motor vehicles and parts			l								88.1
		33.69	82.6	83.9	85.3	86.6	86.6	87.8	87.2	87.3	94.2
Measures excluding motor vehicles and parts Total industry		33.69 96.46	82.6 91.5	83.9 91.9	85.3 92.5	86.6 93.5	86.6 93.5	87.8 93.9	87.2 94.4	87.3 94.2	94.2 92.2
Measures excluding motor vehicles and parts Total industry Manufacturing ¹ Durable Measures excluding selected high-technology		33.69 96.46 71.86	82.6 91.5 88.6	83.9 91.9 89.6	92.5 90.5	93.5 91.3	93.5 91.1	93.9 91.3	94.4 91.6	94.2 91.7	94.2 92.2
Measures excluding motor vehicles and parts Total industry Manufacturing ¹ Durable Measures excluding selected high-technology industries and motor vehicles and parts		33.69 96.46 71.86 34.07	82.6 91.5 88.6 87.5	83.9 91.9 89.6 88.7	85.3 92.5 90.5 90.6	93.5 91.3 91.6	93.5 91.1 91.7	93.9 91.3 91.9	94.4 91.6 92.1	94.2 91.7 92.2	94.2 92.2 92.9
Measures excluding motor vehicles and parts Total industry Manufacturing Durable Measures excluding selected high-technology industries and motor vehicles and parts		33.69 96.46 71.86	82.6 91.5 88.6	83.9 91.9 89.6	92.5 90.5	93.5 91.3	93.5 91.1	93.9 91.3	94.4 91.6	94.2 91.7	94.2 92.2 92.9 93.1
Measures excluding motor vehicles and parts Total industry Manufacturing¹ Durable Measures excluding selected high-technology industries and motor vehicles and parts Total industry Manufacturing¹ Stage-of-process components of non-energy materials, measures of the input to		33.69 96.46 71.86 34.07 92.54 67.95	82.6 91.5 88.6 87.5 90.6 87.3	83.9 91.9 89.6 88.7 91.0 88.2	85.3 92.5 90.5 90.6 91.5 89.1	93.5 91.3 91.6 92.5 89.9	93.5 91.1 91.7 92.5 89.6	87.8 93.9 91.3 91.9 92.9 89.8	94.4 91.6 92.1 93.4 90.1	87.3 94.2 91.7 92.2 93.2 90.2	88.1 94.2 92.2 92.9 93.1 90.7
Measures excluding motor vehicles and parts Total industry Manufacturing¹ Durable Measures excluding selected high-technology industries and motor vehicles and parts Total industry Manufacturing¹ Stage-of-process components of non-energy		33.69 96.46 71.86 34.07	82.6 91.5 88.6 87.5	83.9 91.9 89.6 88.7	85.3 92.5 90.5 90.6	93.5 91.3 91.6	86.6 93.5 91.1 91.7	93.9 91.3 91.9	94.4 91.6 92.1	94.2 91.7 92.2	94.2 92.2

Table 6 DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION

ercent												
Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
One month earlier												
2008	42.6	37.5	49.4	37.8	45.5	47.1	44.2	39.7	29.8	40.1	27.6	21.5
2009	34.0	42.3	36.2	43.6	42.3	44.9	64.7	61.5	59.6	54.2	64.4	50.6
2010	64.4	51.0	64.1	62.2	62.5	51.6	56.7	52.9	47.6			
Three months earlier												
2008	49.0	39.1	36.2	34.0	39.1	33.7	36.5	34.3	25.6	25.6	22.1	19.2
2009	17.3	21.8	31.1	36.2	36.2	41.0	51.3	64.4	66.3	62.5	67.0	57.7
2010	66.7	58.3	64.7	62.2	71.5	64.4	60.9	57.1	53.8			
Six months earlier												
2008	47.4	42.0	39.7	37.5	35.3	31.7	35.6	34.9	22.4	23.7	24.4	13.5
2009	15.7	16.7	22.4	19.6	22.4	33.0	39.4	45.8	55.4	58.3	67.0	67.3
2010	68.6	66.3	67.3	72.1	72.4	70.2	65.1	65.4	62.8			

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

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1. Refer to note on cover page.

Table 7 CAPACITY UTILIZATION

ereent or expuerty, seasonary adjusted			1972-	1994-	2008-									
Item		2009	2009	95	09	2010			2010					
		proportion	ave.	high	low	Q1	Q2 ^r	Q3 ^r	May ^r	June ^r	July ^r	Aug.r	Sept.r	Oct.p
Total industry		100.00	80.6	85.1	68.2	72.5	73.9	74.8	74.2	74.2	74.8	74.9	74.8	74.8
Manufacturing ¹		79.41	79.2	84.6	65.4	70.0	71.6	72.3	72.0	71.7	72.2	72.2	72.3	72.7
Manufacturing (NAICS)	31–33	75.63	79.0	84.8	65.2	70.0	71.8	72.5	72.0	71.9	72.4	72.5	72.6	73.0
Wandiacturing (WATCS)	31-33	75.05	77.0	04.0	03.2	70.0	/1.0	12.3	/2.1	/1./	72.4	12.5	72.0	73.0
Durable manufacturing		41.96	77.5	83.7	61.0	67.1	69.4	70.3	69.8	69.8	70.6	70.2	70.2	70.7
Wood products	321	1.22	78.5	87.2	53.4	58.8	62.8	60.7	63.8	61.7	60.9	60.8	60.4	62.3
Nonmetallic mineral products	327	2.48	77.0	82.6	52.0	53.6	56.7	57.7	56.6	56.9	57.6	57.8	57.7	58.9
Primary metal	331	2.43	79.7	94.1	46.8	67.4	70.2	66.7	70.1	70.4	66.4	66.3	67.6	67.2
Fabricated metal products	332	6.13	77.4	85.7	65.1	69.3	72.6	75.6	72.7	73.7	74.8	75.8	76.1	76.4
Machinery	333	5.34	78.3	87.2	61.1	66.8	71.5	72.8	71.8	72.8	72.7	72.7	72.9	74.0
Computer and electronic products	334	7.56	78.2	84.7	68.0	71.7	73.5	73.4	74.0	73.4	73.8	73.6	72.9	73.0
Electrical equip., appliances,														
and components	335	1.93	83.0	93.0	70.4	74.4	76.9	77.3	76.4	76.8	76.7	78.0	77.4	79.1
Motor vehicles and parts	3361-3	5.59	75.8	87.6	35.8	57.6	59.4	63.3	60.6	60.2	66.0	62.0	62.0	63.1
Aerospace and miscellaneous														
transportation equipment	3364-9	4.34	72.9	68.8	66.3	71.5	70.9	71.1	70.7	70.5	71.3	71.1	70.9	70.9
Furniture and related products	337	1.40	78.0	82.6	64.6	66.3	69.7	70.3	69.8	70.2	70.4	69.8	70.6	71.4
Miscellaneous	339	3.56	76.1	80.7	68.4	69.4	70.2	69.5	71.0	69.5	70.1	69.1	69.3	69.4
Nondurable manufacturing		33.67	81.3	86.1	70.1	73.7	74.6	75.2	74.9	74.6	74.7	75.3	75.6	75.8
Food, beverage, and tobacco products	311,2	10.72	81.4	85.8	73.6	76.9	78.0	79.1	78.7	78.2	78.2	79.4	79.8	80.4
Textile and product mills	311,2	.87	81.0	92.5	57.3	64.9	66.8	68.9	67.4	67.1	68.8	68.9	68.9	69.0
Apparel and leather	315,4	.36	78.6	87.3	65.8	74.7	75.5	76.9	75.5	75.9	75.4	78.5	76.9	79.3
Paper	313,0	2.46	87.2	92.6	69.7	76.9	78.0	78.0	77.9	78.4	78.2	77.7	77.9	78.5
Printing and support	323	2.01	82.8	85.7	63.4	63.4	65.0	65.1	65.6	65.2	64.6	65.8	64.8	64.6
Petroleum and coal products	323	1.91	86.1	91.0	74.8	79.4	84.5	85.8	84.2	84.7	86.8	85.9	84.8	84.3
Chemical	325	12.12	78.1	81.9	67.5	74.5	73.7	73.7	73.7	73.2	73.0	73.5	74.7	74.7
Plastics and rubber products	325	3.22	82.6	92.7	57.3	63.3	65.9	65.8	66.5	65.5	66.2	66.2	65.1	65.2
Other manufacturing (non-NAICS)	1133,5111	3.79	83.8	83.2	68.0	68.4	68.4	67.2	69.3	68.2	68.0	67.7	66.0	66.0
Mining	21	10.24	87.4	88.9	79.6	83.2	85.5	87.4	85.4	85.2	86.1	88.0	88.0	87.9
Utilities	2211,2	10.34	86.7	93.3	77.6	81.6	79.2	80.9	79.6	81.5	82.1	81.3	79.4	76.6
Selected high-technology industries		4.13	78.3	86.8	67.0	72.6	73.9	72.9	74.2	73.5	73.1	73.0	72.5	71.9
Computers and peripheral equipment	3341	.94	78.0	87.0	67.7	77.3	77.3	77.8	77.4	77.9	77.9	77.8	77.7	77.6
Communications equipment	3342	.93	76.4	83.6	73.4	78.0	81.5	80.6	81.9	82.2	81.0	80.5	80.3	80.1
Semiconductors and related	33 12	.,,,		05.0	, 3. 1	. 5.0	01.0	00.0	01.7	02.2	01.0	50.5	50.5	50.1
electronic components	334412-9	2.26	80.5	92.4	61.8	68.8	69.8	68.4	70.1	68.6	68.6	68.6	68.0	67.1
Measures excluding selected high-technology industries														
Total industry		95.87	80.8	85.0	68.1	72.5	73.8	74.9	74.1	74.2	74.8	75.0	74.8	74.9
Manufacturing ¹		75.28	79.3	84.5	65.2	69.8	71.4	72.2	71.8	71.6	72.1	72.1	72.2	72.6
STAGE-OF-PROCESS GROUPS														
		13.87	86.5	90.0	78.3	83.3	84.8	86.4	84.6	84.5	85.2	86.6	87.2	87.3
Crudo		13.07	00.5	20.0	10.3	05.5	04.0		04.0					
Crude Primary and semifinished		46.13	81.6	87.9	65.7	69.8	71.2	71.9	71.6	71.9	72.2	72.1	71.5	71.0

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1. Refer to note on cover page.

Table 8 INDUSTRIAL CAPACITY

Percent change

													Monthly
			nnual rate		Fourth	quarter to	o fourth q	uarter		Annua	l rate		rate
Item	1972-	1980-	1989-	1995-					2010				2010
	79	88	94	2010	2007	2008	2009	2010	Q1	Q2	Q3	Q4	Oct.
Total industry	3.1	1.9	2.3	2.6	1.7	.8	.5	3	7	6	2	.2	.0
Manufacturing ¹	3.3	2.2	2.5	2.9	2.4	.5	-1.2	2	8	3	.0	.2	.0
Mining Utilities	.7 4.2	.0 2.1	8 1.8	1 2.2	.9 .6	1.5 2.2	3.0 3.1	.0 1.5	2 2.2	4 1.5	.0 1.1	.7 1.0	.1 .1
Selected high-technology industries	19.5	17.3	15.8	22.0	27.2	.3	7.7	11.4	13.3	11.8	10.5	10.0	.8
Manufacturing ¹ ex. selected high-technology industries	2.6	1.3	1.6	1.2	1.0	.5	-1.7	8	-1.4	9	5	3	.0
STAGE-OF-PROCESS GROUPS Crude	1.6	.4	5	.2	.6	1.5	2.6	8	8	-1.1	8	2	.0
Primary and semifinished	3.0	1.4	2.5	3.0	3.0	.6	7	6	8	6	5	4	.0
Finished	3.9	3.3	2.7	2.7	1.3	.8	7	.9	.1	.8	1.2	1.4	.1

^{1.} Refer to note on cover page.

Table 9
GROSS VALUE OF FINAL PRODUCTS AND NONINDUSTRIAL SUPPLIES
Billions of 2005 dollars at annual rate, seasonally adjusted

			2010			2010					
Item	2005	2009	Q1	Q2 ^r	Q3 ^r	May ^r	June ^r	July ^r	Aug.r	Sept.r	Oct.
Final products and nonindustrial											
supplies	3,336.9	3,056.8	3,149.9	3,210.0	3,260.0	3,223.8	3,231.2	3,275.8	3,261.5	3,242.8	3,240.
Final products	2,477.7	2,324.8	2,410.1	2,455.2	2,506.6	2,469.3	2,475.8	2,521.5	2,505.5	2,492.8	2,495.
Consumer goods	1,853.6	1,724.0	1,791.3	1,811.1	1,849.8	1,822.0	1,826.7	1,865.1	1,849.3	1,835.0	1,832.
Durable	513.7	380.1	424.9	434.8	449.7	440.6	436.6	463.8	444.1	441.3	445.
Automotive products	306.7	221.8	266.1	269.6	285.4	274.7	271.9	298.0	280.2	278.1	280.
Other durable goods	207.0	158.2	159.2	165.5	165.0	166.4	165.1	166.7	164.5	163.8	165.
Nondurable	1,339.8	1,334.0	1,357.1	1,367.4	1,391.7	1,372.9	1,380.8	1,394.3	1,396.0	1,384.7	1,378.
Equipment, total	624.1	599.9	617.8	643.8	656.5	646.9	648.8	655.7	655.9	658.0	664.
Business and defense	600.7	585.8	601.0	625.2	638.2	627.9	630.6	637.6	637.5	639.5	645.
Business	520.8	487.6	500.9	523.8	536.1	526.6	530.0	535.0	535.6	537.7	543.
Defense and space	79.9	96.4	98.3	99.8	100.6	99.8	99.2	101.1	100.4	100.3	100.
Nonindustrial supplies	859.2	734.0	743.0	757.9	757.3	757.8	758.8	758.3	759.7	753.7	748.
Construction supplies	270.1	205.8	207.3	217.3	216.5	217.0	217.1	215.3	217.3	217.0	217.
Business supplies	589.1	528.5	536.0	540.8	540.9	541.0	541.8	543.2	542.6	536.9	530.
Commercial energy products	210.9	211.0	215.3	216.7	216.9	215.0	218.2	218.8	217.7	214.2	208.

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

		Fou	rth quarte	er to										
		fo	urth quar	ter	A	Annual r	ate			Mont	hly rate			Oct. '09
Item	2009				2010			2010						to
	gross value1	2007	2008	2009	Q1	$Q2^{r}$	Q3 ^r	May ^r	June ^r	July ^r	Aug.r	Sept.r	Oct.p	Oct. '10
Finished	1795.3	1.5	-8.9	-2.0	7.7	8.6	7.5	1.7	3	1.6	3	.2	1.0	7.4
Semifinished	1497.9	2.2	-9.7	-7.3	6.9	7.7	6.0	1.3	.8	1.1	5	8	3	4.8
Primary	1249.9	4.0	-8.3	-2.2	6.8	6.3	3.0	1.6	1	.7	4	3	-1.7	2.4
Crude	604.2	3.0	-9.1	2.3	7.9	3.8	4.7	-1.3	.1	.4	1.2	1.2	1	5.9

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^{1.} Billions of 2005 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) ¹																	
1988	.0	.4	.3	.5	1	.2	.1	.5	4	.5	.2	.4	3.5	3.5	1.9	2.9	5.2
1989	.3	4	.3	.0	7	.0	9	.9	2	1	.3	.6	1.6	-1.6	-2.5	1.8	.9
1990	5	.9	.5	1	.2	.3	1	.2	.2	8	-1.2	7	3.0	2.7	1.5	-6.1	1.0
1991 1992	4 6	6 .8	5 .8	.2 .7	1.0	1.0	.0	.1 5	.9	2 .7	1 .4	3 .0	-7.4 4	2.5 7.1	5.6 2.8	.9 4.0	-1.5 2.8
1993	.5	.3	.0	.3	4	.2	.3	.0	.4	.8	.4	.5	3.5	1.1	2.0	6.2	3.3
1993	.4	.0	1.1	.5	.6	.7	.2	.6	.2	.8	.6	1.1	5.0	7.4	5.1	8.2	5.3
1995	.3	.0	.2	1	.2	.3	4	1.4	.4	2	.2	.4	5.2	1.0	3.7	3.2	4.8
1996 1997	6 .1	1.6 1.2	2 .8	.8	.7 .7	.9 .5	1 .6	.7 1.3	.6 .9	.0	.8	.6	3.1 7.8	8.1 6.4	5.4 9.6	5.6 10.1	4.4 7.2
.998	.5	.1	.1	.4	.7	6	4	2.1	3	.7	1	.3	4.5	3.0	3.0	5.4	5.9
1999	.5	.4	.2	.2	.8	2	.6	.4	3	1.3	.5	.8	4.1	3.9	3.9	7.4	4.3
2000	.1	.4	.4	.6	.2	.1	2	2	.5	4	.0	4	4.7	4.7	5	-1.1	4.0
2001	7	6	3	2	7	6	4	3	3	5	5	.0	-5.6	-5.0	-5.6	-4.6	-3.3
2002	.6	.0	.8	.4	.5	.9	3	.2	.1	3	.5	5	2.8	6.5	2.3	3	.2
2003	.7	.4	1	8	.0 .7	.0	.4	1	.6	.0	.8	1	2.9	-3.0	2.2	3.6	1.3
2004 2005	.2 .5	.6 .7	5 .0	.5 .0	.7	9 .3	.7 1	.2 .2	1 -2.0	.9 1.0	.2 1.1	.7 .6	2.6 5.9	1.8 2.0	1.8 -1.5	5.6 2.7	2.3 3.2
2006	.0	.1	.2	.4	1	.4	.3	.3	1	.0	2	1.0	3.7	2.6	2.7	.9	2.2
2007	4	1.1	.1	.7	.0	1	.2	.0	.4	7	.4	.1	4.3	4.5	1.0	7	2.7
2008	3	2	3	8	5	4	.0	-1.2	-4.0	1.0	-1.0	-2.0	-1.6	-5.9	-9.7	-13.0	-3.3
2009	-2.1	8	-1.5	8	9	2	1.4	1.2	.7	.3	.5	.5	-17.6	-10.3	8.3	7.0	-9.3
2010	1.0	.0	.6	.5	1.2	.0	.8	.2	2	.0			7.1	7.1	5.2		
IP (2007=100)																	
2008	100.1	99.9	99.6	98.8	98.3	98.0	98.0	96.8	93.0	93.9	92.9	91.0	99.9	98.4	95.9	92.6	96.7
2009 2010	89.1 90.5	88.5 90.5	87.2 91.0	86.5 91.5	85.7 92.6	85.5 92.6	86.7 93.3	87.8 93.5	88.4 93.4	88.6 93.4	89.1	89.6	88.2 90.6	85.9 92.2	87.6 93.4	89.1	87.7
Capacity (percent of 2007 output) 2008 2009	123.7 125.0	123.8 125.1	123.8 125.2	123.9 125.3	123.9 125.4	124.0 125.4	124.1 125.4	124.2 125.4	124.3 125.4	124.5 125.3	124.7 125.2	124.8 125.2	123.8 125.1	123.9 125.4	124.2 125.4	124.7 125.2	124.1 125.3
2010 Utilization	125.1	125.0	125.0	124.9	124.8	124.8	124.8	124.8	124.8	124.8			125.0	124.8	124.8		
(percent) 1988	83.4	83.6	83.8	84.2	84.1	84.3	84.4	84.7	84.4	84.8	84.8	85.1	83.6	84.2	84.5	84.9	84.3
1989	85.2	84.7	84.8	84.7	84.0	83.8	82.9	83.5	83.1	82.8	82.9	83.2	84.9	84.2	83.1	83.0	83.8
1990	82.6	83.2	83.4	83.1	83.1	83.1	82.9	82.9	83.0	82.2	81.1	80.4	83.0	83.1	82.9	81.2	82.6
1991	79.9	79.3	78.7	78.8	79.5	80.2	80.1	80.1	80.7	80.4	80.3	79.9	79.3	79.5	80.3	80.2	79.8
1992	79.3	79.7	80.3	80.7	80.8	80.6	81.1	80.5	80.5	80.9	81.1	81.0	79.8	80.7	80.7	81.0	80.5
1993	81.2	81.4	81.2	81.4	81.0	81.1	81.2	81.1	81.4	81.9	82.1	82.3	81.3	81.1	81.2	82.1	81.4
1994	82.5	82.3	83.0	83.2	83.4	83.7	83.6	83.8	83.8	84.2	84.4	85.1	82.6	83.5	83.7	84.6	83.6
1995	85.0	84.7	84.6	84.2	84.0	84.0	83.3	84.2	84.2	83.6	83.5	83.5	84.8	84.1	83.9	83.5	84.1
1996 1997	82.6 83.4	83.6 84.0	83.1 84.2	83.4 83.8	83.5 83.9	83.9 83.8	83.4 83.8	83.6 84.5	83.7 84.7	83.3 84.7	83.6 85.0	83.7 84.7	83.1 83.9	83.6 83.9	83.6 84.3	83.5 84.8	83.4 84.2
1998	84.5	84.1	83.6	83.4	83.4	82.5	81.7	83.0	82.3	82.5	82.0	81.9	84.1	83.1	82.3	82.1	82.9
1999	81.9	81.9	81.8	81.6	81.9	81.4	81.6	81.7	81.1	81.9	82.0	82.3	81.9	81.6	81.5	82.0	81.8
2000	82.1	82.1	82.1	82.4	82.2	82.0	81.5	81.1	81.2	80.7	80.4	79.9	82.1	82.2	81.3	80.3	81.5
2001 2002	79.1 73.8	78.4 73.7	77.9 74.1	77.5 74.4	76.8 74.7	76.1 75.3	75.6 75.0	75.1 75.1	74.7 75.2	74.2 75.0	73.6 75.3	73.5 75.0	78.5 73.9	76.8 74.8	75.1 75.1	73.8 75.1	76.0 74.7
2003 2004	75.6 77.0	75.9 77.4	75.8 77.0	75.2 77.4	75.3 78.0	75.4 77.3	75.7 77.8	75.7 78.0	76.1 78.0	76.2 78.7	76.8 78.9	76.8 79.4	75.7 77.1	75.3 77.6	75.8 78.0	76.6 79.0	75.9 77.9
2004	77.0	80.3	80.2	80.2	80.4	80.5	80.4	80.4	78.0 78.7	78.7 79.5	80.3	80.6	80.1	80.4	78.0 79.8	80.1	80.1
	80.6	80.5	80.6	80.8	80.4	80.9	81.0	81.0	80.8	80.6	80.3	81.0	80.6	80.8	80.9	80.7	80.7
	80.6	81.3	81.3	81.7	81.6	81.3	81.4	81.3	81.5	80.9	81.2	81.2	81.1	81.5	81.4	81.1	81.3
2006													I				I
2006 2007 2008	80.9	80.7	80.5	79.8	79.4	79.0	79.0	77.9	74.8	75.4	74.5	72.9	80.7	79.4	77.2	74.3	77.9
2006 2007		80.7 70.7 72.4	80.5 69.6 72.8	79.8 69.0 73.2	79.4 68.3 74.2	79.0 68.2 74.2	79.0 69.1	77.9 70.0 74.9	74.8 70.5 74.8	75.4 70.7 74.8	74.5 71.1	72.9 71.6	80.7 70.5 72.5	79.4 68.5 73.9	77.2 69.9 74.8	74.3 71.1	77.9 70.0

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

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

Year																	
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent change) ²																	
1988	2	.2	.3	.8	1	.1	.1	.1	.3	.6	.3	.4	2.6	4.5	1.2	4.5	5.3
1989	.8	9	1	.1	9	.1	-1.1	.9	2	2	.2	.1	1.9	-3.0	-3.0	.6	.8
1990	1	1.4	.4	3	.1	.3	2	.3	.0	8	-1.2	8	4.5	2.6	.9	-6.8	.8
1991	8	6	7	.3	.7	1.1	.2	.2	1.1	2	2	1	-8.8	2.0	7.3	1.7	-2.0
1992	6	.9	1.0	.5	.6	.3	.9	4	.0	.6	.4	2	.6	8.1	3.9	2.8	3.6
993	1.0	.2	2	.6	1	1	.3	1	.6	.9	.4	.5	4.4	1.6	1.2	7.0	3.5
1994	.2	.1	1.3	.8	.7	.3	.4	.8	.3	1.0	.8	1.2	4.8	9.5	6.0	9.9	5.9
1995	.3	1	.2	2	.0	.4	6	1.2	.9	1	.0	.4	5.6	.4	3.0	4.1	5.2
1996	7	1.6	3	1.0	.7	1.1	.3	.6	.7	1	.8	.9	2.4	9.1	7.9	5.8	4.8
1997	.0	1.4	1.2	2	.9	.7	.4	1.6	.9	.6	1.1	.4	9.3	7.7	10.7	10.9	8.4
.998	.8	.1	1	.5	.6	7	5	2.6	3	1.0	.2	.5	6.1	2.5	3.3	7.6	6.7
1999	.3	.7	.0	.4	.9	4	.5	.7	3	1.5	.6	.7	4.6	4.4	3.6	9.0	5.0
2000	.2	.3	.7	.6	2	.2	.0	6	.5	4	3	7	5.2	4.4	7	-2.7	4.2
2001	6	6	3	2	8	7	3	7	2	7	3	.3	-6.5	-5.2	-6.1	-4.3	-4.0
2002	.5	.0	.7	.1	.7	1.1	5	.4	.1	5	.5	5	3.4	5.9	3.1	8	.3
2003	.6	.2	.3	9	.1	.4	.1	3	.8	.0	1.0	2	2.4	-2.0	1.9	4.1	1.3
2004	.0	.7	2	.5	.7	9	.8	.7	2	1.0	1	.7	2.3	3.0	3.5	5.3	2.8
2005	.7	.8	3	.2	.4	.1	1	.3	-1.0	1.5	.8	.0	6.6	2.2	3	5.6	4.0
2006	.7	2	1	.6	3	.3	.1	.4	.1	3	.0	1.5	3.1	1.3	1.9	1.6	2.5
2007	4	.6	.8	.7	1	.1	.4	5	.5	7	.3	.2	5.2	5.4	.7	-1.0	2.9
2008	5	5	2	-1.2	5	6	5	9	-3.2	4	-1.9	-2.6	-2.7	-8.1	-10.4	-18.0	-4.5
2009	-2.7	2	-1.7	6	8	1	1.7	1.3	.7	.1	1.0	.1	-21.0	-9.3	10.4	7.1	-11.1
2010	.9	3	1.1	.9	1.2	3	.7	.0	.1	.5			6.2	9.3	3.7		
P (2007=100)																	
2008	100.0	99.5	99.2	98.0	97.5	96.9	96.4	95.6	92.5	92.2	90.4	88.1	99.5	97.5	94.8	90.2	95.5
2009	85.7	85.5	84.1	83.5	82.9	82.7	84.1	85.3	85.9	86.0	86.8	86.9	85.1	83.0	85.1	86.6	85.0
							0	00.0	00.7		00.0	00.7				00.0	00.0
	87.8	87.5	88.5	89.3	90.3	90.0	90.7	90.7	90.8	91.3			87.9	89.9	90.7		
Capacity Spercent of 2007 output)	87.8 127.0	87.5 127.2	88.5 127.3	89.3 127.4	90.3	127.4	127.5	127.5	127.5	127.4	127.4	127.3	127.2	127.4	127.5	127.4	127.3
Capacity percent of 2007 output) 2008	87.8	87.5	88.5	89.3	90.3						127.4 125.9	127.3 125.8				127.4 125.9	127.3 126.5
Capacity (percent of 2007 output) 2008 2009 2010 Utilization	127.0 127.2	87.5 127.2 127.1	88.5 127.3 127.0	89.3 127.4 126.8	90.3 127.4 126.7	127.4 126.5	127.5 126.4	127.5 126.2	127.5 126.1	127.4 126.0			127.2 127.1	127.4 126.7	127.5 126.2		
Capacity percent of 2007 output) 2008 2009 2010 Utilization percent)	87.8 127.0 127.2 125.7	87.5 127.2 127.1 125.6	127.3 127.0 125.6	89.3 127.4 126.8 125.5	90.3 127.4 126.7 125.5	127.4 126.5 125.5	127.5 126.4 125.5	127.5 126.2 125.5	127.5 126.1 125.5	127.4 126.0 125.6	125.9 84.8	125.8 85.0	127.2 127.1 125.6	127.4 126.7 125.5	127.5 126.2 125.5	125.9 84.8	126.5 84.0
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989	87.8 127.0 127.2 125.7 83.0 85.6	87.5 127.2 127.1 125.6 83.1 84.6	88.5 127.3 127.0 125.6 83.3 84.4	89.3 127.4 126.8 125.5 84.0 84.4	90.3 127.4 126.7 125.5 83.9 83.5	127.4 126.5 125.5 84.0 83.4	127.5 126.4 125.5 84.0 82.3	127.5 126.2 125.5 84.0 82.9	127.5 126.1 125.5 84.2 82.5	127.4 126.0 125.6 84.6 82.2	125.9 84.8 82.1	85.0 82.0	127.2 127.1 125.6 83.2 84.9	127.4 126.7 125.5 83.9 83.8	127.5 126.2 125.5 84.1 82.6	125.9 84.8 82.1	84.0 83.3
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989 990	87.8 127.0 127.2 125.7 83.0 85.6 81.7	87.5 127.2 127.1 125.6 83.1 84.6 82.7	88.5 127.3 127.0 125.6 83.3 84.4 82.8	89.3 127.4 126.8 125.5 84.0 84.4 82.4	90.3 127.4 126.7 125.5 83.9 83.5 82.3	127.4 126.5 125.5 84.0 83.4 82.3	127.5 126.4 125.5 84.0 82.3 82.0	127.5 126.2 125.5 84.0 82.9 82.1	127.5 126.1 125.5 84.2 82.5 81.9	127.4 126.0 125.6 84.6 82.2 81.1	84.8 82.1 80.0	85.0 82.0 79.2	127.2 127.1 125.6 83.2 84.9 82.4	127.4 126.7 125.5 83.9 83.8 82.4	127.5 126.2 125.5 84.1 82.6 82.0	84.8 82.1 80.1	84.0 83.3 81.7
Capacity percent of 1007 output) 1008 1009 1010 Utilization percent) 988 989 990 991	127.0 127.2 125.7 83.0 85.6 81.7 78.5	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8	127.4 126.5 125.5 84.0 83.4 82.3 78.6	127.5 126.4 125.5 84.0 82.3 82.0 78.7	127.5 126.2 125.5 84.0 82.9 82.1 78.8	127.5 126.1 125.5 84.2 82.5 81.9 79.5	127.4 126.0 125.6 84.6 82.2 81.1 79.3	84.8 82.1 80.0 79.0	85.0 82.0 79.2 78.8	127.2 127.1 125.6 83.2 84.9 82.4 77.9	127.4 126.7 125.5 83.9 83.8 82.4 77.9	127.5 126.2 125.5 84.1 82.6 82.0 79.0	84.8 82.1 80.1 79.0	84.0 83.3 81.7 78.5
Capacity percent of 1007 output) 1008 1009 1010 Utilization percent) 988 989 990 991	87.8 127.0 127.2 125.7 83.0 85.6 81.7	87.5 127.2 127.1 125.6 83.1 84.6 82.7	88.5 127.3 127.0 125.6 83.3 84.4 82.8	89.3 127.4 126.8 125.5 84.0 84.4 82.4	90.3 127.4 126.7 125.5 83.9 83.5 82.3	127.4 126.5 125.5 84.0 83.4 82.3	127.5 126.4 125.5 84.0 82.3 82.0	127.5 126.2 125.5 84.0 82.9 82.1	127.5 126.1 125.5 84.2 82.5 81.9	127.4 126.0 125.6 84.6 82.2 81.1	84.8 82.1 80.0	85.0 82.0 79.2	127.2 127.1 125.6 83.2 84.9 82.4	127.4 126.7 125.5 83.9 83.8 82.4	127.5 126.2 125.5 84.1 82.6 82.0	84.8 82.1 80.1	84.0 83.3 81.7 78.5
Capacity (percent of 2007 output) 2008 2009 2010 Utilization percent) 1988 1989 1990 1991 1992	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8	84.8 82.1 80.0 79.0 80.0 81.0	85.0 82.0 79.2 78.8 79.7 81.2	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0	84.8 82.1 80.1 79.0 79.9 81.0	84.0 83.3 81.7 78.5 79.6 80.3
Capacity (percent of 2007 output) 2008 2009 2010 Utilization (percent) 1988 1989 1990 1991 1992	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7	84.8 82.1 80.0 79.0 80.0 81.0 84.0	85.0 82.0 79.2 78.8 79.7 81.2 84.6	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0	84.8 82.1 80.1 79.0 79.9 81.0 84.1	84.0 83.3 81.7 78.5 79.6 80.3 82.8
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989 990 991 992 993 994 995	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 79.8 83.2 83.0	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8	84.8 82.1 80.0 79.0 80.0 81.0 84.0 82.4	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3
010 Capacity percent of 007 output) 008 009 010 Utilization percent) 988 989 990 991 992 993 994 995 996	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 79.8 83.2 83.0 82.5	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1	84.8 82.1 80.0 79.0 80.0 81.0 84.0 82.4 82.3	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989 990 991 992 993 994 995 996	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 79.8 83.2 83.0	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8	84.8 82.1 80.0 79.0 80.0 81.0 84.0 82.4	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989 990 991 992 993 994 995 996 997	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.1	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6	84.8 82.1 80.0 79.0 80.0 81.0 84.0 82.4 82.3 83.9	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989 990 991 992 993 994 995 996 997	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 81.0 80.1	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989 990 991 992 993 994 995 996 997 998 999 2000	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 84.0 81.6 83.4 82.5 80.5	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 81.0 80.1 80.3	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.1 80.2	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 80.9 79.7	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 81.2 80.6 78.7	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7 78.2	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2
010 Capacity Descrept of 007 output) 008 009 010 Utilization Descrept) 988 989 990 991 992 993 994 995 996 997 998 999 000 001	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 76.6	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0	88.5 127.3 127.0 125.6 83.3 84.4 82.7 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.8 75.5	89.3 127.4 126.8 125.5 84.0 84.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 81.0 80.1 80.3 73.7	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.1 80.0 73.2	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 80.9 79.7 79.3 72.3	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 81.2 80.6 78.7 71.7	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7 78.2 71.4	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4 71.5	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4 80.6 74.4	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7	84.8 82.1 80.1 79.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 71.6	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2 81.7 80.5 79.7
010 Capacity Descrept of 007 output) 008 009 010 Utilization Descrept) 988 989 990 991 992 993 994 995 996 997 998 999 000 001	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 84.0 81.6 83.4 82.5 80.5	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 75.2	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 81.0 80.1 80.3	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.1 80.2 80.0 73.2 73.1	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 80.9 79.7	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 81.2 80.6 78.7	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7 78.2	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2 81.7 79.7
010 Capacity percent of 007 output) 008 009 010 Itilization percent) 988 989 990 991 992 993 994 995 996 997 998 999 000 001 002 003	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 76.6 71.8	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0 71.7	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.8 75.5 72.2	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 72.2	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4 72.7	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 81.0 80.1 80.3 73.5	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.1 80.2 80.0 73.2 73.1	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6 73.4	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 79.7 79.3 72.3 73.4	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 81.2 80.6 78.7 71.7 73.1	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7 78.2 71.4 73.4	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4 71.5 73.0	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0 71.9	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.9 81.8 80.4 80.6 74.4 72.8	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7 73.3	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 71.6 73.2	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2 81.7 80.5 79.7 72.8
Capacity percent of 1007 output) 1008 1009 1010 Utilization percent) 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 76.6 71.8 73.5 74.8	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0 71.7 73.6 75.3	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.8 75.5 72.2	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 72.2 73.2 75.6	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4 72.7 73.2 76.2	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 80.1 80.3 73.7 73.5 75.5	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.0 73.2 73.1	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6 73.4	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 80.9 79.7 79.3 72.3 73.4	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 71.7 73.1 74.1 77.3	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7 78.2 71.4 73.4	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4 71.5 73.0	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0 71.9	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4 80.6 74.4 72.8	127.5 126.2 125.5 84.1 82.6 82.0 79.0 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7 73.3	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 71.6 73.2 74.6 77.4	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 81.7 80.5 79.7 73.7 72.8
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 988 989 990 991 992 993 994 995 996 997 998 999 2000 2001 2002 2003 2004 2005	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 76.6 71.8 73.5 74.8 78.1	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0 71.7 73.6 75.3 78.7	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.5 75.5 72.2 73.8 75.2 78.4	89.3 127.4 126.8 125.5 84.0 84.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 72.2 73.2 75.6 78.4	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4 72.7 73.2 76.2 78.6	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 81.0 80.1 80.3 73.7 73.5 75.5 78.5	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.0 73.2 73.1 73.7 76.2 78.4	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6 73.4 73.5 76.7 78.4	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 79.7 79.3 72.3 73.4 74.1 76.5 77.5	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 71.7 73.1 74.1 77.3 78.6	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7 78.2 71.4 73.4 74.9 77.2 79.0	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 77.4 71.5 73.0 74.8 77.6 78.9	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0 71.9 73.6 75.1 78.4	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4 74.4 72.8 75.8 75.8	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7 73.3 73.7 76.5 78.1	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 71.6 73.2 74.6 77.4 78.8	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 81.7 80.5 79.7 73.7 72.8
Capacity percent of 1007 output) 1008 1009 1010 Utilization percent) 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 76.6 71.8 73.5 74.8	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0 71.7 73.6 75.3	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.8 75.5 72.2	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 72.2 73.2 75.6	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4 72.7 73.2 76.2	127.4 126.5 125.5 84.0 83.4 82.3 78.6 79.9 79.9 82.7 83.2 82.6 82.9 80.1 80.3 73.7 73.5 75.5	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.0 73.2 73.1	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6 73.4	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 80.9 79.7 79.3 72.3 73.4	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 71.7 73.1 74.1 77.3	84.8 82.1 80.0 79.0 80.0 81.0 82.4 82.3 83.9 80.9 80.7 78.2 71.4 73.4	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4 71.5 73.0	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0 71.9	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4 80.6 74.4 72.8	127.5 126.2 125.5 84.1 82.6 82.0 79.0 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7 73.3	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 71.6 73.2 74.6 77.4	84.0 83.3 81.7 79.6 80.3 82.8 83.3 82.2 83.2 81.7 79.7 73.7 72.8 73.8 76.5 79.1
2010 Capacity percent of 2007 output) 2008 2009 2010 Utilization percent) 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 80.7 80.7 80.7 90.6 71.8 73.5 74.8 78.1 79.4 79.2	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0 71.7 73.6 75.3 78.7 79.1 79.5	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.5 80.5 72.2 73.8 75.2 78.4 78.9 79.9	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 72.2 75.6 78.4 79.3 80.3	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4 72.7 73.2 76.2 78.9 80.0	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 82.7 83.2 82.6 82.9 81.0 80.1 80.1 80.3 73.5 73.5 75.5 79.0 79.9	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.1 80.2 73.2 73.1 76.2 78.4 79.0 80.0	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6 73.4 73.5 76.7 78.4 79.5	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 79.3 72.3 73.4 74.1 76.5 77.5 79.1	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 81.2 80.6 78.7 71.7 73.1 74.1 77.3 78.6 78.7	84.8 82.1 80.0 79.0 80.0 81.0 84.0 82.4 82.3 83.9 80.7 78.2 71.4 73.4 74.9 77.2 79.0 78.6 79.1	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4 71.5 73.0 74.8 77.6 78.9 79.7	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0 71.9 73.6 75.1 78.4 79.1	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4 80.6 74.4 72.8 73.3 75.8 78.5 79.1 80.1	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7 73.3 73.7 76.5 78.1 79.1	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 673.2 74.6 77.4 78.8 79.0	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2 81.7 80.5 79.7 72.8 73.8 76.2 79.1 79.6
2010 Capacity (percent of 2007 output) 2008 2009 2010 Utilization (percent) 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 76.6 71.8 73.5 74.8 78.1 79.4 79.2 78.7	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0 71.7 73.6 75.3 78.7 79.1 79.5 78.2	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.8 75.5 72.2 73.8 75.2 78.4 78.9 79.9 78.0	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 72.2 75.6 78.4 79.3 80.3	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4 72.7 73.2 76.2 78.6 78.9 80.0 76.5	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 82.7 83.2 82.6 82.9 80.1 80.3 73.5 73.5 75.5 78.5 79.9	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.0 73.2 73.1 76.2 78.4 79.0 80.0 75.6	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6 73.4 73.5 76.7 78.4 79.2 79.5	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 79.3 72.3 73.4 74.1 76.5 77.5 79.1 79.7	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 71.7 73.1 74.1 77.3 78.6 78.7 79.0	84.8 82.1 80.0 79.0 80.0 81.0 84.0 82.4 82.3 83.9 80.9 80.7 78.2 71.4 73.4 74.9 77.2 79.0 78.6 79.1	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4 71.5 73.0 74.8 77.6 78.9 79.7	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0 71.9 73.6 75.1 78.4 79.1 79.5 78.3	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.9 81.8 80.4 80.6 74.4 72.8 73.3 75.8 78.5 79.1 80.1	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7 73.3 73.7 76.5 78.1 79.1 79.7	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 71.6 73.2 74.6 77.4 78.8 79.0 79.1	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2 81.7 80.5 79.7 72.8 73.8 76.2 78.5 79.6
2009 2010 Capacity (percent of 2007 output) 2008 2009 2010 Utilization (percent) 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010	87.8 127.0 127.2 125.7 83.0 85.6 81.7 78.5 78.2 80.3 81.2 84.6 81.4 82.2 83.7 80.7 80.7 80.7 80.7 90.6 71.8 73.5 74.8 78.1 79.4 79.2	87.5 127.2 127.1 125.6 83.1 84.6 82.7 77.9 78.8 80.3 81.1 84.2 82.3 82.8 83.2 80.9 80.6 76.0 71.7 73.6 75.3 78.7 79.1 79.5	88.5 127.3 127.0 125.6 83.3 84.4 82.8 77.2 79.4 80.0 82.0 84.0 81.6 83.4 82.5 80.5 80.5 80.5 72.2 73.8 75.2 78.4 78.9 79.9	89.3 127.4 126.8 125.5 84.0 84.4 82.4 77.3 79.6 80.3 82.4 83.6 82.0 82.7 82.3 80.4 81.0 75.1 72.2 75.6 78.4 79.3 80.3	90.3 127.4 126.7 125.5 83.9 83.5 82.3 77.8 79.9 80.2 82.7 83.2 82.1 82.9 82.2 80.8 80.5 74.4 72.7 73.2 76.2 78.9 80.0	127.4 126.5 125.5 125.5 84.0 83.4 82.3 78.6 79.9 82.7 83.2 82.6 82.9 81.0 80.1 80.1 80.3 73.5 73.5 75.5 79.0 79.9	127.5 126.4 125.5 84.0 82.3 82.0 78.7 80.4 80.0 82.8 82.4 82.4 82.8 80.1 80.2 73.2 73.1 76.2 78.4 79.0 80.0	127.5 126.2 125.5 84.0 82.9 82.1 78.8 79.8 83.2 83.0 82.5 83.6 81.7 80.3 79.2 72.6 73.4 73.5 76.7 78.4 79.5	127.5 126.1 125.5 84.2 82.5 81.9 79.5 79.6 80.2 83.1 83.3 82.6 83.7 79.3 72.3 73.4 74.1 76.5 77.5 79.1	127.4 126.0 125.6 84.6 82.2 81.1 79.3 79.9 80.8 83.7 82.8 82.1 83.6 81.2 80.6 78.7 71.7 73.1 74.1 77.3 78.6 78.7	84.8 82.1 80.0 79.0 80.0 81.0 84.0 82.4 82.3 83.9 80.7 78.2 71.4 73.4 74.9 77.2 79.0 78.6 79.1	85.0 82.0 79.2 78.8 79.7 81.2 84.6 82.4 82.6 83.6 80.9 80.9 77.4 71.5 73.0 74.8 77.6 78.9 79.7	127.2 127.1 125.6 83.2 84.9 82.4 77.9 78.8 80.2 81.4 84.3 81.8 82.8 83.1 80.7 76.0 71.9 73.6 75.1 78.4 79.1	127.4 126.7 125.5 83.9 83.8 82.4 77.9 79.8 80.1 82.6 83.3 82.3 82.9 81.8 80.4 80.6 74.4 72.8 73.3 75.8 78.5 79.1 80.1	127.5 126.2 125.5 84.1 82.6 82.0 79.0 79.9 80.0 83.0 82.9 82.5 83.3 80.9 80.1 79.5 72.7 73.3 73.7 76.5 78.1 79.1	84.8 82.1 80.1 79.0 79.9 81.0 84.1 82.5 82.3 83.7 81.0 80.7 78.1 673.2 74.6 77.4 78.8 79.0	84.0 83.3 81.7 78.5 79.6 80.3 82.8 83.3 82.2 83.2 81.7 80.5 79.7

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 Industries¹
Seasonally adjusted

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent				r													
change) ²																	
1988	.0	.4	.2	.4	1	.2	.1	.5	4	.5	.2	.4	3.0	2.7	1.4	2.7	4.4
1989	.3	4	.3	.0	7	.0	-1.1	.9	3	2	.2	.6	1.9	-1.8	-3.4	1.0	.6
1990	7	.9	.4	2	.1	.3	2	.2	.2	8	-1.3	8	2.3	2.2	1.1	-6.7	.3
1991 1992	4 8	8 .7	6 .8	.2	1.0	1.0	.0	.1 6	.9	2 .6	2	5 .0	-8.0 -1.9	2.1 6.1	5.4 1.7	.5 2.9	-2.0 1.9
1993 1994	.5	.3	1 .9	.3	4 .4	.2	.3	1 .4	.3	.7	.3	.5	3.1	5.3	1.4 3.2	5.2 5.6	2.5
1995	.2	2	1	3	.0	.1	5	1.2	.1	5	.1	.2	3.0	-1.4	1.5	.5	2.4
1996	9	1.3	4	.7	.5	.7	5	.4	.4	3	.8	.5	2	5.9	2.1	3.2	1.7
1997	1	.9	.5	3	.3	.2	.3	1.0	.7	.6	.7	.1	5.1	2.3	6.0	7.8	4.2
1998	.2	.0	.0	.2	.6	9	8	2.0	6	.5	3	.0	1.9	.9	2	2.3	3.1
1999	.2	.1	1	1	.6	5	.3	.4	5	1.2	.2	.5	.7	.4	1.0	5.4	1.1
2000 2001	3 7	.0 5	.1 3	.4 1	1 6	1 5	5 3	4 3	.4 3	5 5	2 4	5 1	.5 -6.1	1.5 -4.2	-3.0 -4.4	-2.6 -4.7	1.0 -3.9
2002	.7	.0	.8	.4	.5	.8	4	.1	.0	3	.4	7	3.0	6.2	1.5	-1.0	.3
2003	.7	.2	3	9	1	1	.3	1	.6	1	.7	1	1.5	-4.5	1.1	2.8	.2
2004	.1	.5	6	.5	.7	-1.0	.7	.1	1	1.0	.2	.7	1.8	1.9	1.3	5.3	1.7
2005	.4	.6	1	.0	.2	.3	2	.0	-2.2	1.0	1.1	.6	5.1	1.2	-2.8	1.6	2.5
2006	.0	.0	.2	.4	2	.4	.2	.2	2	1	2	1.0	3.3	2.0	1.8	.2	1.4
2007	4	1.1	.0	.6	.1	1	.2	1	.3	9	.2	.0	3.7	3.7	.8	-2.3	1.9
2008	4	3	4	9	5	3	.0	-1.2	-4.1	1.2	8	-1.9	-2.7	-6.8	-9.6	-11.7	-4.0
2009	-2.0	7	-1.6	9	-1.0	3	1.3	1.2	.7	.2	.5	.5	-16.8	-11.2	7.4	6.5	-9.2
2010	1.0	1	.6	.4	1.2	.0	.8	.2	2	.0			6.8	6.6	5.2		
IP (2007=100)																	
2008	99.6	99.2	98.8	97.9	97.4	97.1	97.1	96.0	92.1	93.2	92.5	90.7	99.2	97.5	95.0	92.1	96.0
2009 2010	88.9 89.7	88.2 89.6	86.9 90.1	86.0 90.5	85.2 91.6	85.0 91.6	86.1 92.3	87.1 92.5	87.7 92.4	87.9 92.4	88.3	88.8	88.0 89.8	85.4 91.2	86.9 92.4	88.3	87.2
Capacity (percent of 2007 output) 2008	123.0	123.0	123.0	123.1	123.2	123.2	123.4	123.5	123.7	123.9	124.1	124.2	123.0	123.2	123.5	124.1	123.4
2009	124.4	124.5	124.6	124.7	124.7	124.7	124.7	124.6	124.5	124.4	124.3	124.2	124.5	124.7	124.6	124.3	124.5
2010	124.0	123.9	123.8	123.7	123.6	123.5	123.5	123.4	123.4	123.4			123.9	123.6	123.4		
Utilization (percent)																	
1988	83.6	84.0	84.1	84.5	84.4	84.5	84.6	85.0	84.6	85.0	85.1	85.4	83.9	84.4	84.7	85.2	84.6
1989	85.6	85.1	85.3	85.1	84.4	84.3	83.2	83.8	83.4	83.1	83.2	83.5	85.3	84.6	83.5	83.3	84.2
1990	82.8	83.5	83.7	83.4	83.3	83.4	83.2	83.3	83.3	82.5	81.4	80.6	83.3	83.4	83.3	81.5	82.9
1991 1992	80.2 79.1	79.5 79.6	78.9 80.2	79.0 80.6	79.7 80.7	80.4 80.5	80.3 81.0	80.2 80.5	80.9 80.5	80.6 81.0	80.4 81.1	79.9 81.1	79.5 79.6	79.7 80.6	80.4 80.7	80.3 81.1	80.0 80.5
1993	81.4	81.5	81.4	81.5	81.1	81.2	81.4	81.2	81.4	81.9	82.1	82.4	81.4	81.3	81.3	82.1	81.6
1994 1995	82.6 85.0	82.5 84.7	83.1 84.4	83.2 84.0	83.4 83.9	83.8 83.8	83.7 83.2	83.9 84.0	83.8 84.0	84.2 83.4	84.4 83.3	85.0 83.3	82.7 84.7	83.5 83.9	83.8 83.7	84.5 83.4	83.6 83.9
1996	82.4	83.4	82.9	83.4	83.6	84.0	83.5	83.6	83.8	83.4	83.8	84.0	82.9	83.7	83.6	83.7	83.5
1997	83.7	84.2	84.4	83.9	83.9	83.8	83.7	84.3	84.6	84.8	85.0	84.8	84.1	83.9	84.2	84.9	84.3
1998	84.6	84.3	84.0	83.8	84.0	82.9	82.0	83.4	82.6	82.8	82.3	82.0	84.3	83.6	82.7	82.4	83.2
1999	82.0	81.9	81.6	81.3	81.6	81.0	81.1	81.3	80.7	81.5	81.6	81.9	81.8	81.3	81.0	81.7	81.5
2000	81.5	81.4	81.4	81.6	81.4	81.3	80.7	80.3	80.6	80.1	79.8	79.3	81.4	81.4	80.5	79.7	80.8
2001 2002	78.7 75.0	78.2 74.9	77.8 75.5	77.7 75.7	77.1 76.1	76.6 76.7	76.3	76.0	75.6 76.5	75.1 76.3	74.7 76.6	74.6 76.2	78.2 75.1	77.1 76.2	76.0 76.4	74.8 76.4	76.5 76.0
2002	73.0	74.7	13.3	13.1	76.1	76.7	76.4	76.4	76.5	76.3	76.6	10.2	75.1	10.2	70.4	76.4	76.0
2003	76.7	76.9	76.8	76.1	76.1	76.1	76.3	76.3	76.7	76.7	77.3	77.2	76.8	76.1	76.5	77.1	76.6
2004 2005	77.3 80.3	77.8 80.8	77.4 80.7	77.8 80.7	78.4 80.8	77.7 81.0	78.3 80.8	78.4 80.8	78.4 79.0	79.2 79.7	79.4 80.5	80.0 80.9	77.5 80.6	78.0 80.8	78.3 80.2	79.5 80.3	78.3 80.5
2006	80.8	80.7	80.8	80.7	80.7	80.8	80.9	80.9	80.7	80.5	80.2	80.9	80.7	80.8	80.8	80.5	80.7
2007	80.5	81.3	81.2	81.6	81.6	81.5	81.6	81.5	81.8	81.0	81.3	81.3	81.0	81.6	81.7	81.2	81.4
2008	80.9	80.7	80.3	79.6	79.1	78.8	78.7	77.7	74.4	75.2	74.5	73.0	80.6	79.1	76.9	74.3	77.7
2009	71.4	70.9	69.7	69.0	68.3	68.1	69.0	69.9	70.4	70.6	71.1	71.5	70.7	68.5	69.8	71.1	70.0
2010	72.3	72.3	72.8	73.2	74.1	74.2	74.8	75.0	74.8	74.9			72.5	73.8	74.9		
	72.0		, 2.0	70.2	,	,	,	, , ,	, 1.0	,			1				

^{1.} 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

Property Property	Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
1986	IP (percent																	
1986	change)3																	
1990		- 2	2	2	8	- 2	1	0	1	3	5	3	4	19	3.5	4	43	44
1991																		
1995														1				
1993																		
1994	1992	9	.9	.9	.4	.5	.1	.8	5	1	.5	.3	2	-1.2	6.9	2.6	1.4	2.6
1995																		
1996				1.2						.1	.7	.5	.9				6.9	4.4
1998											4							
1998	1996	-1.1	1.3	5	1.0	.5	.8	1	.3	.5	4	.7	.7	-1.6	6.7	4.1	3.0	1.5
1999	1997	2	1.0	.9	7	.5	.4	.1	1.3	.6	.5	.8	.1	6.2	2.8	6.6	8.2	4.9
100 1-3	1998	.5	1	3	.3	.4	-1.1	9	2.5	7	.7	1	.2	3.2	1	5	4.2	3.5
2000	1999		.4	4	.0	.8	7	.0	.6	5	1.4	.4		.7	.3	.2	6.7	1.4
2001	2000	3	2	.3	.4		.0	4	8	.4	5	6	9	.2		-3.7	-4.7	
2003																		
2004																		1
2004	2003	5	- 1	1	-1.1	0	3	- 1	- 3	8	<u>.</u> 1	Q	- 3	7	-37	5	3.1	0
2005																		
2006																		
2008																		
Capacity Capacity																		
Decompose Capacity Corporation Corpo																		
Processes Proc																		
Properties Pro	2009	-2.7	1	-1.9	8	9	2	1.6	1.3	.6	.0	1.0	.1	-20.1	-10.6	9.3	6.4	-11.0
2008	2010	.9	4	1.1	.8	1.2	3	.7	.0	.1	.6			5.8	8.7	3.7		
No. Second Process Second Process	IP (2007=100)																	
No. Second Process Second Process		99.2	98.6	98.2	96.8	96.2	95.7	95.2	94.4	91.3	91.2	89.7	87.5	98.7	96.2	93.6	89.5	94.5
Capacity (percent of good 2008 126.3 126.4 126.5 126.6 126.7 126.7 126.8 126.8 126.7 126.7 126.8 1																		
Control Cont												03.7	05.0	1			05.1	01.1
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1995 84.5 84.1 83.8 83.3 83.0 82.1 82.7 83.0 82.5 82.2 82.1 84.1 83.1 82.6 82.3 83.0 1996 81.0 81.9 81.3 81.9 82.1 82.6 82.4 82.5 82.1 82.5 82.9 81.4 82.2 82.5 82.2 1997 82.5 83.1 83.5 82.7 82.8 82.8 82.5 83.3 83.5 83.9 83.6 83.0 82.7 83.1 83.7 83.1 83.7 83.3 82.7 82.6 82.6 81.4 80.4 82.0 81.1 81.1 81.0 83.2 82.2 81.2 81.1 81.9 1999 80.7 80.8 80.2 79.9 80.3 79.6 79.4 79.7 79.1 80.1 80.2 80.3 80.5 79.9 79.4 80.2 80.0 2000 79.9 79.7 79.8 79.9																		
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2000 79.9 79.7 79.8 79.9 79.4 79.3 78.9 78.1 78.4 77.8 77.3 76.5 79.8 79.5 78.4 77.2 78.7 2001 75.9 75.5 75.2 75.1 74.5 74.0 73.9 73.4 73.2 72.6 72.5 72.6 75.5 74.5 73.5 72.6 74.0 2002 73.1 73.0 73.6 73.6 74.1 74.9 74.5 74.7 74.8 74.4 74.7 74.3 73.2 74.2 74.7 74.5 74.1 2003 74.7 74.7 74.8 74.1 74.3 74.3 74.1 74.6 75.4 75.2 74.7 74.1 74.3 75.0 74.6 2004 75.1 75.7 75.5 76.0 76.6 75.9 76.6 77.1 76.8 77.7 77.6 78.1 75.4 76.1 76.8 77.8 79.0 78.9																		
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57.1 07.7 10.3 10.5 11.0 12.1 12.1 12.2 12.0 07.0 11.4 12.2												00.0	07.0				00.0	37.0
	2010	07.1	07.7	, 0.5	, 0.7	, 1.0	, 1.0	, 2.1	, 2.1	, 4.4	, 2.0			07.0	, 1.7	, 2.2		

^{1.} 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.

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

value added divided by the average annual IP index.

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 on the Board's website at www.federalreserve.gov/releases/G17. In addition, the website includes files containing data shown in the release, more detailed series that are published in a monthly supplement to the G.17, and historical data. Instructions on searching for and downloading specific series are provided as well.

The IP proportions (typically shown in the first column of the relevant

INDUSTRIAL PRODUCTION

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 4 percent. If output in this industry increased 10 percent in a month, then this gain would boost growth in total IP by 4/10percentage point (0.04 x 10% = 0.4%). 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/IPWeightsSa.txt).

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 2007. Manufacturing consists of those industries included in the North American Industry Classification System (NAICS) definition of manufacturing plus those industries— newspaper, periodical, book, and directory publishing plus logging—that have traditionally been considered to be manufacturing. For the period since 1997, the total IP index has been constructed from 312 individual series based on the 2002 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.htm).

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 five 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 84 percent for estimates in the second month that the estimate is published, 93 percent in the third month, 97 percent in the fourth month, 98 percent in the fifth month, and 99 percent in the sixth month. Data availability by data type in late 2009 is summarized in the table below:

Source data. On a monthly basis, the individual indexes of industrial

Availability of Monthly IP Data in Publication Window (Percent of value added in 2009)

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 and unit values or sales) 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 direct measures of 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.

	Mon	Month of estimate									
Type of data	1st	2nd	3rd	4th	5th	6th					
Physical product	25	39	48	52	53	53					
Production-worker hours	45	45	45	45	45	45					
IP data received	70	84	93	97	98	98					
IP data estimated	30	16	7	3	2	2					

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 the Federal Reserve Bulletins of 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 shown below. An output index for month m is denoted by I_m^A for aggregate A and I_m for each of its components. The monthly price measure in the formula (p_m) is interpolated from an annual series of

The physical product group includes series based on either monthly or quarterly data. As can be seen in the first row 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 a total of 53 percent). Of the 25 percent, about two-thirds (19 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 fourth estimate of industrial production. Specifically, quarterly data are available for the third estimate of the last month of a quarter, the fourth estimate of the second month of a quarter, and the fifth estimate of the first month of

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 January 2010; for other series, the factors were estimated with data through at least January 2010. Series are pre-adjusted for the effects of holidays or business cycles 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 0.26 percent during the 1987–2009 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 1987–2009 period. In most cases (about 85 percent), the direction of the 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 89 detailed industries (71 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 (NAICS) definition of manufacturing plus those industries—newspaper, periodical, book, and directory publishing plus logging—that have traditionally been considered to be manufacturing. Also, special aggregates are available, such as high-technology industries and manufacturing excluding high-technology 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 25 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 Quarterly Survey of Plant Capacity (QSPC); these industries account for a bit less than 70 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 5 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/CapNotes.htm).

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 the annual capacity aggregate 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 Census Bureau's annual Survey of Plant Capacity (the predecessor to the QSPC) 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 QSPC.

Perspective. Over the 1972–2009 period, the average total industry utilization rate is 80.6 percent; for manufacturing, the average factory operating rate has been 79.2 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 release for the annual revision that was published on June 25, 2010 is available on the Board's website (www.federal $reserve.gov/releases/g17/revisions/Current/DefaultRev.htm). \ The$ annual revision published in March 2009 is provided in the Federal Reserve Bulletin, vol. 95 (August 2009), pp. A125–A145. The annual revision published in March 2008 is described in an article published in the Federal Reserve Bulletin, vol. 94 (August 2008), pp. A41–A60. A summary of the annual revision that incorporated back to 1972 production and capacity indexes reclassified according to the North American Industry Classification System is available in an article in the Federal Reserve Bulletin, vol. 89 (April 2003), pp. 151-176. 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/CapitalStockDocLatest.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, March 2006, May 2007, August 2008).

Release Schedule

At 9:15 a.m. on

2010: January 15, February 17, March 15, April 15, May 14, June 16, July 15, August 17, September 15, October 18, November 16, and December 15.

2011: January 14, February 16, March 17, April 15, May 17, June 15, July 15, August 16, September 15, October 17, November 16, and December 15.