# **FEDERAL RESERVE statistical release**

2012



Apr. '11 to

G.17 (419)

For release at 9:15 a.m. (EDT) May 16, 2012

Percent change

### INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

2011

Industrial production increased 1.1 percent in April. Output is now reported to have fallen 0.6 percent in March and to have moved up 0.4 percent in February; previously, industrial production was estimated to have been unchanged in both months. Manufacturing output increased 0.6 percent in April after having decreased

(over)

2011

**Industrial Production and Capacity Utilization: Summary** 

Seasonally adjusted

	2011		2012				2011		2012				Apr. 11 to
Industrial production	Nov. <sup>r</sup>	Dec.r	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>r</sup>	Apr. <sup>p</sup>	Nov. <sup>r</sup>	Dec.r	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>r</sup>	Apr. <sup>p</sup>	Apr. '12
	0	0.7.0		0.4.0	0.4				_		_		
Total index	95.1	95.9	96.5	96.9	96.4	97.4	.2	.8	.6	.4	6	1.1	5.2
Previous estimates	95.1	95.9	96.6	96.6	96.6		.2	.9	.7	.0	.0		
Major market groups													
Final Products	94.2	94.6	95.3	96.0	95.8	96.6	2	.4	.7	.7	3	.9	5.4
Consumer goods	92.2	92.5	92.8	93.3	92.8	93.6	7	.4	.3	.5	5	.8	3.1
Business equipment	96.5	97.4	99.3	100.6	100.9	102.4	.7	.9	1.9	1.4	.2	1.5	12.0
Nonindustrial supplies	85.1	86.1	86.4	87.5	87.0	87.8	3	1.2	.4	1.2	6	1.0	4.6
Construction	77.9	79.8	79.9	81.6	80.3	80.3	.8	2.4	.2	2.1	-1.6	.0	6.5
Materials	99.4	100.4	101.1	101.0	100.2	101.5	.7	1.0	.6	1	8	1.3	5.1
Materials	, ,,,,	100.4	101.1	101.0	100.2	101.5	.,	1.0	.0		.0	1.5	3.1
Major industry groups													
Manufacturing (see note below)	91.5	92.8	93.8	94.5	94.1	94.6	.0	1.4	1.0	.8	5	.6	5.8
Previous estimates	91.5	92.8	93.8	94.6	94.4		1	1.5	1.1	.8	2		
Mining	111.8	112.3	112.6	110.4	108.5	110.2	1.4	.5	.2	-1.9	-1.7	1.6	4.9
Utilities	100.2	96.6	94.8	95.9	96.5	100.9	.2	-3.6	-1.8	1.1	.7	4.5	1.1
													Capacity
					Perce	nt of cap	acity						growth
	Average	1988-	1990-	1994-									
~	1972-	89	. 91		2009	2011	2011		2012				Apr. '11 to
Capacity utilization	2011	high	low	high	low	Apr.	Nov.	Dec.	Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>r</sup>	Apr. <sup>p</sup>	Apr. '12
Total industry	80.3	85.2	78.8	85.0	66.8	76.1	77.7	78.2	78.7	78.9	78.4	79.2	1.0
Previous estimates	80.5	05.2	70.0	65.0	00.8	70.1	77.7	78.3	78.7	78.7	78.6	19.2	1.0
1 revious estimates							//./	76.5	70.7	70.7	78.0		
Manufacturing (see note below)	78.8	85.6	77.3	84.6	63.8	74.3	75.7	76.7	77.5	78.0	77.6	77.9	.8
Previous estimates	70.0	05.0	11.5	04.0	05.0	77.5	75.7	76.7	77.5	78.0	77.8	11.7	.0
Mining	07.0	06.2	83.9	88.6	78.5	86.3	90.4	90.8	90.9	89.1	87.5	88.8	1.9
willing	873	1 X6 3											1./
Hilitias	87.3 86.3	86.3									73.3		2.4
Utilities	87.3	92.9	83.9	93.3	79.1	77.4	76.6	73.7	72.3	72.9	73.3	76.4	2.4
Utilities Stage-of-process groups											73.3		2.4
											73.3 86.2		2.4
Stage-of-process groups Crude	86.3 86.3	92.9 87.7	84.3	93.3	79.1 76.4	77.4	76.6	73.7	72.3	72.9	86.2	76.4 87.2	
Stage-of-process groups	86.3	92.9	84.3 84.4	93.3 89.7	79.1	77.4 84.9	76.6 87.7	73.7 88.4	72.3 88.8	72.9 87.2		76.4	1.4

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.

0.5 percent in March. Excluding motor vehicles and parts, which increased nearly 4 percent, manufacturing output moved up 0.3 percent, and output for all but a few major industries increased. Production at mines rose 1.6 percent, and the output of utilities gained 4.5 percent after unseasonably warm weather in the first quarter held down demand for heating. At 97.4 percent of its 2007 average, total industrial production for April was 5.2 percent above its year-earlier level. The rate of capacity utilization for total industry moved up to 79.2 percent, a rate 3.1 percentage points above its level from a year earlier but 1.1 percentage points below its long-run (1972–2011) average.

### Market Groups

The production of consumer goods increased 0.8 percent in April. The index for durable consumer goods rose 1.9 percent, led by a gain of 2.4 percent in automotive products. All other major categories of consumer durables posted gains of more than 1 percent. The production of nondurable consumer goods moved up 0.5 percent as a result of an increase of 2.5 percent in the index for consumer energy products. The output of non-energy nondurable consumer goods edged down 0.1 percent as a small gain in chemical products was more than offset by a decrease in foods and tobacco.

The production of business equipment moved up 1.5 percent in April after having risen 0.2 percent in March. The more rapid gain in April reflected improvement for all of the major business equipment categories, particularly transit equipment, which posted an increase of more than 3 percent for the third month this year.

The index for defense and space equipment rose 0.3 percent in April and was up 5.0 percent over the past 12 months.

The production of construction supplies was unchanged in April after falling 1.6 percent in March; it remained more than 20 percent below its level preceding the recession. The index for business supplies advanced 1.4 percent for its largest increase in more than 2 years.

The output of materials to be further processed in the industrial sector rose 1.3 percent in April. The index for durable materials increased 1.0 percent after having decreased 0.5 percent in March; growth in this category averaged 1.4 percent per month for November through February. Much of the increase in durable materials in April came from consumer parts, which advanced 2.7 percent and was boosted by an increase in the output of motor vehicle parts for use in newly assembled vehicles. The production of equipment parts moved up 1.3 percent, and the index for other durable materials rose 0.3 percent. The production of nondurable materials increased 0.3 percent, as all of its subcategories posted gains. The output index for energy materials jumped 2.2 percent after four straight months of declines.

# **Industry Groups**

Manufacturing output increased 0.6 percent in April after having decreased 0.5 percent in March. Capacity utilization for manufacturing in April moved up 0.3 percentage point to 77.9 percent, a rate 14.1 percentage points above its trough in June 2009 but still 0.9 percentage point below its long-run average.

Within manufacturing, the output of durable goods increased 1.3 percent in April after having moved down 0.3 percent in March. With the exception of wood products, all major categories of durable goods rose. The largest gains were recorded by motor vehicles and parts, computers and electronic products, aerospace and miscellaneous transportation equipment, furniture and related products, and miscellaneous manufacturing.

The production of nondurable goods decreased 0.2 percent in April after having fallen 0.8 percent in

March. Among the major components of nondurables, the most notable decrease in April was for petroleum and coal products, which dropped 2.6 percent. The largest gains were posted by the indexes for textile and product mills, for apparel and leather, for paper, and for printing and support.

The index for other manufacturing (non-NAICS), which consists of publishing and logging, edged down 0.1 percent.

Mining production increased 1.6 percent in April after having dropped 1.7 percent in March. Capacity utilization in mining moved up to 88.8 percent in April and was 1.5 percentage points above its long-run average. The output of utilities jumped 4.5 percent after having fallen at an annual rate of about 12 percent in each of the previous two quarters. After having been low from December through March, the operating rate for utilities climbed in April to 76.4 percent, a rate about the same as in November.

Capacity utilization rates in April at industries grouped by stage of process were as follows: At the crude stage, utilization increased 1 percentage point to 87.2 percent, a rate 0.9 percentage point above its long-run average; at the primary and semifinished stages, utilization increased 0.9 percentage point to 76.5 percent, a rate 4.6 percentage points below its long-run average; and at the finished stage, utilization increased 0.6 percentage point, to 78.8 percent, a rate 1.6 percentage points above its long-run average.

### **Tables**

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

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

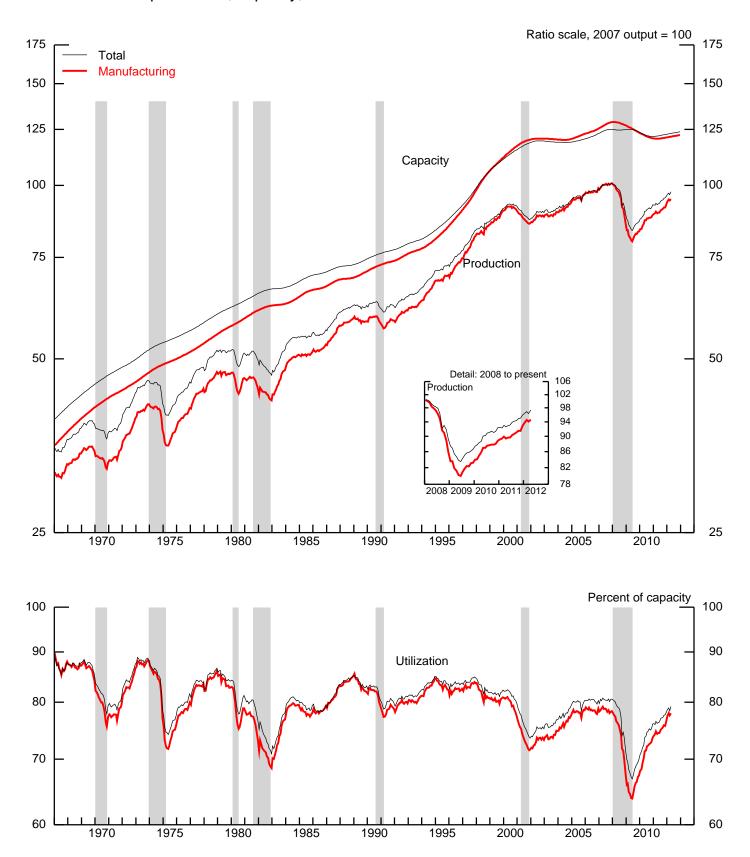
### **Revision of Industrial Production and Capacity Utilization**

The Federal Reserve Board issued its annual revision to the index of industrial production (IP) and the related measures of capacity utilization at noon EDT on March 30, 2012. The revised IP indexes incorporated detailed data from the 2010 Annual Survey of Manufactures, conducted by the U.S. Census Bureau. Annual data from the U.S. Geological Survey regarding metallic and nonmetallic minerals (except fuels) for 2010 were also incorporated. The update included revisions to the monthly indicator and to seasonal factors for each industry. In addition, the estimation methods for some series have changed. Modifications to the methods for estimating the output of an industry did affect the index from 1972 to the present.

Capacity and capacity utilization were revised to incorporate data through the fourth quarter of 2011 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.

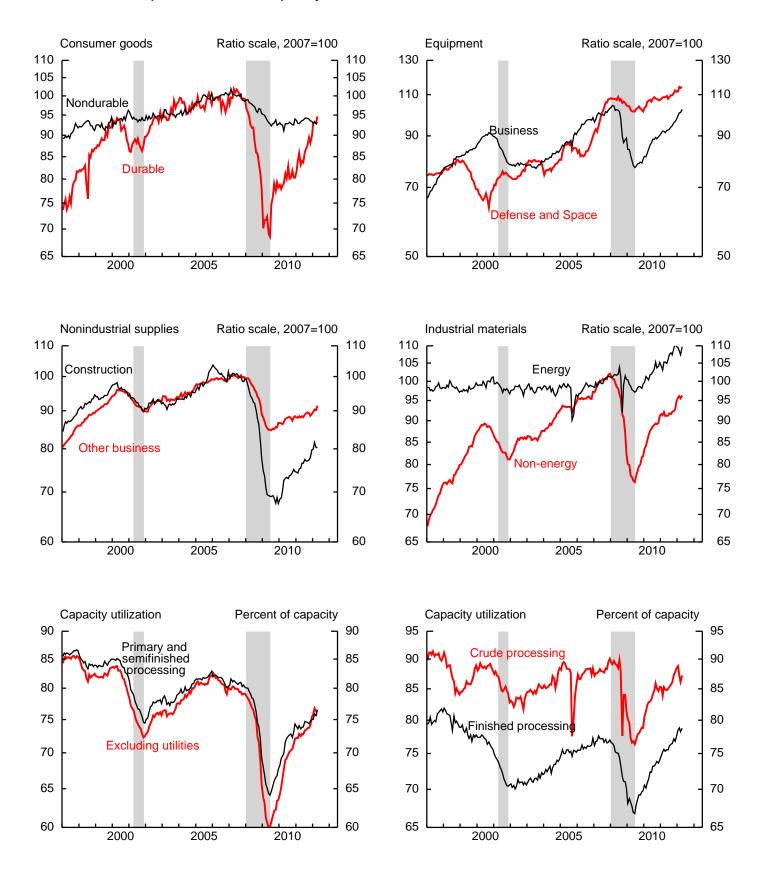
The revision is available on the Board's website at www.federalreserve.gov/releases/G17. Further information on the revision can be obtained from the Board's Industrial Output Section (telephone number 202-452-3197).

# 1. Industrial production, capacity, and utilization

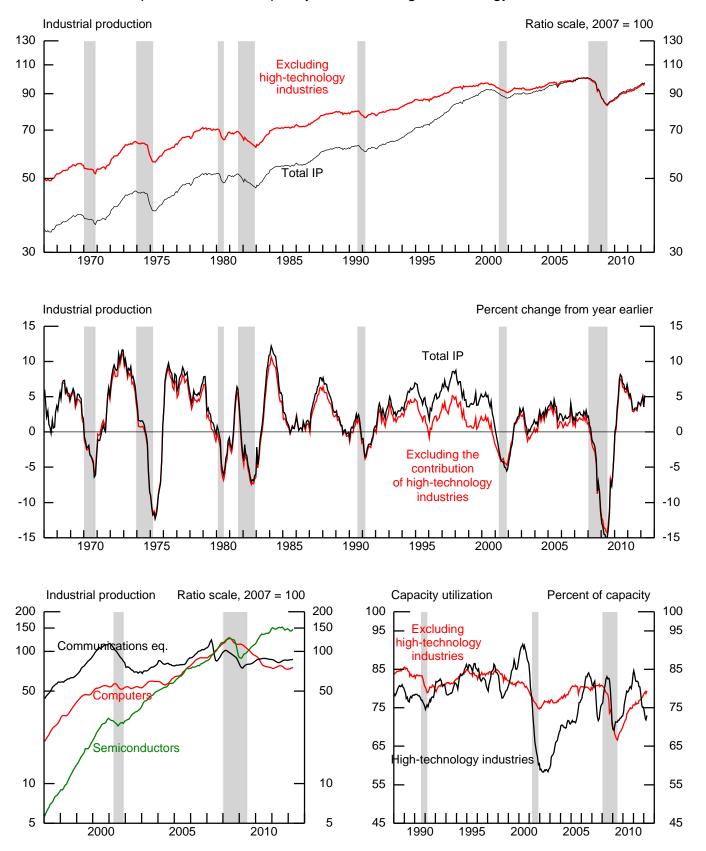


Note: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER).

# 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

				th quarte rth quart			nnual rat				Month	ly rate			Apr. '11
Item		2011 proportion <sup>1</sup>	2009	2010	2011	2011 Q3	Q4 <sup>r</sup>	2012 Q1 <sup>r</sup>	2011 Nov. <sup>r</sup>	Dec.r	2012 Jan. <sup>r</sup>	Feb.r	Mar. <sup>r</sup>	Apr.p	to Apr. '12
Total IP		100.00	-5.7	6.3	4.0	5.6	5.0	5.4	.2	.8	.6	.4	6	1.1	5.2
MARKET GROUPS		52.04		4.2	2.0		2.2	<b>.</b>						0	
Final products and nonindustrial supplie	S	53.84 27.68	-6.6 -3.3	4.2	3.8 2.8	6.1 5.9	3.2	5.8	3 7	.6	.6	.9	4	.9	5.2
Consumer goods Durable		6.30	-3.3	3.1	10.3	16.3	.5 11.1	1.9 18.5	-1.5	.4 1.9	 3.3	.5 .5	5 4	.8 1.9	13.9
Automotive products		3.50	7.6	1.6	16.6	27.8	20.5	26.8	-2.4	3.2	4.7	.2	4	2.4	21.9
Home electronics		.16	-16.8	-21.4	2.1	13.5	-6.8	1.7	-1.3	.3	.2	.4	.7	1.3	5.3
Appliances, furniture, carpeting		.76	-15.9	2.3	2.5	9	4.3	11.3	.1	1.6	2.2	.3	-2.2	1.3	3.7
Miscellaneous goods		1.88	-10.9	9.2	3.4	4.7	8	7.7	4	2	1.4	1.3	4	1.1	4.4
Nondurable		21.38	-3.3	.1	.6	3.0	-2.5	-2.7	5	1	6	.4	5	.5	.0
Non-energy		15.99	-4.2	6	1.0	.2	.8	2.9	8	1.0	.4	.2	6	1	.2
Foods and tobacco		9.22	-1.2	1.3	1.2	1.7	1.0	5.4	6	.5	1.1	.5	6	3	1.1
Clothing		.20	-27.9	10.3	-6.7	-12.6	-4.2	17.6	.5	5	5.0	.1	-2.2	.0	-2.1
Chemical products		4.72	-7.4	-3.5	2.1	-1.6	-2.3	-1.7	-1.4	2.2	7	6	7	.1	-1.9
Paper products		1.35	-7.1	-4.3	-3.9	-2.0	10.8	-2.4	3	.5	-1.1	.6	3	.0	.1
Energy		5.39	5	2.1	4	11.2	-11.4	-18.2	.5	-3.3	-3.6	1.3	4	2.5	9
Business equipment		9.57	-9.9	12.7	7.9	7.9	11.9	16.1	.7	.9	1.9	1.4	.2	1.5	12.0
Transit		2.31	11.5	13.2	17.5	16.7	27.1	23.6	.4	8	3.4	3.1	.9	3.8	24.8
Information processing		2.22	-8.0	6.0	6.1	10.3	8.7	15.4	.7	1.3	2.1	.9	6	.8	9.3
Industrial and other		5.04	-17.0	15.8	4.6	3.1	6.8	12.9	.8	1.5	1.2	.7	.3	.7	7.6
Defense and space equipment		2.18	-3.2	5.0	4.1	2.7	8.7	5.9	1.3	6	.2	2.1	4	.3	5.0
Construction supplies Business supplies		4.12 9.56	-17.0 -6.1	9.8 2.4	4.9 1.2	5.6 4.6	6.0 9	12.1 4.6	.8 8	2.4	.2 .4	2.1	-1.6 2	.0 1.4	6.5 3.8
Materials		46.16	-4.6	9.0	4.3	5.1	7.1	5.0	.7	1.0	.6	1	8	1.3	5.1
Non-energy Durable		28.76 17.14	-6.5 -11.2	10.9 16.4	3.7 6.6	3.1 4.0	6.2 7.6	11.4 15.2	.5 1.2	2.0 1.8	1.1 1.5	.4 1.0	6 5	.8 1.0	5.6 8.3
		2.45	-11.2	27.2	6.7	11.6	19.2	35.3	1.1	5.2	3.1	.9	3	2.7	19.8
Consumer parts Equipment parts		6.28	-9.5	17.5	7.9	4.7	4.8	12.9	.9	1.5	1.1	.9	.0	1.3	8.7
Other		8.42	-12.5	12.5	5.6	1.3	6.5	11.4	1.5	1.0	1.3	1.0	-1.3	.3	4.7
Nondurable		11.61	.8	3.6	5	1.8	4.1	5.9	7	2.4	.6	3	7	.3	1.8
Textile		.45	-5.1	5.2	1.2	-3.3	4.6	17.6	1.0	1.7	2.9	1.1	-2.8	.7	3.9
Paper		2.01	-4.7	1	-2.9	-5.0	-1.9	5.4	.5	1.3	3	1.3	6	.8	6
Chemical		5.68	4.9	6.6	8	4.8	5.2	7.7	-1.2	3.9	.6	-1.1	4	.2	2.6
Energy		17.40	-1.7	5.7	5.3	8.5	8.5	-4.8	1.1	7	2	9	-1.0	2.2	4.2
INDUSTRY GROUPS															
Manufacturing		75.34	-6.5	6.5	4.2	5.1	5.6	9.8	.0	1.4	1.0	.8	5	.6	5.8
Manufacturing (NAICS)	31–33	72.60	-6.3	7.1	4.5	5.2	5.4	10.0	.0	1.5	1.1	.8	5	.6	5.8
Durable manufacturing		37.96	-9.3	11.7	7.2	7.3	9.1	15.4	.5	1.4	1.8	1.2	3	1.3	10.1
Wood products	321	.90	-12.8	5.0	2.6	-4.9	11.5	13.3	.3	1.3	3.0	9	5	-1.4	2.3
Nonmetallic mineral products	327	1.55	-18.1	10.5	.3	5.4	-6.5	7.4	7	.3	.5	2.9	-1.8	.4	2.6
Primary metals	331	2.94	-2.8	11.9	8.6	2.7	19.1	11.8	3.3	2.6	.2	1.1	-2.5	.1	6.0
Fabricated metal products  Machinery	332 333	5.41 5.41	-19.0 -18.6	14.4 20.2	7.7	6.4 2.7	5.1 8.4	13.4	1.1	1.0	1.0	1.8	2 .7	.8	8.7 9.8
Computer and electronic products	334	6.25	-18.6	12.2	5.6	7.3	.6	7.1	.6	1.6	1.5	3	3	1.6	5.5
Electrical equip., appliances,	334	0.23	-3.1	12.2	3.0	1.3	.0	/.1	0.0	1.0	.0	3	3	1.0	3.3
and components	335	1.76	-18.1	12.5	.2	-4.5	10.2	9.5	-1.4	3	1.5	2.4	5	.7	4.7
Motor vehicles and parts	3361–3	5.33	2.3	15.8	14.6	21.8	23.9	40.3	-1.4	3.3	6.2	.7	1.2	3.9	27.1
Aerospace and miscellaneous	0001 3		2.5	20.0	20	21.0	20.7	.0.5	2.0	0.0	0.2	.,	1.2	0.7	2,1
transportation equipment	3364-9	4.30	1	2.5	10.4	13.5	17.6	7.1	1.6	6	1	2.9	9	1.1	12.0
Furniture and related products	337	.98	-22.3	5.8	3.5	3.5	-2.3	16.1	.0	.6	2.8	1.8	-1.9	2.4	6.2
Miscellaneous	339	3.12	-4.0	4.2	2.4	3.5	2.3	9.9	2	.0	2.3	.2	.1	1.5	5.8
Nondurable manufacturing		34.64	-2.9	2.3	1.6	2.9	1.5	4.3	6	1.5	.3	.4	8	2	1.3
Food, beverage, and tobacco products	311,2	11.43	-2.9	1.0	1.7	1.8	2.1	4.5	6	.5	s 1.1	.4	-1.0	2	1.3
Textile and product mills	313,4	.74	-10.4	5.3	.8	-4.1	5.2	9.1	.8	1.5	.9	.9	-1.8	.5	1.9
Apparel and leather	315,6	.28	-20.0	9.5	-2.6	-9.0	5	10.9	.5	7	3.9	7	-1.4	.6	4
Paper	322	2.43	-1.2	.3	-1.8	-4.5	1.6	1.5	.5	1.1	8	.7	5	.7	6
Printing and support	323	1.43	-12.4	1.0	-5.9	-4.6	-8.1	7.2	-1.1	1.6	1.3	.3	-1.4	.6	-2.6
Petroleum and coal products	324	3.69	-2.6	2.6	7.3	18.4	5.1	.6	.3	1.1	-2.0	2.8	-1.5	-2.6	5.0
	325	11.53	-1.5	1.9	.4	1.9	.8	4.0	-1.2	2.9	.2	9	5	.3	.7
Chemicals	326	3.11	-8.4	10.6	6.4	5.8	1.0	6.4	8	.9	.5	1.3	6	4	3.1
Chemicals Plastics and rubber products			1		0.4	2.0	9.0	3.8	.0	1.0	-	0	7	1	4.0
	1133,5111	2.74	-11.5	-6.0	-3.1	3.0	9.0	3.0	.0	1.0	6	.9	.7	1	4.0
Plastics and rubber products  Other manufacturing (non-NAICS)  Mining	21	14.38	-5.1	8.3	7.8	6.7	15.3	-3.3	1.4	.5	.2	-1.9	-1.7	1.6	4.9
Plastics and rubber products  Other manufacturing (non-NAICS)															

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

<sup>1.</sup> 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			l	rth quarte urth quar		Δ	annual rat	te			Month	ly rate			Apr. '11
Item		2011 proportion	2009	2010	2011	2011 Q3	Q4 <sup>r</sup>	2012 Q1 <sup>r</sup>	2011 Nov. <sup>r</sup>	Dec. <sup>r</sup>	2012 Jan. <sup>r</sup>	Feb. <sup>r</sup>	Mar. <sup>r</sup>	Apr.p	to Apr. '12
Total industry		100.00	-5.7	6.3	4.0	5.6	5.0	5.4	.2	.8	.6	.4	6	1.1	5.2
Energy Consumer products		26.40 5.39	-2.5 5	5.1 2.1	3.8	9.3	2.3	-7.3 -18.2	.7	-1.2 -3.3	9 -3.6	2 1.3	9 4	2.3	3.2
Commercial products		2.93	-1.4	1.9	4 4	6.4	-11.4	-3.9	-1.9	-3.3 -1.4	-3.0 5	2.0	4	3.4	2.6
Oil and gas well drilling	213111	.68	-42.3	44.9	21.1	28.0	13.9	4.1	-1.9	-1.4	1.0	5	0	-1.5	11.9
Converted fuel	213111	3.98	4	3.0	-1.2	2.7	-10.1	2.8	.8	-1.6	5	3.1	1	2.6	2.9
Primary energy		13.42	-2.2	6.7	7.2	10.3	14.6	-6.9	1.2	4	1	-2.1	-1.3	2.0	4.5
Non-energy		73.60	-6.8	6.7	4.1	4.3	5.9	10.3	.0	1.5	1.2	.6	5	.7	5.9
Selected high-technology industries		3.38	3	12.9	1.7	2.9	-9.6	-3.9	.3	1.0	8	-1.5	.2	2.3	1
Computers and peripheral equipment	3341	.46	-16.6	-20.0	-2.6	.9	-16.8	3.1	-1.1	4	o .7	-1.3 .7	.9	.9	1
Communications equipment	3342	.63	-4.4	5.2	-1.4	10.0	6.5	2.7	.2	4	.4	.6	.2	.2	4.6
Semiconductors and related	3342	.03	-4.4	3.2	-1.4	10.0	0.5	2.1	.2	4	.4	.0	.2	.2	4.0
electronic components	334412-9	2.29	9.3	27.0	3.4	1.5	-12.0	-7.0	.6	1.7	-1.5	-2.5	.0	3.2	-1.1
Evoluting colored high teachers															l
Excluding selected high-technology industries		70.21	-7.2	6.4	4.2	4.4	6.8	11.0	.0	1.6	1.3	.7	5	.6	6.2
Motor vehicles and parts	3361-3	5.33	2.3	15.8	14.6	21.8	23.9	40.3	-1.6	3.3	6.2	.7	1.2	3.9	27.1
Motor vehicles	3361	2.86	8.9	11.7	21.3	35.8	26.9	47.6	-3.8	3.2	8.8	.5	.6	4.6	34.3
Motor vehicle parts	3363	2.15	-4.5	21.4	5.0	10.9	18.9	33.3	.5	3.2	3.8	.9	2.0	3.3	20.1
Excluding motor vehicles and parts		64.89	-7.8	5.6	3.4	3.1	5.5	8.8	.1	1.4	.8	.7	6	.3	4.5
Consumer goods		19.10	-5.9	.4	1.6	.8	1.6	4.2	7	.9	.6	.4	6	.1	1.2
Business equipment		7.84	-9.3	12.5	7.7	9.4	10.7	12.1	.9	1.1	1.0	1.2	1	1.0	10.3
Construction supplies		4.10	-17.1	9.8	4.9	5.5	6.0	12.2	.8	2.4	.2	2.1	-1.6	.0	6.5
Business supplies Materials		6.35 25.30	-8.7 -7.4	1.7 8.5	1.9 3.5	3.7 2.4	3.4 6.8	9.2 10.9	4 .4	1.6 1.9	.9 1.1	.5 .6	.1 8	.4	4.5 4.9
Measures excluding selected high-technology industries															
Total industry		96.62	-5.9	6.0	4.1	5.7	5.5	5.8	.2	.8	.7	.5	6	1.0	5.3
Manufacturing <sup>1</sup>		71.96	-6.9	6.2	4.3	5.2	6.3	10.4	1	1.5	1.1	.9	5	.5	6.0
Durable		34.70	-10.4	11.6	7.7	7.7	11.1	17.2	.5	1.5	2.0	1.4	3	1.2	11.0
Measures excluding motor vehicles and parts															
Total industry		94.67	-6.1	5.8	3.5	4.8	4.0	3.6	.3	.7	.3	.4	7	.9	4.0
Manufacturing <sup>1</sup> Durable		70.01 32.75	-7.1 -10.8	5.9 11.0	3.5 6.0	4.0 5.2	4.3 6.8	7.6 11.5	.1 .8	1.3 1.1	.6 1.1	.8 1.3	6 5	.3 .8	4.2 7.4
Measures excluding selected high-technology industries															
and motor vehicles and parts															
Total industry		91.29	-6.3	5.5	3.5	4.9	4.5	3.9	.3	.6	.3	.5	7	.9	4.1
Manufacturing <sup>1</sup>		66.63	-7.5	5.5	3.5	4.0	5.0	8.2	.1	1.3	.7	.9	7	.2	4.4
Stage-of-process components of non-energy materials, measures of the input to Finished processors Primary and semifinished processors		11.19	-8.8 -4.9	15.1 8.1	5.4	4.0	6.6 5.9	16.5	.9	2.3 1.9	1.4 1.0	1.0	.0	1.5	9.2 3.4
rimary and seministical processors		17.57	-4.9	8.1	2.6	2.5	3.9	8.3	.2	1.9	1.0	.1	-1.0	.2	3.4

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

willions of units, seasonarry adjusted airitial rate												
	2011	2011			2012	2011		2012				
Item	average	Q2	Q3	Q4	Q1	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	
Total	8.66	8.01	8.69	9.22	10.12	8.97	9.41	10.15	10.13	10.07	10.67	
Autos	2.98	2.77	2.93	3.40	3.86	3.32	3.57	3.85	3.84	3.90	4.25	
Trucks	5.68	5.23	5.76	5.82	6.26	5.65	5.84	6.30	6.29	6.17	6.42	
Light	5.44	4.99	5.51	5.55	5.98	5.38	5.58	6.04	6.01	5.88	6.11	
Medium and heavy	.24	.24	.25	.27	.28	.27	.26	.26	.28	.29	.31	
Memo												
Autos and light trucks	8.41	7.76	8.44	8.95	9.84	8.70	9.14	9.89	9.85	9.78	10.36	

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

r Revised. p Preliminary.

1. Refer to note on cover page.

 Table 4

 INDUSTRIAL PRODUCTION INDEXES: MARKET AND INDUSTRY GROUP SUMMARY

 2007 = 100, seasonally adjusted

007 = 100, seasonally adjusted											
Item		2011 proportion	2011 Aug.	Sept.	Oct.	Nov. <sup>r</sup>	Dec.r	2012 Jan. <sup>r</sup>	Feb.r	Mar. <sup>r</sup>	Apr. <sup>p</sup>
Total IP		100.00	94.2	94.4	94.9	95.1	95.9	96.5	96.9	96.4	97.4
Market Groups											
Final products and nonindustrial supplies		53.84	91.3	91.6	92.0	91.7	92.3	92.9	93.7	93.3	94.2
Consumer goods		27.68	92.5	92.6	92.9	92.2	92.5	92.8	93.3	92.8	93.6
Durable		6.30	86.8	87.6	89.5	88.1	89.9	92.8	93.3	92.9	94.7
Automotive products		3.50	94.0	95.0	98.8	96.5	99.5	104.2	104.3	104.3	106.8
Home electronics		.16	71.0	71.4	70.2	69.3	69.5	69.6	69.9	70.4	71.3
Appliances, furniture, carpeting		.76	67.2	66.9	67.1	67.2	68.3	69.7	69.9	68.4	69.3
Miscellaneous goods Nondurable		1.88 21.38	85.7 94.3	86.5 94.2	86.3 94.0	86.0 93.5	85.8 93.4	87.0 92.9	88.1 93.3	87.7 92.8	88.7 93.2
Non-energy		15.99	90.8	90.9	91.2	93.3	91.3	92.9	93.3	92.8	93.2
Foods and tobacco		9.22	96.5	96.9	97.3	96.7	97.2	98.3	98.7	98.1	97.8
Clothing		.20	58.8	57.5	58.2	58.5	58.2	61.2	61.2	59.9	59.9
Chemical products		4.72	86.3	85.6	85.7	84.5	86.3	85.6	85.1	84.5	84.6
Paper products		1.35	77.0	78.2	78.9	78.6	79.0	78.1	78.6	78.4	78.4
Energy		5.39	106.2	105.4	103.3	103.8	100.5	96.8	98.0	97.7	100.1
Business equipment		9.57	94.1	94.6	95.9	96.5	97.4	99.3	100.6	100.9	102.4
Transit		2.31	95.5	96.2	100.5	100.9	100.1	103.5	106.7	107.7	111.7
Information processing Industrial and other		2.22 5.04	96.4 91.6	97.4 91.9	97.7 92.1	98.4 92.9	99.7 94.3	101.8 95.4	102.7 96.1	102.1 96.4	102.9 97.0
Defense and space equipment		2.18	109.7	109.6	110.9	112.3	111.7	111.8	114.2	113.7	114.1
• • •											
Construction supplies		4.12	77.1	77.1	77.3	77.9	79.8	79.9	81.6	80.3	80.3
Business supplies		9.56	89.3	89.6	89.3	88.6	89.2	89.6	90.4	90.2	91.5
Materials		46.16	97.8	98.0	98.7	99.4	100.4	101.1	101.0	100.2	101.5
Non-energy		28.76	91.6	92.2	92.3	92.8	94.6	95.7	96.1	95.6	96.3
Durable Consumer parts		17.14 2.45	94.5 80.4	94.7 81.3	94.9 82.4	96.1 83.2	97.8 87.5	99.3 90.2	100.2 91.0	99.8 91.8	100.8 94.2
Equipment parts		6.28	110.2	109.7	109.7	110.8	112.5	113.7	114.7	114.9	116.3
Other		8.42	88.2	88.6	88.8	90.1	91.0	92.2	93.1	91.9	92.2
Nondurable		11.61	87.6	88.6	88.6	88.1	90.2	90.7	90.4	89.7	90.0
Textile		.45	78.4	79.3	79.4	80.2	81.6	83.9	84.8	82.5	83.1
Paper		2.01	82.2	82.3	81.7	82.1	83.1	82.9	83.9	83.4	84.1
Chemical Energy		5.68 17.40	86.3 108.0	88.3 107.4	87.9 109.2	86.8 110.5	90.2 109.8	90.7 109.6	89.7 108.5	89.4 107.4	89.5 109.7
INDUSTRY GROUPS Manufacturing		75.34	90.7	91.1	91.5	91.5	92.8	93.8	94.5	94.1	94.6
Manufacturing (NAICS)	31–33	72.60	91.6	92.0	92.5	92.5	93.8	94.8	95.6	95.1	95.7
Durable manufacturing		37.96	93.1	93.5	94.3	94.8	96.1	97.8	99.0	98.7	100.0
Wood products	321	.90	67.4	69.5	69.8	70.0	71.0	73.1	72.4	72.0	71.0
Nonmetallic mineral products	327	1.55	72.5	72.3	71.3	70.8	71.1	71.4	73.5	72.2	72.5
Primary metals	331	2.94	95.8	96.7	97.2	100.4	103.0	103.2	104.2	101.6	101.7
Fabricated metal products Machinery	332 333	5.41 5.41	88.3 93.8	87.9 94.1	88.4 94.6	89.4 95.4	90.3 97.9	91.2 99.4	92.8 100.8	92.6 101.4	93.3 101.5
Computer and electronic products	334	6.25	112.6	112.4	111.3	112.0	113.7	114.7	114.3	113.9	115.7
Electrical equip., appliances,	334	0.23	112.0	.12,7	.11.0	112.0	110.1	/	111.0	.10.7	110.7
and components	335	1.76	80.4	81.3	83.4	82.2	82.0	83.2	85.2	84.8	85.4
Motor vehicles and parts	3361–3	5.33	87.6	88.3	92.1	90.6	93.6	99.4	100.1	101.2	105.2
Aerospace and miscellaneous				400 -	400	400-	400	400	40	40= -	
transportation equipment	3364–9	4.30	99.1	100.0	102.1	103.7	103.1	103.0	106.0	105.1	106.2
Furniture and related products Miscellaneous	337 339	.98 3.12	68.8 100.7	68.2 102.0	67.6 101.9	67.6 101.7	68.0 101.7	69.9 104.1	71.2 104.2	69.8 104.3	71.5 105.9
Nondurable manufacturing Food, beverage, and tobacco products	311,2	34.64 11.43	90.2 98.1	90.6 98.3	90.6 99.0	90.1 98.5	91.4 99.0	91.7	92.0 100.5	91.3 99.5	91.1 99.3
Textile and product mills	313,4	.74	74.5	75.0	75.3	75.9	77.0	77.7	78.4	77.0	77.4
Apparel and leather	315,6	.28	61.0	60.1	61.1	61.4	60.9	63.3	62.9	62.0	62.4
Paper	322	2.43	84.5	85.1	84.8	85.2	86.1	85.4	86.0	85.6	86.2
Printing and support	323	1.43	75.3	74.5	73.8	73.0	74.2	75.2	75.4	74.4	74.8
Petroleum and coal products	324	3.69	100.8	101.3	101.5	101.7	102.9	100.8	103.7	102.1	99.5
Chemicals Plastics and rubber products	325 326	11.53 3.11	86.4 90.2	87.1 90.2	86.6 90.7	85.6 90.0	88.1 90.9	88.3 91.4	87.5 92.5	87.1 92.0	87.4 91.6
Other manufacturing (non-NAICS)	1133,5111	2.74	71.2	71.8	72.2	72.2	72.9	72.5	73.2	73.6	73.6
	ŕ	14.38	107.9	107.8	110.2						
Mining	21		111/9	IU/X	110.2	111.8	112.3	112.6	110.4	108.5	110.2
Mining Utilities	21 2211,2	10.28	102.3	101.2	100.0	100.2	96.6	94.8	95.9	96.5	100.9
							96.6 96.5	94.8 95.2	95.9 96.0	96.5 97.6	100.9 100.5

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

 Table 5

 INDUSTRIAL PRODUCTION INDEXES: SPECIAL AGGREGATES

 2007 = 100, seasonally adjusted

507 = 100, scasonarry adjusted		2011	2011					2012			
Item		proportion	Aug.	Sept.	Oct.	Nov.r	Dec.r	Jan. <sup>r</sup>	Feb.r	Mar. <sup>r</sup>	Apr.p
Total industry		100.00	94.2	94.4	94.9	95.1	95.9	96.5	96.9	96.4	97.4
Energy		26.40	106.8	106.3	107.0	107.7	106.4	105.5	105.3	104.4	106.7
Consumer products		5.39	106.2	105.4	103.3	103.8	100.5	96.8	98.0	97.7	100.1
Commercial products		2.93	102.4	102.6	101.6	99.7	98.3	97.8	99.8	99.0	102.3
Oil and gas well drilling	213111	.68	103.2	104.5	106.2	106.0	106.6	107.6	107.1	107.3	105.6
Converted fuel		3.98	99.5	97.5	96.9	97.8	96.2	95.7	98.6	98.5	101.1
Primary energy		13.42	110.7	110.6	113.2	114.6	114.2	114.0	111.7	110.2	112.5
Non-energy		73.60	90.0	90.4	91.0	91.0	92.4	93.4	94.1	93.6	94.3
Selected high-technology industries		3.38	119.2	117.4	114.6	115.0	116.1	115.2	113.5	113.7	116.3
Computers and peripheral equipment	3341	.46	77.3	76.0	74.2	73.4	73.1	73.6	74.1	74.8	75.4
Communications equipment	3342	.63	84.5	85.4	85.7	85.9	85.6	85.9	86.4	86.6	86.8
Semiconductors and related											
electronic components	334412-9	2.29	153.0	149.6	145.0	145.9	148.4	146.2	142.6	142.6	147.1
Excluding selected high-technology industries		70.21	88.5	89.0	89.6	89.7	91.1	92.2	92.9	92.4	93.0
Motor vehicles and parts	3361-3	5.33	87.6	88.3	92.1	90.6	93.6	99.4	100.1	101.2	105.2
Motor vehicles	3361	2.86	91.3	92.2	97.4	93.7	96.7	105.2	105.7	106.4	111.3
Motor vehicle parts	3363	2.15	83.9	85.1	86.8	87.2	90.0	93.4	94.2	96.1	99.2
Excluding motor vehicles and parts		64.89	88.5	88.9	89.3	89.4	90.7	91.5	92.1	91.6	91.9
Consumer goods		19.10	88.4	88.7	89.0	88.4	89.2	89.8	90.1	89.5	89.6
Business equipment		7.84	95.1	95.8	96.6	97.5	98.6	99.6	100.8	100.7	101.7
Construction supplies		4.10	77.0	77.0	77.2	77.8	79.7	79.8	81.5	80.2	80.2
Business supplies		6.35	82.8	83.2	83.3	83.0	84.4	85.1	85.6	85.6	86.0
Materials		25.30	89.0	89.7	90.0	90.4	92.1	93.0	93.6	92.8	93.1
Measures excluding selected high-technology											
industries Total industrie		96.62	93.2	93.5	94.1	94.3	95.0	95.7	96.2	95.6	96.6
Total industry  Manufacturing!			89.2			94.3			93.4	93.6	
Manufacturing <sup>1</sup> Durable		71.96 34.70	90.2	89.7 90.7	90.3 91.8	90.2	91.6 93.6	92.6 95.6	93.4 96.9	92.9 96.6	93.4 97.8
Measures excluding motor vehicles and parts		34.70	90.2	90.7	91.8	92.3	93.0	93.0	90.9	90.0	97.8
Total industry		94.67	94.4	94.6	94.9	95.2	95.8	96.1	96.5	95.9	96.8
Manufacturing <sup>1</sup>		70.01	90.8	91.1	91.3	91.4	92.6	93.2	93.9	93.3	93.6
Durable		32.75	93.5	93.9	94.2	95.0	96.0	93.2 97.0	98.3	93.3 97.7	98.5
Measures excluding selected high-technology		32.13	73.3	13.1	77.2	73.0	70.0	71.0	70.3	71.1	70.3
industries and motor vehicles and parts											
Total industry		91.29	93.4	93.6	94.1	94.3	95.0	95.3	95.7	95.1	95.9
Manufacturing <sup>1</sup>		66.63	89.2	89.7	90.0	90.1	91.2	91.9	92.7	92.1	92.3
		1	1								
Stage-of-process components of non-energy materials, measures of the input to Finished processors		11.19	95.9	96.0	96.1	97.0	99.2	100.5	101.5	101.5	103.1

Table 6 DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION

ercent	T	г 1	3.6		3.7		T 1			0 :	N.T.	
Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
One month earlier												
2010	64.4	56.4	65.7	67.0	66.0	52.6	61.9	52.6	52.2	55.1	52.9	60.9
2011	57.7	54.2	56.1	46.8	53.2	49.7	57.1	52.9	51.9	58.0	52.2	62.8
2012	59.9	62.8	44.6									
Three months earlier												
2010	68.6	62.2	69.2	67.0	69.9	66.7	60.9	58.0	58.3	55.8	54.2	57.4
2011	62.5	62.5	61.9	51.9	54.8	53.5	56.4	51.0	57.1	55.8	59.3	65.1
2012	66.7	71.2	62.2									
Six months earlier												
2010	69.6	64.1	65.7	72.1	72.4	72.1	69.9	68.6	64.1	63.5	57.1	63.8
2011	59.0	61.2	63.1	59.6	59.3	57.1	57.4	53.2	51.9	58.7	57.4	62.8
2012	66.3	70.5	64.4									

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

r Revised. p Preliminary.

1. Refer to note on cover page.

Table 7
CAPACITY UTILIZATION
Percent of capacity, seasonally adjusted

Percent of capacity, seasonally adjusted														
			1972-	1994-										
Item		2011	2011	95	2009	2011		2012	2011		2012			
		proportion	ave.	high	low	Q3	Q4 <sup>r</sup>	Q1 <sup>r</sup>	Nov.r	Dec.r	Jan. <sup>r</sup>	Feb.r	Mar. <sup>r</sup>	Apr. <sup>p</sup>
Total industry		100.00	80.3	85.0	66.8	77.1	77.8	78.7	77.7	78.2	78.7	78.9	78.4	79.2
Manufacturing <sup>1</sup>		76.96	78.8	84.6	63.8	75.2	76.1	77.7	75.7	76.7	77.5	78.0	77.6	77.9
Manufacturing (NAICS)	31–33	73.67	78.7	84.7	63.6	75.7	76.6	78.2	76.2	77.2	78.0	78.5	78.0	78.4
Durable manufacturing		39.73	77.1	83.7	58.2	73.8	75.1	77.4	74.8	75.8	77.0	77.8	77.4	78.3
Wood products	321	1.10	77.6	86.6	51.7	62.1	64.3	66.7	64.0	65.0	67.1	66.6	66.4	65.6
Nonmetallic mineral products	327	2.21	75.2	82.7	44.2	55.2	54.9	56.4	54.7	55.0	55.5	57.3	56.4	56.9
Primary metals	331	3.08	79.2	94.1	48.6	72.3	75.3	77.5	75.5	77.4	77.5	78.4	76.4	76.6
Fabricated metal products	332	5.28	77.3	85.9	60.9	79.2	80.1	82.5	80.1	80.9	81.7	83.1	82.9	83.5
Machinery	333	5.18	78.1	87.7	60.3	79.6	81.1	84.6	80.6	82.7	83.8	84.8	85.3	85.1
Computer and electronic products	334	6.22	78.2	84.5	68.7	79.8	77.9	77.5	77.7	78.2	78.3	77.4	76.7	77.4
Electrical equip., appliances,														
and components	335	1.71	82.6	92.7	66.3	77.6	79.8	81.9	79.5	79.4	80.6	82.7	82.4	83.0
Motor vehicles and parts	3361-3	6.24	75.0	87.4	34.7	65.8	69.4	75.3	68.3	70.5	74.8	75.2	76.0	78.8
Aerospace and miscellaneous														
transportation equipment	3364-9	4.49	73.1	69.1	69.7	74.0	76.6	77.4	77.1	76.5	76.3	78.4	77.5	78.2
Furniture and related products	337	1.12	77.1	82.4	57.5	67.9	67.9	70.9	67.8	68.3	70.4	71.8	70.5	72.3
Miscellaneous	339	3.09	76.1	80.6	68.2	77.5	77.4	78.5	77.3	77.1	78.7	78.6	78.4	79.3
Nondurable manufacturing		33.94	80.9	86.1	69.3	78.0	78.3	79.1	77.7	78.9	79.1	79.4	78.7	78.6
Food, beverage, and tobacco products	311,2	11.05	81.1	86.1	75.7	78.6	79.0	80.0	78.8	79.1	80.0	80.3	79.5	79.3
Textile and product mills	313,4	.85	80.3	91.9	53.8	66.7	68.0	69.9	67.8	69.0	69.7	70.5	69.4	69.8
Apparel and leather	315.6	.31	78.0	87.5	59.0	68.6	69.0	71.2	69.3	68.9	71.8	71.4	70.5	71.1
Paper	322	2.27	86.9	92.6	71.8	81.0	81.5	81.9	81.4	82.3	81.6	82.3	81.9	82.5
Printing and support	323	1.70	81.6	84.7	60.4	65.1	64.2	65.8	63.7	64.8	65.8	66.1	65.3	65.9
Petroleum and coal products	324	3.32	85.7	90.9	76.0	86.1	86.3	86.2	86.1	86.9	85.0	87.4	86.1	84.0
Chemicals	325	11.33	77.7	81.9	65.0	77.5	77.7	78.4	76.6	78.8	79.0	78.3	77.9	78.1
Plastics and rubber products	326	3.11	82.2	92.5	58.0	77.2	77.5	78.6	77.0	77.8	78.2	79.1	78.6	78.2
Other manufacturing (non-NAICS)	1133,5111	3.29	82.7	83.3	68.4	63.3	65.0	65.9	64.8	65.6	65.3	66.0	66.5	66.6
Mining	21	12.77	87.3	88.6	78.5	87.4	90.2	89.2	90.4	90.8	90.9	89.1	87.5	88.8
Utilities	2211,2	10.27	86.3	93.3	79.1	78.5	75.6	72.8	76.6	73.7	72.3	72.9	73.3	76.4
Selected high-technology industries		3.45	78.2	86.5	69.1	79.8	75.3	72.6	75.1	75.2	73.9	72.2	71.8	73.0
Computers and peripheral equipment	3341	.44	78.4	86.8	75.8	86.4	80.7	80.2	80.5	79.8	79.9	80.2	80.7	81.3
Communications equipment	3342	.66	76.4	84.1	75.8	76.0	76.5	76.5	76.7	76.2	76.3	76.6	76.6	76.6
Semiconductors and related	2212	.50	, 0.0	01	, , , ,	, 0.0	, 0.0	, 0.0	, 5.7	. 0.2	, 0.5	, 0.0	, 0.0	, 0.0
electronic components	334412-9	2.36	80.2	92.1	62.7	79.6	74.1	70.4	73.8	74.1	72.2	69.8	69.1	70.8
Measures excluding selected														
high-technology industries														
Total industry		96.55	80.4	84.9	66.6	77.0	77.9	78.9	77.8	78.3	78.8	79.2	78.7	79.4
Manufacturing <sup>1</sup>		73.50	78.9	84.5	63.5	75.0	76.1	77.9	75.7	76.8	77.6	78.3	77.8	78.2
-														

Crude

Primary and semifinished Finished

STAGE-OF-PROCESS GROUPS

16.85

45.82 37.33

86.3

81.1 77.2

89.7

87.9 80.6

76.4

64.2 66.8

85.7

74.6 76.3

87.8

74.7 77.1

87.4

75.5 78.5

87.7

74.7 76.8

88.4

75.1 77.5

88.8

75.0 78.5

87.2

75.9 78.8

86.2

75.6 78.2

87.2

76.5 78.8

r Revised. p Preliminary.

1. Refer to note on cover page.

Table 8 INDUSTRIAL CAPACITY

Percent change

													Monthly
			nnual rate		Fourth	quarter to	o fourth q	uarter		Annual			rate
Item	1972-	1980-	1989-	1995-					2011		2012		2012
	79	88	94	2012	2009	2010	2011	2012	Q3	Q4	Q1	Q2	Apr.
Total industry	3.1	1.9	2.3	2.2	7	-1.9	.8	1.0	1.0	1.1	1.1	1.0	.1
Manufacturing <sup>1</sup>	3.3	2.2	2.5	2.4	-2.8	-2.4	.1	1.0	.5	.9	1.0	1.0	.1
Mining Utilities	.7 4.2	.1 2.1	7 1.8	.2 2.3	5.0 1.2	2 4.5	2.7 3.2	.9 2.4	2.8 2.7	1.9 2.2	1.2 2.1	.8 2.3	.1 .2
Selected high-technology industries	19.6	17.3	15.6	19.1	3.0	.3	10.4	7.3	13.7	13.7	11.2	7.8	.6
Manufacturing <sup>1</sup> ex. selected high-technology industries	2.6	1.3	1.6	.9	-3.1	-2.6	4	.7	1	.3	.5	.7	.1
STAGE-OF-PROCESS GROUPS Crude	1.6	.4	5	.4	3.1	4	2.0	.9	2.0	1.4	.9	.7	.1
Primary and semifinished	3.0	1.4	2.5	2.7	-1.0	-1.2	.3	.2	.5	.5	.4	.2	.0
Finished	3.9	3.3	2.7	2.2	-3.5	-2.3	.9	2.3	1.4	1.9	2.3	2.4	.2

<sup>1.</sup> 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

| 2011

			2011		2012	2011		2012			
Item	2005	2011	Q3	Q4 <sup>r</sup>	Q1 <sup>r</sup>	Nov. <sup>r</sup>	Dec.r	Jan. <sup>r</sup>	Feb.r	Mar. <sup>r</sup>	Apr. <sup>p</sup>
Final products and nonindustrial supplies	3,332.3	3,218.2	3,247.5	3,275.9	3,313.2	3,266.7	3,285.5	3,294.9	3,331.2	3,313.4	3,334.1
Final products	2,474.8	2,468.3	2,489.9	2,518.8	2,545.7	2,516.2	2,523.8	2,531.2	2,558.1	2,547.7	2,562.2
Consumer goods	1,834.1	1,777.6	1,796.6	1,805.5	1,809.1	1,802.6	1,806.7	1,802.7	1,818.1	1,806.7	1,811.3
Durable	495.3	433.1	438.1	454.1	476.0	448.3	459.0	475.1	477.1	475.7	485.7
Automotive products	288.4	277.5	281.9	297.7	316.9	292.4	302.4	316.5	317.0	317.1	325.5
Other durable goods	206.9	156.1	156.7	156.9	159.8	156.5	157.2	159.4	160.8	159.3	161.0
Nondurable	1,338.8	1,339.8	1,353.6	1,349.1	1,334.7	1,351.0	1,346.2	1,329.3	1,342.3	1,332.6	1,328.8
Equipment, total	640.8	692.5	694.7	716.8	742.7	717.3	721.0	734.0	746.3	747.9	758.8
Business and defense	617.4	670.7	672.1	692.9	718.8	693.1	697.2	709.9	722.4	724.1	735.7
Business	537.5	566.5	568.0	587.0	611.7	586.5	591.3	604.2	614.4	616.6	627.9
Defense and space	79.9	102.9	102.8	104.8	106.2	105.4	104.8	104.9	107.1	106.7	107.1
Nonindustrial supplies	857.4	753.1	760.6	760.5	770.9	754.1	765.1	767.0	776.4	769.2	775.4
Construction supplies	270.0	212.5	214.1	218.4	225.5	216.6	222.6	223.5	228.4	224.5	224.1
Business supplies	587.4	540.6	546.6	542.2	545.5	537.6	542.7	543.6	548.1	544.9	551.5
Commercial energy products	210.9	212.3	217.0	210.7	208.3	208.3	208.1	206.9	210.4	207.5	212.0

r Revised. p Preliminary.

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

		Fou	rth quarte	er to										
		fo	urth quar	ter		Annual	rate			Month	ıly rate			Apr. '11
Item	2011				2011		2012	2011		2012				to
	gross value1	2009	2010	2011	Q3	Q4 <sup>r</sup>	Q1 <sup>r</sup>	Nov.r	Dec.r	Jan. <sup>r</sup>	Feb.r	Mar.r	Apr. <sup>p</sup>	Apr. '12
Finished	1921.3	-4.9	4.8	6.8	7.4	8.8	11.2	5	1.2	1.7	.7	2	1.0	8.4
Semifinished	1627.7	-8.4	9.0	3.2	3.5	1.9	10.2	.4	.6	.9	1.4	1	1.1	6.0
Primary	1331.9	-3.5	4.4	2.4	8.9	.6	-2.1	.4	.5	-1.6	1.7	-1.6	1	1.6
Crude	653.8	1.2	6.6	2.6	4.8	9.3	.4	.3	1.5	.6	-1.9	8	.9	3.1

r Revised. p Preliminary.

<sup>1.</sup> Billions of 2005 dollars.

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

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) <sup>1</sup>																	
.990	6	.9	.5	1	.2	.3	1	.2	.2	8	-1.2	7	2.8	3.0	1.7	-6.2	1.0
.991	4	6	5	.2	1.0	1.0	.0	.1	.9	2	1	3	-7.4	2.5	5.5	.8	-1.5
.992	6	.8	.8	.7	.4	.0	.9	5	.2	.8	.4	.0	5	7.3	2.9	4.1	2.8
1993 1994	.5	.4	1.0	.3 .5	4 .6	.2	.3	.0	.5 .2	.7 .8	.4 .6	.5 1.1	3.5 5.1	1.1 7.5	2.0 5.1	6.1 8.1	3.3 5.3
994	.4	.0		.5			.2	.0	.2	.8		1.1	3.1	7.3	5.1	8.1	3.3
1995 1996	.3	.0 1.6	.2 1	1 .9	.2	.3	4 1	1.3	.4 .5	2 .0	.2	.3 .6	5.0 2.6	1.2 8.7	3.8 5.5	3.2 5.3	4.7 4.4
1997	.1	1.0	.8	.0	.7	.5	.6	1.3	.9	.7	.9	.4	7.7	6.5	9.8	10.1	7.2
1998	.5	.1	.1	.4	.7	6	4	2.1	3	.8	1	.3	4.4	2.9	2.9	5.4	5.8
.999	.4	.4	.2	.2	.7	2	.7	.4	3	1.3	.5	.8	4.1	3.9	4.0	7.5	4.3
000	.1	.4	.4	.6	.1	.1	2	3	.5	4	.0	3	4.7	4.6	6	-1.3	4.0
2001	7	6	3	3	7	6	5	3	3	5	5	.0	-5.6	-5.3	-5.5	-4.6	-3.4
2002	.6	.0	.8	.4	.6	.9	3	.2	.1	4	.5	5	2.7	6.5	2.4	4	.2
2003	.8	.4	2	8	.0 .7	.0 9	.3 .7	1 .3	.6	1 1.0	.8 .2	.0	3.2 2.8	-3.2	1.9	3.3	1.2
2004	.3	.6	6	.4	./	9	./	.3	.0	1.0	.2	.7	2.8	1.7	2.2	5.8	2.3
005	.5	.6 .1	1 .2	.0 .5	.2 2	.4 .4	1 .1	.1	-2.0 2	1.3 1	.9 1	.6 1.0	5.9 4.0	1.8 2.5	-1.6 1.5	3.2	3.3 2.2
007	4	1.2	.0	.8	2 1	.0	.1	.0	2	1 6	1	.1	4.0	4.6	1.0	.6	2.5
.008	3	2	4	8	5	3	5	-1.7	-4.1	.8	-1.2	-2.7	-1.2	-5.9	-12.5	-15.9	-3.5
009	-2.2	6	-1.7	9	-1.1	4	1.0	1.0	.6	.2	.4	.5	-19.6	-11.4	5.0	5.6	-11.4
010	1.0	.4	.6	.4	1.6	.2	.7	.2	.4	4	.3	1.1	7.9	8.6	6.6	2.2	5.4
2011	.1	2	.8	5	.3	.1	.9	.3	.2	.6	.2	.8	4.4	1.2	5.6	5.0	4.1
012	.6	.4	6	1.1									5.4				
<b>P</b> (2007=100)																	
010	87.4	87.8	88.3	88.7	90.1	90.2	90.9	91.1	91.4	91.1	91.4	92.4	87.8	89.7	91.1	91.6	90.1
011 012	92.5 96.5	92.3 96.9	93.1 96.4	92.6 97.4	92.9	93.1	93.9	94.2	94.4	94.9	95.1	95.9	92.6 96.6	92.9	94.2	95.3	93.7
Capacity Dercent of 007 output) 010 011	123.4 121.5	123.1	122.8	122.6	122.3 121.8	122.1 121.9	121.9 122.0	121.8 122.1	121.6 122.2	121.6 122.3	121.5 122.5	121.5 122.6	123.1	122.3	121.8	121.5	122.2
	122./	121.6 122.8	121.6 122.9	121.7 123.0	121.0	121.7						122.0	121.6 122.8	121.8	122.1	122.5	122.0
	122.7	121.6 122.8	121.6 122.9	123.0	121.6	121.)						122.0	121.6 122.8	121.8	122.1	122.5	122.0
Utilization	122.7				121.6	121.)						122.0		121.8	122.1	122.5	122.0
U <b>tilization</b> percent)	82.5				83.0	83.1	82.9	82.9	83.0	82.2	81.1	80.4		121.8 83.0	122.1 82.9	122.5 81.2	
Utilization percent) 990 991	82.5 79.9	83.0 79.3	122.9 83.3 78.8	123.0 83.0 78.8	83.0 79.5	83.1 80.2	82.9 80.1	80.1	80.7	80.5	80.3	80.4 79.9	82.9 79.3	83.0 79.5	82.9 80.3	81.2 80.2	82.5 79.8
Utilization percent) 990 991	82.5 79.9 79.3	83.0 79.3 79.8	122.9 83.3 78.8 80.3	83.0 78.8 80.7	83.0 79.5 80.8	83.1 80.2 80.7	82.9 80.1 81.2	80.1 80.6	80.7 80.6	80.5 81.0	80.3 81.2	80.4 79.9 81.0	82.9 79.3 79.8	83.0 79.5 80.7	82.9 80.3 80.8	81.2 80.2 81.1	82.5 79.8 80.6
Utilization percent) 990 991 992 993	82.5 79.9 79.3 81.3	83.0 79.3 79.8 81.4	83.3 78.8 80.3 81.3	83.0 78.8 80.7 81.4	83.0 79.5 80.8 81.0	83.1 80.2 80.7 81.1	82.9 80.1 81.2 81.2	80.1 80.6 81.1	80.7 80.6 81.4	80.5 81.0 81.8	80.3 81.2 82.0	80.4 79.9 81.0 82.3	82.9 79.3 79.8 81.3	83.0 79.5 80.7 81.2	82.9 80.3 80.8 81.2	81.2 80.2 81.1 82.1	82.5 79.8 80.6 81.4
Utilization percent) 1990 1991 1992 1993 1994	82.5 79.9 79.3 81.3 82.5	83.0 79.3 79.8 81.4 82.3	83.3 78.8 80.3 81.3 83.0	83.0 78.8 80.7 81.4 83.2	83.0 79.5 80.8 81.0 83.4	83.1 80.2 80.7 81.1 83.7	82.9 80.1 81.2 81.2 83.6	80.1 80.6 81.1 83.8	80.7 80.6 81.4 83.8	80.5 81.0 81.8 84.2	80.3 81.2 82.0 84.4	80.4 79.9 81.0 82.3 85.0	82.9 79.3 79.8 81.3 82.6	83.0 79.5 80.7 81.2 83.5	82.9 80.3 80.8 81.2 83.7	81.2 80.2 81.1 82.1 84.6	82.5 79.8 80.6 81.4 83.6
Utilization percent) 990 991 992 993 994	82.5 79.9 79.3 81.3 82.5	83.0 79.3 79.8 81.4 82.3 84.6	83.3 78.8 80.3 81.3 83.0 84.5	83.0 78.8 80.7 81.4 83.2 84.1	83.0 79.5 80.8 81.0 83.4 84.0	83.1 80.2 80.7 81.1 83.7 84.0	82.9 80.1 81.2 81.2 83.6	80.1 80.6 81.1 83.8	80.7 80.6 81.4 83.8	80.5 81.0 81.8 84.2	80.3 81.2 82.0 84.4 83.5	80.4 79.9 81.0 82.3 85.0	82.9 79.3 79.8 81.3 82.6 84.7	83.0 79.5 80.7 81.2 83.5	82.9 80.3 80.8 81.2 83.7	81.2 80.2 81.1 82.1 84.6	82.5 79.8 80.6 81.4 83.6
Utilization percent) 990 991 992 993 994 995 996	82.5 79.9 79.3 81.3 82.5 85.0 82.5	83.0 79.3 79.8 81.4 82.3 84.6 83.5	83.3 78.8 80.3 81.3 83.0 84.5 83.0	83.0 78.8 80.7 81.4 83.2 84.1 83.4	83.0 79.5 80.8 81.0 83.4 84.0 83.6	83.1 80.2 80.7 81.1 83.7 84.0 84.0	82.9 80.1 81.2 81.2 83.6 83.4 83.5	80.1 80.6 81.1 83.8 84.1 83.6	80.7 80.6 81.4 83.8 84.1 83.7	80.5 81.0 81.8 84.2 83.6 83.3	80.3 81.2 82.0 84.4 83.5 83.6	80.4 79.9 81.0 82.3 85.0 83.4 83.7	82.9 79.3 79.8 81.3 82.6 84.7 83.0	83.0 79.5 80.7 81.2 83.5 84.0 83.6	82.9 80.3 80.8 81.2 83.7 83.9 83.6	81.2 80.2 81.1 82.1 84.6 83.5 83.5	82.5 79.8 80.6 81.4 83.6 84.0 83.4
Utilization percent) 990 991 992 993 994 995 996 997	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2	83.0 78.8 80.7 81.4 83.2 84.1 83.4 83.8	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9	83.1 80.2 80.7 81.1 83.7 84.0 84.0 83.8	82.9 80.1 81.2 83.6 83.4 83.5 83.9	80.1 80.6 81.1 83.8 84.1 83.6 84.5	80.7 80.6 81.4 83.8 84.1 83.7 84.7	80.5 81.0 81.8 84.2 83.6 83.3 84.7	80.3 81.2 82.0 84.4 83.5 83.6 84.9	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2
Utilization percent) 990 991 992 993 994 995 996 997 998	82.5 79.9 79.3 81.3 82.5 85.0 82.5	83.0 79.3 79.8 81.4 82.3 84.6 83.5	83.3 78.8 80.3 81.3 83.0 84.5 83.0	83.0 78.8 80.7 81.4 83.2 84.1 83.4	83.0 79.5 80.8 81.0 83.4 84.0 83.6	83.1 80.2 80.7 81.1 83.7 84.0 84.0	82.9 80.1 81.2 81.2 83.6 83.4 83.5	80.1 80.6 81.1 83.8 84.1 83.6	80.7 80.6 81.4 83.8 84.1 83.7	80.5 81.0 81.8 84.2 83.6 83.3	80.3 81.2 82.0 84.4 83.5 83.6	80.4 79.9 81.0 82.3 85.0 83.4 83.7	82.9 79.3 79.8 81.3 82.6 84.7 83.0	83.0 79.5 80.7 81.2 83.5 84.0 83.6	82.9 80.3 80.8 81.2 83.7 83.9 83.6	81.2 80.2 81.1 82.1 84.6 83.5 83.5	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8
Utilization percent) 990 991 991 992 993 994 995 996 997 998 999	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.5 83.6 84.2 83.5 81.6	83.0 78.8 80.7 81.4 83.2 84.1 83.4 83.8 83.3 81.5	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8	83.1 80.2 80.7 81.1 83.7 84.0 84.0 83.8 82.4 81.4	82.9 80.1 81.2 83.6 83.4 83.5 83.9 81.5 81.6	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7
Utilization percent) 990 991 991 992 993 994 995 996 997 998 999 000	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5	83.0 78.8 80.7 81.4 83.2 84.1 83.4 83.8 83.3	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3	83.1 80.2 80.7 81.1 83.7 84.0 84.0 83.8 82.4	82.9 80.1 81.2 81.2 83.6 83.4 83.5 83.9 81.5	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7
Utilization percent) 990 990 991 992 993 994 995 996 997 998 999 0000 0001	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6	83.0 78.8 80.7 81.4 83.2 84.1 83.8 83.3 81.5 82.4 77.5 74.5	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8	83.1 80.2 80.7 81.1 83.7 84.0 84.0 83.8 82.4 81.4	82.9 80.1 81.2 81.2 83.6 83.4 83.5 83.9 81.5 81.6	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 81.5 76.1
Utilization percent) 990 991 991 992 993 994 995 996 997 998 999 000 001 002 003	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8 82.1 79.1 73.9	122.8 83.0 79.3 79.8 81.4 82.3 84.6 83.5 84.0 81.8 82.1 78.4 73.8 76.1	122.9 83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6 82.2 77.9 74.2 76.0	83.0 78.8 80.7 81.4 83.2 84.1 83.8 83.3 81.5 82.4 77.5 74.5	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8 74.8	83.1 80.2 80.7 81.1 83.7 84.0 83.8 82.4 81.4 82.0 76.1 75.5	82.9 80.1 81.2 81.2 83.6 83.4 83.5 83.9 81.5 81.6 75.6 75.2	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4 76.2	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1 76.2	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0 80.4 73.7 75.5 76.8	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2 76.8	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8 82.1 78.5 74.0	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8 74.9	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2 75.3 75.9	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0 80.3 73.8 75.3 76.6	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 81.5 76.1 74.9
Utilization percent) 990 991 991 992 993 994 995 996 997 998 999 000 001 002 003	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8	122.8 83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8 82.1 78.4 73.8	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6	83.0 78.8 80.7 81.4 83.2 84.1 83.8 83.3 81.5 82.4 77.5 74.5	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8	83.1 80.2 80.7 81.1 83.7 84.0 84.0 83.8 82.4 81.4 82.0 76.1 75.5	82.9 80.1 81.2 81.2 83.6 83.4 83.5 83.9 81.5 81.6 75.6	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0 80.4 73.7 75.5	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0 80.3 73.8 75.3	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 81.5 76.1 74.9
Utilization percent) 990 990 991 992 993 994 995 996 997 998 999 000 001 002 003 004	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8 82.1 79.1 73.9 75.8 77.0	122.8 83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8 82.1 78.4 73.8 76.1 77.4	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6 82.2 77.9 74.2 76.0 77.0	83.0 78.8 80.7 81.4 83.2 84.1 83.4 83.8 81.5 82.4 77.5 74.5 75.4 77.3	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8 74.8 75.5 77.9	83.1 80.2 80.7 81.1 83.7 84.0 84.0 83.8 82.4 81.4 82.0 76.1 75.5 77.2	82.9 80.1 81.2 83.6 83.4 83.5 83.9 81.5 81.6 75.6 75.8 77.8	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3 75.7 78.0	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4 76.2 78.0	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1 76.2 78.7	80.3 81.2 82.0 84.4 83.5 83.6 84.9 82.0 80.4 73.7 75.5 76.8 78.9	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2 76.8 79.4	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8 82.1 78.5 74.0 76.0 77.1	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8 74.9 75.5 77.5	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2 75.3 75.9 77.9	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0 80.3 73.8 75.3 76.6 79.0	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 76.1 77.9
Utilization percent) 990 990 991 992 993 994 995 996 997 998 999 2000 2001 2002 2003 2004 2005	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8 82.1 79.1 73.9 75.8 77.0	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8 82.1 78.4 73.8 76.1 77.4	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6 82.2 77.9 74.2 76.0 77.0	83.0 78.8 80.7 81.4 83.2 84.1 83.8 83.3 81.5 77.5 74.5 77.4 77.3	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8 74.8 75.5 77.9	83.1 80.2 80.7 81.1 83.7 84.0 83.8 82.4 81.4 82.0 76.1 75.5 77.2 80.3 80.5	82.9 80.1 81.2 83.6 83.4 83.5 83.9 81.5 81.6 75.6 75.2 75.8 77.8	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3 75.7 78.0	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4 76.2 78.0	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1 76.2 78.7	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0 80.4 73.7 75.5 76.8 78.9	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2 76.8 79.4	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8 82.1 78.5 74.0 76.0 77.1 80.0 80.3	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8 74.9 75.5 77.5	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2 75.3 75.9 77.9	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0 80.3 73.8 75.3 76.6 79.0	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 76.1 77.9 80.3
Utilization percent) 990 990 991 992 993 994 995 996 997 998 999 000 001 002 003 004 005 006 007	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8 82.1 79.1 73.9 75.8 77.0	122.8 83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8 82.1 78.4 73.8 76.1 77.4 80.2 80.3 80.5	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6 82.2 77.9 74.2 76.0 77.0 80.1 80.4 80.3	83.0 78.8 80.7 81.4 83.2 84.1 83.8 83.3 81.5 74.5 75.4 77.3 80.0 80.6 80.8	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8 74.8 75.5 77.9	83.1 80.2 80.7 81.1 83.7 84.0 84.0 83.8 82.4 81.4 82.0 76.1 75.5 75.5 77.2 80.3 80.5 80.4	82.9 80.1 81.2 83.6 83.4 83.5 83.9 81.5 81.6 75.6 75.2 75.8 77.8	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3 75.7 78.0 80.1 80.5 80.3	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4 76.2 78.0 78.4 80.2 80.6	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1 76.2 78.7	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0 80.4 73.7 75.5 76.8 78.9	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2 76.8 79.4 80.3 80.3 80.6	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8 82.1 78.5 74.0 76.0 77.1 80.0 80.3 80.2	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8 74.9 75.5 77.5	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2 75.3 75.9 77.9	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0 80.3 75.3 76.6 79.0 79.9 80.0 80.4	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 76.1 77.9 79.9 80.3 80.4
Utilization percent) 1990 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8 82.1 79.1 73.9 75.8 77.0	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8 82.1 78.4 73.8 76.1 77.4	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6 82.2 77.9 74.2 76.0 77.0	83.0 78.8 80.7 81.4 83.2 84.1 83.8 83.3 81.5 77.5 74.5 77.4 77.3	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8 74.8 75.5 77.9	83.1 80.2 80.7 81.1 83.7 84.0 83.8 82.4 81.4 82.0 76.1 75.5 77.2 80.3 80.5	82.9 80.1 81.2 83.6 83.4 83.5 83.9 81.5 81.6 75.6 75.2 75.8 77.8	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3 75.7 78.0	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4 76.2 78.0	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1 76.2 78.7	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0 80.4 73.7 75.5 76.8 78.9	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2 76.8 79.4	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8 82.1 78.5 74.0 76.0 77.1 80.0 80.3	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8 74.9 75.5 77.5	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2 75.3 75.9 77.9	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0 80.3 73.8 75.3 76.6 79.0	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 76.1 77.9 80.3 80.4 77.3
Utilization percent) 1990 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8 82.1 79.1 73.9 75.8 77.0 79.7 80.3 79.8 80.4 69.9	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8 82.1 78.4 73.8 76.1 77.4 80.2 80.3 80.5 80.3 69.5	83.3 78.8 80.3 81.3 83.0 84.5 83.0 84.2 83.5 81.6 82.2 77.9 74.2 76.0 77.0 80.1 80.4 80.3 80.1 80.3	83.0 78.8 80.7 81.4 83.2 84.1 83.4 83.8 83.3 81.5 82.4 77.5 75.4 77.3 80.0 80.6 80.8 79.5 67.7	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8 74.8 75.5 77.9 80.1 80.4 80.6 79.1 67.1	83.1 80.2 80.7 81.1 83.7 84.0 83.8 82.4 81.4 82.0 76.1 75.5 77.2 80.3 80.5 80.4 78.9 66.8	82.9 80.1 81.2 83.6 83.4 83.5 83.9 81.5 81.6 75.6 75.8 77.8 80.1 80.5 80.4 78.6 67.5	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 75.2 75.3 75.7 78.0 80.1 80.5 80.3 77.2 68.3	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4 76.2 78.0 78.4 80.2 80.6 74.0 68.9	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1 76.2 78.7 79.3 79.9 80.1 74.6 69.1	80.3 81.2 82.0 84.4 83.5 83.6 84.9 82.0 80.4 73.7 75.5 76.8 78.9 79.9 79.7 80.5	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2 76.8 79.4 80.3 80.3 80.3 80.7	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8 82.1 78.5 74.0 76.0 77.1 80.0 80.3 80.3 80.3 69.3	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8 74.9 75.5 77.5 80.1 80.5 80.6 79.2 67.2	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2 75.3 75.9 77.9 79.5 80.4 80.4 80.6 68.2	81.2 80.2 81.1 82.1 84.6 83.5 84.8 82.0 82.0 80.3 73.8 75.3 76.6 79.0 79.9 80.0 80.4 73.2 69.5	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 76.0 77.9 80.3 80.4 77.3 68.6
Utilization percent) 1990 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	82.5 79.9 79.3 81.3 82.5 85.0 82.5 83.4 84.5 81.8 82.1 79.1 73.9 75.8 77.0	83.0 79.3 79.8 81.4 82.3 84.6 83.5 83.9 84.0 81.8 82.1 78.4 73.8 76.1 77.4	83.3 78.8 80.3 81.3 83.0 84.5 83.5 81.6 82.2 77.9 74.2 76.0 77.0 80.1 80.4 80.3 80.1	83.0 78.8 80.7 81.4 83.2 84.1 83.8 83.3 81.5 74.5 75.4 77.3 80.0 80.6 80.8 79.5	83.0 79.5 80.8 81.0 83.4 84.0 83.6 83.9 83.3 81.8 82.2 76.8 74.8 75.5 77.9	83.1 80.2 80.7 81.1 83.7 84.0 83.8 82.4 81.4 82.0 76.1 75.5 77.2 80.3 80.5 80.4 78.9	82.9 80.1 81.2 81.2 83.6 83.4 83.5 81.5 81.6 75.6 75.2 75.8 77.8	80.1 80.6 81.1 83.8 84.1 83.6 84.5 82.8 81.7 81.1 75.2 75.3 75.7 78.0 80.1 80.5 80.3 77.2	80.7 80.6 81.4 83.8 84.1 83.7 84.7 82.1 81.1 81.2 74.8 75.4 76.2 78.0 78.4 80.2 80.6 74.0	80.5 81.0 81.8 84.2 83.6 83.3 84.7 82.4 81.9 80.6 74.2 75.1 76.2 78.7	80.3 81.2 82.0 84.4 83.5 83.6 84.9 81.9 82.0 80.4 73.7 75.5 76.8 78.9 79.9 79.7 80.5 73.6	80.4 79.9 81.0 82.3 85.0 83.4 83.7 84.7 81.8 82.3 79.9 73.6 75.2 76.8 79.4 80.3 80.3 80.6 71.6	82.9 79.3 79.8 81.3 82.6 84.7 83.0 83.8 84.0 81.8 82.1 78.5 74.0 76.0 77.1 80.0 80.3 80.2 80.3	83.0 79.5 80.7 81.2 83.5 84.0 83.6 83.8 83.0 81.6 82.2 76.8 74.9 75.5 77.5	82.9 80.3 80.8 81.2 83.7 83.9 83.6 84.3 82.2 81.5 81.3 75.2 75.3 75.9 77.9	81.2 80.2 81.1 82.1 84.6 83.5 83.5 84.8 82.0 82.0 80.3 75.3 76.6 79.0 79.9 80.0 80.4 73.2	82.5 79.8 80.6 81.4 83.6 84.0 83.4 84.2 82.8 81.7 81.5 76.1 74.9 76.0 77.9 80.3 80.4 77.3

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

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annua
IP (percent																	
change) <sup>2</sup>																	
.990	1	1.4	.5	3	.2	.3	1	.3	.0	8	-1.1	8	4.3	2.9	1.1	-6.8	
1991	8	6	7	.3	.8	1.1	.2	.2	1.1	2	2	1	-8.8	1.9	7.2	1.5	-2.
1992	6 1.0	.9	1.0	.6 .5	.6	.3 1	.9	4	.0	.6 .8	.4	2 .5	.5	8.3 1.5	4.0 1.2	2.9	3.
1993 1994	.2	.1	1.3	.8	1 .7	.3	.3	1 .8	.6	1.0	.8	1.1	5.0	9.5	6.0	6.9 9.9	3.
00.5	2		2	2		_		1.0	0		0	2			2.2	4.0	_
995 996	.3 8	1 1.6	.3 2	2 1.1	.1	.5 1.1	6 .3	1.2	.9 .6	1 1	.0	.3	5.3 1.8	.6 9.9	3.2 8.0	4.0 5.5	5.
.997	.0	1.4	1.2	2	.9	.7	.5	1.6	.9	.6	1.1	.5	9.1	7.6	10.9	10.9	8.
998	.8	.1	1	.5	.6	7	5	2.5	4	1.0	.2	.5	6.0	2.4	3.3	7.5	6
1999	.3	.7	.0	.4	.9	3	.5	.7	3	1.5	.6	.7	4.7	4.5	3.7	9.0	5
000	.2	.3	.7	.6	2	.2	.0	6	.5	4	3	6	5.3	4.3	8	-2.9	4
2001	6	6	3	2	8	7	4	6	2	7	3	.3	-6.5	-5.5	-6.0	-4.3	-4
2002	.5	.0	.7	.1	.7	1.1	5	.4	.1	4	.5	5	3.2	5.9	3.1	5	1
2003 2004	.6 .0	.2 .7	.2 3	-1.0 .4	.1 .7	.4 8	.0 .8	3 .7	.7 1	1 1.1	1.0 1	2 .7	2.5 2.6	-2.3 2.9	1.4 3.8	3.7 5.6	1 2
2004	.0	.7	3	.4	.1	0	.0	.1		1.1	1	. /	2.0		3.0	5.0	2.
2005 2006	.8 .9	.8 1	5 1	.6	.4 5	.1	1 1	.3	-1.1 .1	1.5 4	.7	.1 1.6	6.5 4.1	2.0	3 .7	5.6 1.1	4.
2007	5	.6	.6	.8	2	.3	.2	5	.5	5	.4	.3	4.7	5.3	.8	.4	2
2008	4	4	4	-1.1	6	6	-1.1	-1.4	-3.4	7	-2.3	-3.3	-2.2	-8.2	-14.0	-21.6	-4
2009	-2.9	.0	-2.1	8	-1.2	3	1.2	1.0	.7	1	.9	.1	-23.3	-11.6	6.4	5.8	-13
2010	.9	.1	1.1	1.0	1.4	.0	.8	.0	.2	.1	.2	1.0	7.1	11.2	5.2	2.6	5
2011	.4	.2	.6	6	.2	.0	.8	.3	.4	.5	.0	1.4	6.0	.2	5.1	5.6	4
2012	1.0	.8	5	.6									9.8				
<b>IP</b> (2007=100)		2.1.2															
2010	83.9	84.0	84.9	85.8	87.0	87.0	87.6	87.6	87.8	87.9	88.0	88.9	84.3	86.6	87.7	88.2	86
2011 2012	89.2 93.8	89.4 94.5	90.0 94.1	89.5 94.6	89.7	89.7	90.4	90.7	91.1	91.5	91.5	92.8	89.6 94.1	89.6	90.7	92.0	90
Capacity (percent of 2007 output) 2010	123.1	122.8	122.5	122.3	122.0	121.7	121.5	121.3	121.1	120.9	120.8	120.6	122.8	122.0	121.3	120.8	121.
2011	120.6	120.5	120.5	120.5	120.5	120.5	120.6	120.6	120.7	120.8	120.9	121.0	120.5	120.5	120.6	120.9	120
2012	121.1	121.2	121.3	121.4									121.2				
Utilization																	
(percent)																	
1990	81.6	82.5	82.7	82.3	82.3	82.3	82.1	82.1	81.9	81.1	80.0	79.3	82.3	82.3	82.0	80.1	81
.991 .992	78.5 78.2	77.9 78.7	77.3 79.3	77.4 79.6	77.8 79.9	78.6 79.9	78.7 80.4	78.8 79.9	79.5 79.7	79.3 80.0	79.0 80.1	78.8 79.8	77.9 78.8	77.9 79.8	79.0 80.0	79.0 79.9	78 79
1992	80.4	80.4	80.1	80.4	80.2	80.0	80.4	79.9	80.2	80.8	81.0	81.2	80.3	80.2	80.0	81.0	80
994	81.2	81.1	82.0	82.4	82.8	82.8	82.8	83.2	83.2	83.7	84.0	84.6	81.5	82.7	83.1	84.1	82
995	84.6	84.1	84.0	83.5	83.2	83.3	82.4	83.0	83.3	82.8	82.5	82.3	84.2	83.3	82.9	82.5	83
996	81.3	82.2	81.6	82.0	82.2	82.7	82.5	82.6	82.7	82.1	82.3	82.6	81.7	82.3	82.6	82.3	82
997	82.1	82.8	83.3	82.6	82.9	82.9	82.8	83.5	83.7	83.6	83.9	83.6	82.8	82.8	83.3	83.7	83
998	83.7	83.1	82.4	82.2	82.1	80.9	80.0	81.6	80.8	81.1	80.8	80.8	83.0	81.7	80.8	80.9	8
999	80.6	80.8	80.4	80.3	80.7	80.1	80.1	80.3	79.7	80.6	80.7	80.9	80.6	80.4	80.1	80.7	80
000	80.8	80.6	80.8	81.0	80.5	80.3	80.0	79.2	79.3	78.7	78.2	77.4	80.7	80.6	79.5	78.1	79
001	76.7	76.0	75.5	75.1	74.3	73.7	73.2	72.7	72.4	71.8	71.5	71.6	76.1	74.4	72.8	71.6	73
002 003	71.9 73.7	71.8 73.9	72.3 74.0	72.3 73.3	72.8 73.4	73.6 73.7	73.3 73.8	73.5 73.6	73.6 74.1	73.3 74.1	73.6 74.9	73.2 74.8	72.0 73.9	72.9 73.5	73.5 73.8	73.4 74.6	72
004	74.8	75.4	75.2	75.6	76.1	75.5	76.1	76.6	76.5	77.3	77.1	77.6	75.1	75.7	76.4	77.3	70
005	78.1	78.6	78.1	78.2	78.3	78.3	78.0	78.1	77.1	78.1	78.6	78.5	78.3	78.2	77.7	78.4	78
006	79.1	78.8	78.6	79.0	78.5	78.6	78.4	78.5	78.4	78.0	77.8	78.8	78.8	78.7	78.5	78.2	78
007	78.3	78.5	78.8	79.2	78.8	78.8	78.8	78.2	78.5	78.0	78.2	78.4	78.5	78.9	78.5	78.2	78
008	78.0	77.6	77.4	76.5	76.2	75.8	75.1	74.1	71.7	71.4	69.9	67.7	77.7	76.2	73.6	69.7	74
009	65.9	66.0	64.8	64.5	63.9	63.8	64.8	65.6	66.2	66.4	67.2	67.4	65.6	64.1	65.5	67.0	65
2010	68.2	68.4	69.3	70.2	71.3	71.4	72.1	72.3	72.5	72.7	72.9	73.7	68.6	71.0	72.3	73.1	71
	740	74.2	74.7	74.3	74.4	74.4	75.0	75.2	75.5	75.8	75.7	76.7	74.3	74.4	75.2	76.1	75
2011 2012	74.0 77.5	78.0	77.6	77.9									77.7				

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 Industries<sup>1</sup>
Seasonally adjusted

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) <sup>2</sup>																	
1990	7	.9	.5	2	.1	.3	1	.2	.2	8	-1.3	8	2.2	2.5	1.3	-6.8	.3
1991 1992	4 8	8 .7	6 .8	.2 .6	1.0	1.0 1	.0 .8	.1 6	.9 .1	2 .6	2 .3	5 .0	-8.0 -1.9	2.0 6.2	5.3 1.8	.3 2.9	-2.0 1.9
1993	6	.3	1	.3	4	.2	.3	1	.4	.6	.3	.5	3.1	.3	1.4	5.1	2.5
1994	.4	.0	.9	.3	.4	.6	.0	.4	.0	.6	.4	.9	4.5	5.4	3.2	5.7	4.0
1995	.1	2	1	3	.1	.2	5	1.1	.1	5	.1	.1	2.9	-1.2	1.5	.2	2.5
1996	-1.0	1.3	3	.8	.5	.7	5	.4	.3	3	.8	.5	3	6.5	2.1	3.0	1.7
1997	1	.9	.5	3	.3	.2	.3	1.0	.7	.6	.6	.1	5.1	2.4	6.3	7.7	4.2
1998 1999	.2	.0	.0 1	.1 1	.6 .6	9 5	8 .3	2.0	7 4	.6 1.2	3 .2	.1	1.9	.7	3 1.1	2.3 5.5	3.1
2000 2001	3 7	.0 5	.1 3	.4 2	2 7	1 5	5 3	4 2	.4 4	5 5	2 5	5 1	.6 -5.9	1.5 -4.5	-3.0 -4.3	-2.7 -4.6	1.0 -4.0
2002	.7	1	.8	.4	.5	.9	4	.1	.0	4	.4	6	2.8	6.3	1.7	-1.0	.3
2003	.7	.2	3	9	1	1	.2	1	.6	2	.7	1	1.8	-4.6	.8	2.5	.2
2004	.2	.6	6	.5	.8	9	.7	.2	1	1.0	.2	.7	2.2	1.9	1.7	5.3	1.7
2005 2006	.4	.6 .0	1 .2	.0	.1 3	.3	3 .1	.0	-2.3 2	1.2	1.0	.6 1.0	5.2 3.6	1.0 1.8	-3.0 .9	2.0	2.5 1.4
2006	5	1.1	2	.4 .6	3 .0	.3 .1	.1	.0	2 .4	1 8	2	.0	3.3	3.7	1.0	.0 -1.1	1.4
2008	4	3	5	8	6	3	4	-1.7	-4.2	1.1	-1.0	-2.6	-2.2	-6.6	-12.5	-14.7	-4.2
2009	-2.2	6	-1.8	-1.0	-1.1	5	.9	1.1	.6	.2	.3	.4	-19.1	-12.2	4.7	5.3	-11.3
2010	1.0	.3	.6	.4	1.6	.2	.7	.2	.4	4	.2	1.0	7.3	8.2	6.8	2.0	5.0
2011 2012	.0	2 .5	.9 6	5 1.0	.3	.1	1.0	.2	.3	.7	.2	.8	4.1 5.8	1.2	5.7	5.5	4.0
	./	.3	0	1.0									3.0				
IP (2007=100)	06.0	07.0	97.5	07.0	90.2	90.4	00.1	00.2	00.6	00.2	00.5	01.5	07.1	00.0	00.2	00.0	90.2
2010 2011	86.8 91.5	87.0 91.3	87.5 92.2	87.8 91.7	89.2 92.0	89.4 92.1	90.1 93.0	90.2 93.2	90.6 93.5	90.3 94.1	90.5 94.3	91.5 95.0	87.1 91.7	88.8 91.9	90.3 93.2	90.8 94.5	89.3 92.8
2012	95.7	96.2	95.6	96.6	72.0	72.1	75.0	75.2	75.5	74.1	74.3	75.0	95.8	)1.)	75.2	74.5	72.0
Capacity (percent of 2007 output)																	
2010	122.7	122.4	122.1	121.8	121.5	121.3	121.1	121.0 121.0	120.9	120.8	120.8 121.2	120.7	122.4	121.6	121.0 121.0	120.8	121.4
2011 2012	120.7 121.4	120.7 121.5	120.8 121.5	120.8 121.6	120.9	120.9	121.0	121.0	121.1	121.2	121.2	121.3	120.7 121.5	120.9	121.0	121.2	121.0
Utilization																	
(percent)																	
1990	82.7	83.3	83.6	83.3	83.3	83.4	83.2	83.3	83.3	82.5	81.4	80.7	83.2	83.3	83.3	81.5	82.8
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 81.1	80.2 80.6	80.9 80.6	80.6 81.0	80.4 81.2	79.9 81.1	79.6 79.7	79.7 80.6	80.5 80.8	80.3 81.1	80.0 80.5
1993	81.4	81.6	81.4	81.6	81.1	81.2	81.4	81.2	81.4	81.9	82.1	82.4	81.5	81.3	81.3	82.1	81.6
1994	82.6	82.5	83.1	83.2	83.4	83.8	83.6	83.8	83.7	84.1	84.3	84.9	82.7	83.5	83.7	84.5	83.6
1995	84.9	84.6	84.4	84.0	83.9	83.9	83.3	84.0	84.0	83.4	83.4	83.3	84.6	83.9	83.8	83.4	83.9
1996	82.4	83.4	82.9	83.4	83.7	84.1	83.6	83.7	83.8	83.4	83.8	84.0	82.9	83.8	83.7	83.7	83.5
1997	83.7	84.2	84.4	83.9	83.9	83.8	83.8	84.3	84.6	84.7	85.0	84.7	84.1	83.8	84.2	84.8	84.2
1998 1999	84.6 81.9	84.2 81.8	83.9 81.5	83.7 81.2	83.9 81.5	82.8 81.0	81.9 81.1	83.3 81.2	82.4 80.7	82.7 81.6	82.1 81.6	82.0 81.9	84.2	83.5 81.3	82.5 81.0	82.2 81.7	83.1 81.4
2000 2001	81.6 78.7	81.5 78.2	81.4 77.9	81.7 77.7	81.4 77.1	81.3 76.6	80.8 76.3	80.4 76.1	80.6 75.7	80.1 75.2	79.8 74.8	79.4 74.6	81.5 78.3	81.5 77.1	80.6 76.0	79.8 74.9	80.8 76.6
2002	75.1	75.0	75.5	75.8	76.1	76.8	76.5	76.6	76.6	76.4	76.7	76.3	75.2	76.2	76.6	76.5	76.1
2003	76.9	77.1	76.9	76.3	76.2	76.2	76.4	76.3	76.8	76.7	77.3	77.2	77.0	76.2	76.5	77.1	76.7
2004	77.4	77.9	77.4	77.8	78.4	77.7	78.3	78.5	78.4	79.2	79.3	79.9	77.6	78.0	78.4	79.5	78.3
2005	80.2	80.7	80.6	80.5	80.6	80.8	80.5	80.5	78.6	79.4	80.1	80.5	80.5	80.6	79.9	80.0	80.3
2006	80.5	80.4 80.5	80.4	80.6	80.3	80.4	80.3	80.3	80.0	79.8	79.5	80.2	80.4	80.4	80.2	79.8	80.2
2007 2008	79.7 80.6	80.5	80.3 80.1	80.7 79.4	80.7 79.0	80.7 78.8	80.8 78.4	80.7 77.0	81.1 73.7	80.5 74.4	80.8 73.6	80.9 71.6	80.2 80.4	80.7 79.1	80.9 76.3	80.7 73.2	80.6 77.2
2009	69.9	69.5	68.3	67.6	66.9	66.6	67.3	68.2	68.7	69.0	69.4	69.9	69.2	67.0	68.1	69.4	68.4
2010	70.7	71.1	71.7	72.1	73.4	73.7	74.4	74.6	75.0	74.7	75.0	75.8	71.2	73.1	74.6	75.2	73.5
2011	75.8	75.7	76.3	75.9	76.1	76.2	76.9	77.0	77.2	77.7	77.8	78.3	75.9	76.1	77.0	77.9	76.7
2012	78.8	79.2	78.7	79.4									78.9				
									and relate								

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

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

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
change) <sup>3</sup>																	
1990	3	1.5	.4	3	.1	.2	2	.2	1	9	-1.2	8	3.6	2.3	.6	-7.6	.0
1991	8	8	8	.3	.7	1.1	.3	.2	1.1	2	3	3	-9.6	1.3	7.0	1.0	-2.6
1992	9	.9	.9	.4	.5	.1	.8	5	1	.5	.3	2	-1.2	7.1	2.7	1.4	2.6
1993	1.1	.1	3	.5	1	2	.2	2	.5	.7	.3	.5	4.0	.7	.3	5.7	2.5
1994	.1	.1	1.2	.5	.5	.2	.2	.6	.1	.8	.5	.9	4.2	7.1	3.7	7.0	4.4
1995	.1	3	1	4	1	.3	8	.9	.5	4	1	.0	2.8	-2.3	.4	.5	2.5
1996 1997	-1.1	1.3	5 .9	1.0	.5 .5	.8 .4	1 .2	.3 1.3	.6	4	.7	.7	-1.8 6.2	7.3 2.9	4.0 6.9	2.7	1.5
1998	2 .5	1.0 1	3	.2	.5 .5	.4 -1.1	.2 9	2.4	8	.5 .7	.o 1	.2 .2	3.2	2	5	8.2 4.0	4.9 3.4
1999	1	.4	4	1	.7	7	.0	.6	4	1.3	.3	.4	.8	.3	.2	6.7	1.4
2000	3	2	.3	.4	6	.0	4	8	.4	5	6	8	.4	.6	-3.8	-4.8	.7
2001	6	5	3	1	7	5	1	6	2	7	2	.2	-7.0	-4.5	-4.6	-4.3	-4.8
2002	.6	2	.8	.1	.7	1.1	5	.3	.0	5	.4	7	3.4	5.6	2.4	-1.3	.4
2003	.5	.0	.1	-1.1	1	.3	1	4	.7	2	.9	3	.8	-3.9	.1	2.7	.0
2004	1	.8	3	.5	.8	9	.8	.6	3	1.1	1	.6	1.9	3.1	3.2	5.0	2.0
2005	.7	.7	5	.1	.3	.1	3	.1	-1.4	1.4	.7	.0	5.7	1.1	-2.1	4.2	3.1
2006	.9	2	2	.6	6	.2	2	.3	.0	5	1	1.6	3.6	.0	1	.4	1.5
2007	5	.5	.4	.6	2	.4	.2	6	.4	7	.2	.2	3.8	4.2	.9	-1.8	1.8
2008	5 -2.9	6	6 -2.2	-1.2 9	6 -1.3	6	-1.1	-1.4	-3.5 .7	4	-2.0 .9	-3.1	-3.7	-9.4 -12.8	-14.1	-20.4	-5.8
2009	-2.9	.0	-2.2	9	-1.3	4	1.2	1.1	./	1	.9	.1	-22.9	-12.8	6.0	5.4	-13.8
2010	.9	.0	1.0	1.0	1.4	.0	.8	.0	.2	.1	.1	.8	6.3	10.8	5.4	2.3	5.3
2011	.4	.3	.7	7	.2	.0	.9	.2	.5	.7	1	1.5	5.7	.1	5.2	6.3	4.2
2012	1.1	.9	5	.5									10.4				
<b>IP</b> (2007=100)																	
2010	82.9	82.9	83.7	84.5	85.7	85.7	86.4	86.4	86.6	86.6	86.7	87.5	83.2	85.3	86.4	86.9	85.5
2011	87.8	88.0	88.7	88.1	88.2	88.3	89.0	89.2	89.7	90.3	90.2	91.6	88.2	88.2	89.3	90.7	89.1
2012	92.6	93.4	92.9	93.4									93.0				
Capacity																	
(percent of																	
2007 output)																	
2010	122.1	121.8	121.5	121.2	120.9	120.6	120.4	120.2	120.0	119.8	119.6	119.5	121.8	120.9	120.2	119.7	120.6
2011	119.4	119.3	119.2	119.2	119.1	119.1	119.1	119.1	119.1	119.1	119.2	119.2	119.3	119.1	119.1	119.2	119.2
2012	119.3	119.3	119.4	119.5									119.3				
Utilization																	
(percent)																	
1000	01.0	82.0	02.1	92.6	92.6	82.6	92.4	92.5	92.2	01 /	90.2	70.5	92.6	92.6	92.4	90.4	92.0
1990	81.8	82.9 78.1	83.1	82.6	82.6	82.6 78.7	82.4 78.8	82.5 78.9	82.3 79.6	81.4	80.3	79.5 78.7	82.6 78.1	82.6 78.1	82.4	80.4	82.0 78.6
1991	78.8	78.1	77.4	77.5	77.9	78.7	78.8	78.9	79.6	79.4	79.0	78.7	78.1	78.1	79.1	79.0	78.6
1991 1992	78.8 77.9	78.1 78.5	77.4 79.2	77.5 79.4	77.9 79.7	78.7 79.8	78.8 80.3	78.9 79.8	79.6 79.6	79.4 79.9	79.0 80.0	78.7 79.8	78.1 78.5	78.1 79.6	79.1 79.9	79.0 79.9	78.6 79.5
1991	78.8	78.1	77.4	77.5	77.9	78.7	78.8	78.9	79.6	79.4	79.0	78.7	78.1	78.1	79.1	79.0	78.6
1991 1992 1993 1994	78.8 77.9 80.5 81.2	78.1 78.5 80.5 81.2	77.4 79.2 80.2 82.1	77.5 79.4 80.5 82.4	77.9 79.7 80.3 82.7	78.7 79.8 80.1 82.7	78.8 80.3 80.2 82.8	78.9 79.8 79.9 83.1	79.6 79.6 80.2 83.1	79.4 79.9 80.7 83.6	79.0 80.0 80.9 83.9	78.7 79.8 81.2 84.5	78.1 78.5 80.4 81.5	78.1 79.6 80.3 82.6	79.1 79.9 80.1 83.0	79.0 79.9 81.0 84.0	78.6 79.5 80.4 82.8
1991 1992 1993 1994	78.8 77.9 80.5 81.2 84.5	78.1 78.5 80.5 81.2 84.0	77.4 79.2 80.2 82.1 83.8	77.5 79.4 80.5 82.4 83.3	77.9 79.7 80.3 82.7	78.7 79.8 80.1 82.7 83.1	78.8 80.3 80.2 82.8	78.9 79.8 79.9 83.1 82.8	79.6 79.6 80.2 83.1	79.4 79.9 80.7 83.6 82.5	79.0 80.0 80.9 83.9 82.2	78.7 79.8 81.2 84.5	78.1 78.5 80.4 81.5	78.1 79.6 80.3 82.6	79.1 79.9 80.1 83.0 82.7	79.0 79.9 81.0 84.0	78.6 79.5 80.4 82.8
1991 1992 1993 1994 1995 1996	78.8 77.9 80.5 81.2 84.5 81.0	78.1 78.5 80.5 81.2	77.4 79.2 80.2 82.1 83.8 81.3	77.5 79.4 80.5 82.4 83.3 82.0	77.9 79.7 80.3 82.7 83.0 82.2	78.7 79.8 80.1 82.7 83.1 82.7	78.8 80.3 80.2 82.8 82.2 82.5	78.9 79.8 79.9 83.1 82.8 82.6	79.6 79.6 80.2 83.1 83.0 82.7	79.4 79.9 80.7 83.6 82.5 82.1	79.0 80.0 80.9 83.9 82.2 82.5	78.7 79.8 81.2 84.5 82.1 82.8	78.1 78.5 80.4 81.5 84.1 81.4	78.1 79.6 80.3 82.6 83.1 82.3	79.1 79.9 80.1 83.0 82.7 82.6	79.0 79.9 81.0 84.0 82.3 82.5	78.6 79.5 80.4 82.8 83.0 82.2
1991 1992 1993 1994 1995 1996 1997	78.8 77.9 80.5 81.2 84.5 81.0 82.4	78.1 78.5 80.5 81.2 84.0 81.9 83.0	77.4 79.2 80.2 82.1 83.8 81.3 83.5	77.5 79.4 80.5 82.4 83.3 82.0 82.6	77.9 79.7 80.3 82.7 83.0 82.2 82.7	78.7 79.8 80.1 82.7 83.1 82.7 82.7	78.8 80.3 80.2 82.8 82.2 82.5 82.5	78.9 79.8 79.9 83.1 82.8 82.6 83.2	79.6 79.6 80.2 83.1 83.0 82.7 83.4	79.4 79.9 80.7 83.6 82.5 82.1 83.5	79.0 80.0 80.9 83.9 82.2 82.5 83.8	78.7 79.8 81.2 84.5 82.1 82.8 83.6	78.1 78.5 80.4 81.5 84.1 81.4 83.0	78.1 79.6 80.3 82.6 83.1 82.3 82.7	79.1 79.9 80.1 83.0 82.7 82.6 83.1	79.0 79.9 81.0 84.0 82.3 82.5 83.6	78.6 79.5 80.4 82.8 83.0 82.2 83.1
1991 1992 1993 1994 1995 1996	78.8 77.9 80.5 81.2 84.5 81.0	78.1 78.5 80.5 81.2 84.0 81.9	77.4 79.2 80.2 82.1 83.8 81.3	77.5 79.4 80.5 82.4 83.3 82.0	77.9 79.7 80.3 82.7 83.0 82.2	78.7 79.8 80.1 82.7 83.1 82.7	78.8 80.3 80.2 82.8 82.2 82.5	78.9 79.8 79.9 83.1 82.8 82.6	79.6 79.6 80.2 83.1 83.0 82.7	79.4 79.9 80.7 83.6 82.5 82.1	79.0 80.0 80.9 83.9 82.2 82.5	78.7 79.8 81.2 84.5 82.1 82.8	78.1 78.5 80.4 81.5 84.1 81.4	78.1 79.6 80.3 82.6 83.1 82.3	79.1 79.9 80.1 83.0 82.7 82.6	79.0 79.9 81.0 84.0 82.3 82.5	78.6 79.5 80.4 82.8 83.0 82.2
1991 1992 1993 1994 1995 1996 1997 1998	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5	78.7 79.8 80.1 82.7 83.1 82.7 82.7 81.3	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0
1991 1992 1993 1994 1995 1996 1997 1998 1999	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3	78.7 79.8 80.1 82.7 83.1 82.7 82.7 81.3 79.5	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8
1991 1992 1993 1994 1995 1996 1997 1998 1999	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3	78.7 79.8 80.1 82.7 83.1 82.7 82.7 81.3 79.5	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3	78.7 79.8 80.1 82.7 83.1 82.7 82.7 81.3 79.5	78.8 80.3 80.2 82.8 82.2 82.5 82.5 82.5 80.3 79.4 78.9 74.0	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3 76.6 72.7	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4 79.9 75.6	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 73.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2	78.7 79.8 80.1 82.7 83.1 82.7 82.7 81.3 79.5 79.3 74.1 75.0	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4 78.9 74.0 74.6	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3 76.6 72.7 74.4	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4 79.9 75.6 73.3	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6 80.0 76.0 73.1 74.8 75.2	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0 74.9 75.8	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 75.6 75.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7 74.2 76.0	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2 76.6	78.7 79.8 80.1 82.7 83.1 82.7 82.7 81.3 79.5 79.3 74.1 75.0 74.4 76.0	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4 78.9 74.0 74.6 74.4 76.6	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8 74.1 77.1	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9 74.7 76.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6 74.6 77.7	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9 75.3 77.6	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.3 76.6 72.7 74.4 75.2 78.1	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4 79.9 75.6 73.3 74.9 75.5	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6 74.3 74.3 76.2	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8 74.4 76.8	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6 75.0 77.8	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1 74.2 74.6 76.6
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6 80.0 76.0 73.1 74.8 75.2 78.6 79.1	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0 74.9 75.8	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 73.6 75.0 75.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7 74.2 76.0	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2 76.6	78.7 79.8 80.1 82.7 83.1 82.7 82.7 81.3 79.5 79.3 74.1 75.0 74.4 76.0	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4 78.9 74.0 74.6 74.4 76.6	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8 74.1 77.1	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9 74.7 76.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6 77.7 78.2 77.6	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9 75.3 77.6	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3 76.6 72.7 74.4 75.2 78.1	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4 79.9 75.6 73.3 74.9 75.5	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6 74.3 76.2 78.7	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8 74.4 76.8	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6 75.0 77.8	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1 74.2 74.6 76.6
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6 80.0 76.0 73.1 74.8 75.2 78.6 79.1 78.1	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0 74.9 75.8	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 73.6 75.0 75.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7 74.2 76.0 78.6 78.9 79.0	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2 76.6 78.8 78.3 78.8	78.7 79.8 80.1 82.7 83.1 82.7 81.3 79.5 79.3 74.1 75.0 74.4 76.0	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4 74.0 74.6 74.4 76.6	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8 74.1 77.1	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9 74.7 76.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6 74.6 77.7	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9 75.3 77.6	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3 76.6 72.7 74.4 75.2 78.1 78.6 78.6 78.5	78.1 78.5 80.4 81.5 84.1 83.0 83.2 80.4 79.9 75.6 73.3 74.9 75.5 78.7 78.8	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6 74.3 74.3 76.2 78.7 78.5 78.9	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8 74.4 76.8	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6 75.0 77.8	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1 74.2 74.6 76.6
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6 80.0 76.0 73.1 74.8 75.2 78.6 79.1 78.1	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0 74.9 75.8 79.1 78.8 78.4 77.6	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 73.6 75.0 75.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7 74.2 76.0 78.6 78.9 79.0	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2 74.2 76.6 78.8 78.8 75.8	78.7 79.8 80.1 82.7 83.1 82.7 81.3 79.5 79.3 74.1 75.0 74.4 76.0 78.8 78.3 79.1	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4 78.9 74.0 74.6 74.4 76.6	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8 74.1 77.1	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9 74.7 76.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6 74.6 77.7	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9 75.3 77.6	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3 76.6 72.7 74.4 75.2 78.1 78.6 78.6 78.5	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4 79.9 75.6 73.3 74.9 75.5 78.7 78.8 78.4	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6 74.3 74.3 76.2 78.7 78.5 78.9	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8 74.4 76.8 78.1 78.1 78.9	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6 75.0 77.8 78.5 77.9 78.4 69.4	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1 74.2 74.6 76.6
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6 80.0 76.0 73.1 74.8 75.2 78.6 79.1 78.1	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0 74.9 75.8	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 73.6 75.0 75.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7 74.2 76.0 78.6 78.9 79.0	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2 76.6 78.8 78.3 78.8	78.7 79.8 80.1 82.7 83.1 82.7 81.3 79.5 79.3 74.1 75.0 74.4 76.0	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4 74.0 74.6 74.4 76.6	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8 74.1 77.1	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9 74.7 76.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6 74.6 77.7	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9 75.3 77.6	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3 76.6 72.7 74.4 75.2 78.1 78.6 78.6 78.5	78.1 78.5 80.4 81.5 84.1 83.0 83.2 80.4 79.9 75.6 73.3 74.9 75.5 78.7 78.8	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6 74.3 74.3 76.2 78.7 78.5 78.9	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8 74.4 76.8	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6 75.0 77.8	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1 74.2 74.6 76.6
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6 80.0 76.0 73.1 74.8 75.2 78.6 79.1 78.1 78.1 65.7	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0 74.9 75.8 79.1 78.8 78.4 77.6 65.9 68.0	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 73.6 75.0 75.6 78.6 78.5 78.6 77.2 64.6 68.9	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7 74.2 76.0 78.6 78.9 79.0 76.2 64.1 69.8	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2 76.6 78.8 78.8 75.8 63.5	78.7 79.8 80.1 82.7 83.1 82.7 81.3 79.5 79.3 74.1 75.0 74.4 76.0 78.8 78.3 79.1 75.5 71.1	78.8 80.3 80.2 82.8 82.2 82.5 82.5 80.3 79.4 74.0 74.6 74.4 76.6 78.5 78.1 79.2 74.6 64.4 71.8	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8 74.1 77.1 78.4 78.2 78.7 73.6 65.3	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9 74.7 76.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6 74.6 77.7	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9 75.3 77.6	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.8 80.3 76.6 72.7 74.4 75.2 78.1 78.6 78.6 78.5	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4 79.9 75.6 73.3 74.9 75.5 78.7 78.8 78.4 77.6 65.4 68.3	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6 74.3 76.2 78.7 78.5 78.9 75.8 63.7	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8 74.4 76.8 78.1 78.9 73.1 65.2	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6 75.0 77.8 78.5 77.9 78.4 69.4	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1 74.2 74.6 76.6 78.5 78.4 78.7
1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009	78.8 77.9 80.5 81.2 84.5 81.0 82.4 83.7 80.6 80.0 76.0 73.1 74.8 75.2 78.6 79.1 78.1 65.7	78.1 78.5 80.5 81.2 84.0 81.9 83.0 83.2 80.7 79.7 75.6 73.0 74.9 75.8 79.1 78.8 78.4 77.6 65.9	77.4 79.2 80.2 82.1 83.8 81.3 83.5 82.6 80.1 79.8 75.3 75.6 75.6 78.6 78.5 78.6 77.2 64.6	77.5 79.4 80.5 82.4 83.3 82.0 82.6 82.5 79.9 80.0 75.1 73.7 74.2 76.0 78.6 78.9 79.0 6.2 64.1	77.9 79.7 80.3 82.7 83.0 82.2 82.7 82.5 80.3 79.4 74.5 74.2 76.6 78.8 78.8 75.8 63.5	78.7 79.8 80.1 82.7 83.1 82.7 81.3 79.5 79.3 74.1 75.0 74.4 76.0 78.8 78.3 79.1 75.4 63.5	78.8 80.3 80.2 82.8 82.5 82.5 82.5 80.3 79.4 74.0 74.6 74.4 76.6 78.5 78.1 79.2 74.6 64.4	78.9 79.8 79.9 83.1 82.8 82.6 83.2 81.9 79.7 78.2 73.5 74.8 74.1 77.1 78.4 78.2 78.7 73.6 65.3	79.6 79.6 80.2 83.1 83.0 82.7 83.4 81.0 79.2 78.4 73.3 74.9 74.7 76.9 77.3 78.1 78.9 71.2 65.9	79.4 79.9 80.7 83.6 82.5 82.1 83.5 81.3 80.1 77.9 72.8 74.6 74.6 77.7 78.2 77.6 78.2 77.6 78.9 66.1	79.0 80.0 80.9 83.9 82.2 82.5 83.8 80.9 80.2 77.3 72.6 74.9 75.3 77.6	78.7 79.8 81.2 84.5 82.1 82.8 83.6 80.3 76.6 72.7 74.4 75.2 78.1 78.6 78.6 78.6 67.1	78.1 78.5 80.4 81.5 84.1 81.4 83.0 83.2 80.4 79.9 75.6 73.3 74.9 75.5 78.7 78.8 78.4 77.6 65.4	78.1 79.6 80.3 82.6 83.1 82.3 82.7 82.1 79.9 79.6 74.6 74.3 74.3 76.2 78.7 78.5 78.5 78.9	79.1 79.9 80.1 83.0 82.7 82.6 83.1 81.0 79.4 78.5 73.6 74.8 74.4 76.8 78.1 78.1 78.1 78.1 78.1 78.1	79.0 79.9 81.0 84.0 82.3 82.5 83.6 81.0 80.2 77.3 72.7 74.6 75.0 77.8 78.5 77.9 78.4 66.7	78.6 79.5 80.4 82.8 83.0 82.2 83.1 81.8 80.0 78.8 74.1 74.2 74.6 76.6 78.5 78.4 78.7 74.0 65.2

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

The Industrial Production and Capacity Utilization statistical release, which is published around the middle of the month, reports measures of output, capacity, and capacity utilization in manufacturing, mining, and the electric and gas utilities industries. More detailed descriptions of industrial production and capacity utilization are available on the Board's website at www.federalreserve.gov/releases/G17. In addition, files containing data shown in the release, more detailed series that were published in the G.17 prior to December 2000, and historical data are available from the Data Download Program on the Board's website. Instructions for searching for and downloading specific series are provided as well.

### INDUSTRIAL PRODUCTION

Coverage. The industrial production (IP) index measures the real output of the manufacturing, mining, and electric and gas utilities industries; the reference period for the index is 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 2007 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).

Source data. On a monthly basis, the individual indexes of industrial production are constructed from two main types of source data: (1) output measured in physical units and (2) data on inputs to the production process, from which output is inferred. Data on physical products, such as tons of steel or barrels of oil, are obtained from private trade associations and from government agencies; data of this type are used to estimate monthly IP wherever possible and appropriate. Production indexes for a few industries are derived by dividing estimated nominal output (calculated using unit production 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.

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 value added divided by the average annual IP index.

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

The IP proportions (typically shown in the first column of the relevant tables in the G.17 release) are estimates of the industries' relative contributions to overall growth in the following year. For example, the relative importance weight of the motor vehicles and parts industry is about 4 percent. If output in this industry increased 10 percent in a month, then this gain would boost growth in total IP by 4/10 percentage point  $(0.04 \times 10\% = 0.4\%)$ . 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).

**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 67 percent of the source data (in value-added terms) are available; the fraction of available source data increases to 81 percent for estimates in the second month that the estimate is published, 93 percent in the third month, 96 percent in the fourth month, 99 percent in the fifth month, and 99 percent in the sixth month. Data availability by data type in early 2011 is summarized in the table below:

**Availability of Monthly IP Data in Publication Window** (Percent of value added in 2011)

	Mon	Month of estimate								
Type of data	1st	2nd	3rd	4th	5th	6th				
Physical product	27	41	53	55	58	58				
Production-worker hours	41	41	41	41	41	41				
IP data received	67	81	93	96	99	99				
IP data estimated	33	19	7	4	1	1				

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 (27 percent out of a total of 58 percent). Of the 27 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 a quarter.

**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 2012; for other series, the factors were estimated with data through at least December 2011. 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 0.27 percent during the 1987–2010 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 1987-2010 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 1972–2011 period, the average total industry utilization rate is 80.3 percent; for manufacturing, the average factory operating rate has been 78.8 percent. Industrial plants usually operate at capacity utilization rates that are well below 100 percent: none of the broad aggregates has ever reached 100 percent. For total industry and total manufacturing, utilization rates have exceeded 90 percent only in wartime. The highs and lows in capacity utilization 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 March 30, 2012 is available on the Board's website (www.federal reserve.gov/releases/g17/revisions/Current/DefaultRev.htm). 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, August 2009) or in an on-line staff study (www.federalreserve.gov/releases/g17/articles/rev2010/industrial10.pdf).

### Release Schedule

At 9:15 a.m. on

**2012**: January 18, February 15, March 16, April 17, May 16, June 15, July 17, August 15, September 14, October 16, November 16, and December 14.