FEDERAL RESERVE statistical release



For release at 9:15 a.m. (EST)

February 16, 2011

G.17 (419)

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION

Industrial production decreased 0.1 percent in January 2011 after having risen 1.2 percent in December. In the manufacturing sector, output increased 0.3 percent in January after an upwardly revised gain of 0.9 percent in December. Excluding motor vehicles and parts, factory production rose 0.1 percent in January. The output of

(over)

INDUSTRIAL PRODUCTION AND CAPACITY UTILIZATION: SUMMARY Seasonally adjusted

			2007=	100					F	Percent c	hange		
	2010					2011	2010					2011	Jan. '10 to
Industrial production	Aug."	Sept. ^r	Oct. ^r	Nov. ^r	Dec. ^r	Jan. ^p	Aug."	Sept. ^r	Oct."	Nov."	Dec. ^r	Jan. ^p	Jan. '11
Total index	93.6	93.9	93.8	94.1	95.2	95.1	.1	.3	.0	.3	1.2	1	5.2
Previous estimates	93.7	94.0	93.8	94.1	94.9		.2	.3	1	.3	.8		
Major market groups													
Final Products	95.4	95.4	95.6	95.5	96.4	96.8	1	.0	.2	1	1.0	.4	4.7
Consumer goods	95.3	95.1	94.9	94.7	95.7	95.8	3	2	2	3	1.0	.1	2.2
Business equipment	94.6	95.2	96.4	96.8	97.8	98.7	.3	.6	1.3	.3	1.0	.9	11.4
Nonindustrial supplies	85.4	85.2	84.9	85.7	86.2	86.0	.0	1	4	1.0	.6	3	3.1
Construction	79.1	79.0	79.4	80.4	80.3	80.2	.3	2	.4	1.3	.0	2	7.2
Materials	94.8	95.5	95.4	95.8	97.2	96.9	.4	.8	2	.4	1.5	4	6.2
Major industry groups													
Manufacturing (see note below)	90.8	90.9	91.3	91.6	92.3	92.6	.0	.1	.4	.3	.9	.3	5.5
Previous estimates	90.9	91.0	91.4	91.6	92.0		.1	.1	.4	.3	.4		
Mining	103.0	104.2	104.9	103.9	104.4	103.7	1.9	1.2	.7	-1.0	.5	7	7.5
Utilities	101.4	101.9	97.7	99.7	103.8	102.2	-1.2	.5	-4.1	2.1	4.1	-1.6	.1
													Capacity

					Perce	nt of cap	acity						growth
	Average	1988-	1990-	1994-	2008-								
	1972-	89	91	95	09	2010	2010					2011	Jan. '10 to
Capacity utilization	2010	high	low	high	low	Jan.	Aug."	Sept. ^r	Oct. ^r	Nov. ^r	Dec. ^r	Jan. ^p	Jan. '11
Total industry Previous estimates	80.5	85.2	78.7	85.1	68.2	72.3	75.0 75.1	75.2 75.3	75.2 75.2	75.4 75.4	76.2 76.0	76.1	.0
Manufacturing (see note below) Previous estimates	79.1	85.6	77.2	84.6	65.4	69.8	72.3 72.4	72.4 72.5	72.7 72.8	72.9 72.9	73.5 73.2	73.7	.0
Mining	87.4	86.4	83.6	88.9	79.6	82.2	87.9	88.9	89.5	88.5	88.8	88.1	.3
Utilities	86.5	92.9	84.3	93.3	77.6	82.4	81.2	81.5	78.1	79.6	82.8	81.2	1.5
Stage-of-process groups													
Crude	86.4	87.8	84.2	90.0	78.3	82.6	87.0	88.2	88.6	88.3	89.4	88.6	5
Primary and semifinished	81.3	86.6	77.9	87.9	65.7	69.7	72.0	72.0	71.3	72.3	73.5	73.2	4
Finished	77.4	83.4	77.3	80.5	67.5	72.0	74.0	74.1	74.6	74.1	74.4	74.7	1.2

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. utilities fell 1.6 percent in January, as temperatures moved closer to normal after unseasonably cold weather boosted the demand for heating in December; the output of utilities advanced 4.1 percent in that month. In January, the output of mines declined 0.7 percent. At 95.1 percent of its 2007 average, total industrial production in January was 5.2 percent above its level of a year earlier. The capacity utilization rate for total industry edged down to 76.1 percent, a rate 4.4 percentage points below its average from 1972 to 2010.

Market Groups

The production of consumer goods increased 0.1 percent in January. The index for consumer durables advanced 1.4 percent, and the index for consumer nondurables declined 0.3 percent. Within durables, the production of automotive products rose 3.0 percent and the output of miscellaneous consumer durables gained 0.6 percent, but the index for home electronics decreased 0.8 percent and the index for appliances, furniture, and carpeting fell 1.0 percent. Among consumer nondurables, the output of non-energy goods rose 0.2 percent, as solid gains in clothing, chemical products, and paper products were partly offset by a decline in the production of foods and tobacco products. The output of consumer energy products fell 2.0 percent in January after having risen 5.4 percent in December. The decline in energy production in January reflected drops both in the production of fuels and in residential sales by electric and natural gas utilities.

The output of business equipment rose 0.9 percent in January, and all of its major component indexes increased: Transit equipment advanced 1.2 percent, information processing equipment increased 0.6 percent, and industrial and other equipment gained 1.0 percent. The output of business equipment has risen in each of the past 11 months and in January stood 11.4 percent above its level 12 months earlier.

The production of defense and space equipment moved up 1.2 percent in January after having declined, on balance, over the previous four months.

Within nonindustrial supplies, the output of construction supplies fell 0.2 percent in January, but it was 7.2 percent above its year-earlier level. The production of business supplies declined 0.3 percent; a decrease in the output of commercial energy products more than accounted for the loss.

The production of materials fell 0.4 percent in January after having risen 1.5 percent in December. A decline of 0.6 percent in nondurable materials and a decrease of 1.0 percent in energy materials were partially offset by an increase of 0.5 percent in durable materials. The gains in durable materials were widespread across its major components. Among nondurables, the index for chemical materials, which jumped 3.2 percent in December, fell 0.9 percent in January, and the indexes for textile materials and paper materials each recorded smaller declines.

Industry Groups

Manufacturing output rose 0.3 percent in January after having increased 0.9 percent in December; the level of output in January was 5.5 percent above its year-earlier level. Capacity utilization for manufacturing was 73.7 percent, a rate 5.4 percentage points below its average for the period from 1972 to 2010.

The output of durable goods moved up 0.6 percent in January. A large gain was recorded in the index for motor vehicles and parts; smaller increases were recorded for many other industries, including fabricated metal products, machinery, computer and electronic products, aerospace and miscellaneous transportation equipment, furniture and related products, and miscellaneous manufacturing. Output decreased for wood products; nonmetallic mineral products; primary metals; and electrical equipment, appliances, and components.

Nondurable manufacturing declined 0.1 percent in January after having advanced 1.0 percent in December. The decline in production in January reflected decreases for food, beverage, and tobacco products; textile and product mills; printing and support; and petroleum and coal products. The production of apparel and leather products moved up more than 1 percent, and the output indexes for paper, for chemicals, and for plastics and rubber products recorded smaller increases. The index for non-NAICS manufacturing industries (publishing and logging) rose 0.3 percent.

In January, mining output fell 0.7 percent, and capacity utilization declined to 88.1 percent, a rate 0.7 percentage point above its 1972–2010 average. After a sizable increase in December, the output of utilities dropped 1.6 percent in January, as production declined in both electric and natural gas utilities. The utilization rate for utilities fell to 81.2 percent.

Capacity utilization rates in January at industries grouped by stage of process were as follows: At the crude stage, utilization fell 0.8 percentage point to 88.6 percent, a rate 2.2 percentage points above its 1972–2010 average; at the primary and semifinished stages, utilization declined 0.3 percentage point to 73.2 percent, a rate 8.1 percentage points below its long-run average; and at the finished stage, utilization increased 0.3 percentage point to 74.7 percent, a rate 2.7 percentage points below its long-run average.

Note: Preliminary Estimates of Industrial Capacity

The data in this release include preliminary estimates of industrial capacity for 2011. Measured fourth quarter to fourth quarter, total industrial capacity is projected to rise 1.2 percent this year after having declined 0.3 percent in 2010. Manufacturing capacity is estimated to increase 0.7 percent in 2011 following decreases of 0.2 percent last year and 1.2 percent in 2009. Mining capacity is estimated to rise 2.0 percent in 2011 after having been unchanged in 2010, and utilities capacity is projected to expand 3.6 percent this year, which is 2.1 percentage points faster than the rate of expansion recorded last year. These estimates will be updated with the publication on March 25, 2011, of the annual revision to industrial production, capacity, and capacity utilization.

Tables

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

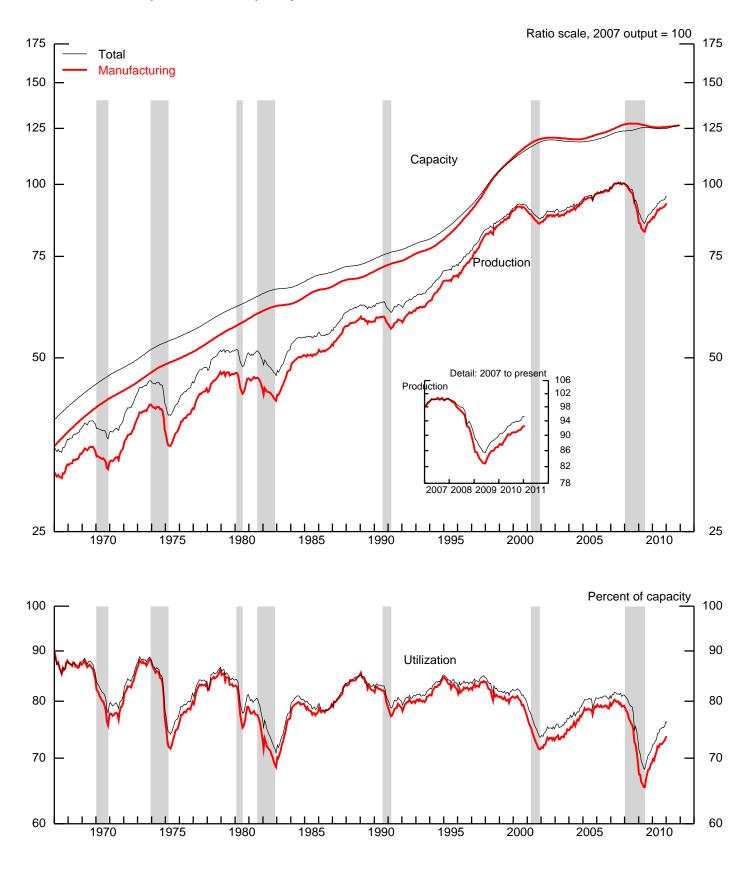
Further detail is available on the Board's website (www.federalreserve.gov/releases/G17/).

Revision of Industrial Production and Capacity Utilization

The Federal Reserve Board plans to issue its annual revision to the index of industrial production (IP) and the related measures of capacity utilization on March 25, 2011. The revised IP indexes will incorporate detailed data from the 2009 Annual Survey of Manufactures, conducted by the U.S. Census Bureau. Data from selected editions of the Census Bureau's 2009 Current Industrial Reports and annual data from the U.S. Geological Survey regarding metallic and nonmetallic minerals (except fuels) for 2009 will also be incorporated. The update will include revisions to the monthly indicator (either product data or input data) and to seasonal factors for each industry. In addition, the estimation methods for some series may be changed. Any modifications to the methods for estimating the output of an industry will affect the index from 1972 to the present.

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

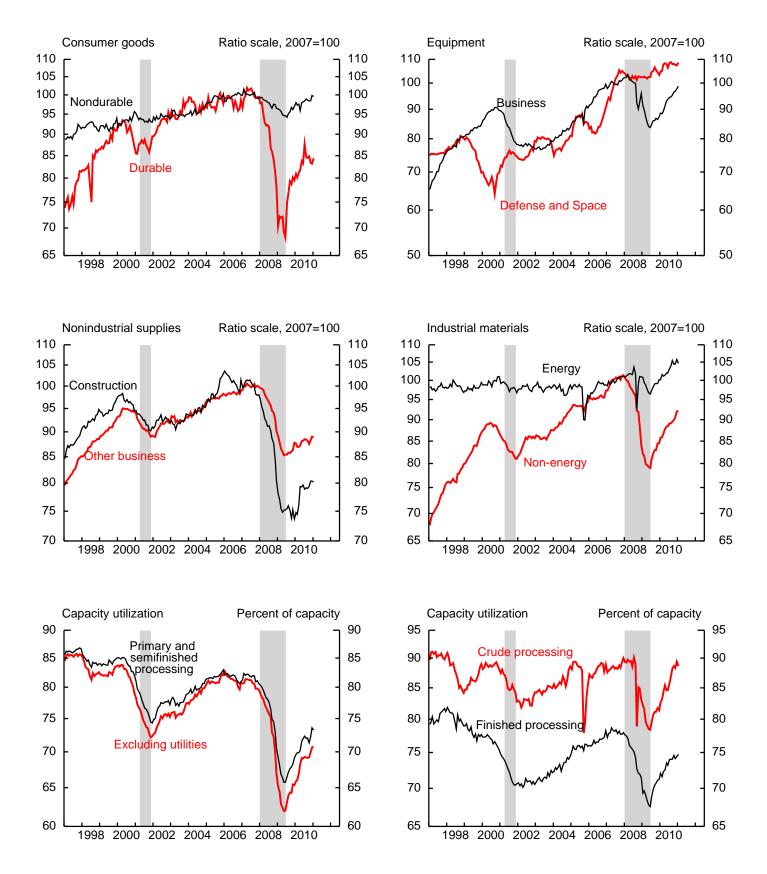
Once the revision is published, it will be available on the Board's website at www.federalreserve.gov/releases/G17. Further information on the revision can be obtained from the Board's Industrial Output Section (telephone number 202-452-3197).



1. Industrial production, capacity, and utilization

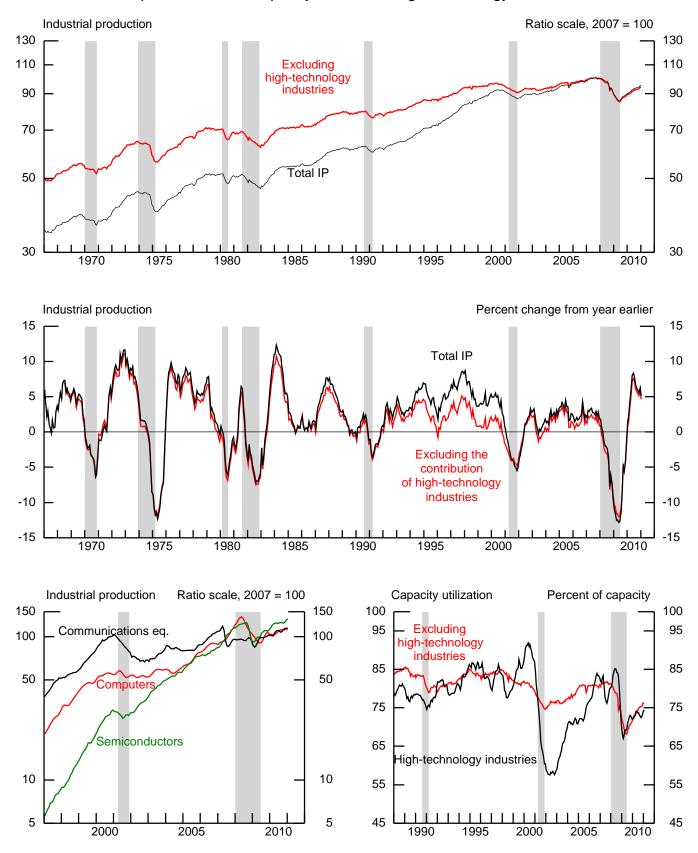
Note: The shaded areas are periods of business recession as defined by the National Bureau of Economic Research (NBER).

2. Industrial production and capacity utilization



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

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



Notes: High-technology industries are defined as semiconductors and related electronic components (NAICS 334412-9), computers (NAICS 3341), and communications equipment (NAICS 3342). The shaded areas are periods of business recession as defined by the NBER.

Table 1 INDUSTRIAL PRODUCTION: MARKET AND INDUSTRY GROUP SUMMARY Percent change, seasonally adjusted

			1	th quart 1rth quar			nnual rat	e			Month	ly rate			Jan. '1
Item		2010 proportion ¹	2008	2009	2010	2010 Q2	Q3 ^r	Q4 ^r	2010 Aug. ^r	Sept. ^r	Oct.r	Nov. ^r	Dec.r	2011 Jan. ^p	to Jan. '1
Fotal IP		100.00	-7.6	-3.8	5.9	7.2	6.2	3.2	.1	.3	.0	.3	1.2	1	5.2
MARKET GROUPS															
Final products and nonindustrial suppli	es	55.09	-7.2	-4.2	5.0	6.9	5.7	1.5	1	1	.1	.2	.9	.2	4.3
Consumer goods		28.48	-6.1	9	3.0	1.3	7.3	-1.1	3	2	2	3	1.0	.1	2.2
Durable		6.09	-18.3	-2.1	5.4	10.9	13.4	-8.0	-3.4	2	.4	-1.8	2	1.4	4.3
Automotive products		2.99	-24.1	6.0	6.2	4.8	27.3	-16.8	-5.8	.3	.8	-5.1	3	3.0	2.9
Home electronics		.29	-3.4	2.4	-2.3	10.0	28.6	1.1	1.8	1.0	6	4	4	8	5.9
Appliances, furniture, carpeting		.89	-18.8	-10.5	1.8	13.5	-8.5	.4	-1.8	-1.2	.5	2.5	-1.9	-1.0	1.1
Miscellaneous goods		1.92	-11.1	-9.9	7.3	20.3	2.2	2.0	-1.0	6	.0	1.4	.9	.6	7.8
Nondurable		22.39	-2.0	5	2.4	-1.2	5.7	.9	.6	3	3	.2	1.4	3	1.6
Non-energy		17.45	-3.0	4	1.9	2.1	.9	2.8	.9	1	.8	7	.2	.2	1.3
Foods and tobacco		9.47	-3.6	.5	5.0	8.3 .3	5.0	1.8	1.2 2.4	1	1.3	-1.9	.2	2 1.3	3.5
Clothing Charrier lang durate		.26	-6.1	-13.6	8.4		-5.4 -2.7	11.9	2.4 .8	-1.2	1.7	.6	2.2		4.4
Chemical products		5.51	-1.7	.1	-1.3	-6.2 -2.8	-2.7	4.3	.8 4	.0 4	.2 .2	.6 1.3	.4 4	.9	-1.1
Paper products		4.94	-5.2	-5.2	-4.1 3.9	-2.8	-0.0	-5.1	4 7	4	.2 -4.4	3.3	4 5.4	.7	-2.5
Energy		4.94	1.0	9	5.9	-12.5	24.2	-3.1	/	0	-4.4	3.5	5.4	-2.0	2.0
Business equipment		9.64	-8.3	-6.4	11.7	18.7	9.3	9.9	.3	.6	1.3	.3	1.0	.9	11.4
Transit		1.72	-27.1	11.1	3.3	3.9	23.1	1	1.2	.7	.2	-1.8	.2	1.2	6.3
Information processing		2.90	.7	9	13.6	21.9	11.2	9.1	3	.3	1.2	.9	.8	.6	12.8
Industrial and other		5.02	-6.4	-14.3	13.6	22.3	3.9	14.1	.3	.7	1.7	.7	1.5	1.0	12.4
Defense and space equipment		2.13	-1.9	1.8	3.1	6.5	3.0	-2.6	.2	7	.1	4	3	1.2	3.7
					_				_	_			_	_	
Construction supplies		4.39	-14.2	-11.8	7.8	25.2	-2.1	5.2	.3	2	.4	1.3	0.	2	7.2
Business supplies		9.86	-7.6	-6.0	1.8	3.3	2.4	3	2	1	8	.9	.8	3	1.4
Materials		44.91	-8.2	-3.2	7.1	7.5	6.8	5.3	.4	.8	2	.4	1.5	4	6.2
Non-energy		27.22	-12.6	-4.8	8.2	10.3	4.9	7.1	.4	.0	2	.4	1.5	4	7.4
Durable		16.13	-12.0	-4.8	0.2 10.8	10.5	4.9 5.0	7.1	.1 4	.0	.4 .9	.7	1.7	.1	9.6
Consumer parts		2.24	-23.6	-7.7	10.0	19.9	12.0	.9	-4.8	1	2.0	.1	2	.7	9.5
Equipment parts		5.94	-23.0	-8.1	12.0	14.6	6.7	9.7	.7	1	.6	1.3	1.7	.7	11.2
Other		7.95	-13.1	-10.4	10.2	18.4	1.9	6.8	.1	.0	.8	.5	1.7	.2	8.4
Nondurable		11.09	-13.5	2.1	4.5	.9	4.8	7.2	.7	1.1	4	.6	2.1	6	4.3
Textile		.43	-16.4	-2.2	7.4	13.0	12.0	.0	7	9	3	.6	2.2	6	8.0
Paper		2.08	-11.3	-5.6	.2	4.8	-2.7	-2.6	-1.3	.0	8	.4	1.0	3	.7
Chemical		5.35	-18.0	9.5	6.8	-1.0	7.6	13.9	.3	2.8	7	1.4	3.2	9	6.4
Energy		17.69	6	9	5.4	3.3	9.8	2.6	.9	1.3	9	.0	1.2	-1.0	4.5
INDUSTRY GROUPS Manufacturing		74.58	-10.0	-4.1	6.0	9.4	4.3	4.0	.0	.1	.4	.3	.9	.3	5.5
Manufacturing (NAICS)	31–33	71.24	-10.0	-3.7	6.5	9.9	4.7	4.4	.0	.2	.5	.3	.9	.3	6.0
Durable manufacturing	51-55	37.50	-11.3	-6.3	8.9	15.4	6.5	4.7	5	.2	.6	.5	.8	.6	8.2
Wood products	321	.93	-20.9	-10.7	1.2	21.3	-18.2	3.8	8	8	1.4	.4	.2	-1.3	-1.6
Nonmetallic mineral products	327	1.73	-15.9	-11.8	5.0	22.2	4.1	-2.3	.0	5	1.0	2	-3.3	-1.0	.7
Primary metal	331	2.50	-23.2	-3.1	11.7	18.7	-18.3	20.1	7	2.1	-1.6	5.3	4.7	9	9.3
Fabricated metal products	332	5.79	-7.1	-11.7	11.7	18.1	15.7	6.5	1.2	.3	1	1.3	.8	.3	11.7
Machinery	333	4.91	-8.2	-19.1	18.1	28.8	6.4	17.5	.0	.3	2.3	1.3	2.0	1.3	16.5
Computer and electronic products	334	7.04	-2.6	1.7	12.7	19.9	8.9	7.8	.2	.1	.6	1.1	1.5	.9	13.0
Electrical equip., appliances,															
and components	335	1.93	-5.6	-10.4	8.8	12.9	.6	10.7	1.2	-1.0	2.6	.8	9	-1.0	4.5
Motor vehicles and parts	3361–3	4.00	-27.5	1.4	8.2	9.2	29.7	-14.8	-6.1	.9	.8	-4.9	.2	3.2	5.3
Aerospace and miscellaneous															
transportation equipment	3364–9	4.19	-13.2	2.6	-1.2	-1.8	4.6	-2.9	.9	4	3	4	5	.7	.3
Furniture and related products	337	1.19	-16.3	-15.2	3.9	16.1	-1.0	2.7	9	.2	1	1.2	.2	.4	6.8
Miscellaneous	339	3.31	2	-2.9	2.4	8.0	1	4.1	7	.0	.6	.8	.2	.2	3.0
									_	-	-	~			
Nondurable manufacturing		33.73	-8.5	6	3.9	4.0	2.7	4.0	.6	.2	.3	.0	1.0	1	3.5
Food, beverage, and tobacco products	311,2	11.25	-3.3	.0	5.0	6.4	6.2	2.2	1.7	1	1.1	-1.8	.2	3	3.4
Textile and product mills	313,4	.73	-15.1	-5.5	3.3	6.4	5.1	-2.2	-1.5	4	.0	3	1.1	4	2.6
	315,6	.32	-14.9	-13.9	8.1	-3.3	-1.7	14.4	2.1	-1.0	2.0	.8	2.5	1.2	4.6
Apparel and leather	322	2.46	-13.2	3	1.6	3.0	-2.1	9	9	.2	-1.0	.8	1.2	.1	2.3
Paper	323	1.60	-9.2	-14.0	-3.2	6.3	-3.4	-7.7	1.0	-1.4	7	7	7	8	-3.9
Paper Printing and support		2.51	-4.4	-1.5	5.3	26.8	5.4	-1.1	-1.2	8	4	1.5	.2	-1.0	10.9
Paper Printing and support Petroleum and coal products	324	10.15		3.9	2.9	-4.7	1.4	9.8	.5 2	1.3	2	1.3	2.0	.1	2.6
Paper Printing and support Petroleum and coal products Chemical	324 325	12.15	-10.4		05	170						1			
Paper Printing and support Petroleum and coal products Chemical Plastics and rubber products	324 325 326	12.15 2.72	-10.4 -15.0	-8.8	8.5	17.0	.3	4.2	2	7	1.0	.1	1.4	.6	
Paper Printing and support Petroleum and coal products Chemical	324 325				8.5 -5.1	2	.3 -5.6	-4.1	2	/	.1	.1	.1	.0	-3.2
Paper Printing and support Petroleum and coal products Chemical Plastics and rubber products Other manufacturing (non-NAICS) Mining	324 325 326 1133,5111 21	2.72 3.34 14.02	-15.0 -9.1 3	-8.8 -11.3 -4.5	-5.1 8.9	2 11.0	-5.6 10.7	-4.1 6.4	5 1.9	-1.9 1.2	.1 .7	.4 -1.0	.1 .5	.3 7	-3.2 7.5
Paper Printing and support Petroleum and coal products Chemical Plastics and rubber products Other manufacturing (non-NAICS) Mining Utilities	324 325 326 1133,5111 21 2211,2	2.72 3.34 14.02 11.40	-15.0 -9.1 3 3	-8.8 -11.3 -4.5 -1.4	-5.1 8.9 2.0	2 11.0 -9.7	-5.6 10.7 14.0	-4.1 6.4 -6.0	5 1.9 -1.2	-1.9 1.2 .5	.1 .7 -4.1	.4 -1.0 2.1	.1 .5 4.1	.3 7 -1.6	-3.2 7.5 .1
Paper Printing and support Petroleum and coal products Chemical Plastics and rubber products	324 325 326 1133,5111 21	2.72 3.34 14.02	-15.0 -9.1 3	-8.8 -11.3 -4.5	-5.1 8.9	2 11.0	-5.6 10.7	-4.1 6.4	5 1.9	-1.9 1.2	.1 .7	.4 -1.0	.1 .5	.3 7	-3.2 7.5

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 separately.

1. The proportion data are the relative weights for the rates of change for each series in the computation of the change in total industrial production in the following year. $\frac{8}{8}$

Table 2 Industrial Production: Special Aggregates and Selected Detail Percent change, seasonally adjusted Fourth quarter to

$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Jan. '11 5.2 4.0
Total industry 100.00 -7.6 -3.8 5.9 7.2 6.2 3.2 1 .3 .0 .3 1.2 Energy 26.15 .0 -2.0 5.3 .3 11.9 .6 .5 .9 -1.7 .7 2.1 -1.7 Consumer products 4.94 1.6 9 3.9 -1.3 24.2 -5.1 7 8 4.4 3.3 5.4 -2.1 Consumer products 2.98 5 1 1.3 -1.5 6.7 -4.8 6 .9 -2.9 1.2 1.5 -1.7 Converted fuel 2.13111 .54 6.9 -42.3 44.8 51.3 2.9 21.9 3.3 1.4 1.8 -2 4.0 .5 Converted fuel 13.35 .8 -1.1 6.6 4.8 11.2 7.1 1.7 2.3 .0 9 .8 -1.1 Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 0 .1 .2 <th>5.2</th>	5.2
Energy 26.15 .0 -2.0 5.3 .3 11.9 .6 .5 .9 -1.7 .7 2.1 -1.2 Consumer products 4.94 1.6 9 3.9 -12.3 24.2 -5.1 7 8 4.4 3.3 5 1 1.3 -1.5 6.7 8 4 3.3 1.5 1 1.5 6.7 8 4 3.3 1.5 1 1.3 5 6.7 8 4 3.3 1.5 1 1.5 1 1.3 5 6.7 8 6 9 2 9.1.2 1.5 1 1.5 6 5.4 -10.8 -1.4 -1.7 -4.0 2.9 2.8 4 7 1.3 6 5.4 -10.8 -1.4 -1.7 -4.0 2.9 2.8 4 7 1.3 6 5.4 -10.8 -1.4 -1.7 2.0 2.9 2.8 4 7 1.7 2.1 1.3 2.2 4.1 3.5 2.1 1.3<	4.0
Consumer products 4.94 1.6 9 3.9 -12.3 24.2 -5.1 7 8 -4.4 3.3 5.4 -2.0 Commercial products 2.98 5 1 1.3 -1.5 6.7 -4.8 6 $.9$ -2.9 1.2 1.5 -1.7 Oil and gas well drilling 213111 $.54$ 6.9 -42.3 44.8 51.3 2.9 21.9 3.3 1.4 1.8 2 4.0 3.7 Converted fuel 4.35 -5.1 5 1.3 6 5.4 -10.8 -1.4 -1.7 -4.0 2.9 2.8 6 Primary energy 13.35 $.8$ -1.1 6.6 4.8 11.2 7.1 1.7 2.3 $.0$ 9 $.8$ -1.1 Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 $.0$ $.1$ $.6$ $.1$ $.8$ $.1.1$ Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 $.0$ $.1$ $.6$ $.1$ $.8$ $.1.1$ Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 $.0$ $.1$ $.6$ $.1$ $.8$ $.1.1$ Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 $.0$ $.1$ $.6$ $.1$ $.8$ $.1.1$ Computers and peripheral equipment 3341	
Commercial products 2.98 5 1 1.3 -1.5 6.7 -4.8 6 .9 -2.9 1.2 1.5 -1.4 Oil and gas well drilling 213111 .54 6.9 -42.3 44.8 51.3 2.9 21.9 3.3 1.4 1.8 2 4.0 .5 Converted fuel 4.35 -5.1 5 1.3 6 5.4 -10.8 -1.4 -1.7 -4.0 2.9 2.8 4 Primary energy 13.35 .8 -1.1 6.6 4.8 11.2 7.1 1.7 2.3 .0 9 .8 -1.1 Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 .0 .1 .6 .1 .8 .1 Selected high-technology industries 3.73 -5.2 4.0 12.2 20.1 6.2 9.1 .1 .2 .4 1.5 2.1 1.1 .2 Computers and peripheral equipment 3341 .99 2.2 5.1 12.4 31	26
Oil and gas well drilling 213111 54 6.9 -42.3 44.8 51.3 2.9 21.9 3.3 1.4 1.8 2 4.0 5 Converted fuel 4.35 -5.1 5 1.3 6 5.4 -10.8 -1.4 -1.7 -4.0 2.9 2.8 0 Primary energy 13.35 .8 -1.1 6.6 4.8 11.2 7.1 1.7 2.3 .0 9 .8 -1. Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 .0 .1 .6 .1 .8 .1 Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 .0 .1 .6 .1 .8 .1 Selected high-technology industries 3.73 -5.2 4.0 12.2 20.1 6.2 9.1 .1 .2 .4 1.5 2.1 1.1 Communications equipment 3341 .83 -4.9 -2.0 5.5 8.8 22.5 2	
Converted fuel Primary energy 4.35 1.3.35 -5.1 .8 -5.1 .8 -5.1 .8 -5.1 .6 -6 5.4 	
Primary energy 13.35 .8 -1.1 6.6 4.8 11.2 7.1 1.7 2.3 .0 9 .8 -1.1 Non-energy 73.85 -10.2 -4.4 6.1 9.6 4.3 4.1 .0 .1 .6 .1 .8 .1.1 Selected high-technology industries Computers and peripheral equipment 3341 .5.2 4.0 12.2 20.1 6.2 9.1 .1 .2 .4 1.5 2.1 1.5 Selected high-technology industries Computers and peripheral equipment 3341 .83 -4.9 -2.0 5.5 8.8 22.5 2.7 .8 .5 2 2 .5 3.3 Communications equipment 3341 .99 2.2 5.1 12.4 31.6 3 20.1 -2.0 1.0 3.0 2.0 .7 .3 Semiconductors and related electronic components 33412-9 1.91 -8.2 6.5 15.2 19.8 3.3 6.8 .9 4 7 1.7 3.5 2.3 2.4 <t< td=""><td></td></t<>	
Selected high-technology industries 3.73 -5.2 4.0 12.2 20.1 6.2 9.1 .1 .2 .4 1.5 2.1 1.1 Computers and peripheral equipment 3341 .83 -4.9 -2.0 5.5 8.8 22.5 2.7 .8 .5 2 .2 .5 .5 Communications equipment 3342 .99 2.2 5.1 12.4 31.6 3 20.1 -2.0 1.0 3.0 2.0 .7 .5 Semiconductors and related electronic components 334412–9 1.91 -8.2 6.5 15.2 19.8 3.3 6.8 .9 4 7 1.7 3.5 2.1 Excluding selected high-technology industries 70.12 -10.5 -4.9 5.8 9.0 4.2 3.9 .0 .1 .6 .1 .8 .5 Motor vehicles and parts 3361–3 4.00 -27.5 1.4 8.2 9.2 29.7 -14.8 -6.1 .9 .8 -4.9 2 3.5	
Computers and peripheral equipment 3341 .83 -4.9 -2.0 5.5 8.8 22.5 2.7 .8 .5 2 .2 .5 .3 Communications equipment 3342 .99 2.2 5.1 12.4 31.6 3 20.1 -2.0 1.0 3.0 2.0 .7 3 Semiconductors and related electronic components 334412–9 1.91 -8.2 6.5 15.2 19.8 3.3 6.8 .9 4 7 1.7 3.5 2.3 Excluding selected high-technology industries 70.12 -10.5 -4.9 5.8 9.0 4.2 3.9 .0 .1 .6 .1 .8 .3 Motor vehicles and parts 3361–3 4.00 -27.5 1.4 8.2 9.2 29.7 -14.8 -6.1 .9 .8 -4.9 2 3.3	5.5
Computers and peripheral equipment 3341 .83 -4.9 -2.0 5.5 8.8 22.5 2.7 .8 .5 2 .2 .5 .3 Communications equipment 3342 .99 2.2 5.1 12.4 31.6 3 20.1 -2.0 1.0 3.0 2.0 .7 3 Semiconductors and related electronic components 334412-9 1.91 -8.2 6.5 15.2 19.8 3.3 6.8 .9 4 7 1.7 3.5 2.3 Excluding selected high-technology industries 70.12 -10.5 -4.9 5.8 9.0 4.2 3.9 .0 .1 .6 .1 .8 .3 Motor vehicles and parts 3361-3 4.00 -27.5 1.4 8.2 9.2 29.7 -14.8 -6.1 .9 .8 -4.9 2 3.3	13.8
Communications equipment 3342 .99 2.2 5.1 12.4 31.6 3 20.1 -2.0 1.0 3.0 2.0 .7 3 Semiconductors and related electronic components 334412–9 1.91 -8.2 6.5 15.2 19.8 3.3 6.8 .9 4 7 1.7 3.5 2.3 Excluding selected high-technology industries 70.12 -10.5 -4.9 5.8 9.0 4.2 3.9 .0 .1 .6 .1 .8 .3 Motor vehicles and parts 3361–3 4.00 -27.5 1.4 8.2 9.2 29.7 -14.8 -6.1 .9 .8 -4.9 .2 3.3	
electronic components 334412–9 1.91 -8.2 6.5 15.2 19.8 3.3 6.8 .9 4 7 1.7 3.5 2.7 Excluding selected high-technology industries 70.12 -10.5 -4.9 5.8 9.0 4.2 3.9 .0 .1 .6 .1 .8 .7 Motor vehicles and parts 3361–3 4.00 -27.5 1.4 8.2 9.2 29.7 -14.8 -6.1 .9 .8 -4.9 2.2 3.7	12.2
Excluding selected high-technology industries 70.12 -10.5 -4.9 5.8 9.0 4.2 3.9 .0 .1 .6 .1 .8 Motor vehicles and parts 3361-3 4.00 -27.5 1.4 8.2 9.2 29.7 -14.8 -6.1 .9 .8 -4.9 .2 3.3	16.5
industries 70.12 -10.5 -4.9 5.8 9.0 4.2 3.9 .0 .1 .6 .1 .8 Motor vehicles and parts 3361–3 4.00 -27.5 1.4 8.2 9.2 29.7 -14.8 -6.1 .9 .8 -4.9 .2 3.4	
	5.1
	5.3
Motor vehicle parts 3363 1.85 -20.7 -2.9 5.1 6.2 8.0 -2.8 -3.6 .9 .9 -1.3 3 1.0	3.6
Excluding motor vehicles and parts 66.12 -9.3 -5.3 5.6 9.0 2.8 5.2 .4 .1 .6 .4 .8 .1	
Consumer goods 20.73 -5.3 -2.3 2.5 4.3 .7 2.4 .5 2 .8 3 .1	
Business equipment 8.10 -8.3 -6.1 11.1 16.8 7.3 10.9 .7 .5 1.4 .4 1.1 1.0	
Construction supplies 4.35 -14.3 -12.0 7.8 25.1 -2.1 5.0 .3 2 .4 1.3 1 2 Business supplies 6.65 -10.2 -8.8 1.6 4.8 .5 1.5 .0 6 .1 .7 .4 .0	
Business supplies 0.03 -10.2 -6.3 1.5 $.0$ -1.6 $.1$ $.7$ $.4$ X Materials 24.15 -11.9 -5.7 7.6 9.4 4.7 7.6 $.3$ $.5$ $.4$ $.7$ 1.7 $.4$ X	
Measures excluding selected	
high-technology industries	
Total industry 96.27 -7.8 -4.1 5.7 6.7 6.2 3.0 .1 .3 1 .2 1.1	
Manufacturing ¹ 70.85 -10.3 -4.5 5.6 8.8 4.2 3.7 .0 .1 .4 .2 .8	
Durable 33.91 -12.1 -7.5 8.5 14.9 6.5 4.16 .2 .6 .4 .6 .0	7.5
Measures excluding motor vehicles and parts	
Total industry 96.00 -6.6 -4.0 5.8 7.1 5.3 4.0 .4 .3 1 .5 1.2 2	5.1
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
Measures excluding selected	
high-technology industries	
and motor vehicles and parts	
Total industry 92.27 -6.7 -4.4 5.5 6.6 5.3 3.8 .4 .3 1 .5 1.2 1	
Manufacturing ¹ 66.85 -9.0 -4.9 5.4 8.8 2.7 5.0 $.4$ $.1$ $.4$ $.5$ $.8$	5.1
Stage-of-process components	
of non-energy materials,	
measures of the input to	
Finished processors 10.69 -11.4 -7.3 9.0 13.6 6.1 5.0 9 $.0$ $.6$ $.8$ 1.2 $$ Drivery and comificational processors 1652 125 20 76 84 7 82 6 20 76	0.5
Primary and semifinished processors 16.53 -13.5 -3.0 7.6 8.1 4.2 8.4 .7 .8 .2 .6 2.0 7	

r Revised. p Preliminary. 1. Refer to note on cover page.

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

	2010	2010				2010					2011
Item	average	Q1	Q2	Q3	Q4	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.
Total	7.74	7.47	7.59	8.22	7.72	7.90	8.08	8.17	7.57	7.43	7.81
Autos	2.73	2.79	2.88	2.72	2.52	2.74	2.66	2.56	2.63	2.35	2.34
Trucks	5.01	4.68	4.71	5.50	5.21	5.16	5.42	5.60	4.94	5.08	5.47
Light	4.86	4.55	4.58	5.35	5.05	5.01	5.25	5.44	4.78	4.92	5.31
Medium and heavy	.15	.13	.13	.16	.16	.15	.17	.16	.16	.16	.15
Memo											
Autos and light trucks	7.60	7.34	7.47	8.07	7.56	7.75	7.91	8.00	7.41	7.27	7.66

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

Table 4 INDUSTRIAL PRODUCTION INDEXES: MARKET AND INDUSTRY GROUP SUMMARY 2007 = 100, seasonally adjusted

007 = 100, seasonally adjusted											
Item		2010 proportion	2010 May	June	July	Aug. ^r	Sept. ^r	Oct.r	Nov. ^r	Dec. ^r	2011 Jan. ^p
Total IP		100.00	92.6	92.6	93.5	93.6	93.9	93.8	94.1	95.2	95.1
			,	,				,	,		,
MARKET GROUPS Final products and nonindustrial supplies		55.09	91.8	91.9	92.7	92.6	92.5	92.6	92.8	93.6	93.8
Consumer goods		28.48	91.8	91.9	92.7 95.7	92.0	92.3	92.0	92.8	95.0	95.8
Durable		6.09	83.8	83.3	87.6	84.6	84.4	84.8	83.3	83.2	84.4
Automotive products		2.99	84.7	84.2	92.1	86.8	87.0	87.7	83.2	83.0	85.5
Home electronics		.29	100.4	101.7	105.0	106.9	108.0	107.4	106.9	106.5	105.7
Appliances, furniture, carpeting		.89	74.2	73.6	74.0	72.6	71.7	72.1	73.9	72.5	71.7
Miscellaneous goods		1.92	84.5	83.9	84.8	84.0	83.5	83.5	84.7	85.4	85.9
Nondurable		22.39	98.0	98.1	98.4	98.9	98.7	98.4	98.5	99.9	99.6
Non-energy		17.45 9.47	97.3 99.9	96.4 99.1	96.2 99.1	97.0	96.9 100.3	97.8 101.6	97.1 99.7	97.3 99.9	97.5 99.7
Foods and tobacco Clothing		.26	99.9 80.0	99.1 79.5	99.1 77.7	100.3 79.6	78.6	79.9	99.7 80.4	99.9 82.2	83.3
Chemical products		5.51	96.9	96.1	95.6	96.4	96.4	96.7	97.3	97.6	98.5
Paper products		1.67	86.7	85.5	84.7	84.4	84.0	84.2	85.3	84.9	85.5
Energy		4.94	100.1	104.2	106.4	105.7	104.8	100.2	103.4	109.0	106.9
Business equipment		9.64	93.0	93.7	94.4	94.6	95.2	96.4	96.8	97.8	98.7
Transit		1.72	82.5	82.6	85.1	86.0	86.7	86.9	85.3	85.5	86.6
Information processing		2.90	110.1	110.7	112.6	112.2	112.5	113.9	114.9	115.9	116.6
Industrial and other		5.02	88.1	88.9	88.4	88.7	89.4	90.9	91.6	92.9	93.9
Defense and space equipment		2.13	107.9	106.4	108.4	108.7	107.9	108.0	107.6	107.3	108.6
Construction supplies		4.39	79.3	79.6	78.9	79.1	79.0	79.4	80.4	80.3	80.2
Business supplies		9.86	88.1	88.2	88.5	88.4	88.3	87.5	88.3	89.1	88.8
Materials		44.91	93.5	93.6	94.4	94.8	95.5	95.4	95.8	97.2	96.9
Non-energy		27.22	88.4	88.5	89.1	89.2	89.6	89.9	90.5	92.0	92.1
Durable		16.13	87.5	87.6	88.4	88.1	88.1	88.9	89.5	90.8	91.2
Consumer parts		2.24	73.3	73.4	77.0	73.2	73.1	74.6	74.7	74.5	75.1
Equipment parts		5.94	98.3	98.7	99.2	100.0	100.1	100.7	102.0	103.7	104.4
Other Nondurable		7.95	84.6 89.7	84.4 89.8	84.6 90.1	84.6 90.8	84.6 91.8	85.2 91.5	85.7 92.0	87.1 93.9	87.3 93.4
Textile		.43	82.0	81.6	84.3	83.7	83.0	82.7	83.2	85.1	84.5
Paper		2.08	84.9	85.2	85.3	84.2	84.2	83.5	83.9	84.7	84.5
Chemical		5.35	91.0	91.1	92.0	92.3	94.9	94.3	95.5	98.6	97.8
Energy		17.69	102.0	102.0	103.1	104.1	105.4	104.4	104.4	105.7	104.7
INDUSTRY GROUPS											
Manufacturing		74.58	90.3	90.1	90.8	90.8	90.9	91.3	91.6	92.3	92.6
Manufacturing (NAICS)	31–33	71.24	91.0	90.8	91.6	91.6	91.8	92.2	92.4	93.3	93.6
Durable manufacturing	001	37.50	89.5	89.6	90.8	90.3	90.5	91.1	91.5	92.2	92.8
Wood products	321	.93	72.8	69.9	68.7	68.2	67.6	68.6	68.9	69.0	68.1
Nonmetallic mineral products Primary metal	327 331	1.73 2.50	75.5 86.5	75.7 87.0	76.5 82.1	76.5 81.5	76.1 83.3	76.9 81.9	76.7 86.3	74.2 90.3	73.5 89.5
Fabricated metal products	332	5.79	87.3	88.4	89.7	90.7	90.9	90.9	92.0	92.7	93.0
Machinery	333	4.91	83.9	84.9	84.8	84.8	85.0	87.0	88.1	89.9	91.1
Computer and electronic products	334	7.04	114.3	114.3	115.9	116.1	116.2	116.9	118.1	119.9	121.0
Electrical equip., appliances,											
and components	335	1.93	88.5	88.9	88.8	89.9	88.9	91.3	92.0	91.2	90.2
Motor vehicles and parts	3361-3	4.00	76.0	75.3	82.6	77.5	78.2	78.8	75.0	75.1	77.5
Aerospace and miscellaneous	2264 0	4.10	01.0	01.5	02.6	02.4	02.0	02.7	02.2	01.0	02.5
transportation equipment Furniture and related products	3364–9 337	4.19	91.8 73.3	91.5 73.5	92.6 73.4	93.4 72.8	93.0 72.9	92.7 72.9	92.3 73.8	91.8 73.9	92.5 74.2
Miscellaneous	339	3.31	99.6	97.8	98.9	98.2	98.2	98.8	99.6	99.9	100.1
Non-damphia and a second											
Nondurable manufacturing Food, beverage, and tobacco products	311,2	33.73 11.25	92.7 99.4	92.3 98.9	92.6 98.9	93.1 100.6	93.3 100.5	93.6 101.7	93.6 99.9	94.6 100.1	94.5 99.8
Textile and product mills	311,2 313,4	.73	99.4 78.9	98.9 78.1	98.9 80.1	78.9	78.6	78.6	99.9 78.4	79.2	99.8 78.9
Apparel and leather	315,4	.32	69.6	69.5	68.6	70.0	69.3	70.7	71.3	73.0	73.9
Paper	322	2.46	88.8	89.2	88.9	88.1	88.3	87.4	88.1	89.2	89.3
Printing and support	323	1.60	78.1	77.4	76.6	77.3	76.2	75.7	75.2	74.7	74.1
Petroleum and coal products	324	2.51	97.3	97.7	99.9	98.7	97.9	97.5	99.0	99.1	98.1
Chemical Dission and rubbar products	325	12.15	93.4	93.0	93.1	93.6	94.8	94.6	95.8	97.7	97.9
Plastics and rubber products	326	2.72	83.1	81.9	82.8	82.6	82.0	82.9	83.0	84.2	84.7
Other manufacturing (non-NAICS)	1133,5111	3.34	78.1	76.9	76.7	76.3	74.9	75.0	75.3	75.3	75.6
Mining	21	14.02	100.0	99.8	101.1	103.0	104.2	104.9	103.9	104.4	103.7
Utilities	2211,2	11.40	99.2	101.6	102.6	101.4	101.9	97.7	99.7	103.8	102.2
			00.2	101.0	102.7	101.0	101.2	07.1	00.0	102 5	100.9
Electric Natural gas	2211 2212	9.84 1.56	99.2 98.1	101.8 99.6	102.7 101.1	101.0 103.0	101.3 104.8	97.1 101.0	98.0 110.3	102.5	100.7

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

Table 5 INDUSTRIAL PRODUCTION INDEXES: SPECIAL AGGREGATES 2007 = 100, seasonally adjusted

Iterre		2010	2010	T	Testes	Δ Γ	Caret I	Ort	New	Deel	2011
Item		proportion	May	June	July	Aug. ^r	Sept. ^r	Oct.r	Nov. ^r	Dec. ^r	Jan. ^p
Fotal industry		100.00	92.6	92.6	93.5	93.6	93.9	93.8	94.1	95.2	95.1
Energy		26.15	101.0	101.9	103.1	103.6	104.5	102.7	103.4	105.6	104.3
Consumer products		4.94	100.1	104.2	106.4	105.7	104.8	100.2	103.4	109.0	106.9
Commercial products		2.98	100.3	102.3	102.8	102.2	103.0	100.1	101.3	102.8	101.6
Dil and gas well drilling	213111	.54	84.6	80.5	81.4	84.1	85.2	86.8	86.6	90.1	90.3
Converted fuel		4.35	99.6	100.0	101.5	100.0	98.3	94.4	97.2	99.8	99.2
Primary energy		13.35	102.6	102.5	103.4	105.2	107.6	107.5	106.6	107.4	106.2
Non-energy		73.85	89.8	89.6	90.3	90.3	90.4	90.9	91.0	91.8	92.1
Selected high-technology industries		3.73	116.5	116.7	117.7	117.8	118.0	118.5	120.2	122.7	124.1
Computers and peripheral equipment	3341	.83	105.8	107.7	110.6	111.5	112.0	111.8	112.0	112.5	113.4
Communications equipment	3342	.99	109.7	111.0	110.1	107.9	109.0	112.3	114.6	115.4	114.8
Semiconductors and related											
electronic components	334412–9	1.91	124.9	123.7	124.8	125.9	125.5	124.6	126.7	131.1	134.0
Excluding selected high-technology											
industries		70.12	88.3	88.1	88.8	88.8	88.9	89.4	89.4	90.1	90.4
Motor vehicles and parts	3361-3	4.00	76.0	75.3	82.6	77.5	78.2	78.8	75.0	75.1	77.5
Motor vehicles	3361	1.84	75.1	73.9	86.5	78.4	80.7	81.1	73.6	73.0	77.2
Motor vehicle parts	3363	1.85	77.5	76.9	79.8	76.9	77.6	78.3	77.3	77.1	78.3
Excluding motor vehicles and parts		66.12	89.3	89.1	89.3	89.7	89.7	90.2	90.6	91.3	91.4
Consumer goods		20.73	93.9	93.1	93.1	93.6	93.4	94.1	93.8	93.9	94.1
Business equipment		8.10	93.6	94.1	94.3	95.0	95.5	96.8	97.3	98.3	99.3
Construction supplies		4.35	79.0	79.3	78.6	78.8	78.7	79.0	80.0	80.0	79.8
Business supplies Materials		6.65 24.15	82.9 87.1	82.4 87.3	82.6 87.7	82.6 87.9	82.1 88.4	82.2 88.7	82.8 89.3	83.2 90.8	83.2 90.7
Measures excluding selected high-technology industries											
Total industry		96.27	91.6	91.7	92.5	92.6	92.9	92.8	93.0	94.1	94.0
Manufacturing ¹		70.85	88.9	88.7	89.4	89.3	89.4	89.8	90.0	90.7	91.0
Durable		33.91	86.6	86.6	87.8	87.3	87.4	88.0	88.3	88.9	89.4
Measures excluding motor vehicles and parts											
Fotal industry		96.00	93.5	93.6	94.0	94.4	94.7	94.6	95.1	96.3	96.1
Manufacturing ¹		70.58	91.3	91.2	91.4	91.8	91.8	92.2	92.7	93.6	93.7
Durable		33.64	91.6	91.7	92.0	92.2	92.3	92.8	93.9	94.7	95.0
Measures excluding selected high-technology industries and motor vehicles and parts											
Total industry		92.27	92.5	92.6	93.0	93.4	93.7	93.6	94.0	95.1	94.9
Manufacturing ¹		66.85	89.9	89.7	89.9	90.3	90.3	90.7	91.2	91.9	92.0
Stage-of-process components of non-energy materials, measures of the input to											
Finished processors		10.69	88.8	89.1	90.4	89.6	89.6	90.1	90.9	92.0	92.4
Primary and semifinished processors		16.53	88.0	88.0	88.2	88.8	89.5	89.7	90.2	92.0	91.8

r Revised. p Preliminary. 1. Refer to note on cover page.

Table 6 DIFFUSION INDEXES OF INDUSTRIAL PRODUCTION

Item	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
One month earlier												
2008	42.6	37.5	49.4	37.8	45.5	47.1	44.2	39.7	29.8	40.1	27.6	21.5
2009	34.0	42.3	36.2	43.6	42.3	44.9	64.7	61.5	59.6	54.2	64.4	50.6
2010	64.4	51.0	64.1	62.2	62.5	51.9	58.0	49.4	50.0	59.9	55.1	61.2
Three months earlier												
2008	49.0	39.1	36.2	34.0	39.1	33.7	36.5	34.3	25.6	25.6	22.1	19.2
2009	17.3	21.8	31.1	36.2	36.2	41.0	51.3	64.4	66.3	62.5	67.0	57.7
2010	66.7	58.3	64.7	62.2	71.5	65.4	62.2	56.1	55.8	53.8	55.4	60.9
Six months earlier												
2008	47.4	42.0	39.7	37.5	35.3	31.7	35.6	34.9	22.4	23.7	24.4	13.5
2009	15.7	16.7	22.4	19.6	22.4	33.0	39.4	45.8	55.4	58.3	67.0	67.3
2010	68.6	66.3	67.3	72.1	72.4	70.8	67.6	68.6	64.7	59.9	58.0	61.2

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

_			1972-	1994-	2008-									
Item		2010	2010	95	09	2010		- 1T	2010	~ ~ ~				201
		proportion	ave.	high	low	Q2	Q3 ^r	Q4 ^r	Aug. ^r	Sept. ^r	Oct.r	Nov. ^r	Dec. ^r	Jan
Fotal industry		100.00	80.5	85.1	68.2	73.9	75.0	75.6	75.0	75.2	75.2	75.4	76.2	76
Manufacturing ¹		77.79	79.1	84.6	65.4	71.6	72.4	73.0	72.3	72.4	72.7	72.9	73.5	73.
Manufacturing (NAICS)	31-33	74.10	78.9	84.8	65.2	71.8	72.6	73.4	72.6	72.7	73.0	73.2	73.9	74
Durable manufacturing		40.68	77.2	83.7	61.0	69.4	70.4	71.0	70.2	70.3	70.7	71.0	71.5	71.
Wood products	321	1.14	78.1	87.2	53.4	62.9	60.8	62.5	60.8	60.7	61.9	62.5	63.0	62.
Nonmetallic mineral products	327	2.30	76.5	82.6	52.0	56.7	57.5	57.4	57.6	57.4	58.1	58.0	56.2	55
Primary metal	331	2.70	79.4	94.1	46.8	70.2	66.4	69.0	65.8	67.0	65.8	69.1	72.2	71
Fabricated metal products	332	5.84	77.3	85.7	65.1	72.6	75.6	77.1	75.8	76.1	76.2	77.2	77.9	78
Machinery	333	5.09	78.1	87.2	61.1	71.5	73.0	76.2	72.9	73.2	75.0	76.1	77.7	78
Computer and electronic products	334	7.49	78.1	84.7	68.0	73.6	73.7	73.7	73.7	73.3	73.3	73.6	74.2	74
Electrical equip., appliances,														
and components	335	1.87	82.8	93.0	70.4	76.9	77.1	79.1	77.6	76.9	78.9	79.6	78.9	78
Motor vehicles and parts	3361-3	5.03	75.4	87.6	35.8	59.4	63.6	61.3	62.1	62.7	63.3	60.2	60.4	62
Aerospace and miscellaneous														
transportation equipment	3364-9	4.40	72.9	68.8	66.3	70.8	71.2	70.3	71.5	71.1	70.7	70.3	69.8	70
Furniture and related products	337	1.28	77.8	82.6	64.6	69.7	70.3	71.6	70.1	70.5	70.7	71.9	72.3	72
Miscellaneous	339	3.55	76.0	80.7	68.4	70.2	69.6	69.6	69.4	69.2	69.4	69.8	69.7	69
Nondurable manufacturing		33.42	81.1	86.1	70.1	74.7	75.3	76.2	75.4	75.6	75.9	76.0	76.8	76
Food, beverage, and tobacco products	311,2	10.65	81.3	85.8	73.6	78.0	79.0	79.3	79.5	79.3	80.2	78.7	78.9	78
Textile and product mills	313,4	.81	80.7	92.5	57.3	66.8	68.4	68.7	68.1	68.1	68.4	68.4	69.4	69
Apparel and leather	315,6	.31	78.6	87.3	65.8	75.5	76.7	80.9	77.5	77.2	79.3	80.5	83.0	83
Paper	322	2.36	87.0	92.6	69.7	78.0	78.0	78.2	77.7	78.0	77.3	78.1	79.2	79
Printing and support	323	1.87	82.3	85.7	63.4	65.0	64.9	64.1	65.5	64.7	64.4	64.1	63.9	63
Petroleum and coal products	324	2.25	86.0	91.0	74.8	84.5	86.0	86.1	85.8	85.3	85.1	86.5	86.7	85
Chemical	325	12.05	78.0	81.9	67.5	73.8	74.3	76.2	74.1	75.1	75.0	76.0	77.6	77
Plastics and rubber products	326	3.12	82.1	92.7	57.3	65.9	65.9	66.5	66.0	65.6	66.2	66.2	67.2	67
Other manufacturing (non-NAICS)	1133,5111	3.69	83.4	83.2	68.0	68.4	67.4	66.5	67.7	66.3	66.4	66.6	66.7	66
Mining	21	11.79	87.4	88.9	79.6	85.5	87.7	88.9	87.9	88.9	89.5	88.5	88.8	88.
Utilities	2211,2	10.41	86.5	93.3	77.6	79.2	81.6	80.2	81.2	81.5	78.1	79.6	82.8	81.
Selected high-technology industries		4.09	78.1	86.8	67.0	73.9	73.2	73.0	73.2	72.7	72.4	72.9	73.8	74
Computers and peripheral equipment	3341	.85	78.0	87.0	67.7	77.4	79.6	78.2	79.6	79.4	78.6	78.1	77.8	78
Communications equipment	3342	.95	76.5	83.6	73.4	81.5	79.7	81.7	78.9	79.2	81.0	82.1	82.1	81
Semiconductors and related														
electronic components	334412–9	2.29	80.2	92.4	61.8	69.9	68.7	68.3	69.0	68.2	67.2	67.9	69.7	71
Measures excluding selected high-technology industries														
Total industry		95.91	80.6	85.0	68.1	73.8	75.1	75.6	75.0	75.3	75.2	75.4	76.3	76
Manufacturing ¹		73.70	79.1	84.5	65.2	71.4	72.3	73.0	72.2	72.3	72.7	72.8	73.4	73
STAGE-OF-PROCESS GROUPS														
Crude		15.45	86.4	90.0	78.3	84.9	87.0	88.8	87.0	88.2	88.6	88.3	89.4	88
Primary and semifinished		45.46	81.3	87.9	65.7	71.2	72.1	72.4	72.0	72.0	71.3	72.3	73.5	73
Finished		39.09	77.4	80.5	67.5	73.1	74.0	74.4	74.0	74.1	74.6	74.1	73.3	74
		57.07	1 11.4	00.5	01.5	1 13.1	77.0	/ 7.7	1 7.0	/ 7.1	/ 4.0	/ 7.1	/ +	/+

Table 7 CAPACITY UTILIZATION Percent of capacity, seasonally adjusted

r Revised. p Preliminary. 1. Refer to note on cover page.

Table 8 INDUSTRIAL CAPACITY Percent change

		Average a	nnual rate		Fourth	quarter t	o fourth c	juarter		Annua	ıl rate		Monthly rate
Item	1972-	1980-	1989-	1995-		_			2010			2011	2011
	79	88	94	2011	2008	2009	2010	2011	Q2	Q3	Q4	Q1	Jan.
Total industry	3.1	1.9	2.3	2.5	.8	.5	3	1.2	6	2	.2	1.0	.1
Manufacturing ¹	3.3	2.2	2.5	2.7	.5	-1.2	2	.7	3	.0	.2	.6	.1
Mining Utilities	.7 4.2	.0 2.1	8 1.8	.0 2.3	1.5 2.2	3.0 3.1	.0 1.5	2.0 3.6	4 1.5	.0 1.1	.7 1.0	1.8 2.7	.2 .3
Selected high-technology industries	19.5	17.3	15.8	20.9	.3	7.7	11.4	4.5	11.8	10.5	10.0	6.1	.2
Manufacturing ¹ ex. selected high-technology industries	2.6	1.3	1.6	1.2	.5	-1.7	8	.5	9	5	3	.4	.1
STAGE-OF-PROCESS GROUPS Crude	1.6	.4	5	.2	1.5	2.6	8	1.6	-1.1	8	2	1.1	.2
Primary and semifinished	3.0	1.4	2.5	2.9	.6	7	6	.4	6	5	4	.1	.0
Finished	3.9	3.3	2.7	2.7	.8	7	.9	1.9	.8	1.2	1.4	1.8	.2

1. Refer to note on cover page.

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

finions of 2005 donars at annual rate, seaso	iany adjusted										
			2010			2010					2011
Item	2005	2010	Q2	Q3 ^r	Q4 ^r	Aug. ^r	Sept. ^r	Oct.r	Nov. ^r	Dec. ^r	Jan. ^p
Final products and nonindustrial supplies	3,336.9	3,231.2	3,210.4	3,270.2	3,275.2	3,267.1	3,265.3	3,258.6	3,266.2	3,300.7	3,299.4
Final products	2,477.7	2,478.3	2,455.0	2,515.1	2,517.0	2,512.4	2,510.2	2,509.2	2,505.7	2,536.1	2,538.5
Consumer goods	1,853.6	1,830.1	1,811.1	1,856.9	1,848.6	1,854.6	1,849.6	1,843.1	1,839.2	1,863.7	1,860.2
Durable	513.7	438.0	434.8	451.4	438.5	445.0	444.8	447.1	435.1	433.2	441.1
Automotive products	306.7	274.2	269.6	286.5	272.5	280.3	281.1	283.0	267.9	266.5	274.8
Other durable goods	207.0	164.3	165.6	165.5	166.4	165.3	164.3	164.7	167.4	167.0	166.8
Nondurable	1,339.8	1,383.3	1,367.5	1,397.2	1,400.4	1,400.4	1,395.8	1,387.5	1,394.2	1,419.4	1,409.2
Equipment, total	624.1	648.2	643.6	657.8	668.8	657.4	660.6	666.6	667.0	672.8	679.1
Business and defense	600.7	630.0	625.0	639.5	650.2	639.0	642.1	648.1	648.6	654.0	660.2
Business	520.8	528.9	523.8	537.5	549.3	536.6	540.5	546.7	547.6	553.6	558.5
Defense and space	79.9	99.6	99.6	100.5	99.8	100.8	100.2	100.2	99.8	99.4	100.6
Nonindustrial supplies	859.2	756.5	758.4	759.0	762.0	758.5	758.9	753.4	764.0	768.4	764.9
Construction supplies	270.1	215.6	217.6	216.0	219.8	216.2	216.4	217.4	220.9	221.1	220.2
Business supplies	589.1	541.2	541.0	543.2	542.3	542.5	542.7	536.2	543.3	547.4	544.8
Commercial energy products	210.9	216.3	216.7	217.7	214.6	216.7	217.6	210.8	215.3	217.7	215.0

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	A	Annual 1	ate			Month	ly rate			Jan. '10
Item	2010				2010			2010					2011	to
	gross value1	2008	2009	2010	Q2	Q3 ^r	Q4 ^r	Aug. ^r	Sept. ^r	Oct.r	Nov. ^r	Dec.r	Jan. ^p	Jan. '11
Finished	1935.0	-8.9	-2.0	6.7	8.6	8.2	2.3	2	.3	.8	7	.4	.7	5.5
Semifinished	1573.0	-9.7	-7.3	5.2	7.9	6.8	8	4	4	6	.6	1.2	1	4.3
Primary	1326.7	-8.3	-2.2	4.7	6.3	3.1	2.7	8	.5	-1.6	2.1	2.5	-1.1	5.6
Crude	649.3	-9.1	2.3	7.7	4.1	8.3	10.4	1.1	1.5	.2	.3	2.1	7	7.0

r Revised. p Preliminary.

1. Billions of 2005 dollars.

Yate Jate Feb Mar. App. May. June Into Mag. Stat. Nov. Lee. Q1 Q2 Q3 Q4 Annual Changeying -	Seasonally adjusted	Ţ								<i>a</i>				0.1				
observed	Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
observed	IP (percent																	
1886 3 3 4 3 5 9 7 2 1 3 5 1 6 25 18 3 1 1 10 30 15 10 15 10 15 10 <	• .																	
1990 -3 -3 -3 -1 2 -3 -1 2 -3 -1 2 -1 10 </td <td></td> <td>.3</td> <td>4</td> <td>.3</td> <td>.0</td> <td>7</td> <td>.0</td> <td>9</td> <td>.9</td> <td>2</td> <td>1</td> <td>.3</td> <td>.6</td> <td>1.6</td> <td>-1.6</td> <td>-2.5</td> <td>1.8</td> <td>.9</td>		.3	4	.3	.0	7	.0	9	.9	2	1	.3	.6	1.6	-1.6	-2.5	1.8	.9
1991 .4 .4 .5 .2 1.0 1.0 0 1.2 1.1 .5 3 0 1.2 1.2 1.3 1.2 1.3 1.2 2.8 4.0 1.2 1.1 2.0 2.3 1993 4 4 0 1.3 0.7 4.7 1.4 1.4 2.2 1.4 1.3 1.0 3.7 1.3 2.3 3.3 3.4 3.4 1.4 2.2 2.4 4.2 2.4 4.3 1.0 3.7 1.3 3.4 3.5 4.4 3.4 1.4 3.5 3.4 3.4 3.5 3.4 3.4 3.5 3.4 4.4 4.4 3.4																		
1993 5 3 0 3 -4 2 3 0 4 8 4 5 53 11 20 6 2 8 6 11 50 74 18 33 93 54 14 14 12 3 30 31 7 6 13 9 7 7 14 12 33 54 56 14 3 9 7 14 40 1990 1 4 2 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <th1< th=""> <th1< th=""> <th1< th=""></th1<></th1<></th1<>	1991				.2			.0			2	1	3	-7.4		5.6	.9	-1.5
1994 4 0 1.1 5 6 7 2 6 2 8 6 1.1 50 7.4 51 8.3 8.4 1997 1 1.2 2 3 -4 1.4 4 -2 2 4.4 51 8.4 60 10 34 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 8.4 9.7	1992	6	.8	.8	.7	.3	.0	.9	5	.2	.7	.4	.0	4	7.1	2.8	4.0	2.8
1995 3 0 2 -1 2 3 .4 14 4 -2 2 4 5 10 33 32 44 1997 .1 12 .8 .0 .7 .5 .6 13 .0 .3 .4 .5 .4 .5 .4 .5 .4 .5 .4 .5 .4 .5 .4 .5 .4 .4 .4 .5 .4 .4 .4 .4 .5 .4 .5 .6 .4 .4 .5 .4 .5	1993	.5	.3	.0	.3	4	.2	.3	.0	.4	.8	.4	.5	3.5	1.1	2.0	6.2	3.3
1995 3 0 2 -1 -1 -2 3 -4 14 4 -2 2 4 5 1 0 3 4 14 4 -2 2 4 6 51 8 15 4 5 4 4 1997 1 1 2 3 -5 5 6 13 9 3 3 4 5 4 3 3 3 4 5 3 3 14 4 4 2 1 2 2 2 2 2 4 3 5 8 4 1 4 <td>1004</td> <td></td> <td>0</td> <td></td> <td>~</td> <td></td> <td>7</td> <td>2</td> <td></td> <td>2</td> <td>0</td> <td></td> <td></td> <td>5.0</td> <td>7.4</td> <td>F 1</td> <td>0.0</td> <td>5.0</td>	1004		0		~		7	2		2	0			5.0	7.4	F 1	0.0	5.0
1996 -6 1.6 -2 8 7 9 -1 7 6 0 8 6 13 31 8.1 5.4 45 50 14 72 1997 5 1 1 1 4 7 -6 -4 21 -3 7 7 -1 3 78.8 64 98 10 10 1 4 4 6 2 -1 -2 -2 -3 -4 0 8 41 39 73 -1 43 2001 -7 4 1 3 0 4 -1 5 5 5 5 13 3 35 35 28 65 21 33 3 -1 10 29 20 13 32 33 33 33 31 81 54 55 75 75 75 13 33 31 33 31														1				
1997 1. 1.2 8 0 7 7 7 9 3 45 30 45 55 1999 5 1 4 2 2 2 4 12 7 7 9 3 45 30 30 54 55 1990 5 4 6 2 1 2 2 2 5 -4 0 44 41 30 30 74 43 2001 -7 6 0 8 4 5 9 2 -5 5 5 28 65 50 55 14 43 2003 2 6 5 5 7 0 0 2 3 -1 2 20 10 <																		
1998 5 1 1 4 7 -6 4 21 -7 7 -1 3 45 30 30 54 55 1999 5 4 2 2 2 1 -2 5 3 5 8 41 39 39 74 43 33 2001 7 4 1 -5 0 4 -3 3 5 5 5 29 30 22 3 3 5 5 29 30 22 3 4 -1 4 0 4 -1 6 0 8 -1 29 30 13 3 10 0 3 10 13 13 3 10 0 3 10 13 13 13 3 14 14 14 14 3 3 13 10 13 13 13 13 13 13<																		
2000 .1 .4 .4 .6 .2 .1 .2 .2 .5 .4 .0 .4 .4 .5 .0 .5 .7 .6 .5 .5 .7 .6 .5 .7 .6 .5 .7 .7 .6 .7 .27 .25 .1 .2 .0 .1 .6 .5 .7 .7 .2 .1 .1 .4 .4 .3 .3 .1 .1 .3 .7 .2 .1 .1 .2 .2 .1 .1 .2 .1 .2 .1 .3 .3 .3 .2 .7 .1 .2 .2 .2 .2 .2 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																		
2000 .1 .4 .4 .6 .2 .1 .2 .2 .5 .4 .0 .4 .4 .5 .0 .5 .7 .6 .5 .5 .7 .6 .5 .7 .6 .5 .7 .7 .6 .7 .27 .25 .1 .2 .0 .1 .6 .5 .7 .7 .2 .1 .1 .4 .4 .3 .3 .1 .1 .3 .7 .2 .1 .1 .2 .2 .1 .1 .2 .1 .2 .1 .3 .3 .3 .2 .7 .1 .2 .2 .2 .2 .2 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>																		
2001 -7 -6 -3 -3 -5 -5 0 5.6 -5.6 -4.6 -3.3 -2 -3 -2 -3 -2 1 -3 -5 -5 2.8 65 2.2 3.6 1.3 2003 7 4 -1 -8 0 0 4 -1 6 0 3 -1 2.7 2.6 5.7 0.5 2.2 3.0 3 1 0 -2 1.9 2.7 2.6 2.7 9.2 2.2 2.07 -4 1.1 1.7 0 -1 2.0 4 -7 4 1.4 3.5 5.5 4.0 1.0 1.0 2.0 1.4 1.0 2.0 1.4 1.0 2.0 1.4 1.0 2.7 3.3 5.5 4.16 1.03 8.3 7.0 9.3 2.2 1.0 1.1 3.0 3.1 1.0 2.0 1.0 1.0 1.0														1				
2002 6 0 8 4 -1 -3 2 1 -3 5 2.8 6.5 2.3 -3 2.3 2003 7 4 -1 -7.8 0 0 4 -1 6 0 8 -1 2.9 3.0 2.2 3.6 1.8 1.8 5.6 2.3 -2.3 2.0 1.0 1.0 1.0 1.0 5.7 2.4 1.1 7.7 2.4 1.1 7.7 2.4 1.1 7.7 0 -1.2 0.0 1.0 1.0 2.0 1.6 5.9 9.7 1.30 7.3 2006 -2.1 -8 -1.5 -8 -9 -2 1.4 1.2 7.7 3.5 5.1 1.6 -5.8 9.7 1.30 2.33 2010 -10 0.5 9.5 9.10 9.1 9.25 9.26 9.26 9.26 9.26 9.26 9.26 9.27																		
2003 7 4 1 8 0 0 4 1 6 0 8 1 2.9 3.0 2.2 3.6 1.3 2004 2 6 5 5 7 9 7 2.0 1.0 9 2 7 2.6 1.8 1.8 1.5 2.7 3.3 2005 4 1 2 4 1 4 3 3 0 1.4 1.1 6 5.9 2.0 1.0 3.3 2.0 1.0 1.0 1.0 1.0 3.5 5.5 1.7 1.0 0 1.0 <td></td>																		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$																		
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	2005	.,		.1	.0	.0	.0		.1	.0	.0	.0		2.9	5.0	2.2	5.0	1.5
2006 .0 .1 .2 .4 .1 .1 .7 .0 .1 .0 .7 .4 .1 .7 .0 .2 .2 .2 .2 .2 .2 .2 .2 .2 .2 .4 .1 .1 .2 .2 .4 .1 .1 .2 .2 .4 .1 .2 .4 .1 .1 .2 .4 .1 .1 .2 .2 .4 .1 .2 .2 .4 .1 .2 .3 .2 .3 .2 .2 .4 .1 .2 .7 .3 .5 .5 .7 .2 .																		
2007 -4 1.1 -1 -7 -4 0 -7 -4 0.1 -7 -4 0.1 -7 -4 0.1 -7 -4 0.1 -7 -1 -7 <																		
2008 3 2 3 8 5 4 0 -1.2 -4.0 1.0 -1.0 -1.6 5.9 9.7.7 -1.30 3.3 2009 -2.1 8 -1.5 8 9 2 1.4 1.2 7 3 5 5 -1.6 -10.3 8.3 7.0 9.3 2010 1 1 1 1 1 1 7.1 7.2 6.2 3.2 5.8 2009 89.1 88.5 87.7 85.5 86.7 87.8 88.4 88.6 89.1 89.6 88.2 85.9 87.6 89.1 87.7 2010 95.1 95.5 92.6 92.6 93.5 93.6 93.9 93.8 94.1 95.2 93.6 93.4 92.8 91.4 95.2 93.6 93.2 93.9 93.8 94.1 95.2 93.6 93.2 93.8 94.1 93.4 93.7 <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td>														1				
2009 2.1 8 1.5 8 9 2 1.4 1.2 .7 .3 .5 .5 .17.6 .10.3 8.3 7.0 2.3 2010 1 <td></td>																		
2010 1.0 0. 6 5 1.2 1. 9 1. 3. 0. 3. 1.2 7.1 7.2 6.2 3.2 5.8 2011 1 1 1 1 1 1 7.1 7.2 6.2 3.2 5.8 2009 1891 88.5 87.7 85.5 85.7 87.8 88.4 88.6 89.1 89.6 82.2 85.9 87.6 89.1 87.7 2010 95.1 95.5 91.0 91.5 92.6 92.6 93.5 93.8 94.1 95.2 90.6 92.2 93.6 94.4 92.8 2009 125.0 125.1 125.0 124.9 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.9 125.0 125.4 125.1 125.0 124.8 124.8 124.8 124.8 124.8 124.9 125.0 124.8 124	2008	3	2	5	8	5	4	.0	-1.2	-4.0	1.0	-1.0	-2.0	-1.0	-3.9	-9.7	-13.0	-5.5
2010 1.0 0. 6 5 1.2 1. 9 1. 3. 0. 3. 1.2 7.1 7.2 6.2 3.2 5.8 2011 1 1 1 1 1 1 7.1 7.2 6.2 3.2 5.8 2009 1891 88.5 87.7 85.5 85.7 87.8 88.4 88.6 89.1 89.6 82.2 85.9 87.6 89.1 87.7 2010 95.1 95.5 91.0 91.5 92.6 92.6 93.5 93.8 94.1 95.2 90.6 92.2 93.6 94.4 92.8 2009 125.0 125.1 125.0 124.9 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.9 125.0 125.4 125.1 125.0 124.8 124.8 124.8 124.8 124.8 124.9 125.0 124.8 124	2009	-2.1	8	-1.5	8	9	2	1.4	1.2	.7	.3	.5	.5	-17.6	-10.3	8.3	7.0	-9.3
IP (2007-100) 191 88.5 87.2 86.5 85.7 85.5 86.7 87.8 88.4 88.6 89.1 89.6 82.2 85.2 85.6 91.7 2010 95.1 95.5 91.0 91.5 92.6 92.6 93.5 93.6 93.9 93.8 94.1 95.2 90.6 92.2 93.6 94.4 92.8 Capacity (percent of 2007 coupun) 125.0 125.1 125.0 125.1 125.0 124.9 124.8 124.9 124.9<	2010	1.0	.0	.6	.5	1.2	.1	.9	.1	.3	.0	.3	1.2	7.1	7.2	6.2	3.2	5.8
2009 89.1 88.5 87.7 85.5 86.7 87.8 88.4 88.6 89.1 89.2 85.9 87.6 89.1 87.7 2010 90.5 91.0 91.5 92.6 92.6 93.5 93.6 93.8 94.1 95.2 90.6 92.2 93.6 94.4 92.8 Capacity (percent of 2007 couput) 125.0 125.1 125.0 125.0 125.0 125.0 125.0 125.0 125.0 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.9 125.0 125.0 124.8 124.9 124.9 125.0 124.8 124.9	2011	1																
2009 89.1 88.5 87.7 85.5 86.7 87.8 88.4 88.6 89.1 89.2 85.9 87.6 89.1 87.7 2010 90.5 91.0 91.5 92.6 92.6 93.5 93.6 93.8 94.1 95.2 90.6 92.2 93.6 94.4 92.8 Capacity (percent of 2007 couput) 125.0 125.1 125.0 125.0 125.0 125.0 125.0 125.0 125.0 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.8 124.9 125.0 125.0 124.8 124.9 124.9 125.0 124.8 124.9	ID $(2007 - 100)$																	
2010 90.5 90.5 91.0 91.5 92.6 92.6 93.5 93.6 93.8 94.1 95.2 90.6 92.2 93.6 94.4 92.8 2011 95.1 95.0 125.1 125.0 125.1 125.0 125.1 125.0 125.1 125.0 124.8 124.9	· · · · · · · · · · · · · · · · · · ·	80.1	88 5	87.2	86.5	85 7	85.5	867	87.8	88 /	88.6	80.1	80.6	88.2	85.0	87.6	80.1	87.7
2011 95.1 Unitable Uni																		
ippercent of 2007 output) 125.0 125.1 125.2 125.2 125.3 125.4 12			20.5	91.0	<i>y</i> 1.5	2.0	2.0	20.0	25.0	/3./	25.0	<i>y</i> 1.1	<i>)0.2</i>	20.0	/2.2	25.0	21.1	2.0
2011 125.0 111 125.0 111 11	(percent of 2007 output)	125.0	125.1	125.2	125.3	125.4	125.4	125.4	125.4	125.4	125.3	125.2	125.2	125.1	125.4	125.4	125.2	125.3
(premt) (premt) <t< td=""><td></td><td></td><td>125.0</td><td>125.0</td><td>124.9</td><td>124.8</td><td>124.8</td><td>124.8</td><td>124.8</td><td>124.8</td><td>124.8</td><td>124.9</td><td>124.9</td><td>125.0</td><td>124.8</td><td>124.8</td><td>124.9</td><td>124.9</td></t<>			125.0	125.0	124.9	124.8	124.8	124.8	124.8	124.8	124.8	124.9	124.9	125.0	124.8	124.8	124.9	124.9
1989 85.2 84.7 84.8 84.7 84.0 83.8 82.9 83.1 82.8 82.9 83.2 84.9 84.2 83.1 83.0 82.2 81.1 80.4 80.3 83.1 83.1 82.9 79.3 79.5 79.3 79.5 80.3 80.2 79.8 1992 79.3 79.7 80.3 80.7 80.7 80.7 80.7 80.7 80.7 80.7 80.7 80.7 80.5 79.8 80.7 80.5 80.5 80.9 81.1 81.4 81.9 82.1 82.3 81.3 81.1 81.4 81.9 82.1 82.6 83.5 83.7 84.6 83.6 83.6 83.6 83.6 83.6 83.6 83.6 83.6 83.6 83																		
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$		95.2	017	010	017	84.0	02.0	82.0	025	02.1	020	82.0	02 2	84.0	84.2	02.1	82.0	02.0
1991 79.9 79.3 78.7 78.8 79.5 80.2 80.1 80.1 80.7 80.4 80.3 79.9 79.3 79.5 80.3 80.2 79.8 1992 79.3 79.7 80.3 80.7 80.8 80.6 81.1 81.5 80.5 80.9 81.1 81.0 79.8 80.7 80.7 80.7 80.6 80.5 1993 81.2 81.4 81.0 81.1 81.2 81.1 81.4 81.9 82.3 81.1 81.1 81.2 81.1 81.4 81.9 82.3 83.1 83.4 83.7 83.6 83.8 84.2 84.4 85.1 82.6 83.5 83.7 84.4 85.1 82.6 83.6 83.5 83.4 83.4 83.6 83.7 83.3 84.2 84.4 85.1 82.6 83.6 83.7 83.4 83.6 83.7 83.6 83.7 83.4 83.6 83.7 83.1 83.6 83.6 83.5 83.4 84.2 83.4 84.2 83.4 84.2 <																		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$														1				
1994 82.5 82.3 83.0 83.2 83.4 83.7 83.6 83.8 83.8 84.2 84.4 85.1 82.6 83.5 83.7 83.6 83.8 1995 85.0 84.7 84.6 84.2 84.0 83.3 84.2 84.2 83.6 83.5 83.5 84.8 84.1 83.9 83.6 83.7 83.3 83.6 83.7 83.1 83.6 83.7 83.1 83.6 83.7 83.1 83.6 83.7 83.1 83.6 83.7 83.1 83.6 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.9 83.9 83.4 84.2 84.7 84.7 83.9 83.9 83.4 84.2 84.7 84.7 83.0 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.1 83.1 83.7 83.4 84.2 84.7 84.7 84.1 83.1 83.2 83.4 83.4 83														1				
1995 85.0 84.7 84.6 84.2 84.0 83.3 84.2 84.2 83.6 83.5 83.5 84.8 84.1 83.9 83.5 84.1 1996 82.6 83.6 83.1 83.4 83.5 83.7 83.3 83.6 83.7 83.1 83.6 83.7 83.9 83.4 84.5 84.7 84.7 85.0 84.7 83.9 83.9 84.3 84.8 84.2 83.4 83.4 83.0 82.3 82.5 82.0 81.9 81.4 83.1 82.3 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1	1993	81.2	81.4	81.2	81.4	81.0	81.1	81.2	81.1	81.4	81.9	82.1	82.3	81.3	81.1	81.2	82.1	81.4
1995 85.0 84.7 84.6 84.2 84.0 83.3 84.2 84.2 83.6 83.5 83.5 84.8 84.1 83.9 83.5 84.1 1996 82.6 83.6 83.1 83.4 83.5 83.7 83.3 83.6 83.7 83.1 83.6 83.7 83.9 83.4 84.5 84.7 84.7 85.0 84.7 83.9 83.9 84.3 84.8 84.2 83.4 83.4 83.0 82.3 82.5 82.0 81.9 81.4 83.1 82.3 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1	1004	00.5	00.0	02.0	02.2	02.4	02.7	02.5	02.0	02.0	04.0	04.4	07.1	00.5	02.5	02.7	04.5	0.2 6
1996 82.6 83.6 83.1 83.4 83.5 83.9 83.4 83.6 83.7 83.3 83.6 83.7 83.1 83.6 83.7 83.1 83.6 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.3 83.6 83.7 83.8 83.9 83.8 83.8 84.5 84.7 84.7 85.0 84.7 83.1 83.6 83.4 84.8 84.2 1998 84.5 84.1 83.6 83.4 83.4 82.5 81.7 83.0 82.3 82.0 81.9 84.1 83.6 83.5 82.0 81.9 84.1 83.6 83.4 84.2 82.9 82.0 82.3 81.9 84.1 83.6 83.7 83.8 82.0 82.1 82.2 81.3 80.3 81.5 70.0 71.7 75.6 75.1 74.7 74.2 73.6 73.5 75.8 75.1 75.1																		
1997 83.4 84.0 84.2 83.8 83.9 83.8 83.8 84.5 84.7 85.0 84.7 83.9 83.9 84.3 84.8 84.2 1998 84.5 84.1 83.6 83.4 83.4 82.5 81.7 83.0 82.3 82.5 82.0 81.9 84.1 83.1 82.3 82.1 82.9 1999 81.9 81.9 81.8 81.6 81.9 81.4 81.6 81.7 81.1 81.9 82.0 82.3 81.9 81.6 81.5 82.0 82.1 2000 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.2 81.3 80.3 81.5 2001 79.1 78.4 77.9 75.6 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.1 74.7 75.2 75.3 75.0 75.3 75.0 75.3 75.8 76.6 75.9																		
1998 84.5 84.1 83.6 83.4 82.5 81.7 83.0 82.3 82.5 82.0 81.9 84.1 83.1 82.3 82.1 82.9 1999 81.9 81.9 81.8 81.6 81.9 81.4 81.6 81.7 81.1 81.9 82.0 82.3 82.3 82.0 82.3 82.1 82.3 82.1 82.4 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.2 81.3 80.3 81.5 2001 79.1 78.4 77.9 77.5 76.8 76.1 75.6 75.1 74.7 74.2 73.6 73.5 78.5 76.8 75.1 74.7 2002 73.8 73.7 74.1 74.4 74.7 75.3 75.0 75.1 75.2 75.0 75.3 75.7 75.3 75.6 75.7 75.3 75.4 75.7 75.7 76.1 76.2 76.8 76.8 75.7 75.3 75.4 75.9 2004 77.0 77.4 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1</td><td></td><td></td><td></td><td></td></td<>														1				
1999 81.9 81.9 81.8 81.6 81.9 81.4 81.6 81.7 81.1 81.9 82.0 82.3 81.9 81.6 81.5 82.0 81.8 2000 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.1 82.2 81.3 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.2 81.3 80.3 81.5 2001 79.1 78.4 77.9 77.5 76.8 76.1 75.1 74.7 74.2 73.6 73.5 78.5 76.8 75.1 73.5 75.3 75.1 75.1 75.3 75.0 75.3 75.7 75.3 75.7 75.3 75.7 75.3 75.8 75.7 75.3 75.7 75.3 75.7 75.3 75.7 75.3 75.8 75.7 75.3 75.8 76.6 75.9 2004 77.0 77.4 78.0 77.3 77.8 <td></td>																		
2000 82.1 82.1 82.1 82.4 82.2 82.0 81.5 81.1 81.2 80.7 80.4 79.9 82.1 82.2 81.3 80.3 81.5 2001 79.1 78.4 77.9 77.5 76.8 76.1 75.6 75.1 74.7 74.2 73.6 73.5 78.5 76.8 75.1 73.8 75.0 73.9 74.8 75.1 75.1 74.7 74.2 76.8 75.0 73.9 74.8 75.1 75.1 74.7 2003 75.6 75.9 75.8 75.2 75.3 75.7 75.7 76.1 76.2 76.8 76.8 75.7 75.3 75.8 76.6 75.9 2004 77.0 77.4 78.0 77.3 77.8 78.0 78.7 78.7 75.8 76.8 75.7 75.3 75.8 76.6 75.9 2005 79.8 80.3 80.2 80.2 80.4 80.5																		
2001 79.1 78.4 77.9 77.5 76.8 76.1 75.6 75.1 74.7 74.2 73.6 73.5 78.5 76.8 75.1 73.8 73.7 74.1 74.4 74.7 75.3 75.0 75.3 75.0 73.3 75.0 73.9 74.8 75.1 75.1 74.7 2003 75.6 75.9 75.8 75.2 75.3 75.7 75.7 76.1 76.2 76.8 76.8 75.7 75.3 75.8 75.7 75.9 2004 77.0 77.4 77.0 77.4 78.0 77.3 77.8 78.0 78.7 78.9 79.4 77.1 77.6 78.0 79.0 77.9 2005 79.8 80.3 80.2 80.2 80.4 80.4 78.7 79.5 80.3 80.6 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 <td></td>																		
2002 73.8 73.7 74.1 74.4 74.7 75.3 75.0 75.1 75.2 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.0 75.3 75.3 75.1 75.1 75.7 75.7 76.1 76.2 76.8 76.8 75.7 75.3 75.3 75.8 76.6 75.9 2004 77.0 77.4 78.0 77.3 77.8 78.0 78.7 78.9 79.4 77.1 77.6 78.0 79.0 77.9 2005 79.8 80.3 80.2 80.4 80.5 80.4 80.4 78.7 79.5 80.3 80.6 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.7 80.7 80.7 80.7<																		
2003 75.6 75.9 75.8 75.2 75.3 75.4 75.7 76.1 76.2 76.8 76.8 75.7 75.3 75.8 76.6 75.9 2004 77.0 77.4 77.0 77.4 78.0 77.3 77.8 78.0 78.7 78.9 79.4 77.1 77.6 78.0 77.9 2005 79.8 80.3 80.2 80.2 80.4 80.5 80.4 80.4 78.7 79.5 80.3 80.4 79.8 80.3 80.4 79.8 80.3 80.6 80.7<																		
2004 77.0 77.4 77.0 77.4 78.0 77.3 77.8 78.0 78.7 78.9 79.4 77.1 77.6 78.0 79.0 77.9 2005 79.8 80.3 80.2 80.2 80.4 80.5 80.4 80.4 78.7 79.5 80.3 80.6 80.1 80.4 79.8 80.3 80.6 80.1 80.4 79.8 80.3 80.6 80.1 80.4 79.8 80.3 80.6 80.1 80.4 79.8 80.1 80.1 80.1 80.1 80.1 80.1 80.1 80.4 79.7 79.5 80.3 81.0 80.4 78.7 79.5 80.3 80.6 80.4 79.8 80.1 80.1 80.1 80.4 79.8 80.1 80.7 80.7 80.7 80.7 80.7 80.7 80.7 80.7 80.7 79.3 77.9 74.8 75.4 74.5 72.9 80.7 79.4 77.2 74														1				
2005 79.8 80.3 80.2 80.2 80.4 80.5 80.4 78.7 79.5 80.3 80.6 80.4 79.8 80.1 80.4 79.8 80.1 80.4 79.8 80.1 80.4 79.8 80.1 80.1 80.1 80.4 79.8 80.1 80.1 80.4 79.8 80.1 80.1 80.1 80.4 79.8 80.1 80.1 80.1 80.7 77.9 74.8 75.4 74.5 72.9 80.7 79.4 77.2 74.3 77.9 2009 71.3 70.7 69.6 69.0 68.3 68.2 69.1 70.0 70.5 70.7 71.1 71.6 70.5 68.5 69.9 71.1 70.0 70.5 75.2 75.4 76.2 72.5 73.9	2003	15.0	13.7	15.0	13.2	15.5	15.4	15.1	15.1	/0.1	10.2	70.0	/0.0	15.1	15.5	15.0	/0.0	13.7
2006 80.6 80.5 80.6 80.8 80.6 80.9 81.0 81.0 80.8 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 80.6 80.3 81.0 81.2 81.1 81.3 81.7 80.6 80.3 81.2 81.2 81.1 81.5 81.4 81.3 2008 80.9 80.7 80.5 79.8 79.4 79.0 79.0 77.9 74.8 75.4 74.5 72.9 80.7 79.4 77.2 74.3 77.9 2009 71.3 70.7 69.6 69.0 68.3 68.2 69.1 70.0<													79.4					
2007 80.6 81.3 81.7 81.6 81.3 81.4 81.3 81.5 80.9 81.2 81.2 81.1 81.5 81.4 81.3 2008 80.9 80.7 80.5 79.8 79.4 79.0 77.9 74.8 75.4 74.5 72.9 80.7 79.4 77.2 74.3 77.9 2009 71.3 70.7 69.6 69.0 68.3 68.2 69.1 70.0 70.5 70.7 71.1 71.6 70.5 68.5 69.9 71.1 70.0 72.3 72.4 72.8 73.2 74.2 74.9 75.0 75.2 75.4 76.2 72.5 73.9 75.0 74.3 2010 72.3 72.4 72.8 73.2 74.2 74.9 75.0 75.2 75.4 76.2 72.5 73.9 75.0 75.6 74.3 2011 76.1 76.1 76.1 76.1 76.1 76.1 76.1														1				
2008 80.9 80.7 80.5 79.8 79.4 79.0 77.9 74.8 75.4 74.5 72.9 80.7 79.4 77.2 74.3 77.9 2009 71.3 70.7 69.6 69.0 68.3 68.2 69.1 70.0 70.5 70.7 71.1 71.6 70.5 68.5 69.9 71.1 70.0 2010 72.3 72.4 72.8 73.2 74.2 74.9 75.0 75.2 75.4 76.2 72.5 73.9 75.0 75.6 74.3 2011 76.1 76.1 71.2 74.2 74.2 74.9 75.0 75.2 75.4 76.2 72.5 73.9 75.0 75.6 74.3																		
2009 71.3 70.7 69.6 69.0 68.3 68.2 69.1 70.0 70.5 70.7 71.1 71.6 70.5 68.5 69.9 71.1 70.0 2010 72.3 72.4 72.8 73.2 74.2 74.9 75.0 75.2 75.4 76.2 72.5 73.9 75.0 75.6 74.3 2011 76.1<																		
2010 72.3 72.4 72.8 73.2 74.2 74.9 75.0 75.2 75.4 76.2 72.5 73.9 75.0 75.6 74.3 2011 76.1 76	2008	80.9	80.7	80.5	/9.8	/9.4	/9.0	/9.0	//.9	/4.8	/5.4	/4.5	72.9	80.7	/9.4	11.2	/4.3	//.9
2010 72.3 72.4 72.8 73.2 74.2 74.9 75.0 75.2 75.4 76.2 72.5 73.9 75.0 75.6 74.3 2011 76.1 76	2009	71.3	70.7	69.6	69.0	68.3	68.2	69.1	70.0	70.5	70.7	71.1	71.6	70.5	68.5	69.9	71.1	70.0
2011 76.1																		
	1.0		1			1 1 -	c	1										

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

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

Seasonally adjusted	Lon	Eab	Mar	A	Mari	Terrere		A	Cant	Ort	New	Dee	01		- 02	- 04	A
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP (percent																	
$change)^2$	0	0	1	1	0	1	1.1	0	2	2	2	1	1.0	2.0	2.0	6	0
1989 1990	.8	9 1.4	1	.1 3	9 .1	.1 .3	-1.1 2	.9 .3	2 .0	2 8	.2	.1 8	1.9 4.5	-3.0 2.6	-3.0 .9	.6 -6.8	.8
1991	8	6	7	.3	.7	1.1	.2	.2	1.1	2	2	1	-8.8	2.0	7.3	1.7	-2.0
1992	6	.9	1.0	.5	.6	.3	.9	4	.0	.6	.4	2	.6	8.1	3.9	2.8	3.6
1993	1.0	.2	2	.6	1	1	.3	1	.6	.9	.4	.5	4.4	1.6	1.2	7.0	3.5
1994	.2	.1	1.3	.8	.7	.3	.4	.8	.3	1.0	.8	1.2	4.8	9.5	6.0	9.9	5.9
1995	.3	1	.2	2	.0	.4	6	1.2	.9	1	.0	.4	5.6	.4	3.0	4.1	5.2
1996	7	1.6	3	1.0	.7	1.1	.3	.6	.7	1	.8	.9	2.4	9.1	7.9	5.8	4.8
1997 1998	.0	1.4 .1	1.2 1	2 .5	.9 .6	.7 7	.4 5	1.6 2.6	.9 3	.6 1.0	1.1 .2	.4 .5	9.3 6.1	7.7 2.5	10.7 3.3	10.9 7.6	8.4 6.7
1770	.0	.1	1		.0	/	5	2.0		1.0	.2		0.1	2.3	5.5	7.0	0.7
1999	.3	.7	.0	.4	.9	4	.5	.7	3	1.5	.6	.7	4.6	4.4	3.6	9.0	5.0
2000 2001	.2	.3 6	.7 3	.6 2	2 8	.2 7	.0 3	6 7	.5 2	4 7	3 3	7 .3	5.2 -6.5	4.4 -5.2	7 -6.1	-2.7 -4.3	4.2
2001	.5	.0	.7	.1	.7	1.1	5	.4	.1	5	.5	5	3.4	5.9	3.1	8	.3
2003	.6	.2	.3	9	.1	.4	.1	3	.8	.0	1.0	2	2.4	-2.0	1.9	4.1	1.3
2004	.0	.7	2	.5	.7	9	.8	.7	2	1.0	1	.7	2.3	3.0	3.5	5.3	2.8
2005	.7	.8	3	.2	.4	.1	1	.3	-1.0	1.5	.8	.0	6.6	2.2	3	5.6	4.0
2006	.7	2	1	.6	3	.3	.1	.4	.1	3	.0	1.5	3.1	1.3	1.9	1.6	2.5
2007 2008	4 5	.6 5	.8 2	.7	1 5	.1 6	.4 5	5 9	.5 -3.2	7 4	.3 -1.9	.2 -2.6	5.2	5.4 -8.1	.7 -10.4	-1.0 -18.0	2.9 -4.5
2009 2010	-2.7	2 3	-1.7 1.1	6 .9	8 1.2	1 2	1.7 .8	1.3	.7	.1 .4	1.0	.1	-21.0	-9.3 9.4	10.4 4.3	7.1	-11.1
2010	.9	3	1.1	.9	1.2	2	.0	.0	.1	.4	.3	.9	0.2	9.4	4.5	4.0	6.2
ID (2007, 100)																	
IP (2007=100) 2009	85.7	85.5	84.1	83.5	82.9	82.7	84.1	85.3	85.9	86.0	86.8	86.9	85.1	83.0	85.1	86.6	85.0
2010	87.8	87.5	88.5	89.3	90.3	90.1	90.8	90.8	90.9	91.3	91.6	92.3	87.9	89.9	90.8	91.7	90.2
2011	92.6																
Capacity																	
(percent of																	
2007 output)	107.0	107.1	105.0	1250	1265	10.5 5	1251	10.6.0	1011	1260	125.0	105.0	107.1	1017	10 4 0	105.0	101.5
2009 2010	127.2 125.7	127.1 125.6	127.0 125.6	126.8 125.5	126.7 125.5	126.5 125.5	126.4 125.5	126.2 125.5	126.1 125.5	126.0 125.6	125.9 125.6	125.8 125.6	127.1 125.6	126.7 125.5	126.2 125.5	125.9 125.6	126.5 125.6
2010	125.7	125.0	125.0	125.5	125.5	125.5	125.5	125.5	125.5	125.0	125.0	125.0	125.0	125.5	125.5	125.0	125.0
¥7,414 /*																	
Utilization (percent)																	
1989	85.6	84.6	84.4	84.4	83.5	83.4	82.3	82.9	82.5	82.2	82.1	82.0	84.9	83.8	82.6	82.1	83.3
1990	81.7	82.7	82.8	82.4	82.3	82.3	82.0	82.1	81.9	81.1	80.0	79.2	82.4	82.4	82.0	80.1	81.7
1991	78.5	77.9	77.2	77.3	77.8	78.6	78.7	78.8	79.5	79.3	79.0	78.8	77.9	77.9	79.0	79.0	78.5
1992 1993	78.2	78.8 80.3	79.4 80.0	79.6 80.3	79.9 80.2	79.9 79.9	80.4 80.0	79.8 79.8	79.6 80.2	79.9 80.8	80.0 81.0	79.7 81.2	78.8 80.2	79.8 80.1	79.9 80.0	79.9 81.0	79.6 80.3
1775	00.5	00.5	00.0	00.5	00.2	17.7	00.0	17.0	00.2	00.0	01.0	01.2	00.2	00.1	00.0	01.0	00.5
1994	81.2	81.1	82.0	82.4	82.7	82.7	82.8	83.2	83.1	83.7	84.0	84.6	81.4	82.6	83.0	84.1	82.8
1995 1996	84.6 81.4	84.2 82.3	84.0 81.6	83.6 82.0	83.2 82.1	83.2 82.6	82.4 82.4	83.0 82.5	83.3 82.6	82.8 82.1	82.4 82.3	82.4 82.6	84.3 81.8	83.3 82.3	82.9 82.5	82.5 82.3	83.3 82.2
1997	82.2	82.8	83.4	82.7	82.9	82.9	82.8	83.6	83.7	83.6	83.9	83.6	82.8	82.9	83.3	83.7	83.2
1998	83.7	83.2	82.5	82.3	82.2	81.0	80.1	81.7	80.9	81.2	80.9	80.9	83.1	81.8	80.9	81.0	81.7
1999	80.7	80.9	80.5	80.4	80.8	80.1	80.2	80.3	79.7	80.6	80.7	80.9	80.7	80.4	80.1	80.7	80.5
2000	80.7	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	79.7
2001	76.6	76.0	75.5	75.1	74.4	73.7	73.2	72.6	72.3	71.7	71.4	71.5	76.0	74.4	72.7	71.6	73.7
2002	71.8	71.7	72.2	72.2	72.7	73.5	73.1	73.4	73.4	73.1	73.4	73.0	71.9	72.8	73.3	73.2	72.8
2003	73.5	73.6	73.8	73.2	73.2	73.5	73.7	73.5	74.1	74.1	74.9	74.8	73.6	73.3	73.7	74.6	73.8
2004	74.8	75.3	75.2	75.6	76.2	75.5	76.2	76.7	76.5	77.3	77.2	77.6	75.1	75.8	76.5	77.4	76.2
2005 2006	78.1 79.4	78.7 79.1	78.4 78.9	78.4 79.3	78.6 78.9	78.5 79.0	78.4	78.4 79.2	77.5 79.1	78.6 78.7	79.0 78.6	78.9 79.7	78.4 79.1	78.5 79.1	78.1 79.1	78.8 79.0	78.5 79.1
2006	79.4	79.1	78.9	80.3	80.0	79.0	79.0 80.0	79.2	79.1	78.7 79.0	78.6 79.1	79.7	79.1	80.1	79.1	79.0	79.1
2008	78.7	78.2	78.0	77.0	76.5	76.0	75.6	75.0	72.6	72.4	71.0	69.2	78.3	76.5	74.4	70.9	75.0
2009	67.4	67.3	66.2	65.9	65.4	65.4	66.6	67.6	68.1	68.2	69.0	69.1	67.0	65.6	67.4	68.8	67.2
2009	69.8	69.7	70.4	71.1	72.0	71.8	72.3	72.3	72.4	72.7	72.9	73.5	70.0	71.6	72.4	73.0	71.8
2011	73.7																
	1																

Table 12 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing¹ Seasonally adjusted New June July Aug Sept. Oct. Nov. Dec. Q1 Q2

 I. Refer to note on cover page.

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

Seasonally adjusted Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
							j	8	~					X -	<u> </u>	X .	
IP $(percent$																	
change) ² 1989	.3	4	.3	.0	7	.0	-1.1	.9	3	2	.2	.6	1.9	-1.8	-3.4	1.0	.6
1990	7	.9	.3	2	7	.0	-1.1	.2	.2	2	-1.3	8	2.3	2.2	1.1	-6.7	.0
1991	4	8	6	.2	1.0	1.0	.0	.1	.2	2	2	5	-8.0	2.1	5.4	.5	-2.0
1992	8	.0	.8	.6	.2	2	.8	6	.1	.6	.2	.0	-1.9	6.1	1.7	2.9	1.9
1993	.5	.3	1	.3	4	.2	.3	1	.3	.7	.3	.5	3.1	.4	1.4	5.2	2.5
100.4		0	0	2			0		0			0	1.2	5.0	2.2		10
1994 1995	.4	.0	.9 1	.3 3	.4	.6	.0 5	.4 1.2	.0	.6 5	.4	.9 .2	4.3	5.3 -1.4	3.2 1.5	5.6 .5	4.0
1996	9	1.3	4	.7	.5	.7	5	.4	.4	3	.8	.5	2	5.9	2.1	3.2	1.7
1997	1	.9	.5	3	.3	.2	.3	1.0	.7	.6	.7	.1	5.1	2.3	6.0	7.8	4.2
1998	.2	.0	.0	.2	.6	9	8	2.0	6	.5	3	.0	1.9	.9	2	2.3	3.1
1999	.2	.1	1	1	.6	5	.3	.4	5	1.2	.2	.5	.7	.4	1.0	5.4	1.1
2000	3	.0	.1	.4	1	1	5	4	.4	5	2	5	.5	1.5	-3.0	-2.6	1.0
2001	7	5	3	1	6	5	3	3	3	5	4	1	-6.1	-4.2	-4.4	-4.7	-3.9
2002	.7	.0	.8	.4	.5	.8	4	.1	.0	3	.4	7	3.0	6.2	1.5	-1.0	.3
2003	.7	.2	3	9	1	1	.3	1	.6	1	.7	1	1.5	-4.5	1.1	2.8	.2
2004	.1	.5	6	.5	.7	-1.0	.7	.1	1	1.0	.2	.7	1.8	1.9	1.3	5.3	1.7
2005	.4	.6	1	.0	.2	.3	2	.0	-2.2	1.0	1.1	.6	5.1	1.2	-2.8	1.6	2.5
2006	.0	.0	.2	.4	2	.4	.2	.2	2	1	2	1.0	3.3	2.0	1.8	.2	1.4
2007	4	1.1	.0	.6	.1	1	.2	1	.3	9	.2	.0	3.7	3.7	.8	-2.3	1.9
2008	4	3	4	9	5	3	.0	-1.2	-4.1	1.2	8	-1.9	-2.7	-6.8	-9.6	-11.7	-4.0
2009	-2.0	7	-1.6	9	-1.0	3	1.3	1.2	.7	.2	.5	.5	-16.8	-11.2	7.4	6.5	-9.2
2010	1.0	1	.6	.4	1.2	.1	.9	.1	.3	1	.2	1.1	6.8	6.7	6.2	3.0	5.4
2011	1																
IP (2007=100)																	
2009	88.9	88.2	86.9	86.0	85.2	85.0	86.1	87.1	87.7	87.9	88.3	88.8	88.0	85.4	86.9	88.3	87.2
2010 2011	89.7 94.0	89.6	90.1	90.5	91.6	91.7	92.5	92.6	92.9	92.8	93.0	94.1	89.8	91.3	92.6	93.3	91.9
Capacity (percent of 2007 output) 2009 2010 2011	124.4 124.0 123.5	124.5 123.9	124.6 123.8	124.7 123.7	124.7 123.6	124.7 123.5	124.7 123.5	124.6 123.4	124.5 123.4	124.4 123.4	124.3 123.4	124.2 123.4	124.5 123.9	124.7 123.6	124.6 123.4	124.3 123.4	124.5 123.6
Utilization (percent)		05.1	05.2	05.1	04.4	04.2	02.2	02.0	02.4	02.1	02.2	02.5	05.2	04.6	02.5	02.2	04.2
1989	85.6	85.1	85.3	85.1	84.4	84.3	83.2	83.8	83.4	83.1	83.2	83.5	85.3	84.6	83.5	83.3	84.2
1990 1991	82.8 80.2	83.5 79.5	83.7 78.9	83.4 79.0	83.3 79.7	83.4 80.4	83.2 80.3	83.3 80.2	83.3 80.9	82.5 80.6	81.4 80.4	80.6 79.9	83.3 79.5	83.4 79.7	83.3 80.4	81.5 80.3	82.9 80.0
1991	79.1	79.6	80.2	80.6	80.7	80.4	81.0	80.2	80.5	81.0	81.1	81.1	79.6	80.6	80.4	81.1	80.5
1993	81.4	81.5	81.4	81.5	81.1	81.2	81.4	81.2	81.4	81.9	82.1	82.4	81.4	81.3	81.3	82.1	81.6
1994	82.6	82.5	83.1	83.2	83.4	83.8	83.7	83.9	83.8	84.2	84.4	85.0	82.7	83.5	83.8	84.5	83.6
1995	85.0	84.7	84.4	84.0	83.9	83.8	83.2	84.0	84.0	83.4	83.3	83.3	84.7	83.9	83.7	83.4	83.9
1996	82.4	83.4	82.9	83.4	83.6	84.0	83.5	83.6	83.8	83.4	83.8	84.0	82.9	83.7	83.6	83.7	83.5
1997	83.7	84.2	84.4	83.9	83.9	83.8	83.7	84.3	84.6	84.8	85.0	84.8	84.1	83.9	84.2	84.9	84.3
1998	84.6	84.3	84.0	83.8	84.0	82.9	82.0	83.4	82.6	82.8	82.3	82.0	84.3	83.6	82.7	82.4	83.2
1999	82.0	81.9	81.6	81.3	81.6	81.0	81.1	81.3	80.7	81.5	81.6	81.9	81.8	81.3	81.0	81.7	81.5
2000	81.5	81.4	81.4	81.6	81.4	81.3	80.7	80.3	80.6	80.1	79.8	79.3	81.4	81.4	80.5	79.7	80.8
2001	78.7	78.2	77.8	77.7	77.1	76.6	76.3	76.0	75.6	75.1	74.7	74.6	78.2	77.1	76.0	74.8	76.5
2002	75.0	74.9	75.5	75.7	76.1	76.7	76.4	76.4	76.5	76.3	76.6	76.2	75.1	76.2	76.4	76.4	76.0
2003	76.7	76.9	76.8	76.1	76.1	76.1	76.3	76.3	76.7	76.7	77.3	77.2	76.8	76.1	76.5	77.1	76.6
2004	77.3	77.8	77.4	77.8	78.4	77.7	78.3	78.4	78.4	79.2	79.4	80.0	77.5	78.0	78.3	79.5	78.3
2005	80.3	80.8	80.7	80.7	80.8	81.0	80.8	80.8	79.0	79.7	80.5	80.9	80.6	80.8	80.2	80.3	80.5
2006	80.8	80.7	80.8	80.9	80.7	80.8	80.9	80.9	80.7	80.5	80.2	80.9	80.7	80.8	80.8	80.5	80.7
2007	80.5	81.3	81.2	81.6	81.6	81.5	81.6	81.5	81.8	81.0	81.3	81.3	81.0	81.6	81.7	81.2	81.4
2008	80.9	80.7	80.3	79.6	79.1	78.8	78.7	77.7	74.4	75.2	74.5	73.0	80.6	79.1	76.9	74.3	77.7
2009	71.4	70.9	69.7	69.0	68.3	68.1	69.0	69.9	70.4	70.6	71.1	71.5	70.7	68.5	69.8	71.1	70.0
2010	72.3	72.3	72.8	73.2	74.1	74.2	74.9	75.0	75.3	75.2	75.4	76.3	72.5	73.8	75.1	75.6	74.2
2011	76.1																
	1																1

Table 13 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Total Industry Excluding Selected High-Technology Industries¹ Seasonally adjusted

 I. 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.

Seasonally adjusted	- 6,																
Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Q1	Q2	Q3	Q4	Annual
IP $(percent change)^3$																	
1989	.8	-1.0	1	.1	9	.1	-1.3	.9	2	3	.1	.1	2.2	-3.3	-4.1	5	.4
1990	2	1.5	.3	4	.1	.2	2	.3	.0	9	-1.3	8	3.8	1.9	.4	-7.5	0.
1991 1992	8	7 .9	8 .9	.3	.7 .5	1.1 .1	.3	.2 5	1.1 1	2 .5	3 .3	3 2	-9.6 -1.2	1.4 6.9	7.2 2.6	1.1 1.4	-2.6
1992	1.1	.9	3	.4	1	2	.0	3	1		.3	2	3.9	.7	.4	5.9	2.0
1775	1.1	.1	.0		.1	.2		.2		.0			5.7	.,		5.9	2.5
1994	.1	.1	1.2	.5	.5	.2	.2	.6	.1	.7	.5	.9	4.0	7.0	3.7	6.9	4.4
1995	.2	3	1	4	2	.2	8	.9	.6	4	1	.1	3.0	-2.5	.3	.8	2.5
1996	-1.1	1.3	5	1.0	.5	.8	1	.3	.5	4	.7	.7	-1.6	6.7	4.1	3.0	1.5
1997 1998	2	1.0 1	.9 3	7 .3	.5 .4	.4	.1 9	1.3 2.5	.6 7	.5 .7	.8 1	.1	6.2 3.2	2.8 1	6.6 5	8.2 4.2	4.9
1770		1	5		.4	-1.1	9	2.3	/	./	1	.2	3.2	1	5	4.2	5.5
1999	1	.4	4	.0	.8	7	.0	.6	5	1.4	.4	.3	.7	.3	.2	6.7	1.4
2000	3	2	.3	.4	6	.0	4	8	.4	5	6	9	.2	.6	-3.7	-4.7	.7
2001	6	5	3	1	7	5	1	7	2	7	2	.2	-7.2	-4.2	-4.8	-4.4	-4.8
2002 2003	.6	1 1	.8 .1	.1 -1.1	.7 .0	1.0 .3	5 1	.3 3	.0 .8	5 1	.4 .9	7 3	3.7 .7	5.5 -3.7	2.2 .5	-1.6 3.1	.4
2003	.5	1	.1	-1.1	.0	.5	1	5	.0	1	.9	5	. /	-3.7	.5	5.1	.0
2004	2	.7	2	.5	.7	9	.9	.6	3	1.1	.0	.6	1.3	3.2	3.0	4.9	2.0
2005	.6	.7	4	.1	.4	.0	2	.1	-1.3	1.5	.7	1	5.6	1.2	-1.9	4.3	3.1
2006	.7	3	1	.5	5	.2	.0	.3	1	4	.0	1.6	2.6	.4	.6	.7	1.5
2007	5	.5 7	.6 4	.5 -1.4	1	.2	.3 5	6 9	.3 -3.3	9 1	.1 -1.6	.1 -2.4	4.5	4.4 -9.4	.4 -10.5	-3.2	2.0
2008	6	/	4	-1.4	6	6	3	7	-3.3	1	-1.0	-2.4	-4.2	-7.4	-10.3	-16.6	-5.5
2009	-2.7	1	-1.9	8	9	2	1.6	1.3	.6	.0	1.0	.1	-20.1	-10.6	9.3	6.4	-11.0
2010	.9	4	1.1	.8	1.2	3	.8	.0	.1	.4	.2	.8	5.8	8.8	4.2	3.7	5.6
2011	.3																
IP (2007=100)																	
2009	85.2	85.1	83.5	82.8	82.1	81.9	83.2	84.3	84.8	84.8	85.7	85.8	84.6	82.2	84.1	85.4	84.1
2010	86.6	86.2	87.1	87.9	88.9	88.7	89.4	89.3	89.4	89.8	90.0	90.7	86.6	88.5	89.4	90.2	88.8
2011	91.0																
Capacity (percent of 2007 output)																	
2009 (000)	126.5	126.4	126.2	126.0	125.8	125.6	125.4	125.2	125.0	124.8	124.6	124.4	126.4	125.8	125.2	124.6	125.5
2010	124.3	124.1	124.0	123.9	123.9	123.8	123.7	123.7	123.7	123.6	123.6	123.6	124.1	123.9	123.7	123.6	123.8
2011	123.7																
Utilization																	
(percent)																	
1989	86.0	85.1	84.9	84.9	84.0	83.9	82.7	83.2	82.9	82.5	82.4	82.3	85.3	84.3	82.9	82.4	83.7
1990	82.0	83.0	83.1	82.7	82.6	82.7	82.4	82.4	82.3	81.4	80.3	79.5	82.7	82.7	82.4	80.4	82.0
1991	78.8	78.1	77.4	77.5	77.9	78.7	78.8	78.8	79.6	79.4	79.0	78.7	78.1	78.0	79.1	79.1	78.6
1992	77.9	78.5	79.2	79.4	79.7	79.7	80.2	79.7	79.6	79.9	80.0	79.7	78.6	79.6	79.9	79.9	79.5
1993	80.5	80.5	80.1	80.5	80.3	80.0	80.1	79.9	80.2	80.8	80.9	81.2	80.4	80.2	80.1	81.0	80.4
1994	81.2	81.2	82.1	82.4	82.7	82.7	82.8	83.1	83.1	83.6	83.9	84.5	81.5	82.6	83.0	84.0	82.8
1995	84.5	84.1	83.8	83.3	83.0	83.0	82.1	82.7	83.0	82.5	82.2	82.1	84.1	83.1	82.6	82.3	83.0
1996	81.0	81.9	81.3	81.9	82.1	82.6	82.4	82.5	82.7	82.1	82.5	82.9	81.4	82.2	82.5	82.5	82.2
1997	82.5	83.1	83.5	82.7	82.8	82.8	82.5	83.3	83.5	83.5	83.9	83.6	83.0	82.7	83.1	83.7	83.1
1998	83.7	83.3	82.7	82.6	82.6	81.4	80.4	82.0	81.1	81.4	81.1	81.0	83.2	82.2	81.2	81.1	81.9
1999	80.7	80.8	80.2	79.9	80.3	79.6	79.4	79.7	79.1	80.1	80.2	80.3	80.5	79.9	79.4	80.2	80.0
2000	79.9	79.7	79.8	79.9	79.4	79.3	78.9	78.1	78.4	77.8	77.3	76.5	79.8	79.5	78.4	77.2	78.7
2001	75.9	75.5	75.2	75.1	74.5	74.0	73.9	73.4	73.2	72.6	72.5	72.6	75.5	74.5	73.5	72.6	74.0
2002	73.1	73.0	73.6	73.6	74.1	74.9	74.5	74.7	74.8	74.4	74.7	74.3	73.2	74.2	74.7	74.5	74.1
2003	74.7	74.7	74.8	74.1	74.1	74.3	74.3	74.1	74.7	74.6	75.4	75.2	74.7	74.1	74.3	75.0	74.6
2004	75.1	75.7	75.5	76.0	76.6	75.9	76.6	77.1	76.8	77.7	77.6	78.1	75.4	76.1	76.8	77.8	76.5
2005	78.6	79.2	78.8	78.8	79.1	79.0	78.8	78.8	77.7	78.7	79.2	79.0	78.9	79.0	78.4	79.0	78.8
2006	79.5	79.2	79.0	79.3	78.8	78.9	78.8	78.9	78.8	78.4	78.3	79.5	79.2	79.0	78.9	78.7	79.0
0007	79.0	79.4	79.8	80.1	80.0	80.0	80.2	79.7	79.9	79.1	79.1	79.1	79.4	80.0	79.9	79.1	79.6
2007										71.0	70.8	69.1	78.1	76.0			74.6
2007 2008	79.0	78.0	77.6	76.5	76.0	75.5	75.1	74.4	72.0	71.9	70.8	07.1	/0.1	76.0	73.9	70.6	/4.0
2008	78.6	78.0															
			77.6 66.1 70.3	76.5 65.7 70.9	76.0 65.2 71.8	75.5 65.2 71.6	75.1 66.3 72.2	67.3 72.2	67.9 72.3	68.0 72.7	68.8 72.8	69.0 73.4	66.9 69.8	65.4 71.4	67.2 72.3	70.6 68.6 73.0	67.0 71.6
2008 2009	78.6 67.3	78.0 67.3	66.1	65.7	65.2	65.2	66.3	67.3	67.9	68.0	68.8	69.0	66.9	65.4	67.2	68.6	67.0

Table 14 HISTORICAL STATISTICS FOR INDUSTRIAL PRODUCTION, CAPACITY, AND UTILIZATION: Manufacturing' Excluding Selected High-Technology Industries² Seasonally adjusted

I. 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.

EXPLANATORY NOTE

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

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 2002 NAICS codes. These individual series are classified in two ways: (1) market groups, and (2) industry groups. Market groups consist of products and materials. Total products are the aggregate of final products, such as consumer goods and equipment, and nonindustrial supplies (which are inputs to nonindustrial sectors). Materials are inputs in the manufacture of products. Major industry groups include three-digit NAICS industries and aggregates of these industries-for example, durable and nondurable manufacturing, mining, and utilities. A complete description of the market and industry structures, including details regarding series classification, relative importance weights, and data sources, is available on the Board's web site (www.federalreserve.gov/releases/G17/About.htm).

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 x 10% = 0.4%). To assist users with calculations, the Federal Reserve's web site provides supplemental monthly statistics that represent the exact proportionate contribution of a monthly change in a component index to the monthly change in the total index (www.federalreserve.gov/releases/G17/ipdisk/IPWeightsSa.txt).

Timing. The first estimate of output for a month is published around the 15th of the following month. The estimate is preliminary (denoted by the superscript "p" in tables) and subject to revision in each of the subsequent five months as new source data become available. (Revised estimates are denoted by the superscript "r" in tables.) For the first estimate of output for a given month, about 70 percent of the source data (in value-added terms) are available; the fraction of available source data increases to 84 percent for estimates in the second month that the estimate is published, 93 percent in the third month, 97 percent in the fourth month, 98 percent in the fifth month, and 99 percent in the sixth month. Data availability by data type in late 2009 is summarized in the table below:

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

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

The physical product group includes series based on either monthly or quarterly data. As can be seen in the first row of the table, in the first month, a physical product indicator is available for about half of the series (in terms of value added) that ultimately are based on physical product data (25 percent out of a total of 53 percent). Of the 25 percent, about two-thirds (19 percent of total IP) include series that are derived from weekly physical product data and for which actual monthly data may lag up to several months. On average, quarterly product data are received for the fourth estimate of industrial production. Specifically, quarterly data are available for the third estimate of the last month of a quarter, the fourth estimate of the second month of a quarter, and the fifth estimate of the first month of 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 2010; for other series, the factors were estimated with data through at least January 2010. Series are pre-adjusted for the effects of holidays or business cycles when appropriate. For the data since 1972, all seasonally adjusted aggregate indexes are calculated by aggregating the seasonally adjusted indexes of the individual series.

Reliability. The average revision to the *level* of the total IP index, without regard to sign, between the first and the fourth estimates was 0.26 percent during the 1987–2009 period. The average revision to the *percent change* in total IP, without regard to sign, from the first to the fourth estimates was 0.21 percentage point during the 1987–2009

period. In most cases (about 85 percent), the direction of the change in output indicated by the first estimate for a given month is the same as that shown by the fourth estimate.

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

CAPACITY UTILIZATION

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

Coverage. Capacity indexes are constructed for 89 detailed industries (71 in manufacturing, 16 in mining, and 2 in utilities), which mostly correspond to industries at the three- and four-digit NAICS level. Estimates of capacity and utilization are available for a variety of groups, including durable and nondurable manufacturing, total manufacturing, mining, utilities, and total industry. Manufacturing consists of those industries included in the North American Industry Classification System (NAICS) definition of manufacturing plus those industries- newspaper, periodical, book, and directory publishing plus logging-that have traditionally been considered to be manufacturing. Also, special aggregates are available, such as high-technology industries and manufacturing excluding high-technology industries.

Source Data. The monthly rates of capacity utilization are designed to be consistent with both the monthly data on production and the periodically available data on capacity and utilization. Because there is no direct monthly information on overall industrial capacity or utilization rates, the Federal Reserve first estimates annual capacity indexes from the source data. Capacity data reported in physical units from government sources (primarily from the U.S. Geological Survey and the Department of Energy's Energy Information Administration) and trade sources are available for portions of several industries in manufacturing (e.g., paper, industrial chemicals, petroleum refining, motor vehicles), as well as for electric utilities and mining; these industries represent about 25 percent of total industrial capacity. When physical product data are unavailable for manufacturing industries, capacity indexes are based on responses to the Bureau of the Census's Quarterly Survey of Plant Capacity (QSPC); these industries account for a bit less than 70 percent of total industry capacity. In the absence of utilization data for a few mining and petroleum series, capacity is based on trends through peaks in production (roughly 5 percent of total industry capacity). A detailed description of the methodology used to construct the capacity indexes is available on the Board's web site (www.federalreserve.gov/releases/G17/CapNotes.htm).

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

Consistency. A major aim is that the Federal Reserve utilization rates be consistent over time so that, for example, a rate of 85 percent means about the same degree of tightness that it meant in the past. A major task for the Federal Reserve in developing reasonable and consistent time series of capacity and utilization is dealing with inconsistencies between the movements of the industrial production index and the survey-based utilization rates. The McGraw-Hill/DRI Survey, now discontinued, was the primary source of manufacturing

utilization rates for many years. This was a survey of large companies that reported, on average, higher utilization rates than those reported by establishments covered by the Census Bureau's annual Survey of Plant Capacity (the predecessor to the QSPC) for the fourteen years they overlapped. Adjustments have been made to keep the industry utilization rates currently reported by the Federal Reserve roughly in line with rates formerly reported by McGraw-Hill. As a consequence, the rates reported by the Federal Reserve tend to be higher than the rates reported in the QSPC.

Perspective. Over the 1972–2009 period, the average total industry utilization rate is 80.6 percent; for manufacturing, the average factory operating rate has been 79.2 percent. Industrial plants usually operate at capacity utilization rates that are well below 100 percent: none of the broad aggregates has ever reached 100 percent. For total industry and total manufacturing, utilization rates have exceeded 90 percent only in wartime. The highs and lows in capacity utilization shown in table 7 are specific to each series and do not all occur in the same month.

REFERENCES AND RELEASE DATES

References. The release for the annual revision that was published on June 25, 2010 is available on the Board's website (www.federal reserve.gov/releases/g17/revisions/Current/DefaultRev.htm). The annual revision published in March 2009 is provided in the Federal Reserve Bulletin, vol. 95 (August 2009), pp. A125-A145. The annual revision published in March 2008 is described in an article published in the Federal Reserve Bulletin, vol. 94 (August 2008), pp. A41-A60. A summary of the annual revision that incorporated back to 1972 production and capacity indexes reclassified according to the North American Industry Classification System is available in an article in the Federal Reserve Bulletin, vol. 89 (April 2003), pp. 151-176. A description of the aggregation methods for industrial production and capacity utilization is included in an article in the Federal Reserve Bulletin, vol. 83 (February 1997), pp. 67–92. The Federal Reserve methodology for constructing industry-level measures of capital is detailed in "Capital Stock Estimates for Manufacturing Industries: Methods and Data" by Mike Mohr and Charles Gilbert (1996), which can be obtained at:

www.federalreserve.gov/releases/g17/CapitalStockDocLatest.pdf.

Industrial Production-1986 Edition contains a more detailed description of the other methods used to compile the industrial production index, plus a history of its development, a glossary of terms, and a bibliography. The major revisions to the IP indexes and capacity utilization since 1990 have been described in the Federal Reserve Bulletin (April 1990, June 1990, June 1993, March 1994, January 1995, January 1996, February 1997, February 1998, January 1999, March 2000, March 2001, March 2002, April 2003, Winter 2004, Winter 2005, March 2006, May 2007, August 2008).

Release Schedule

At 9:15 a.m. on

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