Industrial Production Source and Description Tables

Table 3. Industry Structure of Capacity and Capacity Utilization: Classification, Value-Added Proportions, and Descriptions of Series

	Classification ¹		Value added			
				proportion	Beginning	
Groups and series ¹	NAICS	SOP	Type	2022^{1}	$date^{1,2}$	Source data
Total index				100.00	1967	
Manufacturing (SIC) ³				73.22	1948	
Manufacturing (NAICS)	31–33			71.50	1972	
Durable manufacturing	321, 327, 331–339			36.68	1967	
Nondurable manufacturing	311–316, 322–326			34.82	1967	
Other manufacturing	1133, 5131pt.			1.72	1972	
Mining	21			16.01	1967	
Utilities	2211, 2			10.77	1967	
Stage of process groups						
Crude		C		20.26	1967	
Semifinished		Р		45.50	1948	
Finished		F		34.24	1948	

^{. . .} Not applicable.

1. Description of columns:

Groups and Series: Series marked with either an asterisk (*) or a dagger (†) are included in the published totals but are not published separately. Series marked with an asterisk are available in the auxiliary data (www.federalreserve.gov/releases/G17/Current/ipdisk/auxiliary.htm). The following abbreviations are used: ex. = excluding; eq. = equipment; misc. = miscellaneous; pt. = part.

Classification:

NAICS: North American Industry Classification System, 2022 edition, published by the U.S. Office of Management and Budget.

SOP: Stage of process classification: Crude processing (C), Primary & semifinished processing (P), Finished processing (F).

Type: Basis for capacity estimates.

Phys: Capacity estimates are based on physical data.

SPC: Capacity estimates are based on measures of capital services from the Federal Reserve Board and on utilization rate data for the fourth quarter of each year from the *Survey of Plant Capacity* (1974 to 2006) and from the *Quarterly Survey of Plant Capacity* (after 2006), both conducted by the Census Bureau.

TTP: Capacity estimates are based on trends through peaks in output.

Value-added proportion, 2022: This proportion is compiled from information contained in the Census of Manufactures, Annual Survey of Manufactures, and Census of Mineral Industries and in reports from the Department of Energy, the Edison Electric Institute, and the American Gas Association. The figures may not add to totals because of rounding.

Beginning date: Denotes beginning dates for series. Underlying physical data for some series may start at different dates.

- 2. Series beginning prior to 1972 are based, in part, on the McGraw-Hill/DRI survey that was available from 1955–88. In those industries where the McGraw-Hill/DRI survey is used at an aggregate level and the Census's Survey of Plant Capacity is used for more detailed components, the level of estimated capacity based on the Census survey has been adjusted to achieve consistency with the McGraw-Hill/DRI survey.
- 3. Manufacturing (SIC) consists of those industries included in the North American Industry Classification System (NAICS) definition of manufacturing plus those industries—logging and newspaper, periodical, book, and directory publishing (except exclusive Internet publishing)—that traditionally have been considered to be manufacturing and included in the industrial sector.

Table 3. Industry Structure of Capacity and Capacity Utilization: Classification, Value-Added Proportions, and Descriptions of Series—Continued

	Classification			Value added		
				proportion	Beginning	
Groups and series	NAICS	SOP	Туре	2022	date	Source data
Industry groups						
Manufacturing (SIC)				73.22	1948	
Manufacturing (NAICS)	31–33			71.50	1972	
Durable manufacturing	321, 327, 331–339			36.68	1967	
Wood product	321			1.93	1972	
Sawmills and wood preservation*	3211	Р	SPC	.57	1972	
Plywood and misc. wood products*	3212,9	Р		1.37	1972	
Veneer, plywood, and engineered wood product†	3212	Р	Phys	.46	1986	Capacity and output, thousand sq. ft. of 3/4-inch basis particleboard and fiberboard; Composite Panel Association. Million sq. ft. of 3/8-inch basis plywood and oriented strand board; APA: The Engineered Wood Association.
Other wood product*	3219	Р	SPC	.91	1986	
Nonmetallic mineral product	327			2.15	1948	
Clay, lime, gypsum, and misc. nonmetallic mineral products*	3271,4,9			.72	1972	
Clay and misc. nonmetallic mineral products*	3271,9	Р	SPC	.57	1972	
Lime and gypsum product†	3274	Р	Phys	.15	1972	Capacity and output, billions of sq. ft. of 1/2 inch basis gypsum board; Gypsum Industry Association.
Glass and glass product*	3272	Р	SPC	.44	1972	
Cement and concrete product*	3273			1.00	1972	
Cement*	32731	Р	Phys	.17	1972	Kiln capacity and output of cement clinker, tons; U.S. Geological Survey.
Concrete and product*	32732-9	Р	SPC	.82	1972	
Primary metal	331			2.91	1967	
Iron and steel products	3311,2	Р	Phys	1.59	1972	Capacity and output of raw steel, tons; American Iron and Steel Institute.
Alumina and aluminum production and processing*	3313	Р	Phys	.41	1972	Capacity and output, metric tons of ingot; Aluminum Association, U.S. Geological Survey.
Nonferrous metal (except aluminum) production and processing*	3314	Р	Phys	.51	1972	Capacity and output, tons, copper refining, copper smelting, and zinc smelting; U.S. Geological Survey.
Foundries*	3315	Р	SPC	.41	1972	
Fabricated metal product	332	Р	SPC	5.84	1948	
Machinery	333			5.13	1967	

 $[\]ast$ Auxiliary index.

[†] Unpublished.

^{. . .} Not applicable.

Table 3. Industry Structure of Capacity and Capacity Utilization: Classification, Value-Added Proportions, and Descriptions of Series—Continued

	Classification		Value added			
				proportion	Beginning	
Groups and series	NAICS	SOP	Type	2022	date	Source data
Agriculture, construction, and mining machinery*	3331	F	SPC	1.14	1972	
Industrial machinery*	3332	F	SPC	.50	1972	
Commercial and service industry machinery and other general purpose machinery*	3333,9	F	SPC	1.87	1972	
HVAC, metalworking, and power transmission machinery*	3334–6	P	SPC	1.63	1972	
Computer and electronic product	334			4.60	1972	
Computer and peripheral equipment	3341	F	SPC	.19	1972	
Communications equipment	3342	F	SPC	.48	1972	
Audio and video equipment and media*	3343,6	F	SPC	.08	1972	
Semiconductor and other electronic component	3344			1.38	1972	
Semiconductor and related device*	334413	Р		.81	1972	
MPUs†	334413pt.	Р	SPC	.25	1992	
Semiconductors except MPUs†	334413pt.	Р	SPC	.56	1992	
Electronic components ex. chips*	33441 ex. 334413	P		.58	1972	
Navigational, measuring, electromedical, and control instruments*	3345	F	SPC	2.47	1972	
Electrical equipment, appliance, and component	335			1.91	1972	
Household appliance*	3352	F	SPC	.32	1972	
Electrical equipment except appliances*	3351,3,9	Р	SPC	1.59	1972	
Transportation equipment	336			8.71	1967	
Motor vehicles and parts	3361-3			5.43	1948	
Motor vehicle*	3361			2.68	1972	
Automobile and light duty motor vehicle	33611			2.48	1972	
Automobile*	336110pt.	F	Phys	.67	1972	Capacity and output, line speeds and peaks in output for individual plants; Ward's Communications. Census Survey, 1972–1975.
Light truck and utility vehicle*	336110pt.	F	Phys	1.82	1972	Same as above.
Heavy duty truck*	33612			.20	1972	
Heavy trucks*	33612pt.	F	Phys	.08	1972	Daily production rate at capacity by plant; Stark's Truck & Off-Highway Ledger. Census Survey, 1972–1976.

^{*} Auxiliary index.

[†] Unpublished.

^{. . .} Not applicable.

Table 3. Industry Structure of Capacity and Capacity Utilization: Classification, Value-Added Proportions, and Descriptions of Series—Continued

	Classification		Value added			
				proportion	Beginning	
Groups and series	NAICS	SOP	Type	2022	date	Source data
Medium trucks*	33612pt.	F	Phys	.12	1972	Same as above.
Motor vehicle body and trailer*	3362	F	SPC	.63	1972	
Motor vehicle parts*	3363	Р	SPC	2.13	1972	
Aerospace and miscellaneous transportation eq.	3364–9			3.28	1948	
Aerospace product and parts*	3364	F	SPC	2.37	1972	
Railroad eq., ships and boats, and other transportation equipment*	3365–9	F	SPC	.91	1972	
Furniture and related product	337	F	SPC	1.13	1967	
Miscellaneous	339			2.37	1972	
Medical equipment and supplies*	3391	F	SPC	1.49	1972	
Other miscellaneous*	3399	F	SPC	.88	1967	
Nondurable manufacturing	311–316, 322–326			34.82	1967	
Food	311	F	SPC	8.91	1972	
Beverage and tobacco product	312			2.60	1972	
Beverage*	3121	F	SPC	1.58	1972	
Tobacco*	3122	F	SPC	1.03	1967	
Textile mills	313	Р	SPC	.27	1972	
Textile product mills	314	F		.27	1972	
Apparel	315	F	SPC	.13	1972	
Leather and allied product	316	F	SPC	.06	1967	
Paper	322			2.31	1948	
Pulp, paper, and paperboard mills*	3221			1.02	1972	
Pulp mills†	32211	С	Phys	.11	1972	Capacity and output, tons; American Forest and Paper Association.
Paper mills†	32212	С	Phys	.37	1972	Same as above.
Paperboard mills†	32213	С	Phys	.54	1972	Same as above.
Converted paper product*	3222	Р	SPC	1.29	1972	
Printing and related support activities	323	Р	SPC	1.27	1972	
Petroleum and coal products	324			4.22	1948	
Petroleum and coal products*				4.22	1972	
Petroleum refineries*	32411	Р	Phys	3.66	1972	Capacity and gross input to crude distillation units at petroleum refineries, millions of barrels per calendar day; Department of Energy.
Paving, roofing, and other petroleum and coal products*	32412,9	Р	SPC	.56	1972	

^{*} Auxiliary index.

[†] Unpublished.

^{. . .} Not applicable.

Table 3. Industry Structure of Capacity and Capacity Utilization: Classification, Value-Added Proportions, and Descriptions of Series—Continued

	Classification			Value added		
				proportion	Beginning	
Groups and series	NAICS	SOP	Type	2022	date	Source data
Chemical	325			11.23	1948	
Basic chemical*	3251			3.07	1972	
Organic chemicals*	32511,9	С		2.14	1972	
Ethyl alcohol†	325193	С	Phys	.17	1997	Output, barrels; Energy Information Administration, Department of Energy. Capacity, gallons; Renewable Fuels Association.
Organic chemicals ex. ethanol*	32511,9 ex 325193	С	SPC	1.97	1996	
Basic inorganic chemicals*	32512-8	С		.93	1972	
Alkalies and chlorine†	32518pt.	С	Phys	.12	1972	Capacity and output, tons of chlorine; Chlorine Institute.
Basic inorganic chemicals ex. alkalies and chlorine*	32512–3, 32518pt.	С	SPC	.81	1972	
Resin, synthetic rubber, and artificial and synthetic fibers and filaments*	3252			1.18	1972	
Resin and synthetic rubber*	32521			1.11	1972	
Plastics material and resin	325211	Р	Phys	1.03	1972	Capacity and output, major thermosetting and thermoplastic resins, pounds; American Plastics Council. Society of the Plastics Industry, Inc., 1972–98.
Synthetic rubber	325212	Р	SPC	.08	1972	Census Survey. Capacity, tons; International Institute of Synthetic Rubber Producers. Output, tons; Rubber Manufacturers Association, 1972–2001.
Artificial and synthetic fibers and filaments	32522	Р	SPC	.08	1972	Census Survey. Capacity and output, pounds; Fiber Economics Bureau, 1972–2016.
Pesticide, fertilizer, and other agricultural chemical*	3253			.65	1972	
Fertilizer*	32531	С	SPC	.40	1972	Census Survey. Capacity and Output, thousands of short tons; The Fertilizer Institute, 1997–2016.
Pesticide and other agricultural chemical*	32532	С	SPC	.24	1972	
Pharmaceutical and medicine*	3254	F	SPC	4.06	1972	
Paints, soaps and toiletries, and other chemical products*	3255-9			2.28	1972	
Paints and other chemical products*	3255,9	Р	SPC	1.18	1972	
Soap, cleaning compound, and toilet preparation*	3256	F	SPC	1.09	1972	
Plastics and rubber products	326			3.55	1948	
Plastics product*	3261	Р	SPC	2.96	1972	

^{*} Auxiliary index.

[†] Unpublished.

^{. . .} Not applicable.

Table 3. Industry Structure of Capacity and Capacity Utilization: Classification, Value-Added Proportions, and Descriptions of Series—Continued

	Classification			Value added		
				proportion	Beginning	
Groups and series	NAICS	SOP	Type	2022	date	Source data
Rubber product*	3262			.59	1972	
Tire*	32621	Р	SPC	.25	1972	
Rubber products ex. tires*	32622,9	Р	SPC	.34	1972	
Other manufacturing	1133, 5131pt.			1.72	1972	
Newspaper, periodical, book, and directory publishers*	5131pt.	Р	SPC	1.56	1972	
Logging*	1133	С	TTP	.16	1972	Census Survey, 1974–1996.
Mining	21			16.01	1967	
Oil and gas extraction	211			12.12	1972	
Oil and gas extraction*				12.12	1972	
Crude oil*	21112			8.26	1972	
Texas crude oil†	211120pt.	С	TTP	3.53	1972	
Alaska and California crude oil†	211120pt.	С	TTP	.53	1972	
Louisiana and other crude oil†	211120pt.	С	TTP	4.20	1972	
Natural gas and natural gas liquids*	21113			3.86	1972	
Natural gas*	211130pt.	С	TTP	2.89	1972	Capacity, billion cubic feet per day; Energy Information Administration, Department of Energy, 1984–2003.
Natural gas liquid extraction*	211130pt.			.97	1972	
Propane†	211130pt.	С	TTP	.13	1972	
Liquefied petroleum†	211130pt.	С	TTP	.84	1972	
Mining (except oil and gas)	212			1.95	1972	
Coal mining	2121	С	Phys	.55	1967	Capacity estimates and output, coal, thousand short tons per year; Energy Information Administration, Department of Energy.
Metal ore mining	2122			.65	1967	
Iron ore mining*	21221	С	Phys	.05	1972	Capacity estimates and output, taconite pellets, million metric tons per year; U.S. Geological Survey.
Gold ore and silver ore mining*	21222			.19	1972	
Gold ore mining*	212220pt.	С	Phys	.18	1972	Capacity estimates and output, gold ore, thousand troy ounces per year; U.S. Geological Survey.
Silver ore mining*	212220pt.	С	Phys	.01	1972	Capacity estimates and output, silver ore, thousand metric tons per year; U.S. Geological Survey.
Copper, nickel, lead, and zinc mining*				.34	1972	
Lead ore and zinc ore mining*	212230pt.	С	Phys	.05	1972	Capacity estimates and output, tons; U.S. Geological Survey.
Copper ore and nickel ore mining*	212230pt.	С	Phys	.29	1972	Capacity estimates and output, copper ores, tons; U.S. Geological Survey.

^{*} Auxiliary index.

[†] Unpublished.

^{. . .} Not applicable.

Table 3. Industry Structure of Capacity and Capacity Utilization: Classification, Value-Added Proportions, and Descriptions of Series—Continued

	Classification		Value added			
				proportion	Beginning	
Groups and series	NAICS	SOP	Type	2022	date	Source data
Other metal ore mining*	21229	С	Phys	.06	1972	Capacity estimates and output, molybdenum ores, tons; U.S. Geological Survey.
Nonmetallic mineral mining and quarrying	2123			.75	1967	
Stone, sand, gravel, clay, and ceramic and refractory minerals mining and quarrying†	21231,2	Р	TTP	.64	1972	
Other nonmetallic mineral mining and quarrying [†]	21239	С	Phys	.12	1972	Capacity estimates and output, soda ash and phosphate rock, tons; U.S. Geological Survey.
Support activities for mining	213	С	Phys	1.93	1972	Capacity based on available rigs; physical utilization is ratio of active to available rigs; NOV Downhole.
Utilities	2211, 2			10.77	1967	
Electric power generation, transmission, and distribution	2211	Р	Phys	9.12	1967	Capacity and output, Department of Energy. Capacity projections, North American Electric Reliability Council.
Natural gas distribution	2212	Р	TTP	1.65	1967	

^{*} Auxiliary index.

 $[\]dagger$ Unpublished.

^{. . .} Not applicable.