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For immediate release
July 20, 1967REVISED INDEXES OF MANUFACTURING
CAPACITY AND CAPACITY UTILIZATION

The Board's indexes of capacity and capacity utilization in U.S. manufacturing industries have been revised. The effect of the revisions has been to lower utilization estimates slightly for the recent period and to raise them moderately for the period 1948-54. The indexes are now reported in figures to the nearest tenth of a point, rather than rounded to the nearest point as in earlier releases. The purpose of this change is to make it possible to observe gradual changes. No increased accuracy is implied.

The indexes have been described in full in the November 1966 issue of the Federal Reserve Bulletin. Their calculation may be described briefly. For each of the two subgroups of manufacturing--primary-processing industries and advanced-processing industries--a first-approximation capacity series is constructed by dividing seasonally adjusted December values for the Federal Reserve production index by the corresponding year-end operating rate taken from the annual McGraw-Hill survey. The first-approximation capacity series controls the level and trend of the final capacity estimates.

A capital stock series and a McGraw-Hill series on yearly capacity changes are used to smooth and to extrapolate the capacity estimates. Because these two series are believed to be subject to long-run bias as indicators of capacity, they are adjusted in level and trend to conform to the first-approximation series mentioned above. The two resulting capacity estimates are then averaged to obtain the final capacity estimates. Quarterly capacity figures are straight-line interpolations between the end-of-year estimates. Capacity utilization rates are obtained by dividing quarterly production indexes by the corresponding capacity figures. For total manufacturing both the capacity series and the capacity utilization series are weighted averages of the corresponding series for the two subgroups.

The capacity index is subject to revision when the results of new McGraw-Hill surveys and more recent investment information provide the basis for a change in the capacity estimates. An additional factor affecting the revision this year is the exclusion of that portion of the petroleum industry's capital used in petroleum extraction from the capital stock figure for primary-processing industries. Petroleum extraction is not a manufacturing activity, and its earlier inclusion had not been consistent with the investment and production series used.

Adjustment of the initial capital stock to exclude petroleum extraction raised estimates of the operating rate for the early years. For example, the operating rate for total manufacturing in the first quarter of 1948 is now 91.1 whereas before the revision it had been 88.5. For primary-processing industries the corresponding estimate has been revised from 88.7 to 93.0. Differences between the revised and unrevised figures narrow gradually, and after 1954 they are negligible.

TOTAL MANUFACTURING: OUTPUT AND CAPACITY
(1957-59 output = 100)

Year	Output					Capacity ^{1/}				
	QI	QII	QIII	QIV	Annual Average	QI	QII	QIII	QIV	Annual Average
1948	68.5	69.0	69.5	68.7	68.9	75.3	76.3	77.3	78.3	76.8
1949	66.5	64.2	65.1	64.6	65.1	79.4	80.5	81.6	82.8	81.1
1950	68.1	73.9	80.1	81.4	75.8	83.6	84.0	84.5	85.0	84.3
1951	83.0	83.0	80.7	81.0	81.9	85.8	86.9	88.0	89.1	87.4
1952	82.9	82.2	84.4	91.1	85.2	90.4	92.0	93.5	95.0	92.7
1953	93.2	94.5	94.1	88.8	92.7	96.6	97.8	99.1	100.3	98.4
1954	85.5	85.6	86.0	88.0	86.3	101.5	102.7	103.9	105.1	103.3
1955	92.7	96.8	99.0	100.7	97.3	106.4	107.7	109.1	110.4	108.4
1956	99.7	99.9	98.8	102.2	100.2	111.9	113.5	115.1	116.7	114.3
1957	102.5	101.9	102.0	96.7	100.8	118.3	119.9	121.5	123.0	120.7
1958	89.7	89.4	94.9	98.7	93.2	124.3	125.3	126.3	127.2	125.8
1959	103.0	109.4	105.9	105.4	106.0	128.3	129.5	130.7	131.9	130.1
1960	111.7	110.2	108.7	105.0	108.9	133.1	134.3	135.5	136.8	134.9
1961	103.1	108.4	112.3	115.0	109.6	137.9	139.0	140.1	141.2	139.6
1962	116.6	118.6	119.7	119.9	118.7	142.4	143.7	145.1	146.4	144.4
1963	121.3	124.9	126.0	127.2	124.9	147.8	149.1	150.5	151.8	149.8
1964	129.4	132.5	134.7	135.9	133.1	153.3	154.9	156.4	158.0	155.6
1965	141.4	143.5	146.1	148.9	145.0	160.1	162.7	165.3	167.9	164.0
1966	154.5	157.7	159.8	161.3	158.7	170.6	173.5	176.4	179.3	175.0
1967p	158.9	157.3	--	--	--	182.2	185.1	--	--	--

^{1/} When manufacturing output as shown here is divided by the capacity index shown here, the result may differ very slightly from the estimated utilization rate for total manufacturing as shown in the following table. The differences are due in part to rounding and in part to the fact that the utilization rate for manufacturing has been calculated as a weighted average of utilization for primary-processing industries and utilization for advance processing industries, rather than as the ratio of total manufacturing output of total manufacturing capacity. Output is seasonally adjusted.
p--Preliminary.

NOTE: Estimates based on data from Federal Reserve Board, Department of Commerce, and McGraw-Hill Economics Department.

UTILIZATION OF CAPACITY
(In per cent)

Year	Total manufacturing					Advanced products					Primary products				
	QI	QII	QIII	QIV	Annual average	QI	QII	QIII	QIV	Annual average	QI	QII	III	QIV	Annual average
1948.....	91.1	90.2	89.8	87.7	89.7	89.6	88.4	87.6	86.1	87.9	93.0	92.8	92.9	90.0	92.2
1949.....	83.9	79.8	79.8	77.3	80.2	82.8	80.5	80.2	77.9	80.3	85.4	78.8	79.2	76.5	80.0
1950.....	81.9	88.5	95.2	96.1	90.4	79.7	85.3	91.7	92.4	87.3	84.9	93.1	99.9	101.3	94.8
1951.....	96.8	95.8	92.2	91.1	94.0	93.5	91.8	89.0	89.6	91.0	101.4	101.4	96.7	93.0	98.1
1952.....	91.7	88.4	89.3	95.8	91.3	90.9	91.2	90.3	95.2	91.9	92.7	84.4	87.9	96.6	90.4
1953.....	96.6	96.8	95.1	88.4	94.2	96.4	96.2	94.6	89.2	94.1	97.0	97.5	95.7	87.4	94.4
1954.....	84.2	83.2	82.7	83.9	83.5	85.3	84.0	83.2	82.8	83.8	82.5	82.2	81.9	85.3	83.0
1955.....	87.4	90.2	91.1	91.5	90.0	85.7	87.9	88.6	88.9	87.8	89.6	93.4	94.6	95.1	93.2
1956.....	89.4	88.2	85.6	87.6	87.7	86.7	85.8	85.7	87.7	86.0	93.1	91.6	85.5	90.4	90.1
1957.....	86.7	85.0	84.0	78.6	83.6	85.3	83.7	82.5	77.8	82.3	88.6	86.8	86.0	79.7	85.3
1958.....	71.9	71.2	75.3	77.7	74.0	72.7	71.6	74.0	76.3	73.6	70.8	70.7	77.0	79.8	74.6
1959.....	80.6	84.9	80.7	79.8	81.5	78.7	82.2	82.9	80.3	81.0	83.1	88.7	77.6	79.2	82.1
1960.....	84.1	82.0	80.0	76.5	80.6	82.9	82.1	81.0	78.4	81.1	85.7	81.8	78.5	73.9	80.0
1961.....	74.5	78.0	80.2	81.5	78.5	76.3	78.2	79.7	81.3	78.9	72.1	77.7	80.9	81.7	78.1
1962.....	82.0	82.4	82.4	81.8	82.1	81.4	82.8	83.3	82.5	82.5	82.7	81.9	81.1	80.7	81.6
1963.....	82.0	83.9	83.7	83.7	83.3	82.2	82.9	83.6	83.7	83.1	81.7	85.2	83.9	83.8	83.6
1964.....	84.5	85.7	86.3	86.2	85.7	83.8	84.7	84.9	84.4	84.4	85.5	87.1	88.3	88.8	87.4
1965.....	88.5	88.4	88.5	88.6	88.5	87.2	87.1	87.4	88.7	87.6	90.2	90.1	90.1	88.5	89.7
1966.....	90.6	90.9	90.6	89.8	90.5	90.3	90.5	90.8	90.5	90.5	91.0	91.4	90.4	88.7	90.4
1967.....	87.0	84.7	--	--	--	87.8	86.2	--	--	--	85.9	82.6	--	--	--

p Preliminary.

Note--Seasonally adjusted estimates based on data from Federal Reserve Board, Department of Commerce, and McGraw-Hill Economics Department.