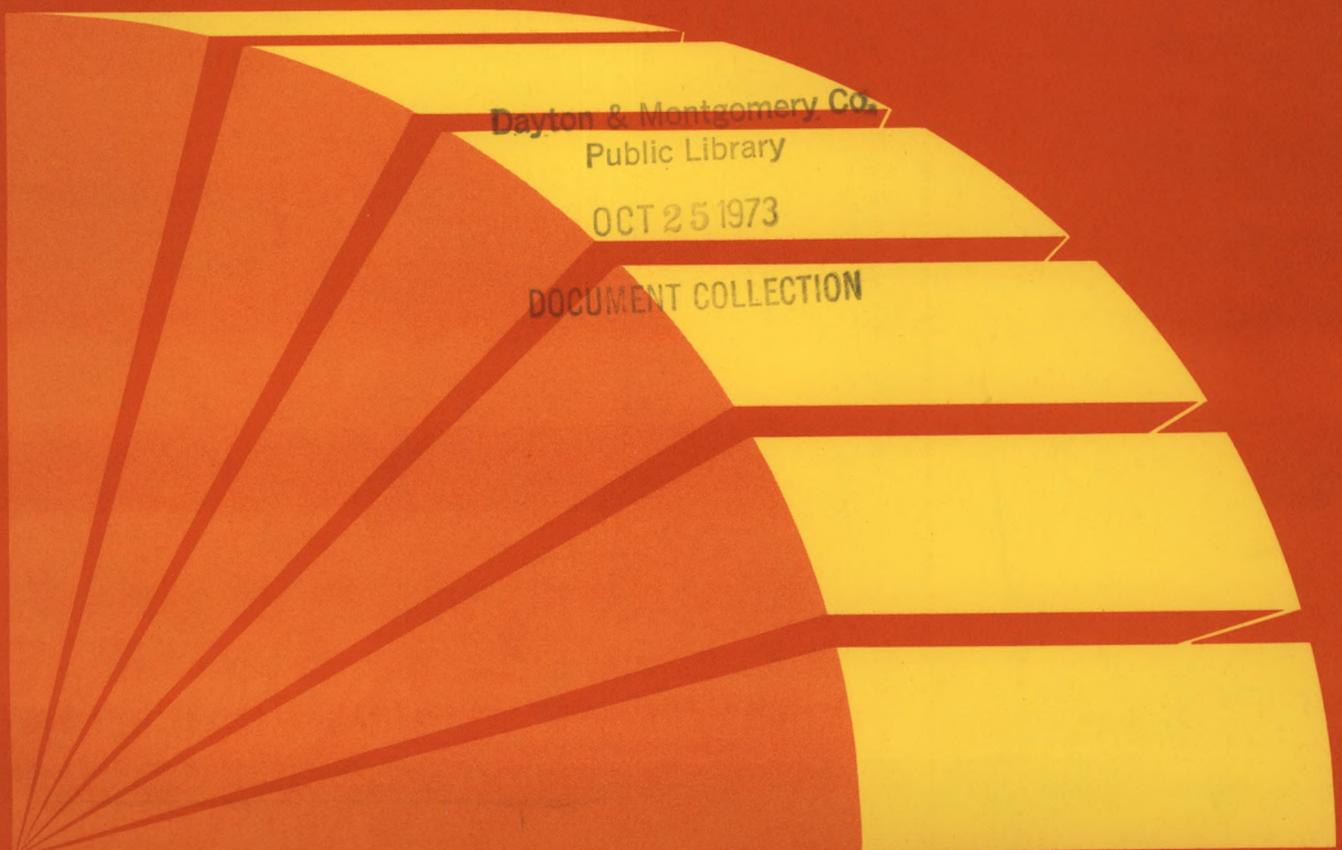


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**Indexes of Output
Per Man-Hour
Selected Industries
1973 Edition**

Bulletin 1780

**U.S. DEPARTMENT OF LABOR
Bureau of Labor Statistics
1973**



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Indexes of Output Per Man-Hour Selected Industries 1973 Edition

Bulletin 1780

U.S. DEPARTMENT OF LABOR
Peter J. Brennan, Secretary
BUREAU OF LABOR STATISTICS
Julius Shiskin, Commissioner

1973



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Preface

This bulletin updates industry indexes of output per man-hour and output per employee for the industries currently included in the U.S. Government's productivity measurement program. The data cover the year 1939 and each year from 1947 to 1972. Indexes for the steel foundries and ready-mixed concrete industries are added for the first time.

The selected industries for which output per man-hour indexes are shown are not necessarily a representative cross section of American industry. They should not be combined, therefore, to obtain an overall measure for the entire economy or for any sector. Each index is intended to represent only the change in output per man-hour for the designated industry or combination of industries. However, the Bureau of Labor Statistics does publish indexes of output per man-hour and related measures for the total private economy and for major sectors of the economy—farm, nonfarm, manufacturing, nonmanufacturing, and nonfinancial corporations. Those measures show the relationship between gross product originating in the private economy or in its major sectors, and employment and man-hours. (These data are presented in the Bureau of Labor Statistics *Productivity and Costs in the Private Economy* (quarterly), in *Productivity and Costs in Nonfinancial Corporations* (quarterly), in the *Monthly Labor Review*, and in *Employment and Earnings*.)

The productivity measures presented reflect the relationship between output in real terms and labor time involved in its production. They show the changes from year to year in the amount of labor time required to produce a unit of output. Although the measures relate output to employment and man-hours, they do not measure the specific contributions of labor, capital, or any other factor of production. Rather, they reflect the joint effect of a number of interrelated influences, such as changes in technology, capital investment per worker, changes in the level of output, utilization of capacity, layout and flow of material, managerial skill, and skills and effort of the work force.

This bulletin was prepared in the Bureau's Office of Productivity and Technology by Edwin Adelman, John Carey, Richard Carnes, Barbara Donoghue, John Duke, John Ferris, Brian Friedman, John Henneberger, Clyde Huffstutler, Phyllis Otto, Elmer Persigehl, Robert Robinowitz, and Andrea Sweeny, under the direction of Charles Ardolini, Horst Brand, and Arthur Herman.

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Highlights of Trends in Output Per Man-Hour

Current developments

In 1972, output per man-hour increased in more than three-quarters of the selected industries presented in this report. However, in almost two-thirds of these industries, the gain was not as great as in the previous year and in 8 industries actual declines in productivity took place in 1972, compared with only 4 in 1971. This slowdown in the rate of productivity gain mirrored the situation in the manufacturing sector, which includes the preponderance of the industries covered. Output per man-hour in manufacturing grew at a rate of only 4.0 percent in 1972 compared with 5.8 percent in 1971.

The rates of gain were dispersed widely among the selected industries in 1972, ranging from an unusually high increase of 17.6 percent in aluminum rolling and drawing to a gain of only 0.1 percent for radio and TV manufacturing. Declines ranged from -0.4 percent for bakery products to -3.2 percent for copper mining.

Among the more economically significant industries covered, steel posted an above average increase of 5.8 percent, compared with a 3.6 percent gain in 1971. This large gain was based on an increase in output of 7.2 percent, as demand picked up significantly in 1972, coupled with a rise in man-hours of only 1.3 percent. The situation in 1972 in the steel industry was very much different from that of 1971, when output declined by 4.9 percent and man-hours dropped still more sharply, by 8.2 percent, resulting in a gain in productivity. On the other hand, in 1972, the motor vehicles industry, had a productivity increase of only 2.6 percent, as the result of an above average gain in output of 8.8 percent coupled with a large increase in man-hours of 6.1 percent. The fact that the 1972 gain in output per man-hour in this industry was significantly lower than the 16.7 percent increase in 1971 was largely the effect of the rebound in motor vehicle production in 1971 from the 1970 General Motors strike. Other major industries recording significant gains in 1972 were air transportation, 10.2 percent; railroads, 8.9 percent; pulp and paper, 5.3 percent. Gas and electric utilities, however, posted a below average gain of 3.4 percent, and footwear and coal mining declines of 2.8 and 1.3 percent, respectively.

Short-term gains in productivity usually are associated with gains in output, as in 1972, when output increases occurred in all but 4 industries. Despite across the board output gains (which exceeded the previous year's in more than three-quarters of the industries) man-hours grew at a still greater rate or declined less in 1972 than in 1971 in almost all of the industries. This rise in man-hours resulted in a smaller productivity gain in 1972 than in the previous year, for many industries. This situation differed significantly from 1971, when productivity increases in many industries were associated with declines in output and even sharper drops in man-hours. The employment situation among the selected industries was significantly better in 1972, with about half recording gains, compared with only 8 in 1971.

Long term trends

In the 1947-72 period, all of the industries for which data are available recorded gains in output per man-hour. (See table 1.) In the more recent period, 1960-72, the average rate of gain ranged from a high of 9.6 percent for petroleum pipelines to a low of 0.5 percent for footwear. (See chart 1.) More than two-thirds of these industries had rates equal to or greater than the 2.9 percent increase in the total private economy during this latter period.

About half of the industries recorded higher growth rates during the 1960-72 period than during the preceding period, 1947-60. For these industries, the greater gain in the more recent period can be attributed to large productivity increases during the early 1960's and again during 1970-72, which more than compensated for the general fall off in productivity during the latter part of the 1960's. (For a graphic presentation of the long-term trends in output per man-hour and related data for the selected industries, see charts 2-77.)

New measures

Steel Foundries. Output per man-hour in the steel foundries industry rose at an average annual rate of 1.3 percent from 1954, the first year that data became available, to 1972. This rate was below the corresponding

rates of 3.0 percent for all manufacturing industries and 2.2 percent for the gray iron foundries industry. In the more recent 1960-72 period, productivity grew at a rate of 1.2 percent a year. Because this industry is a supplier of capital goods, its output and output per man-hour were influenced greatly by cyclical trends in the economy and reflected generally the changes in output growth of producers' durable equipment.

In 1972, output per man-hour grew by 4.4 percent, just about the same gain as the preceding year (4.5 percent). These large increases, well above the long term rate, were the result of differing circumstances. In 1971, output had dropped by 4.0 percent, as demand for producers' durable goods fell off. Employment and man-hours declined even more sharply, however, resulting in the productivity gain. In 1972, by contrast, the gain in output per man-hour was based on a slight increase in output, as demand picked up, coupled with a lag in employment and man-hours, which declined for the year.

The low rate of productivity gain in the 1954-72 period can be attributed to a number of factors. Since much of the output of steel foundries is on a custom order basis, economies associated with mass production are difficult to achieve. Many key production operations, such as patternmaking and coremaking, have remained labor intensive. An increasing emphasis on quality control has taken place. For example, items such as aircraft components and parts for nuclear generators require much testing and inspection. Technological changes in the industry, for the most part, involved modification of existing techniques designed to increase efficiency or quality control rather than introduction of innovations that significantly affected foundry production operations.

Productivity in the future may be affected by the Occupational Safety and Health Act of 1970, since more emphasis will be placed on the need to protect workers

from fumes, noise, and heat associated with foundry operations. Environmental restrictions also may have some impact on future productivity growth.

Ready-Mixed Concrete. Output per man-hour increased in this industry at an average rate of 2.0 percent a year between 1958 and 1971, below the 3.2 percent yearly increase in all manufacturing. The growth in productivity and output in this industry largely reflects changes in construction techniques which affect the use of ready-mixed concrete, and, more importantly, the general level of activity in the construction industry. Construction activity (the principal source of demand for ready-mixed concrete) was somewhat lower than manufacturing activity during the period covered by the study.

Output per man-hour grew by 5.6 percent in 1971, compared with a decline of 2.4 percent in 1970. This large productivity gain can be attributed to a sharp rise in construction activity in 1971, led by a 37 percent gain in single- and multi-family home building.

Technological change in the ready-mixed concrete industry has primarily involved diffusion of available techniques rather than major innovations. The factor having the greatest effect on productivity growth was an increase in the capacity of trucks used for mixing concrete. In addition, the use of hot water and heated aggregates has acted to increase the year round market for ready-mixed concrete.

Productivity probably will continue to increase at a low rate in this industry, since truck drivers are the major portion of the industry's employment, truck size is limited by State and Federal laws, and growing traffic congestion will continue to affect efficient product delivery adversely.

TABLE 1. SELECTED INDUSTRIES: SIC CODES, 1972 EMPLOYMENT, AND AVERAGE ANNUAL RATES OF CHANGE IN OUTPUT PER MAN-HOUR, 1947-72 AND 1960-72

SIC Code	Industry title	1972 employment (thousands) ¹			Output per man-hour: Average annual rate of change (percent) ²					
		All employees	Production workers	Non-production workers	1947-72			1960-72		
					All employees	Production workers	Non-production workers ³	All employees	Production workers	Non-production workers ³
<u>Mining</u>										
101	Iron mining, crude ore -----	20	16	4	(⁴)	5.4	(⁴)	(⁴)	5.2	(⁴)
101	Iron mining, usable ore -----	20	16	4	(⁴)	2.3	(⁴)	(⁴)	3.0	(⁴)
102	Copper mining, crude ore -----	39	31	8	(⁴)	4.8	(⁴)	(⁴)	5.1	(⁴)
102	Copper mining, recoverable metal -----	39	31	8	(⁴)	2.9	(⁴)	(⁴)	2.2	(⁴)
11, 12	Coal mining -----	147	124	22	(⁴)	5.5	(⁴)	(⁴)	3.5	(⁴)
12	Bituminous coal and lignite mining -----	143	121	22	(⁴)	5.6	(⁴)	(⁴)	3.6	(⁴)
<u>Manufacturing</u>										
203	Canning and preserving -----	282	234	49	⁵ 3.3	⁵ 3.4	⁵ (2.1)	⁶ 2.3	⁶ 2.2	⁶ (3.1)
2041	Flour and other grain mill products -----	28	20	8	4.0	4.2	(3.4)	4.3	4.3	(4.0)
205	Bakery products -----	271	156	115	2.4	2.7	(1.8)	3.2	2.8	(3.8)
206	Sugar -----	34	26	8	4.3	4.4	(3.3)	3.7	3.7	(3.6)
2071	Candy and other confectionery products -----	61	49	12	3.2	3.2	(3.2)	2.8	2.9	(2.7)
2082	Malt liquors -----	55	36	19	5.0	5.1	(4.7)	6.3	6.5	(5.7)
2086	Bottled and canned soft drinks -----	128	48	80	(⁴)	(⁴)	(⁴)	5.5	5.9	(5.2)
211, 212, 213	Tobacco products--total -----	60	50	10	3.2	3.5	(1.0)	2.1	2.3	(0.5)
211, 213	Cigarettes, chewing and smoking tobacco --	47	38	9	1.4	1.6	(-0.1)	1.2	1.4	(-0.1)
212	Cigars -----	14	12	2	5.8	6.0	(3.5)	3.8	4.0	(2.6)
2251, 2252	Hosiery -----	90	80	10	5.3	5.5	(3.9)	6.4	6.7	(3.5)
261, 262, 263, 266	Paper, paperboard and pulp mills -----	278	218	61	4.0	4.3	(2.0)	4.3	4.5	(3.5)
2653	Corrugated and solid fiber boxes -----	109	84	26	(⁴)	(⁴)	(⁴)	3.5	3.7	(2.6)
2823, 2824	Man-made fibers -----	115	83	32	(⁴)	(⁴)	(⁴)	6.0	5.7	(6.7)
291	Petroleum refining -----	151	89	62	5.7	6.1	(4.4)	5.3	5.6	(4.6)
301	Tires and inner tubes -----	128	91	37	4.0	4.2	(3.0)	3.4	3.5	(3.1)
314	Footwear -----	178	159	18	1.4	1.4	(1.1)	0.5	0.5	(⁷)
3221	Glass containers -----	76	67	9	1.7	1.8	(1.2)	2.5	2.6	(2.2)
324	Hydraulic cement -----	34	26	7	4.5	4.9	(2.2)	4.2	4.6	(2.5)
3271, 3272	Concrete products -----	86	66	20	⁵ 3.5	⁵ 3.8	⁵ (1.8)	⁶ 4.7	⁶ 4.8	⁶ (3.7)
3273	Ready-mixed concrete -----	77	55	22	(⁴)	(⁴)	(⁴)	⁶ 2.2	(⁴)	(⁴)
331	Steel -----	573	457	116	1.7	2.1	(-0.2)	2.2	2.3	(1.7)
3321	Gray iron foundries -----	139	118	21	⁸ 2.2	⁸ 2.3	⁸ (1.7)	2.4	2.4	(2.5)
3323	Steel foundries -----	56	45	12	⁸ 1.3	⁸ 1.4	⁸ (0.6)	1.2	1.4	(⁷)
3331, 3332, 3333	Primary copper, lead, and zinc -----	27	22	5	2.2	2.4	(1.1)	1.7	1.8	(1.3)
3334	Primary aluminum -----	29	24	5	4.7	4.9	(3.6)	3.1	3.1	(3.0)
3352	Aluminum rolling and drawing -----	67	49	17	(⁴)	(⁴)	(⁴)	5.3	5.4	(4.7)
341	Metal cans -----	68	58	10	2.4	2.4	(2.3)	2.0	2.0	(1.5)
3631, 2, 3, 9	Major household appliances -----	97	79	19	(⁴)	(⁴)	(⁴)	5.0	4.7	(6.2)
3651	Radio and television receiving sets -----	96	76	20	(⁴)	(⁴)	(⁴)	6.5	6.6	(6.2)
371	Motor vehicles and equipment -----	861	666	195	(⁴)	(⁴)	(⁴)	3.3	3.3	(3.4)
<u>Other</u>										
401, Class I	Railroads, revenue traffic -----	543	478	65	5.2	5.4	3.0	5.5	5.6	4.7
401, Class I	Railroads, car-miles -----	543	478	65	4.0	4.2	1.8	3.3	3.4	2.5
451	Air transportation -----	289	(⁴)	(⁴)	⁹ 7.7	(⁴)	(⁴)	⁹ 7.8	(⁴)	(⁴)
4612, 4613	Petroleum pipelines -----	18	¹⁰ 14	¹¹ 4	(⁴)	(⁴)	(⁴)	⁹ 9.6	^{6,10} 10.4	(⁴)
491, 492, 493	Gas and electric utilities -----	662	¹⁰ 564	¹¹ 98	6.8	¹⁰ 7.3	(⁴)	5.8	¹⁰ 6.1	(⁴)

¹ Because of rounding, the sum of production workers and nonproduction workers may not always equal all employees.

² Based on the linear least squares trends of the logarithms of the index numbers.

³ Rates of change for nonproduction workers (in parentheses) are subject to a wider margin of error than other rates shown.

⁴ Not available.

⁵ Average annual rate of change is for 1947-71.

⁶ Average annual rate of change is for 1960-71.

⁷ Less than .05 percent.

⁸ Average annual rate of change is for 1954-72.

⁹ Output per employee.

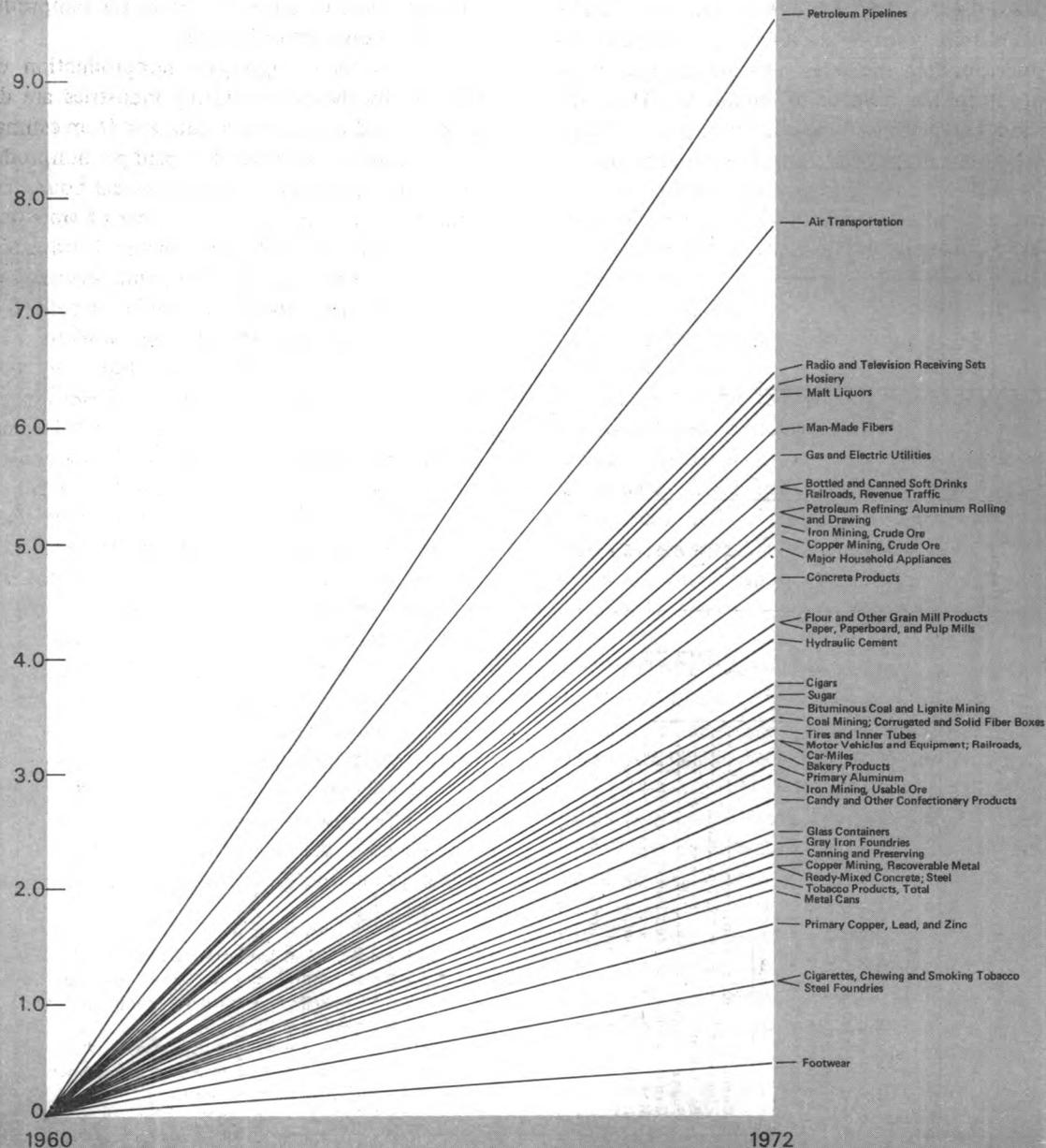
¹⁰ Nonsupervisory personnel.

¹¹ Supervisory personnel and force account construction workers.

Chart 1

Growth in Output Per Man-Hour in Selected Industries, 1960-72

Average annual percent change
10.0



Methods and Data

The *indexes of output per man-hour* are computed by dividing an output index by an index of aggregate man-hours. Corresponding measures also are computed relating output to the number of employees. Thus, the industry indexes presented measure changes in the relationship between output and employment or man-hours. Indexes of unit labor requirements are not shown in this issue. They may be derived for each industry, however, by dividing an index of employment or man-hours by an index of output.

The *output indexes* are based primarily on the physical output of the products of the industry combined with fixed period weights. Unit man-hour weights are used whenever possible. However, for most industries unit value weights, which are assumed to be proportional to unit man-hour weights, are used as substitute weights. Indexes for 1947-58 are based on 1947 weights; for 1958-63, 1958 weights; for 1963-67, 1963 weights; and for 1967-72, 1967 weights. For three industries, railroads, iron mining, and copper mining, two alternative output measures, using different concepts of industry output, are presented.

Employment and man-hour indexes are developed primarily from basic data compiled by the Bureau of the Census¹ or the Bureau of Labor Statistics. In concept, indexes based on man-hour data from the Bureau of the Census relate to plant hours only. Man-hour data from the Bureau of Labor Statistics include not only hours at work but also payroll hours such as vacations, holidays, and sick leave paid by the establishment directly to the employee.² In general, because of increases in paid leave during the period, output per man-hour worked would tend to show a somewhat higher rate of gain than output per man-hour paid. However, actual differences may result from statistical limitations in the data as well as from differences in concepts.

This report includes indexes of output per man-hour and output per employee. In most cases the indexes are shown for all employees, production workers, and nonproduction workers.³ Although both the Bureau of the Census and the Bureau of Labor Statistics provide data on production worker man-hours, neither source provides annual data by industry on nonproduction worker

or all employee man-hours. Therefore, the nonproduction worker man-hours are estimated.

The estimates of aggregate nonproduction worker man-hours for the manufacturing industries are derived from published employment data and from estimates of average annual hours worked or paid per nonproduction worker. The estimates of average annual hours paid are calculated by multiplying the number of workweeks in the year by the scheduled weekly hours. Estimated hours for vacations, holidays, disability, and personal time off are subtracted from average annual hours paid to obtain an estimate of average annual hours worked. Vacation and holiday trends are based on studies by the U.S. Department of Health, Education, and Welfare, and on data from the Bureau of Labor Statistics surveys. Personal time off has been estimated as a constant on the basis of data obtained from various sources.

All employee man-hour estimates for manufacturing industries are derived by summing the aggregate man-hours for production workers and the estimated aggregate man-hours for nonproduction workers.⁴

Indexes involving nonproduction worker man-hours are subject to a wider margin of error than are the indexes involving only production worker man-hours, because it was necessary to estimate the average man-hours of nonproduction workers. Any errors in these estimates, however, would have a relatively insignificant effect on the indexes of man-hours for all employees.

The output indexes and man-hour components of the industry productivity indexes are based on data from

¹ For those industries using the Bureau of the Census as the primary source of employment and man-hours, the 1972 indexes are developed by linking in information from BLS, because 1972 Census data are not yet available.

² Indexes for the railroad transportation industry are based on data from the Interstate Commerce Commission (ICC), and are related primarily to hours at work.

³ The term "production workers" has been used for many years to cover manufacturing and mining employees who work at the plant or mine and who are generally in nonsupervisory occupations. The remaining employees, such as professional, technical, clerical, supervisory, etc., have been identified as "nonproduction workers."

⁴ The ICC publishes all employee man-hours for the railroad transportation industry.

various sources which are identified in the accompanying tables.

The indexes refer to the standard reference base (1967=100) and conform to the 1967 Standard Industrial Classification (SIC) system.

All average annual rates of change are based on the linear least squares trends of the logarithms of the index numbers. Average annual rates of change for any

time periods shown in this report are available on request from the Bureau of Labor Statistics.

More detailed information on the methods, limitations, and data sources is contained in the *BLS Handbook of Methods for Surveys and Studies*, Bulletin 1711 (1971), Chapter 26, and in a number of individual industry reports. These publications, as well as additional information are available on request from the Bureau of Labor Statistics.

TABLE 2. IRON MINING, CRUDE ORE SIC 101
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>	OUTPUT PER EMPLOYEE <u>1/ 2/</u>		
	PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	34.9	(2/)	29.5	(2/)
1947.....	40.8	43.7	38.8	87.1
1948.....	41.4	45.2	40.4	83.7
1949.....	39.5	40.6	37.1	64.2
1950.....	43.7	46.0	42.3	70.2
1951.....	48.0	52.2	48.1	77.7
1952.....	45.2	49.4	46.8	62.8
1953.....	47.3	50.2	47.4	65.2
1954.....	42.9	39.6	38.3	46.0
1955.....	55.3	53.6	52.5	58.0
1956.....	57.6	53.9	54.2	52.8
1957.....	58.2	53.3	54.2	50.2
1958.....	56.8	45.4	48.4	36.6
1959.....	58.7	48.7	52.3	38.2
1960.....	66.3	61.3	62.6	56.3
1961.....	76.7	66.9	70.3	56.2
1962.....	82.4	74.9	78.1	64.4
1963.....	91.1	83.5	84.7	78.4
1964.....	98.6	94.3	94.3	94.3
1965.....	95.1	93.3	92.6	96.1
1966.....	96.1	96.6	96.2	97.8
1967.....	100.0	100.0	100.0	100.0
1968.....	110.0	108.2	109.2	104.5
1969.....	117.8	113.4	116.2	103.9
1970.....	118.0	115.8	117.8	108.7
1971.....	123.4	115.8	119.0	104.8
1972 <u>3/</u>	139.1	131.7	136.4	115.7
AVERAGE ANNUAL RATES (PERCENT)				
1947-72....	5.4	4.9	5.5	2.3
1960-72....	5.2	5.8	5.8	6.0

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ Not available.

3/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 3. IRON MINING, CRUDE ORE SIC 101
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS		EMPLOYMENT	
		PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	33.4	95.7	(1/)	113.4	(1/)
1947.....	64.4	157.8	147.4	166.1	73.9
1948.....	71.0	171.4	157.1	175.7	84.8
1949.....	58.7	148.5	144.7	158.3	91.4
1950.....	70.2	160.6	152.6	166.1	100.0
1951.....	84.5	176.0	161.9	175.7	108.8
1952.....	71.0	157.0	143.8	151.7	113.1
1953.....	86.4	182.6	172.2	182.3	132.6
1954.....	60.0	139.9	151.4	156.7	130.5
1955.....	78.2	141.4	146.0	148.9	134.9
1956.....	80.4	139.5	149.2	148.4	152.2
1957.....	88.5	152.1	165.9	163.4	176.2
1958.....	60.5	106.5	133.2	125.0	165.3
1959.....	56.6	96.4	116.3	108.3	148.0
1960.....	85.7	129.2	139.9	136.8	152.2
1961.....	75.8	98.8	113.3	107.8	134.9
1962.....	79.8	96.8	106.6	102.2	124.0
1963.....	85.3	93.6	102.2	100.7	108.8
1964.....	96.4	97.8	102.2	102.2	102.2
1965.....	98.2	103.3	105.3	106.1	102.2
1966.....	100.0	104.1	103.5	103.9	102.2
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	106.8	97.1	98.7	97.8	102.2
1969.....	112.9	95.8	99.6	97.2	108.7
1970.....	115.8	98.1	100.0	98.3	106.5
1971.....	107.1	86.8	92.5	90.0	102.2
1972 <u>2/</u>	103.1	74.1	78.3	75.6	89.1
AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	2.2	-3.0	-2.6	-3.1	-0.1
1960-72....	3.0	-2.1	-2.7	-2.6	-2.8

1/ Not available.

2/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 4. IRON MINING, USABLE ORE SIC 101
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>	OUTPUT PER EMPLOYEE <u>1/</u>		
	PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	62.8	(2/)	53.0	(2/)
1947.....	68.7	73.5	65.3	146.7
1948.....	68.7	75.0	67.0	138.9
1949.....	66.7	68.4	62.5	108.3
1950.....	71.2	75.0	68.9	114.4
1951.....	77.4	84.1	77.5	125.2
1952.....	72.9	79.6	75.5	101.2
1953.....	75.7	80.3	75.8	104.2
1954.....	65.1	60.2	58.1	69.8
1955.....	84.7	82.1	80.5	88.8
1956.....	81.2	75.9	76.3	74.4
1957.....	80.9	74.1	75.3	69.8
1958.....	73.1	58.5	62.3	47.1
1959.....	72.0	59.7	64.1	46.9
1960.....	79.7	73.6	75.3	67.7
1961.....	83.9	73.2	76.9	61.5
1962.....	86.6	78.6	82.0	67.6
1963.....	91.8	84.1	85.3	79.0
1964.....	101.4	97.1	97.1	97.1
1965.....	99.7	97.8	97.1	100.8
1966.....	102.5	103.1	102.7	104.4
1967.....	100.0	100.0	100.0	100.0
1968.....	105.1	103.4	104.4	99.9
1969.....	109.6	105.4	108.0	96.6
1970.....	108.7	106.6	108.4	100.1
1971.....	110.6	103.8	106.7	93.9
1972 <u>3/</u>	121.5	114.9	119.0	101.0
AVERAGE ANNUAL RATES (PERCENT)				
1947-72.....	2.3	1.8	2.4	-0.7
1960-72.....	3.0	3.6	3.6	3.8

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ Not available.

3/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 5. IRON MINING, USABLE ORE SIC 101
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS		EMPLOYMENT	
		PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	60.1	95.7	(1/)	113.4	(1/)
1947.....	108.4	157.8	147.4	166.1	73.9
1948.....	117.8	171.4	157.1	175.7	84.8
1949.....	99.0	148.5	144.7	158.3	91.4
1950.....	114.4	160.6	152.6	166.1	100.0
1951.....	136.2	176.0	161.9	175.7	108.8
1952.....	114.5	157.0	143.8	151.7	113.1
1953.....	138.2	182.6	172.2	182.3	132.6
1954.....	91.1	139.9	151.4	156.7	130.5
1955.....	119.8	141.4	146.0	148.9	134.9
1956.....	113.3	139.5	149.2	148.4	152.2
1957.....	123.0	152.1	165.9	163.4	176.2
1958.....	77.9	106.5	133.2	125.0	165.3
1959.....	69.4	96.4	116.3	108.3	148.0
1960.....	103.0	129.2	139.9	136.8	152.2
1961.....	82.9	98.8	113.3	107.8	134.9
1962.....	83.8	96.8	106.6	102.2	124.0
1963.....	85.9	93.6	102.2	100.7	108.8
1964.....	99.2	97.8	102.2	102.2	102.2
1965.....	103.0	103.3	105.3	106.1	102.2
1966.....	106.7	104.1	103.5	103.9	102.2
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	102.1	97.1	98.7	97.8	102.2
1969.....	105.0	95.8	99.6	97.2	108.7
1970.....	106.6	98.1	100.0	98.3	106.5
1971.....	96.0	86.8	92.5	90.0	102.2
1972 <u>2/</u>	90.0	74.1	78.3	75.6	89.1
AVERAGE ANNUAL RATES (PERCENT)					
1947-72.....	-0.8	-3.0	-2.6	-3.1	-0.1
1960-72.....	0.8	-2.1	-2.7	-2.6	-2.8

1/ Not available.

2/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 6. COPPER MINING, CRUDE ORE SIC 102
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}	OUTPUT PER EMPLOYEE ^{1/}		
	PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	28.2	(2/)	27.8	(2/)
1947.....	44.5	53.1	47.0	83.4
1948.....	42.8	51.7	45.6	82.3
1949.....	43.9	49.0	43.7	74.1
1950.....	52.5	61.3	55.5	86.5
1951.....	52.2	61.7	56.7	82.4
1952.....	54.8	63.2	58.8	80.1
1953.....	51.8	59.4	55.8	71.9
1954.....	53.7	56.5	53.8	64.7
1955.....	60.5	65.6	62.7	75.5
1956.....	61.4	66.7	63.0	80.0
1957.....	67.3	67.8	64.8	77.7
1958.....	74.3	70.0	68.1	76.0
1959.....	75.8	75.6	75.2	76.8
1960.....	77.6	82.2	80.2	88.7
1961.....	79.4	86.0	80.5	106.7
1962.....	86.5	93.1	86.1	120.5
1963.....	86.0	94.5	86.2	129.6
1964.....	96.9	105.3	96.6	140.5
1965.....	98.5	109.3	99.4	151.2
1966.....	103.0	114.1	104.3	154.7
1967.....	100.0	100.0	100.0	100.0
1968.....	109.6	121.1	119.8	125.2
1969.....	116.2	133.1	125.2	162.2
1970.....	126.9	140.3	131.9	170.4
1971.....	137.2	140.5	136.9	151.7
1972 ^{3/}	141.1	143.1	136.6	165.1
AVERAGE ANNUAL RATES (PERCENT)				
1947-72....	4.8	4.5	4.7	3.6
1960-72....	5.1	4.9	5.1	3.9

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees. The output measure represents copper ore (including old tailings) sold or treated.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 7. COPPER MINING, CRUDE ORE SIC 102
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT ^{1/}	MAN-HOURS		EMPLOYMENT	
		PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	40.9	144.9	(2/)	146.9	(2/)
1947.....	66.1	148.6	124.5	140.7	79.3
1948.....	63.9	149.2	123.6	140.1	77.6
1949.....	57.5	130.9	117.3	131.5	77.6
1950.....	71.6	136.5	116.8	129.0	82.8
1951.....	72.4	138.8	117.3	127.8	87.9
1952.....	75.9	138.6	120.0	129.0	94.8
1953.....	76.9	148.5	129.5	137.7	106.9
1954.....	71.4	133.0	126.4	132.7	110.3
1955.....	85.9	142.1	130.9	137.0	113.8
1956.....	100.7	164.0	150.9	159.9	125.9
1957.....	99.2	147.4	146.4	153.1	127.6
1958.....	87.8	118.2	125.5	129.0	115.5
1959.....	79.4	104.8	105.0	105.6	103.4
1960.....	103.9	133.9	126.4	129.6	117.2
1961.....	110.3	138.9	128.2	137.0	103.4
1962.....	116.4	134.6	125.0	135.2	96.6
1963.....	113.9	132.4	120.5	132.1	87.9
1964.....	121.1	125.0	115.0	125.3	86.2
1965.....	135.6	137.7	124.1	136.4	89.7
1966.....	146.7	142.4	128.6	140.7	94.8
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	133.8	122.1	110.5	111.7	106.9
1969.....	176.1	151.5	132.3	140.7	108.6
1970.....	202.8	159.8	144.5	153.7	119.0
1971.....	191.0	139.2	135.9	139.5	125.9
1972 ^{3/}	219.2	155.3	153.2	160.5	132.8
AVERAGE ANNUAL RATES (PERCENT)					
1947-72.....	4.7	-0.1	0.2	(4/)	1.1
1960-72.....	6.0	0.9	1.1	0.8	2.1

^{1/} Represents output in terms of copper ore (including old tailings) sold or treated.

^{2/} Not available.

^{3/} Preliminary.

^{4/} Less than .05 percent.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 8. COPPER MINING, RECOVERABLE METAL SIC 102
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}		OUTPUT PER EMPLOYEE ^{1/}	
	PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	51.2	(2/)	50.5	(2/)
1947.....	58.9	70.3	62.2	110.3
1948.....	57.7	69.7	61.5	111.0
1949.....	58.8	65.6	58.6	99.2
1950.....	68.4	80.0	72.4	112.8
1951.....	68.6	81.2	74.5	108.3
1952.....	68.8	79.4	73.9	100.5
1953.....	64.6	74.1	69.7	89.8
1954.....	65.0	68.4	65.2	78.4
1955.....	73.0	79.3	75.8	91.2
1956.....	70.1	76.1	71.9	91.3
1957.....	76.5	77.0	73.7	88.4
1958.....	86.3	81.3	79.1	88.3
1959.....	81.8	81.6	81.2	82.9
1960.....	84.0	89.0	86.8	96.0
1961.....	87.5	94.8	88.7	117.5
1962.....	95.0	102.3	94.6	132.4
1963.....	95.4	104.8	95.6	143.7
1964.....	103.9	113.0	103.7	150.7
1965.....	102.5	113.8	103.5	157.4
1966.....	105.0	116.3	106.3	157.7
1967.....	100.0	100.0	100.0	100.0
1968.....	103.4	114.3	113.1	118.1
1969.....	106.9	122.4	115.1	149.1
1970.....	112.8	124.7	117.2	151.4
1971.....	114.6	117.4	114.3	126.7
1972 ^{3/}	110.9	112.4	107.3	129.7
AVERAGE ANNUAL RATES (PERCENT)				
1947-72....	2.9	2.5	2.8	1.7
1960-72....	2.2	2.0	2.3	1.0

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees. The output measure represents copper recovered from copper ore, old tailings, and precipitates.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 9. COPPER MINING, RECOVERABLE METAL SIC 102
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT <u>1/</u>	MAN-HOURS		EMPLOYMENT	
		PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	74.2	144.9	(<u>2/</u>)	146.9	(<u>2/</u>)
1947.....	87.5	148.6	124.5	140.7	79.3
1948.....	86.1	149.2	123.6	140.1	77.6
1949.....	77.0	130.9	117.3	131.5	77.6
1950.....	93.4	136.5	116.8	129.0	82.8
1951.....	95.2	138.8	117.3	127.8	87.9
1952.....	95.3	138.6	120.0	129.0	94.8
1953.....	96.0	148.5	129.5	137.7	106.9
1954.....	86.5	133.0	126.4	132.7	110.3
1955.....	103.8	142.1	130.9	137.0	113.8
1956.....	114.9	164.0	150.9	159.9	125.9
1957.....	112.8	147.4	146.4	153.1	127.6
1958.....	102.0	118.2	125.5	129.0	115.5
1959.....	85.7	104.8	105.0	105.6	103.4
1960.....	112.5	133.9	126.4	129.6	117.2
1961.....	121.5	138.9	128.2	137.0	103.4
1962.....	127.9	134.6	125.0	135.2	96.6
1963.....	126.3	132.4	120.5	132.1	87.9
1964.....	129.9	125.0	115.0	125.3	86.2
1965.....	141.2	137.7	124.1	136.4	89.7
1966.....	149.5	142.4	128.6	140.7	94.8
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	126.3	122.1	110.5	111.7	106.9
1969.....	161.9	151.5	132.3	140.7	108.6
1970.....	180.2	159.8	144.5	153.7	119.0
1971.....	159.5	139.2	135.9	139.5	125.9
1972 <u>3/</u>	172.2	155.3	153.2	160.5	132.8
AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	2.8	-0.1	0.2	(<u>4/</u>)	1.1
1960-72....	3.1	0.9	1.1	0.8	2.1

1/ Represents output in terms of copper recovered from copper ore, old tailings, and precipitates.

2/ Not available.

3/ Preliminary.

4/ Less than .05 percent.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 10. TOTAL COAL MINING SIC 11, 12
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>	OUTPUT PER EMPLOYEE <u>1/</u>		
	PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	29.2	23.3	21.6	55.3
1947.....	32.8	34.7	32.3	70.9
1948.....	32.8	32.6	30.4	66.1
1949.....	34.4	26.4	24.8	48.6
1950.....	37.1	32.7	30.8	59.5
1951.....	37.3	33.5	31.5	62.1
1952.....	39.2	33.6	31.8	57.1
1953.....	42.2	36.5	34.6	59.7
1954.....	49.3	40.5	39.1	55.2
1955.....	52.8	49.9	48.0	68.0
1956.....	55.3	52.1	50.5	67.7
1957.....	56.1	50.6	49.4	60.6
1958.....	62.3	50.5	50.8	49.4
1959.....	63.6	54.9	55.4	51.7
1960.....	67.3	58.4	59.0	54.8
1961.....	74.1	65.0	65.5	62.2
1962.....	78.7	71.9	71.7	73.2
1963.....	81.6	79.1	78.2	86.1
1964.....	86.7	84.4	83.5	91.2
1965.....	92.4	91.4	91.0	94.7
1966.....	97.6	97.6	97.6	97.9
1967.....	100.0	100.0	100.0	100.0
1968.....	105.4	103.5	104.0	99.6
1969.....	105.3	103.4	103.7	100.6
1970.....	102.7	103.0	103.2	101.3
1971.....	101.1	98.1	101.1	81.2
1972 <u>2/</u>	99.8	98.9	101.2	85.2
	AVERAGE ANNUAL RATES (PERCENT)			
1947-72.....	5.5	6.0	6.4	2.4
1960-72.....	3.5	4.5	4.6	3.3

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 11. TOTAL COAL MINING SIC 11, 12
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS	EMPLOYMENT		
		PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	85.1	291.3	364.6	394.5	153.9
1947.....	130.3	396.9	375.6	402.8	183.7
1948.....	124.6	379.7	382.4	409.8	188.5
1949.....	91.6	266.1	347.5	369.9	188.5
1950.....	106.7	287.6	325.9	346.7	179.4
1951.....	108.4	291.0	323.4	344.6	174.6
1952.....	96.2	245.1	285.9	302.5	168.5
1953.....	91.2	216.0	249.7	263.4	152.8
1954.....	79.0	160.1	195.0	202.2	143.0
1955.....	91.1	172.5	182.7	189.6	133.9
1956.....	98.9	178.7	189.7	195.8	146.1
1957.....	96.6	172.2	191.0	195.5	159.4
1958.....	80.9	129.9	160.1	159.4	163.7
1959.....	80.8	127.0	147.2	145.9	156.3
1960.....	80.6	119.7	138.0	136.6	147.2
1961.....	77.6	104.7	119.4	118.5	124.8
1962.....	80.7	102.6	112.3	112.5	110.2
1963.....	87.6	107.3	110.8	112.0	101.8
1964.....	91.7	105.8	108.7	109.8	100.6
1965.....	94.7	102.5	103.6	104.1	100.0
1966.....	97.3	99.7	99.7	99.7	99.4
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	98.4	93.4	95.1	94.6	98.8
1969.....	100.6	95.5	97.3	97.0	100.0
1970.....	107.5	104.7	104.4	104.2	106.1
1971.....	98.4	97.3	100.3	97.3	121.2
1972 ^{1/}	104.3	104.5	105.5	103.1	122.4
AVERAGE ANNUAL RATES (PERCENT)					
1947-72.....	-0.3	-5.5	-5.9	-6.3	-2.6
1960-72.....	2.5	-0.9	-1.9	-2.0	-0.8

^{1/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 12. BITUMINOUS COAL AND LIGNITE MINING SIC 12
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>	OUTPUT PER EMPLOYEE <u>1/</u>		
	PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	28.2	22.8	21.0	55.8
1947.....	32.1	34.1	31.8	70.6
1948.....	32.0	31.7	29.6	63.6
1949.....	33.7	25.8	24.2	47.0
1950.....	36.9	32.6	30.7	58.8
1951.....	36.7	33.5	31.4	61.8
1952.....	38.8	33.3	31.5	55.9
1953.....	42.0	37.1	35.2	60.8
1954.....	48.8	40.4	38.7	57.6
1955.....	52.6	50.1	48.1	69.8
1956.....	54.3	51.6	50.0	66.9
1957.....	55.6	50.6	49.5	59.2
1958.....	61.6	50.1	50.4	48.5
1959.....	62.8	54.4	55.0	50.3
1960.....	66.7	58.0	58.6	54.1
1961.....	73.6	64.3	64.9	60.7
1962.....	77.9	70.8	70.7	71.0
1963.....	80.8	78.2	77.2	85.1
1964.....	86.6	84.4	83.4	91.4
1965.....	92.7	92.0	91.6	95.1
1966.....	97.9	97.9	98.1	96.9
1967.....	100.0	100.0	100.0	100.0
1968.....	105.1	103.1	103.9	98.1
1969.....	105.4	103.3	103.9	99.5
1970.....	103.2	103.1	103.5	100.6
1971.....	101.6	98.1	101.4	80.2
1972 <u>2/</u>	100.1	98.4	100.8	84.0
	AVERAGE ANNUAL RATES (PERCENT)			
1947-72....	5.6	6.0	6.4	2.4
1960-72....	3.6	4.6	4.7	3.4

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. The do not relate to the specific output of any single group of employees.

2/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 13. BITUMINOUS COAL AND LIGNITE MINING SIC 12
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS		EMPLOYMENT	
		PRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	71.7	254.2	314.2	340.7	128.4
1947.....	114.4	356.5	335.5	360.3	162.1
1948.....	108.8	339.8	342.7	367.0	171.0
1949.....	79.4	235.8	308.0	327.8	169.1
1950.....	93.7	254.1	287.2	305.3	159.4
1951.....	96.9	264.2	289.4	308.3	156.8
1952.....	84.7	218.2	254.1	268.8	151.6
1953.....	82.9	197.3	223.3	235.6	136.3
1954.....	71.0	145.5	175.9	183.5	123.3
1955.....	84.7	161.1	169.2	176.0	121.4
1956.....	91.6	168.7	177.5	183.2	136.9
1957.....	90.5	162.9	179.0	182.7	153.0
1958.....	75.7	122.8	151.0	150.2	156.2
1959.....	75.9	120.9	139.6	138.0	151.0
1960.....	76.4	114.6	131.8	130.3	141.3
1961.....	74.0	100.5	115.0	114.0	122.0
1962.....	77.5	99.5	109.4	109.6	109.1
1963.....	84.1	104.1	107.6	108.9	98.8
1964.....	89.0	102.8	105.5	106.7	97.4
1965.....	93.3	100.7	101.4	101.9	98.1
1966.....	96.9	99.0	99.0	98.8	100.0
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	98.7	93.9	95.7	95.0	100.6
1969.....	101.4	96.2	98.2	97.6	101.9
1970.....	109.1	105.7	105.8	105.4	108.4
1971.....	99.9	98.3	101.8	98.5	124.5
1972 ^{1/}	106.8	106.7	108.5	105.9	127.1
AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	0.4	-4.9	-5.3	-5.7	-2.0
1960-72....	3.2	-0.4	-1.3	-1.5	-0.2

^{1/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 14. CANNING AND PRESERVING SIC 203
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	43.7	(3/)	(3/)	40.2	(3/)
1947.....	50.7	48.5	(70.1)	50.4	47.9	76.7
1948.....	51.5	49.8	(64.4)	49.6	47.5	70.1
1949.....	55.5	54.1	(66.1)	53.8	52.0	70.7
1950.....	61.1	59.7	(71.6)	59.9	58.0	76.2
1951.....	63.6	61.5	(79.2)	63.6	61.3	85.0
1952.....	63.2	61.8	(73.8)	62.6	60.7	78.9
1953.....	64.1	62.6	(74.1)	62.8	61.0	79.0
1954.....	68.9	67.6	(77.7)	67.0	65.0	82.4
1955.....	71.5	70.4	(78.1)	69.2	67.6	82.2
1956.....	76.3	74.9	(85.0)	75.5	73.7	89.7
1957.....	77.4	77.4	(76.3)	75.7	75.1	79.6
1958.....	76.2	77.2	(69.3)	75.2	75.7	71.7
1959.....	79.3	80.4	(71.9)	77.2	77.6	74.5
1960.....	84.1	85.0	(77.7)	82.3	82.5	79.6
1961.....	89.7	91.0	(81.8)	86.7	87.2	82.6
1962.....	90.7	91.1	(85.3)	89.1	89.6	85.6
1963.....	90.9	91.6	(85.9)	89.2	89.6	86.1
1964.....	95.9	96.0	(94.2)	95.4	95.3	94.8
1965.....	101.0	100.8	(101.4)	102.0	101.9	101.7
1966.....	99.4	98.5	(103.9)	101.1	100.6	103.9
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	107.4	107.2	(108.7)	109.5	109.3	109.6
1969.....	103.5	102.8	(107.0)	105.9	105.6	107.5
1970.....	105.7	105.9	(104.9)	106.8	107.1	105.3
1971 <u>4/</u>	111.6	112.7	(106.2)	111.7	112.8	106.6
AVERAGE ANNUAL RATES (PERCENT)						
1947-71.....	3.3	3.4	(2.1)	3.4	3.6	1.7
1960-71.....	2.3	2.2	(3.1)	2.7	2.7	3.0

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output based on data from the National Cannery Association; U.S. Department of Agriculture; the Bureau of Labor Statistics, U.S. Department of Labor; the Bureau of Competitive Assessment and Business Policy, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 15. CANNING AND PRESERVING SIC 203
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>1/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	30.4	(2/)	69.6	(2/)	(2/)	75.7	(2/)
1947.....	48.6	95.9	100.3	(69.3)	96.4	101.5	63.4
1948.....	48.1	93.4	96.5	(74.7)	96.9	101.2	68.6
1949.....	49.7	89.5	91.9	(75.2)	92.3	95.5	70.3
1950.....	53.1	86.9	89.0	(74.2)	88.7	91.5	69.7
1951.....	60.3	94.8	98.0	(76.1)	94.8	98.4	70.9
1952.....	58.0	91.7	93.9	(78.6)	92.7	95.6	73.5
1953.....	60.8	94.8	97.1	(82.0)	96.8	99.7	77.0
1954.....	61.4	89.1	90.8	(79.0)	91.7	94.4	74.5
1955.....	64.1	89.6	91.0	(82.1)	92.6	94.8	78.0
1956.....	71.7	94.0	95.7	(84.4)	95.0	97.3	79.9
1957.....	68.7	88.8	88.8	(90.0)	90.8	91.5	86.3
1958.....	67.7	88.9	87.7	(97.7)	90.0	89.4	94.4
1959.....	71.6	90.3	89.0	(99.6)	92.7	92.3	96.1
1960.....	76.0	90.4	89.4	(97.8)	92.4	92.1	95.5
1961.....	81.2	90.5	89.2	(99.3)	93.7	93.1	98.3
1962.....	85.3	94.0	93.6	(100.0)	95.7	95.2	99.7
1963.....	84.0	92.4	91.7	(97.8)	94.2	93.7	97.6
1964.....	89.5	93.3	93.2	(95.0)	93.8	93.9	94.4
1965.....	97.2	96.2	96.4	(95.9)	95.3	95.4	95.6
1966.....	101.1	101.7	102.6	(97.3)	100.0	100.5	97.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	110.0	102.4	102.6	(101.2)	100.5	100.6	100.4
1969.....	109.4	105.7	106.4	(102.2)	103.3	103.6	101.8
1970.....	110.3	104.4	104.2	(105.1)	103.3	103.0	104.7
1971 <u>3/</u>	114.7	102.8	101.8	(108.0)	102.7	101.7	107.6
AVERAGE ANNUAL RATES (PERCENT)							
1947-71....	3.8	0.5	0.4	(1.7)	0.4	0.2	2.1
1960-71....	3.8	1.5	1.6	(0.7)	1.1	1.1	0.8

1/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

2/ Not available.

3/ Preliminary.

Source: Output based on data from the National Canners Association; U.S. Department of Agriculture; the Bureau of Labor Statistics, U.S. Department of Labor; the Bureau of Competitive Assessment and Business Policy, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 16. FLOUR AND OTHER GRAIN-MILL PRODUCTS SIC 2041
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	54.5	(3/)	(3/)	50.8	(3/)
1947.....	53.3	49.8	(68.7)	58.0	53.8	72.7
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	49.2	47.2	(56.9)	49.8	46.9	59.7
1950.....	50.4	48.7	(56.7)	49.9	47.1	59.4
1951.....	50.1	48.2	(57.4)	50.8	47.9	60.3
1952.....	48.9	47.5	(54.3)	50.6	48.5	57.1
1953.....	52.8	50.4	(62.1)	54.6	51.4	64.9
1954.....	58.4	57.7	(60.6)	59.0	57.5	63.2
1955.....	60.8	60.6	(61.5)	60.8	59.8	63.7
1956.....	63.9	63.6	(65.1)	63.7	62.3	67.7
1957.....	69.4	69.2	(70.2)	69.1	67.9	72.8
1958.....	70.7	71.8	(68.0)	69.3	68.8	70.5
1959.....	68.3	68.3	(68.3)	68.8	68.1	70.8
1960.....	71.7	72.2	(70.5)	73.4	73.9	72.3
1961.....	74.6	73.9	(77.3)	76.2	75.5	78.2
1962.....	76.8	75.2	(82.6)	79.1	77.7	82.9
1963.....	86.3	84.5	(93.0)	89.5	88.1	93.4
1964.....	91.8	90.5	(96.1)	94.3	93.2	96.9
1965.....	96.0	95.3	(98.5)	97.0	96.4	98.9
1966.....	102.1	100.8	(107.2)	103.3	102.0	107.1
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	106.7	106.1	(108.5)	107.2	106.5	109.4
1969.....	106.1	105.8	(106.6)	105.8	105.4	107.0
1970.....	110.9	111.2	(109.9)	110.6	110.7	110.2
1971.....	116.0	114.8	(119.5)	115.0	113.2	120.0
1972 ^{4/}	117.2	117.0	(118.0)	117.5	117.2	117.9
	AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	4.0	4.2	(3.4)	3.9	4.2	3.2
1960-72....	4.3	4.3	(4.0)	3.9	4.0	3.8

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 17. FLOUR AND OTHER GRAIN-MILL PRODUCTS SIC 2041
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	83.6	(2/)	153.4	(2/)	(2/)	164.6	(2/)
1947.....	112.0	210.2	225.0	(163.1)	193.2	208.3	154.0
1948.....	102.3	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	87.1	177.1	184.5	(153.2)	174.8	185.9	145.9
1950.....	84.1	166.9	172.7	(148.3)	168.4	178.6	141.7
1951.....	86.2	172.2	178.9	(150.2)	169.6	179.9	143.0
1952.....	85.9	175.5	180.7	(158.3)	169.6	177.1	150.5
1953.....	83.3	157.7	165.2	(134.1)	152.7	162.1	128.4
1954.....	83.3	142.7	144.3	(137.5)	141.3	144.8	131.9
1955.....	85.5	140.7	141.2	(139.0)	140.6	143.0	134.2
1956.....	87.0	136.2	136.8	(133.7)	136.5	139.6	128.6
1957.....	91.4	131.7	132.0	(130.2)	132.2	134.6	125.5
1958.....	95.3	134.7	132.8	(140.1)	137.6	138.6	135.1
1959.....	95.7	140.1	140.1	(140.1)	139.0	140.6	135.2
1960.....	97.5	135.9	135.0	(138.3)	132.8	132.0	134.8
1961.....	98.8	132.4	133.7	(127.8)	129.6	130.8	126.4
1962.....	99.1	129.1	131.8	(120.0)	125.3	127.6	119.5
1963.....	97.8	113.3	115.7	(105.2)	109.3	111.0	104.7
1964.....	100.6	109.6	111.1	(104.7)	106.7	107.9	103.8
1965.....	98.2	102.3	103.0	(99.7)	101.2	101.9	99.3
1966.....	101.2	99.1	100.4	(94.4)	98.0	99.2	94.5
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	103.6	97.1	97.6	(95.5)	96.6	97.3	94.7
1969.....	103.3	97.4	97.6	(96.9)	97.6	98.0	96.5
1970.....	102.5	92.4	92.2	(93.3)	92.7	92.6	93.0
1971.....	101.0	87.1	88.0	(84.5)	87.8	89.2	84.2
1972 ^{3/}	101.4	86.5	86.7	(85.9)	86.3	86.5	86.0
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	0.6	-3.2	-3.4	(-2.6)	-3.1	-3.3	-2.4
1960-72.....	0.4	-3.7	-3.8	(-3.4)	-3.4	-3.4	-3.3

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 18. BAKERY PRODUCTS SIC 205
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	66.3	59.6	(81.1)	71.2	64.0	85.9
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	65.8	61.3	(75.1)	69.6	64.5	78.8
1950.....	66.4	62.0	(75.0)	69.8	64.9	78.7
1951.....	65.8	62.7	(71.6)	68.8	65.2	75.2
1952.....	67.6	65.4	(71.5)	70.4	67.6	75.2
1953.....	71.3	67.9	(77.5)	73.8	69.7	80.8
1954.....	70.5	70.0	(71.1)	72.0	70.7	74.1
1955.....	71.1	71.0	(71.3)	72.6	71.7	73.9
1956.....	72.5	73.1	(71.4)	73.3	72.8	74.3
1957.....	74.7	77.3	(70.7)	75.4	76.6	73.5
1958.....	77.3	79.0	(74.6)	78.9	79.9	77.4
1959.....	77.2	79.5	(73.8)	78.8	80.4	76.5
1960.....	77.7	79.8	(74.3)	79.8	82.3	76.3
1961.....	79.0	81.0	(75.7)	80.6	83.4	76.6
1962.....	81.1	84.1	(76.7)	82.7	86.9	77.1
1963.....	87.3	89.3	(84.0)	88.4	91.1	84.6
1964.....	90.1	91.8	(87.4)	93.1	96.6	88.1
1965.....	93.5	95.1	(90.8)	94.3	96.4	91.2
1966.....	94.6	95.6	(92.7)	96.0	98.1	92.9
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	102.2	101.5	(103.6)	103.6	103.0	104.3
1969.....	104.0	103.1	(105.7)	104.1	102.8	106.1
1970.....	107.1	105.5	(110.1)	107.2	105.1	110.4
1971.....	110.4	110.4	(110.5)	110.3	109.9	110.9
1972 ^{4/}	109.9	111.0	(108.2)	110.3	111.8	108.1
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	2.4	2.7	(1.8)	2.2	2.5	1.6
1960-72.....	3.2	2.8	(3.8)	3.0	2.5	3.6

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 19. BAKERY PRODUCTS SIC 205
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	75.5	113.9	126.6	(93.1)	106.1	118.0	87.9
1948.....	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	77.1	117.1	125.8	(102.7)	110.8	119.5	97.8
1950.....	77.8	117.2	125.4	(103.8)	111.5	119.8	98.9
1951.....	79.9	121.4	127.5	(111.6)	116.1	122.5	106.3
1952.....	83.9	124.1	128.3	(117.4)	119.1	124.1	111.6
1953.....	80.1	112.4	117.9	(103.4)	108.6	114.9	99.1
1954.....	79.7	113.1	113.9	(112.1)	110.7	112.8	107.5
1955.....	81.5	114.6	114.8	(114.3)	112.3	113.7	110.3
1956.....	84.7	116.8	115.9	(118.7)	115.5	116.4	114.0
1957.....	87.0	116.4	112.5	(123.0)	115.4	113.6	118.4
1958.....	90.3	116.8	114.3	(121.1)	114.4	113.0	116.6
1959.....	90.9	117.7	114.4	(123.1)	115.3	113.1	118.8
1960.....	91.8	118.1	115.0	(123.5)	115.0	111.6	120.3
1961.....	91.0	115.2	112.3	(120.2)	112.9	109.1	118.8
1962.....	92.9	114.5	110.5	(121.2)	112.3	106.9	120.5
1963.....	93.7	107.3	104.9	(111.5)	106.0	102.8	110.8
1964.....	97.4	108.1	106.1	(111.5)	104.6	100.8	110.5
1965.....	99.1	106.0	104.2	(109.2)	105.1	102.8	108.7
1966.....	99.7	105.4	104.3	(107.5)	103.9	101.6	107.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	101.0	98.8	99.5	(97.5)	97.5	98.1	96.8
1969.....	104.3	100.3	101.2	(98.7)	100.2	101.5	98.3
1970.....	99.5	92.9	94.3	(90.4)	92.8	94.7	90.1
1971.....	98.9	89.6	89.6	(89.5)	89.7	90.0	89.2
1972 ^{3/}	99.8	90.8	89.9	(92.2)	90.5	89.3	92.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-72....	1.3	-1.0	-1.3	(-0.5)	-0.8	-1.2	-0.2
1960-72....	0.9	-2.2	-1.9	(-2.8)	-2.0	-1.6	-2.7

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 20. SUGAR SIC 206
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	42.9	41.0	(57.4)	45.5	43.2	60.8
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	47.3	45.1	(63.5)	48.6	45.9	66.7
1950.....	50.7	48.8	(64.5)	51.2	48.6	67.6
1951.....	47.4	46.0	(56.4)	46.4	44.4	59.2
1952.....	51.1	50.0	(58.1)	51.9	50.3	61.1
1953.....	53.0	52.0	(58.3)	54.1	52.9	60.8
1954.....	58.3	58.2	(58.6)	58.4	57.8	61.1
1955.....	60.3	60.0	(61.8)	60.1	59.4	64.0
1956.....	63.5	62.8	(67.4)	65.6	64.7	70.1
1957.....	62.7	61.8	(67.7)	64.0	62.8	70.3
1958.....	64.8	64.9	(63.8)	67.4	67.7	66.2
1959.....	68.4	68.2	(69.6)	69.7	69.1	72.2
1960.....	72.2	71.9	(73.3)	74.4	74.2	75.2
1961.....	77.5	77.3	(78.1)	79.2	79.2	79.0
1962.....	85.2	84.4	(88.9)	87.1	86.5	89.3
1963.....	86.2	85.9	(87.4)	87.8	87.8	87.8
1964.....	91.1	90.8	(92.0)	93.4	93.6	92.8
1965.....	95.3	94.4	(99.8)	94.4	93.0	100.3
1966.....	99.5	99.9	(96.2)	97.9	99.5	96.3
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	104.3	103.7	(107.7)	105.1	104.4	108.5
1969.....	102.0	101.9	(102.6)	100.7	100.2	103.0
1970.....	111.1	111.1	(110.8)	109.7	109.4	111.3
1971.....	111.6	110.8	(115.8)	115.6	115.5	116.3
1972 ^{4/}	117.3	117.9	(117.7)	126.4	128.4	117.7
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	4.3	4.4	(3.3)	4.3	4.5	3.1
1960-72.....	3.7	3.7	(3.6)	3.8	3.8	3.5

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Agricultural Stabilization and Conservation Service and Statistical Reporting Service, U.S. Department of Agriculture, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 21. SUGAR SIC 206
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	60.1	140.1	146.7	(104.7)	132.0	139.0	98.9
1948.....	54.8	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	58.6	123.9	129.8	(92.3)	120.6	127.6	87.8
1950.....	65.9	129.9	135.1	(102.1)	128.8	135.5	97.5
1951.....	57.2	120.7	124.3	(101.4)	123.2	128.8	96.6
1952.....	60.9	119.1	121.8	(104.8)	117.3	121.1	99.6
1953.....	64.9	122.5	124.7	(111.3)	119.9	122.7	106.7
1954.....	65.6	112.6	112.8	(112.0)	112.4	113.4	107.4
1955.....	65.0	107.8	108.4	(105.2)	108.1	109.5	101.5
1956.....	68.1	107.3	108.5	(101.1)	103.8	105.3	97.2
1957.....	67.5	107.7	109.3	(99.7)	105.4	107.4	96.0
1958.....	71.7	110.7	110.5	(112.4)	106.4	105.9	108.3
1959.....	75.5	110.3	110.7	(108.4)	108.3	109.2	104.6
1960.....	77.7	107.6	108.0	(106.0)	104.5	104.7	103.3
1961.....	82.5	106.5	106.7	(105.7)	104.2	104.2	104.4
1962.....	86.3	101.3	102.2	(97.1)	99.1	99.8	96.6
1963.....	91.0	105.6	105.9	(104.1)	103.6	103.7	103.6
1964.....	98.7	108.4	108.7	(107.3)	105.7	105.5	106.4
1965.....	96.2	100.9	101.9	(96.4)	101.9	103.4	95.9
1966.....	97.6	98.1	97.7	(101.5)	99.7	98.1	101.4
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	104.8	100.5	101.1	(97.3)	99.7	100.4	96.6
1969.....	103.0	101.0	101.1	(100.4)	102.3	102.8	100.0
1970.....	109.4	98.5	98.5	(98.7)	99.7	100.0	98.3
1971.....	110.4	98.9	99.6	(95.3)	95.5	95.6	94.9
1972 ^{3/}	115.7	98.6	98.1	(98.3)	91.5	90.1	98.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	3.1	-1.2	-1.3	(-0.2)	-1.1	-1.4	0.0
1960-72.....	3.0	-0.7	-0.8	(-0.6)	-0.8	-0.8	-0.5

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Agricultural Stabilization and Conservation Service and Statistical Reporting Service, U.S. Department of Agriculture, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 22. CANDY AND OTHER CONFECTIONERY PRODUCTS SIC 2071
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	47.6	(3/)	(3/)	47.9	(3/)
1947.....	54.6	53.3	(63.2)	57.6	56.2	67.2
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	52.3	53.2	(47.9)	54.8	55.7	50.4
1950.....	51.3	54.5	(39.1)	53.3	56.5	41.1
1951.....	59.2	60.6	(52.8)	62.6	64.3	55.6
1952.....	58.5	60.8	(48.5)	62.6	65.4	51.1
1953.....	61.9	62.5	(58.9)	64.0	64.5	61.6
1954.....	61.9	63.1	(55.9)	63.4	64.5	58.3
1955.....	63.8	66.8	(51.4)	65.0	67.9	53.4
1956.....	64.5	68.6	(48.7)	66.5	70.6	50.7
1957.....	70.0	74.3	(53.4)	71.3	75.4	55.6
1958.....	73.2	75.7	(62.0)	74.2	76.4	64.5
1959.....	74.9	77.8	(62.1)	77.4	80.5	64.5
1960.....	78.3	81.5	(64.3)	80.8	84.4	66.0
1961.....	78.1	80.9	(66.0)	80.7	84.0	66.8
1962.....	79.6	82.5	(67.0)	82.3	86.0	67.4
1963.....	88.0	89.1	(82.3)	89.0	90.5	82.6
1964.....	89.7	90.8	(84.4)	90.5	91.6	85.1
1965.....	93.4	93.7	(92.1)	94.7	95.1	92.6
1966.....	97.2	97.9	(93.7)	97.2	97.8	93.7
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	101.6	103.0	(94.6)	102.5	104.0	95.4
1969.....	99.5	101.1	(92.0)	101.0	102.9	92.3
1970.....	99.9	103.0	(85.9)	100.3	103.5	86.3
1971.....	105.1	109.4	(86.6)	108.5	113.9	87.0
1972 ^{4/}	109.8	115.1	(87.9)	113.5	120.2	87.9
AVERAGE ANNUAL RATES (PERCENT)						
1947-72....	3.2	3.2	(3.2)	3.1	3.1	3.0
1960-72....	2.8	2.9	(2.7)	2.8	2.8	2.6

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Bureau of Competitive Assessment and Business Policy, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 23. CANDY AND OTHER CONFECTIONERY PRODUCTS SIC 2071
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	42.0	(2/)	88.2	(2/)	(2/)	87.7	(2/)
1947.....	64.2	117.5	120.5	(101.6)	111.4	114.3	95.6
1948.....	64.2	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	61.8	118.1	116.1	(129.1)	112.8	110.9	122.6
1950.....	64.1	124.9	117.7	(163.9)	120.2	113.4	156.1
1951.....	62.2	105.1	102.7	(117.8)	99.3	96.8	111.9
1952.....	64.2	109.8	105.6	(132.4)	102.5	98.1	125.6
1953.....	64.4	104.1	103.1	(109.3)	100.7	99.9	104.5
1954.....	62.8	101.5	99.5	(112.4)	99.0	97.3	107.8
1955.....	65.7	103.0	98.4	(127.7)	101.0	96.7	123.0
1956.....	67.9	105.3	99.0	(139.5)	102.1	96.2	133.9
1957.....	70.7	101.0	95.2	(132.3)	99.1	93.8	127.2
1958.....	72.7	99.3	96.0	(117.2)	98.0	95.1	112.8
1959.....	73.8	98.5	94.8	(118.8)	95.3	91.7	114.4
1960.....	76.8	98.1	94.2	(119.5)	95.0	91.0	116.3
1961.....	77.8	99.6	96.2	(117.9)	96.4	92.6	116.4
1962.....	79.7	100.1	96.6	(118.9)	96.8	92.7	118.2
1963.....	83.5	94.9	93.7	(101.5)	93.8	92.3	101.1
1964.....	87.4	97.4	96.3	(103.6)	96.6	95.4	102.7
1965.....	91.0	97.4	97.1	(98.8)	96.1	95.7	98.3
1966.....	95.4	98.1	97.4	(101.8)	98.1	97.5	101.8
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	101.6	100.0	98.6	(107.4)	99.1	97.7	106.5
1969.....	100.9	101.4	99.8	(109.7)	99.9	98.1	109.3
1970.....	101.5	101.6	98.5	(118.1)	101.2	98.1	117.6
1971.....	102.3	97.3	93.5	(118.1)	94.3	89.8	117.6
1972 ^{3/}	104.2	94.9	90.5	(118.5)	91.8	86.7	118.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	2.5	-0.7	-0.7	(-0.7)	-0.5	-0.6	-0.4
1960-72.....	2.9	0.0	-0.0	(0.1)	0.1	0.0	0.3

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of Competitive Assessment and Business Policy, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 24. MALT LIQUORS SIC 2082
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	33.0	(3/)	(3/)	34.0	(3/)
1947.....	42.0	38.6	(51.6)	47.7	44.8	54.7
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	46.3	45.3	(48.4)	49.5	48.7	50.9
1950.....	45.9	46.4	(44.9)	48.4	49.0	47.0
1951.....	46.7	46.5	(46.9)	49.5	49.4	49.2
1952.....	48.4	48.1	(49.1)	50.9	50.5	51.6
1953.....	48.1	48.1	(48.1)	50.2	50.2	50.1
1954.....	49.4	50.5	(47.3)	51.0	51.9	49.2
1955.....	51.4	51.9	(50.3)	52.8	53.0	52.1
1956.....	52.4	53.3	(50.5)	53.9	54.5	52.4
1957.....	54.1	55.4	(51.4)	55.1	55.9	53.4
1958.....	59.9	60.8	(57.8)	60.3	60.4	60.0
1959.....	62.7	62.9	(62.0)	63.3	62.8	64.3
1960.....	65.2	64.9	(65.5)	65.0	63.8	67.2
1961.....	68.3	68.2	(68.5)	68.0	67.2	69.3
1962.....	71.8	71.1	(73.1)	71.9	71.1	73.5
1963.....	78.9	77.9	(81.1)	79.0	77.7	81.4
1964.....	84.6	83.9	(86.0)	84.9	83.7	86.8
1965.....	89.0	88.7	(89.3)	89.6	89.6	89.6
1966.....	93.7	93.9	(92.8)	94.6	95.3	92.8
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	106.4	105.7	(107.7)	106.9	106.1	108.7
1969.....	113.7	113.3	(114.5)	112.6	111.5	115.1
1970.....	119.2	120.3	(117.1)	122.6	122.4	117.4
1971.....	124.1	127.7	(117.2)	126.3	128.0	117.8
1972 ^{4/}	134.9	139.6	(125.7)	136.4	139.0	125.9
	AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	5.0	5.1	(4.7)	4.7	4.7	4.4
1960-72....	6.3	6.5	(5.7)	6.4	6.7	5.6

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 25. MALT LIQUORS SIC 2082
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	37.2	(2/)	112.8	(2/)	(2/)	109.5	(2/)
1947.....	66.2	157.6	171.6	(128.2)	138.8	147.8	121.0
1948.....	64.3	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	65.5	141.5	144.5	(135.3)	132.4	134.4	128.8
1950.....	66.1	143.9	142.5	(147.3)	136.6	134.8	140.6
1951.....	68.2	146.1	146.6	(145.5)	137.9	138.0	138.5
1952.....	69.5	143.5	144.5	(141.6)	136.6	137.7	134.7
1953.....	71.7	149.1	149.1	(149.2)	142.7	142.9	143.0
1954.....	69.8	141.3	138.3	(147.7)	136.8	134.6	141.9
1955.....	71.4	138.8	137.5	(142.0)	135.3	134.6	137.0
1956.....	72.0	137.4	135.0	(142.7)	133.6	132.1	137.3
1957.....	71.8	132.7	129.5	(139.7)	130.2	128.4	134.5
1958.....	72.6	121.3	119.4	(125.5)	120.3	120.1	121.1
1959.....	75.3	120.1	119.7	(121.4)	119.0	120.0	117.1
1960.....	76.1	116.8	117.2	(116.1)	117.1	119.3	113.2
1961.....	77.7	113.7	114.0	(113.5)	114.3	115.6	112.2
1962.....	79.6	110.8	111.9	(108.9)	110.7	112.0	108.3
1963.....	83.0	105.2	106.6	(102.4)	105.0	106.8	102.0
1964.....	88.1	104.1	105.0	(102.4)	103.8	105.2	101.5
1965.....	90.9	102.1	102.5	(101.8)	101.4	101.5	101.4
1966.....	96.0	102.5	102.2	(103.4)	101.5	100.7	103.4
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	105.3	99.0	99.6	(97.8)	98.5	99.2	96.9
1969.....	109.8	96.6	96.9	(95.9)	97.5	98.5	95.4
1970.....	115.1	96.6	95.7	(98.3)	93.9	94.0	98.0
1971.....	119.0	95.9	93.2	(101.5)	94.2	93.0	101.0
1972 ^{3/}	122.6	90.9	87.8	(97.5)	89.9	88.2	97.4
AVERAGE ANNUAL RATES (PERCENT)							
1947-72....	2.6	-2.2	-2.4	(-2.0)	-2.0	-2.0	-1.7
1960-72....	4.4	-1.8	-2.1	(-1.3)	-1.9	-2.2	-1.2

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 26. BOTTLED AND CANNED SOFT DRINKS SIC 2086
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	73.3	72.9	(73.7)	75.0	73.0	76.3
1959.....	76.7	76.7	(76.8)	79.4	79.3	79.5
1960.....	73.8	74.5	(73.5)	75.6	76.0	75.3
1961.....	76.6	77.8	(76.0)	77.5	78.4	76.9
1962.....	81.8	83.7	(80.8)	81.9	83.8	80.8
1963.....	84.3	84.7	(84.2)	85.2	86.7	84.2
1964.....	88.0	89.5	(87.1)	88.6	90.9	87.1
1965.....	92.0	94.0	(90.6)	92.4	95.4	90.6
1966.....	96.9	96.0	(97.6)	97.7	97.7	97.6
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	109.1	110.8	(109.1)	108.2	108.4	108.1
1969.....	113.6	117.6	(111.3)	112.2	113.8	111.3
1970.....	122.3	129.1	(118.3)	120.9	125.1	118.3
1971.....	133.1	142.7	(127.6)	131.5	138.6	127.6
1972 ^{3/}	142.0	148.2	(138.4)	140.0	142.7	138.4
AVERAGE ANNUAL RATES (PERCENT)						
1958-72....	4.9	5.3	(4.6)	4.6	4.8	4.4
1960-72....	5.5	5.9	(5.2)	5.2	5.3	5.1

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Preliminary.

Source: Output based on data from the Sales Survey of the Soft Drink Industry, National Soft Drink Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 27. BOTTLED AND CANNED SOFT DRINKS SIC 2086
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	58.0	79.1	79.6	(78.7)	77.3	79.4	76.0
1959.....	62.8	81.9	81.9	(81.8)	79.1	79.2	79.0
1960.....	61.8	83.7	83.0	(84.1)	81.8	81.3	82.1
1961.....	63.6	83.0	81.8	(83.7)	82.1	81.1	82.7
1962.....	68.5	83.7	81.8	(84.8)	83.6	81.7	84.8
1963.....	72.9	86.5	86.1	(86.6)	85.6	84.1	86.6
1964.....	79.2	90.0	88.5	(90.9)	89.4	87.1	90.9
1965.....	85.3	92.7	90.7	(94.1)	92.3	89.4	94.1
1966.....	95.2	98.2	99.2	(97.5)	97.4	97.4	97.5
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	108.6	99.5	98.0	(100.5)	100.4	100.2	100.5
1969.....	115.2	101.4	98.0	(103.5)	102.7	101.2	103.5
1970.....	123.3	100.8	95.5	(104.2)	102.0	98.6	104.2
1971.....	132.6	99.6	92.9	(103.9)	100.8	95.7	103.9
1972 ^{2/}	139.6	98.3	94.2	(100.9)	99.7	97.8	100.9
AVERAGE ANNUAL RATES (PERCENT)							
1958-72....	6.9	1.9	1.6	(2.2)	2.2	2.0	2.4
1960-72....	7.4	1.9	1.5	(2.1)	2.1	2.0	2.2

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output based on data from the Sales Survey of the Soft Drink Industry, National Soft Drink Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 28. TOBACCO PRODUCTS-TOTAL SIC 211,212,213
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	38.6	(3/)	37.1	36.2	46.0
1947.....	50.3	48.2	(77.6)	51.1	49.0	79.1
1948.....	54.4	52.2	(82.1)	54.2	52.0	83.7
1949.....	55.8	53.6	(83.1)	54.5	52.3	83.8
1950.....	60.2	58.1	(86.0)	58.2	56.0	86.5
1951.....	62.3	60.3	(84.8)	60.8	58.7	85.5
1952.....	63.9	61.8	(89.0)	62.9	60.7	89.9
1953.....	62.3	60.4	(83.6)	61.6	59.7	83.8
1954.....	62.6	60.3	(89.2)	62.0	59.8	89.2
1955.....	62.4	60.1	(89.2)	62.2	60.0	88.9
1956.....	66.3	64.1	(94.1)	65.9	63.6	93.9
1957.....	69.4	67.1	(96.5)	69.1	66.9	96.3
1958.....	74.6	72.8	(93.9)	75.1	73.4	93.6
1959.....	78.4	77.0	(91.1)	79.3	78.1	90.7
1960.....	83.7	82.4	(96.2)	84.3	83.2	96.0
1961.....	86.6	85.9	(93.0)	87.9	87.4	92.8
1962.....	89.3	89.1	(90.6)	90.8	90.8	91.0
1963.....	94.1	93.5	(99.9)	95.7	95.1	100.3
1964.....	96.4	94.8	(111.3)	99.7	98.4	112.3
1965.....	100.2	99.5	(106.4)	99.4	98.7	106.8
1966.....	99.9	99.2	(106.0)	100.3	99.6	106.0
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	103.0	103.2	(101.0)	100.5	100.4	101.9
1969.....	101.0	102.0	(93.6)	99.4	100.1	94.1
1970.....	102.9	103.4	(99.7)	103.7	104.1	100.2
1971.....	108.3	109.4	(100.5)	107.8	108.6	100.9
1972 ^{4/}	111.1	111.6	(107.0)	109.9	110.3	107.0
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	3.2	3.5	(1.0)	3.3	3.5	1.0
1960-72.....	2.1	2.3	(0.5)	1.8	2.0	0.6

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 29. TOBACCO PRODUCTS-TOTAL SIC 211,212,213
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	60.2	(2/)	156.1	(2/)	162.4	166.1	131.0
1947.....	74.2	147.6	154.0	(95.6)	145.1	151.5	93.8
1948.....	76.9	141.4	147.4	(93.7)	141.8	147.9	91.9
1949.....	75.5	135.4	140.9	(90.9)	138.5	144.4	90.1
1950.....	75.8	125.9	130.5	(88.1)	130.2	135.4	87.6
1951.....	79.1	127.0	131.1	(93.3)	130.0	134.7	92.5
1952.....	82.2	128.6	133.0	(92.4)	130.6	135.4	91.4
1953.....	81.9	131.5	135.6	(98.0)	133.0	137.2	97.7
1954.....	79.7	127.3	132.1	(89.3)	128.5	133.2	89.3
1955.....	80.4	128.9	133.7	(90.1)	129.2	133.9	90.4
1956.....	81.0	122.1	126.4	(86.1)	122.9	127.4	86.3
1957.....	83.5	120.3	124.5	(86.5)	120.9	124.9	86.7
1958.....	88.3	118.3	121.3	(94.0)	117.5	120.3	94.3
1959.....	93.5	119.3	121.4	(102.6)	117.9	119.7	103.1
1960.....	95.8	114.4	116.3	(99.6)	113.7	115.2	99.8
1961.....	95.3	110.0	110.9	(102.5)	108.4	109.1	102.7
1962.....	95.5	107.0	107.2	(105.4)	105.2	105.2	104.9
1963.....	97.6	103.7	104.4	(97.7)	102.0	102.6	97.3
1964.....	106.0	110.0	111.8	(95.2)	106.3	107.7	94.4
1965.....	103.2	103.0	103.7	(97.0)	103.8	104.6	96.6
1966.....	100.5	100.6	101.3	(94.8)	100.2	100.9	94.8
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	101.9	98.9	98.7	(100.9)	101.4	101.5	100.0
1969.....	98.4	97.4	96.5	(105.1)	99.0	98.3	104.6
1970.....	101.7	98.8	98.4	(102.0)	98.1	97.7	101.5
1971.....	99.4	91.8	90.9	(98.9)	92.2	91.5	98.5
1972 ^{3/}	98.8	88.9	88.5	(92.3)	89.9	89.6	92.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-72....	1.4	-1.7	-2.0	(0.4)	-1.8	-2.0	0.4
1960-72....	0.3	-1.7	-1.9	(-0.2)	-1.5	-1.6	-0.2

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 30. CIGARETTES, CHEWING AND SMOKING TOBACCO SIC 211,213
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	47.7	(3/)	45.1	45.4	42.9
1947.....	70.5	68.5	(90.3)	72.3	70.2	92.8
1948.....	75.6	73.4	(96.7)	76.0	73.6	99.6
1949.....	77.6	75.2	(100.0)	76.4	73.9	101.8
1950.....	80.7	78.6	(101.2)	81.0	78.7	102.9
1951.....	84.6	83.1	(97.7)	85.2	83.5	99.5
1952.....	85.1	83.6	(97.2)	85.8	84.1	99.1
1953.....	81.6	79.7	(99.0)	81.3	79.3	100.3
1954.....	78.7	76.3	(101.7)	79.2	76.9	102.6
1955.....	77.8	75.3	(104.3)	79.7	77.2	104.7
1956.....	80.1	77.3	(109.2)	81.8	79.0	110.1
1957.....	82.3	79.6	(110.0)	83.8	81.1	110.8
1958.....	83.5	81.3	(103.8)	85.0	82.9	104.3
1959.....	85.4	84.2	(96.3)	87.2	86.0	96.9
1960.....	89.2	88.0	(98.4)	90.4	89.3	98.9
1961.....	91.1	90.4	(96.8)	92.7	92.2	96.9
1962.....	91.5	91.5	(90.7)	94.0	94.4	91.2
1963.....	95.5	95.0	(99.1)	98.0	97.7	99.5
1964.....	94.1	93.5	(98.0)	96.4	96.0	98.8
1965.....	98.4	98.1	(99.9)	96.9	96.4	100.4
1966.....	98.5	98.6	(97.5)	99.2	99.3	97.6
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	102.6	103.0	(99.6)	98.5	98.2	100.5
1969.....	97.7	98.9	(89.3)	94.9	95.7	89.7
1970.....	98.2	98.8	(94.6)	98.5	99.0	94.9
1971.....	102.9	104.5	(91.7)	101.5	102.9	92.2
1972 ^{4/}	106.5	107.3	(101.2)	104.3	104.8	101.2
AVERAGE ANNUAL RATES (PERCENT)						
1947-72....	1.4	1.6	(-0.1)	1.3	1.5	-0.2
1960-72....	1.2	1.4	(-0.1)	0.8	0.9	-0.1

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 31. CIGARETTES, CHEWING AND SMOKING TOBACCO SIC 211,213
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	46.9	(2/)	98.4	(2/)	103.9	103.2	109.4
1947.....	69.8	99.0	101.9	(77.3)	96.5	99.4	75.2
1948.....	72.6	96.0	98.9	(75.1)	95.5	98.6	72.9
1949.....	72.2	93.1	96.0	(72.2)	94.5	97.7	70.9
1950.....	73.3	90.8	93.3	(72.4)	90.5	93.1	71.2
1951.....	76.8	90.8	92.4	(78.6)	90.1	92.0	77.2
1952.....	79.1	93.0	94.6	(81.4)	92.2	94.0	79.8
1953.....	76.9	94.2	96.5	(77.7)	94.6	97.0	76.7
1954.....	73.9	93.9	96.8	(72.7)	93.3	96.1	72.0
1955.....	75.8	97.4	100.6	(72.7)	95.1	98.2	72.4
1956.....	77.1	96.3	99.7	(70.6)	94.3	97.6	70.0
1957.....	80.1	97.3	100.6	(72.8)	95.6	98.8	72.3
1958.....	84.9	101.7	104.4	(81.8)	99.9	102.4	81.4
1959.....	89.7	105.0	106.5	(93.1)	102.9	104.3	92.6
1960.....	92.0	103.1	104.5	(93.5)	101.8	103.0	93.0
1961.....	94.0	103.2	104.0	(97.1)	101.4	101.9	97.0
1962.....	93.7	102.4	102.4	(103.3)	99.7	99.3	102.7
1963.....	96.5	101.0	101.6	(97.4)	98.5	98.8	97.0
1964.....	95.6	101.6	102.3	(97.6)	99.2	99.6	96.8
1965.....	97.3	98.9	99.2	(97.4)	100.4	100.9	96.9
1966.....	98.5	100.0	99.9	(101.0)	99.3	99.2	100.9
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	100.5	98.0	97.6	(100.9)	102.0	102.3	100.0
1969.....	97.3	99.6	98.4	(109.0)	102.5	101.7	108.5
1970.....	101.0	102.8	102.2	(106.8)	102.5	102.0	106.4
1971.....	100.0	97.2	95.7	(109.0)	98.5	97.2	108.5
1972 ^{3/}	103.3	97.0	96.3	(102.1)	99.0	98.6	102.1
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	1.7	0.3	0.1	(1.8)	0.4	0.2	1.9
1960-72.....	0.8	-0.4	-0.6	(0.9)	(^{4/})	-0.1	0.9

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

^{4/} Less than .05 percent.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce, and Consumer and Marketing Service, U.S. Department of Agriculture. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 32. CIGARS, SIC 212
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	28.7	(3/)	28.0	27.0	42.8
1947.....	33.0	31.4	(59.2)	33.6	32.2	58.7
1948.....	35.9	34.3	(61.4)	35.9	34.5	61.1
1949.....	36.7	35.2	(60.6)	36.1	34.6	59.6
1950.....	41.0	39.4	(64.9)	38.7	37.2	63.6
1951.....	42.0	40.4	(66.5)	40.3	38.8	65.4
1952.....	43.9	42.0	(75.5)	42.8	40.9	74.4
1953.....	43.4	42.0	(61.8)	43.1	41.8	60.4
1954.....	45.4	43.8	(69.4)	44.8	43.3	67.6
1955.....	45.8	44.2	(67.8)	44.8	43.4	65.6
1956.....	50.5	48.9	(71.8)	49.0	47.6	69.8
1957.....	54.0	52.3	(76.2)	52.8	51.2	74.0
1958.....	62.6	61.2	(77.7)	62.4	61.3	75.4
1959.....	67.9	66.7	(81.0)	68.4	67.5	78.5
1960.....	75.1	73.7	(90.5)	75.3	74.1	88.8
1961.....	79.5	78.9	(85.3)	80.4	79.9	84.3
1962.....	85.2	84.6	(89.8)	85.4	85.0	90.3
1963.....	91.7	90.5	(102.1)	91.8	90.9	102.5
1964.....	101.3	97.9	(145.8)	107.0	104.1	147.2
1965.....	104.4	102.8	(121.1)	105.2	103.6	121.6
1966.....	103.2	100.8	(133.4)	103.0	100.6	133.4
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	103.8	103.8	(103.9)	104.7	104.7	104.7
1969.....	109.0	109.3	(106.5)	110.3	110.6	107.0
1970.....	114.9	114.7	(115.9)	116.3	116.3	116.4
1971.....	122.5	121.3	(135.2)	124.2	123.0	135.7
1972 ^{4/}	122.9	122.4	(129.8)	124.7	124.0	131.8
AVERAGE ANNUAL RATES (PERCENT)						
1947-72....	5.8	6.0	(3.5)	6.0	6.2	3.6
1960-72....	3.8	4.0	(2.6)	3.9	4.0	2.8

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 33 CIGARS SIC 212
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	80.0	(2/)	278.9	(2/)	285.5	295.9	186.9
1947.....	83.3	252.8	265.2	(140.8)	247.8	258.9	141.9
1948.....	86.1	239.9	250.9	(140.2)	239.5	249.8	141.0
1949.....	83.4	227.2	237.0	(137.6)	231.2	240.8	140.0
1950.....	82.8	201.9	210.0	(127.6)	213.9	222.6	130.2
1951.....	86.4	205.5	213.9	(129.9)	214.2	222.8	132.2
1952.....	90.4	205.7	215.1	(119.7)	211.3	220.8	121.5
1953.....	92.1	212.3	219.3	(149.1)	213.7	220.2	152.5
1954.....	90.8	199.8	207.5	(130.8)	202.5	209.8	134.3
1955.....	90.2	197.0	204.1	(133.1)	201.3	208.0	137.5
1956.....	89.8	177.8	183.8	(125.1)	183.1	188.8	128.7
1957.....	91.8	170.1	175.5	(120.5)	173.9	179.2	124.1
1958.....	96.4	154.1	157.5	(124.1)	154.5	157.2	127.9
1959.....	102.2	150.5	153.2	(126.2)	149.4	151.4	130.2
1960.....	104.3	138.9	141.5	(115.2)	138.5	140.8	117.5
1961.....	99.0	124.5	125.4	(116.1)	123.2	123.9	117.5
1962.....	99.6	116.9	117.7	(110.9)	116.6	117.2	110.3
1963.....	100.2	109.3	110.7	(98.1)	109.1	110.2	97.8
1964.....	129.5	127.8	132.3	(88.8)	121.0	124.4	88.0
1965.....	116.5	111.6	113.3	(96.2)	110.7	112.4	95.8
1966.....	105.0	101.7	104.2	(78.7)	101.9	104.4	78.7
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	104.7	100.9	100.9	(100.8)	100.0	100.0	100.0
1969.....	101.0	92.7	92.4	(94.8)	91.6	91.3	94.4
1970.....	103.5	90.1	90.2	(89.3)	89.0	89.0	88.9
1971.....	98.0	80.0	80.8	(72.5)	78.9	79.7	72.2
1972 ^{3/}	87.9	71.5	71.8	(67.7)	70.5	70.9	66.7
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	0.9	-4.7	-4.8	(-2.5)	-4.8	-5.0	-2.6
1960-72.....	-0.8	-4.5	-4.6	(-3.4)	-4.5	-4.6	-3.5

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Internal Revenue Service, U.S. Department of the Treasury, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 34. HOSIERY SIC 2251,2252
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	36.9	35.8	(53.5)	37.8	36.6	54.8
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	38.4	38.0	(42.5)	38.4	37.9	43.2
1950.....	40.6	39.7	(51.5)	40.7	39.9	52.1
1951.....	42.6	42.4	(44.0)	41.7	41.4	44.6
1952.....	45.9	45.9	(45.4)	46.2	46.2	46.1
1953.....	44.5	44.2	(47.7)	44.1	43.7	48.0
1954.....	46.8	45.9	(57.2)	45.8	44.8	57.5
1955.....	46.1	45.4	(54.0)	45.3	44.5	54.2
1956.....	47.0	46.3	(54.2)	46.0	45.3	54.5
1957.....	49.2	48.7	(54.1)	48.1	47.5	54.3
1958.....	58.1	57.9	(60.2)	56.2	55.8	60.4
1959.....	57.8	57.2	(63.6)	57.5	57.0	63.8
1960.....	59.3	58.6	(66.0)	58.7	58.0	66.4
1961.....	64.8	64.5	(67.5)	64.5	64.2	67.5
1962.....	67.1	66.9	(69.4)	66.9	66.5	69.5
1963.....	75.8	75.2	(82.7)	74.7	73.9	82.9
1964.....	81.1	80.2	(90.0)	81.8	81.0	90.7
1965.....	80.9	80.1	(89.9)	81.2	80.4	90.0
1966.....	89.1	88.4	(95.0)	90.4	89.9	94.8
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	92.9	93.1	(90.5)	93.0	93.3	91.3
1969.....	106.0	106.4	(101.0)	106.4	106.9	101.1
1970.....	124.3	126.2	(109.3)	118.6	119.6	109.4
1971.....	116.5	120.0	(90.1)	111.6	114.3	90.2
1972 ^{4/}	124.2	127.9	(96.5)	122.4	125.7	96.0
	AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	5.3	5.5	(3.9)	5.3	5.4	3.8
1960-72....	6.4	6.7	(3.5)	6.2	6.5	3.5

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the National Association of Hosiery Manufacturers, Inc., and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 35. HOSIERY SIC 2251,2252
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	52.6	142.4	146.9	(98.3)	139.2	143.6	96.0
1948.....	52.7	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	52.3	136.1	137.5	(123.0)	136.3	137.9	121.2
1950.....	58.5	144.1	147.3	(113.5)	143.7	146.8	112.3
1951.....	57.3	134.5	135.0	(130.3)	137.5	138.5	128.6
1952.....	60.6	132.1	131.9	(133.4)	131.2	131.3	131.4
1953.....	59.9	134.5	135.4	(125.7)	135.7	137.0	124.7
1954.....	58.3	124.7	127.0	(102.0)	127.4	130.1	101.4
1955.....	59.1	128.3	130.3	(109.4)	130.6	132.8	109.1
1956.....	57.7	122.8	124.6	(106.4)	125.3	127.4	105.9
1957.....	57.7	117.3	118.5	(106.6)	119.9	121.4	106.2
1958.....	59.8	103.0	103.3	(99.4)	106.5	107.2	99.0
1959.....	63.0	109.0	110.1	(99.1)	109.5	110.6	98.8
1960.....	62.8	105.9	107.1	(95.2)	106.9	108.3	94.6
1961.....	68.8	106.1	106.6	(101.9)	106.6	107.2	101.9
1962.....	70.6	105.2	105.5	(101.8)	105.6	106.1	101.6
1963.....	73.1	96.4	97.2	(88.4)	97.9	98.9	88.2
1964.....	77.7	95.8	96.9	(86.3)	95.0	95.9	85.7
1965.....	81.8	101.1	102.1	(91.0)	100.7	101.7	90.9
1966.....	90.3	101.4	102.1	(95.1)	99.9	100.5	95.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	97.6	105.1	104.8	(107.8)	104.9	104.6	106.9
1969.....	117.4	110.8	110.3	(116.2)	110.3	109.8	116.1
1970.....	125.7	101.1	99.6	(115.0)	106.0	105.1	114.9
1971.....	103.6	88.9	86.3	(115.0)	92.8	90.6	114.9
1972 ^{3/}	111.5	89.8	87.2	(115.6)	91.1	88.7	116.1
AVERAGE ANNUAL RATES (PERCENT)							
1947-72....	3.4	-1.8	-1.9	(-0.4)	-1.7	-1.9	-0.4
1960-72....	5.6	-0.8	-1.1	(2.0)	-0.6	-0.9	2.0

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the National Association of Hosiery Manufacturers, Inc., and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 36. PAPER, PAPERBOARD AND PULP MILLS SIC 261,2,3,6
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	48.5	(3/)	(3/)	45.8	(3/)
1947.....	47.9	44.4	(78.9)	50.3	46.0	81.2
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	50.1	47.4	(70.1)	50.3	46.9	71.4
1950.....	56.4	53.0	(83.6)	58.5	54.4	84.9
1951.....	58.8	55.6	(82.1)	60.7	57.0	83.8
1952.....	57.6	54.9	(76.0)	58.5	55.2	77.6
1953.....	57.6	54.9	(75.2)	58.7	55.6	76.3
1954.....	59.7	57.4	(75.1)	60.0	57.1	75.9
1955.....	63.9	61.0	(83.1)	65.6	62.3	83.6
1956.....	66.7	64.3	(81.6)	68.1	65.3	82.2
1957.....	66.6	64.9	(77.0)	66.4	64.1	77.6
1958.....	68.3	66.7	(77.7)	67.7	65.4	78.3
1959.....	72.4	70.9	(81.1)	73.2	71.5	81.6
1960.....	74.8	73.9	(79.8)	74.7	73.5	80.2
1961.....	79.7	79.0	(83.1)	79.4	78.5	83.3
1962.....	82.8	82.0	(87.2)	82.7	81.6	87.7
1963.....	87.6	86.9	(91.6)	87.7	86.7	92.0
1964.....	92.2	91.3	(97.5)	93.1	91.9	98.3
1965.....	96.9	96.4	(99.5)	97.4	96.7	100.0
1966.....	101.6	101.2	(104.2)	102.9	102.5	104.2
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	106.7	106.2	(109.0)	107.6	106.9	110.0
1969.....	110.6	110.2	(112.7)	111.7	111.3	113.2
1970.....	114.9	115.8	(111.4)	113.3	113.7	111.9
1971.....	121.8	123.5	(114.2)	120.4	121.8	114.7
1972 ^{4/}	128.3	128.4	(127.6)	128.0	128.0	127.6
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	4.0	4.3	(2.0)	3.8	4.2	1.9
1960-72.....	4.3	4.5	(3.5)	4.3	4.5	3.5

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 37. PAPER, PAPERBOARD AND PULP MILLS SIC 261,2,3,6
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	26.9	(2/)	55.5	(2/)	(2/)	58.7	(2/)
1947.....	41.8	87.2	94.1	(53.0)	83.1	90.8	51.5
1948.....	43.5	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	40.5	80.8	85.4	(57.8)	80.5	86.4	56.7
1950.....	48.4	85.8	91.3	(57.9)	82.8	89.0	57.0
1951.....	52.7	89.6	94.7	(64.2)	86.8	92.5	62.9
1952.....	50.1	87.0	91.2	(65.9)	85.6	90.7	64.6
1953.....	53.5	92.9	97.4	(71.1)	91.2	96.3	70.1
1954.....	54.5	91.3	95.0	(72.6)	90.8	95.4	71.8
1955.....	61.1	95.6	100.1	(73.5)	93.2	98.0	73.1
1956.....	64.8	97.2	100.8	(79.4)	95.2	99.2	78.8
1957.....	63.1	94.7	97.3	(81.9)	95.1	98.4	81.3
1958.....	63.4	92.8	95.0	(81.6)	93.7	96.9	81.0
1959.....	70.6	97.5	99.6	(87.0)	96.4	98.8	86.5
1960.....	72.2	96.5	97.7	(90.5)	96.6	98.2	90.0
1961.....	74.5	93.5	94.3	(89.6)	93.8	94.9	89.4
1962.....	78.4	94.7	95.6	(89.9)	94.8	96.1	89.4
1963.....	82.6	94.3	95.1	(90.2)	94.2	95.3	89.8
1964.....	87.9	95.3	96.3	(90.2)	94.4	95.6	89.4
1965.....	93.1	96.1	96.6	(93.6)	95.6	96.3	93.1
1966.....	100.3	98.7	99.1	(96.3)	97.5	97.9	96.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	108.0	101.2	101.7	(99.1)	100.4	101.0	98.2
1969.....	113.7	102.8	103.2	(100.9)	101.8	102.2	100.4
1970.....	113.1	98.4	97.7	(101.5)	99.8	99.5	101.1
1971.....	115.5	94.8	93.5	(101.1)	95.9	94.8	100.7
1972 ^{3/}	122.9	95.8	95.7	(96.3)	96.0	96.0	96.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-72....	4.6	0.6	0.3	(2.5)	0.7	0.4	2.6
1960-72....	4.7	0.3	0.2	(1.1)	0.4	0.2	1.2

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 38. CORRUGATED AND SOLID FIBER BOXES SIC 2653
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	76.4	76.3	(76.7)	75.9	75.4	77.2
1959.....	77.6	76.2	(83.1)	78.6	77.2	83.6
1960.....	77.2	76.5	(79.5)	76.5	75.5	80.1
1961.....	81.6	80.7	(84.5)	82.0	81.1	84.8
1962.....	82.7	81.4	(88.0)	83.8	82.5	88.4
1963.....	88.2	87.9	(89.5)	88.8	88.6	89.9
1964.....	90.0	89.8	(90.8)	92.6	93.0	91.7
1965.....	92.8	92.7	(93.7)	95.9	96.5	94.2
1966.....	96.6	94.8	(103.4)	98.6	97.2	103.5
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	102.7	102.4	(103.9)	103.6	103.2	104.8
1969.....	104.1	104.2	(104.0)	104.9	105.1	104.6
1970.....	108.8	110.8	(102.7)	105.7	106.4	103.2
1971.....	115.2	117.9	(106.7)	111.8	113.5	107.2
1972 <u>3/</u>	118.3	119.6	(114.1)	117.1	118.1	114.2
	AVERAGE ANNUAL RATES (PERCENT)					
1958-72....	3.3	3.5	(2.6)	3.2	3.3	2.6
1960-72....	3.5	3.7	(2.6)	3.2	3.4	2.6

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Preliminary.

Source: Output based on data from the Fibre Box Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 39. CORRUGATED AND SOLID FIBER BOXES SIC 2653
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	55.3	72.4	72.5	(72.1)	72.9	73.3	71.6
1959.....	63.0	81.2	82.7	(75.8)	80.2	81.6	75.4
1960.....	63.0	81.6	82.3	(79.2)	82.3	83.4	78.7
1961.....	67.3	82.5	83.4	(79.6)	82.1	83.0	79.4
1962.....	71.9	86.9	88.3	(81.7)	85.8	87.2	81.3
1963.....	76.2	86.4	86.7	(85.1)	85.8	86.0	84.8
1964.....	82.4	91.6	91.8	(90.7)	89.0	88.6	89.9
1965.....	89.5	96.4	96.6	(95.5)	93.3	92.7	95.0
1966.....	97.6	101.0	102.9	(94.4)	99.0	100.4	94.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	107.4	104.6	104.9	(103.4)	103.7	104.1	102.5
1969.....	114.1	109.6	109.5	(109.7)	108.8	108.6	109.1
1970.....	113.9	104.7	102.8	(110.9)	107.8	107.0	110.4
1971.....	118.3	102.7	100.3	(110.9)	105.8	104.2	110.4
1972 ^{2/}	129.8	109.7	108.5	(113.8)	110.8	109.9	113.7
AVERAGE ANNUAL RATES (PERCENT)							
1958-72.....	6.2	2.8	2.6	(3.5)	2.9	2.7	3.5
1960-72.....	6.1	2.6	2.3	(3.4)	2.8	2.6	3.4

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output based on data from the Fibre Box Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 40. MAN MADE FIBERS SIC 2823,2824
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1957.....	68.6	67.4	(72.2)	68.1	66.4	73.5
1958.....	65.9	67.2	(62.1)	66.0	67.1	63.1
1959.....	75.4	73.8	(81.0)	75.9	73.8	82.2
1960.....	72.1	71.9	(72.8)	71.3	70.4	73.6
1961.....	77.5	77.7	(76.7)	77.0	76.9	77.0
1962.....	85.0	83.6	(89.9)	85.2	83.6	90.4
1963.....	84.3	85.0	(82.2)	85.3	86.1	82.7
1964.....	89.8	89.8	(89.6)	91.7	92.0	90.5
1965.....	92.8	91.9	(95.0)	93.7	93.2	95.4
1966.....	93.3	94.7	(89.6)	93.7	95.2	89.7
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	115.6	112.9	(124.6)	117.5	114.8	125.9
1969.....	116.7	114.5	(124.2)	118.1	115.9	124.9
1970.....	119.3	119.1	(120.0)	118.9	118.2	120.8
1971.....	140.4	137.8	(149.0)	139.8	136.7	149.7
1972 ^{3/}	156.2	150.0	(179.2)	155.7	148.7	179.6
AVERAGE ANNUAL RATES (PERCENT)						
1957-72.....	5.4	5.2	(5.8)	5.4	5.3	5.7
1960-72.....	6.0	5.7	(6.7)	6.0	5.7	6.7

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Preliminary.

Source: Output based on data from the Textile Economics Bureau, Inc., and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 41. MAN MADE FIBERS SIC 2823,2824
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1957.....	49.7	72.4	73.7	(68.8)	73.0	74.9	67.6
1958.....	45.4	68.9	67.6	(73.1)	68.8	67.7	72.0
1959.....	54.2	71.9	73.4	(66.9)	71.4	73.4	65.9
1960.....	51.0	70.7	70.9	(70.1)	71.5	72.4	69.3
1961.....	53.6	69.2	69.0	(69.9)	69.6	69.7	69.6
1962.....	64.0	75.3	76.6	(71.2)	75.1	76.6	70.8
1963.....	68.4	81.1	80.5	(83.2)	80.2	79.4	82.7
1964.....	78.4	87.3	87.3	(87.5)	85.5	85.2	86.6
1965.....	89.9	96.9	97.8	(94.6)	95.9	96.5	94.2
1966.....	98.2	105.2	103.7	(109.6)	104.8	103.2	109.5
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	127.0	109.9	112.5	(101.9)	108.1	110.6	100.9
1969.....	131.9	113.0	115.2	(106.2)	111.7	113.8	105.6
1970.....	129.7	108.7	108.9	(108.1)	109.1	109.7	107.4
1971.....	149.7	106.6	108.6	(100.5)	107.1	109.5	100.0
1972 ^{2/}	174.9	112.0	116.6	(97.6)	112.3	117.6	97.4
AVERAGE ANNUAL RATES (PERCENT)							
1957-72.....	9.6	4.0	4.1	(3.5)	3.9	4.0	3.6
1960-72.....	10.6	4.4	4.6	(3.7)	4.4	4.6	3.7

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output based on data from the Textile Economics Bureau, Inc., and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 42. PETROLEUM REFINING SIC 291
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	29.9	(3/)	32.6	28.7	48.1
1947.....	31.4	28.6	(42.3)	32.8	29.7	43.7
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	34.9	31.7	(47.9)	35.5	31.8	48.9
1950.....	39.0	36.6	(47.4)	39.8	37.2	48.3
1951.....	40.7	38.4	(48.4)	41.5	39.0	49.4
1952.....	41.7	39.9	(47.6)	41.9	39.7	48.7
1953.....	42.6	40.9	(48.1)	42.3	40.2	48.8
1954.....	44.7	43.1	(49.6)	44.2	42.1	50.3
1955.....	48.9	47.1	(54.7)	48.5	46.3	55.1
1956.....	50.9	49.1	(56.9)	50.6	48.3	57.4
1957.....	51.0	49.9	(54.6)	50.7	49.2	55.0
1958.....	53.6	52.5	(56.8)	52.5	50.8	57.2
1959.....	60.2	59.1	(63.6)	59.3	57.6	64.1
1960.....	62.7	62.1	(64.7)	62.2	61.2	65.1
1961.....	67.5	67.1	(68.9)	66.8	66.0	69.0
1962.....	73.5	73.5	(73.9)	72.9	72.4	74.3
1963.....	79.1	78.5	(80.5)	77.7	76.5	81.0
1964.....	83.4	83.0	(84.8)	83.1	82.2	85.7
1965.....	90.5	89.9	(92.1)	89.5	88.4	92.7
1966.....	97.7	97.1	(99.5)	97.0	96.0	99.4
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	103.0	103.7	(101.2)	103.8	104.5	102.3
1969.....	107.0	110.6	(98.6)	110.7	113.1	105.1
1970.....	107.6	108.6	(104.8)	108.4	109.7	105.3
1971.....	113.2	115.3	(108.0)	113.1	115.1	108.5
1972 <u>4/</u>	120.3	121.8	(116.7)	119.7	121.0	116.8
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	5.7	6.1	(4.4)	5.7	6.1	4.4
1960-72.....	5.3	5.6	(4.6)	5.5	5.8	4.7

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 43. PETROLEUM REFINING SIC 291
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	30.9	(2/)	103.3	(2/)	94.9	107.5	64.2
1947.....	44.8	142.9	156.5	(105.8)	136.7	150.6	102.6
1948.....	49.3	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	47.9	137.3	151.2	(99.9)	135.1	150.4	97.9
1950.....	52.0	133.3	142.1	(109.6)	130.5	139.7	107.7
1951.....	58.9	144.7	153.2	(121.8)	141.9	151.1	119.3
1952.....	60.2	144.3	150.9	(126.4)	143.6	151.7	123.7
1953.....	63.3	148.5	154.6	(131.7)	149.6	157.6	129.8
1954.....	63.4	141.9	147.0	(127.7)	143.6	150.6	126.1
1955.....	68.6	140.4	145.8	(125.3)	141.4	148.2	124.6
1956.....	73.0	143.4	148.8	(128.3)	144.3	151.1	127.1
1957.....	73.2	143.4	146.6	(134.1)	144.3	148.9	133.0
1958.....	71.9	134.2	136.9	(126.6)	136.9	141.4	125.7
1959.....	76.3	126.8	129.2	(119.9)	128.6	132.4	119.1
1960.....	78.7	125.5	126.8	(121.6)	126.5	128.6	120.8
1961.....	80.6	119.4	120.1	(117.0)	120.6	122.1	116.8
1962.....	84.0	114.3	114.3	(113.7)	115.3	116.1	113.0
1963.....	86.2	109.0	109.8	(107.1)	110.9	112.7	106.4
1964.....	88.7	106.3	106.9	(104.6)	106.7	107.9	103.5
1965.....	91.2	100.8	101.4	(99.0)	101.9	103.2	98.4
1966.....	95.9	98.2	98.8	(96.4)	98.9	99.9	96.5
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	104.2	101.2	100.5	(103.0)	100.4	99.7	101.9
1969.....	106.8	99.8	96.6	(108.3)	96.5	94.4	101.6
1970.....	109.4	101.7	100.7	(104.4)	100.9	99.7	103.9
1971.....	113.1	99.9	98.1	(104.7)	100.0	98.3	104.2
1972 ^{3/}	118.3	98.3	97.1	(101.4)	98.8	97.8	101.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	3.7	-1.9	-2.3	(-0.7)	-1.9	-2.3	-0.7
1960-72.....	3.5	-1.7	-2.0	(-1.1)	-1.9	-2.2	-1.2

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 44. TIRES AND INNER TUBES SIC 301
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	45.3	43.1	(54.8)	47.0	44.6	57.5
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	49.8	47.9	(58.4)	48.6	45.9	60.7
1950.....	56.2	52.6	(74.1)	58.3	54.4	76.8
1951.....	54.2	50.9	(70.3)	56.8	53.3	73.0
1952.....	52.1	49.3	(65.0)	54.1	51.0	67.7
1953.....	54.8	51.9	(68.2)	56.3	53.1	70.4
1954.....	54.5	53.2	(59.4)	53.9	52.0	61.2
1955.....	58.0	54.8	(72.7)	63.1	60.4	74.4
1956.....	57.9	56.3	(64.1)	58.6	56.7	65.9
1957.....	61.0	59.6	(66.6)	62.2	60.5	68.4
1958.....	63.5	62.9	(65.6)	63.8	62.8	67.4
1959.....	70.5	68.2	(79.2)	72.1	69.7	81.2
1960.....	72.2	70.9	(76.8)	73.4	72.1	78.2
1961.....	74.5	74.4	(75.1)	75.8	75.9	75.6
1962.....	82.0	79.8	(90.8)	86.4	84.9	91.4
1963.....	88.2	86.7	(93.4)	91.0	90.2	93.9
1964.....	96.2	94.4	(102.6)	102.1	101.6	103.5
1965.....	98.2	96.7	(103.7)	104.9	105.0	104.3
1966.....	100.3	98.3	(107.6)	107.2	107.1	107.6
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	106.8	105.0	(113.7)	114.0	113.7	114.7
1969.....	102.6	100.3	(111.3)	110.4	110.0	111.9
1970.....	104.6	105.4	(102.0)	106.1	107.2	102.6
1971.....	111.5	111.3	(112.2)	113.7	114.1	112.7
1972 <u>4/</u>	109.4	108.0	(114.8)	115.0	115.1	114.8
	AVERAGE ANNUAL RATES (PERCENT)					
1947-72.....	4.0	4.2	(3.0)	4.1	4.4	2.9
1960-72.....	3.4	3.5	(3.1)	3.5	3.7	3.0

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output based on data from the Rubber Manufacturers Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 45. TIRES AND INNER TUBES SIC 301
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	60.1	132.7	139.4	(109.6)	127.8	134.8	104.5
1948.....	52.2	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	46.8	93.9	97.8	(80.2)	96.2	101.9	77.1
1950.....	57.7	102.7	109.8	(77.9)	98.9	106.1	75.1
1951.....	57.9	106.8	113.8	(82.4)	101.9	108.7	79.3
1952.....	58.5	112.3	118.7	(90.0)	108.1	114.7	86.4
1953.....	60.4	110.2	116.4	(88.6)	107.2	113.7	85.8
1954.....	55.2	101.3	103.7	(93.0)	102.4	106.2	90.2
1955.....	68.8	118.7	125.6	(94.7)	109.1	114.0	92.5
1956.....	63.6	109.8	112.9	(99.2)	108.6	112.2	96.5
1957.....	66.6	109.1	111.7	(100.0)	107.0	110.0	97.3
1958.....	61.5	96.8	97.7	(93.7)	96.4	98.0	91.3
1959.....	73.5	104.3	107.7	(92.8)	102.0	105.4	90.5
1960.....	72.8	100.9	102.7	(94.8)	99.2	101.0	93.1
1961.....	70.5	94.6	94.8	(93.9)	93.0	92.9	93.3
1962.....	80.4	98.0	100.8	(88.5)	93.1	94.7	88.0
1963.....	83.7	94.9	96.5	(89.6)	92.0	92.8	89.1
1964.....	94.5	98.2	100.1	(92.1)	92.6	93.0	91.3
1965.....	100.3	102.1	103.7	(96.7)	95.6	95.5	96.2
1966.....	107.6	107.3	109.5	(100.0)	100.4	100.5	100.0
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	120.7	113.0	115.0	(106.2)	105.9	106.2	105.2
1969.....	122.4	119.3	122.0	(110.0)	110.9	111.3	109.4
1970.....	115.1	110.0	109.2	(112.8)	108.5	107.4	112.2
1971.....	128.6	115.3	115.5	(114.6)	113.1	112.7	114.1
1972 ^{3/}	136.9	125.1	126.8	(119.2)	119.0	118.9	119.2
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	4.0	0.1	-0.1	(1.0)	(4/)	-0.3	1.2
1960-72.....	5.6	2.0	2.0	(2.4)	2.0	1.8	2.4

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

^{4/} Less than .05 percent.

Source: Output based on data from the Rubber Manufacturers Association, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 46. FOOTWEAR SIC 314
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	70.6	69.6	(80.8)	72.4	71.4	83.9
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	74.3	74.1	(75.4)	70.0	69.2	77.7
1950.....	80.2	80.2	(79.9)	76.9	76.4	82.1
1951.....	82.2	82.9	(75.0)	77.5	77.5	77.3
1952.....	84.1	84.6	(79.2)	82.6	82.6	81.9
1953.....	(4/)	(4/)	(4/)	(4/)	(4/)	(4/)
1954.....	84.3	84.3	(83.9)	81.4	80.9	85.9
1955.....	88.2	88.1	(88.1)	88.3	87.9	89.7
1956.....	89.8	90.0	(87.1)	88.6	88.5	89.1
1957.....	91.5	92.0	(85.4)	89.3	89.5	87.3
1958.....	93.5	94.4	(85.6)	90.8	91.2	87.4
1959.....	98.4	98.6	(94.5)	97.5	97.6	96.6
1960.....	97.2	98.0	(89.1)	94.9	95.3	90.5
1961.....	97.5	98.3	(90.2)	94.9	95.3	90.7
1962.....	98.8	99.0	(96.0)	97.1	97.1	96.3
1963.....	102.3	102.3	(101.6)	100.9	100.8	101.9
1964.....	102.0	101.7	(103.7)	102.6	102.4	104.5
1965.....	101.4	101.2	(102.2)	101.4	101.2	102.6
1966.....	102.6	102.6	(101.7)	103.1	103.4	101.7
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	103.5	103.6	(103.4)	104.4	104.4	104.3
1969.....	96.7	97.4	(91.0)	95.5	96.0	91.3
1970.....	104.1	105.3	(94.1)	102.9	103.8	94.4
1971.....	106.1	108.0	(92.0)	104.9	106.4	92.4
1972 <u>5/</u>	103.2	104.2	(94.8)	103.7	104.7	94.8
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	1.4	1.4	(1.1)	1.5	1.6	0.9
1960-72.....	0.5	0.5	(<u>6/</u>)	0.6	0.7	(<u>6/</u>)

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Indexes for 1953 are not shown since Census data for that year may not be fully comparable with data for other years, possibly due to sampling error.

5/ Preliminary.

6/ Less than .05 percent.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 47. FOOTWEAR SIC 314
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	82.5	116.9	118.5	(102.1)	113.9	115.5	98.3
1948.....	81.5	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	79.7	107.3	107.5	(105.7)	113.9	115.1	102.6
1950.....	87.9	109.6	109.6	(110.0)	114.3	115.1	107.0
1951.....	82.1	99.9	99.0	(109.4)	106.0	106.0	106.2
1952.....	90.4	107.5	106.9	(114.1)	109.5	109.5	110.4
1953.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1954.....	88.8	105.4	105.4	(105.9)	109.1	109.7	103.4
1955.....	97.7	110.8	110.9	(110.9)	110.7	111.1	108.9
1956.....	99.0	110.3	110.0	(113.7)	111.8	111.9	111.1
1957.....	99.5	108.8	108.1	(116.5)	111.4	111.2	114.0
1958.....	97.7	104.5	103.5	(114.2)	107.6	107.1	111.8
1959.....	107.4	109.2	108.9	(113.7)	110.1	110.0	111.2
1960.....	102.4	105.4	104.5	(114.9)	107.9	107.4	113.1
1961.....	102.8	105.4	104.6	(114.0)	108.3	107.9	113.4
1962.....	104.8	106.1	105.9	(109.2)	107.9	107.9	108.8
1963.....	101.8	99.5	99.5	(100.2)	100.9	101.0	99.9
1964.....	103.8	101.8	102.1	(100.1)	101.2	101.4	99.3
1965.....	104.7	103.3	103.5	(102.4)	103.3	103.5	102.0
1966.....	107.4	104.7	104.7	(105.6)	104.2	103.9	105.6
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	106.4	102.8	102.7	(102.9)	101.9	101.9	102.0
1969.....	95.0	98.2	97.5	(104.4)	99.5	99.0	104.0
1970.....	93.5	89.8	88.8	(99.4)	90.9	90.1	99.0
1971.....	88.2	83.1	81.7	(95.9)	84.1	82.9	95.5
1972 ^{4/}	87.2	84.5	83.7	(92.0)	84.1	83.3	92.0
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	0.7	-0.8	-0.9	(-0.5)	-0.9	-1.0	-0.4
1960-72.....	-1.3	-1.8	-1.8	(-1.3)	-1.9	-2.0	-1.3

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Indexes for 1953 are not shown since Census data for that year may not be fully comparable with data for other years, possibly due to sampling error.

^{4/} Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 48. GLASS CONTAINERS SIC 3221
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	59.7	(3/)	55.9	56.7	49.8
1947.....	77.4	77.4	(77.1)	80.2	80.3	79.9
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	70.6	69.9	(76.1)	71.9	71.1	78.1
1950.....	78.5	77.4	(88.9)	79.3	78.2	90.8
1951.....	75.6	74.6	(84.4)	75.9	74.7	86.4
1952.....	74.8	74.0	(82.6)	75.3	74.3	84.7
1953.....	79.2	79.1	(80.4)	78.4	78.1	82.0
1954.....	78.4	78.5	(77.6)	77.8	77.6	78.9
1955.....	81.6	81.2	(84.4)	81.9	81.4	85.3
1956.....	81.8	81.5	(84.3)	82.9	82.5	85.4
1957.....	81.5	81.4	(82.5)	81.7	81.5	83.5
1958.....	78.7	79.2	(74.1)	78.7	79.2	75.1
1959.....	83.6	83.8	(81.8)	82.3	82.3	82.7
1960.....	81.6	81.8	(79.4)	81.5	81.7	80.2
1961.....	83.2	83.1	(82.9)	83.3	82.2	83.4
1962.....	86.3	86.5	(84.0)	86.1	86.3	84.6
1963.....	89.4	89.3	(89.2)	89.1	89.0	89.8
1964.....	91.8	91.9	(90.9)	92.4	92.5	92.0
1965.....	97.6	97.7	(95.9)	96.7	96.7	96.6
1966.....	97.4	97.4	(97.2)	97.2	97.1	97.5
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	105.1	106.5	(94.7)	102.4	103.4	95.5
1969.....	108.5	109.1	(103.2)	106.1	106.4	103.7
1970.....	104.6	105.0	(101.0)	103.6	103.8	101.8
1971.....	107.6	108.5	(100.1)	105.6	106.2	100.5
1972 ^{4/}	107.1	107.4	(105.3)	105.8	105.9	105.3
	AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	1.7	1.8	(1.2)	1.6	1.6	1.1
1960-72....	2.5	2.6	(2.2)	2.4	2.4	2.1

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 49. GLASS CONTAINERS SIC 3221
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>1/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	24.6	(2/)	41.2	(2/)	44.0	43.4	49.4
1947.....	56.7	73.3	73.3	(73.5)	70.7	70.6	71.0
1948.....	47.7	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	43.4	61.5	62.1	(57.0)	60.4	61.0	55.6
1950.....	50.3	64.1	65.0	(56.6)	63.4	64.3	55.4
1951.....	54.7	72.4	73.3	(64.8)	72.1	73.2	63.3
1952.....	53.7	71.8	72.6	(65.0)	71.3	72.3	63.4
1953.....	59.5	75.1	75.2	(74.0)	75.9	76.2	72.6
1954.....	57.6	73.5	73.4	(74.2)	74.0	74.2	73.0
1955.....	62.7	76.8	77.2	(74.3)	76.6	77.0	73.5
1956.....	64.3	78.6	78.9	(76.3)	77.6	77.9	75.3
1957.....	66.4	81.5	81.6	(80.5)	81.3	81.5	79.5
1958.....	64.8	82.3	81.8	(87.4)	82.3	81.8	86.3
1959.....	69.4	83.0	82.8	(84.8)	84.3	84.3	83.9
1960.....	71.5	87.6	87.4	(90.0)	87.7	87.5	89.1
1961.....	74.2	89.2	89.3	(89.5)	90.2	90.3	89.0
1962.....	77.5	89.8	89.6	(92.3)	90.0	89.8	91.6
1963.....	80.1	89.6	89.7	(89.8)	89.9	90.0	89.2
1964.....	83.7	91.2	91.1	(92.1)	90.6	90.5	91.0
1965.....	89.2	91.4	91.3	(93.0)	92.2	92.2	92.3
1966.....	93.9	96.4	96.4	(96.6)	96.6	96.7	96.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	98.1	93.3	92.1	(103.6)	95.8	94.9	102.7
1969.....	113.7	104.8	104.2	(110.2)	107.2	106.9	109.6
1970.....	115.8	110.7	110.3	(114.6)	111.8	111.6	113.7
1971.....	114.3	106.2	105.3	(114.2)	108.2	107.6	113.7
1972 <u>3/</u>	116.9	109.2	108.8	(111.0)	110.5	110.4	111.0
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	3.8	2.1	2.0	(2.6)	2.2	2.2	2.7
1960-72.....	4.6	2.0	2.0	(2.4)	2.2	2.1	2.4

1/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

2/ Not available.

3/ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 50. HYDRAULIC CEMENT SIC 324
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	39.8	(3/)	41.4	39.3	52.3
1947.....	41.2	37.8	(68.6)	44.7	41.0	70.4
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	46.8	43.3	(72.3)	49.6	45.9	73.8
1950.....	47.3	43.6	(74.7)	49.8	46.0	75.9
1951.....	48.7	45.3	(72.7)	51.1	47.5	74.0
1952.....	49.3	45.9	(73.7)	52.2	48.6	75.1
1953.....	54.4	50.7	(78.8)	57.7	54.1	79.7
1954.....	60.5	56.7	(85.2)	63.1	59.3	86.0
1955.....	63.9	59.5	(94.4)	66.8	62.4	94.7
1956.....	67.1	62.5	(99.7)	69.3	64.5	100.3
1957.....	65.2	61.2	(91.8)	64.5	60.1	92.4
1958.....	67.4	64.2	(85.7)	67.7	64.4	86.1
1959.....	72.2	68.2	(97.4)	73.7	69.6	97.7
1960.....	71.5	68.2	(91.0)	72.1	68.6	91.3
1961.....	79.2	76.0	(96.4)	78.9	75.6	96.3
1962.....	83.9	80.9	(100.4)	83.9	80.8	100.7
1963.....	88.8	86.8	(99.6)	89.3	87.3	99.7
1964.....	92.1	91.4	(95.3)	93.9	93.5	95.8
1965.....	94.9	94.4	(97.4)	95.4	94.8	97.5
1966.....	99.6	99.4	(101.0)	101.3	101.5	100.6
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	110.7	110.2	(115.2)	112.9	112.3	115.7
1969.....	112.6	111.9	(118.7)	115.6	114.9	119.1
1970.....	109.0	109.3	(110.8)	110.8	110.7	111.3
1971.....	122.1	121.9	(125.7)	124.7	124.4	125.8
1972 ^{4/}	119.5	119.3	(123.3)	122.4	122.4	122.6
AVERAGE ANNUAL RATES (PERCENT)						
1947-72....	4.5	4.9	(2.2)	4.3	4.7	2.1
1960-72....	4.2	4.6	(2.5)	4.4	4.8	2.5

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 51. HYDRAULIC CEMENT SIC 324
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	35.9	(2/)	90.2	(2/)	86.8	91.3	68.6
1947.....	55.3	134.1	146.4	(80.6)	123.7	134.8	78.5
1948.....	60.6	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	60.9	130.2	140.6	(84.2)	122.9	132.7	82.5
1950.....	65.6	138.8	150.5	(87.8)	131.6	142.6	86.4
1951.....	69.8	143.3	154.0	(96.0)	136.5	146.8	94.3
1952.....	70.5	142.9	153.7	(95.6)	135.1	145.2	93.9
1953.....	74.5	137.0	146.8	(94.6)	129.1	137.8	93.5
1954.....	77.0	127.2	135.7	(90.4)	122.0	129.8	89.5
1955.....	83.6	130.9	140.5	(88.6)	125.1	134.0	88.3
1956.....	88.1	131.2	141.0	(88.4)	127.1	136.6	87.8
1957.....	82.2	126.1	134.3	(89.5)	127.5	136.8	89.0
1958.....	85.4	126.8	133.0	(99.6)	126.1	132.7	99.2
1959.....	93.0	128.8	136.3	(95.5)	126.2	133.7	95.2
1960.....	87.1	121.9	127.7	(95.7)	120.8	126.9	95.4
1961.....	88.1	111.3	115.9	(91.4)	111.6	116.5	91.5
1962.....	91.5	109.0	113.1	(91.1)	109.0	113.3	90.9
1963.....	95.6	107.6	110.2	(96.0)	107.0	109.5	95.9
1964.....	99.8	108.4	109.2	(104.7)	106.3	106.7	104.2
1965.....	101.0	106.4	107.0	(103.7)	105.9	106.5	103.6
1966.....	104.2	104.6	104.8	(103.2)	102.9	102.7	103.6
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	106.7	96.4	96.8	(92.6)	94.5	95.0	92.2
1969.....	107.9	95.8	96.4	(90.9)	93.3	93.9	90.6
1970.....	102.6	94.1	93.9	(92.6)	92.6	92.7	92.2
1971.....	110.1	90.2	90.3	(87.6)	88.3	88.5	87.5
1972 ^{3/}	111.1	93.0	93.1	(90.1)	90.8	90.8	90.6
AVERAGE ANNUAL RATES (PERCENT)							
1947-72....	2.6	-1.9	-2.3	(0.3)	-1.7	-2.1	0.4
1960-72....	2.0	-2.1	-2.5	(-0.5)	-2.3	-2.7	-0.5

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 52. CONCRETE PRODUCTS SIC 3271,3272
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	44.6	39.6	(92.5)	46.9	40.8	95.6
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	50.7	48.0	(67.2)	52.7	49.3	68.7
1950.....	57.1	55.5	(66.4)	59.3	57.1	67.7
1951.....	60.1	58.3	(70.3)	64.5	62.5	71.9
1952.....	64.6	62.1	(78.7)	68.1	65.1	80.5
1953.....	66.2	64.0	(78.8)	67.5	64.5	80.0
1954.....	67.9	68.4	(68.0)	68.3	68.2	69.0
1955.....	71.9	71.9	(74.5)	71.9	71.0	75.0
1956.....	78.5	78.6	(80.8)	79.9	79.4	81.6
1957.....	76.7	77.8	(75.7)	77.3	77.5	76.6
1958.....	75.5	77.4	(71.5)	74.6	75.3	72.2
1959.....	76.8	76.0	(82.6)	78.3	76.9	83.3
1960.....	73.6	72.7	(80.3)	77.3	76.4	80.8
1961.....	75.1	74.5	(80.0)	79.1	78.7	80.2
1962.....	76.6	75.8	(82.9)	81.3	80.7	83.4
1963.....	84.6	85.9	(82.8)	86.9	88.2	83.2
1964.....	89.1	91.0	(85.0)	91.9	94.0	85.8
1965.....	91.9	93.5	(89.4)	93.2	94.2	89.7
1966.....	96.7	100.2	(88.8)	96.2	98.8	88.7
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	109.4	109.7	(108.5)	110.2	110.4	109.4
1969.....	110.1	110.3	(109.6)	112.0	112.6	110.2
1970.....	109.6	109.6	(111.7)	110.8	110.4	112.1
1971 ^{4/}	120.9	123.2	(112.7)	115.1	115.7	113.3
	AVERAGE ANNUAL RATES (PERCENT)					
1947-71.....	3.5	3.8	(1.8)	3.3	3.6	1.7
1960-71.....	4.7	4.8	(3.7)	4.0	4.0	3.7

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 53. CONCRETE PRODUCTS SIC 3271,3272
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	28.2	63.2	71.3	(30.5)	60.1	69.2	29.5
1948.....	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	36.4	71.8	75.9	(54.2)	69.1	73.9	53.0
1950.....	46.3	81.1	83.4	(69.7)	78.1	81.1	68.4
1951.....	53.9	89.7	92.4	(76.7)	83.6	86.2	75.0
1952.....	58.1	90.0	93.5	(73.8)	85.3	89.2	72.2
1953.....	51.3	77.5	80.1	(65.1)	76.0	79.5	64.1
1954.....	53.0	78.1	77.5	(77.9)	77.6	77.7	76.8
1955.....	61.2	85.1	85.1	(82.2)	85.1	86.2	81.6
1956.....	71.8	91.5	91.3	(88.9)	89.9	90.4	88.0
1957.....	69.3	90.3	89.1	(91.5)	89.7	89.4	90.5
1958.....	66.1	87.5	85.4	(92.4)	88.6	87.8	91.5
1959.....	71.1	92.6	93.5	(86.1)	90.8	92.4	85.4
1960.....	72.0	97.8	99.1	(89.7)	93.1	94.3	87.1
1961.....	72.2	96.1	96.9	(90.3)	91.3	91.7	90.0
1962.....	74.7	97.5	98.6	(90.1)	91.9	92.6	89.6
1963.....	84.9	100.4	98.8	(102.5)	97.7	96.3	102.0
1964.....	91.9	103.2	101.0	(108.1)	100.0	97.8	107.1
1965.....	99.4	108.2	106.3	(111.2)	106.6	105.5	110.8
1966.....	105.0	108.6	104.8	(118.3)	109.1	106.3	118.4
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	110.1	100.6	100.4	(101.5)	99.9	99.7	100.6
1969.....	114.5	104.0	103.8	(104.5)	102.2	101.7	103.9
1970.....	120.3	109.8	110.4	(107.7)	108.6	109.0	107.3
1971 ^{3/}	127.8	105.7	103.7	(113.4)	111.0	110.5	112.8
AVERAGE ANNUAL RATES (PERCENT)							
1947-71.....	5.3	1.8	1.4	(3.4)	2.0	1.6	3.5
1960-71.....	5.6	0.9	0.7	(1.8)	1.5	1.5	1.8

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 54. READY-MIXED CONCRETE SIC 3273
INDEXES OF OUTPUT PER MAN-HOUR, OUTPUT PER EMPLOYEE, OUTPUT,
EMPLOYEES, AND MAN-HOURS
(1967=100)

YEAR	OUTPUT PER EMPLOYEE MAN-HOUR	OUTPUT PER EMPLOYEE	OUTPUT	EMPLOYEE MAN-HOURS	EMPLOYEES
1958.....	81.6	79.6	66.4	81.4	83.4
1959.....	83.4	81.7	74.1	88.9	90.7
1960.....	82.0	83.0	72.2	88.0	87.0
1961.....	80.9	83.0	72.8	90.0	87.7
1962.....	83.0	83.8	75.0	90.4	89.5
1963.....	90.3	92.0	88.3	97.8	96.0
1964.....	90.8	92.4	89.6	98.7	97.0
1965.....	95.1	94.7	96.9	101.9	102.3
1966.....	95.6	95.0	96.1	100.5	101.2
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	103.1	102.3	100.4	97.4	98.1
1969.....	98.8	101.3	101.8	103.0	100.5
1970.....	96.1	94.2	96.7	100.6	102.6
1971 <u>1/</u>	101.6	96.7	99.6	98.0	103.0
AVERAGE ANNUAL RATES (PERCENT)					
1958-71.....	2.0	1.9	3.4	1.4	1.5
1960-71.....	2.2	1.7	3.3	1.1	1.5

1/ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce.

TABLE 55. STEEL SIC 331
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	70.3	64.7	(108.4)	68.6	62.8	110.1
1948.....	70.7	65.1	(108.9)	69.8	63.9	110.5
1949.....	71.1	66.8	(97.6)	68.2	63.3	98.8
1950.....	78.3	72.5	(117.4)	78.0	71.9	118.8
1951.....	78.7	72.8	(118.9)	80.1	73.9	120.0
1952.....	79.2	75.0	(102.5)	79.0	74.6	103.4
1953.....	81.0	76.0	(110.0)	81.6	76.5	110.8
1954.....	77.2	74.1	(93.7)	73.4	69.6	94.3
1955.....	87.8	82.4	(120.0)	88.5	82.9	120.7
1956.....	86.4	82.3	(108.8)	87.1	82.8	109.4
1957.....	84.3	81.6	(97.3)	82.4	79.3	98.0
1958.....	77.9	78.4	(76.0)	73.8	73.1	76.5
1959.....	87.5	87.7	(86.7)	87.4	87.4	87.3
1960.....	82.3	82.3	(82.4)	79.0	78.0	82.7
1961.....	84.9	85.4	(83.0)	82.7	82.5	83.2
1962.....	89.2	89.6	(87.9)	87.4	87.2	87.9
1963.....	93.2	92.1	(98.1)	93.2	91.9	98.1
1964.....	97.2	94.8	(108.6)	99.2	97.0	108.6
1965.....	101.1	98.7	(112.9)	103.3	101.0	112.9
1966.....	103.2	101.3	(111.6)	104.8	103.1	111.6
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	104.2	104.6	(102.6)	105.8	106.5	102.6
1969.....	104.8	104.8	(104.7)	107.0	107.6	104.7
1970.....	101.9	102.8	(98.7)	101.5	102.1	98.7
1971.....	105.6	107.2	(99.5)	104.9	106.3	99.6
1972 ^{3/}	111.8	111.9	(110.9)	113.5	114.3	110.9
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	1.7	2.1	(-0.2)	1.9	2.3	-0.3
1960-72.....	2.2	2.3	(1.7)	2.5	2.7	1.7

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Preliminary.

Source: Output based on data from the American Iron and Steel Institute, and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 56. STEEL SIC 331
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	70.8	100.7	109.4	(65.3)	103.2	112.8	64.3
1948.....	74.5	105.4	114.5	(68.4)	106.8	116.6	67.4
1949.....	65.5	92.1	98.1	(67.1)	96.0	103.5	66.3
1950.....	82.8	105.7	114.2	(70.5)	106.1	115.2	69.7
1951.....	90.0	114.3	123.7	(75.7)	112.4	121.8	75.0
1952.....	79.3	100.1	105.7	(77.4)	100.4	106.3	76.7
1953.....	93.2	115.1	122.6	(84.7)	114.2	121.8	84.1
1954.....	74.6	96.6	100.7	(79.6)	101.6	107.2	79.1
1955.....	98.4	112.1	119.4	(82.0)	111.2	118.7	81.5
1956.....	96.8	112.0	117.6	(89.0)	111.2	116.9	88.5
1957.....	93.4	110.8	114.5	(96.0)	113.3	117.8	95.3
1958.....	69.8	89.6	89.0	(91.8)	94.6	95.5	91.2
1959.....	80.8	92.3	92.1	(93.2)	92.4	92.5	92.6
1960.....	81.0	98.4	98.4	(98.3)	102.5	103.8	97.9
1961.....	77.5	91.3	90.8	(93.4)	93.7	93.9	93.2
1962.....	81.5	91.4	91.0	(92.7)	93.3	93.5	92.7
1963.....	86.5	92.8	93.9	(88.2)	92.8	94.1	88.2
1964.....	98.2	101.0	103.6	(90.4)	99.0	101.2	90.4
1965.....	106.8	105.6	108.2	(94.6)	103.4	105.7	94.6
1966.....	107.5	104.2	106.1	(96.3)	102.6	104.3	96.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	105.9	101.6	101.2	(103.2)	100.1	99.4	103.2
1969.....	108.5	103.5	103.5	(103.6)	101.4	100.8	103.6
1970.....	100.4	98.5	97.7	(101.7)	98.9	98.3	101.7
1971.....	95.5	90.4	89.1	(96.0)	91.0	89.8	95.9
1972 ^{2/}	102.4	91.6	91.5	(92.3)	90.2	89.6	92.3
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	1.4	-0.4	-0.7	(1.6)	-0.5	-0.9	1.6
1960-72.....	2.3	0.1	(3/)	(0.5)	-0.2	-0.4	0.5

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

^{3/} Less than .05 percent.

Source: Output based on data from the American Iron and Steel Institute, and the Bureau of Mines, U.S. Department of the Interior. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 57. GRAY IRON FOUNDRIES SIC 3321
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1954.....	78.2	77.2	(87.2)	75.5	73.9	87.7
1955.....	84.3	82.3	(101.7)	86.0	84.1	101.8
1956.....	83.8	82.6	(92.2)	83.3	81.9	92.6
1957.....	81.3	81.3	(81.6)	77.4	76.7	81.9
1958.....	84.3	86.4	(72.9)	77.8	78.6	73.1
1959.....	87.1	87.2	(87.2)	85.6	85.4	87.3
1960.....	86.6	87.9	(78.5)	82.2	82.7	78.8
1961.....	88.7	90.4	(79.0)	83.3	84.0	79.1
1962.....	92.2	92.8	(88.4)	90.4	90.6	89.0
1963.....	94.1	94.1	(95.0)	95.3	95.2	95.5
1964.....	100.1	99.0	(108.1)	105.1	104.7	109.2
1965.....	104.9	103.9	(113.4)	111.1	110.5	114.1
1966.....	105.6	104.7	(112.8)	110.0	109.6	113.0
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	107.1	106.9	(108.2)	109.7	109.8	109.4
1969.....	113.2	112.9	(116.1)	116.1	116.0	116.8
1970.....	108.4	109.7	(99.9)	106.2	107.1	100.5
1971.....	113.6	115.6	(101.1)	111.6	113.3	101.8
1972 <u>3/</u>	118.5	118.8	(115.3)	120.3	121.0	115.5
	AVERAGE ANNUAL RATES (PERCENT)					
1954-72....	2.2	2.3	(1.7)	2.5	2.7	1.7
1960-72....	2.4	2.4	(2.5)	2.8	2.8	2.5

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 58. GRAY IRON FOUNDRIES SIC 3321
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1954.....	73.3	93.7	95.0	(84.1)	97.1	99.2	83.6
1955.....	90.2	107.0	109.6	(88.7)	104.9	107.3	88.6
1956.....	86.1	102.8	104.2	(93.4)	103.4	105.1	93.0
1957.....	76.3	93.8	93.8	(93.5)	98.6	99.5	93.2
1958.....	63.5	75.3	73.5	(87.1)	81.6	80.8	86.9
1959.....	78.1	89.7	89.6	(89.6)	91.2	91.5	89.5
1960.....	72.4	83.6	82.4	(92.2)	88.1	87.5	91.9
1961.....	68.6	77.3	75.9	(86.8)	82.4	81.7	86.7
1962.....	78.1	84.7	84.2	(88.3)	86.4	86.2	87.8
1963.....	83.2	88.4	88.4	(87.6)	87.3	87.4	87.1
1964.....	96.3	96.2	97.3	(89.1)	91.6	92.0	88.2
1965.....	108.5	103.4	104.4	(95.7)	97.7	98.2	95.1
1966.....	112.2	106.3	107.2	(99.5)	102.0	102.4	99.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	108.2	101.0	101.2	(100.0)	98.6	98.5	98.9
1969.....	121.1	107.0	107.3	(104.3)	104.3	104.4	103.7
1970.....	108.5	100.1	98.9	(108.6)	102.2	101.3	108.0
1971.....	107.2	94.4	92.7	(106.0)	96.1	94.6	105.3
1972 ^{2/}	118.6	100.1	99.8	(102.9)	98.6	98.0	102.7
AVERAGE ANNUAL RATES (PERCENT)							
1954-72....	2.9	0.6	0.6	(1.1)	0.3	0.2	1.1
1960-72....	4.4	1.9	1.9	(1.8)	1.6	1.5	1.8

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 59. STEEL FOUNDRIES SIC 3323
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1954.....	78.2	79.4	(71.4)	73.3	73.5	71.8
1955.....	85.9	84.9	(91.3)	85.9	84.7	91.4
1956.....	90.8	88.2	(107.8)	92.6	90.0	108.2
1957.....	88.8	87.8	(94.8)	87.5	86.1	95.1
1958.....	81.0	83.7	(68.6)	75.1	76.5	68.7
1959.....	87.1	86.6	(90.3)	84.5	83.4	90.2
1960.....	86.3	87.1	(82.3)	83.1	83.2	82.4
1961.....	87.3	88.7	(80.4)	83.6	84.2	80.4
1962.....	91.5	91.8	(91.5)	90.1	89.8	91.9
1963.....	97.5	97.2	(99.5)	96.3	95.6	99.9
1964.....	97.9	95.9	(109.5)	100.0	98.1	110.5
1965.....	100.5	98.4	(113.0)	103.7	101.9	113.5
1966.....	102.1	100.1	(114.4)	106.5	104.9	114.4
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	97.7	99.1	(90.4)	96.4	97.5	91.2
1969.....	99.4	100.0	(96.8)	99.6	100.0	97.2
1970.....	96.0	97.4	(89.2)	94.5	95.5	89.6
1971.....	100.3	104.2	(83.4)	97.8	101.1	83.7
1972 ^{3/}	104.6	108.3	(88.7)	103.6	107.1	88.7
AVERAGE ANNUAL RATES (PERCENT)						
1954-72.....	1.3	1.4	(0.6)	1.5	1.6	0.7
1960-72.....	1.2	1.4	(.4)	1.3	1.5	(.4)

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Preliminary.

^{4/} Less than .05 percent.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 60. STEEL FOUNDRIES SIC 3323
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1954.....	58.3	74.6	73.4	(81.6)	79.5	79.3	81.2
1955.....	74.7	87.0	88.0	(81.8)	87.0	88.2	81.7
1956.....	94.2	103.8	106.8	(87.4)	101.7	104.7	87.1
1957.....	85.3	96.1	97.2	(90.0)	97.5	99.1	89.7
1958.....	53.3	65.8	63.7	(77.7)	71.0	69.7	77.6
1959.....	66.0	75.8	76.2	(73.1)	78.1	79.1	73.2
1960.....	61.0	70.7	70.0	(74.1)	73.4	73.3	74.0
1961.....	56.5	64.7	63.7	(70.3)	67.6	67.1	70.3
1962.....	65.8	71.8	71.7	(71.9)	73.0	73.3	71.6
1963.....	79.1	81.1	81.4	(79.5)	82.1	82.7	79.2
1964.....	89.6	91.5	93.4	(81.8)	89.6	91.3	81.1
1965.....	98.2	97.7	99.8	(86.9)	94.7	96.4	86.5
1966.....	108.9	106.7	108.8	(95.2)	102.3	103.8	95.2
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	92.7	94.9	93.5	(102.6)	96.2	95.1	101.7
1969.....	99.7	100.2	99.7	(103.0)	100.1	99.7	102.6
1970.....	83.4	86.9	85.6	(93.5)	88.3	87.3	93.1
1971.....	80.1	79.9	76.9	(96.1)	81.9	79.2	95.7
1972 ^{2/}	81.1	77.5	74.9	(91.4)	78.3	75.7	91.4
AVERAGE ANNUAL RATES (PERCENT)							
1954-72.....	2.0	0.7	0.6	(1.3)	0.5	0.3	1.3
1960-72.....	2.9	1.7	1.5	(2.9)	1.6	1.3	2.9

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 61. PRIMARY COPPER, LEAD, AND ZINC SIC 3331, 3332, 3333
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	(3/)	61.6	(3/)	(3/)	61.6	(3/)
1947.....	71.0	63.4	(138.9)	75.8	67.5	142.4
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	74.5	69.3	(107.2)	76.5	70.8	108.6
1950.....	82.4	75.8	(127.6)	85.4	78.3	129.2
1951.....	83.8	78.0	(120.1)	87.9	81.8	121.9
1952.....	85.5	79.5	(123.1)	90.0	83.6	125.0
1953.....	85.1	78.6	(129.4)	89.5	82.5	130.6
1954.....	84.4	80.7	(104.0)	83.0	78.6	104.7
1955.....	94.1	88.6	(125.7)	95.1	89.2	125.7
1956.....	95.5	89.1	(134.8)	97.7	90.9	135.2
1957.....	96.0	90.7	(125.5)	96.2	90.4	125.9
1958.....	94.1	91.4	(106.9)	92.8	89.7	107.1
1959.....	88.5	86.7	(97.0)	85.9	83.4	97.1
1960.....	98.7	94.4	(121.3)	99.0	94.3	121.5
1961.....	103.2	99.0	(125.2)	104.4	99.9	125.2
1962.....	109.6	104.8	(135.2)	110.6	105.4	135.9
1963.....	112.2	106.4	(143.3)	112.1	105.9	143.9
1964.....	116.6	110.2	(152.7)	115.4	108.0	154.1
1965.....	120.2	113.1	(161.5)	121.1	113.3	162.4
1966.....	118.7	111.6	(159.8)	120.7	113.3	159.8
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	118.3	112.8	(147.0)	117.8	111.8	147.7
1969.....	120.9	113.8	(162.2)	121.4	113.6	163.8
1970.....	117.0	111.4	(147.4)	117.7	111.6	148.2
1971.....	122.3	119.2	(136.9)	120.8	117.6	134.7
1972 ^{4/}	135.2	129.5	(164.4)	132.3	126.4	160.6
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	2.2	2.4	(1.1)	2.0	2.2	1.0
1960-72.....	1.7	1.8	(1.3)	1.6	1.6	1.2

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 62. PRIMARY COPPER, LEAD, AND ZINC SIC 3331, 3332, 3333
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	83.8	(2/)	136.0	(2/)	(2/)	136.1	(2/)
1947.....	107.4	151.3	169.5	(77.3)	141.6	159.2	75.4
1948.....	105.1	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	102.4	137.5	147.8	(95.5)	133.9	144.6	94.3
1950.....	114.7	139.2	151.3	(89.9)	134.3	146.4	88.8
1951.....	113.7	135.7	145.8	(94.7)	129.4	139.0	93.3
1952.....	115.6	135.2	145.4	(93.9)	128.5	138.2	92.5
1953.....	117.5	138.0	149.5	(90.8)	131.3	142.4	90.0
1954.....	108.2	128.2	134.1	(104.0)	130.4	137.6	103.3
1955.....	123.1	130.8	139.0	(97.9)	129.5	138.0	97.9
1956.....	133.6	139.9	149.9	(99.1)	136.8	147.0	98.8
1957.....	130.4	135.9	143.8	(103.9)	135.6	144.3	103.6
1958.....	112.8	119.9	123.4	(105.5)	121.5	125.7	105.3
1959.....	93.5	105.7	107.9	(96.4)	108.8	112.1	96.3
1960.....	121.4	123.0	128.6	(100.1)	122.6	128.7	99.9
1961.....	123.2	119.4	124.5	(98.4)	118.0	123.3	98.4
1962.....	129.4	118.1	123.5	(95.7)	117.0	122.8	95.2
1963.....	128.1	114.2	120.4	(89.4)	114.3	121.0	89.0
1964.....	134.5	115.4	122.1	(88.1)	116.6	124.5	87.3
1965.....	142.1	118.2	125.6	(88.0)	117.3	125.4	87.5
1966.....	146.1	123.1	130.9	(91.4)	121.0	128.9	91.4
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	132.0	111.6	117.0	(89.8)	112.1	118.1	89.4
1969.....	160.4	132.7	140.9	(98.9)	132.1	141.2	97.9
1970.....	160.8	137.4	144.3	(109.1)	136.6	144.1	108.5
1971.....	146.2	119.5	122.6	(106.8)	121.0	124.3	108.5
1972 ^{3/}	160.6	118.8	124.0	(97.7)	121.4	127.1	100.0
AVERAGE ANNUAL RATES (PERCENT)							
1947-72....	1.4	-0.8	-1.0	(0.3)	-0.6	-0.8	0.4
1960-72....	2.0	0.3	0.3	(0.7)	0.5	0.4	0.8

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 63. PRIMARY ALUMINUM SIC 3334
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	43.6	42.4	(50.1)	47.2	46.3	51.5
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	44.5	43.0	(52.7)	50.1	49.3	53.6
1950.....	48.9	47.5	(57.0)	50.2	48.7	57.7
1951.....	47.8	46.0	(58.7)	51.5	49.8	59.5
1952.....	46.8	45.6	(52.8)	49.4	48.4	53.6
1953.....	47.1	44.6	(63.6)	48.3	45.6	64.2
1954.....	51.8	50.5	(58.3)	53.7	52.6	58.6
1955.....	57.4	56.3	(62.8)	59.1	58.3	62.8
1956.....	59.0	58.8	(59.7)	60.0	60.0	60.0
1957.....	59.2	59.7	(57.0)	60.3	61.2	57.3
1958.....	65.9	68.2	(57.2)	67.5	70.5	57.4
1959.....	78.4	78.6	(77.7)	81.3	82.2	77.8
1960.....	81.9	83.0	(77.4)	84.0	85.7	77.7
1961.....	85.3	87.5	(76.8)	87.2	90.3	76.9
1962.....	89.4	90.4	(84.8)	90.9	92.4	85.3
1963.....	92.5	93.2	(89.1)	94.0	95.1	89.6
1964.....	95.2	94.4	(98.7)	92.3	90.6	99.9
1965.....	97.5	97.0	(99.5)	97.7	97.0	100.1
1966.....	100.9	100.7	(102.1)	102.5	102.6	102.4
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	94.9	95.6	(92.1)	94.9	95.1	93.5
1969.....	105.1	104.8	(106.1)	106.2	106.0	106.7
1970.....	108.9	109.8	(104.6)	108.4	109.1	105.6
1971.....	119.6	122.7	(107.6)	118.1	120.7	108.3
1972 <u>4/</u>	126.6	128.8	(117.9)	127.1	129.5	118.4
	AVERAGE ANNUAL RATES (PERCENT)					
1947-72....	4.7	4.9	(3.6)	4.3	4.5	3.6
1960-72....	3.1	3.1	- (3.0)	2.9	2.8	3.1

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 64. PRIMARY ALUMINUM SIC 3334
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>1/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	17.7	40.6	41.7	(35.3)	37.5	38.2	34.4
1948.....	19.4	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	18.8	42.2	43.7	(35.7)	37.5	38.1	35.1
1950.....	22.5	46.0	47.4	(39.5)	44.8	46.2	39.0
1951.....	26.3	55.0	57.2	(44.8)	51.1	52.8	44.2
1952.....	29.6	63.3	64.9	(56.1)	59.9	61.1	55.2
1953.....	39.7	84.2	89.1	(62.4)	82.2	87.1	61.8
1954.....	46.5	89.8	92.1	(79.8)	86.6	88.4	79.3
1955.....	49.7	86.6	88.3	(79.2)	84.1	85.3	79.1
1956.....	53.2	90.2	90.5	(89.1)	88.7	88.7	88.6
1957.....	52.0	87.8	87.1	(91.2)	86.2	85.0	90.8
1958.....	49.3	74.8	72.3	(86.2)	73.0	69.9	85.9
1959.....	61.5	78.4	78.2	(79.2)	75.6	74.8	79.0
1960.....	63.0	76.9	75.9	(81.4)	75.0	73.5	81.1
1961.....	59.4	69.6	67.9	(77.3)	68.1	65.8	77.2
1962.....	65.8	73.6	72.8	(77.6)	72.4	71.2	77.1
1963.....	71.6	77.4	76.8	(80.4)	76.2	75.3	79.9
1964.....	78.8	82.8	83.5	(79.8)	85.4	87.0	78.9
1965.....	84.8	87.0	87.4	(85.2)	86.8	87.4	84.7
1966.....	91.0	90.2	90.4	(89.1)	88.8	88.7	88.9
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	99.6	104.9	104.2	(108.1)	105.0	104.7	106.5
1969.....	116.0	110.4	110.7	(109.3)	109.2	109.4	108.7
1970.....	121.6	111.7	110.7	(116.3)	112.2	111.5	115.2
1971.....	120.1	100.4	97.9	(111.6)	101.7	99.5	110.9
1972 <u>3/</u>	126.1	99.6	97.9	(107.0)	99.2	97.4	106.5
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	8.1	3.1	2.9	(4.2)	3.4	3.3	4.2
1960-72.....	6.9	3.8	3.8	(3.8)	4.0	4.0	3.8

1/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

2/ Not available.

3/ Preliminary.

Source: Output based on data from the Bureau of Mines, U.S. Department of the Interior, and the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 65. ALUMINUM ROLLING AND DRAWING SIC 3352
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	63.8	64.9	(59.3)	63.5	64.6	59.4
1959.....	68.9	67.8	(73.3)	70.1	69.3	73.3
1960.....	65.2	66.3	(61.5)	66.0	67.3	61.5
1961.....	71.7	72.2	(69.6)	72.8	73.7	69.5
1962.....	77.8	78.4	(76.1)	78.5	79.1	76.5
1963.....	86.3	86.5	(85.3)	87.2	87.7	85.7
1964.....	91.7	91.9	(91.0)	93.3	93.6	91.8
1965.....	100.5	100.0	(103.1)	103.8	104.0	103.4
1966.....	101.1	99.4	(109.2)	104.5	103.3	109.2
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	104.7	105.6	(101.0)	103.2	103.5	101.9
1969.....	107.2	107.5	(103.7)	107.1	107.9	104.1
1970.....	109.1	113.4	(94.3)	105.5	108.8	94.5
1971.....	119.0	123.5	(103.6)	113.9	116.8	104.1
1972 <u>3/</u>	139.9	140.9	(136.0)	136.9	137.1	135.8
	AVERAGE ANNUAL RATES (PERCENT)					
1958-72....	5.2	5.3	(4.7)	4.9	4.9	4.8
1960-72....	5.3	5.4	(4.7)	4.8	4.9	4.7

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 66. ALUMINUM ROLLING AND DRAWING SIC 3352
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	48.4	75.9	74.6	(81.6)	76.2	74.9	81.5
1959.....	63.1	91.6	93.0	(86.1)	90.0	91.1	86.1
1960.....	56.5	86.6	85.2	(91.8)	85.6	84.0	91.8
1961.....	61.7	86.0	85.4	(88.7)	84.7	83.7	88.8
1962.....	69.5	89.3	88.7	(91.3)	88.5	87.9	90.9
1963.....	77.0	89.2	89.0	(90.3)	88.3	87.8	89.9
1964.....	85.1	92.8	92.6	(93.5)	91.2	90.9	92.7
1965.....	97.2	96.7	97.2	(94.3)	93.6	93.5	94.0
1966.....	107.6	106.4	108.3	(98.5)	103.0	104.2	98.5
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	110.7	105.7	104.8	(109.6)	107.3	107.0	108.6
1969.....	118.8	110.8	110.5	(114.6)	110.9	110.1	114.1
1970.....	111.5	102.2	98.3	(118.3)	105.7	102.5	118.0
1971.....	119.5	100.4	96.8	(115.4)	104.9	102.3	114.8
1972 ^{2/}	143.3	102.4	101.7	(105.4)	104.7	104.5	105.5
AVERAGE ANNUAL RATES (PERCENT)							
1958-72.....	7.3	1.9	1.8	(2.4)	2.2	2.2	2.4
1960-72.....	7.2	1.8	1.7	(2.4)	2.3	2.2	2.4

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output based on data from the Bureau of the Census, U.S. Department of Commerce. Employment and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 67. METAL CANS SIC 341
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	59.8	60.1	(58.6)	58.1	57.8	60.4
1948.....	(3/)	(3/)	(3/)	(3/)	(3/)	(3/)
1949.....	63.1	63.8	(58.1)	62.3	60.7	59.3
1950.....	70.0	70.2	(68.0)	68.3	68.2	69.3
1951.....	69.0	69.4	(66.0)	66.3	66.1	67.2
1952.....	68.8	69.2	(65.8)	67.1	67.1	67.2
1953.....	71.1	71.5	(68.3)	67.2	66.8	69.2
1954.....	73.2	73.7	(70.0)	69.7	69.5	70.7
1955.....	77.5	77.9	(74.5)	73.9	73.8	74.9
1956.....	80.9	81.0	(79.9)	78.1	77.8	80.5
1957.....	79.5	80.0	(75.2)	75.8	75.9	75.8
1958.....	83.4	84.3	(76.7)	78.4	78.7	77.2
1959.....	86.3	86.7	(83.3)	84.0	84.0	83.8
1960.....	88.3	88.8	(83.8)	85.1	85.2	84.2
1961.....	93.2	93.8	(89.3)	90.3	90.4	89.5
1962.....	90.2	90.3	(89.2)	89.7	89.7	89.6
1963.....	89.6	89.9	(86.8)	88.0	88.1	87.2
1964.....	91.5	92.2	(87.1)	91.2	91.9	87.8
1965.....	94.1	95.6	(83.3)	96.2	98.4	83.7
1966.....	96.7	96.7	(96.6)	95.1	94.9	96.6
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	104.3	104.6	(102.2)	104.9	105.1	103.1
1969.....	107.2	107.7	(103.9)	105.1	105.3	104.3
1970.....	105.9	106.7	(100.6)	104.2	104.8	101.0
1971.....	105.2	107.0	(93.0)	101.5	102.8	93.4
1972 <u>4/</u>	112.5	114.4	(100.0)	108.5	109.9	100.0
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	2.4	2.4	(2.3)	2.5	2.6	2.2
1960-72.....	2.0	2.0	(1.5)	1.9	2.0	1.5

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Not available.

4/ Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 6A. METAL CANS SIC 341
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1947.....	45.1	75.4	75.1	(76.9)	77.6	78.0	74.7
1948.....	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)	(2/)
1949.....	48.3	76.6	75.7	(83.1)	77.5	79.6	81.5
1950.....	58.5	83.6	83.3	(86.0)	85.6	85.8	84.4
1951.....	58.7	85.1	84.6	(89.0)	88.6	88.8	87.3
1952.....	58.1	84.5	83.9	(88.3)	86.6	86.6	86.5
1953.....	62.1	87.3	86.8	(90.9)	92.4	92.9	89.7
1954.....	63.8	87.2	86.6	(91.2)	91.6	91.8	90.3
1955.....	66.9	86.3	85.9	(89.8)	90.5	90.6	89.3
1956.....	71.4	88.3	88.1	(89.4)	91.4	91.8	88.7
1957.....	68.9	86.7	86.1	(91.6)	90.9	90.8	90.9
1958.....	70.6	84.7	83.7	(92.1)	90.0	89.7	91.5
1959.....	74.9	86.8	86.4	(89.9)	89.2	89.2	89.4
1960.....	75.6	85.6	85.1	(90.2)	88.8	88.7	89.8
1961.....	79.9	85.7	85.2	(89.5)	88.5	88.4	89.3
1962.....	78.9	87.5	87.4	(88.5)	88.0	88.0	88.1
1963.....	77.7	86.7	86.4	(89.5)	88.3	88.2	89.1
1964.....	83.4	91.1	90.5	(95.8)	91.4	90.8	95.0
1965.....	87.5	93.0	91.5	(105.0)	91.0	88.9	104.6
1966.....	92.6	95.8	95.8	(95.9)	97.4	97.6	95.9
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	110.8	106.2	105.9	(108.4)	105.6	105.4	107.5
1969.....	113.5	105.9	105.4	(109.2)	108.0	107.8	108.8
1970.....	121.2	114.4	113.6	(120.5)	116.3	115.7	120.0
1971.....	115.6	109.9	108.0	(124.3)	113.9	112.4	123.8
1972 ^{3/}	120.0	106.7	104.9	(120.0)	110.6	109.2	120.0
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	3.7	1.3	1.3	(1.4)	1.2	1.1	1.5
1960-72.....	4.6	2.6	2.5	(3.0)	2.6	2.5	3.0

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Not available.

^{3/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 69. MAJOR HOUSEHOLD APPLIANCES SIC 3631,2,3,9
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}			OUTPUT PER EMPLOYEE ^{1/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	58.3	61.3	(48.0)	59.4	62.7	49.0
1959.....	63.6	65.1	(57.4)	64.4	66.1	58.4
1960.....	66.3	68.9	(56.9)	65.9	68.2	57.6
1961.....	70.6	73.7	(59.5)	71.4	75.0	59.8
1962.....	76.8	78.3	(70.8)	79.5	81.6	71.1
1963.....	87.7	87.8	(87.3)	89.5	89.8	87.6
1964.....	91.4	91.1	(92.3)	93.9	94.2	92.9
1965.....	94.2	94.3	(93.6)	97.7	98.5	94.0
1966.....	94.5	93.2	(100.2)	96.1	95.0	100.0
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	105.1	104.0	(110.4)	106.6	105.4	111.4
1969.....	108.6	108.7	(108.1)	108.2	108.2	108.5
1970.....	105.8	106.0	(104.8)	106.2	106.5	105.1
1971.....	120.3	121.0	(117.2)	120.8	121.5	117.8
1972 ^{3/}	127.5	126.8	(130.8)	129.2	128.9	130.8
	AVERAGE ANNUAL RATES (PERCENT)					
1958-72.....	5.4	5.0	(6.8)	5.3	4.9	6.7
1960-72.....	5.0	4.7	(6.2)	4.9	4.5	6.2

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{3/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 70. MAJOR HOUSEHOLD APPLIANCES SIC 3631,2,3,9
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	53.9	92.4	87.9	(112.2)	90.7	86.0	110.1
1959.....	62.8	98.8	96.4	(109.4)	97.5	95.0	107.5
1960.....	62.5	94.3	90.7	(109.9)	94.8	91.6	108.5
1961.....	61.8	87.5	83.8	(103.9)	86.5	82.4	103.4
1962.....	69.3	90.2	88.5	(97.9)	87.2	84.9	97.5
1963.....	76.9	87.7	87.6	(88.1)	85.9	85.6	87.8
1964.....	85.4	93.4	93.7	(92.5)	90.9	90.7	91.9
1965.....	92.6	98.3	98.2	(98.9)	94.8	94.0	98.5
1966.....	97.5	103.2	104.6	(97.3)	101.5	102.6	97.5
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	110.4	105.0	106.2	(100.0)	103.6	104.7	99.1
1969.....	110.0	101.3	101.2	(101.8)	101.7	101.7	101.4
1970.....	105.6	99.8	99.6	(100.8)	99.4	99.2	100.5
1971.....	99.5	82.7	82.2	(84.9)	82.4	81.9	84.5
1972 ^{2/}	115.5	90.6	91.1	(88.3)	89.4	89.6	88.3
AVERAGE ANNUAL RATES (PERCENT)							
1958-72.....	5.5	0.2	0.5	(-1.2)	0.3	0.6	-1.1
1960-72.....	5.3	0.3	0.6	(-0.9)	0.4	0.7	-0.8

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 71. RADIO AND TELEVISION RECEIVING SETS SIC 3651
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	63.1	66.4	(50.6)	63.9	67.3	51.6
1959.....	67.4	69.2	(59.9)	68.2	70.0	61.1
1960.....	69.1	72.6	(56.1)	69.8	73.3	56.8
1961.....	70.7	75.3	(54.2)	69.9	74.3	54.6
1962.....	78.8	81.4	(68.2)	79.5	82.2	68.6
1963.....	87.5	88.0	(85.3)	88.5	89.0	85.7
1964.....	87.3	87.4	(86.6)	89.9	90.4	87.4
1965.....	95.6	94.4	(102.4)	99.7	99.0	102.9
1966.....	98.5	96.0	(112.6)	100.4	98.2	112.7
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	116.1	117.4	(110.8)	116.4	117.5	111.6
1969.....	125.1	128.2	(112.2)	126.1	129.4	112.9
1970.....	130.2	140.4	(95.8)	130.2	140.8	96.3
1971.....	142.3	150.3	(113.6)	142.5	150.5	113.6
1972 <u>3/</u>	142.4	148.2	(119.5)	142.9	149.1	119.6
AVERAGE ANNUAL RATES (PERCENT)						
1958-72.....	6.3	6.3	(6.4)	6.3	6.3	6.3
1960-72.....	6.5	6.6	(6.2)	6.5	6.6	6.1

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 72. RADIO AND TELEVISION RECEIVING SETS SIC 3651
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1958.....	36.4	57.7	54.8	(71.9)	57.0	54.1	70.5
1959.....	43.8	65.0	63.3	(73.1)	64.2	62.6	71.7
1960.....	42.9	62.1	59.1	(76.5)	61.5	58.5	75.5
1961.....	46.0	65.1	61.1	(84.8)	65.8	61.9	84.3
1962.....	56.5	71.7	69.4	(82.9)	71.1	68.7	82.4
1963.....	61.6	70.4	70.0	(72.2)	69.6	69.2	71.9
1964.....	66.6	76.3	76.2	(76.9)	74.1	73.7	76.2
1965.....	85.5	89.4	90.6	(83.5)	85.8	86.4	83.1
1966.....	112.0	113.7	116.7	(99.5)	111.5	114.1	99.4
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	112.2	96.6	95.6	(101.3)	96.4	95.5	100.5
1969.....	114.0	91.1	88.9	(101.6)	90.4	88.1	101.0
1970.....	100.1	76.9	71.3	(104.5)	76.9	71.1	103.9
1971.....	109.7	77.1	73.0	(96.6)	77.0	72.9	96.6
1972 ^{2/}	117.2	82.3	79.1	(98.1)	82.0	78.6	98.0
AVERAGE ANNUAL RATES (PERCENT)							
1958-72.....	9.4	2.9	2.9	(2.8)	2.9	2.9	2.9
1960-72.....	9.0	2.3	2.2	(2.7)	2.4	2.3	2.7

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output, employment, and hours based on data from the Bureau of the Census, U.S. Department of Commerce, and the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 73. MOTOR VEHICLES AND EQUIPMENT SIC 371
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR <u>1/</u>			OUTPUT PER EMPLOYEE <u>1/</u>		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS <u>2/</u>	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1957.....	68.9	67.6	(73.3)	68.9	67.7	73.3
1958.....	66.9	69.2	(60.5)	65.3	67.3	59.6
1959.....	73.3	72.5	(75.9)	73.7	73.0	76.4
1960.....	79.6	78.5	(83.1)	79.8	78.9	83.3
1961.....	80.6	81.9	(76.7)	79.4	80.4	75.8
1962.....	88.4	87.2	(92.6)	91.6	91.2	93.2
1963.....	91.9	90.4	(96.7)	95.5	94.9	97.9
1964.....	92.8	91.9	(96.1)	97.0	96.8	97.4
1965.....	99.0	96.0	(110.1)	105.8	103.9	112.4
1966.....	99.5	97.9	(105.9)	103.8	102.6	108.3
1967.....	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	108.5	106.2	(116.3)	113.7	112.2	119.3
1969.....	106.8	105.7	(110.8)	109.0	107.8	113.0
1970.....	102.8	104.1	(98.8)	101.4	102.8	97.0
1971.....	120.0	118.7	(124.5)	120.5	119.8	122.9
1972 ^{3/}	123.1	121.2	(129.6)	128.3	127.4	131.5
	AVERAGE ANNUAL RATES (PERCENT)					
1957-72.....	3.8	3.8	(4.1)	4.0	4.0	4.1
1960-72.....	3.3	3.3	(3.4)	3.4	3.3	3.4

1/ The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

2/ The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

3/ Preliminary.

Source: Output based on data from company records; Motor Vehicle Manufacturers Association of the U.S., Inc.; Gousha/Times Mirror Company (Automobile Invoice Service); Ward's Communications, Inc. (Ward's Automotive Yearbooks); Bureau of the Census, U.S. Department of Commerce; Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor; and company records.

TABLE 74. MOTOR VEHICLES AND EQUIPMENT SIC 371
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS ^{1/}	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1957.....	65.0	94.4	96.2	(88.7)	94.3	96.0	88.7
1958.....	48.6	72.6	70.2	(80.3)	74.4	72.2	81.5
1959.....	62.6	85.4	86.4	(82.5)	84.9	85.8	81.9
1960.....	70.9	89.1	90.3	(85.3)	88.8	89.9	85.1
1961.....	61.5	76.3	75.1	(80.2)	77.5	76.5	81.1
1962.....	77.7	87.9	89.1	(83.9)	84.8	85.2	83.4
1963.....	86.8	94.5	96.0	(89.8)	90.9	91.5	88.7
1964.....	89.5	96.4	97.4	(93.1)	92.3	92.5	91.9
1965.....	109.3	110.4	113.8	(99.3)	103.3	105.2	97.2
1966.....	109.7	110.2	112.1	(103.6)	105.7	106.9	101.3
1967.....	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0
1968.....	121.8	112.3	114.7	(104.7)	107.1	108.6	102.1
1969.....	121.7	113.9	115.1	(109.8)	111.7	112.9	107.7
1970.....	99.1	96.4	95.2	(100.3)	97.7	96.4	102.2
1971.....	124.4	103.7	104.8	(99.9)	103.2	103.8	101.2
1972 ^{2/}	135.4	110.0	111.7	(104.5)	105.5	106.3	103.0
AVERAGE ANNUAL RATES (PERCENT)							
1957-72.....	6.1	2.1	2.2	(1.9)	2.0	2.0	1.9
1960-72.....	5.6	2.2	2.2	(2.2)	2.2	2.2	2.2

^{1/} The figures shown in parentheses are subject to a wider margin of error than are other measures for this industry because of the method for estimating nonproduction worker man-hours.

^{2/} Preliminary.

Source: Output based on data from company records; Motor Vehicle Manufacturers Association of the U.S., Inc.; Gousha/Times Mirror Company (Automobile Invoice Service); Ward's Communications, Inc. (Ward's Automotive Yearbooks); Bureau of the Census, U.S. Department of Commerce; Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor; and company records.

TABLE 75. RAILROAD TRANSPORTATION-REVENUE TRAFFIC SIC 401 ^{1/}
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{2/}			OUTPUT PER EMPLOYEE ^{2/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	27.9	27.2	35.2	31.4	30.5	42.3
1947.....	38.3	36.7	60.1	45.2	43.2	72.0
1948.....	37.6	36.1	57.9	44.4	42.5	69.5
1949.....	36.7	35.5	51.1	40.2	39.3	58.6
1950.....	42.0	40.4	60.5	43.5	41.9	64.2
1951.....	44.4	42.7	65.8	45.7	43.8	70.2
1952.....	44.6	43.0	63.3	45.3	43.5	67.3
1953.....	44.8	43.3	62.3	45.1	43.4	66.2
1954.....	46.6	45.4	58.9	46.3	44.9	61.7
1955.....	51.6	50.2	65.2	52.2	50.6	70.7
1956.....	54.0	52.7	67.3	54.6	52.9	73.1
1957.....	54.8	53.7	65.6	54.8	53.3	71.1
1958.....	57.6	57.1	62.3	57.5	56.4	67.4
1959.....	61.2	60.6	66.1	61.3	60.2	71.7
1960.....	63.6	63.2	67.0	63.5	62.5	72.4
1961.....	68.2	68.1	69.0	67.9	67.1	74.3
1962.....	72.6	72.4	74.2	73.0	72.2	80.1
1963.....	77.1	76.9	78.9	78.2	77.3	85.0
1964.....	82.1	81.9	83.8	84.4	83.5	91.1
1965.....	90.8	91.0	89.7	92.9	92.3	97.3
1966.....	97.5	97.6	97.2	99.6	99.2	102.7
1967.....	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	104.3	104.5	103.1	105.8	106.0	103.6
1969.....	109.2	109.4	107.9	111.1	111.4	107.7
1970.....	110.1	110.3	107.7	112.2	112.9	107.2
1971.....	112.3	113.0	106.3	110.1	110.8	105.1
1972 ^{3/}	122.2	123.2	114.7	123.2	124.7	112.1
	AVERAGE ANNUAL RATES (PERCENT)					
1947-72.....	5.2	5.4	3.0	4.8	5.1	2.4
1960-72.....	5.5	5.6	4.7	5.5	5.7	3.6

^{1/} Class I railroads and Class I switching and terminal companies.

^{2/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{3/} Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 76. RAILROAD TRANSPORTATION-REVENUE TRAFFIC SIC 401 ^{1/}
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	50.5	181.0	185.7	143.6	160.6	165.7	119.5
1947.....	99.6	260.1	271.7	165.8	220.4	230.6	138.3
1948.....	96.1	255.3	266.3	166.1	216.5	226.3	138.3
1949.....	79.6	215.8	224.3	155.9	195.0	202.5	135.9
1950.....	87.1	207.6	215.4	143.9	200.0	208.1	135.6
1951.....	95.6	215.2	223.7	145.3	209.2	218.4	136.1
1952.....	91.2	204.7	212.1	144.1	201.5	209.7	135.5
1953.....	89.4	199.6	206.5	143.5	198.2	206.1	135.0
1954.....	81.2	174.2	178.7	137.9	175.2	180.7	131.5
1955.....	91.0	176.5	181.1	139.5	174.2	179.9	128.8
1956.....	94.1	174.2	178.4	139.8	172.4	177.9	128.8
1957.....	89.6	163.5	166.9	136.6	163.5	168.2	126.1
1958.....	80.1	139.0	140.4	128.6	139.3	141.9	118.8
1959.....	82.9	135.5	136.7	125.4	135.2	137.6	115.6
1960.....	82.2	129.2	130.0	122.7	129.5	131.6	113.5
1961.....	80.8	118.5	118.6	117.1	119.0	120.4	108.7
1962.....	84.7	116.6	117.0	114.2	116.1	117.3	105.8
1963.....	88.1	114.2	114.5	111.7	112.7	113.9	103.6
1964.....	92.9	113.1	113.5	110.9	110.1	111.2	102.0
1965.....	97.8	107.7	107.5	109.0	105.3	106.0	100.5
1966.....	103.1	105.7	105.6	106.1	103.5	103.9	100.4
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	102.5	98.3	98.1	99.4	96.9	96.7	98.9
1969.....	105.4	96.5	96.3	97.7	94.9	94.6	97.9
1970.....	104.5	94.9	94.7	97.0	93.1	92.6	97.5
1971.....	100.5	89.5	88.9	94.5	91.3	90.7	95.6
1972 ^{2/}	105.5	86.3	85.6	92.0	85.6	84.6	94.1
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	0.6	-4.4	-4.6	-2.3	-4.0	-4.2	-1.8
1960-72.....	2.3	-3.0	-3.1	-2.3	-3.0	-3.2	-1.3

^{1/} Class I railroads and Class I switching and terminal companies.

^{2/} Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 77. RAILROAD TRANSPORTATION-CAR MILES SIC 401 ^{1/}
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{2/}			OUTPUT PER EMPLOYEE ^{2/}		
	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	44.1	43.0	55.6	49.8	48.2	66.9
1947.....	44.7	42.8	70.1	52.7	50.4	84.0
1948.....	44.5	42.7	68.4	52.5	50.2	82.1
1949.....	46.9	45.3	65.2	52.2	50.2	74.8
1950.....	51.5	49.7	74.4	53.5	51.4	78.9
1951.....	51.4	49.9	76.9	53.4	51.1	82.1
1952.....	53.5	51.7	76.1	54.4	52.3	80.9
1953.....	55.1	53.2	76.6	55.4	53.3	81.4
1954.....	58.9	57.4	74.4	58.6	56.8	78.0
1955.....	62.3	60.7	78.9	63.1	61.1	85.4
1956.....	63.7	62.2	79.4	64.4	62.4	86.2
1957.....	65.6	64.3	78.6	65.6	63.8	85.1
1958.....	70.6	69.9	76.3	70.4	69.1	82.6
1959.....	73.4	72.7	79.3	73.5	72.2	86.0
1960.....	75.5	75.1	79.5	75.4	74.2	86.0
1961.....	79.4	79.3	80.4	79.1	78.2	86.6
1962.....	82.1	81.8	83.8	82.4	81.6	90.5
1963.....	84.7	84.5	86.6	85.8	84.9	93.3
1964.....	87.5	87.2	89.3	89.9	89.0	97.1
1965.....	92.9	93.0	91.7	95.0	94.3	99.5
1966.....	97.4	97.4	97.0	99.4	99.0	102.5
1967.....	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	101.8	102.0	100.7	103.3	103.5	101.2
1969.....	103.8	104.0	102.6	105.6	105.9	102.3
1970.....	103.6	103.8	101.3	105.6	106.2	100.8
1971.....	106.7	107.4	101.1	104.6	105.3	99.9
1972 ^{3/}	114.6	115.5	107.5	115.5	116.9	105.1
AVERAGE ANNUAL RATES (PERCENT)						
1947-72.....	4.0	4.2	1.8	3.6	3.8	1.2
1960-72.....	3.3	3.4	2.5	3.3	3.5	1.5

^{1/} Class I railroads and Class I switching and terminal companies.

^{2/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{3/} Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 78. RAILROAD TRANSPORTATION-CAR MILES SIC 401 ^{1/}
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS			EMPLOYMENT		
		EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS	EMPLOYEES	PRODUCTION WORKERS	NONPRODUCTION WORKERS
1939.....	79.9	181.0	185.7	143.6	160.6	165.7	119.5
1947.....	116.2	260.1	271.7	165.8	220.4	230.6	138.3
1948.....	113.6	255.3	266.3	166.1	216.5	226.3	138.3
1949.....	101.7	216.8	224.3	155.9	195.0	202.5	135.9
1950.....	107.0	207.6	215.4	143.9	200.0	208.1	135.6
1951.....	111.7	215.2	223.7	145.3	209.2	218.4	136.1
1952.....	109.6	204.7	212.1	144.1	201.5	209.7	135.5
1953.....	109.9	199.6	206.5	143.5	198.2	206.1	135.0
1954.....	102.6	174.2	178.7	137.9	175.2	180.7	131.5
1955.....	110.0	176.5	181.1	139.5	174.2	179.9	128.8
1956.....	111.0	174.2	178.4	139.8	172.4	177.9	128.8
1957.....	107.3	163.5	166.9	136.6	163.5	168.2	126.1
1958.....	98.1	139.0	140.4	128.6	139.3	141.9	118.8
1959.....	99.4	135.5	136.7	125.4	135.2	137.6	115.6
1960.....	97.6	129.2	130.0	122.7	129.5	131.6	113.5
1961.....	94.1	118.5	118.6	117.1	119.0	120.4	108.7
1962.....	95.7	116.6	117.0	114.2	116.1	117.3	105.8
1963.....	96.7	114.2	114.5	111.7	112.7	113.9	103.6
1964.....	99.0	113.1	113.5	110.9	110.1	111.2	102.0
1965.....	100.0	107.7	107.5	109.0	105.3	106.0	100.5
1966.....	102.9	105.7	105.6	106.1	103.5	103.9	100.4
1967.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1968.....	100.1	98.3	98.1	99.4	96.9	96.7	98.9
1969.....	100.2	96.5	96.3	97.7	94.9	94.6	97.9
1970.....	98.3	94.9	94.7	97.0	93.1	92.6	97.5
1971.....	95.5	89.5	88.9	94.5	91.3	90.7	95.6
1972 ^{2/}	98.9	86.3	85.6	92.0	85.6	84.6	94.1
AVERAGE ANNUAL RATES (PERCENT)							
1947-72.....	-0.6	-4.4	-4.6	-2.3	-4.0	-4.2	-1.8
1960-72.....	0.2	-3.0	-3.1	-2.3	-3.0	-3.2	-1.3

^{1/} Class I railroads and Class I switching and terminal companies.

^{2/} Preliminary.

Source: Based on Interstate Commerce Commission data.

TABLE 79. AIR TRANSPORTATION SIC 451
INDEXES OF OUTPUT PER EMPLOYEE, OUTPUT, AND EMPLOYEES
(1967=100)

YEAR	OUTPUT PER EMPLOYEE	OUTPUT	EMPLOYEES
1947.....	18.2	6.5	35.7
1948.....	20.5	6.8	33.2
1949.....	23.4	7.6	32.5
1950.....	27.1	9.0	33.2
1951.....	31.1	11.4	36.6
1952.....	32.4	13.3	41.1
1953.....	35.2	15.4	43.8
1954.....	38.9	17.4	44.7
1955.....	43.9	20.7	47.2
1956.....	45.0	23.9	53.1
1957.....	46.6	27.1	58.2
1958.....	48.2	27.5	57.1
1959.....	51.9	31.7	61.1
1960.....	52.3	33.7	64.4
1961.....	55.4	35.7	64.4
1962.....	61.6	40.3	65.4
1963.....	68.2	45.7	67.0
1964.....	75.0	53.2	70.9
1965.....	83.7	64.3	76.8
1966.....	93.9	78.9	84.0
1967.....	100.0	100.0	100.0
1968.....	104.3	115.4	110.6
1969.....	107.2	126.5	118.0
1970.....	109.7	128.5	117.1
1971.....	116.6	131.6	112.9
1972 <u>1</u> /.....	128.5	144.7	112.6
	AVERAGE ANNUAL RATES (PERCENT)		
1947-72.....	7.7	13.7	5.6
1960-72.....	7.8	14.7	6.4

1/ Preliminary.

Source: Based on Civil Aeronautics Board data.

TABLE 80. PETROLEUM PIPELINES SIC 4612, 4613
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}		OUTPUT PER EMPLOYEE ^{1/}	
	EMPLOYEES	PRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS ^{2/}
1947.....	(3/)	(3/)	16.5	(3/)
1948.....	(3/)	(3/)	17.5	(3/)
1949.....	(3/)	(3/)	18.0	(3/)
1950.....	(3/)	(3/)	21.7	(3/)
1951.....	(3/)	(3/)	25.0	(3/)
1952.....	(3/)	(3/)	25.9	(3/)
1953.....	(3/)	(3/)	28.4	(3/)
1954.....	(3/)	(3/)	31.2	(3/)
1955.....	(3/)	(3/)	34.8	(3/)
1956.....	(3/)	(3/)	39.6	(3/)
1957.....	(3/)	(3/)	39.0	(3/)
1958.....	40.4	39.0	39.7	38.4
1959.....	46.7	45.0	45.7	44.1
1960.....	50.2	48.9	48.7	47.4
1961.....	53.7	53.2	51.9	51.4
1962.....	56.0	54.5	54.6	53.2
1963.....	61.6	59.8	60.3	58.5
1964.....	66.9	66.0	66.2	65.4
1965.....	79.4	79.2	78.6	78.5
1966.....	89.5	89.3	88.1	88.0
1967.....	100.0	100.0	100.0	100.0
1968.....	105.8	106.8	105.4	106.2
1969.....	114.3	117.7	113.5	116.9
1970.....	121.3	127.7	120.7	127.1
1971 ^{4/}	122.0	129.9	121.4	129.3
AVERAGE ANNUAL RATES (PERCENT)				
1947-71.....	(3/)	(3/)	8.9	(3/)
1960-71.....	9.6	10.4	9.9	10.7

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} Represents nonsupervisory workers.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the Interstate Commerce Commission. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor, and the Interstate Commerce Commission.

TABLE B1. PETROLEUM PIPELINES SIC 4612, 4613
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS		EMPLOYMENT	
		EMPLOYEES	PRODUCTION WORKERS <u>1/</u>	EMPLOYEES	PRODUCTION WORKERS <u>1/</u>
1947.....	25.2	(2/)	(2/)	152.6	(2/)
1948.....	28.1	(2/)	(2/)	160.9	(2/)
1949.....	27.7	(2/)	(2/)	154.3	(2/)
1950.....	32.1	(2/)	(2/)	147.7	(2/)
1951.....	38.3	(2/)	(2/)	153.1	(2/)
1952.....	40.2	(2/)	(2/)	155.5	(2/)
1953.....	43.0	(2/)	(2/)	151.5	(2/)
1954.....	45.2	(2/)	(2/)	145.1	(2/)
1955.....	49.0	(2/)	(2/)	140.7	(2/)
1956.....	54.8	(2/)	(2/)	138.5	(2/)
1957.....	55.3	(2/)	(2/)	141.7	(2/)
1958.....	54.6	135.1	139.9	137.4	142.3
1959.....	59.3	127.1	131.7	129.9	134.6
1960.....	60.1	119.7	123.0	123.5	126.9
1961.....	61.6	114.7	115.8	118.7	119.9
1962.....	63.1	112.7	115.7	115.5	118.6
1963.....	66.7	108.3	111.6	110.7	114.1
1964.....	70.8	105.9	107.3	107.0	108.3
1965.....	82.0	103.3	103.5	104.3	104.5
1966.....	89.1	99.6	99.8	101.1	101.3
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	104.2	98.5	97.6	98.9	98.1
1969.....	108.6	95.0	92.3	95.7	92.9
1970.....	114.9	94.7	90.0	95.2	90.4
1971 <u>3/</u>	116.9	95.8	90.0	96.3	90.4
AVERAGE ANNUAL RATES (PERCENT)					
1947-71.....	6.3	(2/)	(2/)	-2.4	(2/)
1960-71.....	7.3	-2.1	-2.8	-2.4	-3.1

- 1/ Represents nonsupervisory workers.
2/ Not available.
3/ Preliminary.

Source: Output based on data from the Interstate Commerce Commission. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor, and the Interstate Commerce Commission.

TABLE 82. GAS AND ELECTRIC UTILITIES SIC 491,492,493
INDEXES OF OUTPUT PER MAN-HOUR AND OUTPUT PER EMPLOYEE
(1967 = 100)

YEAR	OUTPUT PER MAN-HOUR ^{1/}		OUTPUT PER EMPLOYEE ^{1/}	
	EMPLOYEES	PRODUCTION WORKERS ^{2/}	EMPLOYEES	PRODUCTION WORKERS ^{2/}
1939.....	15.8	(3/)	15.1	(3/)
1947.....	26.2	23.8	26.5	24.0
1948.....	27.5	25.1	27.7	25.3
1949.....	28.1	25.8	28.1	25.8
1950.....	31.3	28.9	31.5	29.0
1951.....	34.7	32.0	35.1	32.4
1952.....	37.0	34.3	37.2	34.5
1953.....	39.6	37.1	39.7	37.1
1954.....	42.4	40.0	42.3	39.9
1955.....	47.2	44.9	47.1	44.7
1956.....	51.1	48.8	51.0	48.7
1957.....	53.7	51.5	53.2	51.1
1958.....	56.4	54.4	55.5	53.5
1959.....	61.5	59.7	60.8	59.0
1960.....	65.5	63.8	64.8	63.0
1961.....	69.4	67.9	68.4	66.8
1962.....	74.9	73.5	74.3	72.8
1963.....	79.5	78.6	79.0	78.0
1964.....	85.5	84.8	84.9	84.1
1965.....	89.2	88.5	89.0	88.3
1966.....	95.7	95.3	95.8	95.3
1967.....	100.0	100.0	100.0	100.0
1968.....	107.0	107.1	107.1	107.1
1969.....	113.8	114.4	114.1	114.6
1970.....	117.3	117.9	117.6	118.2
1971.....	122.7	123.9	122.7	123.9
1972 ^{4/}	126.9	128.5	126.9	128.5
AVERAGE ANNUAL RATES (PERCENT)				
1947-72.....	6.8	7.3	6.8	7.3
1960-72.....	5.8	6.1	5.9	6.3

^{1/} The output measures underlying the output per man-hour and output per employee indexes relate to the total production of the industry. They do not relate to the specific output of any single group of employees.

^{2/} Represents nonsupervisory workers.

^{3/} Not available.

^{4/} Preliminary.

Source: Output based on data from the American Gas Association, Federal Power Commission, Rural Electrification Administration of the U.S. Department of Agriculture, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

TABLE 83. GAS AND ELECTRIC UTILITIES SIC 491,492,493
INDEXES OF OUTPUT, MAN-HOURS AND EMPLOYMENT
(1967 = 100)

YEAR	OUTPUT	MAN-HOURS		EMPLOYMENT	
		EMPLOYEES	PRODUCTION WORKERS <u>1/</u>	EMPLOYEES	PRODUCTION WORKERS <u>1/</u>
1939.....	10.8	68.2	(2/)	71.4	(2/)
1947.....	20.8	79.3	87.4	78.5	86.6
1948.....	23.1	84.0	91.9	83.3	91.3
1949.....	24.2	86.2	93.9	86.1	93.9
1950.....	27.7	88.5	95.8	87.9	95.4
1951.....	31.3	90.3	97.7	89.2	96.5
1952.....	33.8	91.4	98.5	90.9	98.1
1953.....	36.7	92.6	99.0	92.4	98.8
1954.....	39.4	93.0	98.4	93.2	98.7
1955.....	44.3	93.9	98.7	94.0	99.0
1956.....	48.7	95.3	99.8	95.5	100.0
1957.....	51.8	96.4	100.5	97.3	101.4
1958.....	54.0	95.7	99.2	97.3	100.9
1959.....	59.2	96.2	99.2	97.3	100.4
1960.....	63.1	96.3	98.9	97.4	100.1
1961.....	66.3	95.5	97.7	96.9	99.2
1962.....	71.3	95.2	97.0	96.0	97.9
1963.....	75.8	95.3	96.4	95.9	97.2
1964.....	81.8	95.7	96.5	96.4	97.3
1965.....	86.8	97.3	98.1	97.5	98.3
1966.....	94.1	98.3	98.7	98.2	98.7
1967.....	100.0	100.0	100.0	100.0	100.0
1968.....	108.8	101.7	101.6	101.6	101.6
1969.....	118.4	104.0	103.5	103.8	103.3
1970.....	125.6	107.1	106.5	106.8	106.3
1971.....	132.2	107.7	106.7	107.7	106.7
1972 <u>3/</u>	140.6	110.8	109.4	110.8	109.4
AVERAGE ANNUAL RATES (PERCENT)					
1947-72.....	7.8	0.9	0.5	0.9	0.5
1960-72.....	7.2	1.3	1.0	1.2	0.8

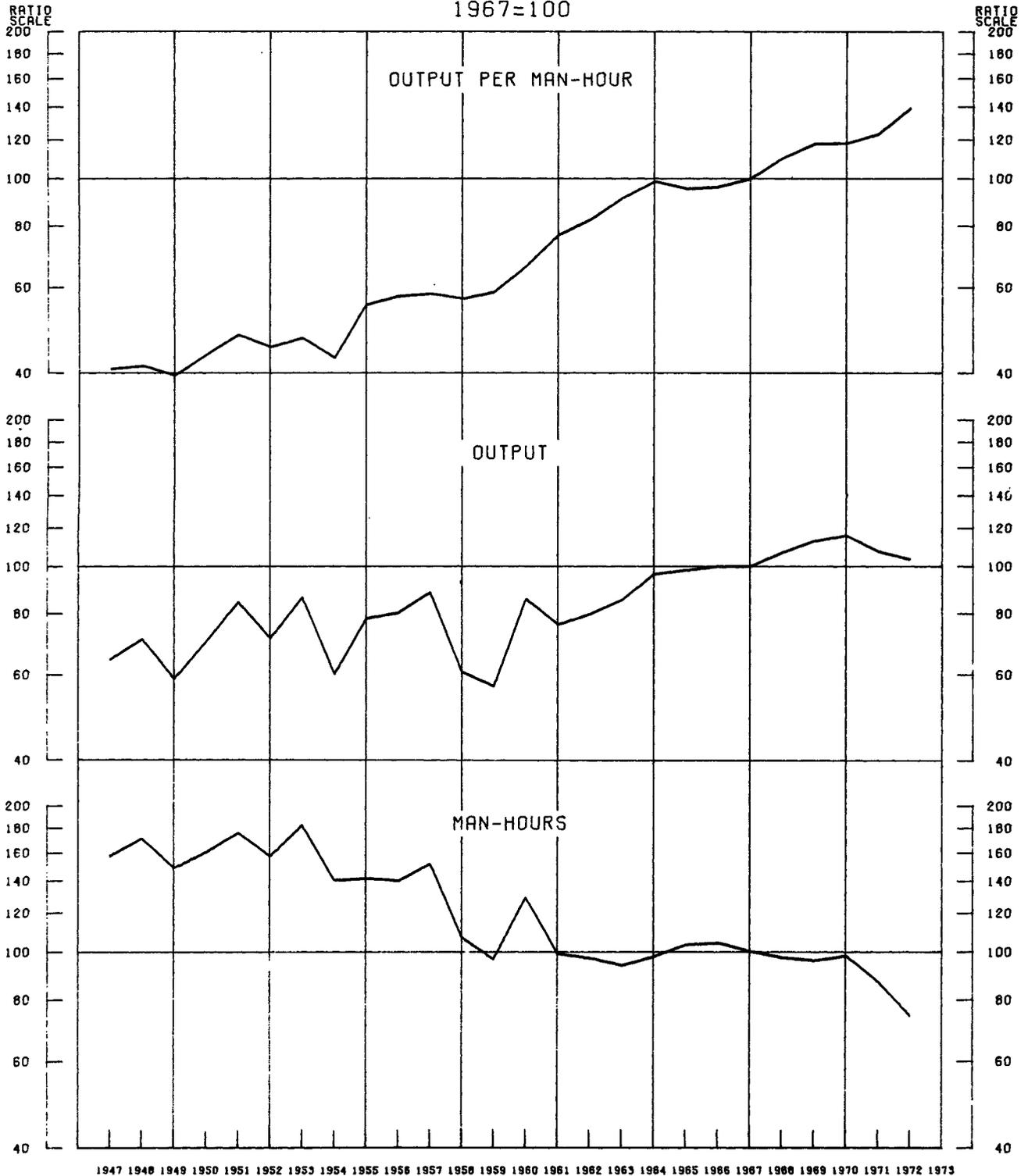
1/ Represents nonsupervisory workers.

2/ Not available.

3/ Preliminary.

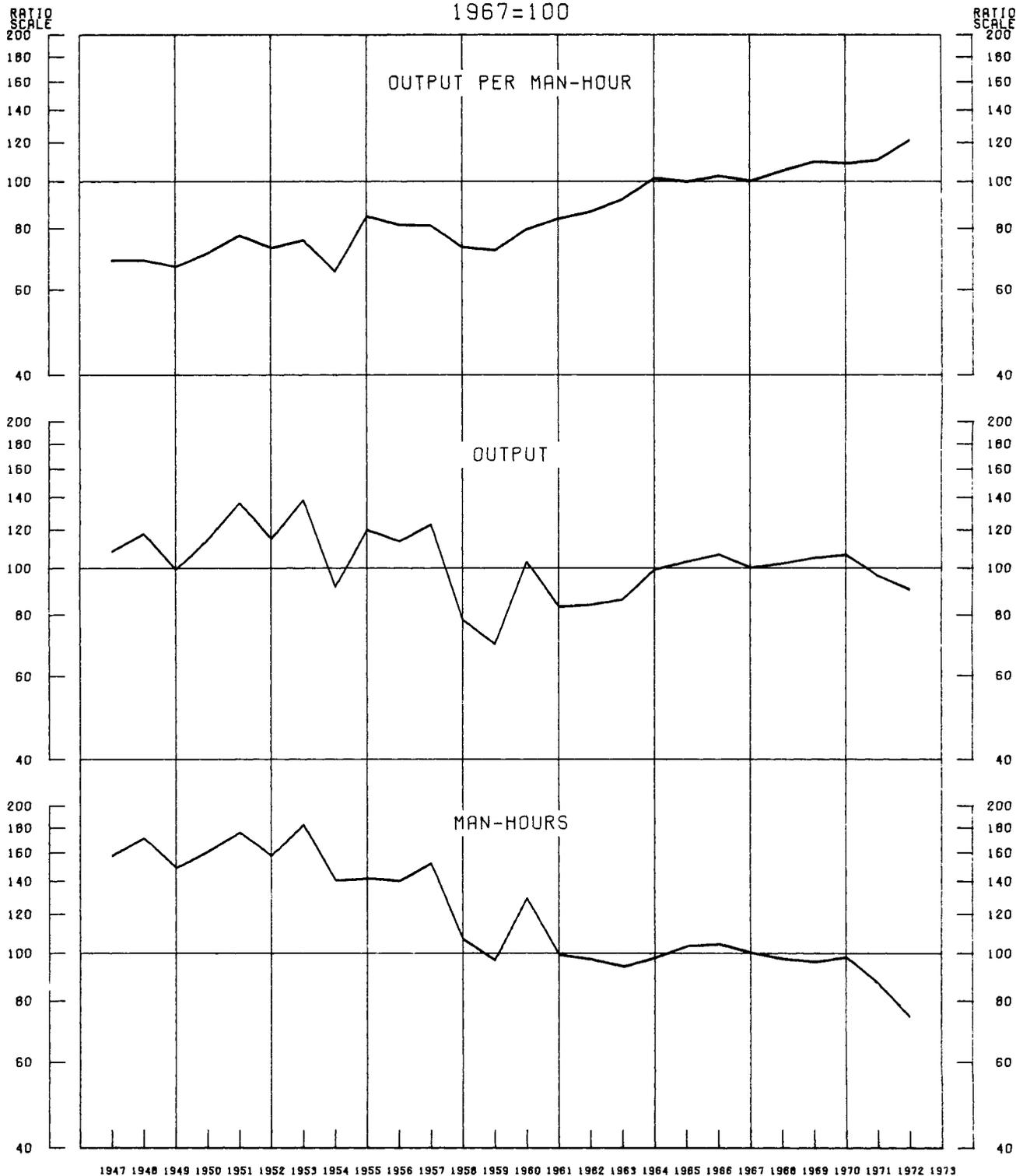
Source: Output based on data from the American Gas Association, Federal Power Commission, Rural Electrification Administration of the U.S. Department of Agriculture, and the Bureau of Labor Statistics, U.S. Department of Labor. Employment and hours based on data from the Bureau of Labor Statistics, U.S. Department of Labor.

CHART 2
 IRON MINING, CRUDE ORE (SIC 101), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



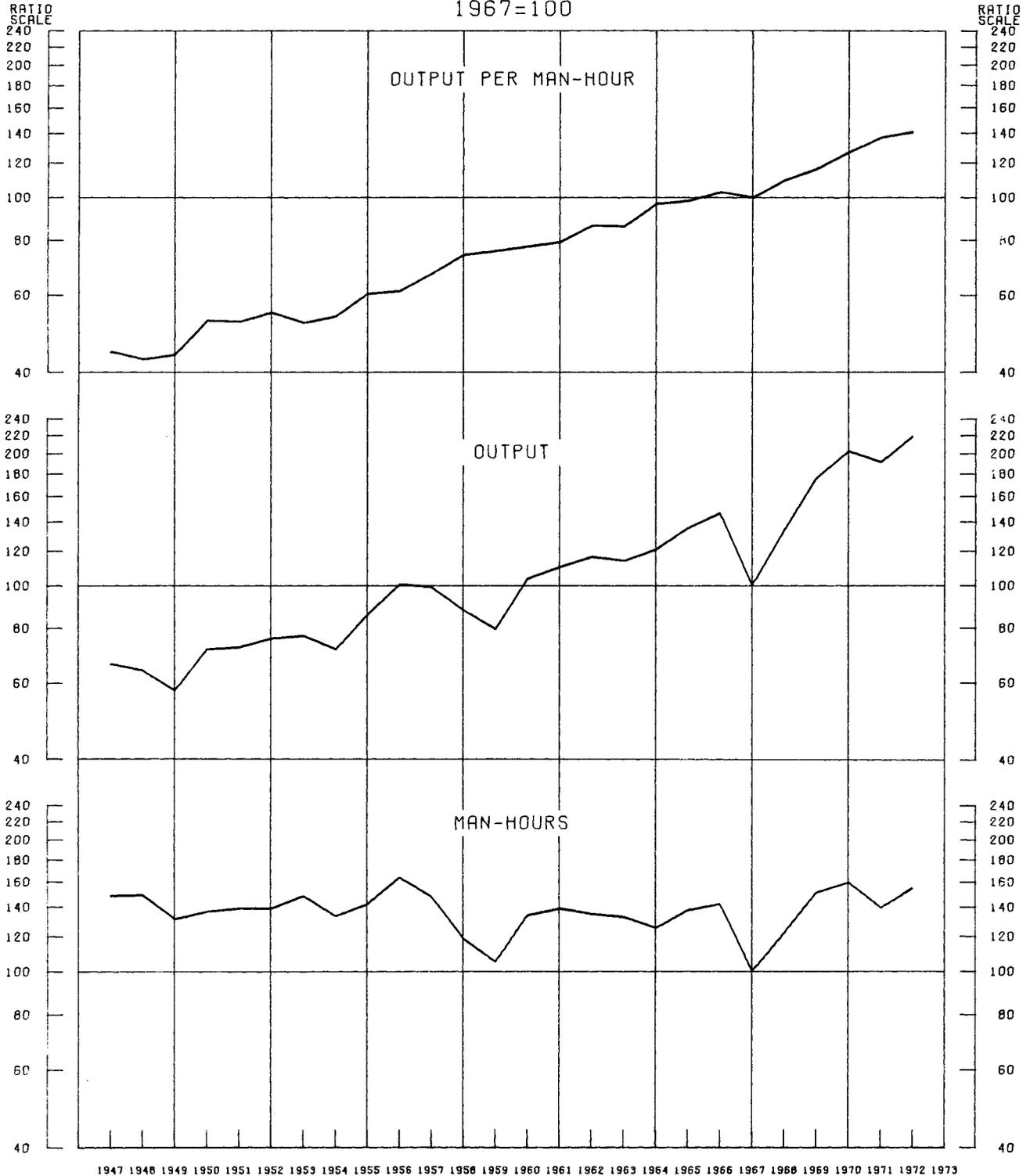
SOURCE-U.S. DEPARTMENT OF LABOR. BUREAU OF LABOR STATISTICS.

CHART 3
 IRON MINING, USABLE ORE (SIC 101), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



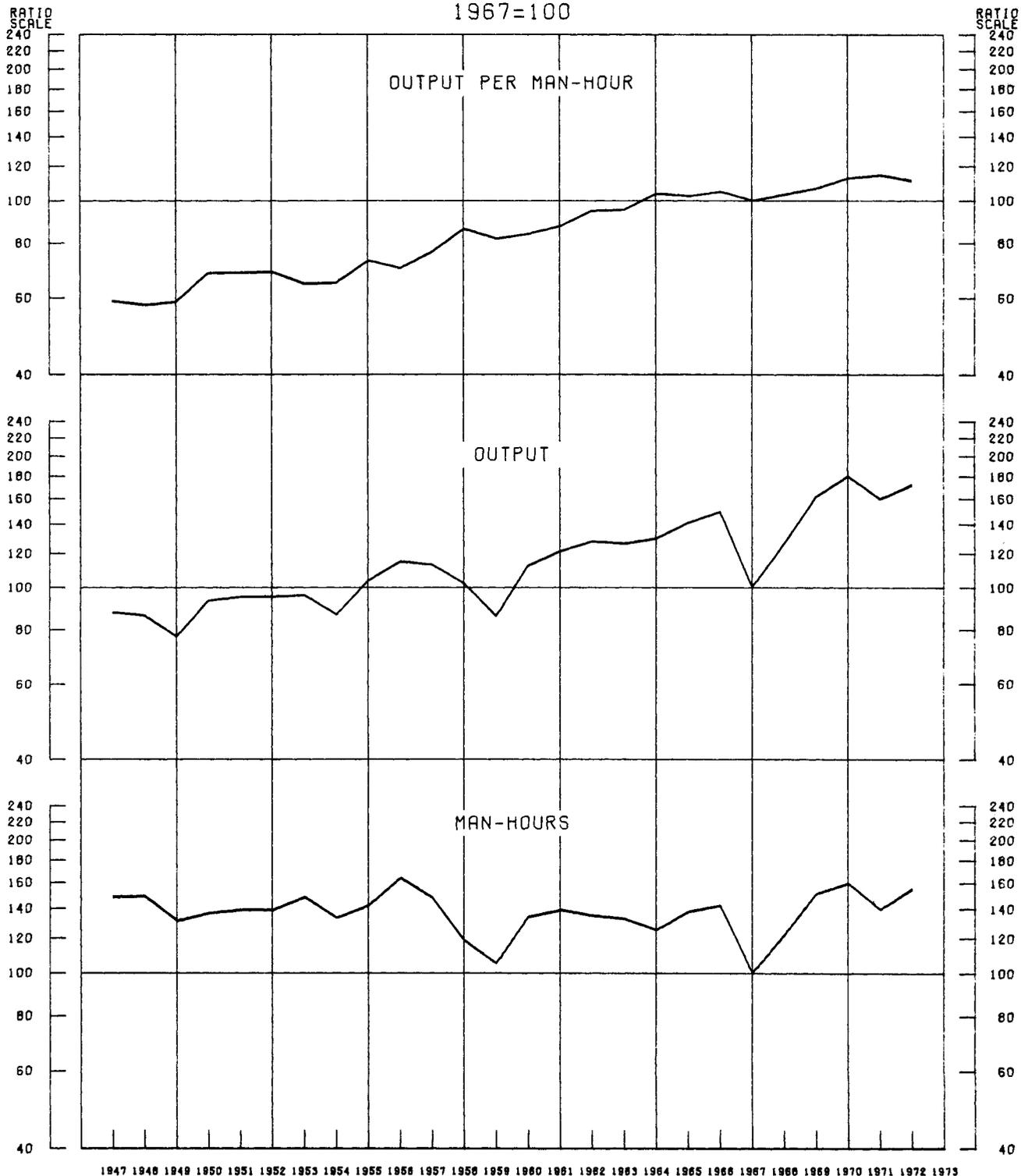
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 4
 COPPER MINING, CRUDE ORE (SIC 102), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



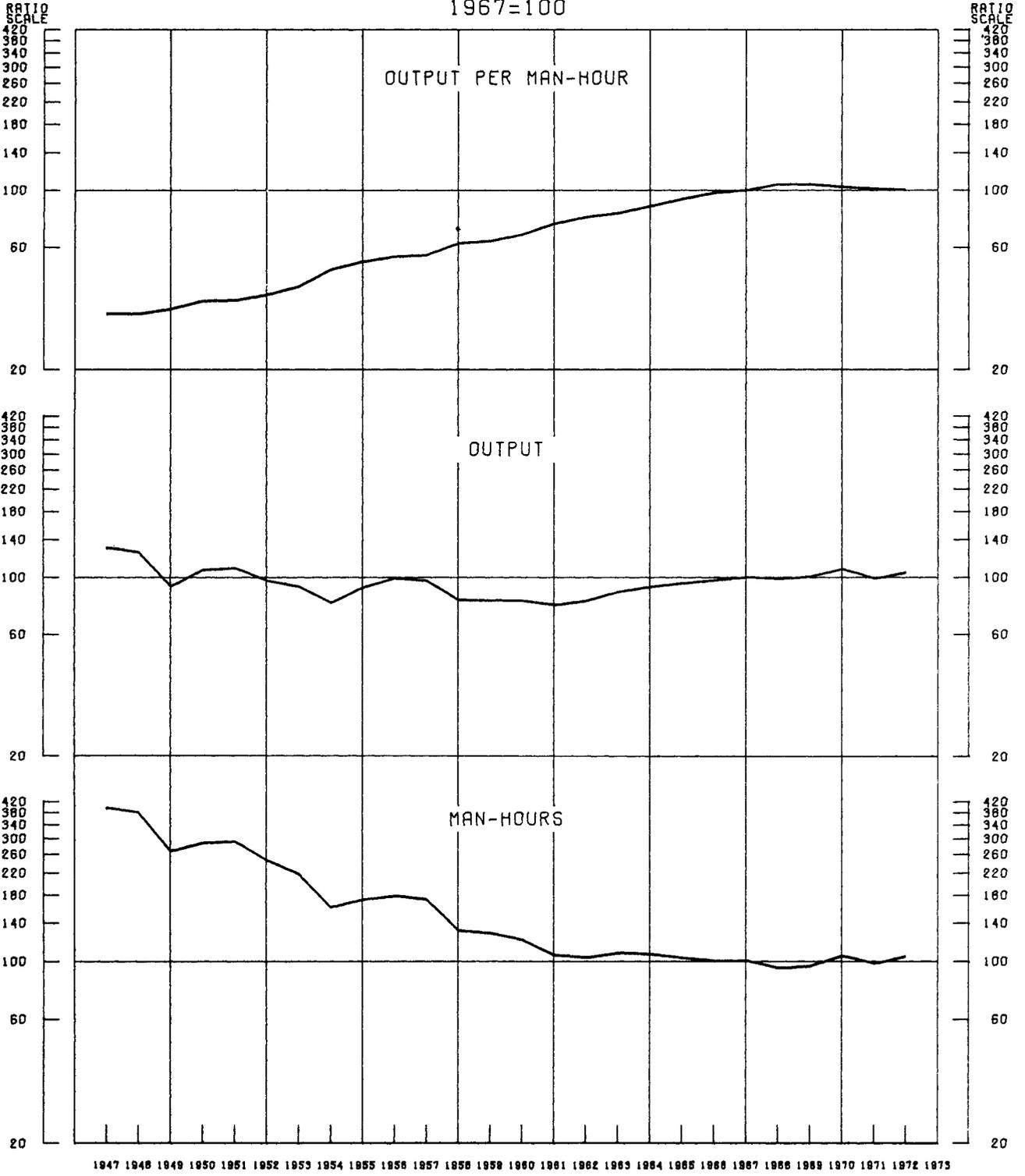
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 5
 COPPER MINING, RECOVERABLE METAL (SIC 102), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



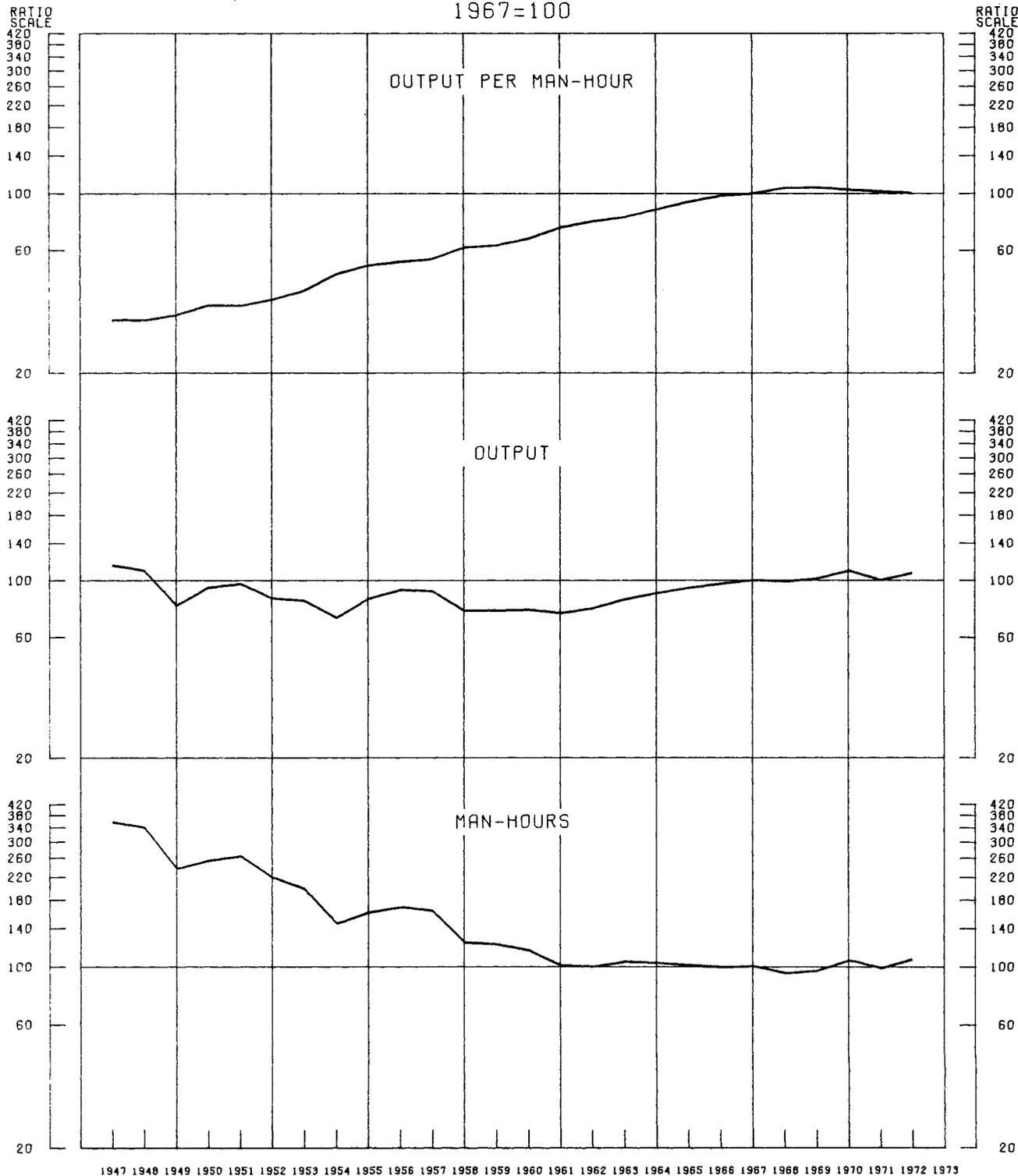
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 6
 COAL MINING (SIC 11, 12), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



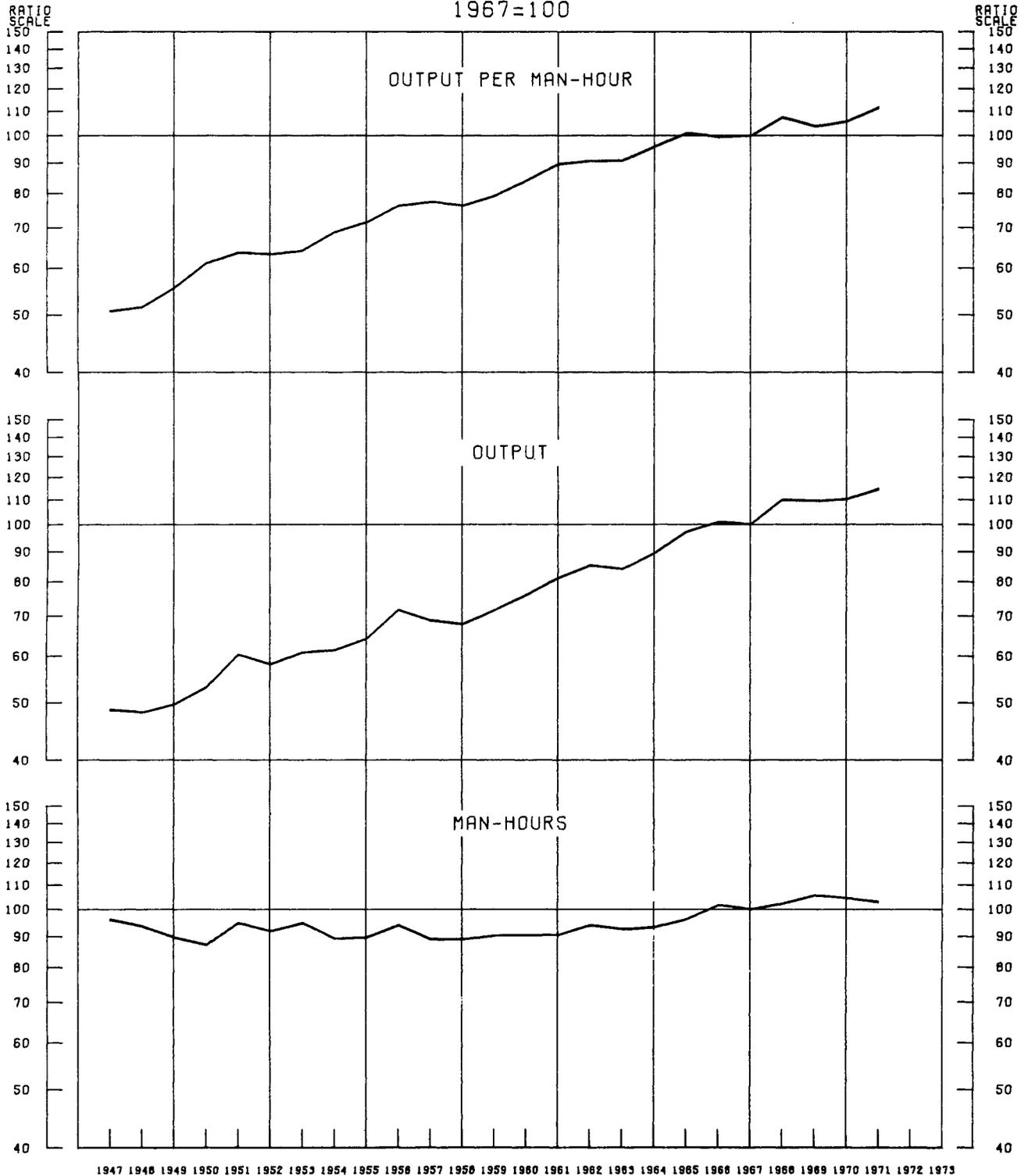
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 7
 BITUMINOUS COAL AND LIGNITE MINING (SIC 12). 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



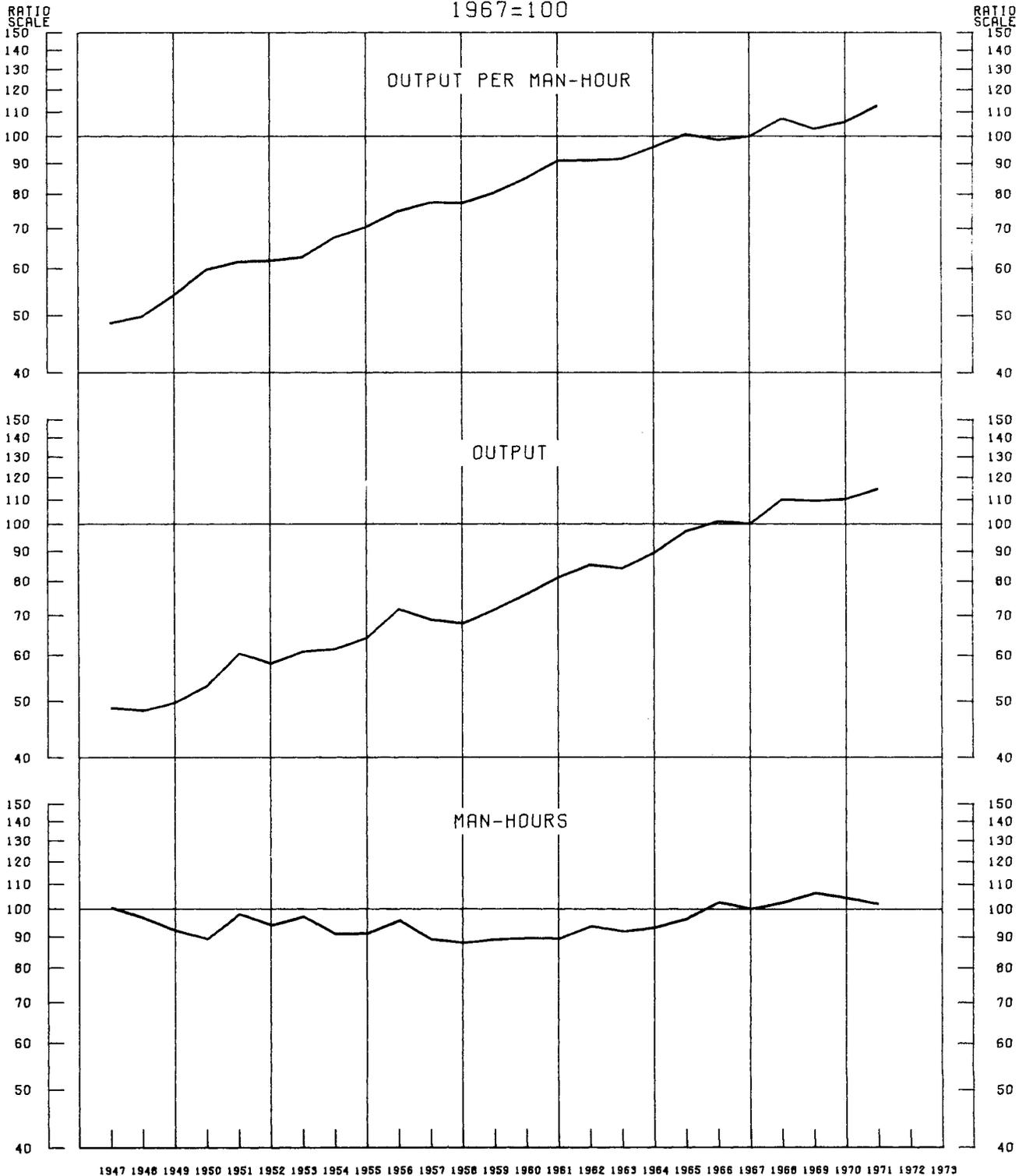
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 8
 CANNING AND PRESERVING (SIC 203), 1947-71
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



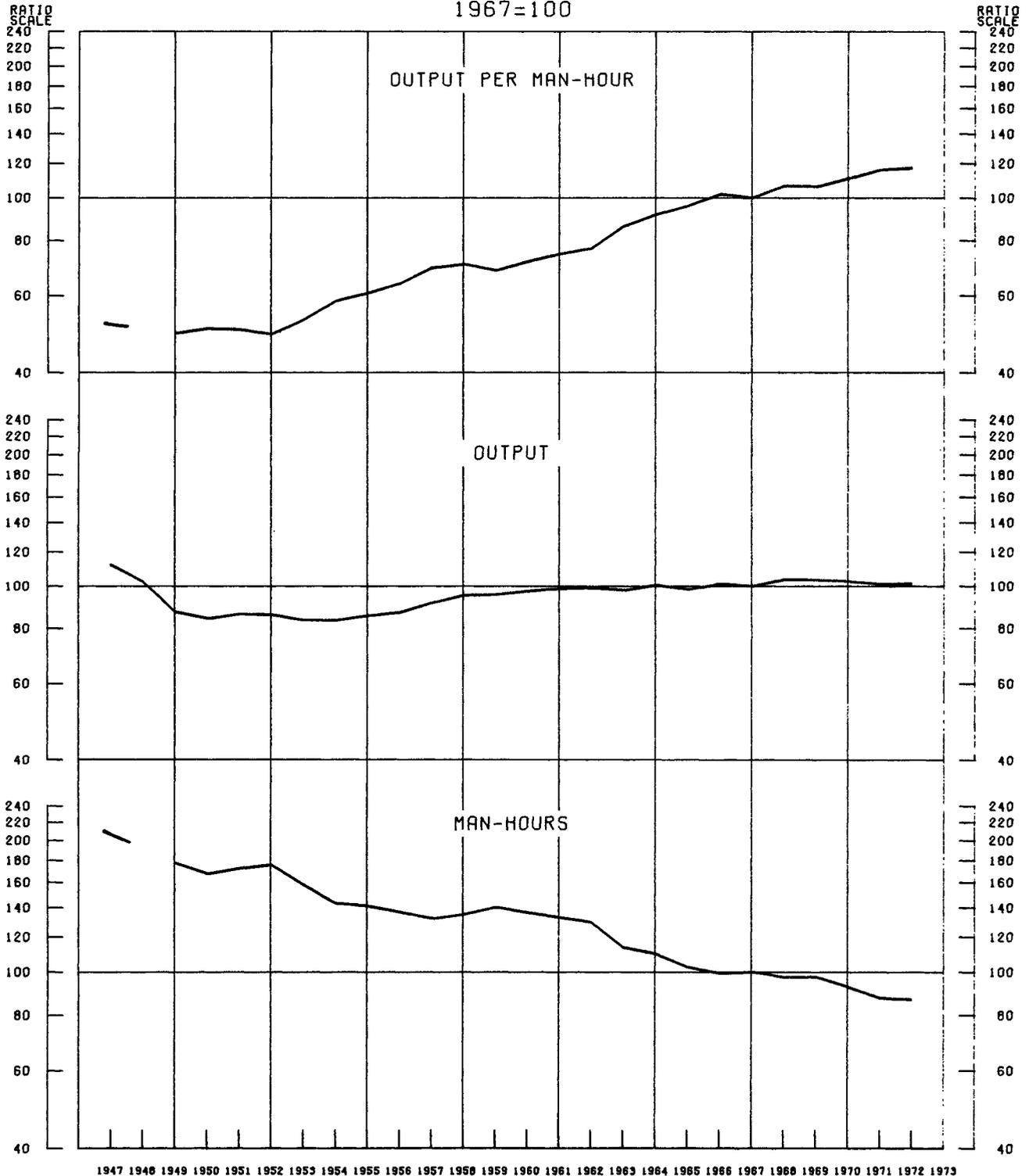
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 9
 CANNING AND PRESERVING (SIC 203), 1947-71
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

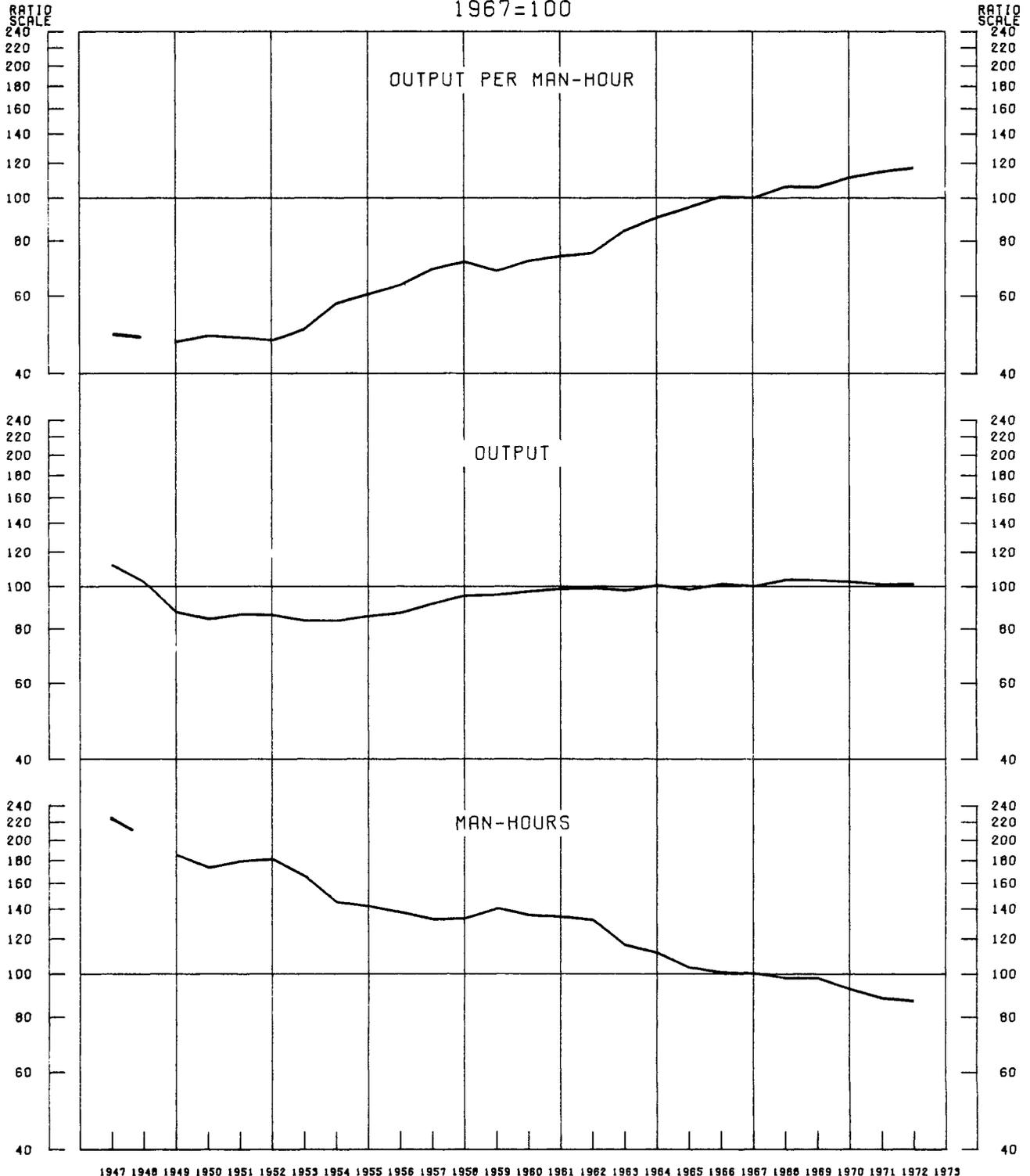
CHART 10
 FLOUR AND OTHER GRAIN-MILL PRODUCTS (SIC 2041), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

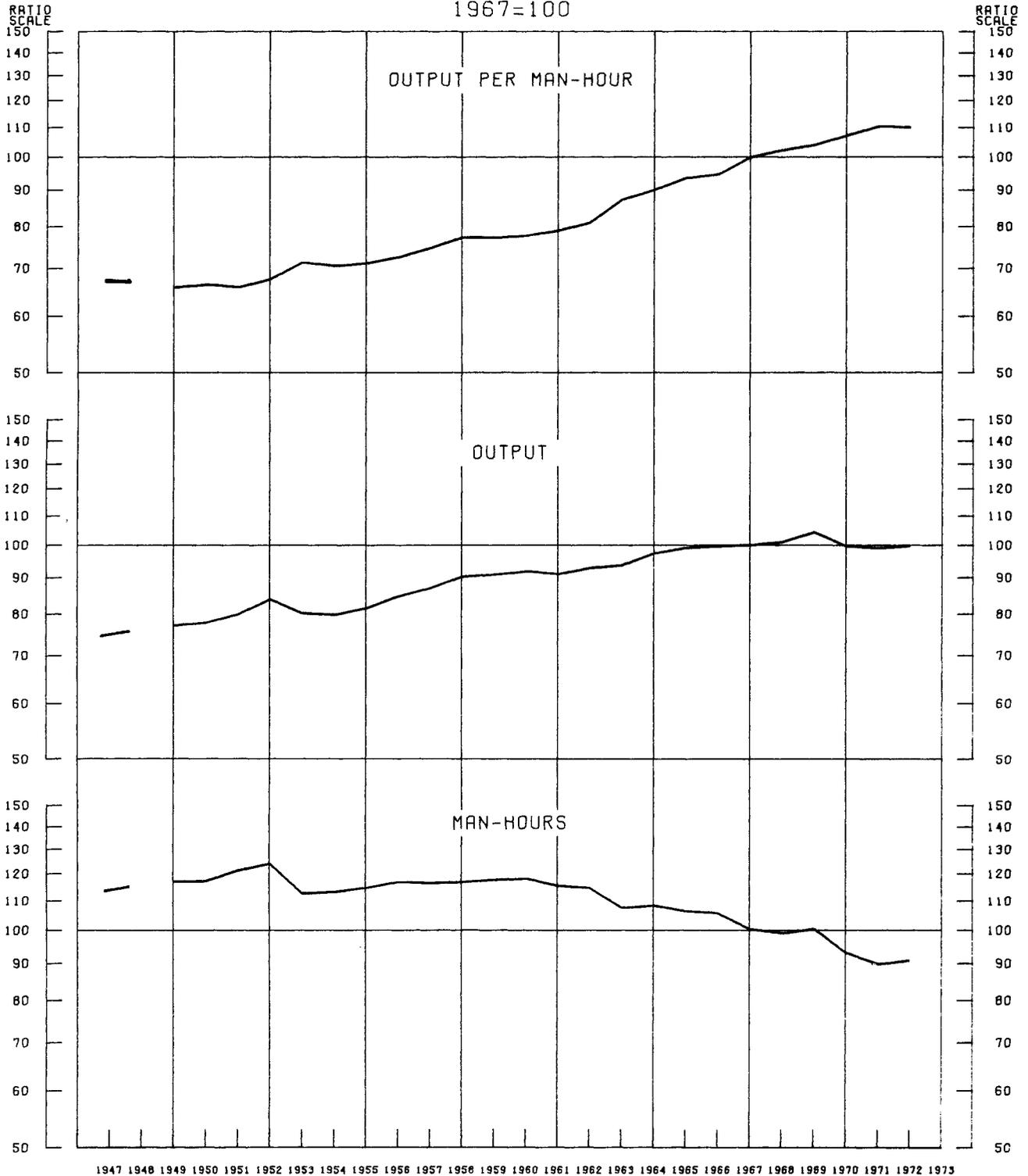
CHART 11
 FLOUR AND OTHER GRAIN-MILL PRODUCTS (SIC 2041), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

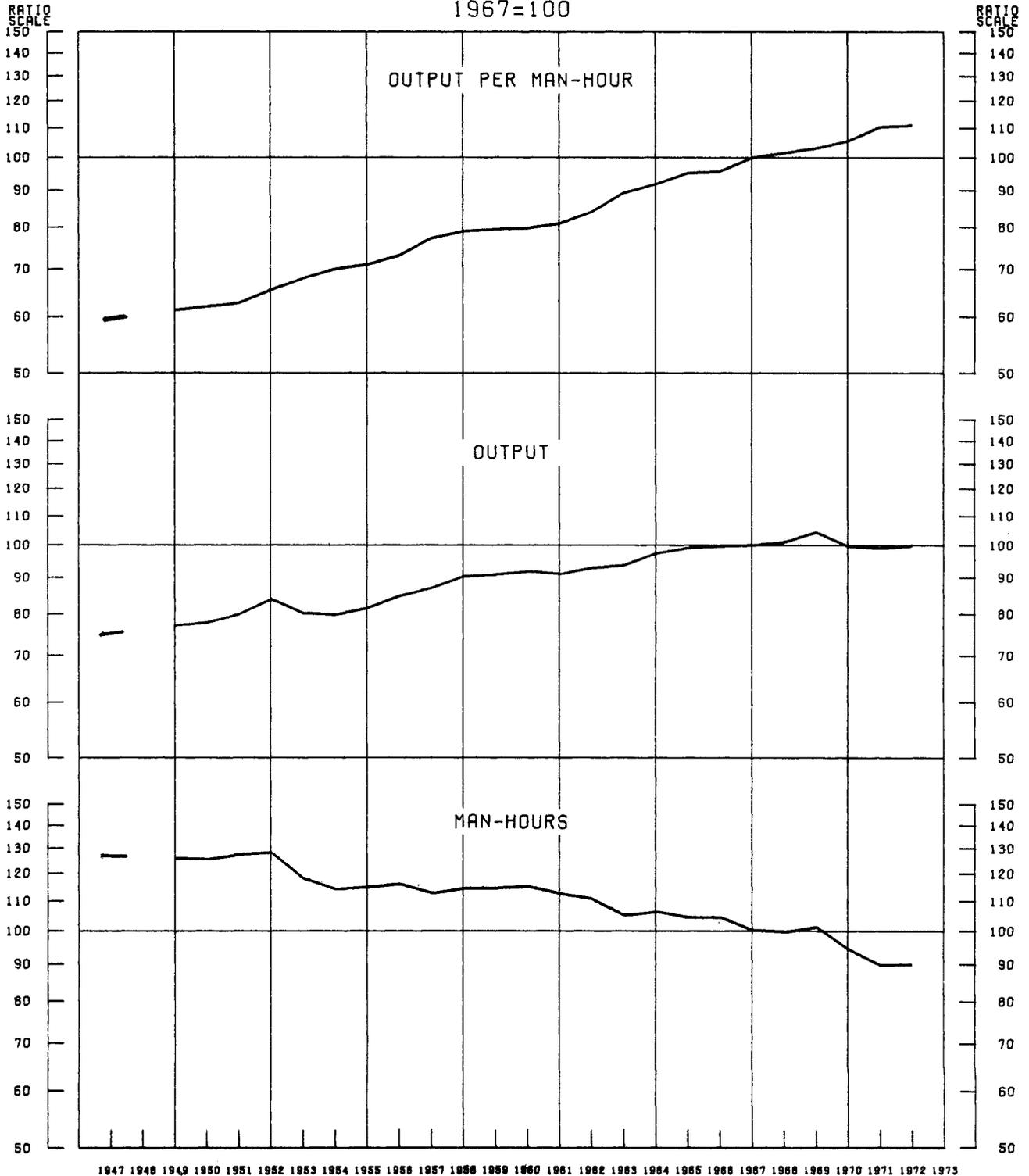
CHART 12
 BAKERY PRODUCTS (SIC 205), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

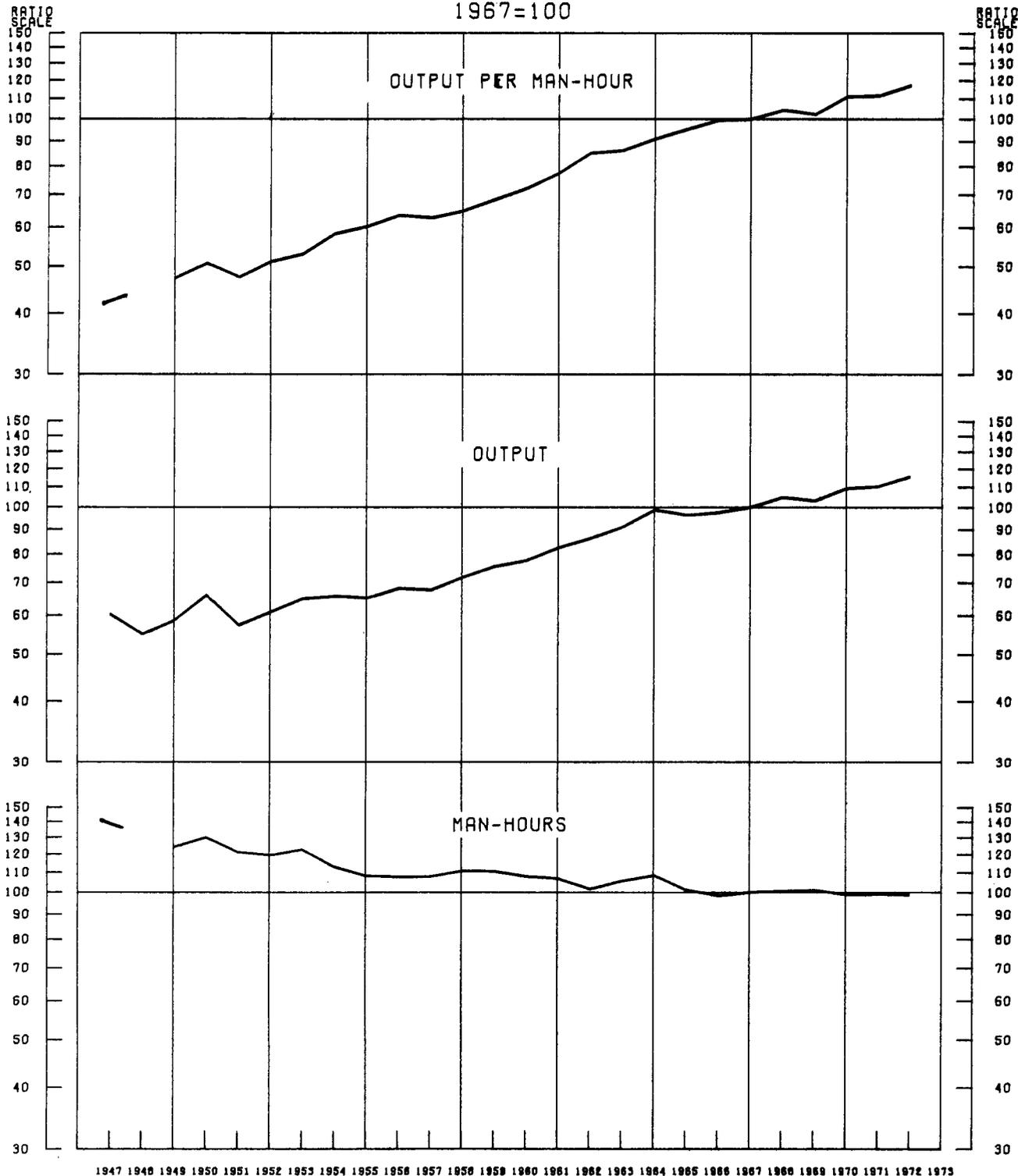
CHART 13
 BAKERY PRODUCTS (SIC 205), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

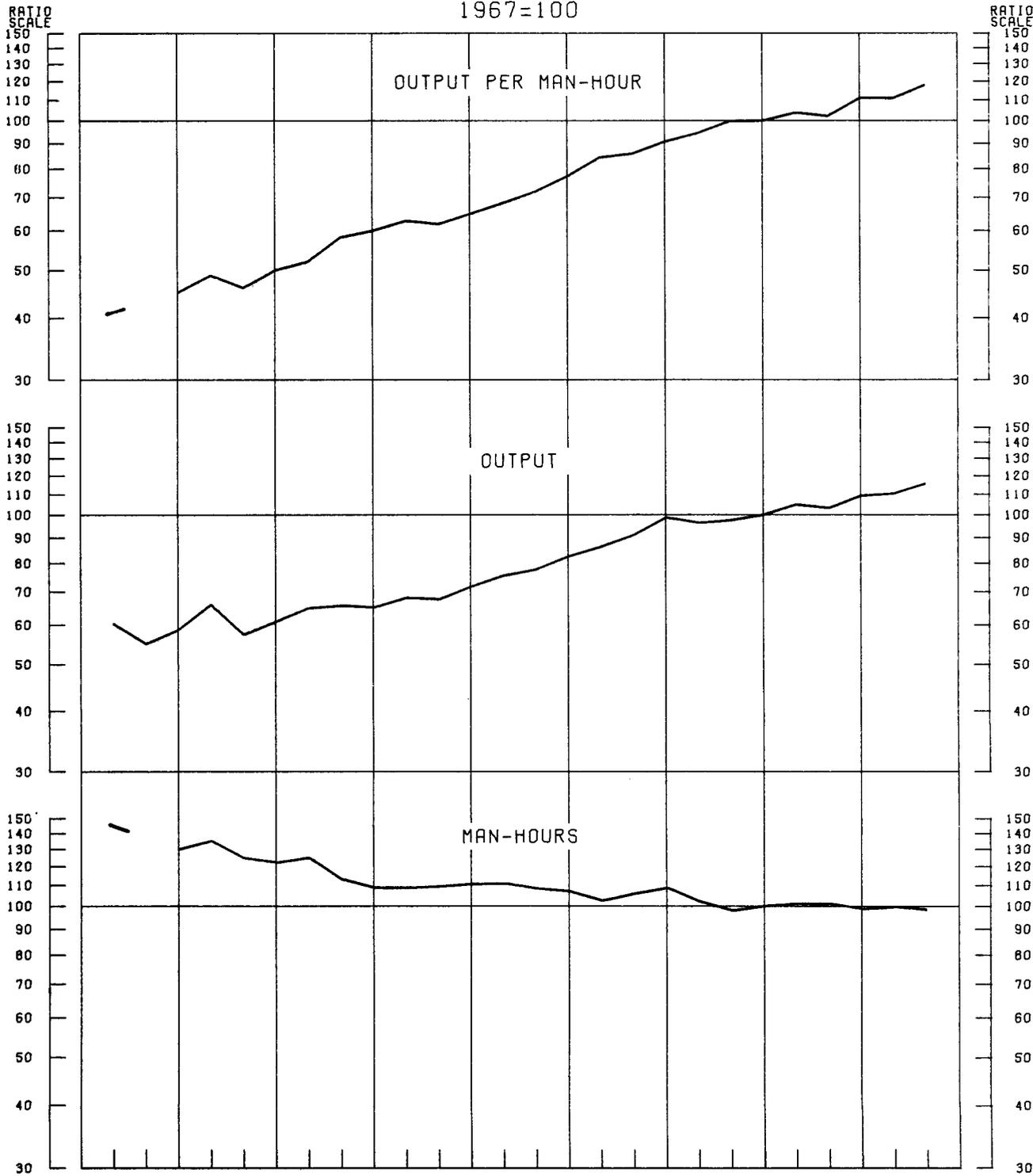
CHART 14
 SUGAR (SIC 206), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 15
 SUGAR (SIC 206), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100

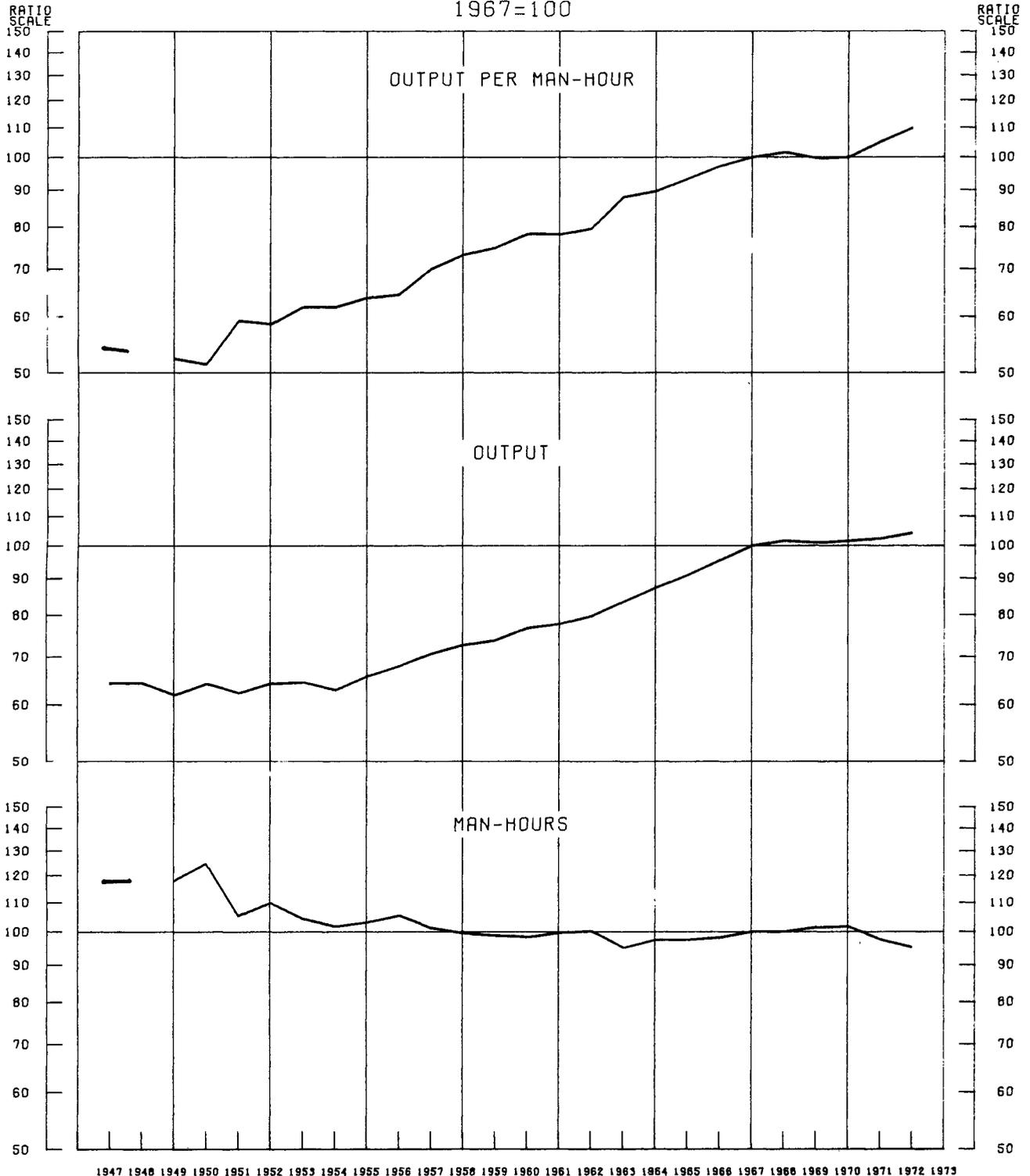


1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973

Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 16
 CANDY AND OTHER CONFECTIONERY PRODUCTS (SIC 2071), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

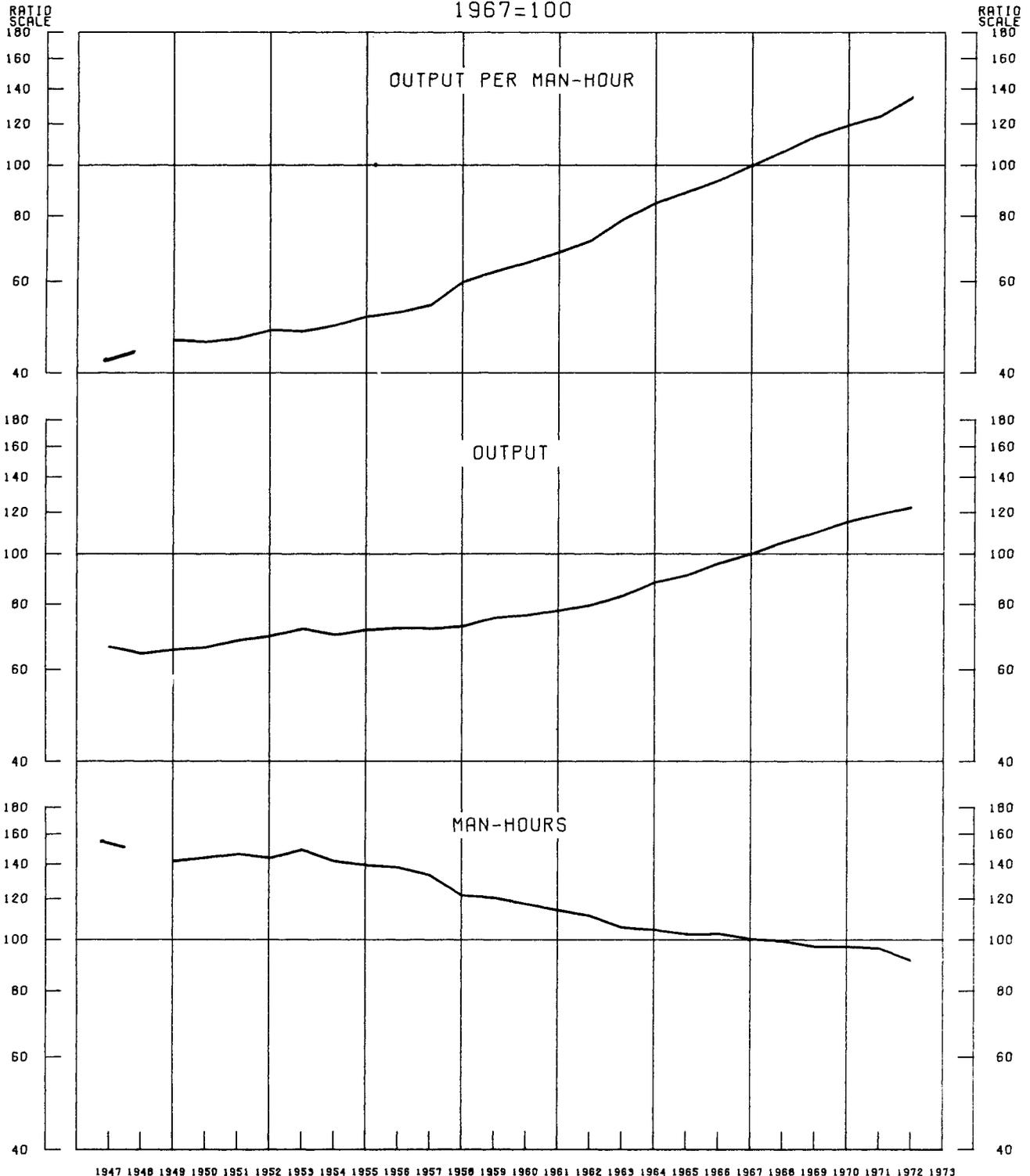
CHART 17
 CANDY AND OTHER CONFECTIONERY PRODUCTS (SIC 2071), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

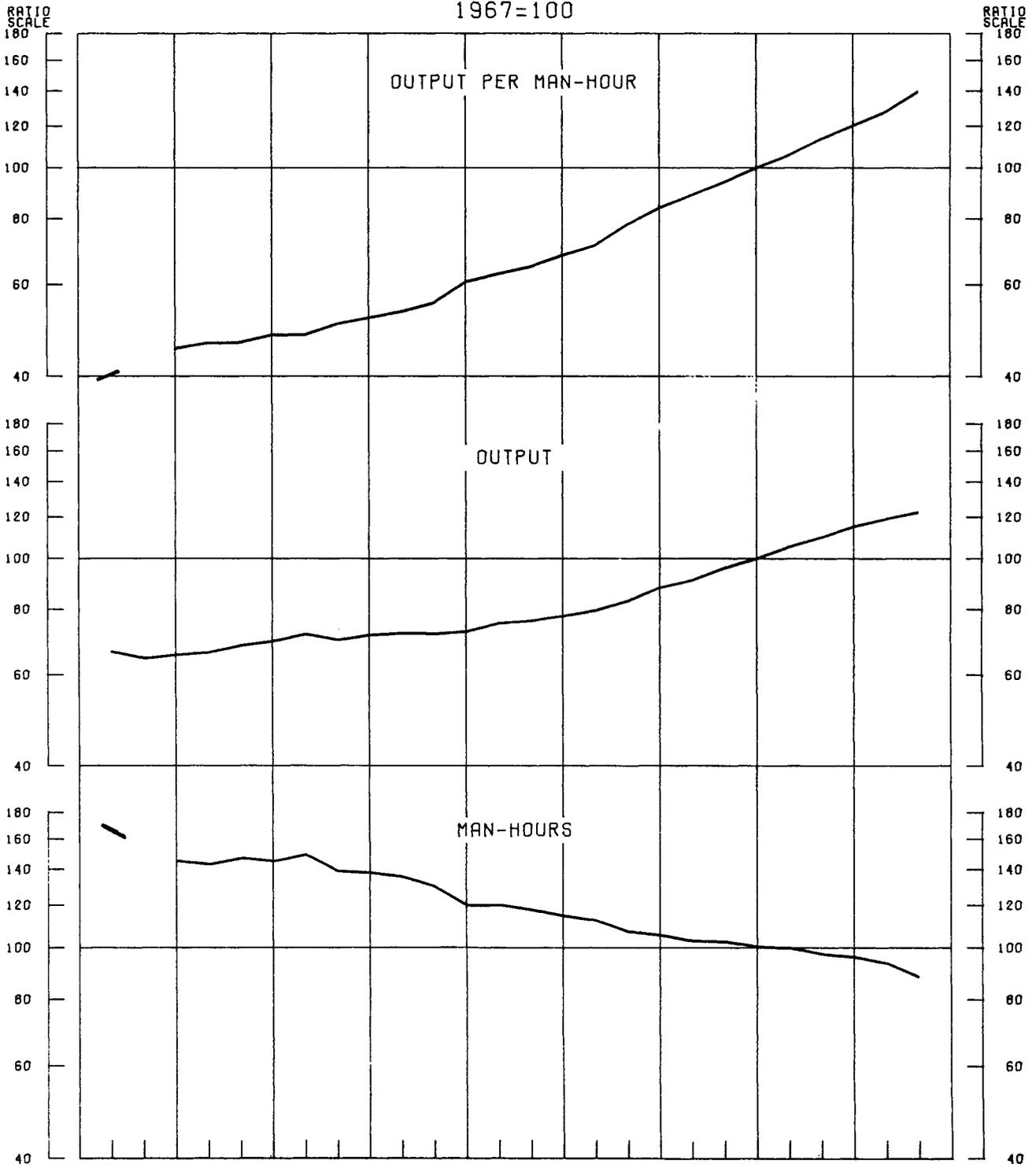
CHART 18
MALT LIQUORS (SIC 2082), 1947-72
OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

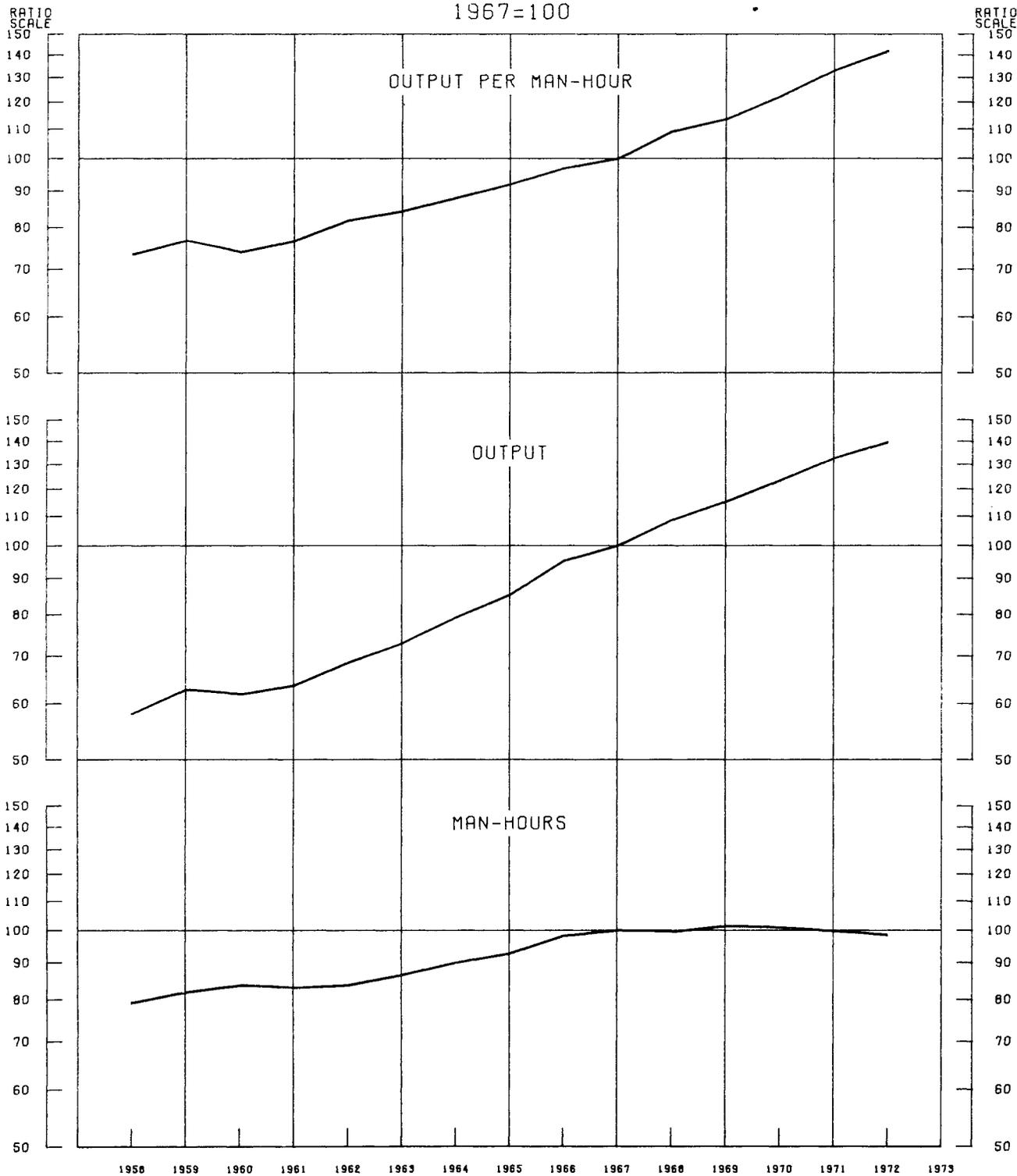
CHART 19
MALT LIQUORS (SIC 2082), 1947-72
OUTPUT PER ,PRODUCTION WORKER MAN-HOUR AND RELATED DATA
1967=100



Note: Where series are not continuous, data are not available.

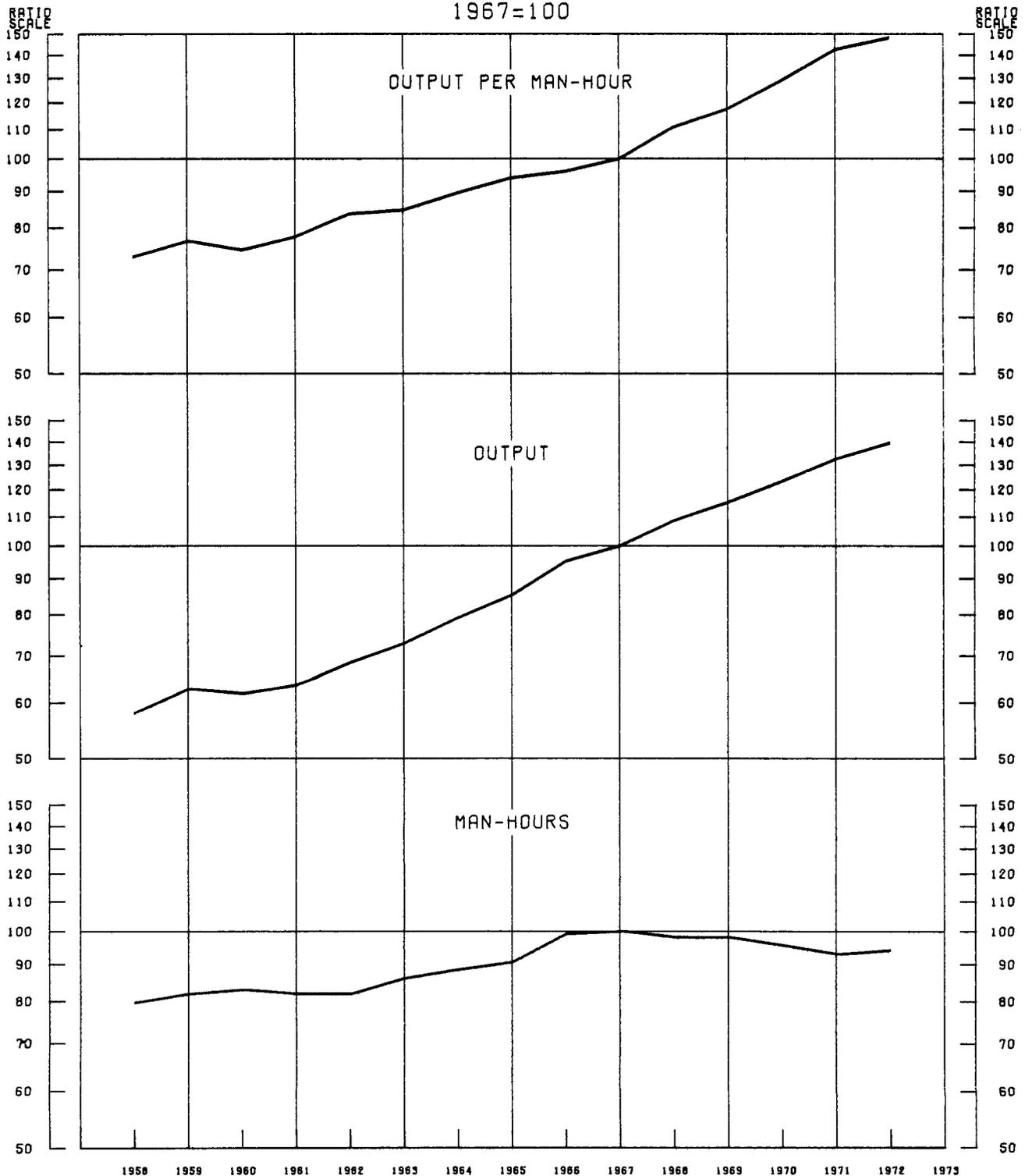
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 20
 BOTTLED AND CANNED SOFT DRINKS (SIC 2086), 1958-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



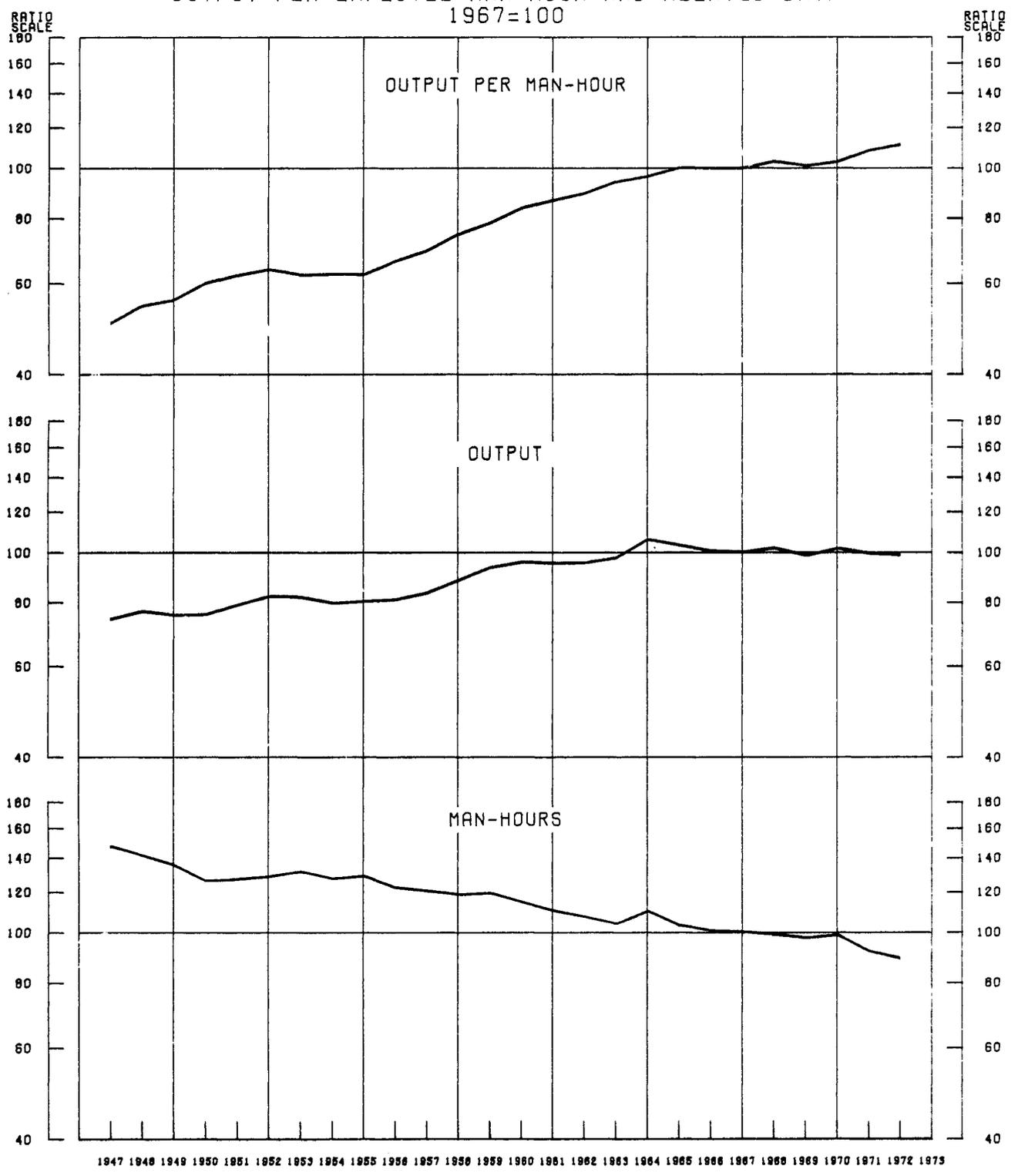
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 21
 BOTTLED AND CANNED SOFT DRINKS (SIC 2086), 1958-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



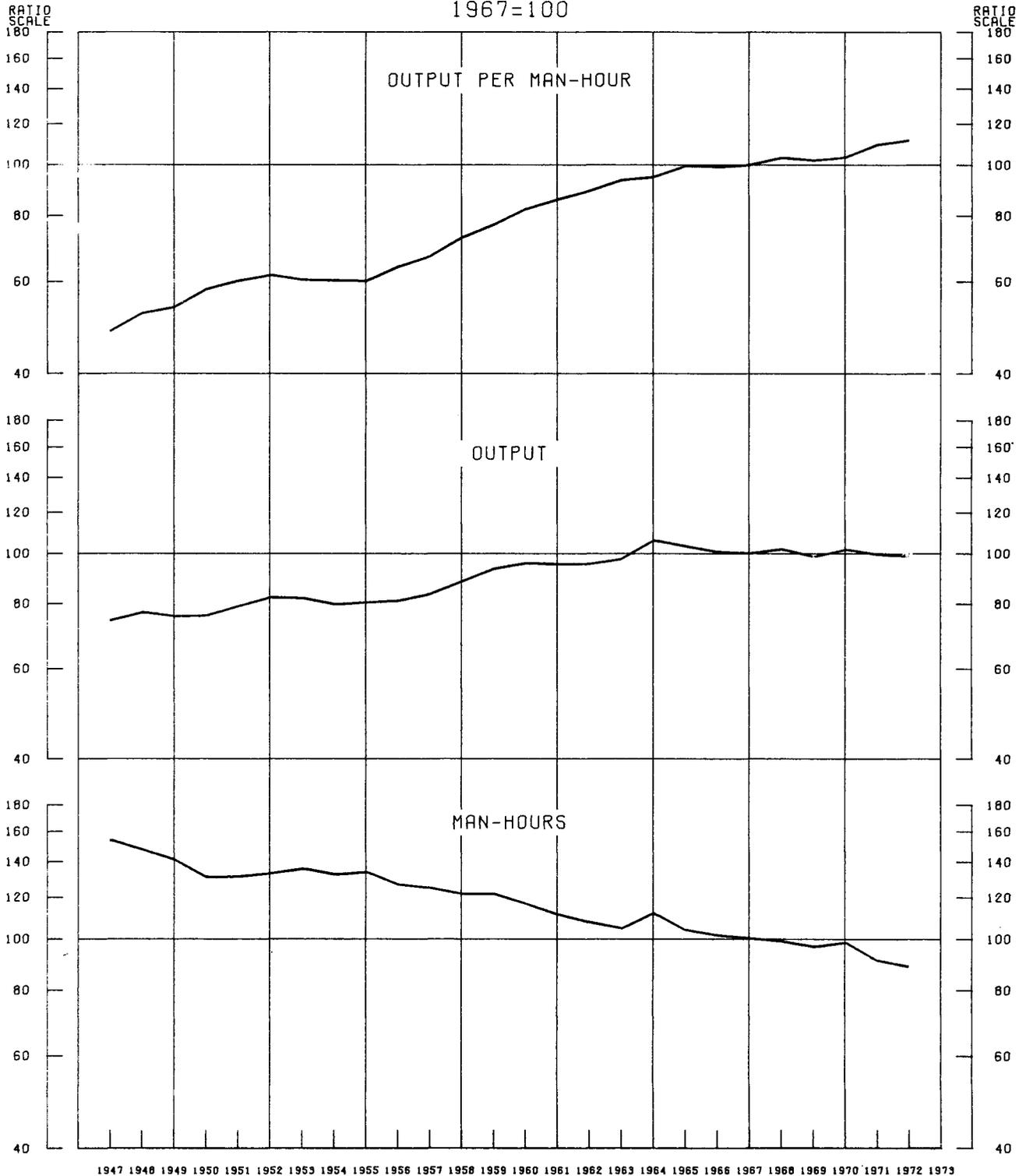
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 22
 TOBACCO PRODUCTS-TOTAL (SIC 211, 212, 213), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



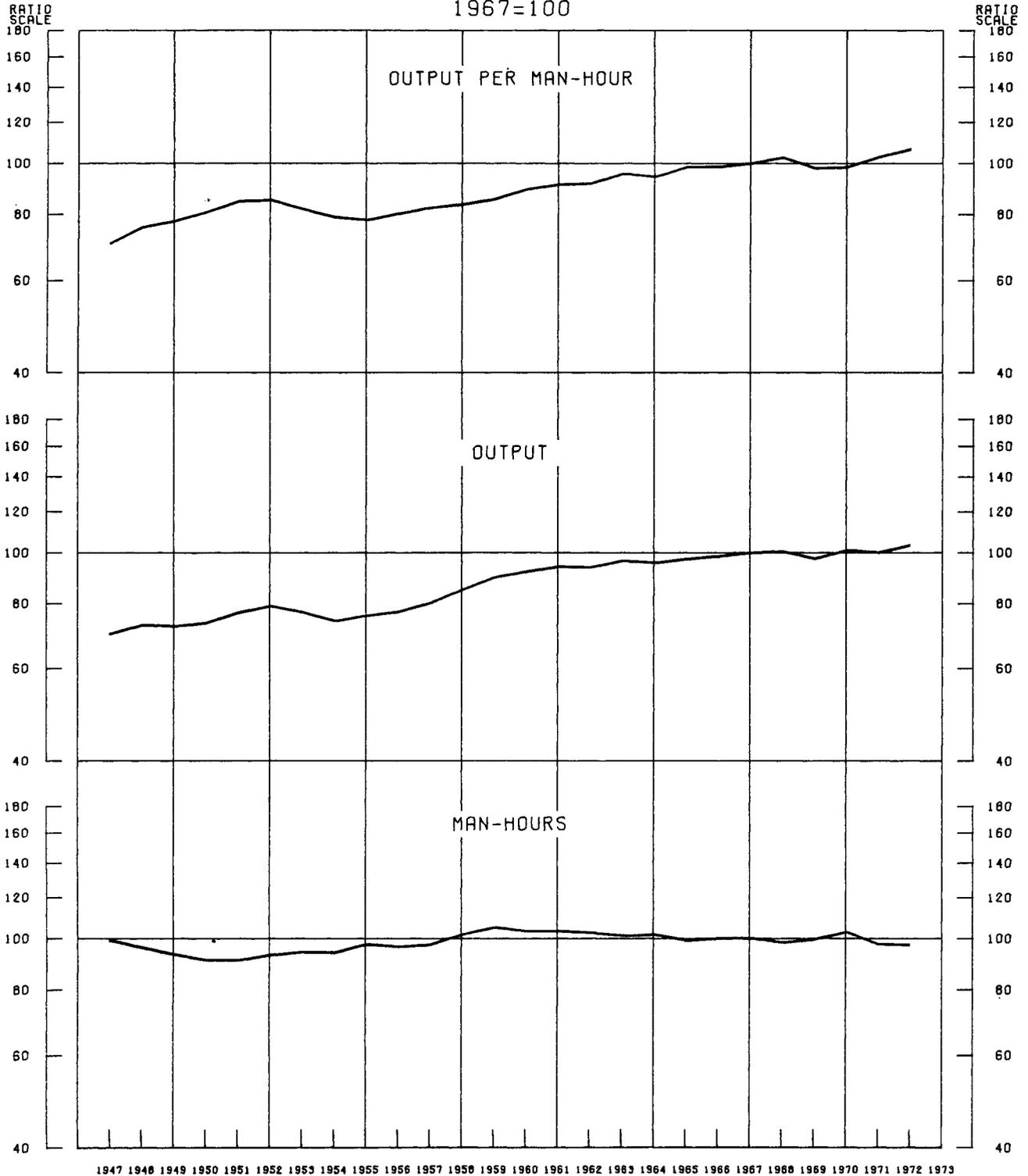
SOURCE-U.S. DEPARTMENT OF LABOR. BUREAU OF LABOR STATISTICS.

CHART 23
 TOBACCO PRODUCTS-TOTAL (SIC 211, 212, 213), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



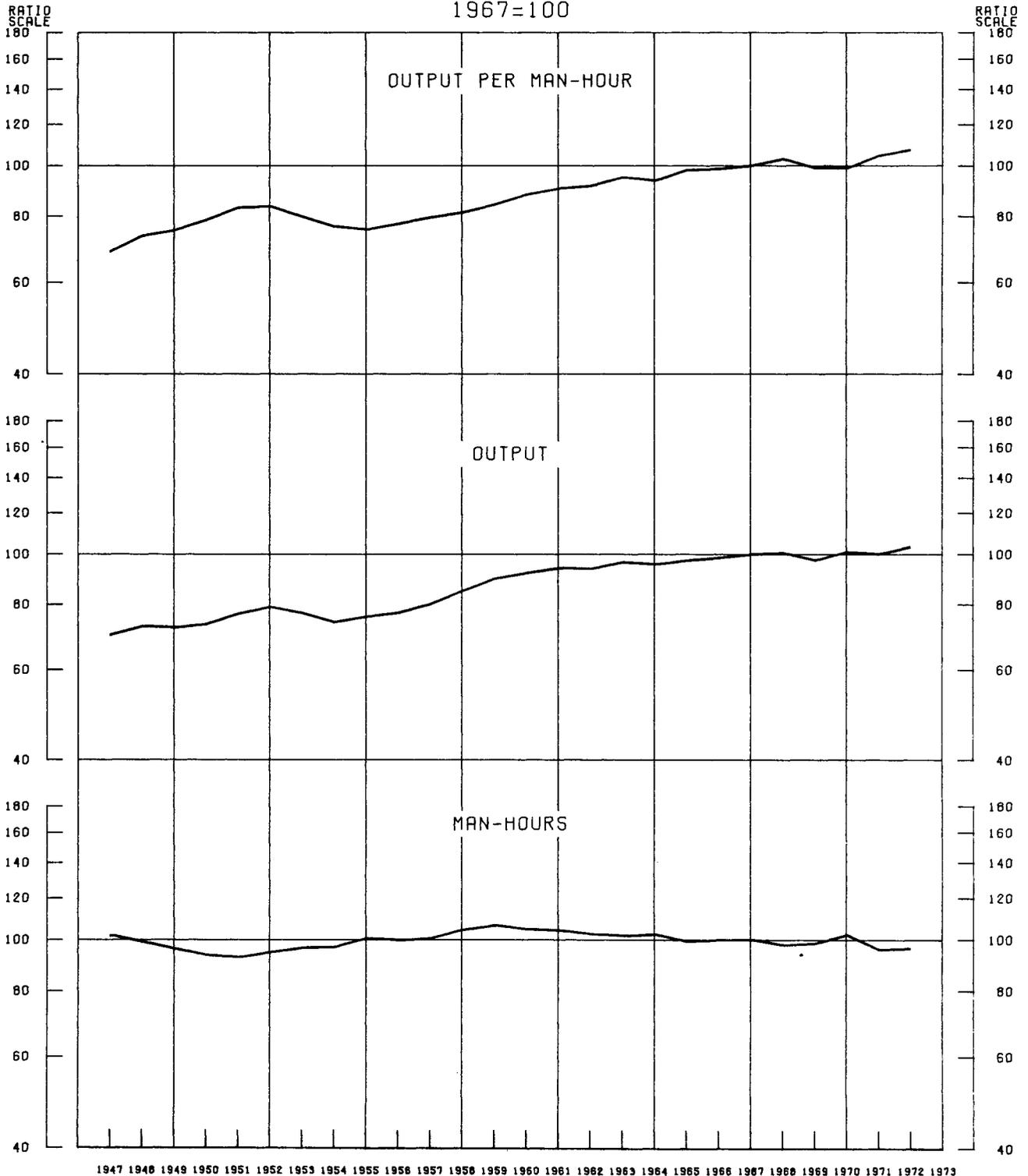
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 24
 CIGARETTES, CHEWING AND SMOKING TOBACCO (SIC 211, 213), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



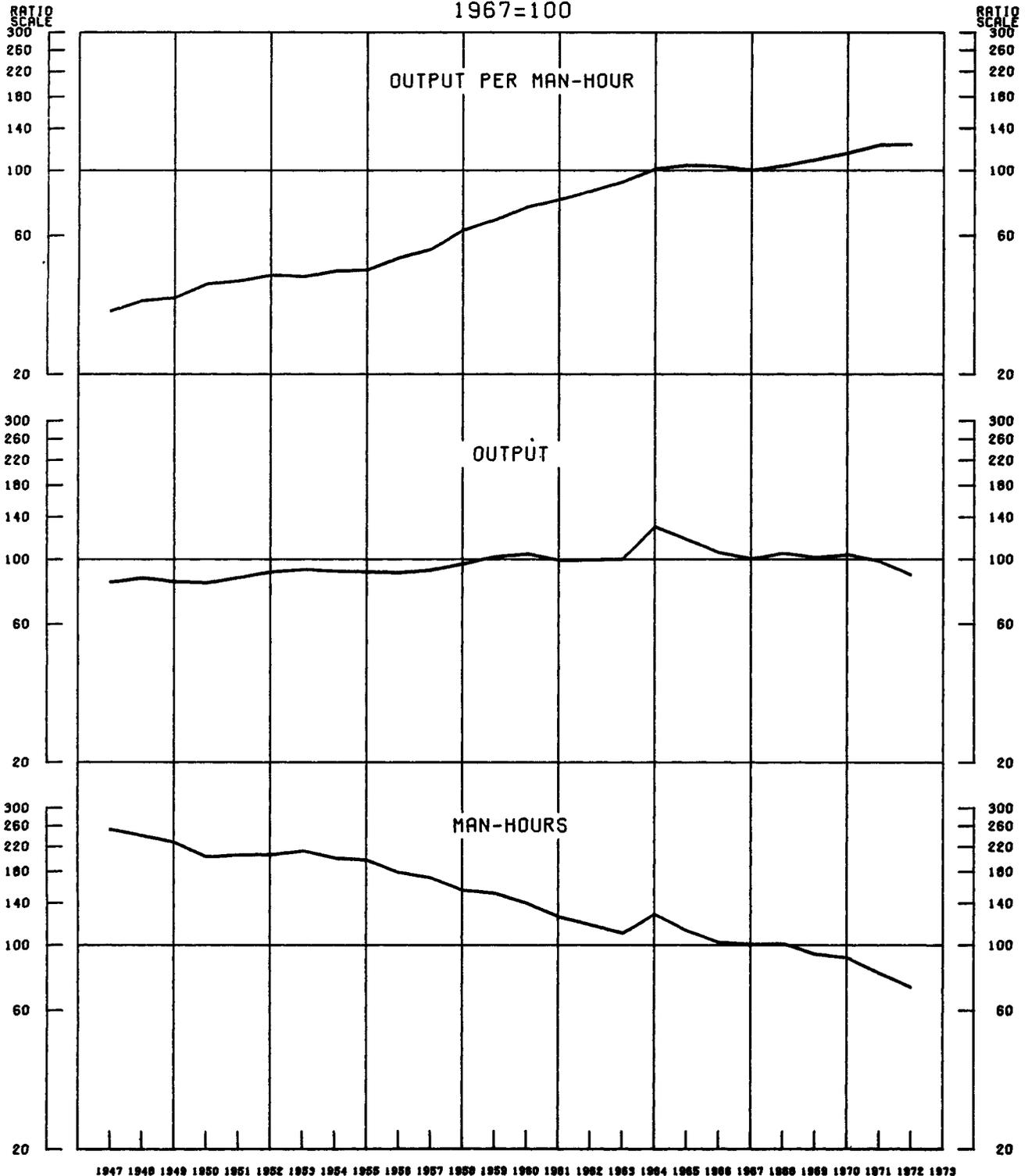
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 25
 CIGARETTES, CHEWING AND SMOKING TOBACCO (SIC 211, 213), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



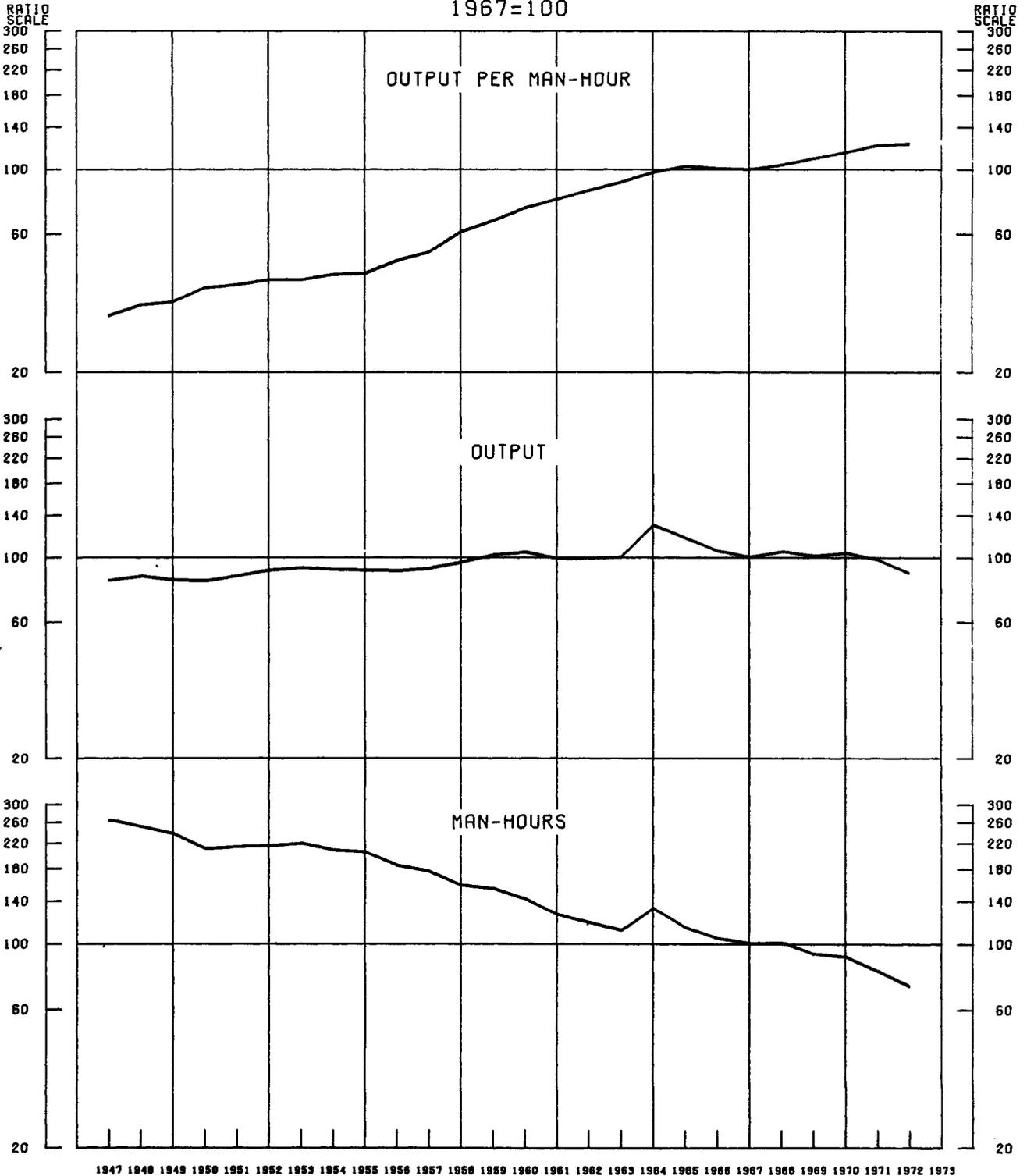
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 26
 CIGARS (SIC 212), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



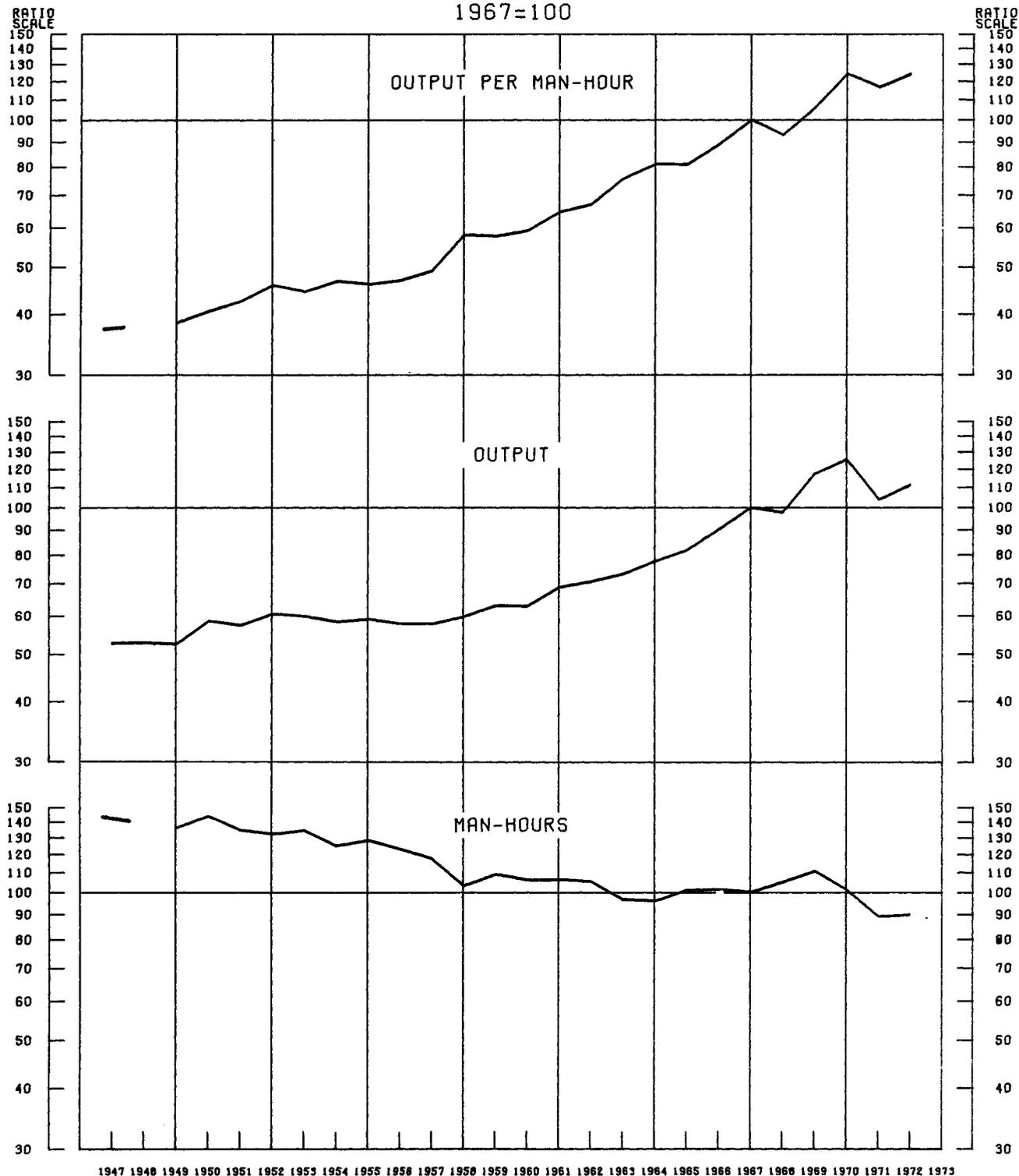
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 27
 CIGARS (SIC 212), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

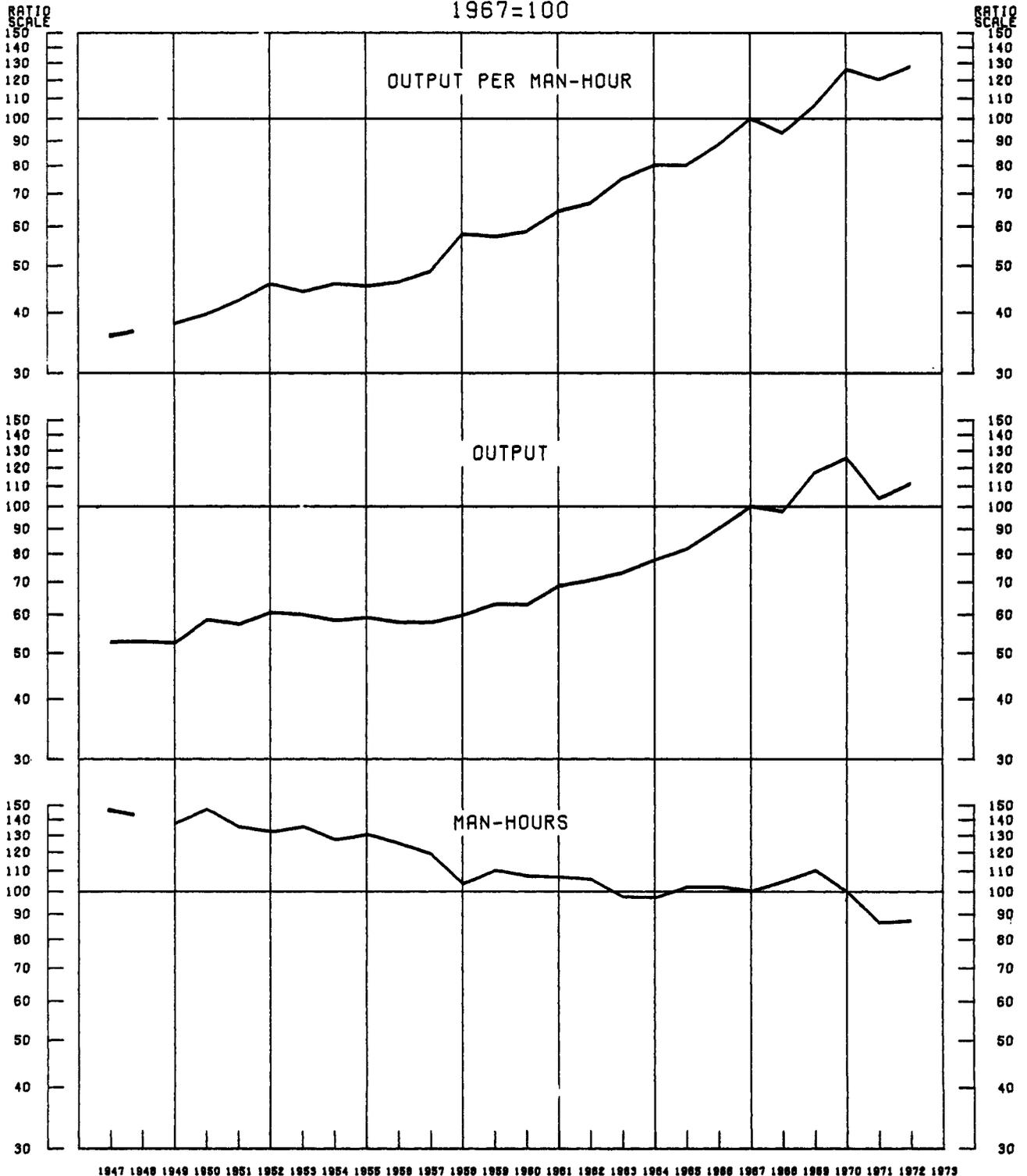
CHART 28
 HOSIERY (SIC 2251, 2252), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

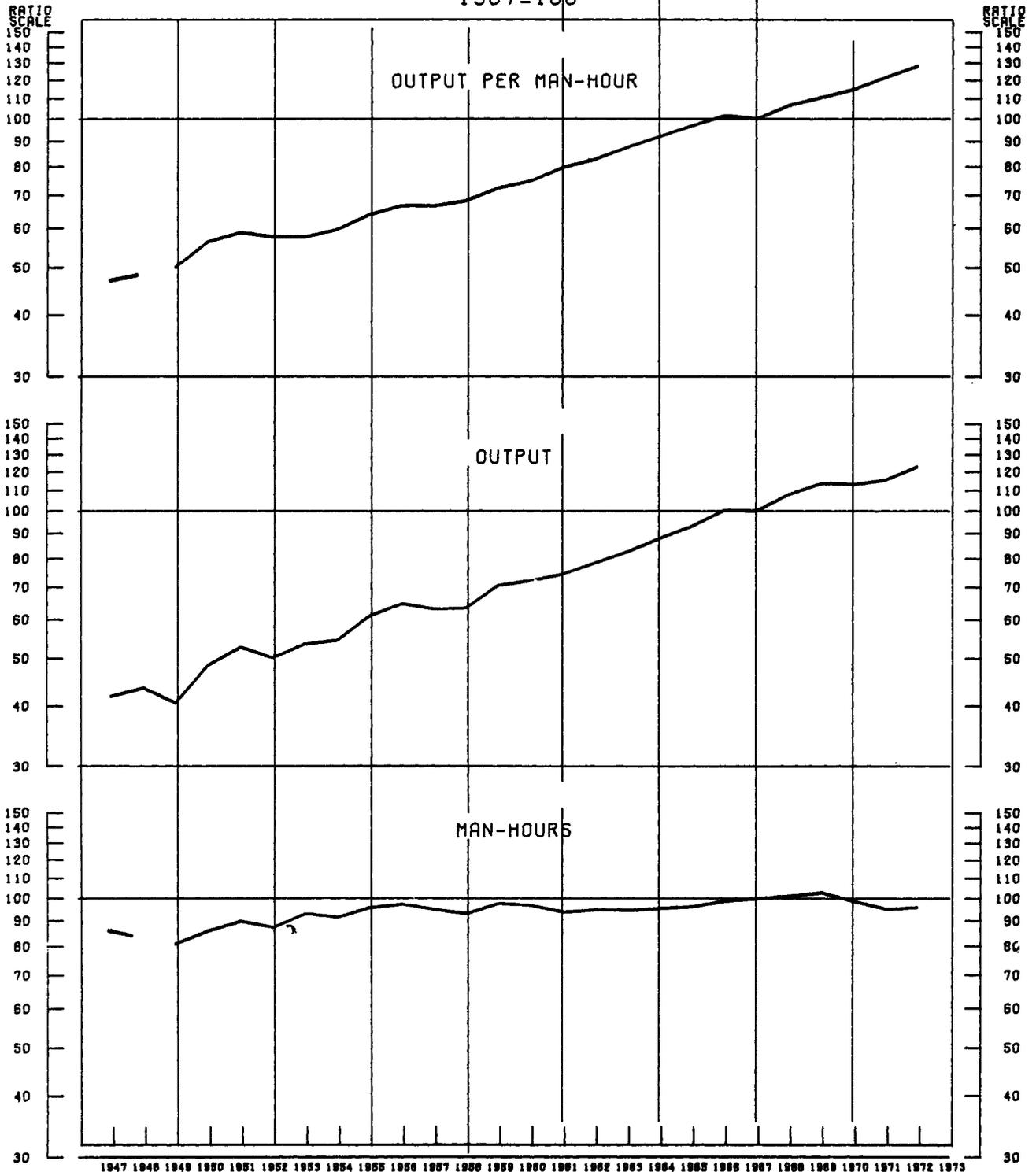
CHART 29
 HOSIERY (SIC 2251, 2252), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

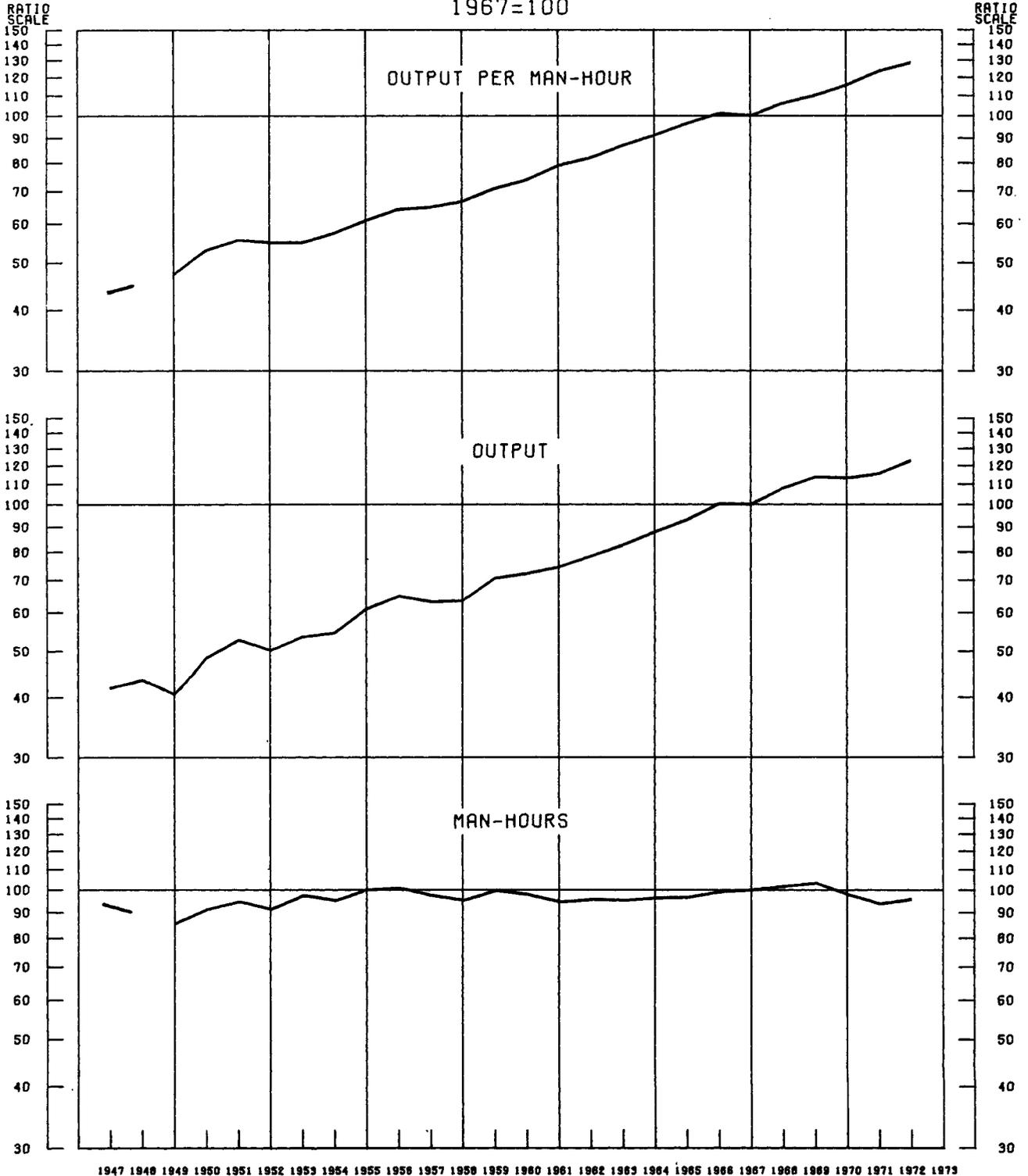
CHART 30
 PAPER, PAPERBOARD AND PULP MILLS (SIC 261, 262, 263, 266), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

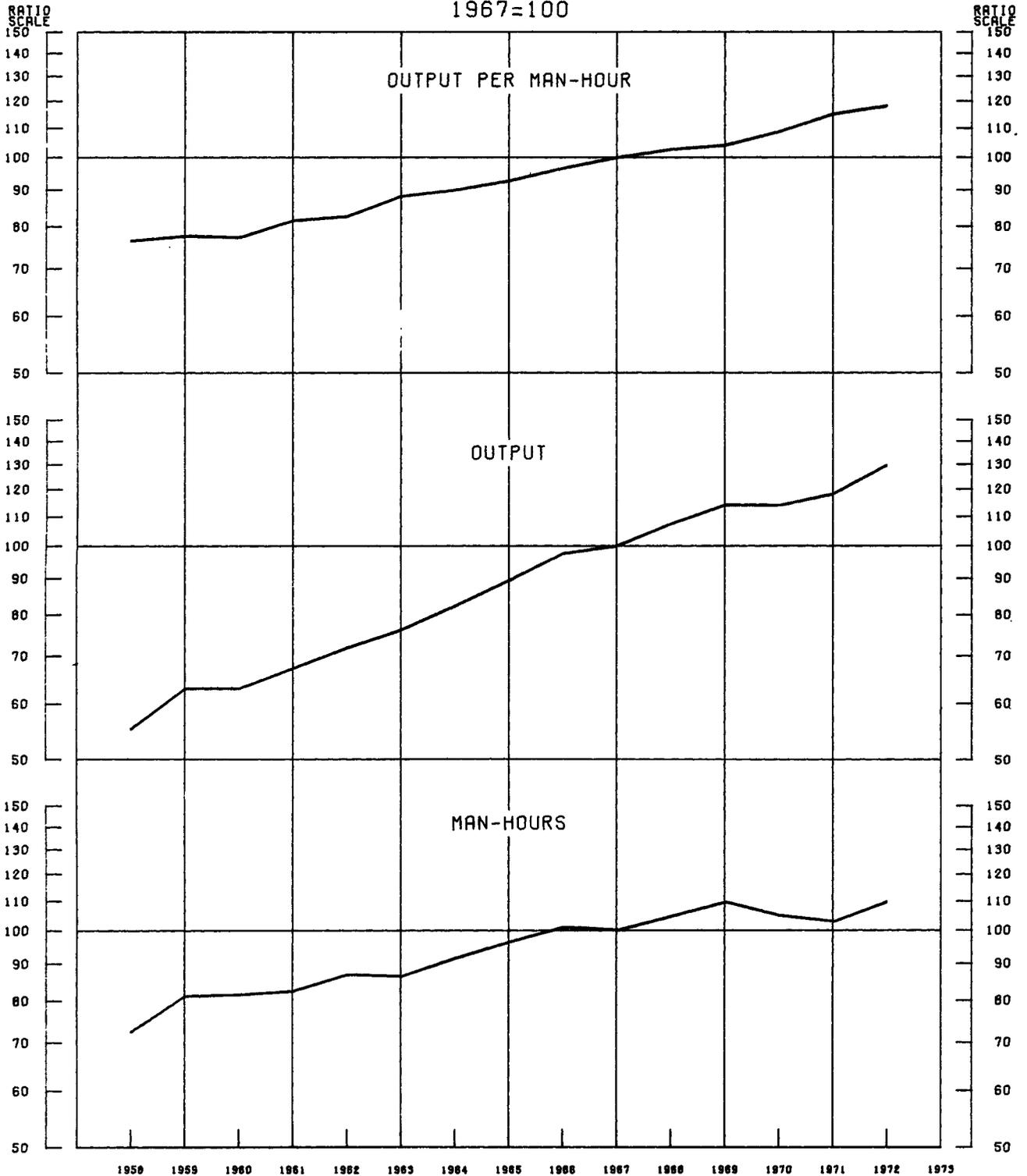
CHART 31
 PAPER, PAPERBOARD AND PULP MILLS (SIC 261, 262, 263, 266), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

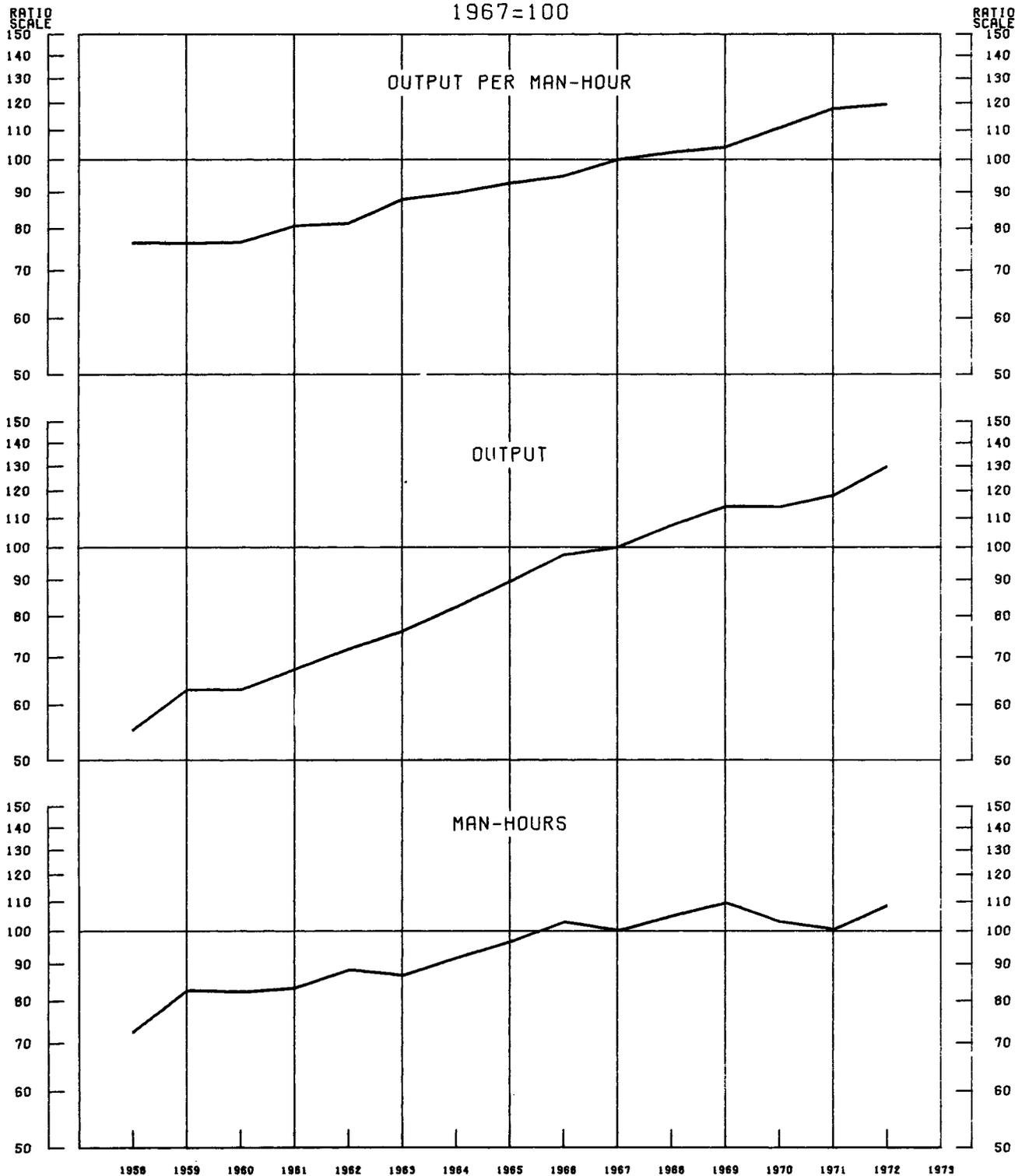
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 32
 CORRUGATED AND SOLID FIBER BOXES (SIC 2653), 1958-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



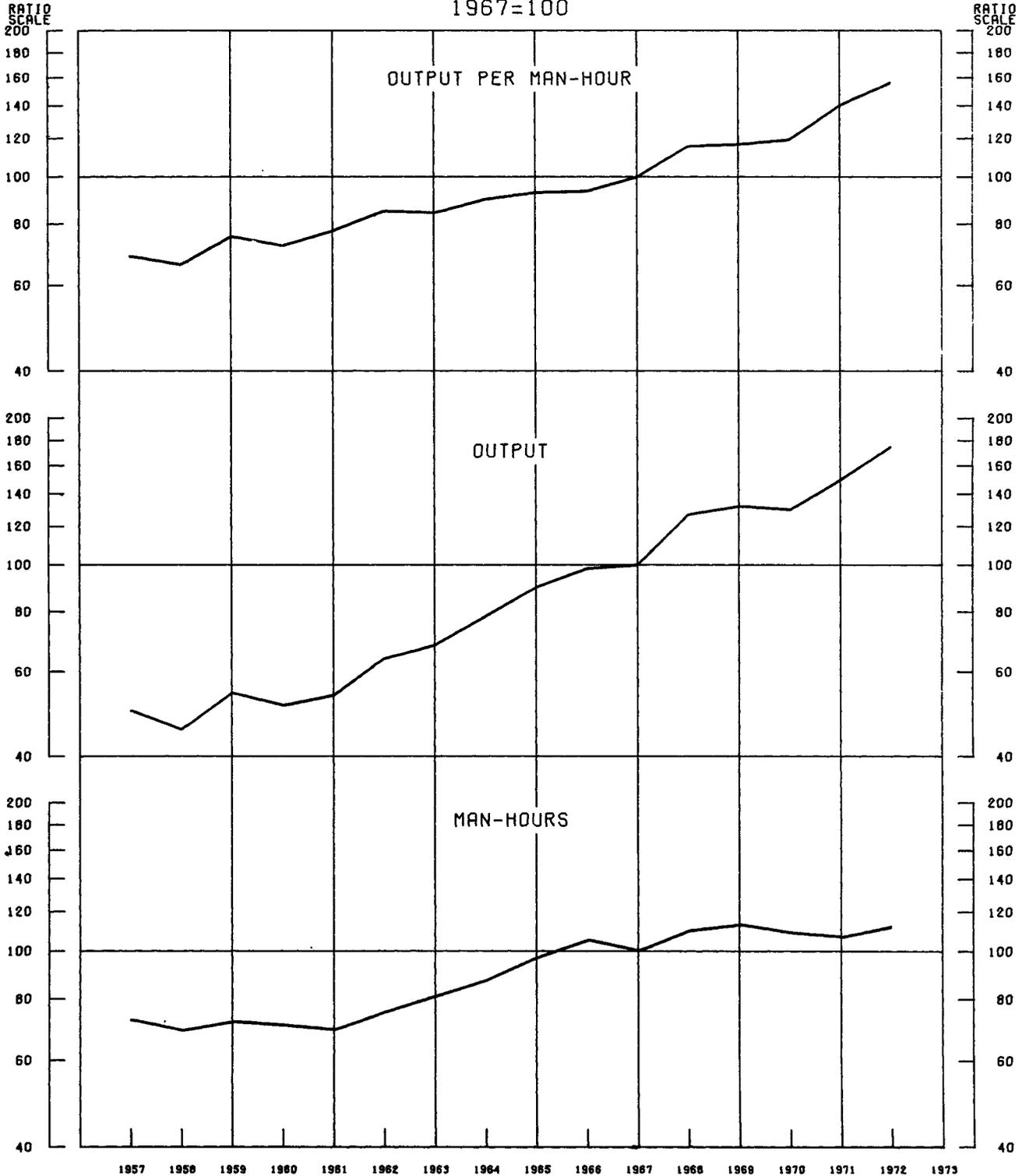
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 33
 CORRUGATED AND SOLID FIBER BOXES (SIC 2653). 1958-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



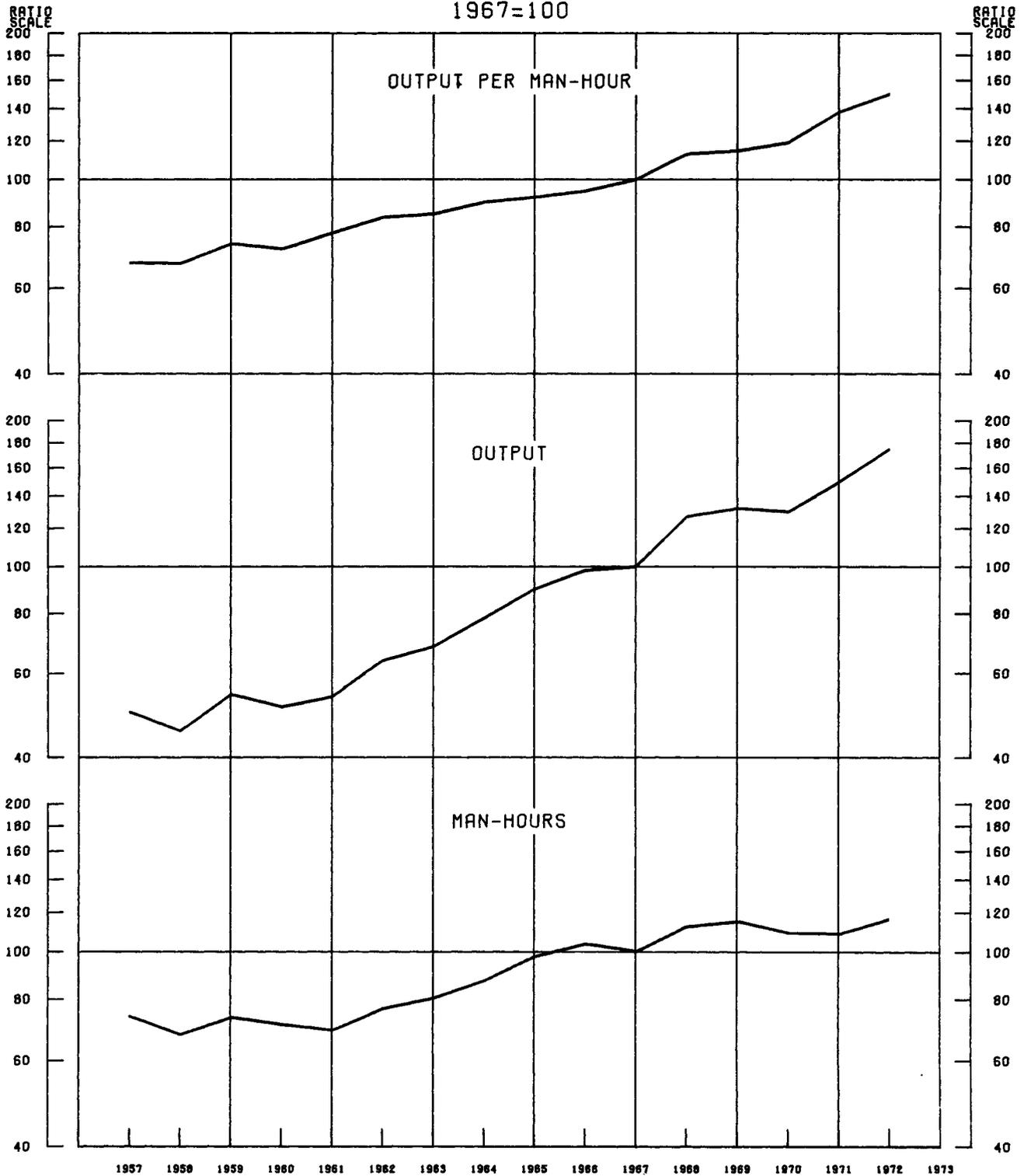
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS

CHART 34
 MAN-MADE FIBERS (SIC 2823, 2824), 1957-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



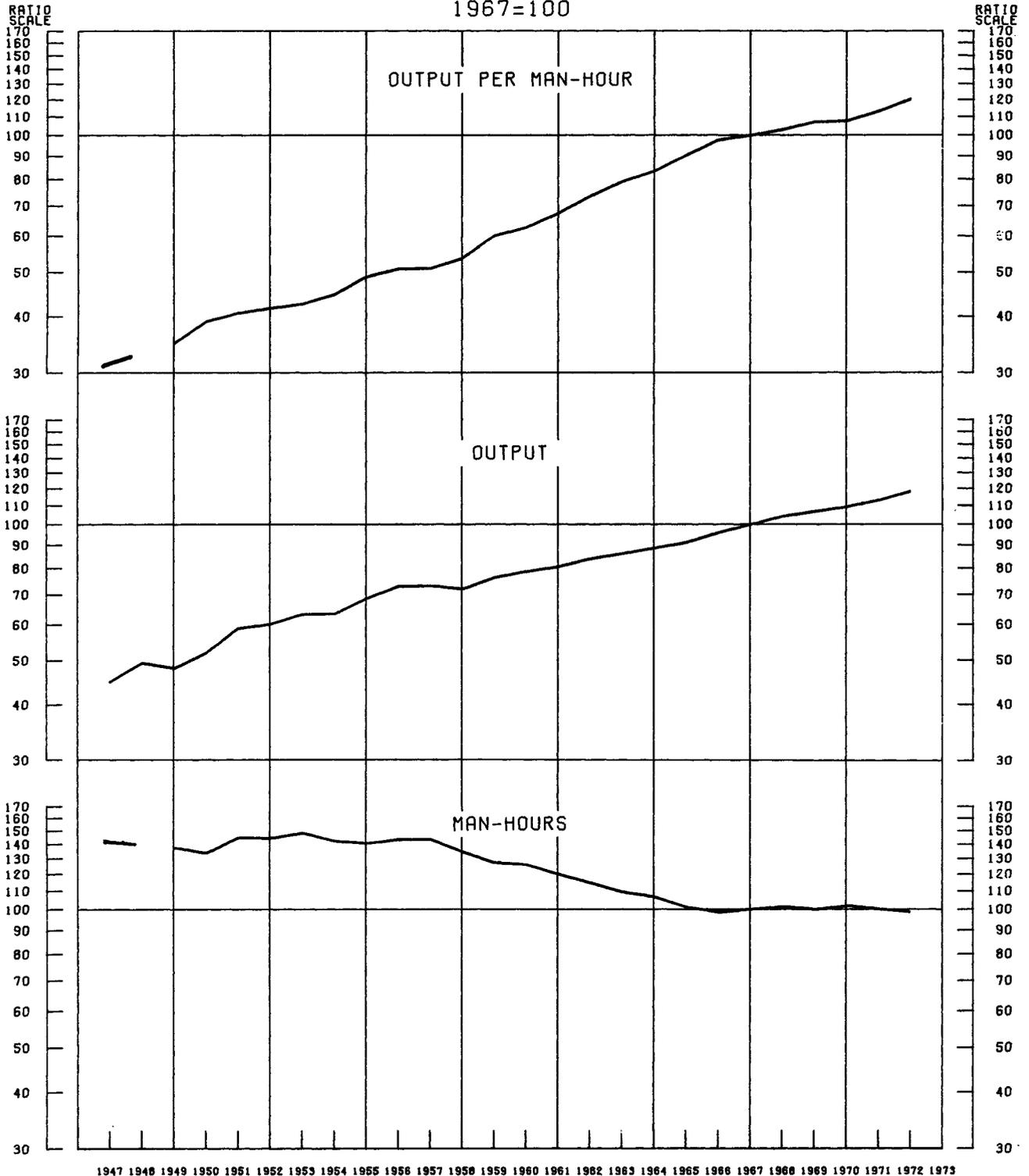
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS

CHART 35
 MAN-MADE FIBERS (SIC 2823, 2824), 1957-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

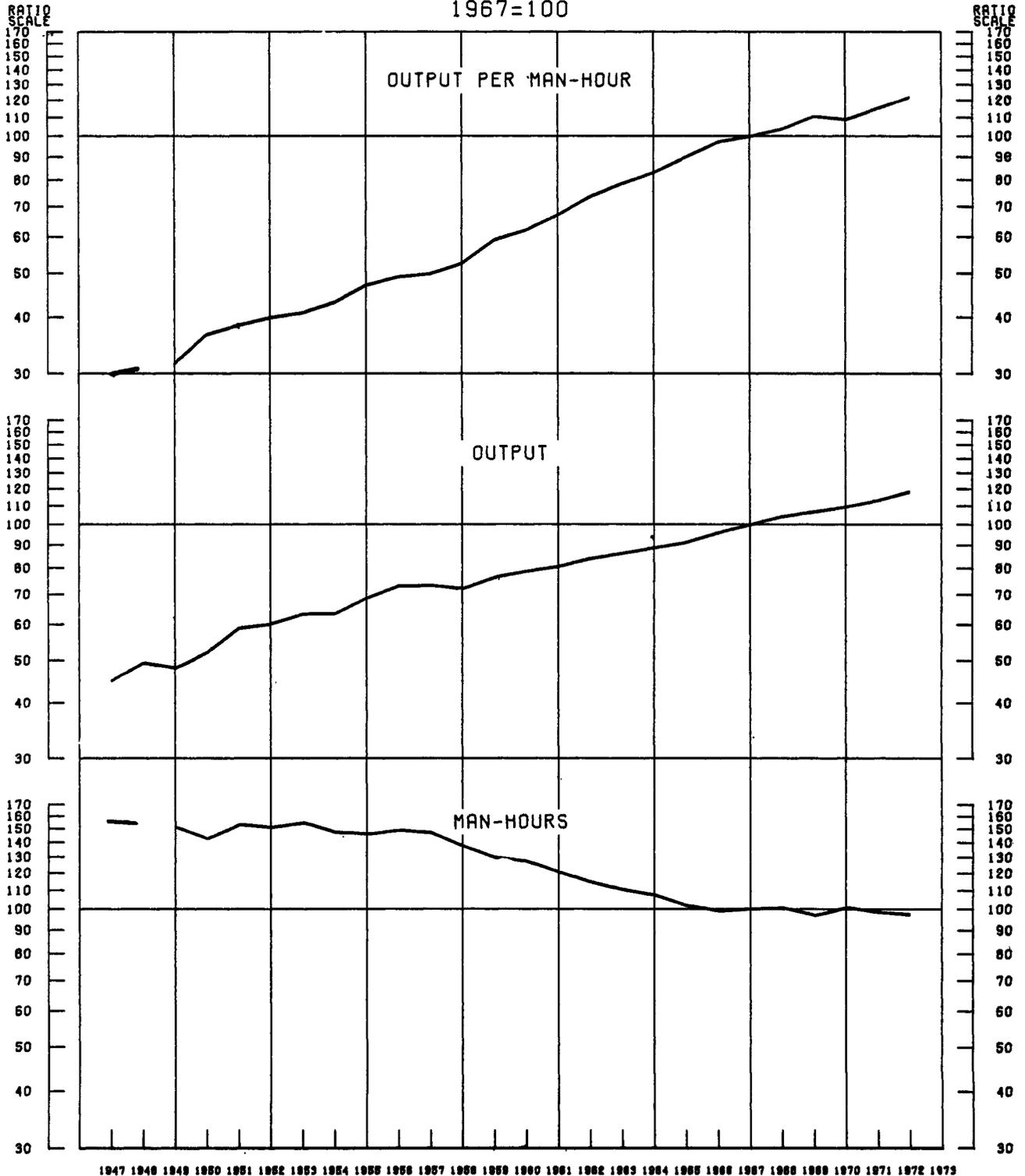
CHART 36
 PETROLEUM REFINING (SIC 291), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

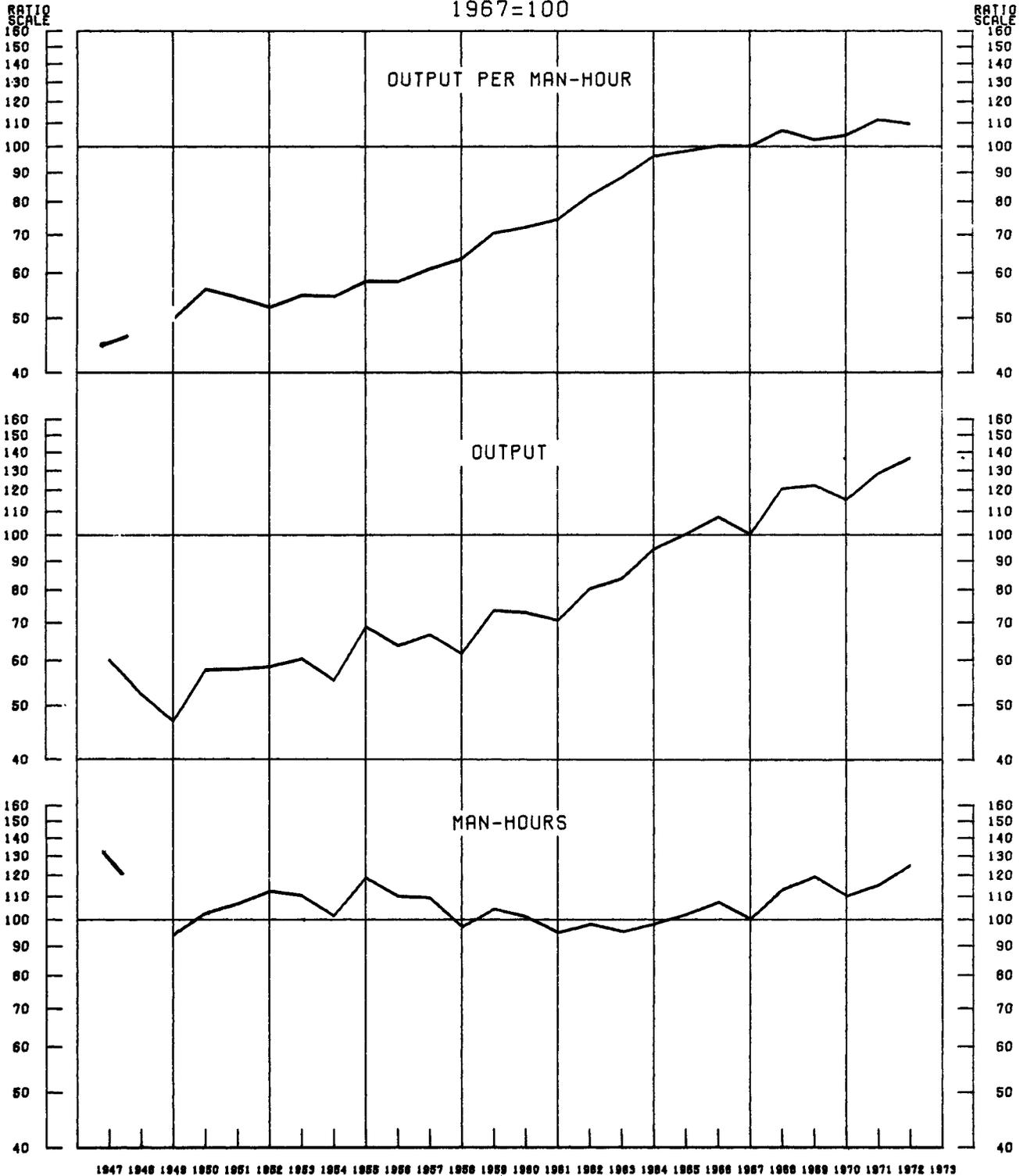
CHART 37
 PETROLEUM REFINING (SIC 291), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 38
 TIRES AND INNER TUBES (SIC 301), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

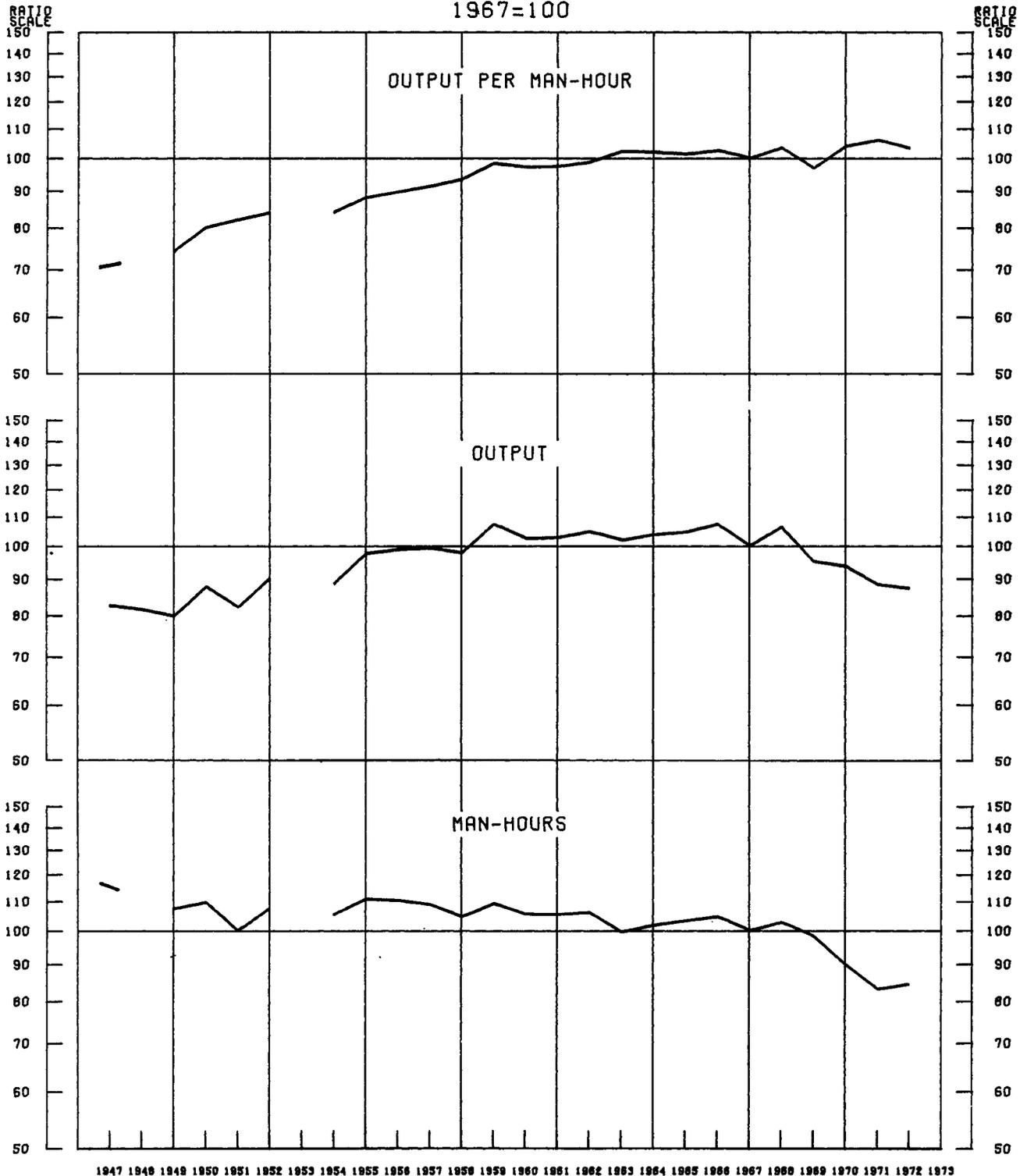
CHART 39
 TIRES AND INNER TUBES (SIC 301), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS

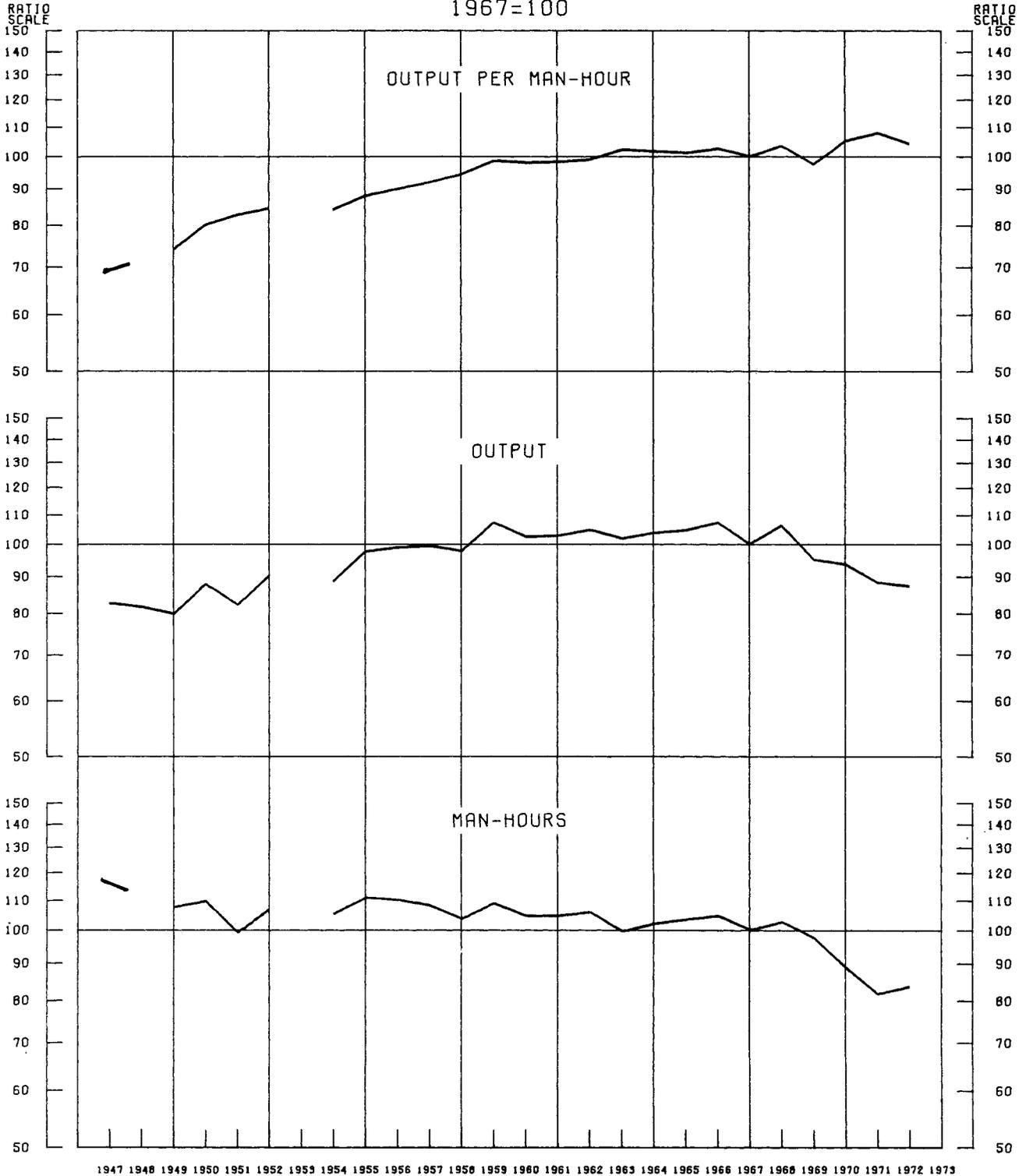
CHART 40
 FOOTWEAR (SIC 314), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 41
 FOOTWEAR (SIC 314), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 42
 GLASS CONTAINERS (SIC 3221), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100

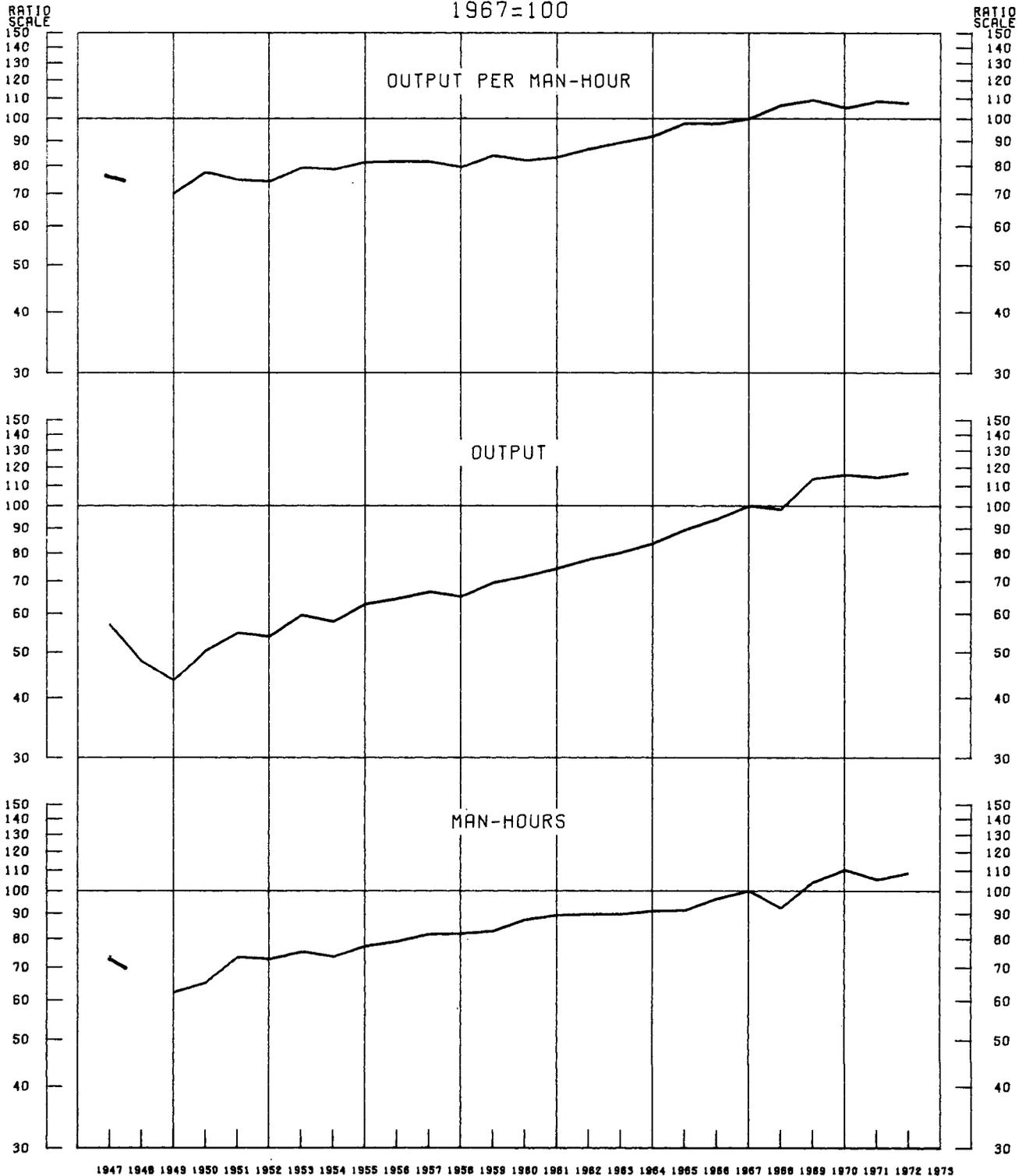


1947 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957 1958 1959 1960 1961 1962 1963 1964 1965 1966 1967 1968 1969 1970 1971 1972 1973

Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

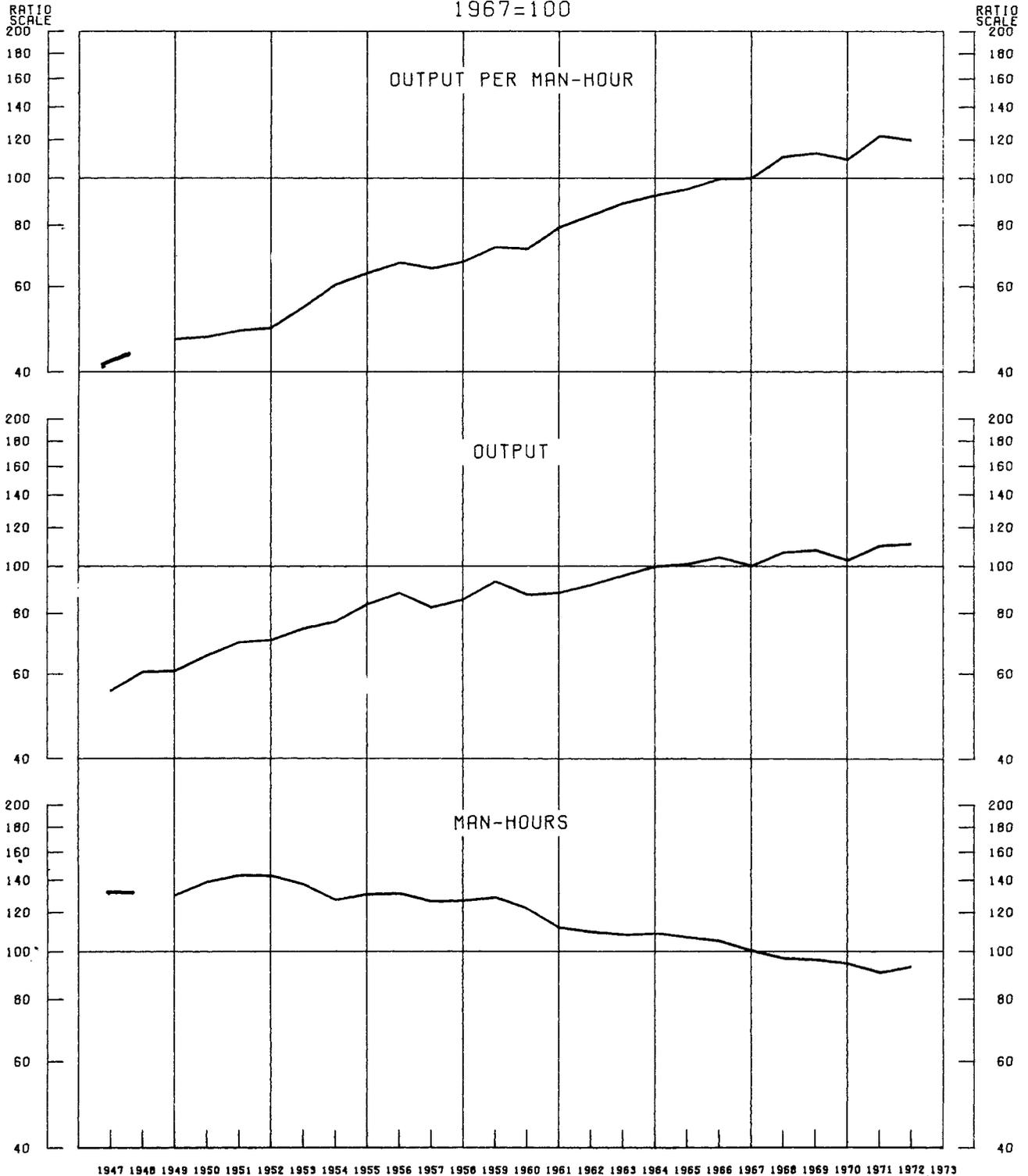
CHART 43
 GLASS CONTAINERS (SIC 3221), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 44
 HYDRAULIC CEMENT (SIC 324), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

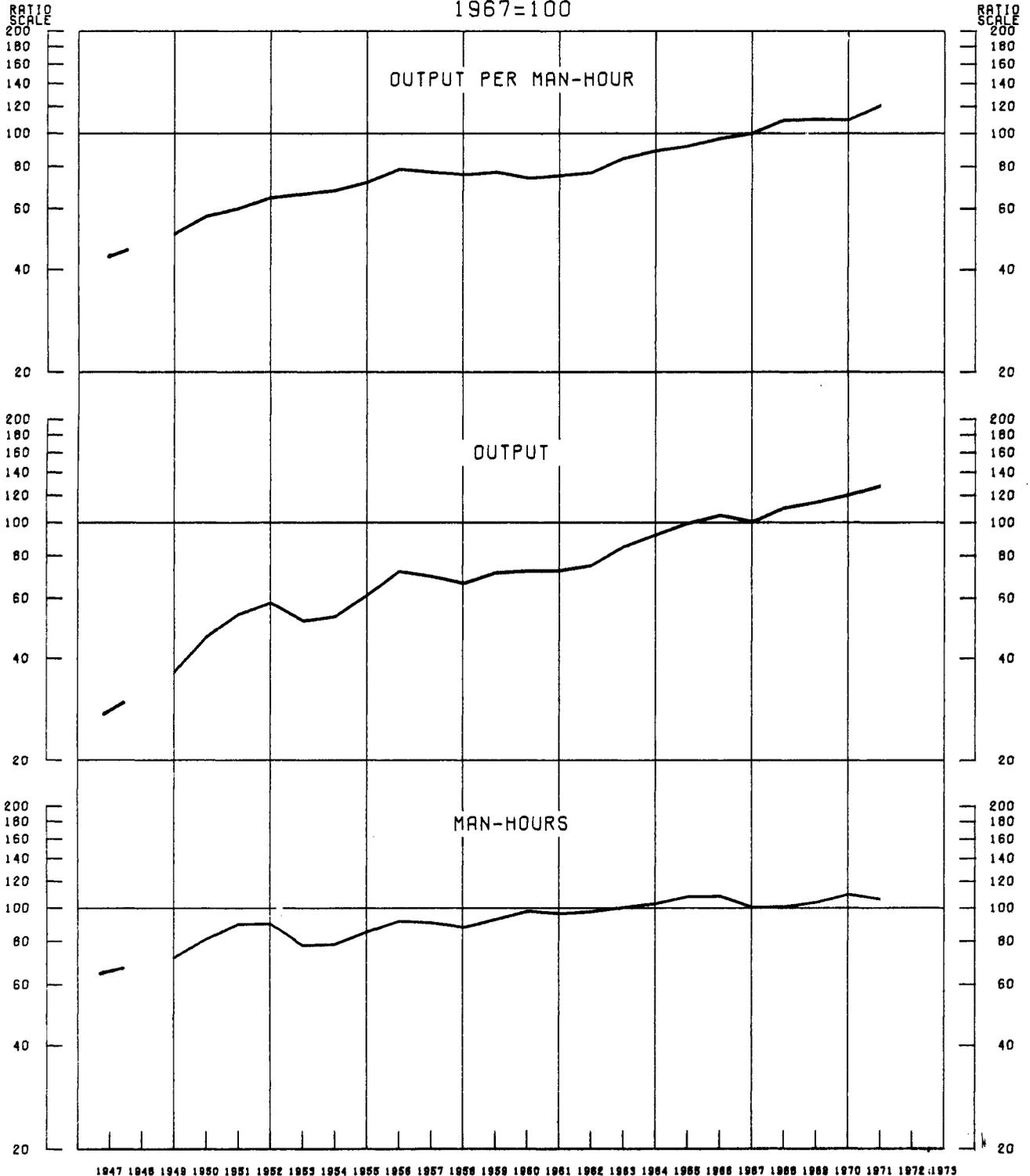
CHART 45
 HYDRAULIC CEMENT (SIC 324), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

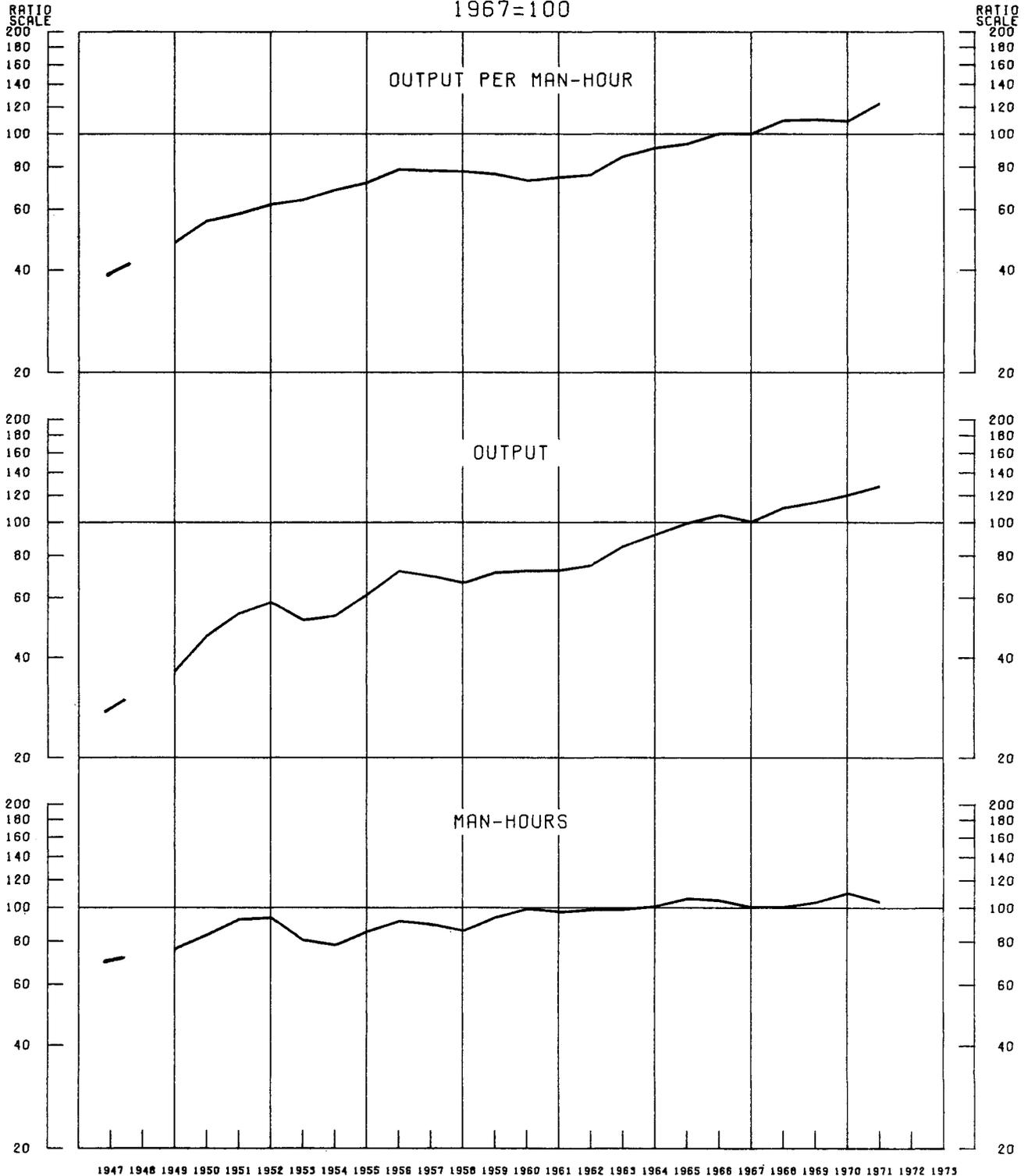
CHART 46
 CONCRETE PRODUCTS (SIC 3271, 3272), 1947-71
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, date are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

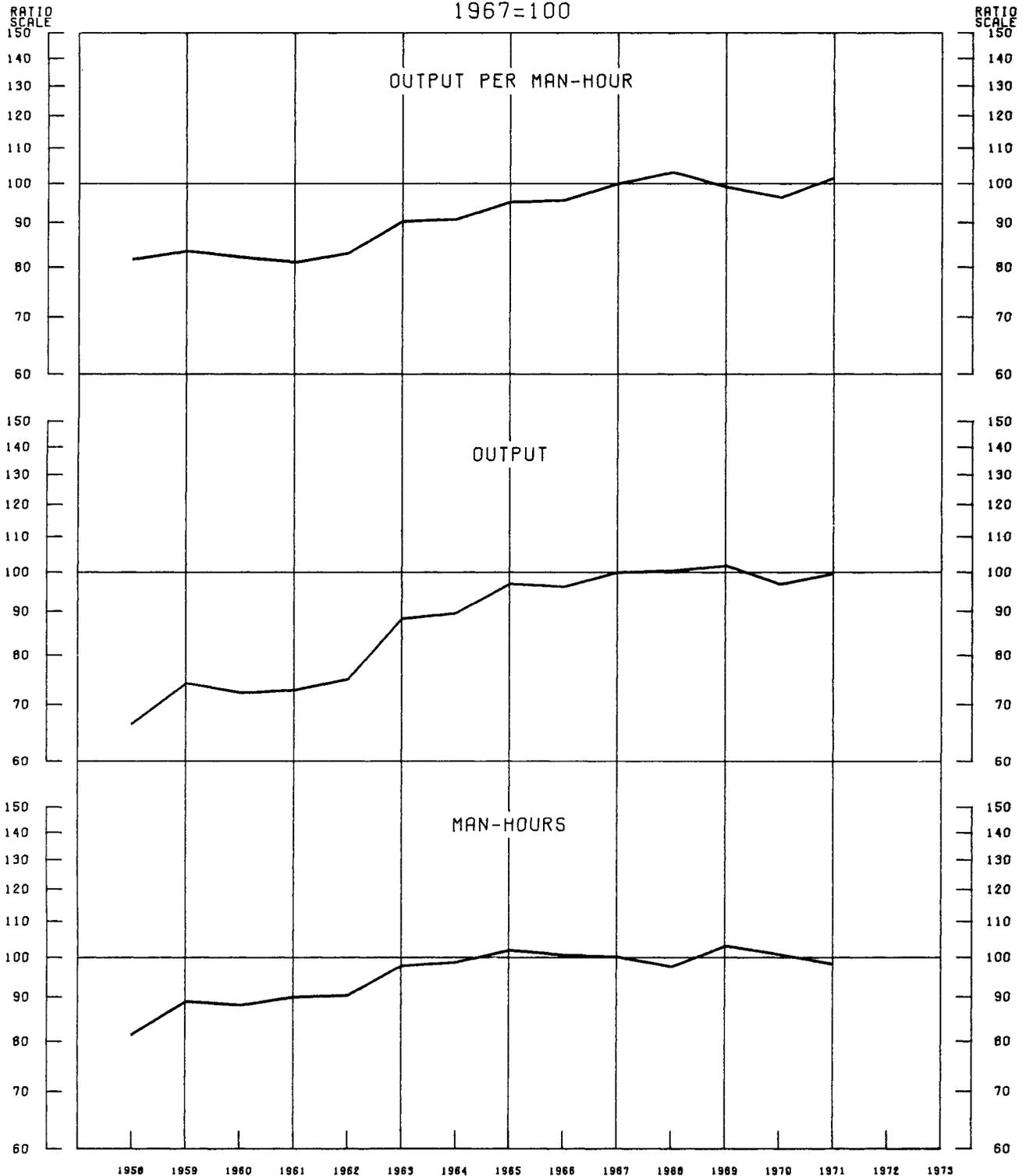
CHART 47
 CONCRETE PRODUCTS (SIC 3271, 3272), 1947-71
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

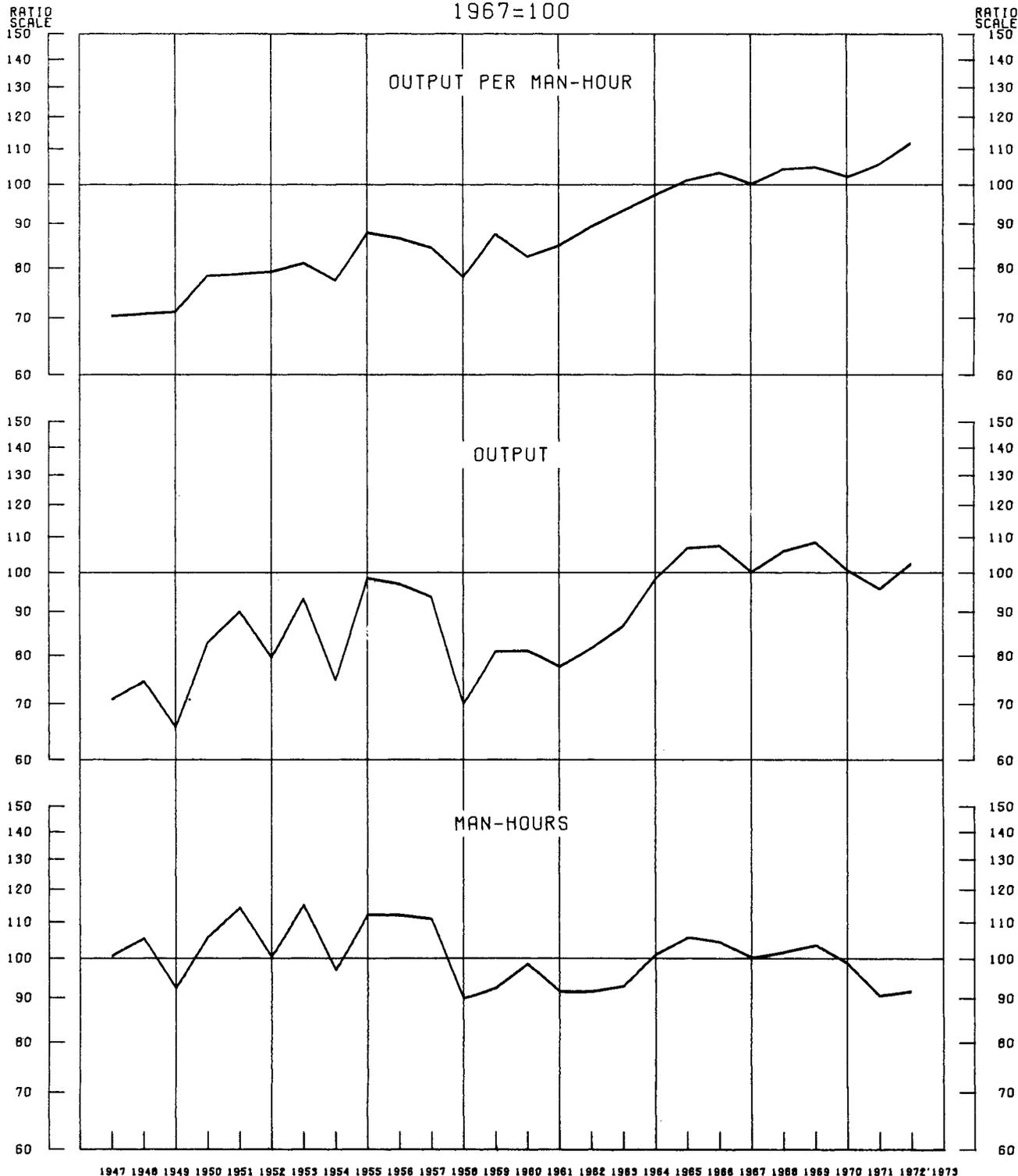
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 48
 READY-MIXED CONCRETE (SIC 3273), 1958-71
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



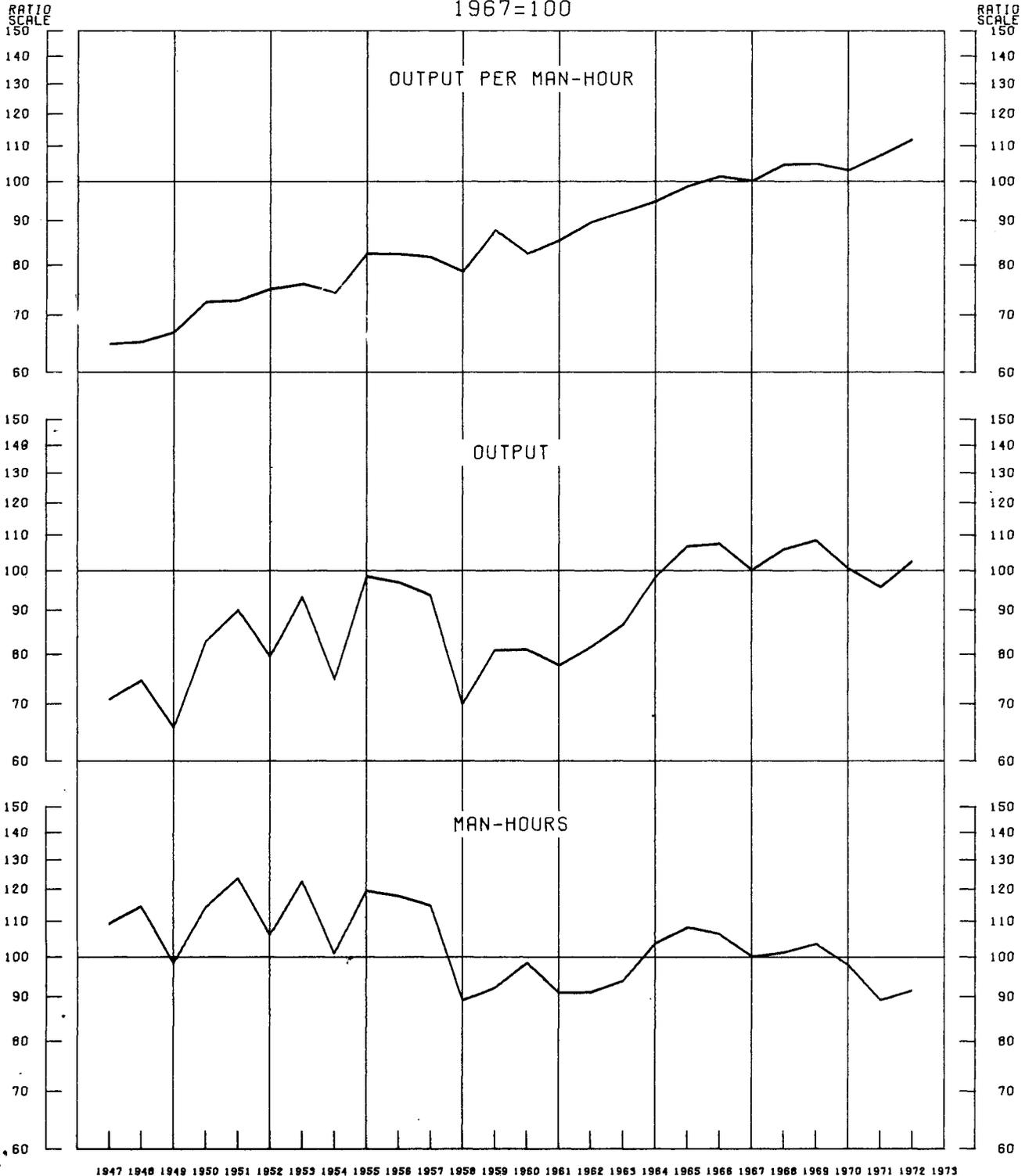
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 49
 STEEL (SIC 331), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



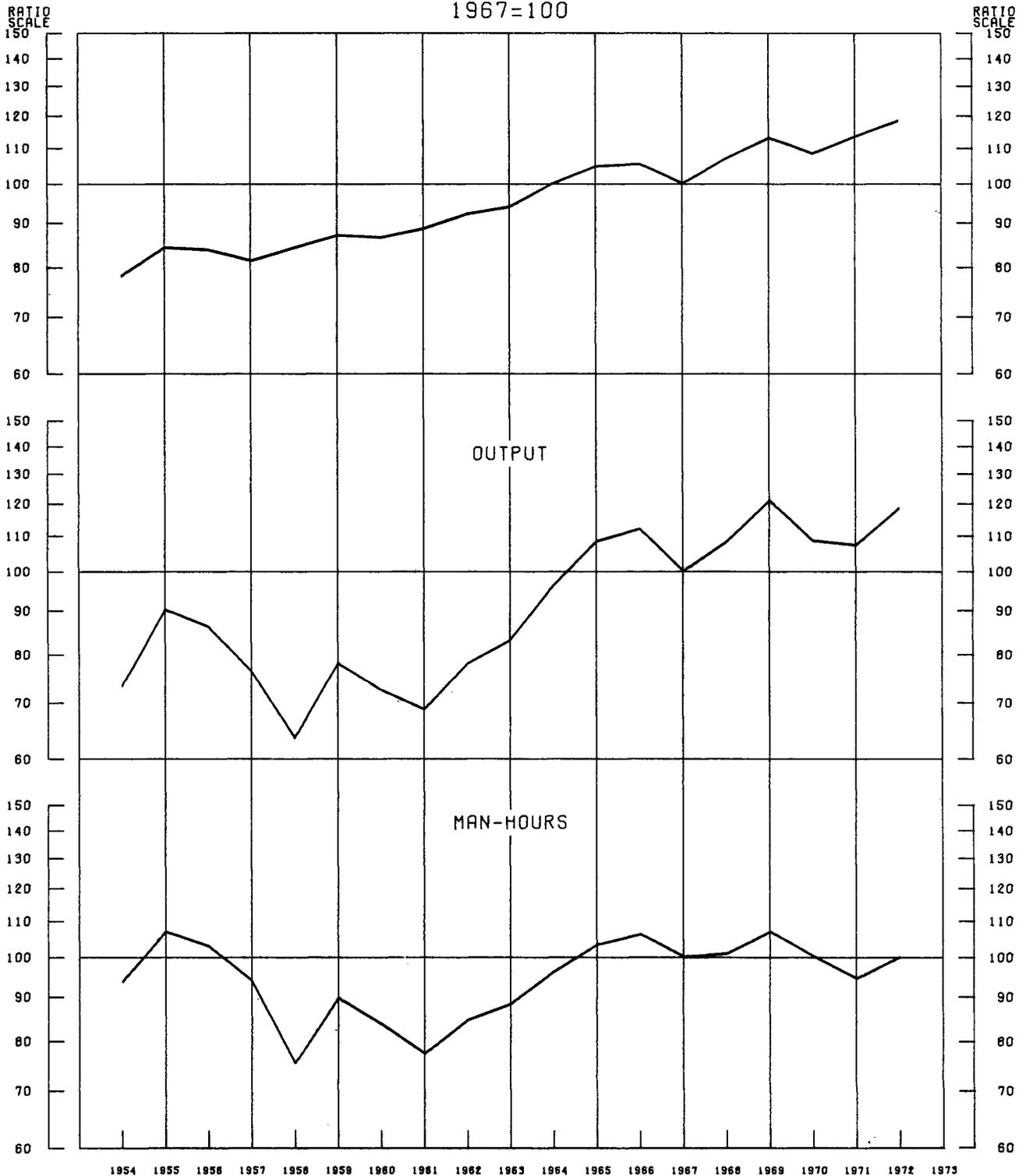
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 50
 STEEL (SIC 331), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



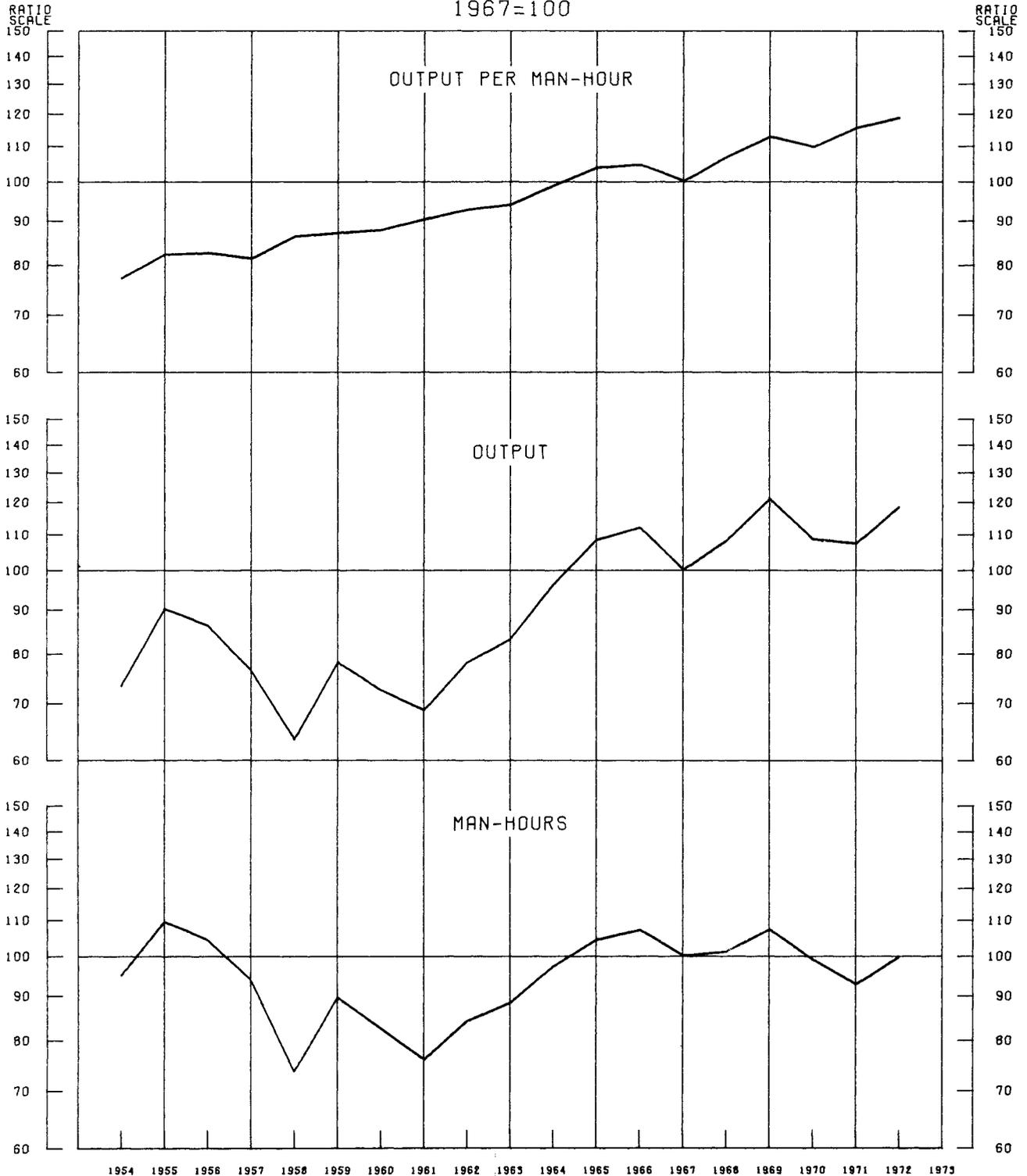
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 51
 GRAY IRON FOUNDRIES (SIC 3321), 1954-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



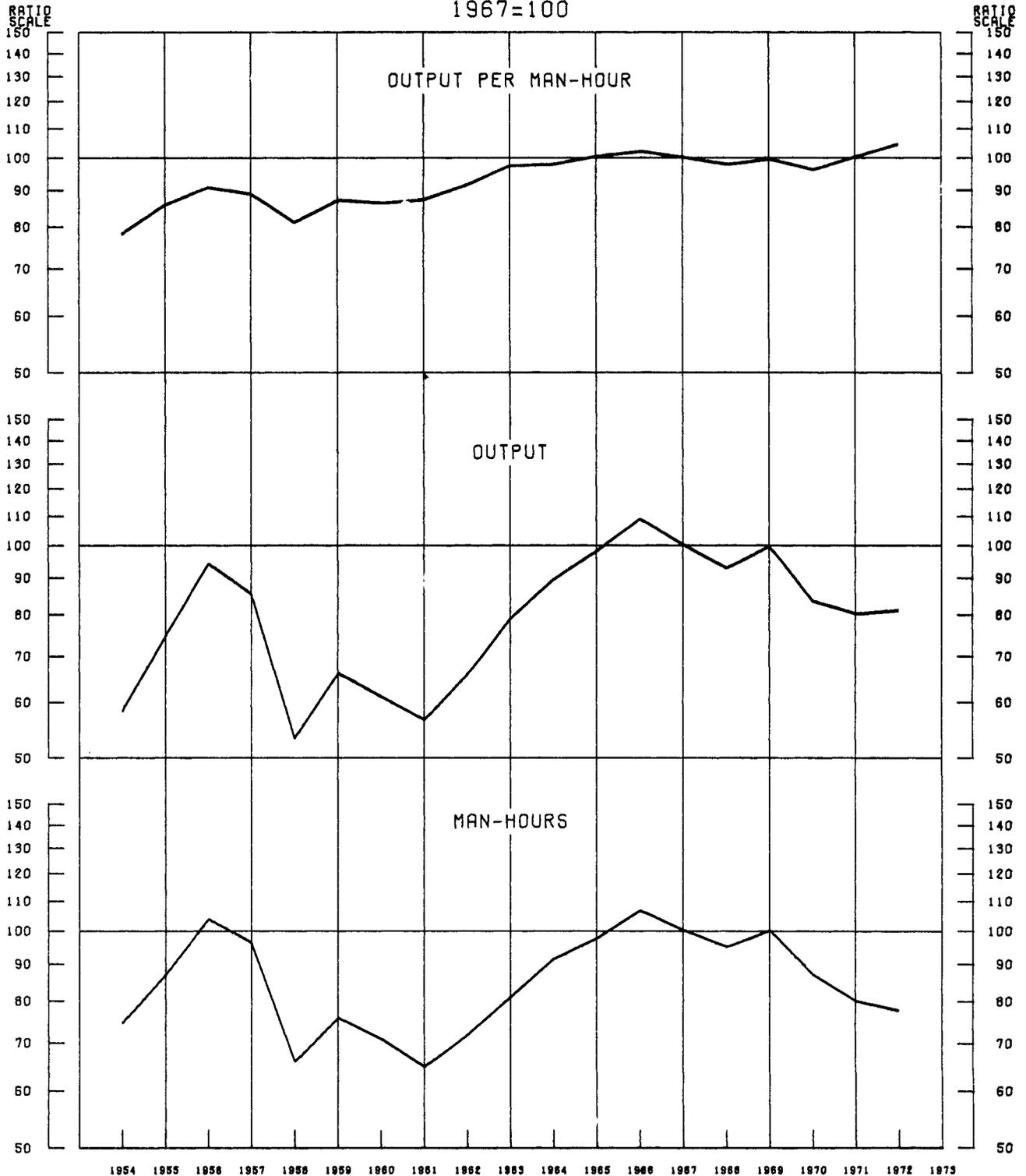
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 52
 GRAY IRON FOUNDRIES (SIC 3321), 1954-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



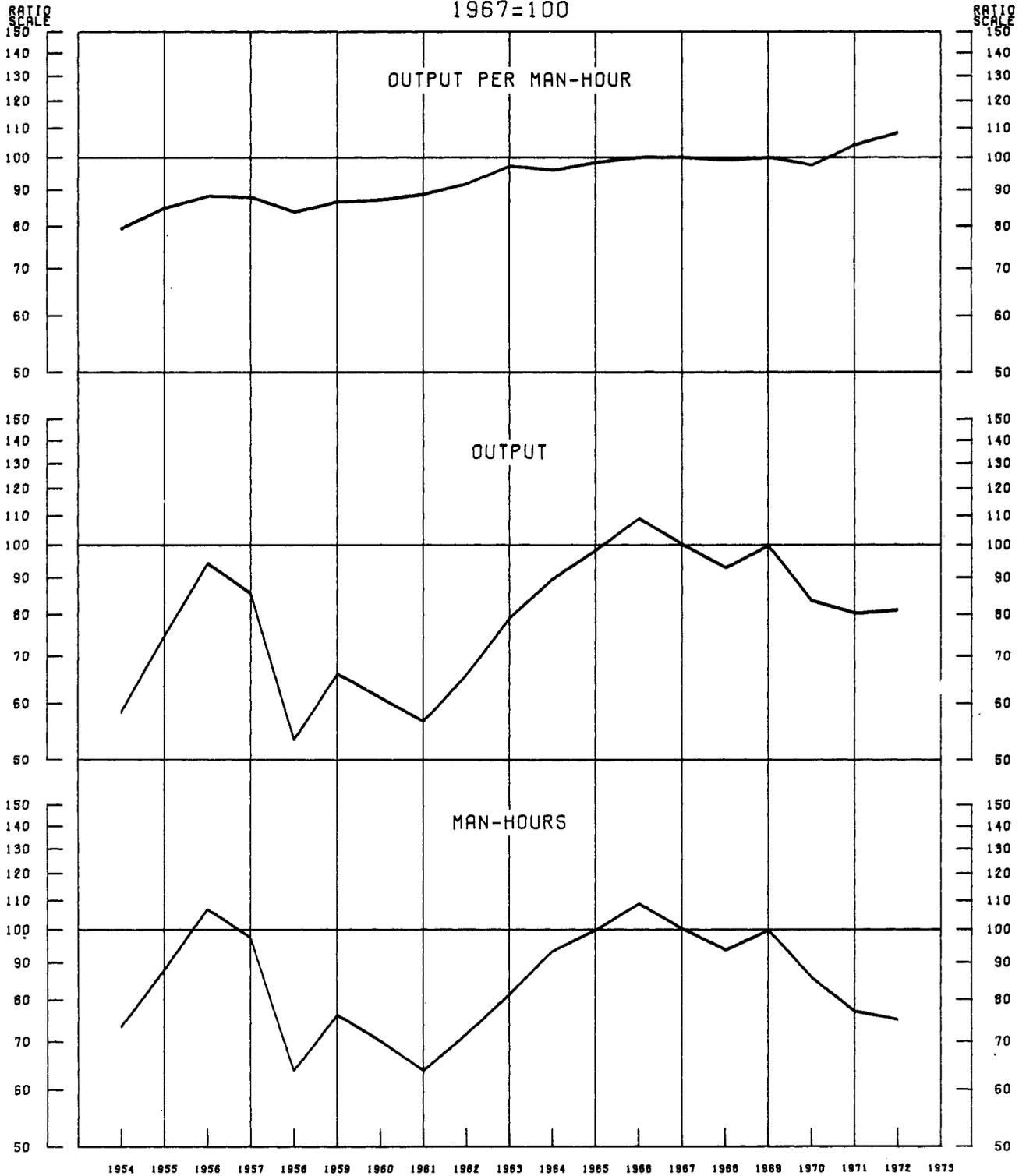
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 53
 STEEL FOUNDRIES (SIC 3323), 1954-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



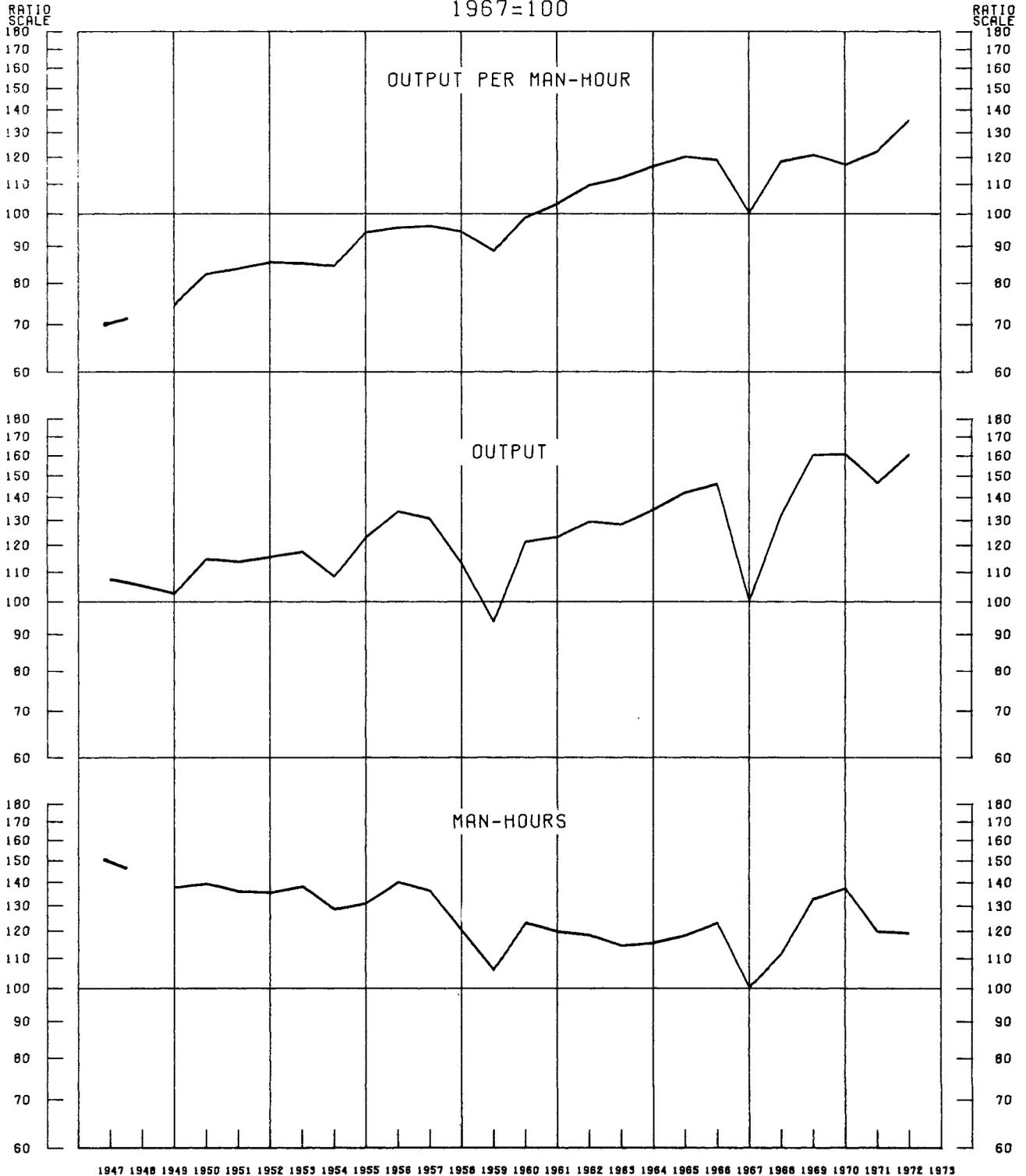
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 54
 STEEL FOUNDRIES (SIC 3323), 1954-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



SOURCE-U.S. DEPARTMENT OF LABOR. BUREAU OF LABOR STATISTICS.

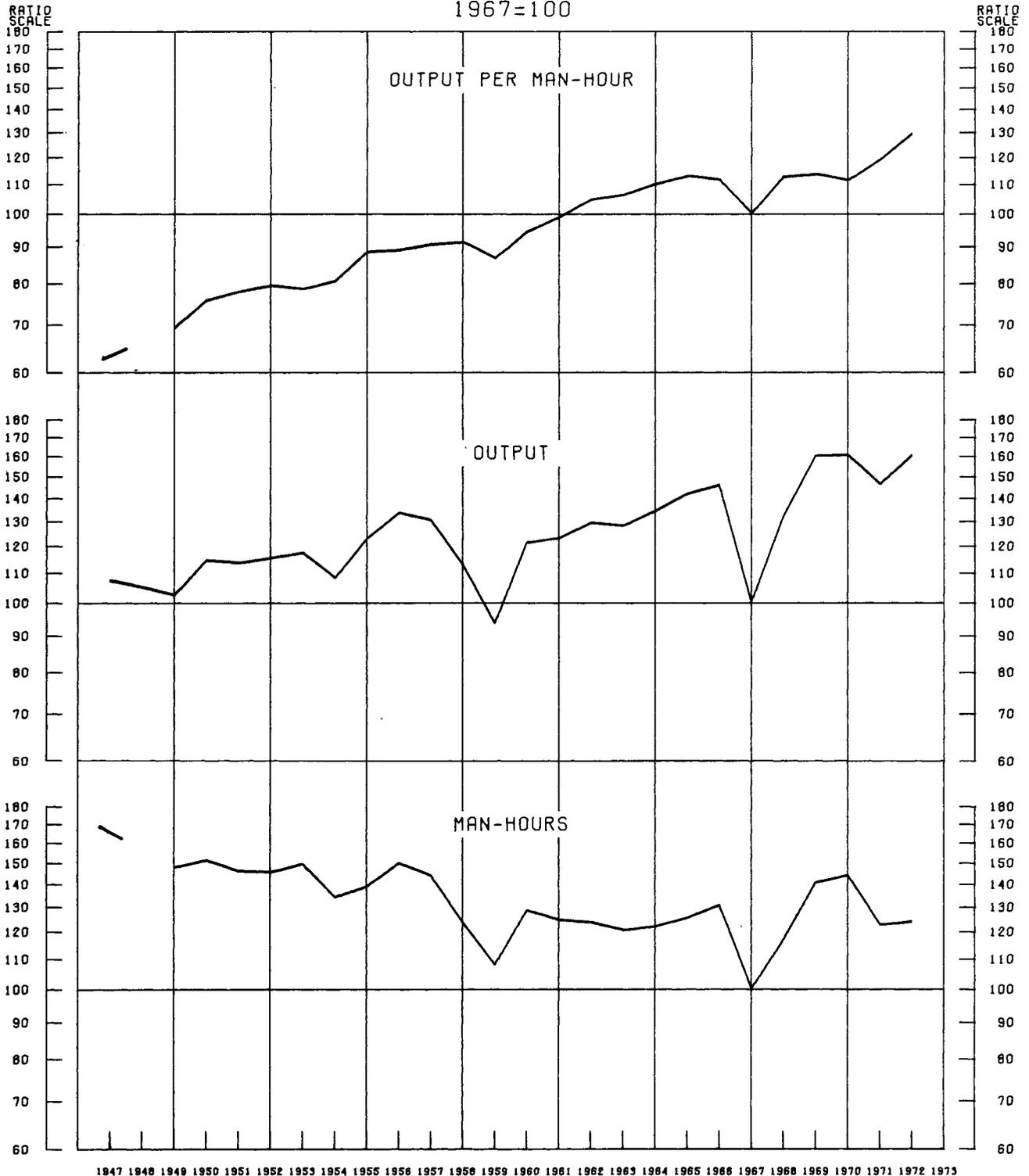
CHART 55
 PRIMARY COPPER, LEAD AND ZINC (SIC 3331, 3332, 3333), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

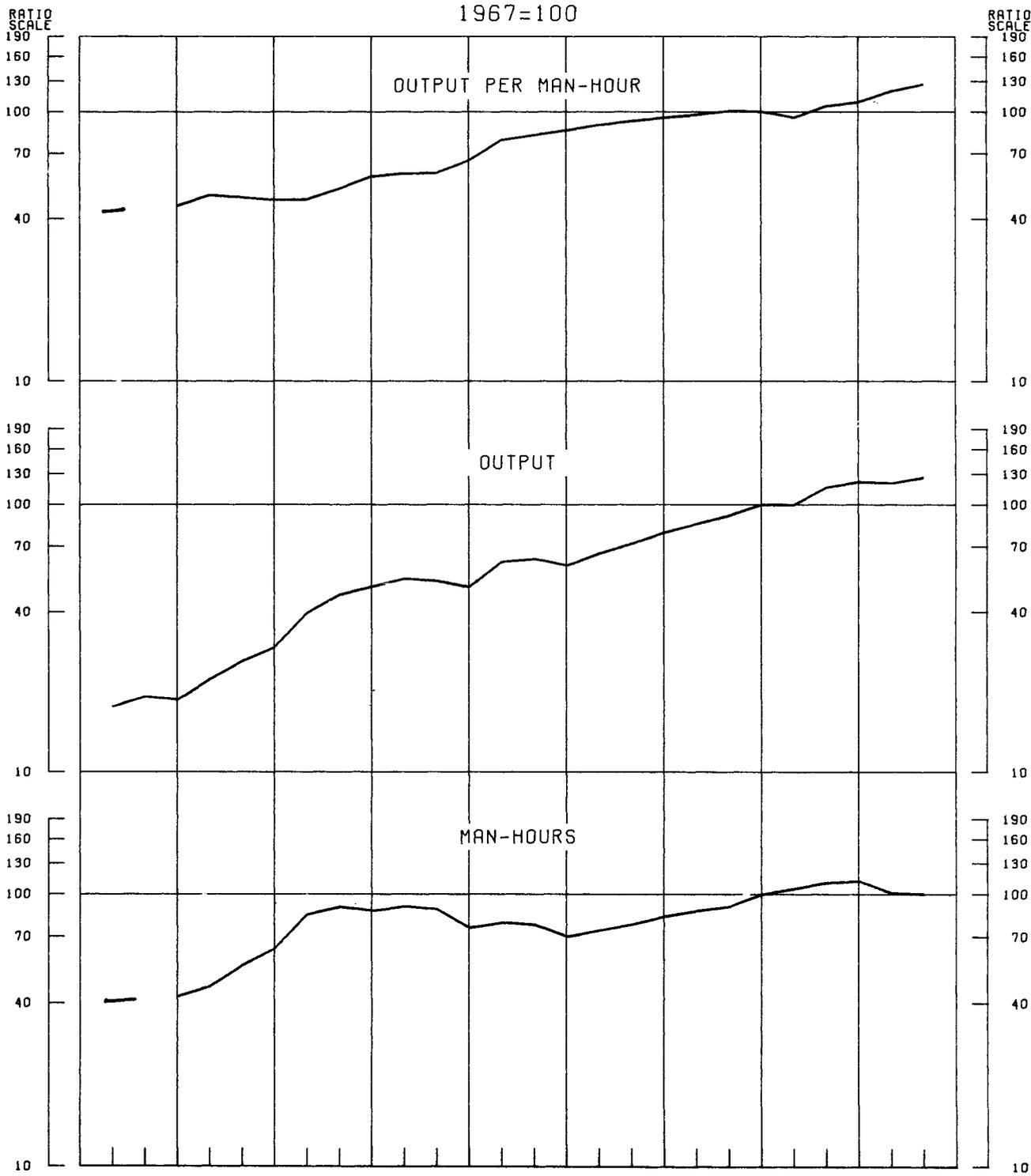
CHART 56
 PRIMARY COPPER, LEAD AND ZINC (SIC 3331, 3332, 3333), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

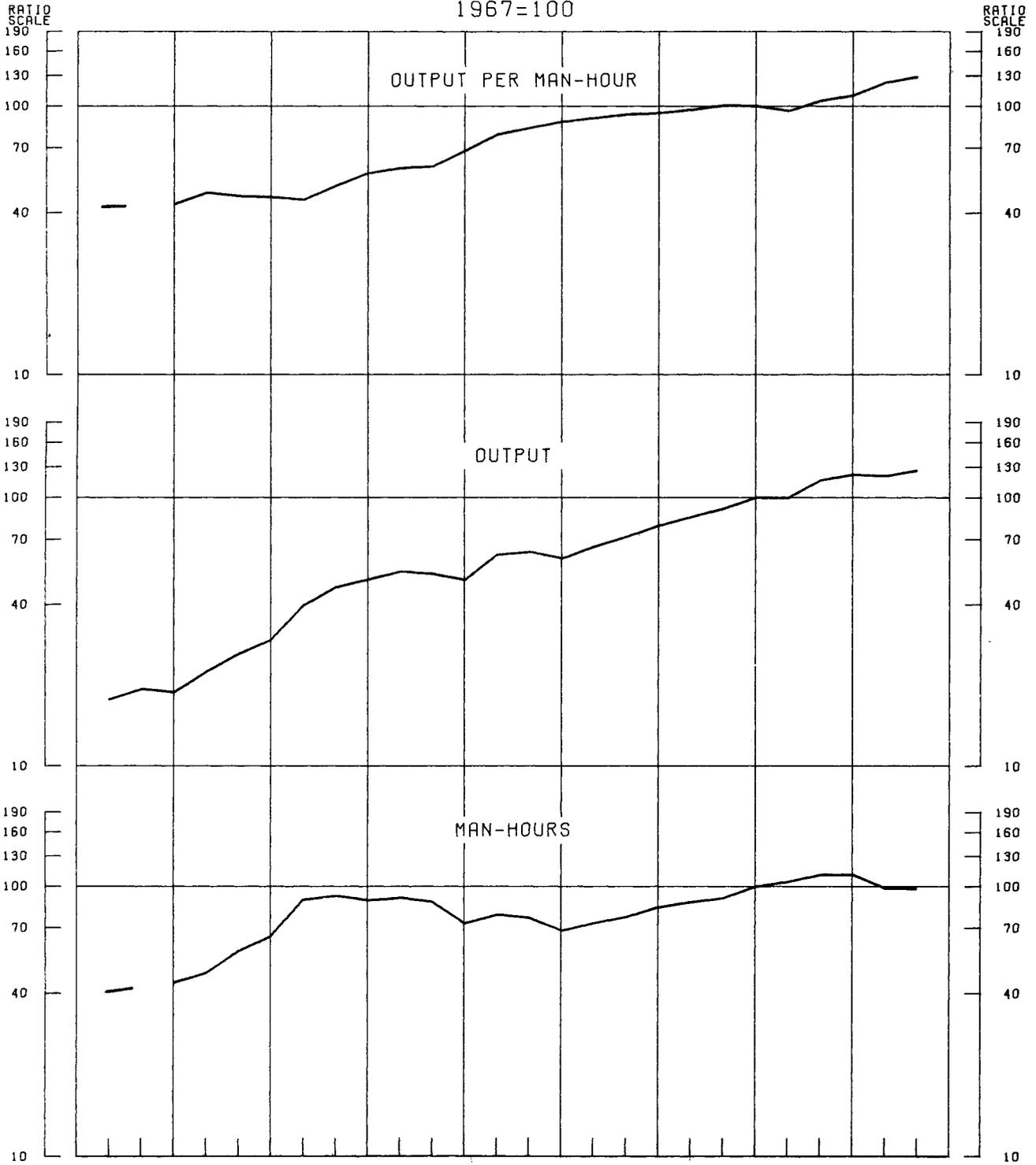
CHART 57
 PRIMARY ALUMINUM (SIC 3334), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

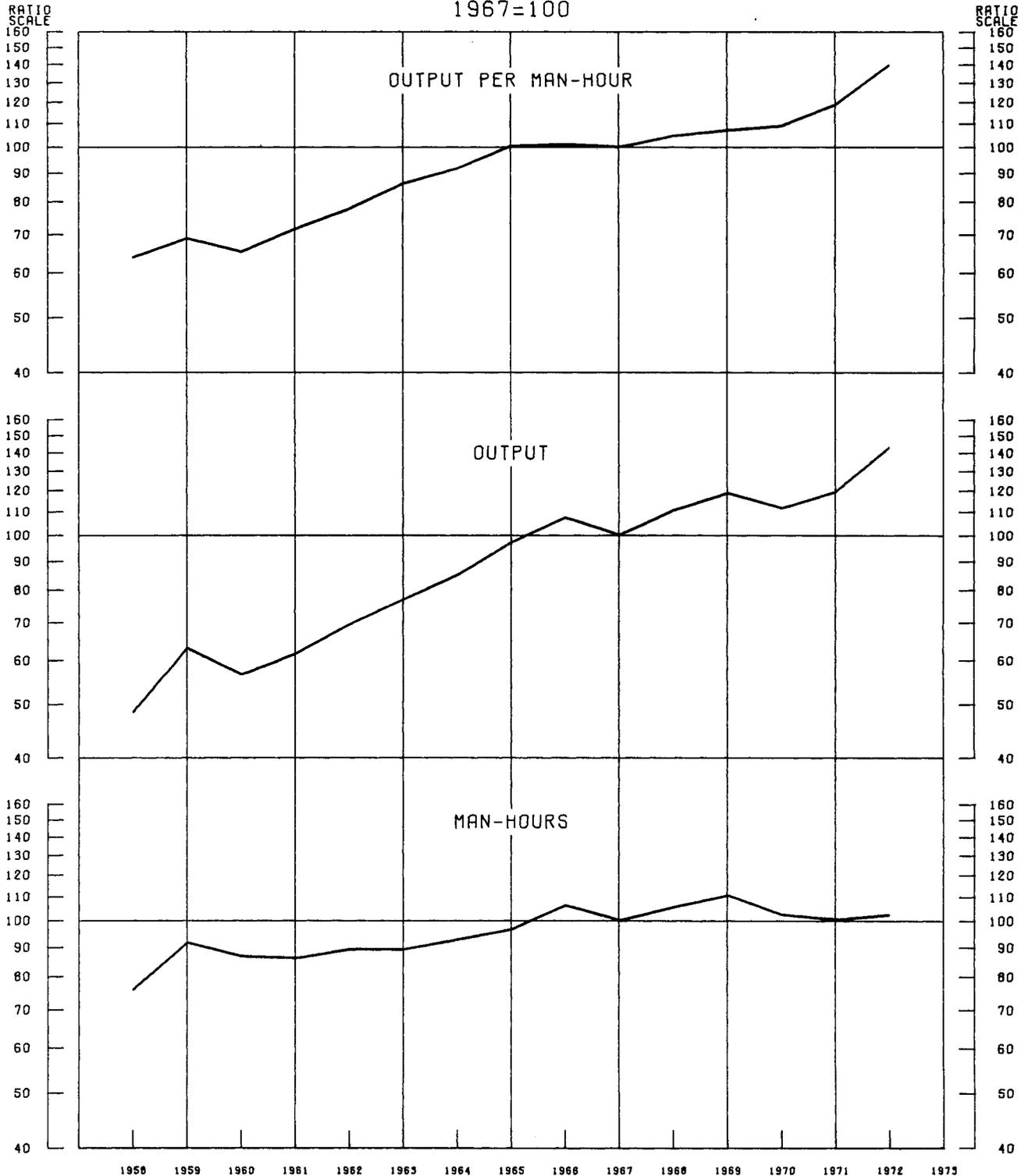
CHART 58
 PRIMARY ALUMINUM (SIC 3334), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

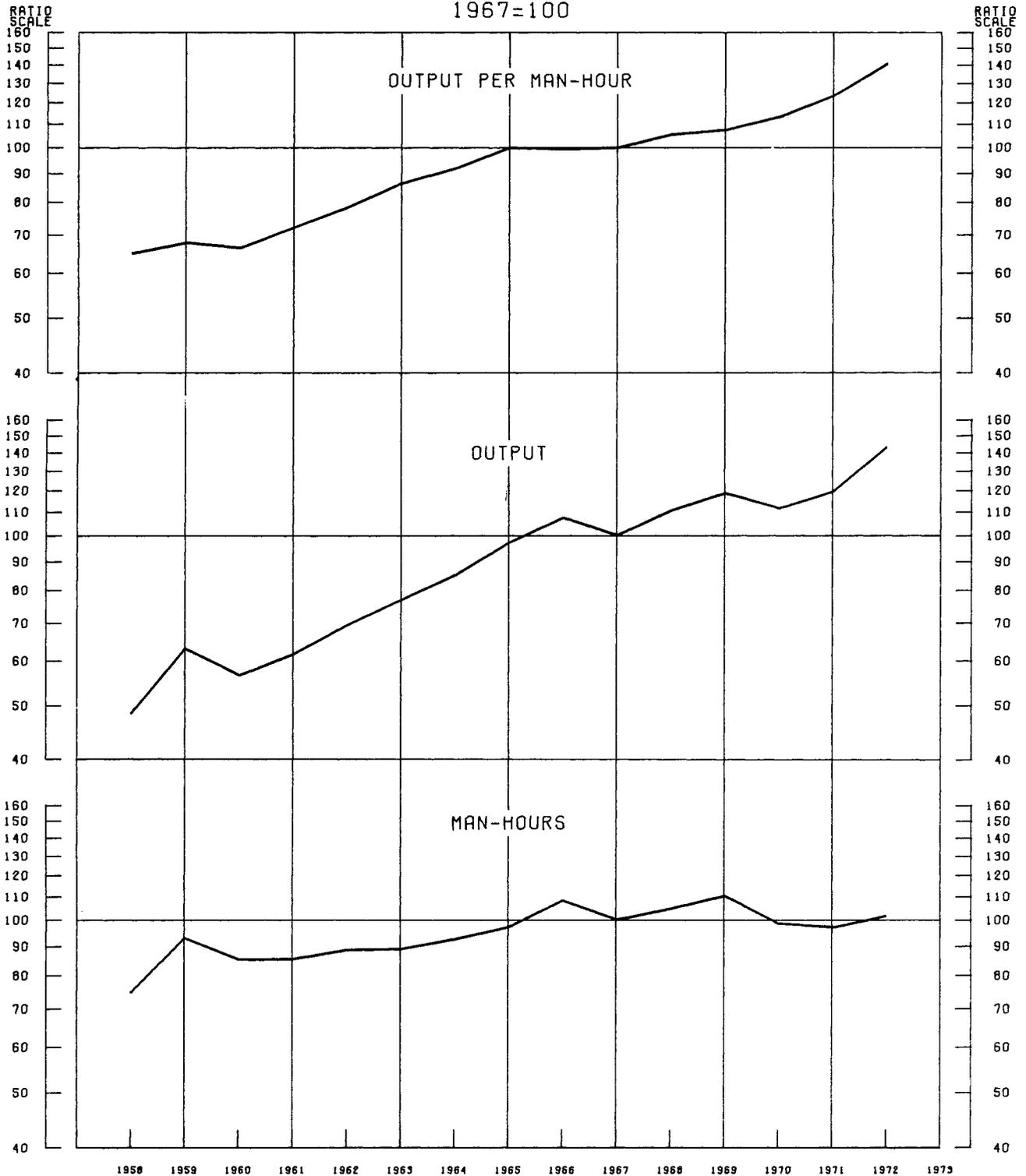
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 59
 ALUMINUM ROLLING AND DRAWING (SIC 3352), 1958-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



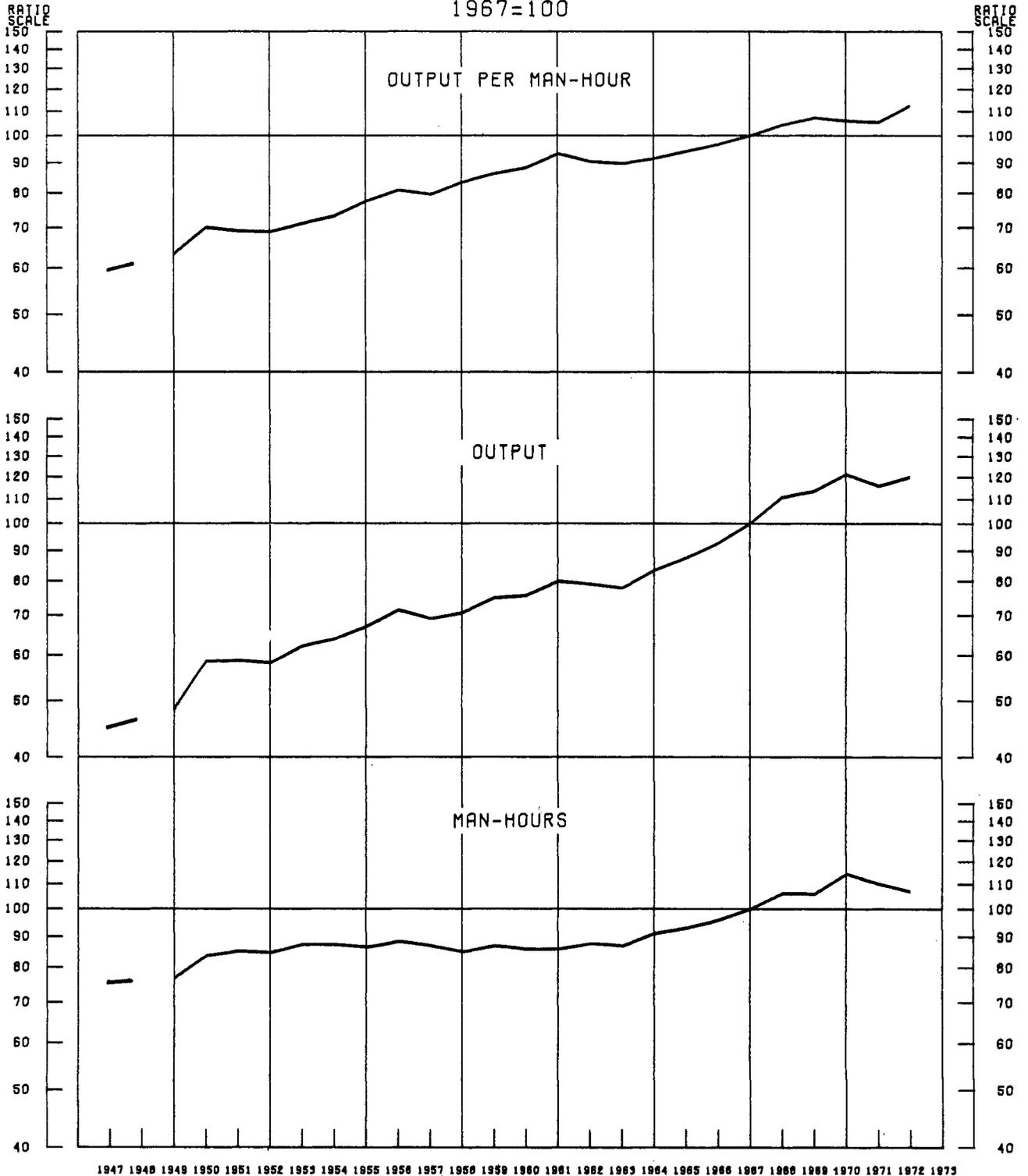
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 60
 ALUMINUM ROLLING AND DRAWING (SIC 3352), 1958-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

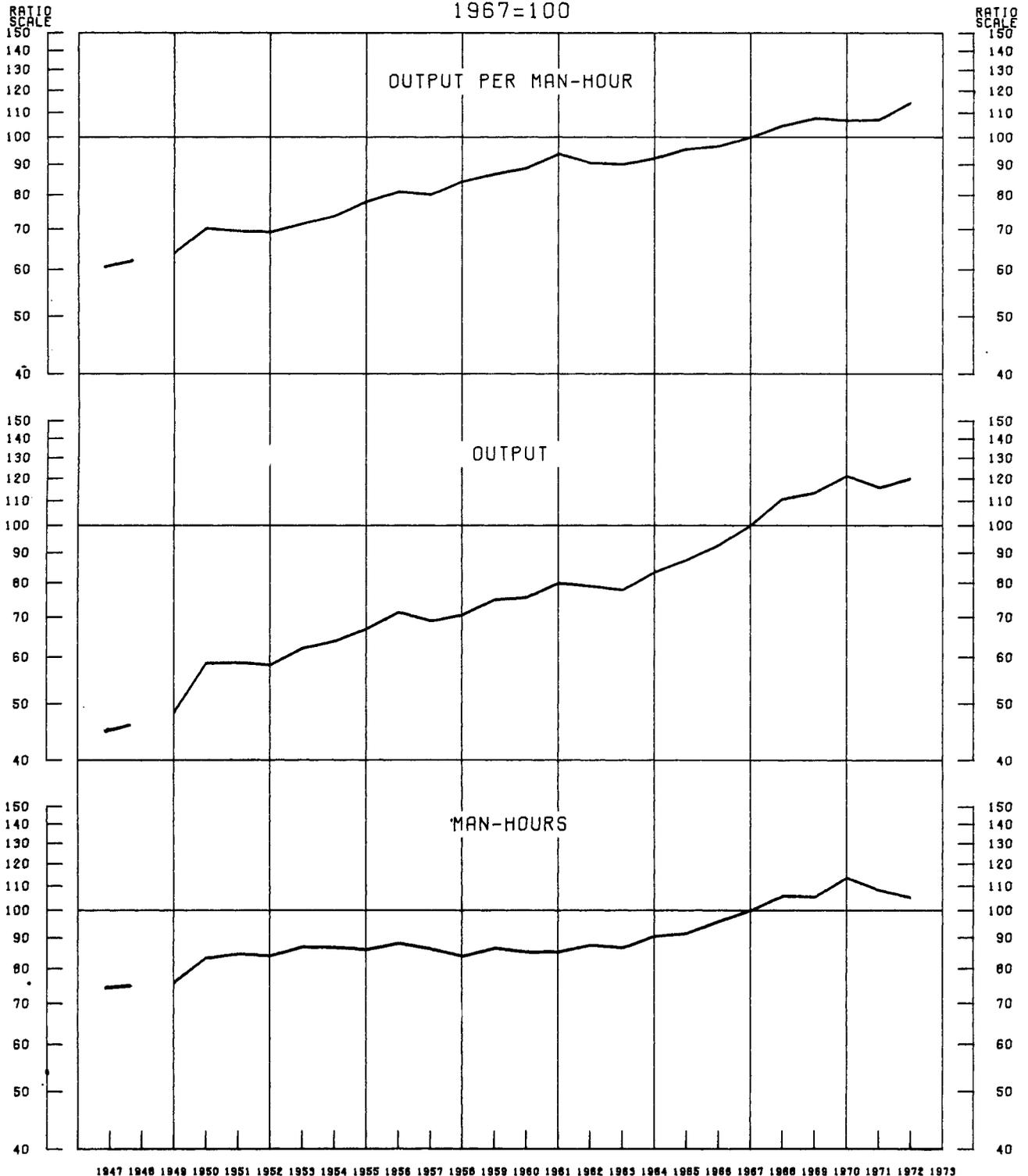
CHART 61
 METAL CANS (SIC 341), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

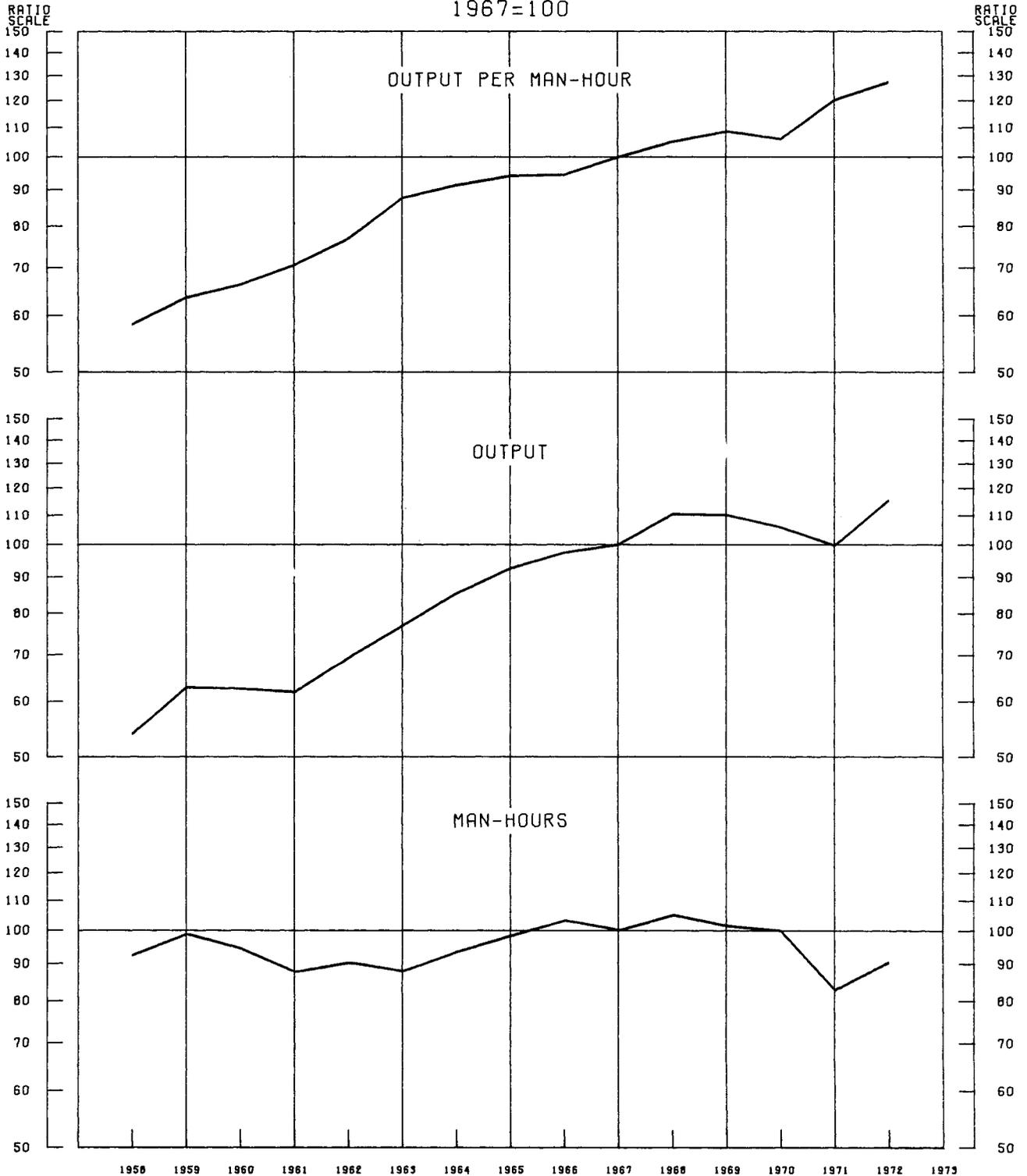
CHART 62
 METAL CANS (SIC 341), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



Note: Where series are not continuous, data are not available.

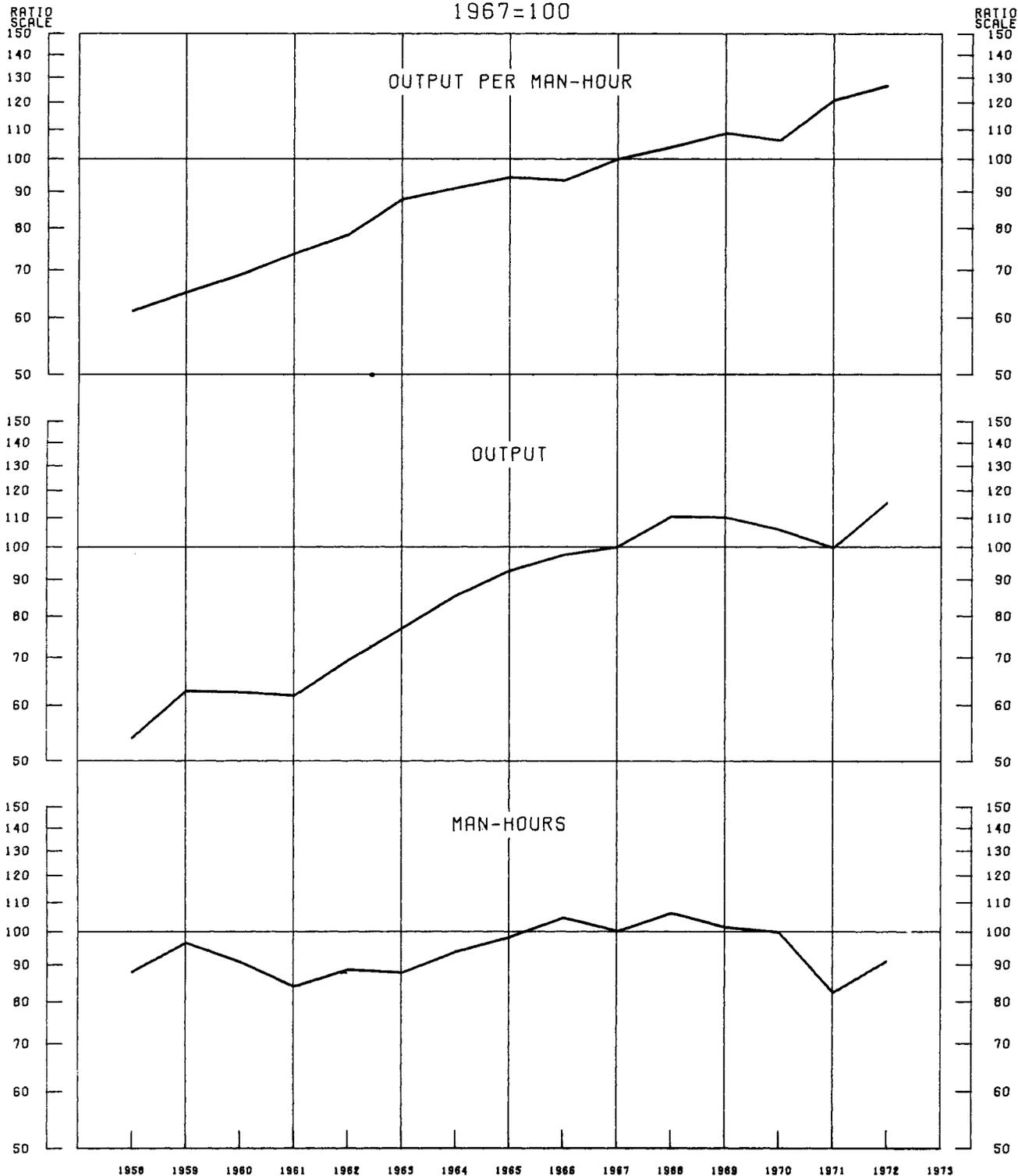
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 63
 MAJOR HOUSEHOLD APPLIANCES (SIC 3631, 3632, 3633, 3639), 1958-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



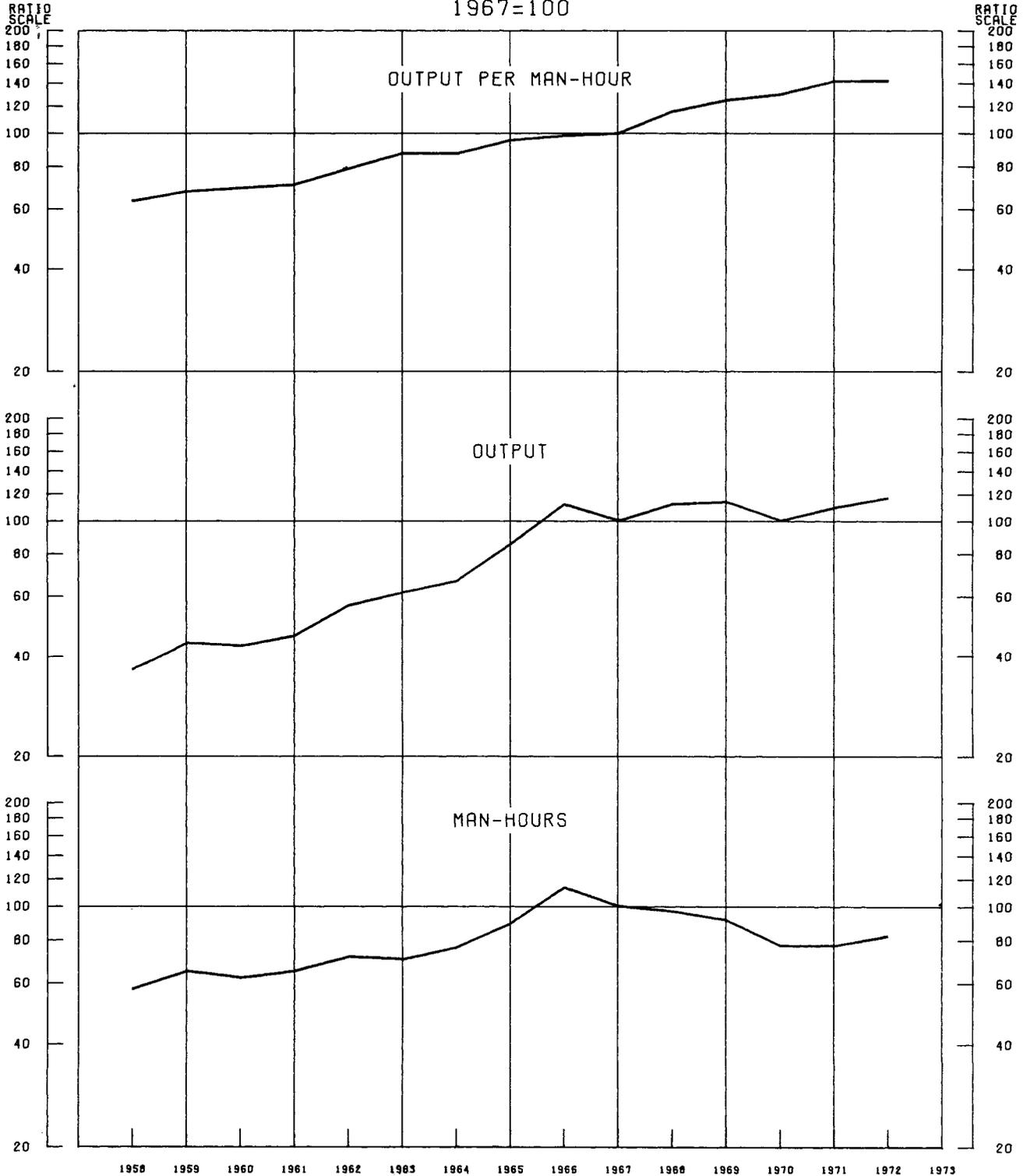
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 64
 MAJOR HOUSEHOLD APPLIANCES (SIC 3631, 3632, 3633, 3639), 1958-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



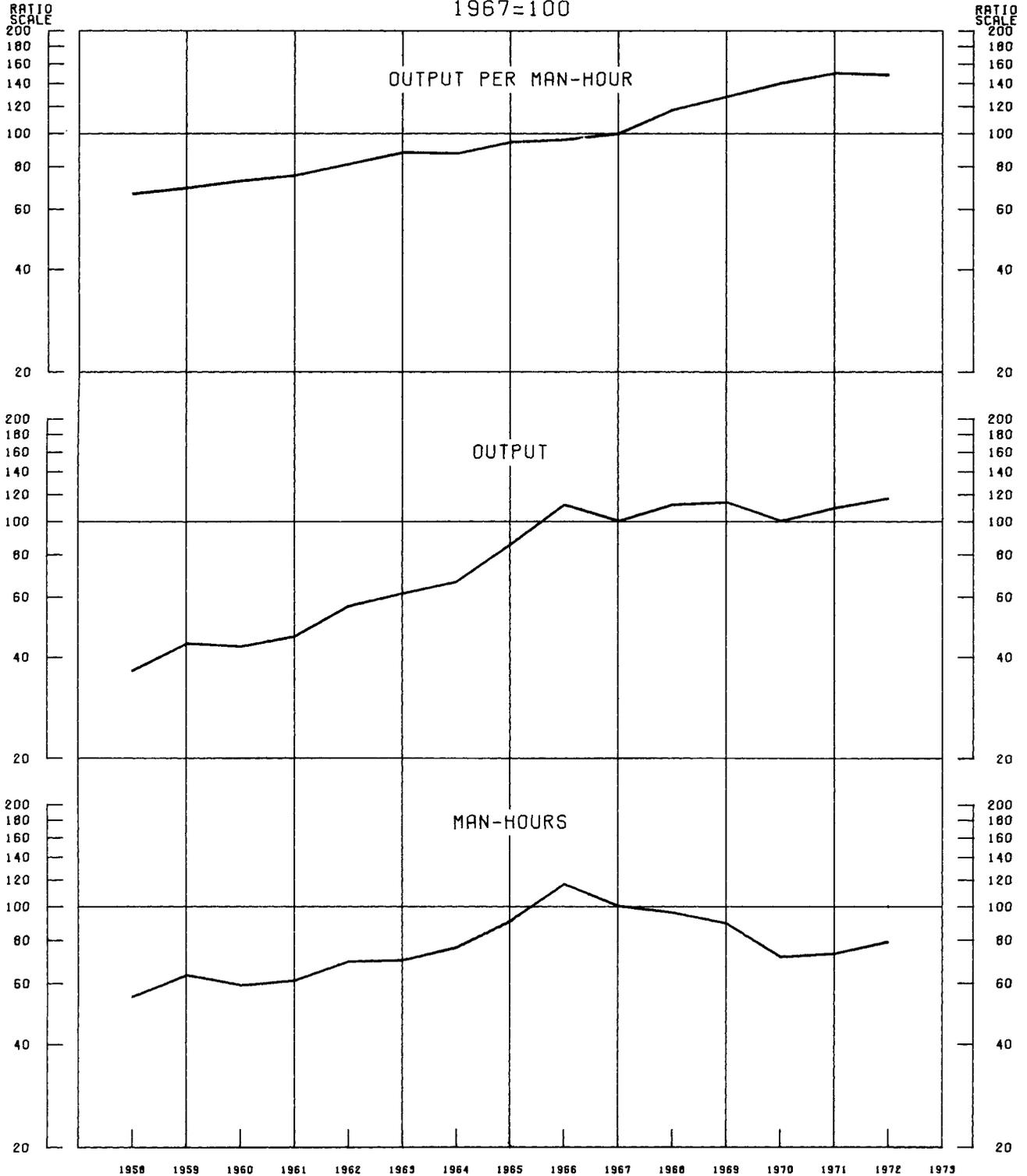
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CHART 65
 RADIO AND TELEVISION RECEIVING SETS (SIC 3651), 1958-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



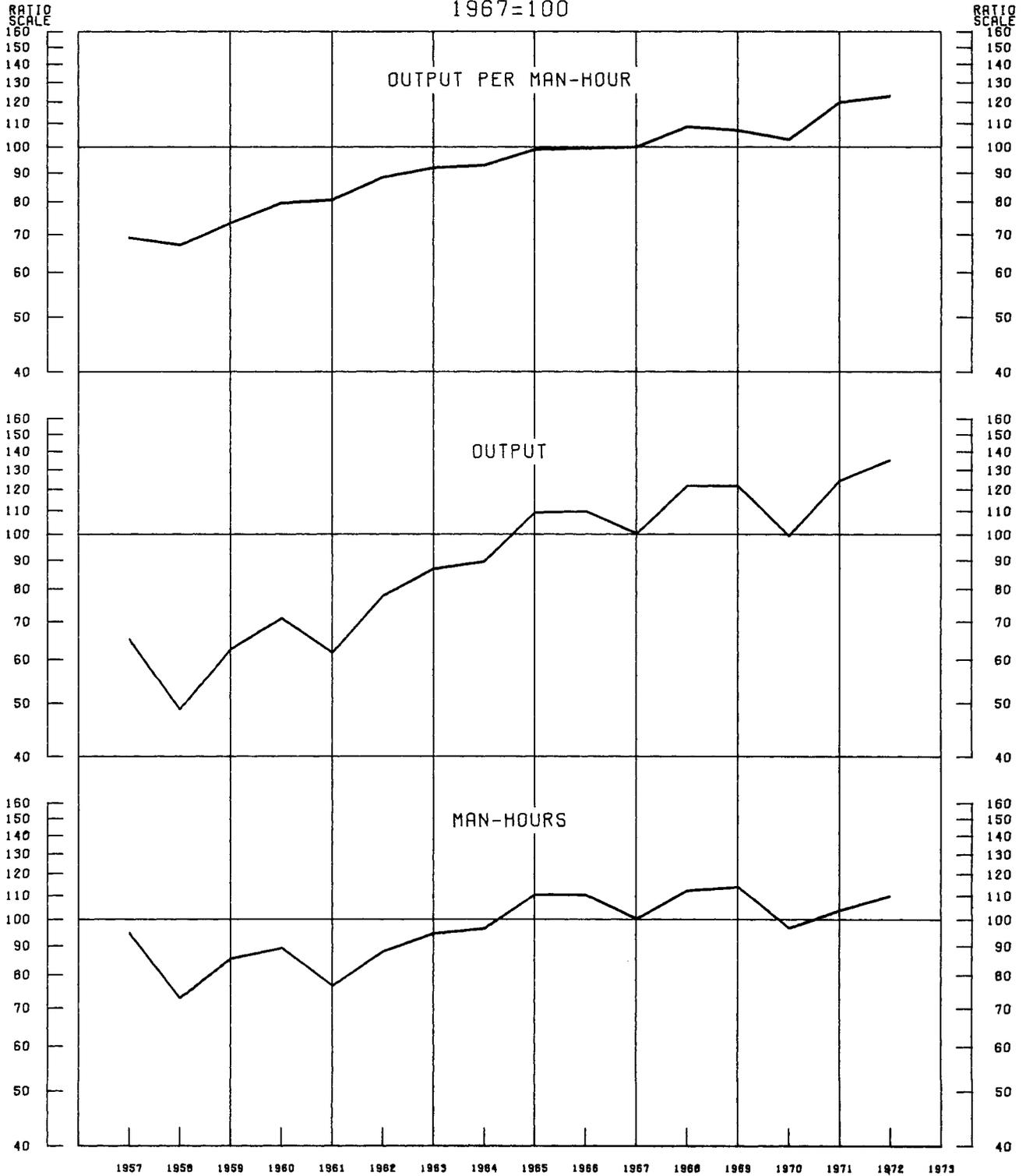
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 66
 RADIO AND TELEVISION RECEIVING SETS (SIC 3651), 1958-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



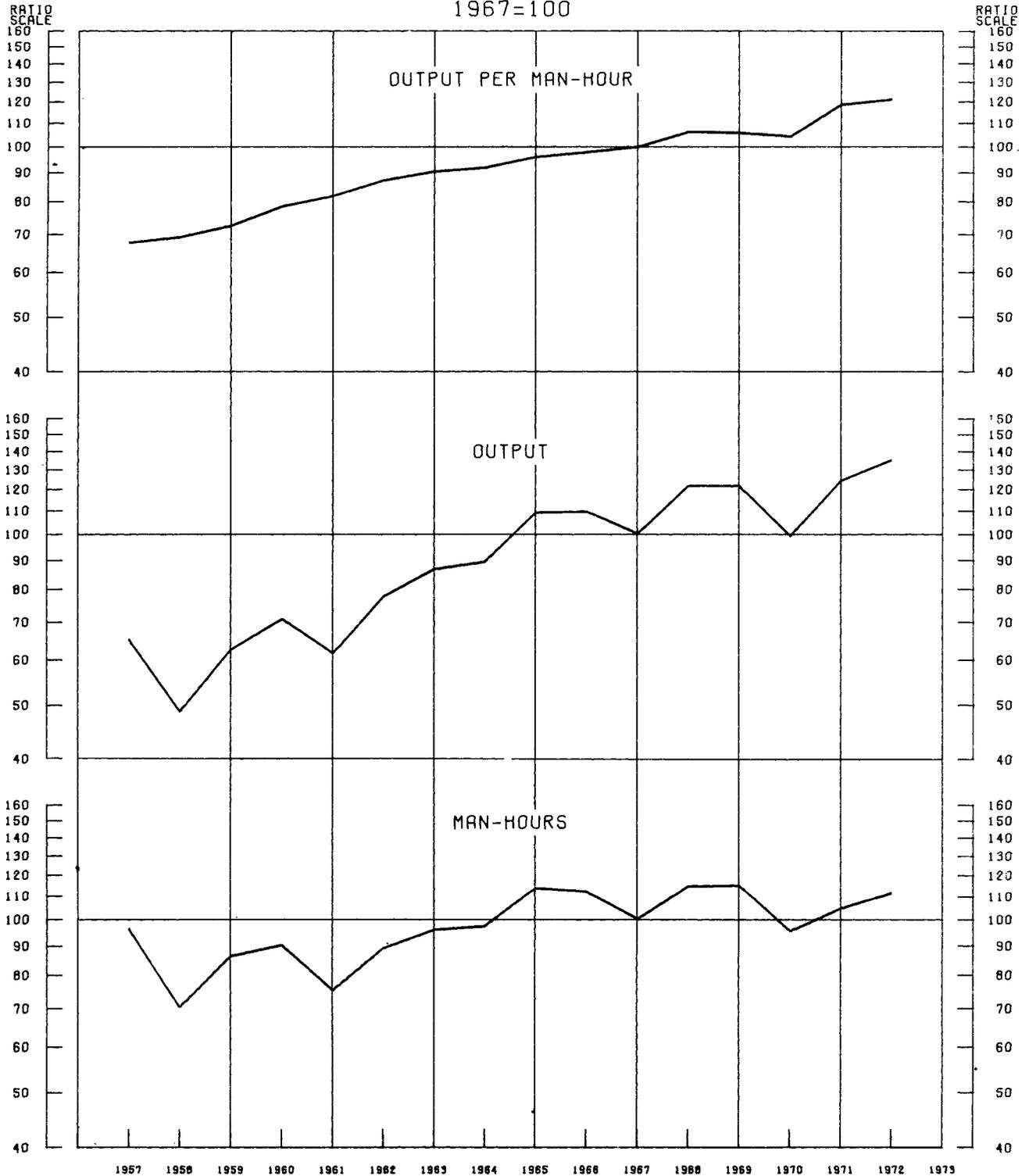
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 67
 MOTOR VEHICLES AND EQUIPMENT (SIC 371), 1957-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



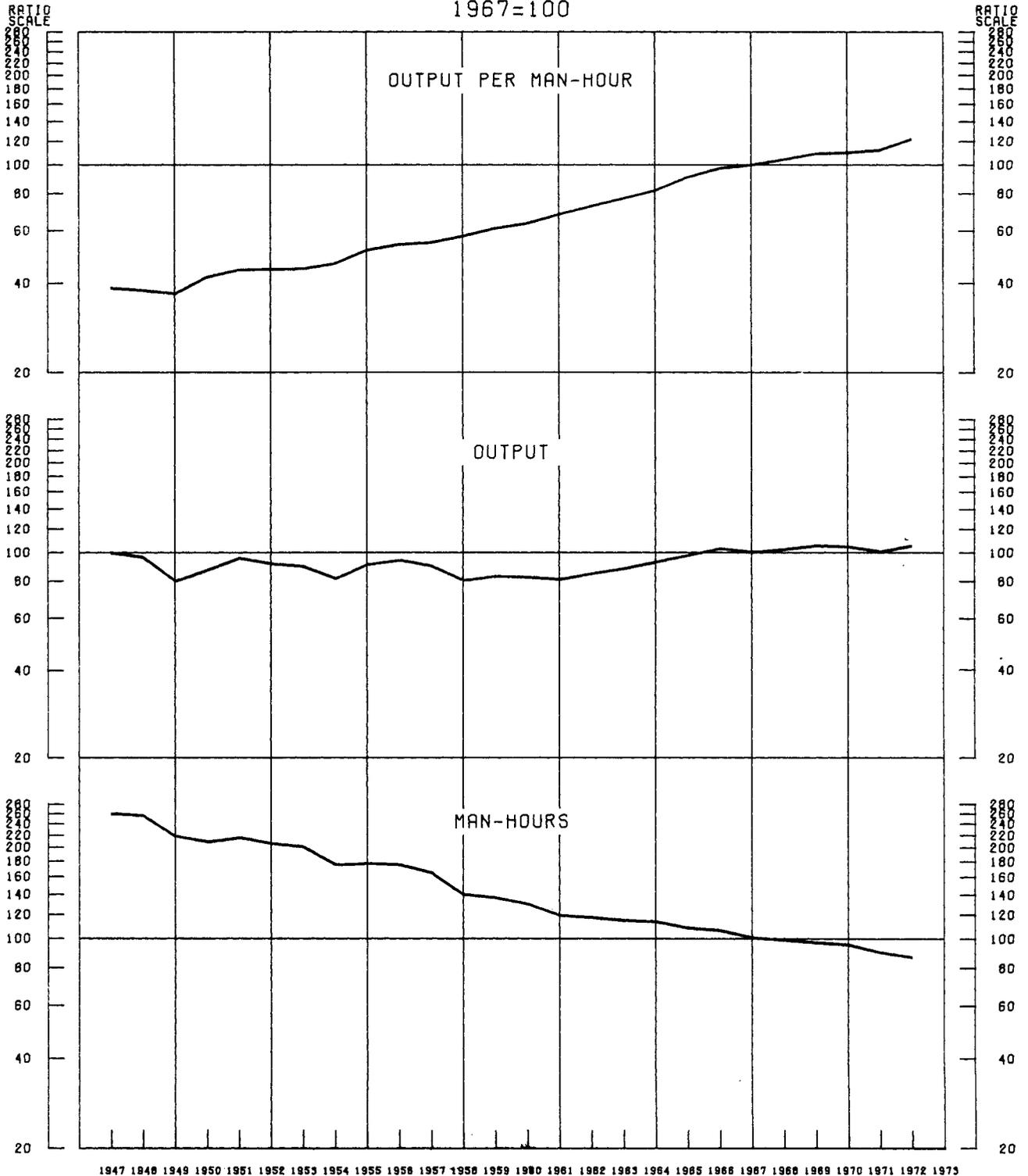
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 68
 MOTOR VEHICLES AND EQUIPMENT (SIC 371), 1957-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



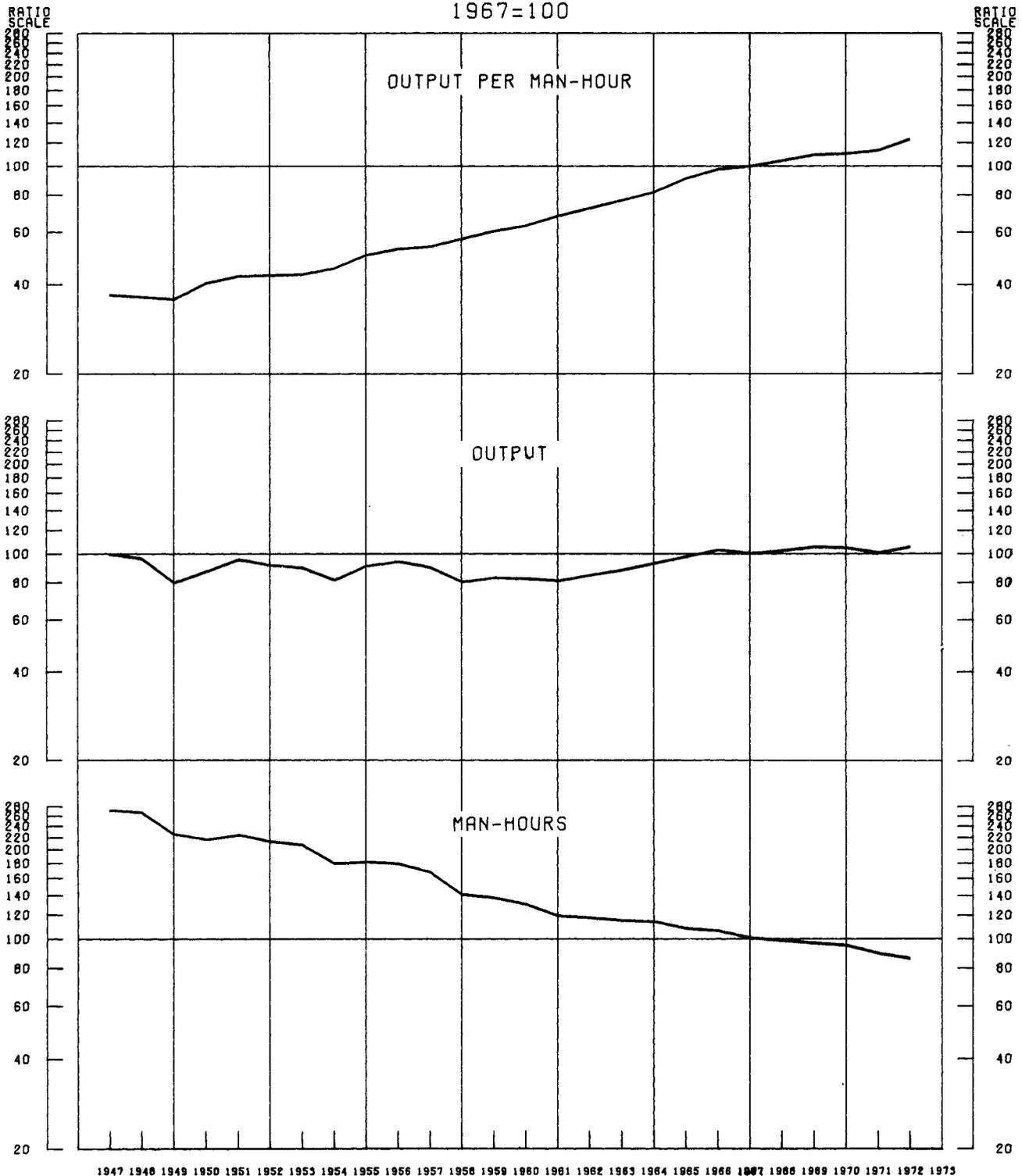
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 69
 RAILROADS, REVENUE TRAFFIC (SIC 401, CLASS I), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



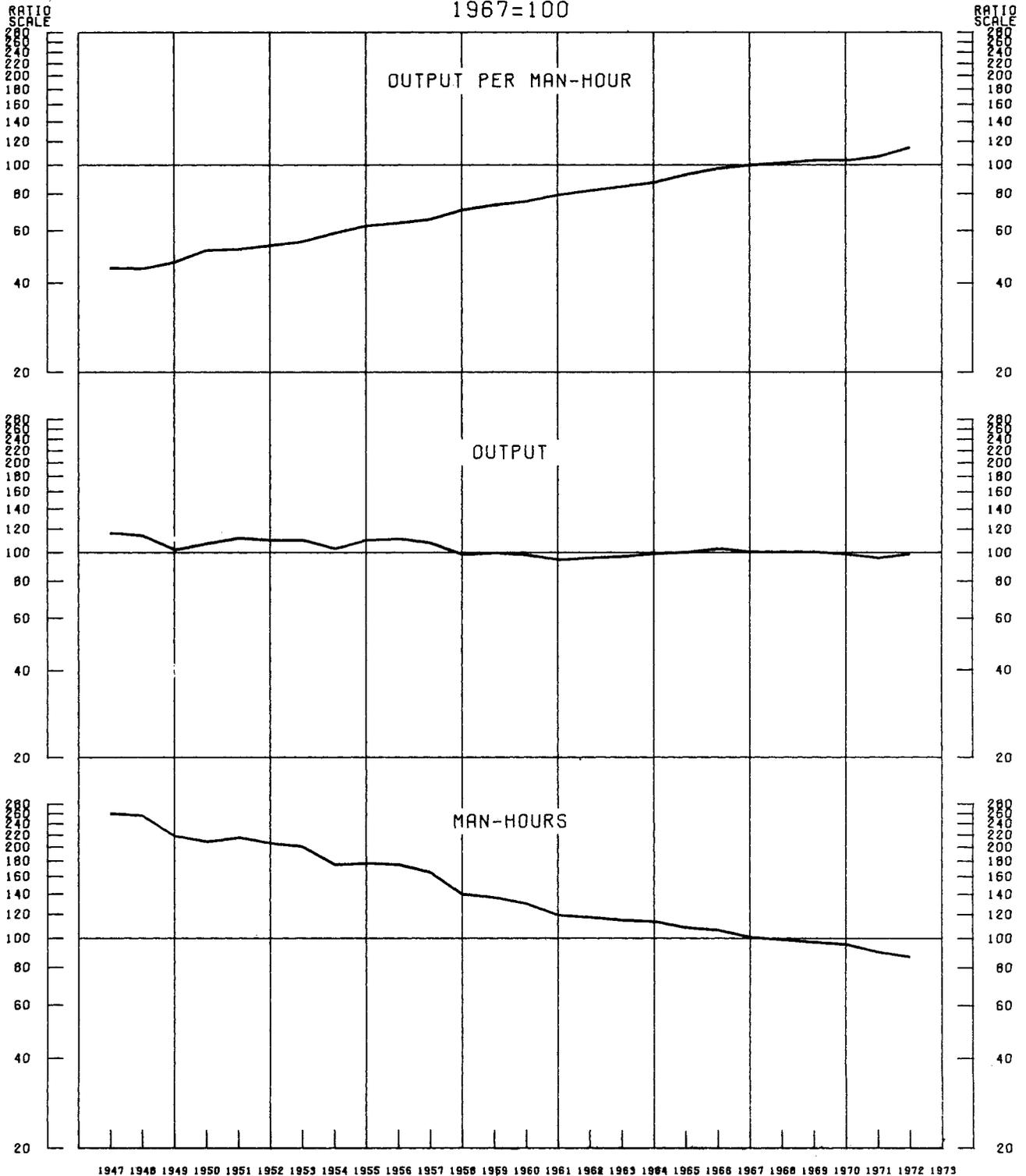
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 70
 RAILROADS, REVENUE TRAFFIC (SIC 401, CLASS I), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



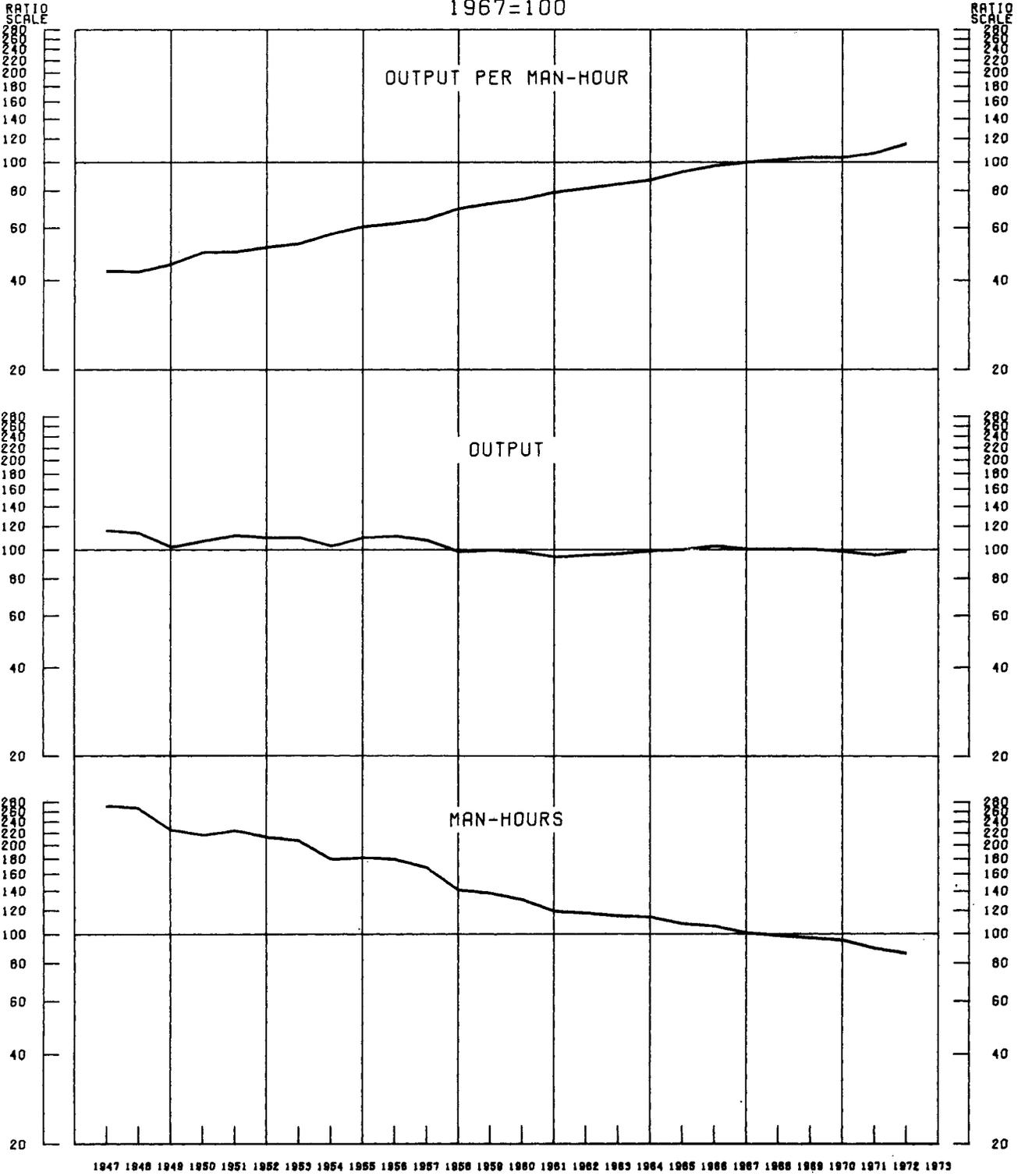
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 71
 RAILROADS, CAR MILES (SIC 401, CLASS I), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



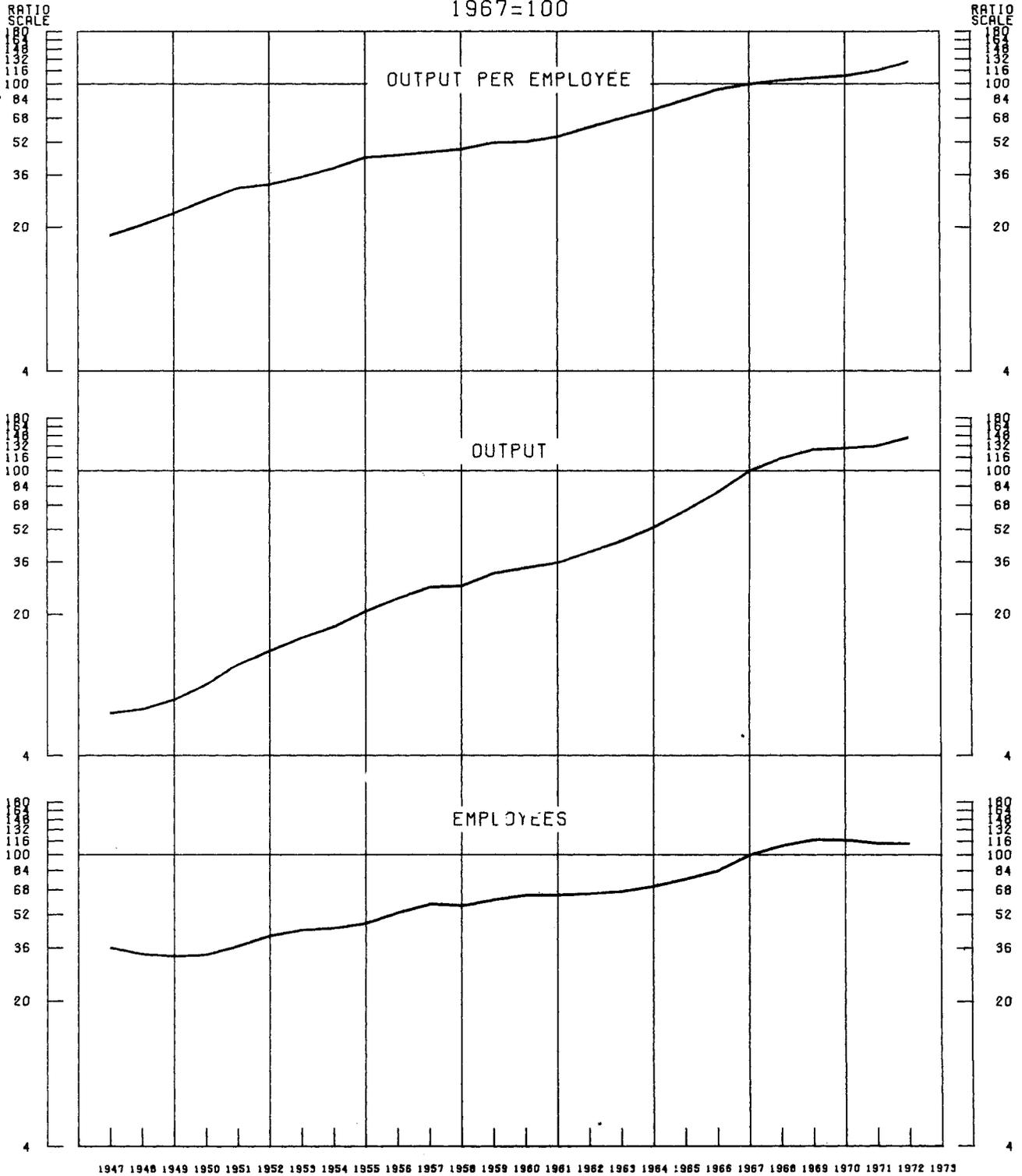
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 72
 RAILROADS, CAR MILES (SIC 401, CLASS I), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



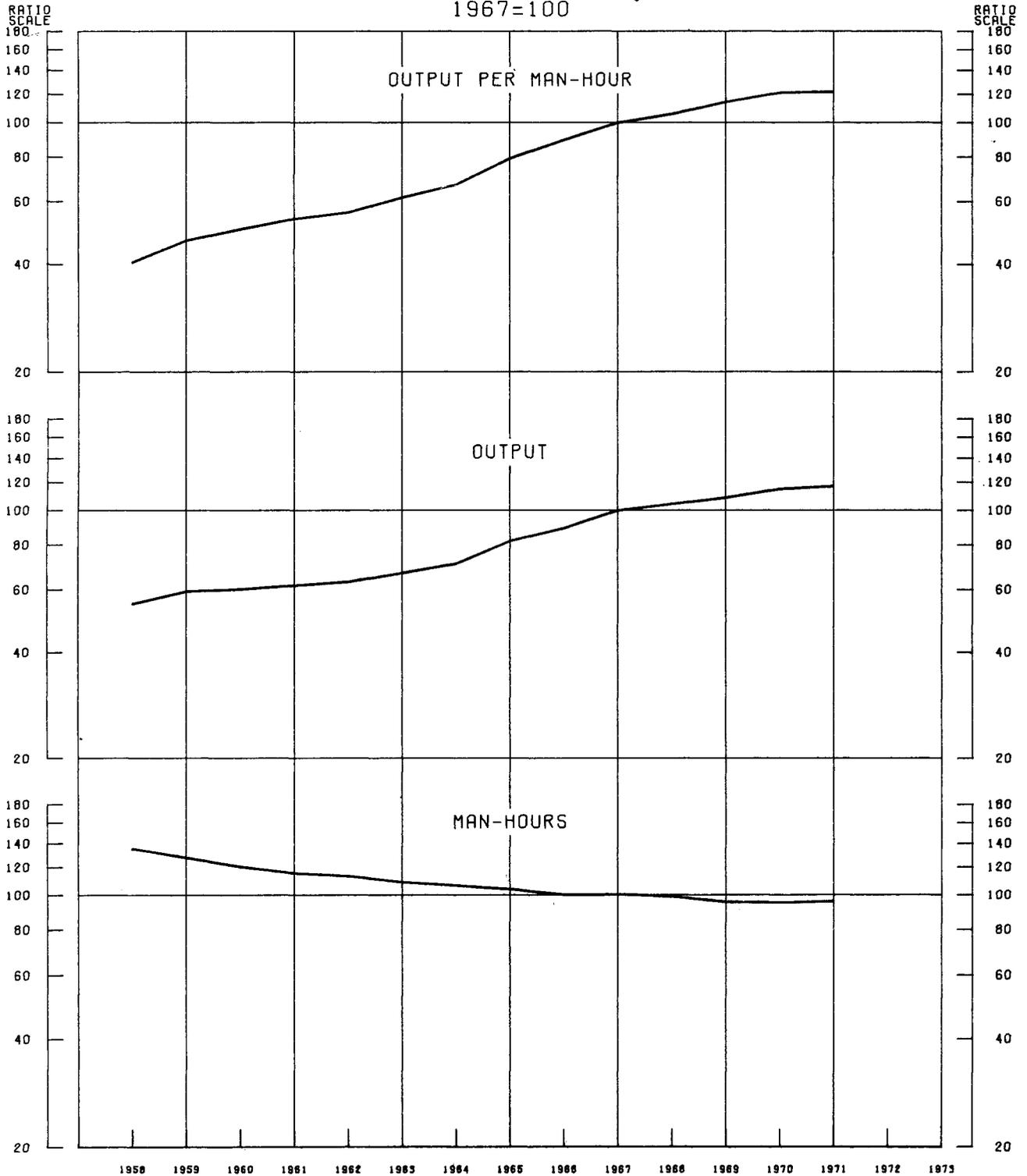
SOURCE-U.S. DEPARTMENT OF LABOR BUREAU OF LABOR STATISTICS.

CHART 73
 AIR TRANSPORTATION (SIC 451), 1947-72
 OUTPUT PER EMPLOYEE AND RELATED DATA
 1967=100



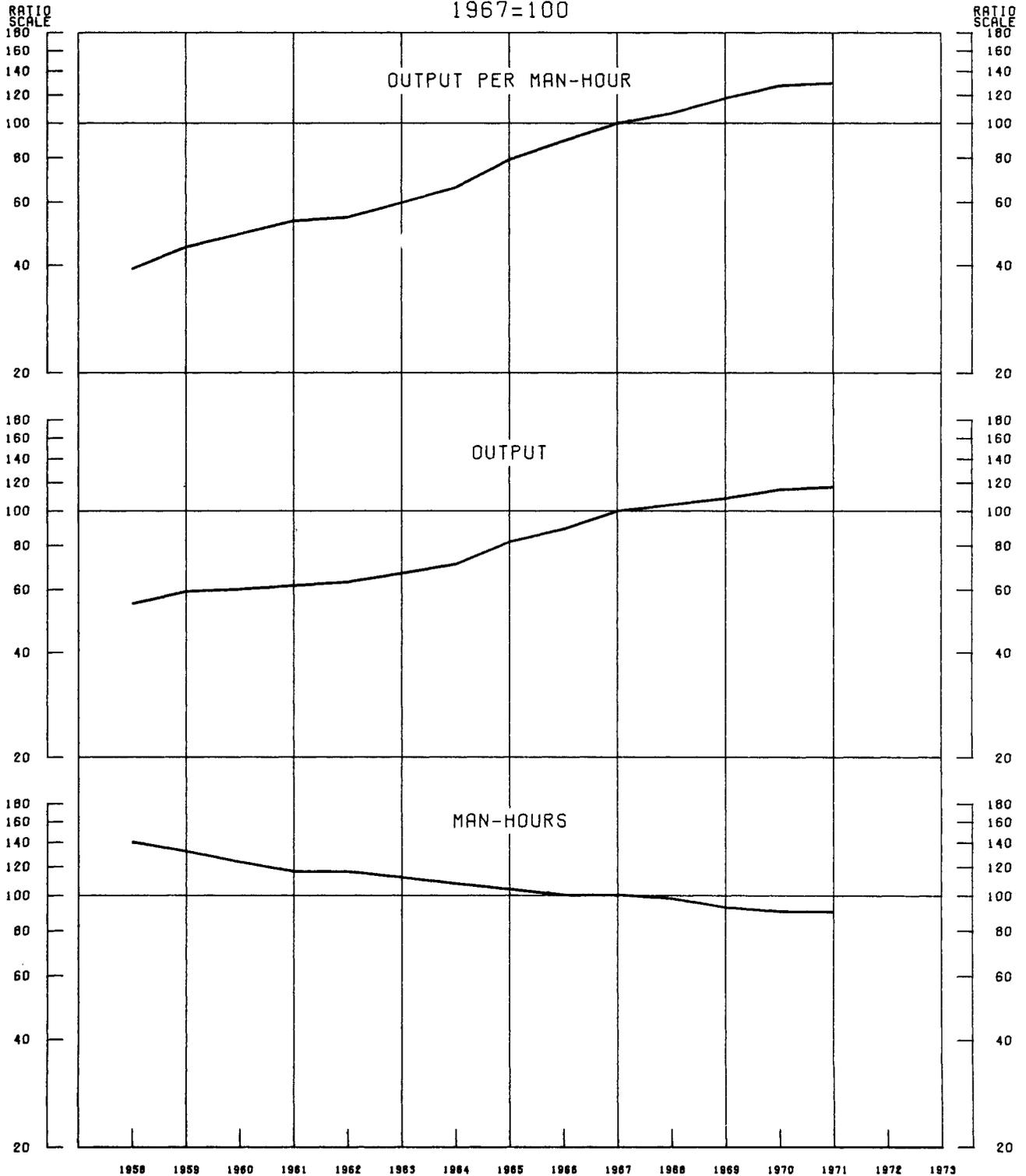
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 74
 PETROLEUM PIPELINES (SIC 4612, 4613), 1958-71
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



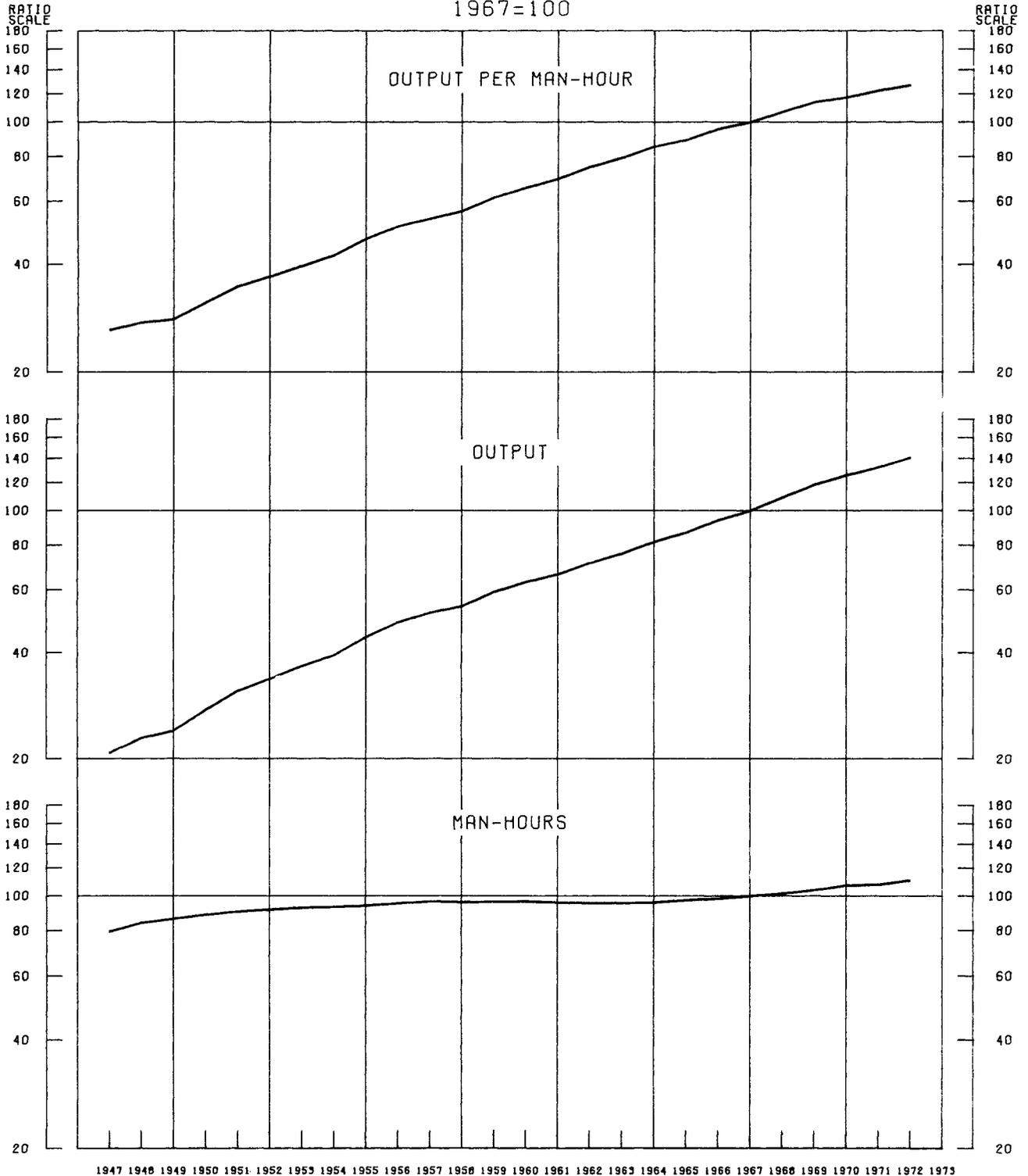
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 75
 PETROLEUM PIPELINES (SIC 4612, 4613), 1958-71
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



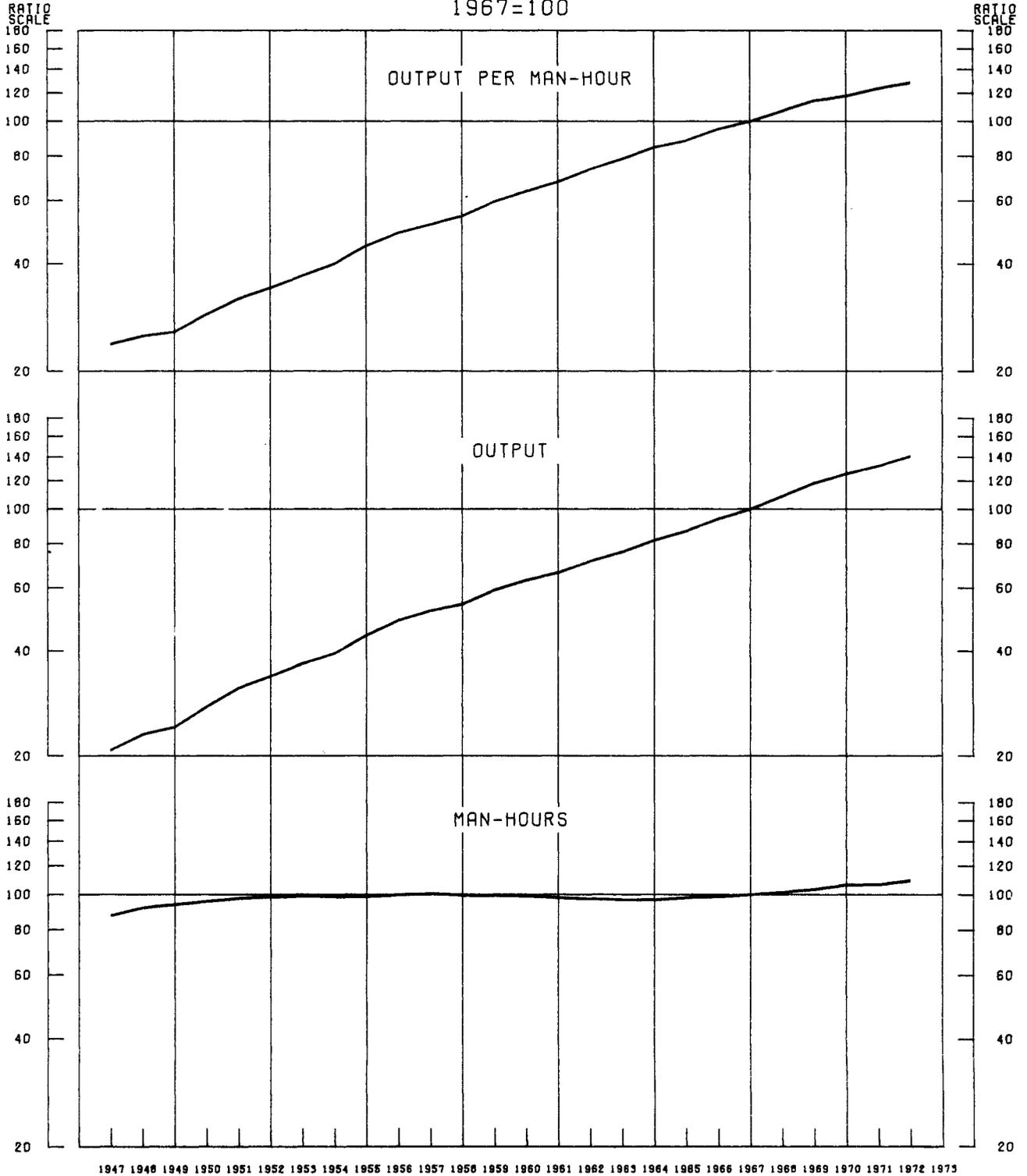
SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

CHART 76
 GAS AND ELECTRIC UTILITIES (SIC 491, 492, 493), 1947-72
 OUTPUT PER EMPLOYEE MAN-HOUR AND RELATED DATA
 1967=100



SOURCE-U.S. DEPARTMENT OF LABOR. BUREAU OF LABOR STATISTICS.

CHART 77
 GAS AND ELECTRIC UTILITIES (SIC 491, 492, 493), 1947-72
 OUTPUT PER PRODUCTION WORKER MAN-HOUR AND RELATED DATA
 1967=100



SOURCE-U.S. DEPARTMENT OF LABOR, BUREAU OF LABOR STATISTICS.

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- The Meaning and Measurement of Productivity*, BLS Bulletin 1714, 1971. 30 cents.
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- Outlook for Technology and Manpower in Printing and Publishing*, BLS Bulletin 1774, 1973. Price not set.
- "Moderization and Manpower in Textile Mills," by Rose N. Zeisel, *Monthly Labor Review*, June 1973, pp. 18-25.
- Railroad Technology and Manpower in the 1970's*, BLS Bulletin 1717, 1972. \$1.
- "New Technology in Laundry and Cleaning Services," by Mary L. Vickery, *Monthly Labor Review*, February 1972, pp. 54-59.
- Improving Productivity: Labor and Management Approaches*, BLS Bulletin 1715, 1971. 45 cents.
- "Technological Change," reprint of Chapter 27 of the *Handbook of Methods for Surveys and Studies*, BLS Bulletin 1711, 1971, pp. 227-233.
- "Technology and Manpower in Nonelectrical Machinery," by Lloyd T. O'Carroll, *Monthly Labor Review*, June 1971, pp. 56-62. Reprint 2741.
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- “Manpower Implications of Computer Control in Manufacturing,” by Arthur S. Herman, *Monthly Labor Review*, October 1970, pp. 3-8. Reprint 2615.
- “Technological Changes in the Printing and Publishing Industry,” by Robert V. Critchlow, *Monthly Labor Review*, August 1970, pp. 3-9. Reprint 2687.

International comparisons

- International Comparisons of Labor Costs and Productivity Trends in Manufacturing, Preliminary Estimates for 1972*, BLS Press Release, April 1973.
- “Unit Labor Costs in the U.S. and 10 Other Nations, 1960-71,” by Arthur Neef, *Monthly Labor Review*, July 1972, pp. 3-8.
- “Unemployment in Nine Industrialized Countries,” by Constance Sorrentino, *Monthly Labor Review*, June 1972, pp. 29-33.
- “Comparing Employment Shifts in 10 Industrialized Countries,” by Constance Sorrentino, *Monthly Labor Review*, October 1971, pp. 3-9.
- “Foreign Labor Conditions, International Comparisons, and Trade Research,” reprint of Chapter 30 of the *Handbook of Methods for Surveys and Studies*, BLS Bulletin 1711, 1971, pp. 241-243.

Construction labor requirements

- “Labor and Materials Required for Highway Construction,” by Robert Ball, *Monthly Labor Review*, June 1973, pp. 40-45.
- Labor and Material Requirements for Construction of Private Single-Family Houses*, BLS Bulletin 1755, 1972. 40 cents.
- “Labor Requirements for Public Housing,” by Joseph T. Finn, *Monthly Labor Review*, April 1972, pp. 40-42.
- “Construction Labor Requirements,” reprint of Chapter 28 of the *Handbook of Methods for Surveys and Studies*, BLS Bulletin 1711, 1971, pp. 235-238.
- Labor and Material Requirements for Hospital and Nursing Home Construction*, BLS Bulletin 1691, 1971.

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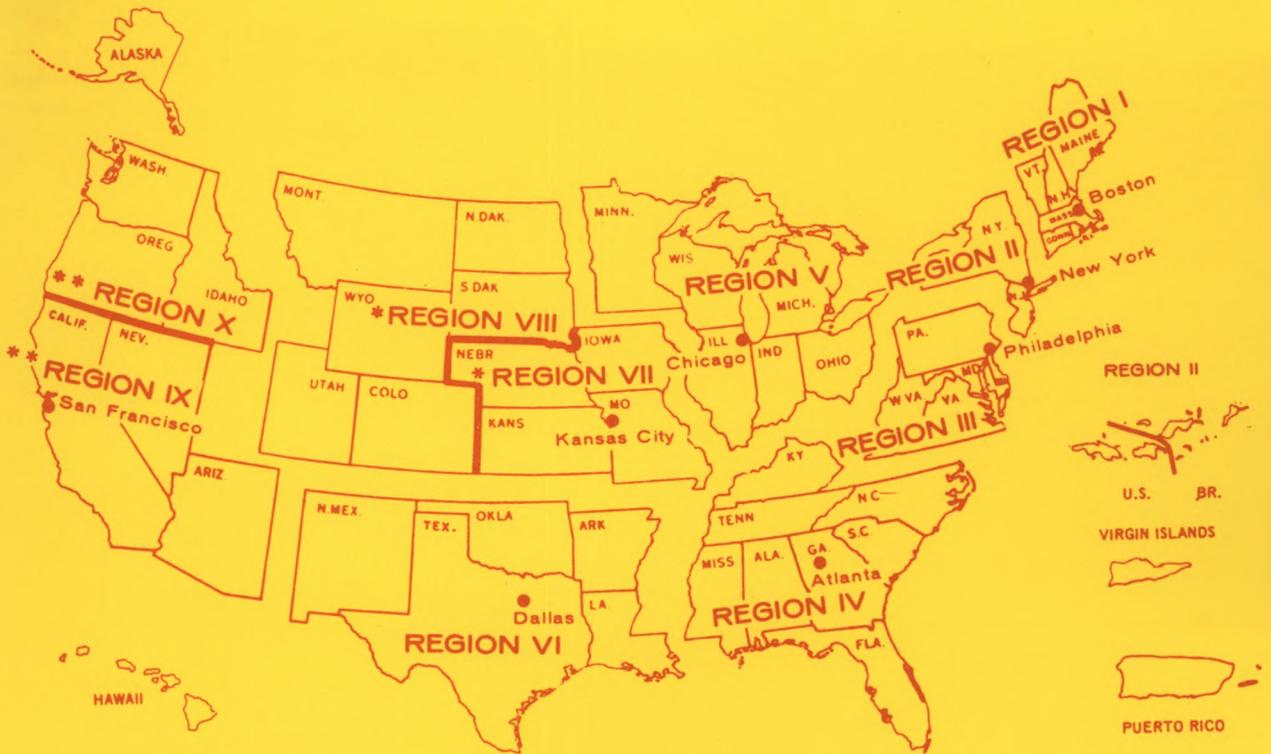
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