

p_i = the price of the i th manufactured commodity.

q_i = the quantity of the i th manufactured commodity shipped during the year.

w_i = the average annual earnings in the i th industry.

l_i = the average number of employees in the i th industry during the year.

a_i = the ratio of number of employees to physical quantity of the i th commodity.

That is, $l_i = a_i q_i$ and

$$l_i / q_i = a_i, \text{ the input of labor required per unit of output.}$$

p_m = the price of raw materials.

m_i = the quantity of materials used in the production of one unit of the i th commodity.

k_i = the markup over the cost of labor and materials in the price of the i th commodity.

Then, the value of the commodity produced by the i th manufacturing industry is

$$p_i q_i = q_i [1 + k_i (w_i a_i + p_m m_i)].$$

The unit value added is

$$P_i - p_m m_i = w_i a_i + k_i (w_i a_i + p_m m_i),$$

and the share of wages and salaries in value added in the industry is

$$\frac{w_i a_i}{P_i - p_m m_i} = 1 - \frac{k_i (w_i a_i + p_m m_i)}{P_i - p_m m_i}$$

The employees' share is defined in terms of the wage rate, the labor/output ratio, and the markup of prices over material costs. It moves with the wage rate and the labor product ratio and against the markup over direct costs. The indexes for each of these variables for all manufacturing are shown in table 1.

TABLE 1.—Income shares—All manufacturing, 1947–56

A. ALL EMPLOYEES

[1947–49=100]

Year	Wages and salaries Value added		Annual earnings		Output Employment	Unit wage plus salary cost, index
	Percent	Index	Real index	Current index	Index	
1947.....	53.4	96.9	99.3	94.8	98.5	95.9
1949.....	56.7	102.9	103.3	105.2	98.5	102.5
1950.....	53.4	96.9	107.7	110.7	107.8	100.2
1951.....	55.1	100.0	110.7	122.9	109.0	111.1
1952.....	56.0	101.6	114.5	130.0	109.6	116.1
1953.....	56.4	102.4	119.8	137.0	112.1	118.3
1954.....	56.4	102.4	121.7	139.7	110.9	120.5
1955.....	54.8	99.5	127.9	146.4	117.3	119.8
1956.....	55.2	100.2	131.8	153.2	118.1	124.4

B. PRODUCTION WORKERS

Year	Wages Value added		Annual wage earnings		Output Employment	Unit wage cost index
	Percent	Index	Real index	Current index	Index	
1947.....	40.7	100.7	100.6	96.1	96.2	97.7
1949.....	40.1	99.3	102.1	103.9	100.9	100.2
1950.....	38.6	95.3	108.2	111.2	110.0	98.8
1951.....	39.8	98.5	110.8	123.0	110.9	107.3
1952.....	40.1	99.1	114.9	130.4	112.8	109.2
1953.....	40.3	99.6	120.0	137.3	115.5	111.3
1954.....	38.1	94.3	118.8	136.4	117.7	108.4
1955.....	37.4	92.5	125.6	143.8	123.9	108.9
1956.....	37.3	92.2	129.1	150.0	125.8	112.0