

TABLES BASED ON U. S. CENSUS OF MANUFACTURES

Year	Total Value of Products (in millions of dollars)	Index of Change 1909=100	Value of Products per Worker (in dollars)	Index of Change 1909=100	Value of Products per Capita of Population (in dollars)	Index of Change 1909=100
1909	20,672	100	3,120	100	228	100
1914	23,837	115	3,460	111	244	107
1919	61,737	298	6,860	220	588	258
1921	43,427	210	6,260	201	400	175
1923	60,258	292	6,870	220	540	236
1925	62,714	304	7,490	240	544	239

Year	Value of Products per \$1.00 of Wage	Index of Change 1909=100	Total Value of Products Reduced to 1909 Level (in millions of dollars)	Index of Change 1909=100	Value of Products per Worker Reduced to 1909 Level (in dollars)	Index of Change 1909=100
1909	\$6.04	100.	20,672	100	3,120	100
1914	5.86	97.	23,600	114	3,430	110
1919	5.87	97.	29,000	140	3,220	103
1921	5.30	87.8	28,600	139	4,120	132
1923	5.50	91.1	38,000	184	4,340	139
1925	5.84	96.8	38,300	185	4,570	147

developed which showed that these very small establishments, while looming large in the count of establishments, affected the number of workers, values of products, and other data well within two per cent and for some units less than one-half of one per cent. Therefore it was concluded that 1909 figures could be used without significant error.

That 1909 and 1925 years are particularly happy as comparative years is shown by such ratios as those revealing that in both years the same proportion was counted as wage earners, nearly 7.3 per cent; that the total number of persons engaged in manufacture, inclusive of firm members, proprietors and salaried employees, bore the same relation to the population, 8.46 per cent, and that the gain in value of products over costs of materials and supplies per \$1.00 of wages paid was the same—\$2.50 in both years.

Among the significant deductions to be made from the analyses are the following:

The opportunity for a job in industry in 1925 was just the same as in 1909, taking the relation of wage earners to the population as an index.

The weighted wholesale price of commodities had increased from one hundred in 1909 to 164 in 1925.

The average annual wage of the wage earner had risen from \$518 to \$1,280 or 147 per cent. When this average wage was reduced to 1909 dollars, it had risen fifty per cent above that of 1909, showing, therefore, an absolute gain in possible standard of living of fifty per cent. Since the wage earning seven per cent of the population makes up, with its dependents, approximately twenty-five per cent of the total population—and this is a moderate estimate—we have some measure of the basis of the manifest increased buying power of our population.

The cost of materials and supplies did not increase as much as either wages or value of products.

The total value of products increased 204 per cent between 1909 and 1925; the value of product per worker went from \$3,120 to \$7,490 in current dollars, while the value of products per capita of population went from \$226 to \$544. Where the value of products is expressed in terms of the 1909

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Year	Gain in Total Value of Products over Cost of Materials (in millions of dollars)	Index of Change 1909=100	Gain in Value of Products, over Materials Cost, per Worker (in dollars)	Index of Change 1909=100	Gain in Value of Product, over Materials Cost, per \$1.00 of Wage	Gain in Value of Product over Wages and Materials Costs, (in dollars)	Index of Change 1909=100	Gain in Value of Product over Materials Cost, per \$1.00	Wage per \$1.00 of Product	Balance Left to Manufacturer	Index of Change 1909=100
1909	8,529	100	1,285	100	\$2.50	767	100	\$.412	\$.166	\$.246	100
1914	9,675	113.5	1,405	109	2.38	815	106	.406	.170	.236	96
1919	24,748	290	2,740	213	2.33	1,590	206	.401	.169	.232	94.3
1921	18,272	214	2,630	205	2.23	1,450	188	.420	.189	.231	94
1923	25,777	302	2,940	229	2.36	1,685	219	.428	.183	.245	99.5
1925	26,778	314	3,200	249	2.50	1,920	249	.427	.171	.256	104.1

Year	Gain in Value of Products over Wages and Materials (in millions of dollars)	Index of Change 1909=100	Total Number of People Engaged in Manufacture (Wage Earners, Salaried Employees and Proprietors)	Ratio to Population	Number of Salaried Employees	Average Yearly Salary of Salaried Employees (in dollars)	Index of Change 1909=100	Ratio of Wage Earners to Total Number of People Engaged in Manufacture
1909	5,102	100	7,678,578	8.46%	790,267	1,190	100	86.2%
1914	5,612	110	8,263,063	8.45	964,217	1,324	111	85.1
1919	14,297	280	10,812,736	10.30	1,447,227	2,000	168	84.1
1921	10,079	198						
1923	14,778	290	10,282,306	9.20	1,355,729	2,220	186	85.4
1925	16,048	314	9,773,051	8.46	1,340,382	2,350	197	86.2

dollar, the product per worker increased forty-seven per cent. This latter figure shows that the worker, with his fifty per cent net gain in wage, had produced forty-seven per cent more units of goods. Industry had seen to it, or rather, in spite of the desire of management to reap a large share in gains due to improved efficiency, the combination of influences had brought about the result that the workers in manufacture could purchase from their wages their share of the increased production.

Now the manufacturer or management is primarily interested in the balance left after paying for materials and wages. The data show that for each \$1.00 of product, the owner had left for overhead and profit \$.246 in 1909 and \$.256 in 1925, so the owner's position was apparently slightly improved at the same time that the worker's and the public's positions were improved. With this gain

in balance above wages and materials, he had seen an increase in dollar value of product to 304 per cent of the 1909 value (or a gain of 204 per cent), yet the actual number of workers had increased only twenty-seven per cent, which was the same as the gain in population in the sixteen years.

Was this apparent gain in margin or balance over wages and materials swallowed up in an increased salary roll for supervision? At a meeting in Chicago in 1913, Emma Goldman, the anarchist labor agitator, told the assembled disciples of scientific management that their methods meant saddling more soldiers on the backs of the actual workers. The census data show that the total number of salaried employees plus proprietors and firm members remains in exactly the same ratio to the workers, at 13.8 per cent of the total employed, and that the relative increase in salary per salaried