

TABLE 4.—*Time series partial correlation coefficients between annual changes in wages, employment, and lagged profits, 1947-58*¹

Industry	Partial correlation ² of percent change in straight-time hourly earnings on—	
	Percent change in production worker employment	Rates of return on stockholders' equity before taxes, lagged 1 year
20. Food.....	0.398	0.834
21. Tobacco.....	-.480	-.072
22. Textiles.....	.675	.821
23. Apparel.....	-.034	.395
24. Lumber.....	.228	-.282
25. Furniture.....	.595	.879
26. Paper.....	.420	.798
27. Printing and publishing.....	-.049	.866
28. Chemicals.....	.213	.240
29. Petroleum.....	.680	.316
30. Rubber.....	.550	.847
31. Leather.....	.390	.538
32. Stone, clay, and glass.....	.385	.182
33. Primary metals.....	.186	.166
34. Fabricated metals.....	.050	.707
35. Machinery, except electrical.....	.386	.692
36. Electrical machinery.....	-.291	.649
37. Transportation equipment.....	.338	-.393
38. Instruments.....	.326	-.008

¹ The 5 percent level of significance is 0.6319; the 1 percent level is 0.7646.

² These are partial correlation coefficients corresponding to the regression coefficients in the equation $W_t = a + bE + cR$, where W_t is the percent change in straight time hourly earnings, E is the percent change in production worker employment, and R is the rate of return on stockholders' equity, lagged 1 year.

Unfortunately, no recent data were available to evaluate the possible relationship between wage changes and union strength. The most recent study of the extent of union organization in different industries was made in 1946;⁷ it is probable, however, that the strength of unionism has not changed greatly in most industries since that time. In any case, on the basis of the best estimates available, there does not appear to be any general relationship between union strength and wage changes. This is suggested by the figures in table 5, in which industries are ranked in accordance with their percentage increases in earnings during two major subperiods, together with data on estimated union strength, average profit levels, concentration ratios, and production worker employment in those industries. During both of the periods 1947-53 and 1953-58, the six industries which had the greatest increases in hourly earnings ranged from quite weakly unionized sectors, such as food and chemicals, to such strongly organized industries as primary metals. Contrariwise, the half dozen industries with the lowest increases in earnings included apparel, which was highly organized, as well as textiles and leather at the other extreme. Union strength per se therefore, does not appear to have been an important factor explaining developments in the wage structure; it must be stressed, however, that it does not necessarily follow from this that collective bargaining has not had an effect on the wage level. For it may be that wages are increased in the more strongly unionized industries by more than would otherwise be the case, and that other industries, both union and nonunion, adopt the same "pattern." Thus the lack of any evident relationship between wage changes and

⁷ "Extent of Collective Bargaining and Union Recognition, 1946," Monthly Labor Review, May 1947.