evident between the year-to-year changes in earnings and percentage changes in output, production worker employment, or productivity per production worker man-hour. On the other hand, the data indicate a strong interrelationship, particularly after 1951, between hourly earnings, profit levels, and 1954 concentration ratios. With the exception of the year 1955–56, earnings and profits were very highly correlated; the relationship of earnings to concentration ratios, while weaker, was still quite marked.

TABLE 1.—*Simple cross section correlation coefficients between wage changes and selected variables in 19 manufacturing industries, 1947–58* [1]

Year	Straight time earnings on—						Output on profits before taxes	Concentration ratios on—	
	Production worker employment	Productivity per production worker man-hour	Output	Profits before taxes	Profits after taxes	Concentration ratios		Profits before taxes	Profits after taxes
1947–48	0.417	−0.248	0.195	0.012	0.138	0.226	0.463	−0.108	0.071
1948–49	−.050	.162	.024	.616	.777	.336	.237	.447	.527
1949–50	−.563	.362	−.372	−.087	−.097	.033	.654	.307	.340
1950–51	.171	−.247	.078	.178	.127	.045	.631	.361	.371
1951–52	.087	.118	.039	.598	.707	.283	.491	.458	.463
1952–53	.249	.251	.332	.550	.689	.423	.724	.559	.537
1953–54	.203	−.279	−.067	.628	.520	.463	−.059	.553	.598
1954–55	.233	.102	.383	.514	.600	.383	.500	.447	.460
1955–56	−.197	.354	.086	.055	.146	.428	.259	.512	.603
1956–57	.230	.390	.372	.546	.544	.607	.726	.612	.755
1957–58	−.576	.049	−.440	.392	.484	.549	.222	.506	.698

[1] The 5 percent level of significance is 0.4555. The 1 percent level is 0.5751.

Sources: See apps. A and B.

The use of simple correlation techniques may, however, yield misleading results. In particular, it will be noted in table 1 that profits were often significantly, though rather sporadically, related to changes in output. In order to test the relationship between earnings and profits, after correcting for the effects of changes in output, partial correlation coefficients were computed for each year. The general conclusions indicated above were not greatly affected, although the coefficients fell to somewhat below the 5 percent level of significance in 1954–55 and 1956–57. The partial correlation coefficients, using profits before taxes as the profit variable, were as follows: [5]

1947–48	−0.009	1953–54	0.627
1948–49	.628	1954–55	.403
1949–50	.223	1955–56	.034
1950–51	.167	1956–57	.432
1951–52	.665	1957–58	.559
1952–53	.476		

Finally, two multiple cross-section regressions were computed for the subperiods 1947–53 and 1953–58, relating changes in hourly earnings to (1) the average level of profits before taxes, (2) the percent change in production worker employment, and (3) the percent change in output. The results, presented in table 2, were again consistent with the previous findings. For the earlier period, the partial correlations coefficients were not significant for any variable; for the years 1953–58,

[5] The 5 percent level of significance is 0.4683; the 1 percent level is 0.5897.