

4 PRICES AND WAGES IN MANUFACTURING INDUSTRIES

however, the coefficient for profits was significant at well above the 5 percent level, while both employment and output were of virtually no significance whatever.⁶

TABLE 2.—Cross-section regression equations: Wages

Independent variable	Regression coefficient	Partial correlation coefficient	Beta coefficient	Standard error of beta coefficient
1947-53:				
Average profit rate before taxes.....	0.7430	0.3028	0.4196	0.3409
Percent change:				
Production worker employment.....	-.2345	-.2009	-.4007	.5044
Output.....	.1329	.1787	.3798	.5398
1953-58:				
Average profit rate before taxes.....	1.7493	1.6590	.6797	.2003
Percent change:				
Production worker employment.....	.0034	.0046	.0049	.2759
Output.....	-.0526	-.1055	-.1139	.2770
Regression constants:				
1947-53.....				19.58
1953-58.....				7.28
Multiple correlation coefficient:				
1947-53.....			$R = .4614$	
1953-58.....			$R = 1.6729$	
Coefficient of multiple determination:				
1947-53.....			$R^2 = .2129$	
1953-58.....			$R^2 = 1.4528$	
Degrees of freedom.....			$N-4=15$	

¹ Significant at the 5-percent level.

In addition to these cross-section tests, some time series analyses were also conducted for each two-digit classification. In view of the limited number of annual observations available, and the rather sharp structural readjustments occurring in the economy as a whole during the immediate postwar and Korean periods, the use of time series is subject to important limitations; nevertheless, the results were generally quite consistent with those indicated by the cross-section data.

Table 3 indicates, for each two-digit industry, the simple correlation coefficients between the year-to-year percentage change in straight-time hourly earnings and the percentage changes in employment and output; in addition, coefficients are given for the relationship between earnings and three different measures of profit levels. There was no important relationship evident with respect to either output or employment. In the case of profits, however, the correlations were consistently stronger, particularly for profits before taxes, lagged 1 year. In the latter instance, the correlation coefficients were at a 5-percent level of significance or better in 9 out of 19 industries, including 5 which were at a 1-percent level.

⁶ Another bit of corroborative evidence can be found in a similar study of 61 smaller (3-digit) industries conducted by Conrad. On the basis of both simple and multiple cross-section regression analysis, he found a "remarkably low degree of relationship" between average annual changes in production workers' wages and output, employment, and productivity. He did not test for the role of profits. See Alfred H. Conrad, "The Share of Wages and Salaries in Manufacturing Incomes, 1947-56," Joint Economic Committee Study of Employment, Growth, and Price Levels, Study Paper No. 9, pp. 149-152.