

TABLE 7.—*Regression equation*

[Average wholesale price index industry, i , 1949-56 = B_1 (average annual wage change, all employees), $i+B_2$ (average annual real output change), $i+B_3$ (average annual change, output per unit labor), $i+B_4$ (average annual change, all employment), i]

Independent variable	Regression coefficient	Partial correlation coefficient	Beta coefficient	Standard error of Beta coefficient
Average annual wage change, i	0.30279	0.3486	0.3487	0.1252
Average annual real output change, i	-.00150	-.0122	-.0113	.1243
Average annual change, output per unit labor, i	.00647	.0673	.0631	.1250
Average annual change, all employment, i	.04587	.1635	.1549	.1249
Regression constant.....	247.99			
Standard error of estimate.....	14.9782			
Multiple correlation coefficient.....	.3695			
Coefficient of multiple determination, R^2	.1359			

NOTE.—Degrees of freedom = $n-5=56$.

36. These are rough-and-ready tests. From the matrix of simple correlation coefficients r , it did not appear that multicollinearity was a problem in these data. But the likelihood of errors of observations for averaged year-to-year change indexes is very serious. Still it is difficult to interpret these results as showing anything but that manufacturing wages and prices during the recent inflation have been essentially free of demand influence at the specific industry level, and that prices appear to be significantly related to combined profit and wage increases. The evidence presented earlier and the negative correlations between changes in wage share and changes in wage earnings imply that price rises have not been simply related to wage costs, but have been accompanied by gross-profit increases.

CONCLUSIONS

This study has examined the behavior of wages and gross-profit margins among the 131 Census of Manufacturing three-digit industry groups. Its purpose was, first, to find out whether wage shares had gained or lost in the course of the postwar inflation. Second, the specific industry patterns were to be used to investigate the way in which different sectors, with different output and price behavior, were struck by the inflation. Finally, some of the data was used to test a very simple version of the demand pull hypothesis on wage and price increases. A summary of the results follows:

(1) The share of production workers in value added declined from 1947 to 1956, largely as the result of the relative reduction in production worker employment. Salaried clerical, administrative, and technical personnel experienced a gain in their share, in part as the result of an increase in proportions, partly as a result of more rapid salary increases.

(2) Among production workers and all employees, there was a clear-cut pattern of gains in the wage and salary share in the non-durable sector and losses in the durables, with the relative wage loss concentrated especially in the basic steel and automobile industries. The declines in the durables were balanced, arithmetically, by the gains in gross profits; in steel and auto production the net profit margins showed unusual gains during the period.