wages will not simply respond to consumer price changes; they may overcompensate as a result of actual or threatened demand declines due to the lagged price increase. The remainder of this study is an attempt to find out to what extent the degree of over or undercompensation is related to demand pressures and productivity changes.

31. From the complete list of three-digit Census of Manufacturing industries, for the years 1949 to 1956, 61 industries provided continuous data from which several linear multiple regression equations attempting to explain specific wage changes were fitted by single-equation least-squares. (Every possible observation of year-to-year change was used in the original correlation matrix.) There were, therefore, seven cross-sections combined over approximately 61 industries.[12]

A selection of the correlation coefficients with (1) changes in average wage earnings, all employees; (2) changes in average wage earnings, production workers; and (3) the three-digit industry price index are shown in tables 4 and 5.[13]

TABLE 4.—*Simple correlation coefficients: Annual changes, all 3-digit industries, 1949–56*

	Change, wages and salaries	Change, production workers' wage	Wholesale price index
Mean value	104.83	104.94	122.95
Standard deviation	4.41	5.57	18.39
Wholesale price index	.1262	.0800	1.0000
Change: Deflated output	.0447	.0398	−.0068
Change: All employees	.0382	.1230	.0160
Change: Production workers	.0719	.1475	.0036
Change: Output per unit, all labor	.0596	.0365	−.0025
Change: Output per unit, production worker	.0209	.0289	−.0144
Change: Wages and salaries	1.0000	.7154	.5967
Change: Production workers' wages	.7154	1.0000	.6131

Sources: Census of manufactures, computed at Littauer Statistical Laboratory. Wholesale price indexes, Bureau of Labor Statistics.

[12] There is no reason to believe that the omissions were systematic among the variables finally chosen. The industries are listed in table 5.

[13] The wage earnings are annual averages for all employees and production workers derived from the census total salaries and wages series. It includes all forms of compensation (including paid holidays and vacations) except the employer social security and unemployment insurance payments, and other nonpayroll costs such as pension plans, group insurance premiums, and workmen's compensation, and is therefore a closer approximation to total labor input costs than the average hourly earnings or straight time hourly earning series. The price indexes are derived from the input-output industry-base series developed from the Wholesale Price Index by the Bureau of Labor Statistics, Division of Productivity and Technological Developments, and made available to the Harvard economic research project.