

TABLE 1.—*Simple correlation coefficients—Profit rates and various dimensions of market structure*

Market structure variables	Correlation with profit rates	
	Natural units ¹	Logarithm ²
Growth of demand.....	0.17	0.42
Capital requirements.....	³ 0.43	³ 0.57
Economies of scale.....	0.25	³ 0.37
Advertising-sales ratio.....	³ 0.42	⁴ 0.27
Advertising per firm.....	³ 0.43	³ 0.50
Concentration ratio (4 firms).....	⁴ 0.36	⁴ 0.35

¹ The units of measurement are described in the text above.² In computing these coefficients, the structural dimension is measured in logarithms although the profit rate is measured in natural units.³ Indicates coefficient is statistically significant at the 99 percent level.⁴ Indicates coefficient is statistically significant at the 95 percent level.NOTE.—Tests of significance are made on the basis of 1-tailed *t* tests.

The correlation between profit rates and concentration in table 1 is based on a continuous four-firm concentration ratio. The relationship between these two variables was also examined in terms of discrete groupings. Industries were divided according to both the three-way classification scheme proposed by Kaysen and Turner, and a two-way classification depending on whether the eight-firm concentration ratio exceeded or was less than 70 percent. The following results are obtained:

	Number of industries	Average profit rates
Kaysen and Turner trichotomy:		
Type I oligopolies.....	13	8.4
Type II oligopolies.....	14	9.2
Unconcentrated.....	14	6.3
Dichotomy based on 8-firm concentration ratio at 70 percent:		
Concentrated.....	8	10.0
Unconcentrated.....	33	7.5
All industries.....	41	7.9

While the distinction between Type I and Type II Oligopolies seems, to the average, unimportant, there do appear to be substantial differences in profits between concentrated and unconcentrated industries. These differences are important in both classification schemes.

The core of the empirical work is the multiple regression equations which relate profit rates to various combinations of the explanatory variables. A set of linear equations is presented in table 2. As may be observed, the advertising-sales ratio and the measure of capital requirements appear to be the most important explanatory factors. Their regression coefficients are generally significant even when all other variables are included. The variable describing economies of scale seems from these results to be quite weak, although it has the expected sign in all cases. The advertising per firm coefficient is significant if the advertising-sales ratio is not included. Where both are included, it tends to be insignificant. Advertising outlays per firms are correlated with absolute capital requirements (the simple correlation coefficient between these variables is 0.40) and this variable is not as statistically important in conjunction with the latter as is the advertising-sales ratio.