

TABLE 2.—Multiple regression equations explaining profit rates—Linear results

	Intercept	Adver- tising- sales ratio	Advertising per firm	Econ- omies of scale	Absolute capital require- ments	Growth of de- mand	Concentration classes ^a		R ²	Cor- rected R ²
							Type I	Type II		
(1)-----	0.049	*0.424 (2.4)	0.00000059 (1.1)	0.113 (0.8)	**0.000281 (3.0)	0.0014 (0.6)	-0.0153 (1.0)	0.0084 (0.6)	**0.47	**0.34
(2)-----	0.052	0.296 (1.6)	*0.00000114 (2.0)	0.113 (0.7)	-----	0.0018 (0.7)	-0.0058 (0.3)	0.0115 (0.8)	*-0.32	*0.19
(3)-----	0.051	**0.437 (2.5)	0.00000060 (1.1)	-----	**0.000282 (3.0)	0.0012 (0.5)	-0.0091 (0.7)	0.0126 (1.0)	**0.46	**0.35
(4)-----	0.048	**0.499 (3.1)	-----	0.116 (0.8)	**0.000315 (3.5)	0.0016 (0.7)	-0.0117 (0.7)	0.0085 (0.6)	**0.45	**0.34
(5)-----	0.058	-----	*0.00000112 (2.1)	0.145 (0.9)	*0.000227 (2.3)	0.0012 (0.5)	-0.0147 (0.9)	0.0146 (1.0)	**0.38	**0.25

^a Based on Kaysen and Turner groupings.

NOTE.—Figures in parentheses are *t* values. The statistical significance of the regression coefficients is tested by means of 1-tailed *t* test and of the multiple correlation coefficients by means of the *F*-ratio test.

*Indicates coefficient is statistically significant at the 95-percent level.

**Indicates coefficient is statistically significant at the 99-percent level.

In none of the equations do the estimated coefficients of the concentration dummy variables exceed their standard errors. In addition, the coefficient for Type I Oligopolies has a negative sign throughout, which does not coincide with a priori expectations. While the impact of concentration is examined at greater length below, the linear results suggest that the partial effect of this variable may be relatively unimportant when it is introduced in conjunction with variables reflecting product differentiation, the height of technical entry barriers, and the rate of growth of demand.

In an alternative formulation, four dummy variables were defined to represent high and moderate technical entry barriers and high and moderate advertising intensities, and these were introduced in place of the advertising, economies of scale, and absolute capital requirements variables. The results are presented in table 3. The dummy variables designed to measure the influence of technical barriers are not statistically significant, and in the second equation, the estimated coefficient for industries with high technical barriers is less than the coefficient for industries with moderate barriers. This result reflects in part the correlation between the high technical barrier dummy variable and concentration. The correlation coefficient between the dummy variable for high technical barriers and the Type I concentration dummy variable is 0.53. When the four-firm concentration ratio is used, this coefficient rises to 0.68. This collinearity obscures the separate effects of concentration and technical entry barriers.

TABLE 3.—Multiple regression equations containing composite variables

	Inter- cept	Advertising barriers		Technical entry barriers		Concentration ^a		Growth of de- mand (logs)	R ²	Cor- rected R ²
		High	Moderate	High	Moderate	Type I	Type II			
(1)-----	0.056	**0.0552 (3.3)	0.0080 (0.6)	0.0154 (0.9)	0.0090 (0.5)	-0.0132 (0.7)	-0.00085 (0.05)	*0.020 (1.9)	**0.46	**0.33

	Inter- cept	Advertising barriers		Technical entry barriers		Concen- tration ratio ^b	Regional industry dummy variable	Growth of de- mand (logs)	R ²	Cor- rected R ²
		High	Moderate	High	Moderate					
(2)-----	0.044	*0.0403 (2.3)	-0.0049 (0.3)	-0.0150 (0.8)	-0.0013 (0.1)	0.000596 (1.4)	0.0311 (1.4)	*0.024 (2.4)	**0.48	**0.36

^a Based on Kaysen and Turner groupings.

^b Four-firm concentration ratio.

NOTE.—Figures in parentheses are *t* values. The statistical significance of the regression coefficients is tested by means of one-tailed *t* test and of the multiple correlation coefficients by means of the *F*-ratio test.

*Indicates coefficient is statistically significant at the 95-percent level.

**Indicates coefficient is statistically significant at the 99-percent level.