

To consider further the impact of concentration, the continuous concentration ratio was introduced into the analysis. As this variable is available only on a national basis, a dummy variable was also introduced to identify industries which sell in local rather than in national markets.³⁴ It is interesting that the continuous variable appears to have a stronger impact on profits than do the concentration dummy variables. Both the coefficient for concentration and for the local market dummy variable are significant at the 90 per level.

In contrast to the weak effect of composite technical barriers, the composite advertising variable has a strong effect. In both equations, the high advertising variable is statistically significant and the coefficient appears relatively stable. In addition, the growth of demand variable becomes significant when introduced in logarithmic form.

Additional sets of regression equations are presented in tables 4 and 5. In both sets, capital requirements are introduced in logarithmic form and the estimated coefficients are generally significant. However, some degree of collinearity exists between the measures of capital requirements and scale economies. When both variables are introduced into the equations, the variance of the estimates increases, and in some cases, the capital requirements coefficient becomes statistically insignificant.

In table 4, the advertising-sales ratio is used to measure the entry barriers created by high advertising expenditures, while in table 5, the dummy variable representing high advertising barriers is introduced. Both advertising variables are statistically significant in all of the equations presented, and the estimated coefficients of both variables are very stable. The dummy variable for high advertising barriers appears to be somewhat stronger than the advertising-sales ratio. However, the coefficients of the other structural variables included in these equations are not sensitive to the particular advertising variable used.

TABLE 4.—Multiple regression equations explaining profits rates—Major findings with advertising-sales ratio

	Intercept	Advertising-sales ratio	Capital requirements (logs)	Economies of scale (logs)	Growth of demand (logs)	Concentration class ^a	Regional industry dummy variable	R ²	Corrected R ²
(1).....	0.042	*0.362 (2.4)	**0.0097 (3.2)	-----	0.016 (1.6)	-----	-----	**0.46	**0.40
(2).....	0.042	*0.362 (2.3)	**0.0096 (2.5)	0.000067 (0.01)	0.016 (1.6)	-----	-----	**0.46	**0.38
(3).....	0.039	*0.343 (2.3)	**0.0105 (2.8)	-----	0.015 (1.4)	0.0043 (0.3)	0.0278 (1.5)	**0.49	**0.40
(4).....	0.038	*0.341 (2.3)	**0.0111 (3.6)	-----	0.014 (1.4)	-----	0.0280 (1.6)	**0.49	**0.42

^a An industry is concentrated if the 8-firm concentration ratio equals or exceeds 70 percent; otherwise it is unconcentrated.

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

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

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

³⁴ These market characteristics had already been accounted for in the Kaysen and Turner groupings.