capital, high advertising expenditures by existing firms, and thereby high advertising requirements for new entrants, will further restrict the rate of entry.

For all of these reasons, heavy advertising expenditures serve to create substantial entry barriers. They act as an important restriction on competition and permit established firms to charge high prices and earn high profit rates without fear of the competitive consequences. And the statistical findings presented earlier merely describe the extent of the effect of advertising on competition.

THE PROBLEM OF CASUALITY

Throughout the analysis, we have assumed that the direction of casuality runs from advertising to high profit rates, and it is necessary to consider whether the reverse could be the case. This is especially so since a plausible argument could be made that, since advertising reflects the discretionary behavior of firms, high profits could lead to high advertising. In other words, high profits could be "spent" on advertising.

There are a number of factors, however, which suggest that the appropriate direction of casuality is in fact from advertising to profits. The first is that if profits were "spent" on advertising, which is after all an expense to the firm, higher measured profit rates would be associated with lower advertising expenditures, and lower measured profit rates, with higher outlays. But we have observed a positive rather than a negative relationship between these two variables.

A second and even more important reason stems from the fact that the amount of advertising expenditures depends on many factors besides the whims of individual managers.

Product and market characteristics make advertising a more profitable activity in some industries than in others, and there are few reasons for believing that managers in some industries are better equipped to take advantage of their opportunities than those in others.

In fact, if we assume that managers make their decisions on advertising burgets so as to maximize profits, then the differences between industries which we observe reflect not the discretionary behavior of individuals but rather the particular product and market characteristics of member firms in the industry.

The figures presented above, which deal with the average values across a 4-year period, may be interpreted in fact as describing the optimal levels of advertising expenditures in the particular industry. And there is no reason to believe that firms with higher profit rates will have higher optimum advertising expenditures than firms with lower profit rates but similar market conditions.

This latter consideration is an important one for interpreting the statistical results presented earlier. Since the analysis focuses on interindustry differences in advertising outlays, and since these differences are more likely to reflect the product and market characteristics in the industry rather than the peculiarity of individual managers, these results have few behavioral connotations. They do not imply that an industry can earn higher profit rates simply by spending more on