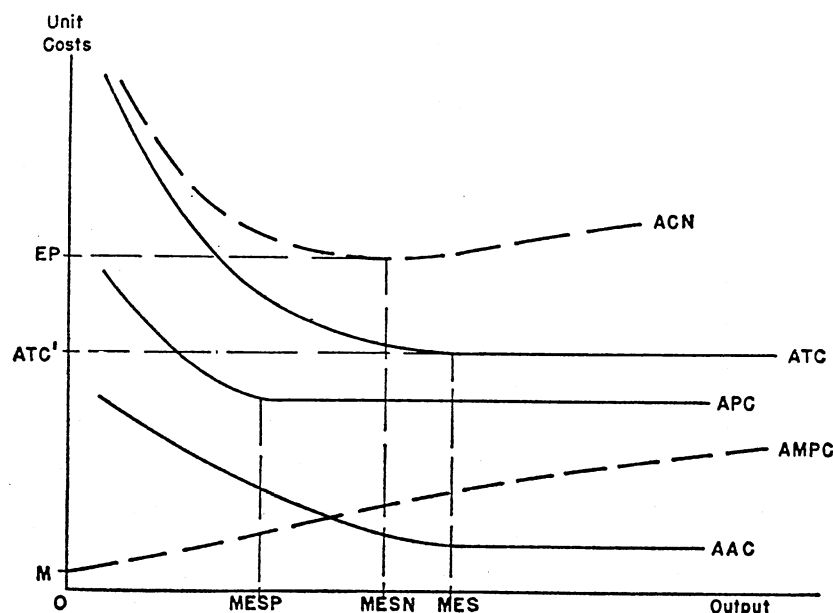


FIGURE 1. — ADVERTISING AND ENTRY BARRIERS



This schedule therefore denotes the required rate of return on capital invested in market penetration times the total expenditure required to establish a given volume of sales, all divided by the number of units sold. The figure illustrates the case where average penetration costs rise throughout the relevant range of output. This assumes that the growing difficulty involved in winning over customers with stronger preferences for the products of established firms, reinforced by rising required rates of return as the absolute amount of capital required for penetration increases with the scale of entry, is not fully offset by economies of scale in advertising or by bandwagon effects for the new entrant's products.

Curve ACN represents average costs, including penetration costs, for new entrants, and MESN is the most efficient scale for entry if the reactions of established producers are neglected. From this, it follows that EP is the *minimum* price at which entry will occur. If MESN is a negligible fraction of the market, EP is the entry-inducing price. If, however, MESN is a significant fraction of the market, entry is unlikely to occur even at price EP because the entrant will expect established producers to contest the encroachment of their market position through an increase in advertising outlays or by a reduction in price. The gap between EP and ATC' represents, therefore, the minimum price-cost margin which may induce entry.

This figure demonstrates, moreover, that the interaction between rising penetration costs and economies of scale at the firm level is important even if no allowance is made for the reactions of existing producers. If economies of scale in both production and in advertising were absent, the relevant price-cost margin would be simply M, which is less than $EP - ATC'$.

VARIABLES USED IN THE MULTIVARIATE ANALYSIS

In this section, we briefly define and discuss the rationale for the selection of each of the specific measures.

Profit Rates

The profit rate variable used is profits after taxes as a percentage of stockholders' equity,¹⁵ averaged within each industry for firms with assets exceeding

¹⁵ This profit rate variable was used originally in Joe S. Bain, "Relation of Profit Rates to Industry Concentration: American Manufacturing, 1936-1940," *Quarterly Journal of Economics* (Aug. 1951), 296-297, and Bain, *Barriers to New Competition*, 192.