<u>How may advertising act as a barrier to entry?</u>

Like almost every science, the school of Industrial economics is made up of theory and empirical studies. In Industrial economics, empirical studies are industry studies conducted by a number of researchers.

Joe Bain, from the Harvard school of industrial economics, first mentions barriers to entry in an industry study he conducted in the early 1950s. Bain links entry barriers to the capacity to raise price above unit (marginal) cost in the long run without inducing potential entrants to enter the industry. Demsetz of the Chicago school links the idea of entry barriers to government based restrictions on entry, which are not relevant for this essay. Bain outlines a total of three types of barriers to entry: Absolute cost advantages, Economies of scale and Product differentiation. Bain links advertising and the creation of copyrighted brand names to product differentiation. In his 1956 industry study, he found that advertising acts as a barrier to entry more in some industries than in others. For example, he found that in the Automobile and Cigarette producing industries, advertising, effectively constituting as a barrier to entry in his belief, is used to a higher extent than in the caned fruit and vegetable industry. For a definition of advertising we refer to Colley (1961). He defines advertising as *"mass paid communication, the ultimate purpose of which is to impart information, develop attitudes and induce action beneficial to the advertiser".*

Advertising is usually used by firms to inform and/or persuade customers to buy their products. Firms also use advertising to remind ex-consumers that their product is still on the market or to hamper the entry of new firms into the market. It is important to establish whether advertising is predatory or cooperative advertising. Predatory advertising attracts away customers from competition, whereas cooperative advertising increases demand for all firms in the market.
A profit maximising firm will typically advertise as long as the expected marginal revenue from advertising equals the expected marginal cost of advertising. Advertisement levels vary between markets mainly due to differences in market structure. For a profit-maximizing monopolist, the optimal level of advertising is dependant on the ratio between advertising and price elasticities according to Dorfmann and Steiner (1954). The greater the consumers' responsiveness to advertising and the lower their responsiveness to changes in the product price, the higher will be the optimal level of advertising relative to sales. In an oligopoly market structure, Cable (1972), argues that advertising plays a more important role than price competition. Cable argues that rival firms quickly realize changes in price, which leads them to also lower their prices as a consequence. With regards to advertisement, it is unlikely that changes in their levels are quickly realized by the competition and effects on profits are unlikely to be closely related. This is the explanation why, according to Cable, in an oligopoly market environment high advertising intensity prevails.

Advertising as persuasion - view

This view is advocated by the Harvard school scholars, like J. Bain (1968). The assumption is that advertisement changes peoples perception of the product. According to Bain, advertisement increases market power and prices, as well as distorting consumers' preferences. Bain argues that by changing the consumers perception in favour of the advertised product, demand for it becomes less price sensitive, more inelastic to changes in its price. Without any immediate changes in the competitor's advertisement levels, consumers will be less likely to change their choices, even if the competitor lowers prices. If a rival company wishes to enter the market, it has to either offer substantial price cuts or advertise more than the incumbent. Bain classifies "persuasion" advertising as a barrier to entry, since either lower prices or heavy advertisement spending will heavily reduce the entrant's potential profits.

John Sutton brought an extension to Bain's "Advertising as persuasion"-view in 1992. Sutton sees advertising as an endogenous strategic "sunk cost" expenditure, which firms alter like they alter price and quantity. In his model, Sutton assumes that companies use advertisement to influence different levels of perceived quality just like Bain does. This leads to consumers perceived quality becoming a function of firms' advertisement. $F(u) = f + a (u)$, where $F(u)$ is the total level of fixed costs and u is the perceived quality, with $a (u)$ being an increasing function. Sutton finds in his three staged game, that even as advertising levels increase, the number of firms in the industry remains unchanged, even if the market is growing. (Church and Ware, 2000)

Advertising as information-view

This view is advocated by the Chicago school scholars, like Stigler (1961). He sees advertising primarily as a means of firms providing information to consumers, who lack knowledge about the products on the market. Stigler reckons that advertisement changes consumers perception about a product so that they can make the decision as to which product is best to them. Different to Bain's theory, this information will actually make the demand for products more price elastic. Consumers have more information about the product and will make more rational decisions. This leads to companies competing and a lower profit maximising price for the incumbents. New firms can make customers aware of the features and prices of their products though informative advertising. Whichever firm, whether incumbent or entrant, offering the best value for quality in the eyes of the consumer, will expand in the long-term, benefiting from economies of scale, leading to higher levels of concentration. In the long term, therefore, effective informative advertising may also be classified as a barrier to entry.

Empirical evidence

Catherine Matraves studied the "Market structure, R&D and Advertising in the Pharmaceutical Industry" in 1999. She found that as markets across the world in this industry become more liberalized and open, e.g. total market size increases, advertising spending of surviving firms also increased. Matraves uses Grabowski and

Vernon's industry studies of the pharmaceutical industry in her paper, which reject Bain's "Advertisement as persuasion-view", but support the Stigler view "Advertisement as information". Grabowski and Vernon found that high advertisement-sales ratios did not act as an effective barrier to entry.

Geroski and Murfin (1991) observed a different relationship between advertisement and entry. The two researchers found that in the UK car industry falling concentration and increasing imports lead to an increase in advertisement intensity. They conclude their findings in saying that advertising facilitates entry to the extent that an entrant can account for a large share of total industry advertising. However, they note that it is very costly to acquire this large share of advertising.

Fiona M. Scott Morton, also studied the Pharmaceutical Industry, but only looking at the U.S.(1998). Fiona looked at the entry decisions generic pharmaceutical manufacturers face when they look at markets which have been opened by patent expiration to competition. She confirms the findings of Grabowski and Vernon (1992) stating that advertising is exogenous to entry decisions. She finds some evidence that brands may affect generic entry very slightly by advertising before patent expiration, but both effects are "nearly insignificant". Fiona concludes her paper stating that "brand advertising is not a barrier to entry by generic firms into the US pharmaceutical market".

Conclusion

We have seen two models in this essay, Bain's "Advertising as persuasion-view" and Stigler's "Advertising as information-view". The models outlined show how the different views shared on the purposes and effects of advertisement yield different outcomes on concentration and market entry. Persuasive advertising causing high brand loyalty forces potential new entrants to either outspend the incumbent for advertisement expenditure or to offer high price cuts. These constitute in substantial barriers to entry. Stigler's "Advertising as information-view" sees advertisement as a barrier to entry mainly in the long term, as companies selling products at the best price for the best quality to well-informed consumers, expand and benefit from economies of scale. However, empirical research shows that in the majority of industries, advertising does not constitute in a barrier to entry.

Bibliography:

Joe Bain: "Relation of Profit Rate to Industry Concentration: American manufacturing, 1936-40", 1951, Quarterly Journal of Economics; Barriers to New Competition", 1956, Harvard University Press; Industrial Organization, 1968
Grabowski, H.G. and J.M. Vernon, "Brand loyalty, Entry, and Price Competition in Pharmaceuticals after the 1984 Drug Act", Journal of Law and Economics, vol35, Pages 331-345
Catherine Matraves: "Market structure, R&D, and Advertising in the Pharmaceutical Industry, The Journal of Industrial Economics, Pages 175-177
Fiona M. Scott Morton: "Barriers to Entry, Brand Advertising, and Generic Entry in the U.S. Pharmaceutical Industry", Chicago Graduate School of Business, 1998
P.A. Geroski and A. Murfin: "Entry and Industry Evolution: The UK Car Industry 1958-83, Applied Economics, vol.23, 1991, Pages 801-805
J. Cable: "Market structure, Advertising Policy and Inter-market Differences in Advertising Intensity", Macmillan, 1972
R.Dorfmann and P.O.Steiner: "Optimal Advertising and Optimal Quality", American Economic Review, Vol.44 (1954), Pages 826-832
J.Church and R.Ware: "Industrial Organnization", Mc Graw-Hill, 2000, P.561-571