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## MARKET SHARE REWARDS TO PIONEERING BRANDS: AN EMPIRICAL ANALYSIS AND STRATEGIC IMPLICATIONS\*

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An empirical analysis indicates that the order of entry of a brand into a consumer product category is inversely related to its market share. Market share is modeled as a log linear function of order of entry, time between entries, advertising, and positioning effectiveness. The coefficients of the entry, advertising, and positioning variables are significant in a regression analysis on an initial sample of 82 brands across 24 categories. These findings are confirmed by predictions on 47 not previously analyzed brands in 12 categories. Managerial implications for pioneers and later entrants are identified.

(MARKETING; COMPETITION; NEW PRODUCTS)

### Introduction

One strategy for new product development is based on innovation and the creation of new markets. It is expensive and risky to be a pioneering brand (Urban and Hauser 1980). The costs of development are often large and the first firm in a market must allocate funds to make consumers aware of its product and convince them to buy it. The risk of failure is high because the potential demand is not known with certainty. An alternative strategy is based on being the second (or later) entrant into the market. The costs may be lower since the innovator has created the primary demand and the basic product design exists; the risk also may be less because a proven demand exists. If an equal market share can be gained, this strategy could be more profitable. If, on the other hand, as a result of being the first entrant in a market, a dominant market share is achieved and maintained, the innovation strategy may be superior. The purpose of this paper is to investigate the market share effects of being a pioneering brand.

If the market grants a long-run market share reward to early entrants, this would encourage innovation. From a public policy point of view, this would serve a similar function to that of patents by providing an additional reward to innovators. Although patents sometimes provide protection, in many cases they are ineffective because of difficulties of establishing and protecting the rights and the ability of other firms to "invent around" the patent as technology advances (von Hippel 1982). This difficulty of protecting an innovation is compounded by the fact that imitators generally take less time and require fewer funds to copy the innovation (Mansfield, Schwartz, and Wagner 1981). If pioneering brands earn a long-run market share advantage, the effectiveness of patent protection may be less critical in providing incentives for innovation and firms may be more willing to innovate without patent protection.

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equation (2). The pioneer's share drops from 100 percent to 27.3 percent after five additional entrants, but a long-run premium is evident. This is especially true with respect to later entrants with equivalent products and advertising spending. In the case of six brands the pioneer has the dominant share position and a 16.1 share point advantage over the sixth entrant. The estimates in Table 4 suggest that the second brand will at equilibrium earn less than three quarters of the share of the pioneering brand if its advertising and positioning are equal. The third brand would similarly earn a share of about six-tenths of the first brand to enter with a parity product and the fourth about one half. As the number of brands increases, the incremental order effect penalty decreases and advertising and positioning become the determining effects on share.

### Implications

The results of our analysis imply a significant market share penalty for later entrants. However, a number of caveats should be considered. First, these data represent only brands that survived in the market. If a later brand entrant failed and was removed from the market, it would not be included in these data. If such brands were present and had been observed, they would have order of entry values greater than one and most likely a low share index. Either their low shares would be reflected in their advertising and positioning levels or in a more negative order of entry parameter. That is, the order effect found in this study may understate the penalty for late entry in this situation. In the case that the pioneer failed we would have no category to analyze unless a later entrant subsequently succeeded. If the pioneer fails after a second entrant, we would be in danger of over-estimating the magnitude of the effect of later entry unless the advertising and positioning variables captured the reasons for failure. We are not aware of the existence of this situation in the categories we studied. A final caveat is that although most of the later entering brands have been in the market for a long time (89% have been on the market five years or more), a small fraction were relatively recent (4% for 2 years, 1% for 3 years, and 6% for 4 years). This small fraction of the data may reflect short-term rather than long-run order of entry effects. However, dropping recent brands changed the parameter estimates relatively little.<sup>10</sup>

There are strategic implications from this study for both later entrants and pioneers. Subject to the above caveats, later entrants should plan on achieving less share than the pioneering brand if they enter with a parity product. In Table 4, the sixth brand potential is reported as 11.2 share points if it is an equal product and advertising spending is at the level of the pioneer. In many cases the sixth firm would not find it profitable to spend at the level of the pioneer who has almost 2.5 times as much share. For example, if the advertising spending is 40 percent of the pioneer's spending level, share potential with the advertising parameter of 0.28 (from Table 2) drops from 11.2 to 8.7 share points. In many cases this may not make entry attractive. The defensive strategy of the pioneer may also deter entry. If advertising increases and price cuts are matched by the innovator, the later entrant may never gain share parity with the pioneer.

A preferred strategy may be to develop a superior product with either unique benefit features and/or a lower price. When this is backed by aggressive advertising spending, a high share can be achieved. Our data demonstrated several cases where the later entrant dominated the pioneer (see Appendices 1 and 2). The model represented by equation (2) can be used to estimate approximately how much money could be spent

<sup>10</sup>The order coefficient is  $\alpha_1 = -0.41$  ( $t = -5.1$ ) when brands less than four years old are dropped from the regression.