Review of Industrial Organization **9**: 177–180, 1994

First-Mover Advantages from Pioneering New Markets: Comment

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For those of us who find it hard to keep pace with literature developments, Robinson *et al.* offer a useful survey of empirical work on first-mover advantages. Their survey shows that the study of first-mover or early-entry advantages has attracted considerable interest since 1977 when Ronald Bond and I documented the extent of such advantages in two prescription drug markets: diuretic-antihypertensives, and antianginals.[1] To our knowledge then, our work represented the first clear empirical identification and analysis of these advantages.

At the time we presented our work, the idea that advantages accrued to early entry was not new. A basic and persistent force affecting business activity is the desire of firms to beat the competition to market. This desire in itself implies a strong belief within the business and marketing communities that early entry offers market share and profit gains. Given "inside" access to product-line sales and cost data needed to perceive and analyze these advantages, it seems likely that firms have long had some empirical understanding of the extent and source of first-mover advantages.[2]

What was new in our situation was the availability of detailed product-line sales and cost information rarely available to scholars outside of industry. Bond and I benefitted from the Federal Trade Commission's use of its data gathering powers in obtaining promotional expense and sales data for virtually all individual products that were present over a sixteen-year period in the markets we studied. As Robinson *et al.* note, these data revealed strong enduring market share advantages to the "pioneering" firm, and seemed traceable to the loyalty of physician prescribers to effective trademarked brand-name products of the "pioneer" firm. Late entrants' various strategies to enter these markets with products of comparable quality were only partially successful in eroding the lead entrant's share. Greater success was achieved where late entrants broadened and differentiated their product offerings and where they also targeted specific segments of the market ("niches"). As Robinson *et al.* observe, subsequent industry and cross-section analyses suggest these findings have a universal flavor.

Given the difficulties of obtaining the type of detailed product-line data desired to examine the many questions about first-mover advantages, it is gratifying then to see from this survey of empirical literature how much subsequent research has been conducted and how much it has added to our knowledge. Of central interest here has been the consideration of definitional issues and the attempts to assess the extent and causes of first-mover advantages across different industries not only through additional industry analyses but through cross-section analyses.

On the definitional questions, Robinson *et al.* report that while different researchers have defined a market pioneer in different ways, typically the first-mover (or pioneer) has been defined to be the first entrant to succeed in reaching a commercial scale of operation (this may usually mean that a first-mover may need to attain widespread geographical distribution of its product). This seems to be a useful and acceptable definition. To be first on the market or to be a pioneer does not necessarily establish a firm as a first-mover.

From the literature, Robinson *et al.* glean no universal prescription for defining market boundaries, but note that market boundaries seem to "typically reflect customer substitution in use." This too seems to represent an acceptable approach although this characterization may be overly simple. By their very nature, first-mover analyses are basically time-oriented studies, and the identification of late entrants as late entrants and not first-movers themselves will hinge on the nature of a product offering and the extent to which it complements or displaces existing products in a first-mover's defined market. Thus, in identifying market boundaries and the firms that fall within them, researchers will need to assess the efects of late entrants' offerings on these boundaries. These market-boundary definitional issues are probably little different from those encountered in antitrust and other analyses of market competition.

The various industry studies and cross-section analyses reported by Robinson *et al.* appear to have generated certain findings about which there may be little dispute. For example: first-mover advantages generally exist and erode gradually over time; first-movers' advantages are often gained in national markets and sustained by periodically broadening and differentiating the product line; late entrants are most successful in gaining footholds by entering markets with "niche" products or by limiting their focus to geographical regions; product quality may be less important than product breadth in sustaining first-mover advantages; and market pioneers tend to spend less on advertising and promotion of sales than later entrants.

These findings and others constitute valuable additions to our knowledge and understanding of market competition. Indeed, the attraction of first-mover studies is that such study requires researchers to attend to the dynamic interplay of firms competing for market position over time, and from such work we broaden our knowledge about the process of competition and about how markets really work. First-mover studies may shed light on forces that encourage firms to innovate and to develop new products and may enable us to learn how firms strive to develop more efficient ways to produce and market these offerings. As a consequence, we obtain valuable insights into our knowledge of forces that may enhance or retard the state of competition in those markets. Thus, policy makers may be better informed to determine whether sustained market positions of first-movers, or whether mergers between first movers and late entrants, constitute competition problems that warrant explicit action by agencies that enforce competition statutes.

In this latter respect, it seems to me that Robinson *et al.* might have provided further insights. They reference Richard Schmalensee who observed, I believe correctly, that there are no simple general public policy prescriptions for situations in which pioneers develop sustainable competitive advantages. However, in an overall sense, it seems the reported research reveals that first-mover advantages erode over time. Thus, any market power enjoyed initially by first-movers is likely to be subject to decay, during which time the subsequent interplay between first-movers and late entrants may generate efficiencies and may stimulate innovation generally to the benefit of all consumers. In such circumstances, it may be prudent generally for policy makers to permit the market to work unfettered by regulatory actions. However, mergers between first-movers with sustained market positions and later entrants will warrant the same close scrutiny that is currently given to mergers between competitors. Policy judgments in these instances will be made on the merits on the individual case. But the usefulness of first-mover research is that it helps provide a perspective within which those judgments can be made.

Robinson *et al.* provide several ideas for future research and call for additional in-depth studies of other markets, and particularly the less-studied industrial goods' markets. I endorse their suggestions. Additionally, I note that some research suggests that products of late entrants experience difficulty gaining trial purchase, perhaps because consumers buy out of habit, or because they seek to avoid risks associated with trial of new products. Useful then might be additional study of hypotheses concerning the relationship between first-mover advantages and consumer behavior in markets for different types of goods; for example, search, credence, and experience goods. Relationships between first-mover advantages and profitability also warrant further work. However, modeling and data problems that appear to have inhibited such work may continue to limit advances in this area.

To do the additional industry analyses and other forms of research deemed desirable will require that reseachers gain access to detailed product-line data. Unfortunately, Robinson *et al.* do not convey much information about future data needs and how these needs might be met. Their insights would have been helpful here. Doubtless, the unavailability of data problem here is little different from that encountered generally by researchers who attempt to conduct analyses at the firm and product level. But the continued availability of relevant product-line data is an issue of critical importance, for without access to such information advances to our knowledge will be slowed, if they occur at all. Whether these data can be obtained will depend upon the extent to which firms are willing to provide scholars with access to such information. To gain access may be a hard sell for researchers and will likely require identifying how firms themselves can benefit from this kind of research.

Notes

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[1] Ronald S. Bond and David F. Lean, *Sales, Promotion, and Product Differentiation in Two Prescription Drug Markets*, Staff Report of the Federal Trade Commission, February, 1977.

[2] With "inside" information about market shares and "inside" intelligence about potential market trends and product development, firms doubtless were able to identify and assess the strength and durability of "first mover" advantages relative to competitors' challenges and changes in strategies.