Artur Raviv
Northwestern and Tel-Aviv Universities

Comments on "Economic Foundations for Pricing"

I would like to commend Thomas Nagle for the competent execution of what, at least at first sight, seems an intractable task. Some of the comments that follow should not be interpreted as a criticism of his survey; rather, they express my thoughts on the subject and some suggestions for what might be a desirable addition to the current survey. I will not attempt to identify papers or areas that were not included in the survey. It seems to me much more fruitful to discuss the general issues and methodologies involved rather than attempt to fill a few voids in the survey presented.

The economics literature dealing with pricing problems is enormous and bringing together this vast body of research in one unified framework is most difficult. A good survey article should provide not only an introduction for a nonspecialist but also new insights for the specialist, who is already conversant with the relevant literature. In order to evaluate the current state of the art as well as the survey, we have to specify first the potential contribution of economic theory for pricing decisions and marketing. Having understood this potential contribution, we can discuss whether the current survey fulfills its goals and then identify possibilities for improvement.

What can economic theory contribute to our understanding of pricing decisions? How can marketing scientists and practitioners benefit from economic theory? In my view there are two answers to these questions.

First, economics contributes a set of analytical methods, economic paradigms, and guides for model building useful in marketing applications.

Second, economic theory provides a set of elementary concepts and insights applicable in various pricing decisions.

In what follows, I will discuss each of these contributions separately and will argue that the current survey is most useful in clarifying the

(*Journal of Business*, 1984, vol. 57, no. 1, pt. 2)

0021-9398/84/5712-0008$01.50.

contribution of the first type. It fails, however, to synthesize the economic literature in such a way as to shed light on the second contribution.

I. Economics Contributes a Set of Analytical Methods, Paradigms, and Guides for Model Building

Economics is perhaps the most useful discipline underlying marketing. This does not imply, however, that the economist can come up with a unified framework for pricing decisions. We should not expect to obtain from economic research a set of theorems that are directly applicable to various problems of interest to marketing scientists and practitioners. The difficulty is understandable once we realize that economics deals with rather general entities while abstracting from the peculiar characteristics that may be of the greatest interest from the marketing viewpoint. For the economist, this abstraction is necessary in order to draw conclusions applicable to a broad class of economic environments and not just to a specific firm. Consequently, marketers will not find in the available literature anything that will solve the immediate and specific pricing problems. What economic research can contribute is a set of analytical methods and guides for model building.

The current survey illustrates these points most clearly. Thomas Nagle has reviewed three areas of economic theory: the economics of information, the economics of spatial competition, and the economics of price segmentation. All three have been subjects of great interest to economists and have significant implications for pricing decisions. Having organized the survey around economic paradigms, the author clearly demonstrated the types of modeling approaches most useful for marketers, identified the crucial assumptions driving each of the models, and suggested their marketing applications. For example, the discussion of economics of information clearly identified the phenomenon of "adverse selection," which occurs anytime there is asymmetric information between sellers and buyers of a product. (If buyers cannot identify a seller's product quality, they will not be willing to pay for this product more than for a product of average quality. Thus, products with above-average quality will be withdrawn from the market.) The message conveyed is that in modeling situations with asymmetric information, one has to consider the market equilibrium when adverse selection occurs as well as the signaling attempts by sellers via prices, branding, or warranties.

To summarize, I believe that this survey has helped us in identifying the types of models and methodologies that are most useful for marketing applications.

II. Economics Provides Elementary Concepts and Insights Applicable in Various Pricing Decisions

The second contribution of a survey could have been the identification of several general pricing strategies applicable in various economic environments. This approach would identify the relation between several key elements of an economic environment (such as number of sellers, barriers to entry, stability of the product, production technology and capacity constraints, consumer preferences, and information) and the pricing decision. As I have already mentioned, I do not believe that the current survey is particularly useful for this purpose. For example, what are the instances in which two-part pricing should be employed? Which types of products should be sold with quantity discounts? When is branding of crucial importance? How is the pricing of a repeat purchase good different from pricing a unique, once-and-for-all product? The survey does not highlight the answers to these problems. Consequently, Nagle does not make any criticisms of the state of the art in pricing research and, moreover, does not make any recommendations for further research. This is the real weakness of the survey. A good survey has to synthesize knowledge, identify voids, and make recommendations.

In what follows, I will try to outline how I think a survey could be organized in order to satisfy the above criticism.

1. It should document the pricing practices encountered in various products and markets. For example, telephone services employ nonlinear price schedules, health clubs often have two-part pricing, rare art objects are sold through an open auction, U.S. treasury bonds are sold by sealed-bid auctions, airlines often sell by priority pricing (i.e., customers paying higher prices obtain first priority in purchasing the product, those paying lower price are served on a stand-by basis), some perfumes are advertised as the most *expensive* products, durable goods are priced higher when an active secondary market exists, etc.). Once all these practices are properly documented, we have a set of well described empirical facts which are to be explained by the theory.

2. It should survey the literature, classify it by the economic environment it analyzes and discuss the pricing strategies obtained for this environment. It is to be hoped that these pricing decisions would match the pricing practices documented in 1, above. To illustrate how one can classify economic environments, consider the following dichotomy: (*a*) a stable product sold in a market, which persists for a long period and for which there may be repeated purchase (e.g., durable goods); and (*b*) a changing product, a new innovation with temporary monopoly power or in which the market will exist for only a short period (e.g., fashion). After the pricing strategies in these two extreme environ-

ments are contrasted, we can ask how the pricing decisions in each case change with further specifications of the environment such as the presence of informational asymmetries, barriers to entry, and so forth.

3. It should identify the pricing strategies employed by firms as documented in 1, for which no explanation is provided in the economic literature discussed in 2. This would clearly identify future research.

4. It should identify economic environments that have not yet been analyzed.

I am not trying to suggest that a survey along these lines would be easy to execute. I recognize the difficulties involved, but in view of the tremendous payoff, I believe this effort is well deserved. Moreover, the current survey, by touching on some of these points, provides a good start for the much more extensive work suggested by this discussion.