

Comments on "The Economics of Consumer Information Acquisition"

Unbeknown to either of us, Wilde (this issue) and I have been pursuing similar lines of inquiry. We are both investigating optimal consumer decision rules when the consumer is faced with some attributes of a good whose qualities he can determine prior to purchase (search attributes) and with some other attributes for the same good whose qualities he can determine only after purchase (experience attributes). It is not surprising, therefore, that I think this is a particularly fruitful line of inquiry.

Since Wilde and I are in such general agreement, little purpose can be served by my detailing the little points of disagreement between us. Instead, I would like to focus on a question that Wilde neglects. Why should anybody be interested in the consumer searching, on one hand, or experiencing, on the other? This distinction between search attributes and experience attributes is the most decisive determinant of market behavior for a considerable number of characteristics important for both marketing and economics.

Let me give you some feel for this proposition. To make the analysis tractable, I have assumed that goods differ by a single parameter, R = the ratio of the variance by brands in the utility of a representative consumer of all experience attributes to this variance for search attributes. The greater the value of R , the more a consumer will choose to get his information by way of experience and the less by way of search. Hence R measures the relative importance of experience and search.

Clearly R is unobservable. However, one can get observable implications from the behavior of R . We can determine from theory whether some given observable market variable will be positively or negatively related to R . Those market variables which are both positively related to R or both negatively related to R will be positively related to each other. When one market variable is positively related to R and one is

negatively related to R , the market variables will be negatively related to each other. These predictions can be tested with observable data.

In Nelson (1978) I have examined the behavior of R for five variables: (1) advertising expenditures, (2) advertising media distributions, (3) concentration ratios, (4) expenditures on retail services, and (5) spatial clustering of retail activity. I cannot describe here the theory that leads to the prediction of the behavior of R with respect to all these variables, but let us briefly examine two.

Look at the relationship of advertising expenditures to R . For direct information—information contained in the advertising message—any remembered advertising message beyond the first is redundant. With indirect information—when consumers use the decision rule, the more advertising messages, the better the buy—remembered advertising messages beyond one will not be redundant. In consequence the return to the firm to additional advertising messages will be greater for indirect information than for direct information (at least where the marginal revenue curve of advertising is downward sloping). One can predict, therefore, that advertising expenditures will be greater, the more important indirect information relative to direct information.

For search qualities advertising provides direct information because consumers can believe the advertising message. For experience qualities the dominant information will be indirect information because consumers cannot believe the advertising message. Hence, the greater R , the greater the advertising expenditures.

Clustering is measured by the ratio of retail sales of a good in central cities to sales in standard metropolitan areas with central cities. This is another market variable for which the search-experience alternative generates meaningful predictions. This should not come as a surprise for people in marketing, since they have long been familiar with a rougher, less satisfactorily developed but similar concept in this context: shopping versus convenience goods (Copeland 1923).

One source of cluster is the incentive of retailers to minimize the distance that consumers have to travel from one search to another. The returns to clustering increase as consumers search more. Hence increases in the search variance, with their resulting decreases in R , increase clustering. Thus one would predict a negative relationship between the goods with high advertising expenditures and those with lots of clustering. Table 1 presents the observed correlations of these variables. Similar consistency between observed and predicted correlations are obtained when other market variables are correlated with each other and with advertising and clustering (Nelson 1978).

These results are much more convincing than those presented in my earlier work where goods were considered either wholly search or wholly experience goods. By treating the relative importance of search and experience as a continuous variable, one is able to obtain a simple

TABLE 1 Predicted and Actual Correlations

2 CL (Predicted Sign)	Variables					
	11	12	13	14	15	16
Simple	-.196	-.306	-.112	-.262	-.414	-.413
Partial	-.197	-.268	-.093	-.233	-.371	-.361

Source.—Nelson (1978).

Note.—Variables are: 11 = A/S = advertising sales ratios, 12 = A_1 = advertising per brand with a narrow brand definition, 13 = A_2 = advertising per brand with a broad brand definition, 2 CL = clustering the ratio of retail sales of a good in the central city to sales in the standard metropolitan area. Partial correlations holding durability constant. For the one-tailed test $r = .121$ at the 5% level of significance.

set of observable predictions that do not depend on any arbitrariness in the classification procedure. To me this is the major advantage of the approach that Wilde takes. However, a warning is required. The theory gets more difficult to use. There is a costly sacrifice of simplicity.

Wilde's criticism of my earlier work is, on the whole, justified. However, I am happier when he criticizes somebody else. His analysis of Schmalensee (1978) is just right: a combination of respect for his workmanship and disagreement with his final conclusion about the conditions under which advertising would yield perverse signals to consumers. Wilde fingers the big problem with Schmalensee's work: the assumption that the price producers charge is fixed independently of quality.

I have developed a model similar to Schmalensee's except I assume producers are free to adjust prices to maximize profits (Nelson 1978). There are other differences between Schmalensee's model and my own. I start with producers facing an arbitrary but fairly general demand function (a translog function), while Schmalensee derives his demand curve from consumer behavior. The superiority of the latter procedure, however, turns out to be more apparent than real. Schmalensee, for simplicity, is forced to make inappropriate assumptions about consumer behavior. I do not believe, however, that this latter difference between Schmalensee's procedure and mine is important. I come up with conclusions quite different from those of Schmalensee. My result: Advertising will be a perverse signal only if the advertising elasticity of demand is greater than one. Then I show a considerable amount of evidence that this elasticity is less than one.

References

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