ADVERTISING AND THE FOOD SYSTEM

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LOW PRICE CLAIMS AND MARKET PENETRATION IN THE GROCERY INDUSTRY: THE CASE OF THE KROGER PRICE PATROL

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The Kroger Price Patrol (KPP) was an advertising campaign that began in December of 1972 and ended in May of 1978. The campaign was used for different lengths of time in 102 cities. Its objective was to convince consumers that Kroger had the lowest prices of any local supermarket. The advertisements were mainly on television and they featured housewives who had been paid by Kroger to compare prices at local supermarkets for lists of items selected by Kroger. Four or five lists were used in each area and there were about 150 items on each list.[1]

The KPP is important because it is the most extensive use to date of grocery pricing surveys to influence consumers' shopping patterns. In addition, the Federal Trade Commission's complaint against the KPP raises the issue of whether substantiation requirements for low price claims cause more public harm than the publication of false claims.

EXPECTED EFFECTS OF PRICE REPORTING

In this discussion, a shopping list formed by a consumer after reading the supermarket advertisements in the newspaper to note the featured items is called a "tailored list." A shopping list made by a consumer without reading the newspaper ads is termed a "preference list." The term "prices" refers to the prices of goods after a consumer has made a subjective discount for any quality differences between goods at different stores.

The expected results of the publication of a grocery pricing survey depend on how consumers choose their supermarket or supermarkets. Assuming this choice is a function of a vector of store attributes such as location, services, food quality, selection and nominal prices, consumers can easily determine the relative positions of their local supermarkets on the first four attributes. The distance to a store is directly observable and the variety of items offered for the types of products that are important to a consumer is also directly observable. The availability of butchers or bagboys or similar services are also directly observable. Determining the quality of the meat or produce is more difficult. Produce and meat vary in quality within a USDA grade and the grades of produce are generally not displayed in a supermarket. Exact judgements on quality require years of experience as a professional meat or produce buyer. However, consumers do make rough judgements based on appearance and taste. Consumers can quickly reach the point where little additional information about a store's quality can be obtained. On the other hand, continued search effort on prices provides more information because of the complexity of the pricing process in supermarkets and because prices change more frequently than do levels of quality.[2] Most consumers have a shopping list either written or in their minds (e.g. the Food Marketing Institute estimates that between 63% and 67% of all shoppers have a written list).[3] Determining the current pricing positions of local stores for one's preference or tailored list is time consuming since the list must be priced at each supermarket. The value of the information gained from such a search would decay rapidly as the items on the consumer's list and the supermarkets' prices changed.

Accurate overall price information for supermarkets is expensive because supermarkets stock so many items (about 10,000) and because so many items change in price from one week to the next (about 600 in any week at Kroger stores).[4] Shoppers select their supermarkets with less than complete information. Alternate strategies used include: shopping exclusively at one store with a tailored shopping list, shopping at several stores with a tailored list, or picking a category of items such as meat and shopping at the supermarket with the best meat prices, etc.

In this environment the publication of a grocery pricing survey can save time that would have been spent in comparison shopping and help consumers switch to a store or stores that offered a better combination of attributes. However, these effects depend on the accuracy of the survey. If one of the more expensive stores is identified as the cheapest, some consumers will switch to that store and because it is difficult to determine overall prices, it will take some time until they learn that they have made a mistake. These mistaken switches are not limited to consumers who go from a lower to a higher priced store. A consumer who values selection or services above lower prices or who drives across town because he thought the winner of the survey had lower prices than it actually had would also be making a mistaken switch. The optimal store or stores for a consumer is the set of supermarkets that offer the best combination of quality, service, selection, location and nominal prices.

Several other problems could make the survey a poor guide for selecting supermarkets. The market basket used in the survey may not match the preference lists of some consumers and they may switch to a store that is higher priced for the items they usually purchase. Similarly, the survey's adjustments for quality differences may differ from the consumer's evaluation of quality. Another consideration is that some consumers may be able to purchase their supermarket goods more cheaply at one of the higher priced stores or some combination of the higher priced stores if they tailor their shopping lists and stock up on featured items.

Prior to the publication of a grocery pricing survey, some consumers wll be at the optimal store or stores and others will be shopping at some of the wrong stores. Consumers make errors in choosing stores because of incomplete information, but the selection process is not biased in the sense that they would systematically select the wrong stores. An inaccurate or misinterpreted survey would bias the selection process and increase the number of consumers shopping at the wrong stores.

Consumers who know that a store's rating as low priced is based on a standard market basket that was not "tailored" would be able to use the published survey as a complement to their search activity and their reading of newspaper ads. If most consumers were this knowledgeable there would be less switching of stores after the publication of a survey than if most consumers believed that the survey was the best guide for selecting supermarkets. This switching of stores can reduce everyone's grocery bills if stores react by reducing prices so that they will be lower priced when the next survey is published.

There are two learning processes going on during the extended publication of a survey: consumers learn the fallibility of the survey as a guide to the best store or stores and supermarkets learn how responsive consumers are to changes in the survey rankings. Behavior that would be beneficial to a consumer in isolation, i.e., only using a survey as a complement to their search activity, might be disadvantageous to consumers as a whole. If the consumers remained highly responsive to the survey the supermarkets might be forced to maintain lower overall prices.

If the survey was based on a small number of known items, supermarkets could "play" to the survey by cutting only the prices on those items and raising other prices. In this case lower overall prices would not occur even if consumers were very responsive to the survey.

If this description of consumer and supermarket behavior is correct, there is no *a priori* basis for judging whether consumers are better or worse off because of the publication of an inaccurate survey. The answer depends on the degree of accuracy in the survey, and how supermarkets respond to the consumer responses. A mathematical model that follows the above description of the effect of publishing a survey and some suggestions on how the model could be estimated are in a mathematical appendix available from the author.

THE KROGER PRICE PATROL

The KPP was created to solve an image problem. In May of 1972 Kroger adopted a company wide policy called "Every Day Low Prices" (EDLP) that replaced the marketing strategy of "deep cut" features.[5] The EDLP was supposed to force Kroger's overall prices to be at or below the prices of any competing merchant offering the same quality. According to some attitude surveys conducted by Kroger's advertising agency, Kroger continued to be perceived by consumers as high priced after the EDLP had been running for seven months; in the Atlanta area the EDLP policy did not improve Kroger's market share.[6] These surveys support the argument that consumers cannot quickly or easily observe relative prices of supermarkets. Kroger needed to convince consumers that it had low prices to obtain the full benefit of the EDLP policy. The KPP was designed to project this image as convincingly as possible. The ordinary housewives who conducted the price checking and appeared in the commercials added to the credibility of the campaign. The grocery items chosen for comparison lists were supposed to be high volume branded items that consumers would recognize. Grocery item refers to the term as used in the industry, mostly canned and dry goods but not meat and produce. The format in which the results were presented was easy for consumers to understand and included a list for each competing store of the number of items for which Kroger had higher, lower, or the same prices plus the number of items which were not available for comparison. Another technique that added to the credibility of the low price claims was to run newspaper ads with photographs and testimonials of consumers who said they were convinced on the basis of their shopping that the KPP's claims were accurate.

About 95% of the advertising budget for the KPP was for television commercials.[7] Most Kroger newspaper ads continued to have the usual displays of featured items and generally the newspaper ads only carried a headline with one of the KPP slogans, for example, "The Price Patrol Proves That Kroger Is the Low Price Leader." The day to day running of the Price Patrols and the advertisements were the responsibility of local Kroger officials. The campaign had to be sold first to those officials and it spread slowly through the regional divisions in the organization.

For internal management purposes, Kroger ran two other surveys. The "full-book" survey was a census of all items shipped from a Kroger central warehouse compared to similar items at competing stores. The full-book was generally done quarterly by local Kroger personnel, and occasionally the meat and produce departments would be added to the survey. The format of the full book was very similar to the KPP in that the number of items with higher, lower, or the same prices was shown for each department.

The other survey was instituted to monitor local compliance with the EDLP policy. It was run out of Kroger's headquarters and the work was contracted out to the Burgoyne Agency. The Burgoyne survey used a judgement sample of 50 to 75 items chosen by the Kroger vice president responsible for monitoring compliance with the EDLP program, and items included were weighted in the calculation of a total dollar figure according to their importance in the consumer's market basket. Because headquarter officials wanted an accurate survey, the local officials were not told when the Burgoyne survey would be done or what items were included. The full-book and the Burgoyne surveys were used by both sides of the Kroger case to argue that the KPP ads were or were not misleading.

As an example of survey methods, the KPP might make a textbook case of what to avoid. One of the problems in survey design was that the local grocery merchandiser was responsible for picking the items on the KPP lists and for setting prices on grocery items. The combination of these two responsibilities raised the suspicion of impropriety. It was an error in judgement by the top management to put grocery merchandisers in a position where they might be tempted to manipulate the survey. At least one of them succumbed. An Indianapolis student group, The Indiana Public Interest Research Group, was conducting a grocery pricing survey at the same time that Kroger ran the price patrol. The students noticed that Kroger always won the KPP survey even though it generally did not come out the lowest in their survey. The author of this paper was asked to devise some procedure to test whether Kroger was manipulating the KPP. The test determined if a higher percentage of the items on a given week's list had price cuts from the week before and if a lower percentage had price increases from the week before compared to all the items in the store. As surveying all of the items in the store was too expensive, the 600 items on the other KPP lists were used as a proxy. For each of 26 consecutive weeks, there were more price cuts and fewer price increases in percentage terms for the items on the current survey. Lawyers for the Federal Trade Commission questioned the local grocery merchandiser and he admitted putting about 20 to 40 items that were temporarily reduced in price on each week's survey. Indianapolis was the only area where a test for manipulation was completed.

Another problem with the KPP was that the ads, at least until the FTC filed its complaint, did not mention that meat and fresh produce were excluded from the KPP lists. According to a telephone survey conducted by the Office of Consumer Affairs of the State of Georgia, a majority of the consumers polled thought that meat and fresh produce were included in the KPP.[8] According to the profiles available from the full-book and the Burgoyne surveys, it appeared that Kroger was relatively higher priced on meat and produce and relatively lower priced on groceries in many cities.[9] The Burgoyne surveys were not adjusted for quality, and it is difficult to determine if these higher prices could entirely be attributed to quality differences.

KROGER'S MARKET SHARE

There was a wide variety of responses to the KPP by Kroger's competitors. Some merchants who were primarily feature merchants "heated up" their features and others adopted an every day low price policy.[10] Some competitors avoided responding with lower prices while others responded with increases in advertising, stamps, or games like "bingo bucks".[11] However, no competitor responded with their own pricing survey. Even in cities where the full-book and/or the Burgoyne surveys cast doubt on the claims of the KPP no competitor publicly challenged the validity of the KPP claims. Yet these competitors had their own surveys, and they were aware of the overall pricing positions. Perhaps they were afraid that challenging the KPP would be non-productive because consumers perceived the KPP as a "proconsumer" program.

An alternate explanation suggested by Robert Pitofsky (1978) regarding the general absence of counteradvertising is that demonstrating the "flaws, inadequacies and irrelevance" of rival claims is less effective than the same effort expended on promoting the claims for ones product or service. Competitors may have thought that it was too difficult to explain the faults of the KPP survey. The Marsh supermarket chain was the only company that was lower priced than Kroger on every full-book and Burgoyne survey in Indianapolis, yet Marsh consistently lost the KPP survey. Marsh did not counteradvertise the KPP claims because they did not lose market share to Kroger and also because the KPP claims of being the low price leader were so vague that there was no way to directly challenge them.[12]

The variety and the intensity of the responses to the KPP suggest that it was an effective campaign. The same inference can be made from the fact that the program spread from one Kroger regional division to another and because it continued so long. Only the FTC complaint was successful in stopping the KPP.

Kroger officials made the following points about the success of the campaign: it was credited with increasing Kroger's market share[13]; it encouraged consumers to shop exclusively at Krogers[14]; it reversed Kroger's image as a high priced merchant[15]; it attracted younger customers to Kroger[16]; the campaign continued to be effective and to slowly build credibility for as long as it ran.[17]

FTC RESPONSE

The Initial Decision of the Administrative Law Judge found the KPP misleading and deceptive under the doctrine first used in the Pfizer case.[18] This doctrine holds that an advertisement is deceptive if the company did not have a reasonable basis for knowing that its claims were true. The statistical methods used in the KPP were ruled to be so deficient that the survey did not constitute a reasonable basis for Kroger's low price claims. The Administrative Law Judge accepted the testimony of the FTC's expert witness to the effect that a statistically sound survey was feasible.

The order provided that Kroger could continue to make comparative low price claims without the use of a survey only if the advertisements prominently displayed a statement that the claims were not based on any survey. Alternatively, Kroger could make low price claims if they relied on a survey that met certain standards. One method for meeting these standards would be to hire an independent agency to conduct the surveys. Kroger could run their own survey if the items on the survey were selected on a random basis or by someone independent of Kroger. If Kroger ran its own survey, the responsibilities for setting prices and selecting the items for the survey must be held by separate individuals. For any survey, Kroger must disclose in its ads which major categories of supermarket items were excluded.

The FTC's complaint counsel and the Administrative Law Judge did not consider any economic arguments such as what harm might be caused by the order. The Administrative Law Judge wrote, "Comparative price advertising is desirable only when it is not misleading, deceptive or unfair".[19] The KPP was "misleading" because the survey was not scientifically sound. What was decisive in the judge's view was whether a scientific survey was technically feasible. Again quoting, "And there is little doubt that such a survey can be done although it may be expensive and difficult".[20] Kroger's expert witness testified that the expense of a survey of the quality required in the order would discourage supermarkets from conducting surveys and that the KPP generally helped consumers by informing them of Kroger's low prices and by forcing some competitors to lower prices.[21] The judge thought these arguments "must be rejected as essentially self-serving and unpersuasive".[22]

According to Richard Posner (1973), the FTC's enforcement activities in advertising cases have largely been misdirected because the agency has not been guided by any economic theory. As the Federal Trade Commission Act does not define "misleading or deceptive" advertising, it is the responsibility of the Commission to set up some logical guidelines. Posner has charged that the FTC wastes its enforcement efforts on advertising cases where it is not clear that the claims caused any harm. Any legal remedy for deceptive or misleading advertisements that is likely to serve the public interest must be made within a framework that considers its costs and benefits.

Some parts of the order in this case could survive such a scrutiny. The requirement to disclose whether meat or produce are excluded from a survey makes the results of the survey more useful to consumers. The costs of adding this disclosure are probably not so high that they would substantially discourage comparative pricing claims. This supposition is supported by Kroger's willingness to add this disclosure to its ads after the FTC began investigating the KPP. Another beneficial section in the order required that Kroger disclose the methods used in its survey to anyone who inquired. If the grocery merchandiser in Indianapolis had been obligated to answer questions about how the items were chosen for the survey he might have been discouraged from adding the 20 to 40 items with temporary price cuts to each week's survey.

The order also specified that the items chosen for a survey must be kept secret from anyone with the power to set prices. In some circumstances this requirement could discourage the use of surveys. For example, in a small supermarket chain, the only individuals who have enough experience in the industry to select a representative list of items may also have the power to set prices. However, the potential for any store to "play" to the survey seriously threatens the reliability of any inferences about overall prices based on the survey. In the KPP the choice of which list to use in a given week and of any additions or deletions was up to the grocery merchandiser. Competitors were largely foreclosed from playing to the KPP. In at least one instance, a competitor played to the KPP by obtaining a copy of all of the lists and cutting the prices on every item on every list.[23] The price cuts on these 600 items may not have cut consumers' grocery bills because the store could have raised prices on other items.

CONCLUSION

The KPP was an effective advertising campaign in terms of raising Kroger's market share and in terms of lowering its advertising costs as a percentage of sales. Consumers are sensitive to documented low price claims, especially if they are broadcast for several years with a frequency high enough to reach housewives about three times a week.

As more grocery pricing surveys are published, the public will become more aware of the limitations of these surveys as guides for selecting supermarkets. This rising sophistication should force any organization that conducts a survey to consider the problems that can be caused by stores playing to the survey or by an inadequate adjustment for quality differences among stores.

FOOTNOTES

[1] Summaries of the facts in the case can be found in the complaint counsel's *Proposed Findings of Fact*, Document No. 77800102, April 9, 1979; *Respondents Proposed Findings of Fact and Conclusions of Law*, April 10, 1979; and the *Initial Decision*, Montgomery K. Hyun, Administrative Law Judge, June 11, 1979.

[2] See the testimony of Mr. Vaughn on meat and Mr. Bere on produce, transcript *Hearings*, pp. 1665-1669 and 1919-1921.

[3] Food Marketing Institute, *Supermarket Trends*, Washington, D.C., Annual, see 1974-80.

[4] Hearing *Transcript*, p. 1637, testimony by Mr. Hoover.

[5] *Initial Decision*, op. cit., p. 14.

[6] *Ibid.*, p. 19, see also *Respondents Proposed Findings of Fact*, op. cit., p. 49.

[7] *Respondents Brief on Appeal to the Commission*, July 25, 1979, p. 22.

[8] Complaint Counsel's *Exhibit No. 22*. The survey had 100 respondents and 96 usable responses. 65% of the respondents thought meat was included and 63% thought produce was included.

[9] *Initial Decision, op. cit.*, p. 44.

[10] *Respondents Proposed Findings of Fact*, p. 79-80.

[11] These responses were observed in Indianapolis, by the author.

[12] Interview of Mr. Don Rix, Indianapolis, October 20, 1980.

[13] Hearing *Transcript*, p. 770, testimony of Mr. Helmsing, p. 1873, testimony of Mr. Stec, p. 2159, testimony of Mr. Thomas.

[14] *Initial Decision op. cit.*, p. 42.

[15] Hearing *Transcript*, p. 1604, testimony of Mr. Hoover.

[16] *Initial Decision op. cit.*, p. 40.

[17] *Initial Decision op. cit.*, p. 39.

[18] Pfizer, 81 FTC 23 (1972).

[19] *Initial Decision op. cit.*, pp. 80-81.

[20] *Ibid.*, p. 79.

[21] See Hearing *Transcript*, p. 2854, and below, testimony of Lee Benham.

[22] *Initial Decision op. cit.*, p. 78.

[23] This playing to the survey occurred in Chattanooga, Tennessee. See p. 1606 of the Hearing *Transcript*, testimony by Mr. Hoover.

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