

Editorial

Competitive Responsiveness

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Marketing strategy and tactics depend on the firm's strengths and weaknesses, including marketing activities relative to those of current and potential competitors, and on customer demand. The impact of marketing often depends on how a firm's own activities compare to those of competitors (Day and Reibstein 1997). For example, a customer's willingness to pay for a product or service offered by a firm often depends on the prices of alternative items. Preferences and perceptions of quality similarly depend on the perceived qualities of alternatives. Many managers specify marketing activities based on a desired level relative to that of competitors, such as *share of voice* or *relative prices*. *Market share* is still a frequently used measure of relative performance, even though marketers increasingly are asked to demonstrate the return on investment (ROI) implications of marketing.

We note that there is a strong rationale for measuring performance on a relative basis, particularly in industries that are sensitive to economic conditions or to other exogenous factors. For example, when the economy thrives or dips, it is inappropriate to evaluate the outcome of the marketing strategy based on absolute financial consequences alone. Thus, it is important to ask: "How are we doing relative to our competitors who operated under the same economic conditions?" This perspective should (but often does not) also apply to the incentives executives receive in terms of lucrative stock options. Thus, measures that reflect relative performance in meaningful ways should give a better sense of the wisdom of an adopted strategy.

Although there is a plethora of possible reasons for managers' interest in relative measures, it is also

important that we understand that such measures may have undesirable consequences. For example, a CEO who chooses maximization of profit as the primary objective is likely to create a different orientation and a different mindset for the firm than a CEO who specifies that market share is a key objective (see, e.g., Armstrong and Collopy 1996, Keil et al. 2001). In addition, competitive reactions are expected to be more intense if the primary objective for the firm is expressed in relative, as compared to absolute, terms. The pitfalls of such relative measures include the following: (a) Improvements in the relative measure may occur by creating better value for customers or by damaging current competitors. (b) In a classic "prisoners' dilemma" fashion, costs may rise for all firms without benefit to any of them. (c) Optimal behavior is based on the assumption that the competitive environment is stable. (d) Relative measures implicitly suggest that the current method for defining the industry will continue to be meaningful and that there will be no new entrants who operate in nontraditional ways.

Managers who assume that the competitive environment is known often find themselves surprised at a very late stage by new entrants who operate under nontraditional principles. An extreme example is the lack of awareness exhibited by managers at Folgers and Maxwell House of the competitive threat posed by Starbucks. As much as many managers believe that scanner data have improved market feedback, we note that the ubiquitous, fast, detailed, and frequent scanner data feedback from supermarkets reinforced the notion that coffee purchases outside of the supermarket were irrelevant since those purchases were excluded. Similarly, while Borders and Barnes and Noble focused on each other, both were slow to react

to, if not preempt, Amazon.com in offering books online. Since such new entrants are difficult or impossible to anticipate, some firms use phantom competitors so as to instill vigilance.

The optimality of marketing activities, in a stable environment, depends on managers' understanding of the market response function and competitors' reactions. The marketing literature contains many articles on market response based on both disaggregate and aggregate data. Yet, there are few papers that deal with competitive reactions. Indeed, the marketing mix models offered by leading data suppliers often gloss over competitive spending and never include competitive reaction functions. By contrast, we surmise that managers understand their (current) competitors much better than they understand their customers. Managers tend to have detailed knowledge about competitors' products, services, prices, etc. They also believe they have a good understanding of how their competitors will react to changing market conditions. Yet, managers rarely have similarly detailed knowledge about current and potential customers. Even if they have access to estimated results of a properly constructed demand model, they may doubt the validity of the results.

In the absence of (perceived) valid and reliable information about customers, it is likely that managers will overreact to competitive actions (see Leeflang and Wittink 1996). One reason is that there is an asymmetry in costs of making two possible errors. Consider the following simplified scenarios. One possible error is for a manager not to react to a competitive action when the competitor's action does affect customer behavior to such an extent that a firm's performance is negatively affected. In this case, the manager may actually be fired. Even if that does not happen, the firm may have a hard time recovering from the loss of customers. The second possible error is for a manager to react when the reaction is unnecessary, in the sense that the competitor's action was ineffective. In the latter case, the error has minimal consequences. This can be explained by the fact that: (1) the competitor's action would have had a deleterious effect if it had not been negated by the reaction or (2) it is a common mistake, since others entered the fray. An example of such is when Duracell offered a battery power checker on their package, Eveready immediately matched. It was not clear that it made any difference to the customers. Nonetheless, Eveready did not want to risk falling behind. Thus, by maintaining parity or by keeping the marketing activities at the desired relative levels, the manager can claim that the competitive reaction achieved its purpose. Only if one knows customer behavior with a very high degree of confidence is it possible for others to question the legitimacy of a competitive reaction. Therefore, the asymmetry in costs of these two errors favors overreaction.

The extent of overreaction should be a function of the lack of information and the lack of trust in the data and analyses about customer behavior.

Special Issue on Competitive Responsiveness

Our interest in the topic of Competitive Responsiveness led to a conference sponsored by the Marketing Science Institute (MSI). In a sense, this conference was the fourth in a series started by Dickson, Urbany, and Lehmann in South Carolina in 1993, followed by Urbany and Dickson in South Carolina in 1997 and Heil and Montgomery in Wiesbaden, Germany in 1999. MSI's call for abstracts for this fourth conference generated 61 submissions. Based on evaluations by a panel of experts, we accepted 34 presentations. After the conference, we received 31 papers, and we used conventional *Marketing Science* criteria for evaluation of these papers. That is, we used exactly the same process in place for evaluating regular submissions, including the role of area editors. The result is this special issue with 12 papers. We believe these papers provide interesting, new, and valid results.

A frequent concern mentioned about special issues is that the papers might not have been accepted if they had been submitted as regular papers. We do not believe this potential criticism applies to this special issue. Apart from the fact that we used the standard reviewing process, we provide support for our position based on a few statistics. We accepted 38% of the papers submitted. Although this is higher than the acceptance rate for regular papers, the numbers are not directly comparable. For example, 27 abstracts were rejected, and one could imagine that the corresponding papers would have been submitted in the absence of this screening. If we compute the ratio based on the number of abstracts and add the papers not presented at the conference, the acceptance rate is 19%. Since all journals receive some papers that are not appropriate for the journal, this acceptance rate should be decreased further for comparison purposes.

We want to mention that, as is often the case for special issues, our interest in the topic compelled us to submit several of our own papers. Specifically, Dave Reibstein submitted two co-authored papers, and Dick Wittink submitted one, with each serving as the editor for the other's paper(s). Of the three papers submitted between the two of us, only one was accepted for publication. This 33% acceptance rate is very similar to the rate for all submitted papers. Thus, we believe that we have also handled this sensitive aspect with the appropriate care.

Research on the topic of competitive responsiveness, and competition in general, should include a wide variety of approaches, including analytical, theoretical, experimental, and empirical research.

This issue includes papers that use each of these approaches. We next discuss a few aspects of the individual papers, in order of their appearance in this issue.

Ailawadi, Kopalle, and Neslin use Procter & Gamble's policy change (e.g., reduction in frequency of temporary price cuts) to determine how the predictions about competitor reactions and retailer response from a game-theoretic model compare with predictions from benchmark models. One benchmark consists of a regression model of competitive reactions. The other benchmark does not allow the retailer to be strategic. The game-theoretic model that accommodates strategic behavior for the competitor and the retailer outperforms both benchmarks.

Naik, Raman, and Winer deal with a related question. They note that brand advertising may enhance brand equity while promotional expenditures tend to emphasize price and, hence, to reduce brand equity. Both activities are necessary in dynamic, competitive markets. Their model allows for interaction effects between advertising and promotion and accommodates strategic foresight with respect to how the parties will act under possible scenarios. Their findings suggest that large brands overpromote while small brands underpromote. All brands tend to under-advertise.

The paper by Steenkamp, Nijs, Hanssens, and Dekimpe focuses on models of consumer- and competitive reactions to price-promotion and advertising actions. The vector autoregression (VAR) models provide estimates of the short- and long-run effects, which are then related to various characteristics. They find that competitive reactions tend to be passive. When they are present, they are concentrated in the same instrument of the action. There is little evidence to support the existence of long-run consequences of reactions. Interestingly, firms that do retaliate often use ineffective instruments.

Debruyne and Reibstein use a base hazard model to explore the contagion effects of competitive behavior. Their results suggest that managers follow competitors into new markets not merely because of the attractiveness of the market but perhaps more so because of mimicking behavior, as in not wanting to be left behind. Thus, the judgments about the attractiveness of a market for a first entrant should include allowance for potentially irrational behavior by competitors. Such herding behavior will make the entry into a new market less attractive than an initial assessment allowing for rational reactions might suggest.

The paper by Chintagunta and Desiraju assesses pricing and detailing behavior in the pharmaceutical industry for one class of prescription drugs across five countries. The model accommodates the market response within the markets and interfirm strategic

interactions both within and across markets. Importantly, the estimated interactions explain why the observed prices are more similar across markets than would have been implied if interactions across markets were ignored.

Dubé and Manchanda also focus on competition across markets. They focus on differences in optimal marketing decisions between markets based on a model that incorporates dynamics in demand and supply. The empirical application is based on data from the frozen entrée product category. Their results suggest that firms adjust advertising in response to competitive goodwill and consistent with cross-brand advertising effects. The estimated adjustments tend to be larger in more competitive, smaller markets.

The paper written by Sudhir, Chintagunta, and Kadiyali considers the anomaly that normative models usually specify that prices rise when demand increases or costs increase even though the marketplace often shows that prices decrease under these conditions. They show that this anomaly can be explained by allowing for time-varying competition. Essentially, the expanded model, applied to the U.S. photographic film sector, incorporates indirect effects of cost and demand changes on competitive intensity.

Moorthy analyzes the problem of a retailer's reaction to a change in the cost of goods, as in the common problem of retailer pass-through of trade promotions. By modeling the problems in terms of category management, he shows that a retailer's response to the cost change for one brand should not be limited to the price of that brand. Interestingly, the appropriate cross-brand pass-through, which depends on substitution versus complementarity, can be positive or negative.

In a related paper, Besanko, Dubé, and Gupta provide empirical results relevant to the pass-through behavior of a U.S. supermarket chain. They use a reduced-form model so as to avoid constraints on the results imposed by the form of consumer demand or the conduct of a category manager. The results suggest that cross-brand pass-through effects are rampant. Consistent with the results by Moorthy, they obtain both positive and negative cross-brand effects. Also, larger brands tend to receive larger pass-through rates. Smaller brands are disadvantaged in three ways: they obtain lower own-brand pass-through rates; they experience higher cross-brand pass-through rates from trade promotions for their brands; and they fail to obtain positive cross-brand effects when larger competing brands offer trade promotions.

Montgomery, Moore, and Urbany focus on strategic competitive reasoning, the extent to which managers try to predict competitive reactions. They assess in a

simulated environment, and then via surveys, under what conditions alternative marketing decisions are based on competitive behavior. They find that managers do consider competitors' past behavior, are less sensitive to future behavior, and mostly lack strategic competitive reasoning. They surmise that the explanation for the lack of strategic competitive behavior may be found in uncertainty and decision justification.

Roberts, Nelson, and Morrison consider the market entry of competitors and how firms with established positions can best defend their position. Their models represent how an incumbent in the Australian long-distance telephone market develops a defensive marketing strategy by estimating the market share impact of a new entrant. One model provides simple, robust forecasts while the other is used to show the effects of marketing actions that allow the defender to create preemptive marketing strategies. Prelaunch model forecasts, obtained six months before the actual launch, are shown to be accurate.

Finally, Soberman and Gatignon develop research propositions pertaining to competitive dynamics and market evolution. They argue that competition between firms is related to how markets evolve. For example, reactions to price reductions tend to be more immediate and more aggressive in mature than in new markets. Yet, there is little research that focuses on the links between the nature of competition and the characteristics of markets. They provide twenty propositions that are designed to improve our understanding of this area of research and to stimulate empirical research.

We are very pleased with the quality of the papers included in this special issue. The papers presented here will undoubtedly stimulate new research. Numerous opportunities will present themselves as a result of new theories, more and better data, interdis-

iplinary approaches, and collaborative research based on partnerships between academics and executives.

We are especially excited about the potential for greater interaction between executives and academics, a dimension that is highly relevant for the topic of Competitive Responsiveness. This interaction is, of course, the province of the Marketing Science Institute. One of the reasons why executives have been reluctant to share their perspectives with academics is the confidentiality of data, frameworks, results, etc. Importantly, we know that some senior executives are now openly expressing the drawback of claiming competitive advantage derived from, for example, sponsored research. By allowing privately funded research results to be published, executives of forward-looking firms put all employees on notice that today's discoveries will be imitated by competitors tomorrow and, hence, that new discoveries are constantly needed. We believe that this is a relatively new type of thinking that needs to be tested so that executives can support it with appropriate evidence. We hope that this perspective will become commonplace so that the research in marketing published in the best academic journals will be both rigorous and substantively relevant.

References

- Armstrong, J. Scott, Fred Collopy. 1996. Competitor orientation: Effects on objectives and information on managerial decisions and profitability. *J. Marketing Res.* 33(May) 188–199.
- Day, George S., David J. Reibstein, eds. 1997. *Wharton on Dynamic Competitive Strategy*. John Wiley, New York.
- Keil, Sev K., David J. Reibstein, Dick R. Wittink. 2001. The impact of business objectives and the time horizon of performance evaluation on pricing behavior. *Internat. J. Res. Marketing* 18(June) 67–81.
- Leeflang, Peter S. H., Dick R. Wittink. 1996. Competitive reaction versus consumer response: Do managers overreact? *Internat. J. Res. Marketing* 13(April) 103–119.