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Reasoning About Competitive Reactions: Evidence from Executives

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Much of the empirical research on competitive reactions describes how or why rivals react to a firm's past actions, but stops short of examining whether managers attempt to *predict* such reactions, which we call strategic competitive reasoning. In three exploratory studies, we find evidence of managers' thinking about competitors' past and future behavior, but little incidence of strategic competitive reasoning. Competitive intelligence experts and other experienced managers' assessment of the results suggests that the relatively low incidence of strategic competitor reasoning is due to perceptions of low returns from anticipating competitor reactions more than to the high cost of doing so. Both the difficulty of obtaining competitive information and the uncertainty associated with predicting competitor behavior contribute to these perceptions. The paper suggests both a need for research on competitive behavior and an opportunity to influence and improve managerial judgment and decision making.

Key words: competitive reaction; competitive analysis; marketing strategy; managerial decision making

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1. Introduction

Thinking strategically is a foundation of modern business and competitive strategy, yet is increasingly difficult in a dynamic environment. Day and Reibstein (1997) identify two strategic errors companies often fall prey to in the face of a dynamic business setting, strategic interdependence notwithstanding: "the failure to anticipate competitors' moves and the failure to recognize potential interactions over time" (p. 8). We characterize the first failure as managers' failure to anticipate competitors' likely *actions*, and the second as managers' failure to anticipate competitors' likely *reactions* to their own moves.

Beginning with the work of Zajac and Bazerman (1991), a strong conceptual case has developed suggesting decision makers often do *not* effectively conjecture about their competitors' future behavior, particularly their rivals' reactions to their own decisions (see Deshpande and Gatignon 1994, Hutchinson and Meyer 1994, Moore and Urbany 1994, Reibstein and Chussil 1997, Urbany and Montgomery 1998). Anecdotes about failures in considering competitive reactions abound, yet there is little or no evidence about how and to what extent managers account for

competitors in their decision making. Not reasoning about rivals' reactions might be perceived as harmless in the eyes of those who would contend that either (1) such "nonstrategic" behavior would correct itself over time, or (2) the link between such conjecturing and performance is ethereal at best. Here we explore two questions: (1) To what extent *do* practicing managers consider competitors and their anticipated reactions when deciding on their own moves, and (2) how do experienced managers account for the answer we get to Question (1)? Heeding Laurent's (2000) pleas for more concern about the external validity of marketing models and for more qualitative input into those models, we went into the field to gather evidence from practicing executives. This paper reports our results and provides food for thought regarding future research and pedagogy in the area of competitive response.

2. Competitive Reasoning

We define competitive reasoning as the assessment and consideration of competitors that serves as an input into the firm's decision making. We recognize

that a manager might simply ignore the competition, behaving strictly as a monopolist. This assumes that the success or failure of a decision depends only upon the company's capabilities and customers' response, not on competitors' actions or reactions. Leeflang's and Wittink's (1996) observation of limited competitive reactions in an apparently competitive environment may reflect this tendency.

Competitive reasoning, if it happens, can take three forms. First, managers may study their competitors in a manner that results in a description of the competitor (say, the competitor's goals, strengths and weaknesses, assumptions, strategy, past and current behavior, and so forth, Porter 1980), but stop short of making predictions about the competitor's future actions. Second, managers may make predictions about competitors' behavior, but only about actions, not reactions. Third, managers may specifically consider how their competitors are likely to react to their firm's own decisions. The third form of competitive reasoning is what we refer to as *strategic* competitive reasoning. Strategic competitive reasoning goes beyond both describing competitors and predicting competitors' future moves. It involves stepping into the shoes of the competitor and predicting the competitor's reactions to one's own moves (see Dixit and Nalebuff 1991).

Stepping into competitors' shoes can require a great deal of cognitive effort and a significant amount of information about competitors that is often neither readily accessible nor routinely collected (cf. Jaworski and Wee 1993). Consider the pieces that would have to be in place for a manager to think strategically about a competitor: The manager must be aware of the competitor's moves and countermoves, make the appropriate attribution regarding motives behind the moves, and accurately distinguish between competitor moves that are reactions and those that are independent moves (Moore and Urbany 1994, Clark and Montgomery 1996). These insights may be difficult to obtain for a variety of reasons—e.g., limited move-countermove sequences (Meyer and Banks 1997), delays between action and reaction, competitor responses in a different market (Ailwadi et al. 2001, Leeflang and Wittink 1996), short managerial tenures, and poor organizational memory (cf. Adams et al. 1998, Day 1991, Huber 1991).

Further, competition is only one of many factors managers must consider in strategic decision making. Many of the other factors, however, do not suffer as severely from the information and inference problems associated with reasoning about competitors. For example, managers may have greater confidence in information about internal company factors such as cost, capacity, and budgets. Information about customers may be more readily available and can

be tailored for the decision at hand. To the extent that customer and internal company information are perceived by managers as more vivid, more available, less debatable, more reliable (after all, competitors may attempt to mislead), and less costly in terms of financial resources, time, and cognitive effort, greater attention will likely be paid to customer and internal decision factors (cf. Culnan 1983, Day and Wensley 1988, O'Reilly 1982). Profiling competitors' past behavior can be difficult; predicting competitors' future behavior is much more difficult. Predicting competitors' future behavior that is a response to any particular action of the focal firm is doubly difficult and open to internal challenge. Thus, managers may perceive that there are better uses of limited resources than trying to resolve uncertainty about competitors' future behavior, especially their potential reactions.

3. Purpose of This Paper

In the field of competitor interaction, a developing body of literature seeks to explain competitive reactions post hoc. This literature generally characterizes the likelihood of competitive reactions to a firm's action as a function of (a) the characteristics of the firm taking the action (e.g., market size, reputation) (Bowman and Gatignon 1995, Venkataraman et al. 1997), (b) the characteristics of the action (e.g., scale of entry, market responsiveness, visibility) (Chen et al. 1992, Dickson and Urbany 1994, Leeflang and Wittink 1992), (c) the characteristics of the rival (e.g., size, performance, desired reputation, organizational responsiveness) (Smith et al. 1989, Gatignon and Reibstein 1997), and (d) environmental characteristics (e.g., turbulence, market growth, industry concentration) (Ramaswamy et al. 1994, Robinson 1988; see also Ailawadi et al. 2001).

While this work illustrates that competitive reactions may be predictable to some degree, it provides no insight into whether or how managers seek to predict competitor behavior in their decision making. In the many contexts where competitor choices do affect firm outcomes, not considering competitors' actions ex ante is likely to lead to poorer decisions and poorer outcomes. For instance, Clark and Montgomery (1996) found that 79% of actual competitor reactions were not even perceived by a firm's managers, and this oversight had significant negative consequences for performance. Our goal here is to explore whether practicing managers incorporate competitor behavior, particularly the prediction of future competitor reactions to their own moves, into their own decision making in strategic marketing settings.

4. The Studies

In this section we describe three studies that examine the incidence of competitive reasoning in marketing decisions, based on responses from practicing

managers. The goal of the first and second studies was to find out whether managers who were asked to describe factors that were important in past and prospective decisions would spontaneously mention considering any type of competitor behavior, with a particular interest in the incidence of strategic competitive reasoning. The third study addresses the perceived plausibility of the results of Studies 1 and 2 by soliciting the reactions of a different group of practicing managers to the results observed in the earlier studies and their explanations of these results.

5. Studies 1 and 2: The Relative Incidence of Types of Competitive Reasoning

5.1. Study 1—Method

Design and Respondents. One hundred seven guided interviews were conducted by MBA students (approximately half were executive MBA students and half were daytime MBA students) at two national universities as part of a class assignment. The students identified the respondents—managers who were involved in either a decision to change price for their product/service or the development and introduction of a new product during the previous year. We distinguished pricing decisions from new product decisions for two reasons. First, pricing decisions, contrasted with other strategic decisions, are more visible, occur more frequently, and can more easily be linked to sales and profit outcomes. Second, research has shown that pricing decisions are more likely than nonpricing actions to evoke competitive reactions (Venkataraman et al. 1997), which we feel increases the likelihood that competitor reactions will be considered *ex ante*. The objective of the interview was to obtain insight into the factors that drove decision making regarding each move. The students submitted a one-page write-up of their interpretation of the interview for class discussion, along with an appendix with the verbatim (or near-verbatim) account of the respondent's answers. Complete information was obtained for 101 respondents. Of these, 44 were new product development decisions, and 57 involved pricing decisions.¹ The student interviewers were blind to the purpose of the study, although the interview itself was structured.

The firms represented by respondents ranged from small local businesses to major package-goods firms. Seventy-nine percent described their firms as either market leaders or major players. On average,

respondents reported 3.36 serious competitors in their markets. Forty-four percent described their market's reaction patterns as "swift," while roughly the same proportion (40%) indicated that competitors tended to "wait-and-see" before reacting. Fourteen percent indicated that competitive reactions were often minimal. These background factors had no moderating effects on the answers discussed below.

Procedure. The interviews were exploratory in nature, with the students instructed to ask questions about the timing of the price change/product introduction and to obtain a retrospective account of the key considerations in the decision. Specifically, once the interviewer and interviewee had identified a particular decision made in a specific line of business and segment, the following questions were asked:

Q1: Thinking back to the time when this particular decision was made, what were the key considerations in the decision? That is, what issues did you consider specifically before you made the final decision?

Q2: Let's say that you were considering a similar move in this same market today. What questions would you ask yourself as you're deciding to make the move?

Coding. A coding scheme was developed based upon several iterative readings of the transcripts. The reports were coded for whether (1) no competitor considerations were mentioned, (2) competitors' past or current behavior was considered, (3) expectations regarding competitors' future behavior were considered, and (4) the account included consideration of competitors' future behavior as a reaction to the focal firm's move. The following "noncompetitor" factors emerged as considerations in the managers' decision making and were coded as well: customer/channel factors (needs, preferences, etc.); the market in general (overall market size, potential market size, primary demand); internal factors (e.g., the firm's sales/revenue/share targets, financial goals, capacity, capabilities); and "other" factors (e.g., regulatory considerations).

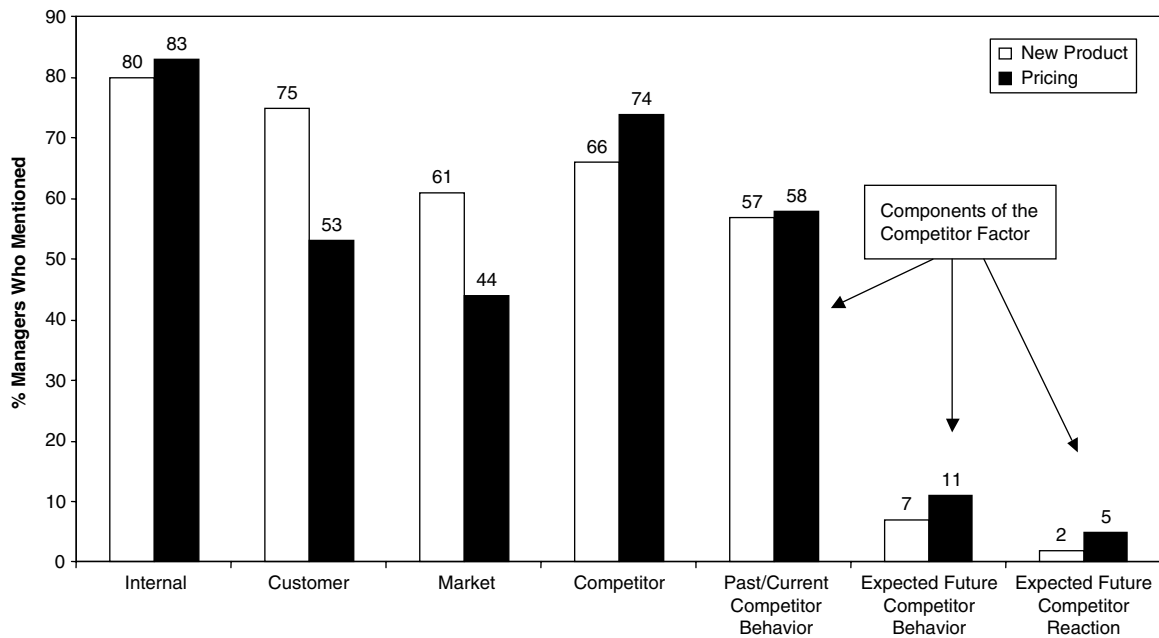
Two coders were trained on a separate sample of 18 interviews. They then coded each interview using these categories, coding separately the *retrospective* account of the decision (the respondents' answers to Q1 above) and the *prospective* account (Q2). The coders each coded the cases separately, and then together resolved any discrepancies. Prior to the resolution, average coder agreement was 77% and 78% for the retrospective and prospective accounts, respectively. Intercoder reliability, following Perreault and Leigh (1989), was 0.86 for both scenarios.

5.2. Study 1—Results

Figures 1a and 1b show the frequency with which managers mentioned considering internal factors, customer factors, market factors, and competitor fac-

¹ In several of the interviews, respondents discussed the pricing of a new product. When pricing received the predominance of discussion, these cases were categorized as pricing decisions.

Figure 1a Frequency: Decision Factors Mentioned—Study 1: Retrospective Decision Account



tors in their retrospective and prospective accounts, respectively, of either a new product decision or a pricing decision. The last three blocks of Figures 1a and 1b provide more detail on the nature of the competitor factors that were considered by those who mentioned competitors. The total percentage of respondents mentioning competitors is the sum of three components: (1) the percentage who mentioned only past or current competitor behavior, (2) the percentage who mentioned expected future competitor actions but

did not mention expected future competitor reactions, and (3) the percentage who mentioned expected future competitor reactions.

For all types of decisions (retrospective and prospective new product and pricing decisions), internal considerations (e.g., costs, profit goals, capacity constraints, human resources) are mentioned by the greatest percentage of respondents. Customer factors and competitor factors (aggregated) were mentioned with approximately equal frequency. However competitor

Figure 1b Frequency: Decision Factors Mentioned—Study 1: Prospective Decision Account

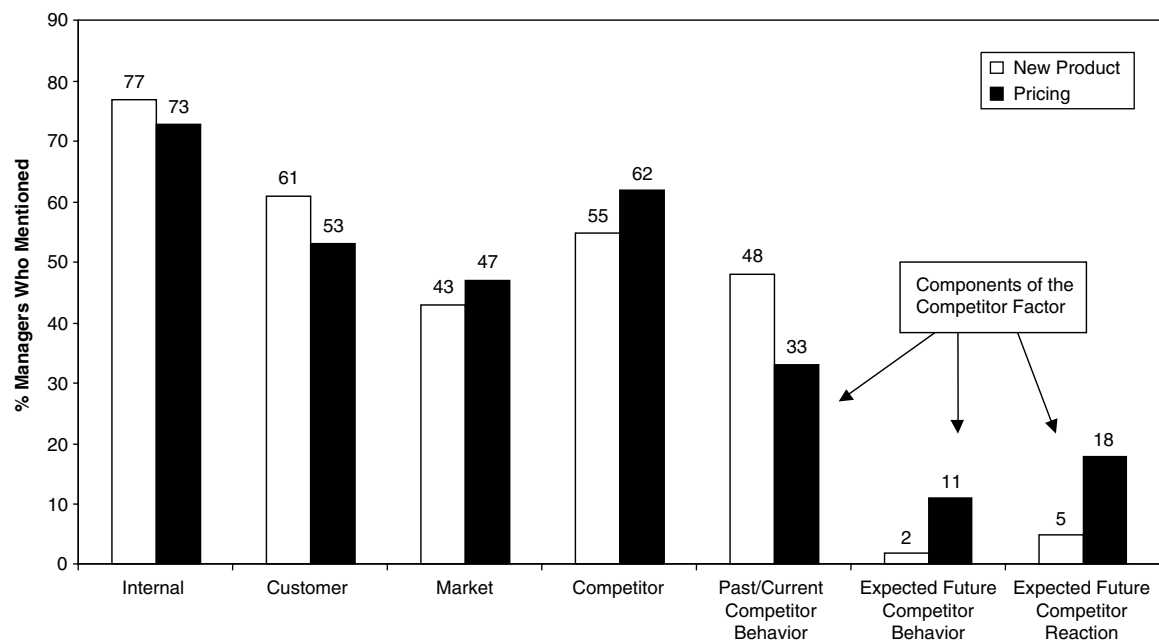


Table 1 Characteristics of Studies 1 and 2

Characteristic	Study 1	Study 2
Industry context	Broad	Narrow
Markets	Varied, real world	Markstrat3
Sample	101 managers, reporting on decision making in their company	47 executives in a one-year executive MBA program
Focal decisions	New product or pricing retrospective and prospective decisions	Advertising increase, price cut, and new market entry prospective decisions
Interview questions	What were the key considerations in the decision? What questions would you ask yourself if you were making the same decision again?	
Survey question		What are the factors you would consider in determining —?

factors receive a greater emphasis in pricing than in new product decisions. This was true for both retrospective and prospective decisions. The most interesting observation is that expected future competitor reactions are mentioned more often in the prospective decision accounts than the retrospective ones for both pricing and new product decisions, although the difference between retrospective and prospective decisions is not significant for new product decisions.² Thus, more respondents forecast they would engage in strategic competitive reasoning for future pricing decisions (18%) than reported doing so for the recalled pricing decision (5%; $Z = 2.83$, $p < 0.01$). Several respondents expressed regret at not having done so when the decision was made, which suggests a perception of potential benefit from more active competitor reaction considerations, at least for pricing decisions.

Summary. In sum, Study 1 indicates that while managers do report considering competitors in their decision making, competitive considerations focus primarily on competitors' past or current behavior rather than competitor reactions. Study limitations, such as the use of multiple interviewers, limited control over interview transcripts, and some sources of uncontrolled heterogeneity in respondents and their firms, dictated that we check the robustness of our results. Study 2 applies the coding scheme developed in Study 1 in a more controlled environment and focuses specifically on prospective decisions. Table 1 contrasts Study 1 and Study 2 on important design characteristics.

5.3. Study 2—Method

In Study 2, we determine whether the Study 1 results generalize to another, very different setting in which executives are asked to describe prospective decision making in three familiar and personally relevant scenarios. Industry differences are held constant, as respondents are asked to focus on decision making in a common, simulated environment, Markstrat3. Importantly, we know with certainty that a firm's outcomes are substantially affected by its competitors' actions in this simulation, removing a source of variability that may have been present in Study 1.

Design and Respondents. Respondents were 47 executives participating in the Sloan Executive program at a major university. The executives in the Sloan program are handpicked fast-risers in their organizations. Those participating in this study averaged 36.2 years old with a range of 30–52 years. Forty-two percent were from the United States and 85% were male. These managers, who were participating in the competitive simulation Markstrat3 during one of their course modules, were presented with three separate decision scenarios and asked to articulate the factors that would be considered by the team in making three kinds of decisions. The scenarios included deciding: (a) which of several market segments to focus on with the team's next new product (market selection), (b) whether to increase the advertising budget, and (c) whether to cut price. All respondents provided responses to all three scenarios, which were counterbalanced across the questionnaires.

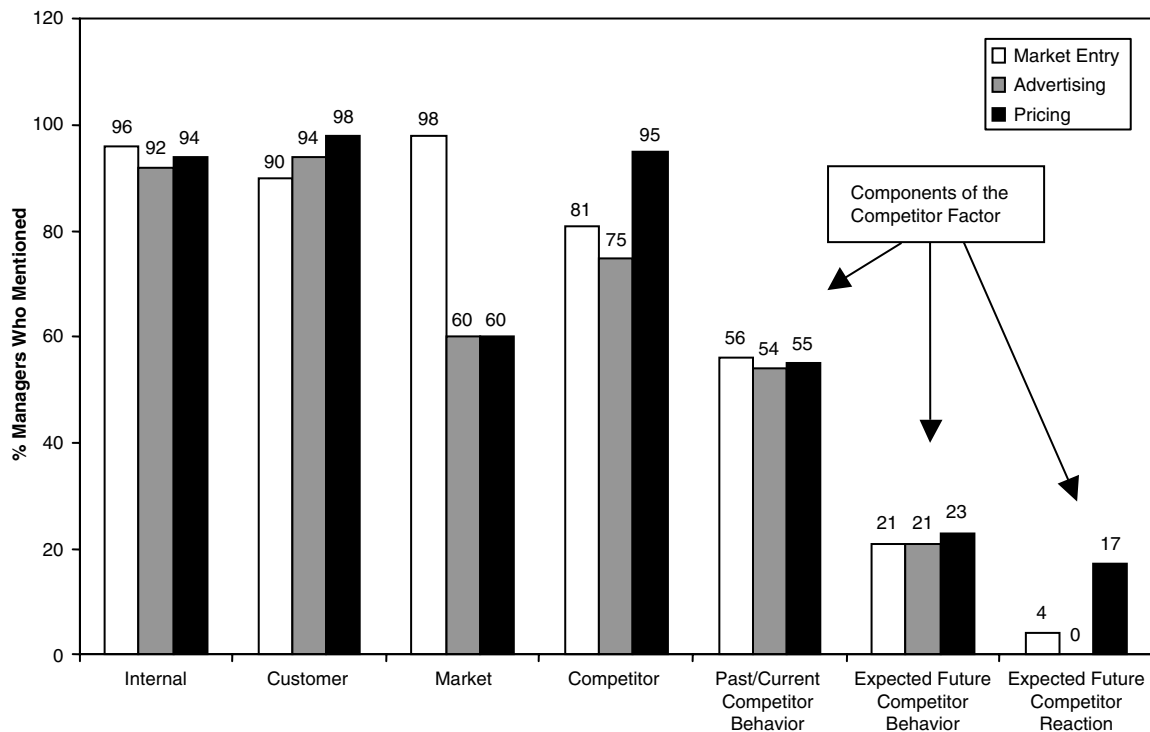
Procedure. Following Period 3 of the Markstrat3 competition, the Sloan executives were presented with a questionnaire that contained questions about the three types of decisions described just above. To illustrate, the advertising scenario was presented as follows:

You're a member of a Markstrat team that is making a decision about whether to increase the advertising budget for an existing Sonite brand. Faced with uncertainty, your team plans to sort through several issues and factors which will influence the success or failure of the target advertising decision. What are the factors that you would consider in making this advertising increase decision?

Coding. The prospective decision protocols were coded by two coders who were different from the coders used in Study 1. The same coding framework was used. Across the market selection, advertising, and pricing scenarios, intercoder agreement was 0.87, 0.89, and 0.85, respectively, leading to reliabilities of 0.92, 0.94, and 0.91.

² Contrasts were at least significant at $p < 0.05$ except as noted.

Figure 2 Frequency: Decision Factors Mentioned—Study 2: Markstrat3



5.4. Study 2—Results

Figure 2 presents the percent of managers who mentioned internal, customer, market, and competitor factors as considerations in prospective decisions in the Markstrat3 context. The last three blocks of Figure 2 provide details regarding the type of competitor reasoning that was mentioned. Similar to Study 1, we find that, in general, reasoning about competitors involves consideration of past and current behavior most often, and consideration of future reactions occurs least often. However, substantially more of the respondents in Study 2 mentioned competitor factors. (More of them mentioned internal, customer, and market factors as well.) Interestingly, the increase in strategic competitive reasoning from Study 1 to Study 2 comes from an increase in considerations of competitors' expected future actions, as the proportion of managers in Study 2 who considered competitors' past/current behavior and competitors' future reactions is quite similar to the proportion that did so in the prospective decision setting of Study 1 (Figure 1b). As in Study 1, the managers in Study 2 mentioned considering strategic competitive reasoning much more often for pricing decisions than for the market selection and advertising decisions ($Z_s = 2.09$ and 2.62 , both $p < 0.05$).

5.5. Studies 1 and 2—Summary

We observe reassuring consistency in results across Study 1 and Study 2, which examine very different decision environments with different research ap-

proaches, as reflected in Table 1. The evidence thus far supports the expectation that managers attend far less to future competitive reactions in their decision making than might be expected based upon traditional economic theory. In fact, these results are so contrary to such theory that one might worry that methodological concerns account for the results. Rather, we believe the similarity in results across these two diverse studies provides greater confidence in the conclusions that emerge. For further insight regarding why so little conjecture about competitive reactions is observed, we turn to Study 3, in which experienced managers assess and offer explanations for the pattern of results observed in Studies 1 and 2 (based upon their own experience).

6. Study 3: Considering the Results of Studies 1 and 2

In Study 3, executives were asked to assess the plausibility of the pattern of results that were observed in Studies 1 and 2. We presented our aggregate results to three different samples of executives—two sets of experts and one set of generalists, and obtained their assessments of the plausibility of the results and their insights into explanations of the results.

6.1. Study 3—Method

Design and Respondents. In this study, 96 experienced managers responded to a survey that presented a summary of the combined results from the earlier

studies described above. The expert sample included an e-mail sample of 14 executives in research, corporate intelligence, and consulting functions, and 16 Marketing Science Institute (MSI) trustees. The generalist sample consisted of 66 executive MBA students at a Top-10 Executive MBA program (EMBA), with an average 11.5 years of work experience. The executive MBA students represented a wide range of industries, including telecommunications, financial services, automotive, photographic, high tech, food/grocery, and industrial products; and a wide range of functions within their organizations, e.g., marketing, finance, human resources, engineering, product development, legal services, and so forth.

Procedure. After a preliminary series of open-ended interviews with four executives to pilot test our approach for collecting the Study 3 data, we developed two versions of a short questionnaire—the first an e-mail questionnaire that was administered to the first sample of 14 executives. This sample was identified primarily with the assistance of a competitive intelligence (CI) professional actively involved with the Society of Competitive Intelligence Professionals (SCIP). The sample included executives who were among the leaders in the field of competitive research nationally. Nearly all of these respondents were currently or had been chief CI professionals in their organizations. Several worked for very large organizations with well-established CI functions or were consultants in CI. The second two groups were presented with a paper and pencil version of the e-mail survey; the MBA group in a classroom setting and the MSI trustees at a semiannual board of trustees meeting.

As noted, respondents were presented with either a questionnaire or an e-mail survey. (Those receiving the e-mail survey were first contacted by telephone.) The survey first discussed the general objectives of the research (i.e., “We are interested in examining what factors managers tend to focus on in decision making and why.”) and then presented results for the overall ranking of the decision factors based upon the first two studies. Each factor was defined in detail, and the following aggregate percentages of managers from Studies 1 and 1B who considered the factors were provided to respondents: internal factors (89%), customer factors (82%), market factors (65%), past or current competitor behavior (56%), expected future competitor behavior (16%), and expected future competitor reactions (6%). The primary objective was to determine whether respondents found the relative emphasis on these factors (reflected in the frequency of mention) to be consistent with their own experience. In addition, we wanted to tap into their experience by requesting their explanations for the observed results. While our particular interest is in

the low incidence of considerations of future competitive reactions, we chose not to focus our respondents exclusively on that particular aspect of our results.

Measures. Respondents were asked to assess the results of Studies 1 and 2 using three 10-point bipolar scales anchored with the labels unexpected–expected, surprising–unsurprising, and inconsistent with my experience–consistent with my experience. Following this, they answered three open-ended questions that asked them to (1) explain their ratings on the three items, (2) provide an explanation, based on their experience, for the rank-order results (if they had one), and (3) provide an explanation of why future competitive reactions receive greater mention in pricing decisions than for other decisions (again, if they had an explanation).

Coding. The executives’ open-ended explanations were content-analyzed by two coders. The authors developed a coding scheme for the results based on several readings. The categories that emerged are presented in Table 2.

The rate of coder agreement varied across the categories, from 65%–100%. Across categories, average agreement was over 90% and overall reliability was 0.956. All disagreements were resolved through discussion.

6.2. Study 3—Results

Plausibility Ratings. The three items used to measure respondents’ assessment of the rank-order results presented in the survey had an alpha of 0.84 and were averaged to form an overall plausibility scale. There were no significant differences in the mean ratings of the three executive subsamples ($F_{2,95} = 0.92, p = 0.40$), so results are aggregated across the groups. The overall mean was 7.30 (standard deviation = 1.94), with median 7.67 and mode 8.33. The mean response is significantly greater than the scale midpoint of 5.5 ($Z = 9.18, p < 0.01$), which suggests that the respondents were, on average, positive in their plausibility ratings. Seventy-one percent of the sample averaged ratings of 7 or above (48% averaged 8 or above).

Framing the Explanations. A useful framework to organize the factors that emerged to explain limited competitive reasoning is presented in Table 3. This framework identifies factors that may reduce the value ascribed to the practice of competitive reasoning by raising the perceived costs of doing so or by reducing the perceived returns from doing so. Table 3 uses this framework and presents the results of the coding, indicating how often the various factors were offered as explanations for the results observed in

Table 2 Coding Categories: Factors That May Decrease the Perceived Value of Strategic Competitive Reasoning

Category	Definition
<i>Factors that may decrease the perceived value of strategic competitive reasoning by raising the perceived costs of strategic competitive reasoning</i>	
Limited information availability	Any mention of how easy or difficult it is to get relevant information
Processing difficulty	Any mention of how difficult it is to analyze competitor information
Limited observations	Any mention of how difficult it is to learn about competitors due to limited interactions, delay between action and effect, lack of time, and so forth
Decision-making tendencies	Comments related to managers' risk aversion or loss aversion with respect to gathering/analyzing competitor information
<i>Factors that may decrease the value of strategic competitive reasoning by decreasing the perceived returns from strategic competitive reasoning</i>	
Irresolvable uncertainty	Comments related to the impossibility of resolving uncertainty about competitors
Firm culture	Any mention of firm rules, processes, norms, or style that discourage competitor analysis
Limited interdependence	Any mention regarding competitors' not having much effect on each other or the firm's not having any competition
Decision-making tendencies	Any mention of managers' need to be in control or a tendency to be overly optimistic or overly confident with regard to competition
Effectiveness of simpler competitor reaction heuristics	Comments related to there being simpler, effective ways to make decisions than trying to predict competitor behavior
Internal factors are more important	Any mention of internal, company-related factors being more important considerations than competitor-related factors
Customer factors are more important	Any mention of customer-related factors being more important considerations than competitor-oriented factor

Studies 1 and 2. The number in each cell indicates how many of the respondents mentioned the factor, either as an explanation for their reactions to the overall rank order or as an explanation for the results of Studies 1 and 2 (i.e., Questions 1 and 2 in the Measures section above). The responses of the experts (MSI Trustees and competitive intelligence professionals) are distinguished from responses of the generalists (the executive MBA students).

The results for the two groups are very consistent. The simple correlation between the experts and the generalists for the percent mentioning each of the 11 items of explanation in Table 3 is 0.92, $p < 0.01$. In addition, the Spearman rank-order correlation and

the Kendall Tau B rank-order correlation between the two groups for the 11 explanations were both significant (0.92 and 0.66, respectively, $p < 0.01$).

6.3. Study 3—Discussion: Factors Influencing the Value of Competitive Reasoning

Factors Raising the Perceived Costs of Competitive Reasoning. Respondents frequently mentioned the difficulty of obtaining competitive information. Two predominant dimensions of the costs of competitive analysis emerged. The first is related to the accessibility of information about competitor behavior and was mentioned by 11.5% of all respondents. The second dimension addressed the difficulty of

Table 3 Explanations Offered for the Results of Studies 1 and 2 (Number and Percent of Respondents Mentioning)

Category	MSI/CI ($n = 30$)		EMBA ($n = 66$)		TOTAL ($n = 96$)	
	No.	%	No.	%	No.	%
<i>Factors that may raise the perceived costs of strategic competitive reasoning</i>						
Information not easily available	6	20.0	5	7.8	11	11.5
Processing difficulty	7	23.3	5	7.8	12	12.5
Limited opportunity to learn	5	16.7	5	7.8	10	10.4
Decision-making tendency: risk aversion	7	23.3	3	4.5	10	10.4
<i>Factors that may decrease perceived returns from strategic competitive reasoning</i>						
Irresolvable uncertainty	25	83.3	31	46.9	56	58.3
Limited interdependence	2	6.7	0	0	2	2.1
Decision-making culture of the firm	23	76.6	55	83.3	78	81.3
Decision-making tendencies: individual	7	23.3	19	28.8	26	27.1
Simpler heuristics effective	5	16.7	13	19.7	18	18.8
Internal factors more important	27	90.0	59	89.4	86	89.6
Customer factors more important	16	53.3	35	53.0	51	53.1

competitive analysis even if competitive information was available (mentioned by 12.5%). These might be financial costs, cognitive costs, or time-related costs.

The data suggest two reasons why the costs of gathering and analyzing competitor information, especially that required for strategic competitive reasoning, may be perceived to be high. The first is the limited opportunity to actually learn about competitors, which was mentioned by 10.4% of the respondents. Respondents suggested this limitation may be due to infrequent observations, the delay between an action and its reaction, or the time pressure associated with the decision. The second reason that emerges is risk aversion, which was mentioned by 10.4% of the respondents.

Factors Reducing the Perceived Returns from Competitive Reasoning. The most often mentioned factors associated with reducing the perceived returns from competitive reasoning are irresolvable uncertainty, the greater importance of internal factors and customer factors, and the decision-making culture of the firm.

Irresolvable Uncertainty. This category deserves special consideration, as it is an outgrowth of the high perceived costs of gathering and analyzing competitor information. When firms have limited information about competitors, we would expect there to be significant uncertainty about competitor behavior, both past and present. However, even when information is available about competitors' past and present behavior, there is likely to be uncertainty about competitor's potential behavior. Uncertainty may have many sources, and generally it is human nature to avoid it (Einhorn and Hogarth 1985). One response may be to apply simple decision heuristics to deal with the uncertainty of competitors' future behavior, as mentioned by 18.8% of our respondents. For some, approximation may be "good enough."

Other Factors Are More Important. In the face of uncertainty about competitors' future actions and reactions that cannot be resolved, our respondents appear to make an implicit trade-off that favors more certain inputs in their decision making. One of the dominant themes in the verbatim comments was that factors that could be assessed with greater certainty—typically internal factors—tended to receive more weight in decisions. This was true for both the experts (90.0%) and the generalists (89.6%). Customer factors, while not as certain or easy to measure as internal factors, were mentioned as "more important than competitor-oriented factors" by 53% of both the expert and the generalist groups.

The Culture of the Firm. The detailed responses provided three potential explanations for the dominance of internal factors. All three are associated with the organizational culture that provides the context for competitive decision making: (1) the firm's focus on the short run, especially short-term Return on Investment; (2) the greater appeal of factors that one can control; and (3) the need to justify one's decisions internally. While we were not surprised by the emergence of firm culture as a factor that would affect the perceived value of strategic competitive reasoning, we were surprised by its importance. Firm culture was mentioned by 81.3% of the total sample; 76.6% of the experts, and 83.3% of the generalists.

Low Perceived Returns vs. High Perceived Costs. We expected factors that would reduce the value (and thus the incidence) of strategic competitor reasoning by lowering the perceived returns to be mentioned about as often as those that would raise perceived costs. However, Study 3 respondents put a much greater emphasis on explanatory factors associated with lowering perceived returns than those associated with raising the perceived cost (Table 3). The four items mentioned by more than 50% of the respondents (overall and within each group) are associated with low perceived returns to competitor reasoning. Not only are factors associated with lowering value by lowering potential returns rank-order dominant, but they are mentioned by a dramatically greater proportion of the executives than factors associated with perceived costs. To the extent that the executives' explanations inform us of their collective experience, this result suggests that the rarity of strategic competitor reasoning is due more to a lack of potential returns than a concern for costs, be they financial, cognitive, or time-related costs. It is also significant to note that of the low-returns-related explanations, limited interdependence is the least often mentioned (by far, at 2.1%!). Thus, the a priori obvious explanation that little competitive reasoning was observed because little or none was appropriate was not a popular explanation. The alternative explanations mentioned by the executives were offered in the context of competitive interdependence.

Contrasting the Experts and the Generalists. Although the overall results are quite consistent between the experts (MSI trustees and competitive intelligence professionals) and the generalists (executive MBA students from a variety of functional areas), there is one particularly interesting difference. For all respondents, factors associated with increasing the perceived costs of competitor reasoning were mentioned much less often than factors associated with decreasing the perceived returns from competitor reasoning. What is striking, though, is that the experts

mentioned the increased-cost-related factors (on average, 21%) at three times the rate the generalists did (on average, 7%, $Z = 2.01$, $p < 0.05$). Our interpretation is that the experts were more likely to have experienced the effort and financial costs of assembling and analyzing competitor information, perhaps even having fought (unsuccessful) budget battles to support such efforts. The generalists, however, may not routinely or formally consider the costs of competitive reasoning. Rather, the notion that not much can be gained from attempts to anticipate competitor behavior may have been institutionalized for the generalists.

Pricing vs. Other Decisions. The explanations described above are answers to the first two questions our respondents were asked, i.e., to describe their reaction to the overall results of Studies 1 and 2. We deliberately did not direct their attention toward the low incidence of competitive reasoning found in the first studies until the third question, which asked respondents why they thought the incidence of anticipating competitor reactions was greater for pricing decisions than for market entry, advertising budgeting, or new product decisions. The reasons offered were consistent with past research and with our expectations. Between 34% and 45% of the respondents mentioned each of four reasons why reasoning about potential competitor reactions is more likely for pricing decisions: (1) The firm feels the impact of a competitor's reaction to pricing more quickly and more obviously than in other areas, (2) competitor information about pricing is easier to gather because of its visibility, and (3) competitor information about pricing, once gathered, is easier to analyze.

7. Summary of the Three Studies

Studies 1 and 2 examined managers' reports of factors considered when making pricing, new products, market entry, and advertising decisions. The data came from a wide variety of competitive contexts, providing sample breadth. A more controlled environment in Study 2 provides depth. Both studies yielded a similar conclusion: Although competitor considerations are fairly widespread, strategic competitive reasoning is, relatively speaking, a very rare occurrence. As anticipated, strategic competitive reasoning occurred more frequently in the pricing arena than the other decision areas.

In Study 3, two additional groups of executives, one more expert and one more generalist, were asked to react to the results of Study 1 and Study 2 and offer reasons that might explain these results. Overall, these executives were inclined to believe the results hold true in the "real" world. They overwhelmingly felt

(somewhat surprisingly) that explanations associated with perceived low returns to competitor thinking were substantially more important in explaining limited strategic competitive reasoning than perceptions of high perceived costs.

7.1. Subsequent Inquiry

In order to assess whether these results are simply well known and consequently of little interest, we asked some 101 participants at research seminars attended largely (over 80%) by marketing and economics academicians to predict *ex ante* whether executives would attribute the results (particularly the rarity of strategic competitor thinking) more to high perceived costs, more to low perceived value, or whether they would anticipate that these reasons would be roughly equally cited. We invoke this procedure, albeit somewhat informal, in recognition that seminar attendees and readers alike are potentially subject to hindsight bias (Bukhszar and Connolly 1988). Nearly half the research seminar participants (46%) expected that high perceived costs would be the dominant reason given by executives. Sixteen percent of the seminar participants thought the reasons cited would be roughly equal. Only 39% correctly identified low perceived value as the dominant reason given. Thus, it appears that the results are not well known, at least to these academic professionals. The authors were also incorrect in their prior expectations.

8. Discussion

We began with the goal of exploring whether managers are inclined to consider competitive reactions, and why. We do find a low incidence of strategic competitive reasoning. Based upon the subsequent study of executives, the clearest explanation seems to center upon uncertainty and decision justification. That is, there is a general tendency to weight more heavily (or rely on more strongly) decision inputs that can be assessed more easily, predicted with greater confidence, are felt to be more controllable, and provide a stronger basis for justifying decisions within the organization (see Cyert and March 1992, Adams et al. 1998). Such behavior may be adaptive, even optimal. (For instance, in markets with little competitive interdependence, Nash behavior is appropriate.) Our interest is in situations when omitting strategic competitor reasoning from the decision-making process may be harmful, despite its inherent difficulty.

8.1. Uncertainty Reduction

The most significant reasons why expectations regarding competitive reactions (and other more qualitative considerations) may not be accounted for in decision making is that such predictions are, by their nature,

uncertain and ambiguous. While the perils of being inwardly focused have been discussed for some time (cf. Bonoma 1981), there has been little or no discussion of (1) how people may limit the “set” of attributes or criteria on which they evaluate decisions, nor (2) how a tendency to favor more quantifiable, less ambiguous decision criteria may blind the management team to particularly diagnostic information. To the extent that such processes represent natural adaptations to a complex environment (which under many circumstances they might), it is conceivable that they reflect rational adaptive behavior. We need to consider under which conditions such behavior is detrimental, that is, when the failure to consider competitors’ reactions impairs firm performance.

8.2. What Harm?

Are failures to conjecture always harmful? Not necessarily. In fact, managers who focus on competitor reactions when there is no need to do so may be wasting considerable time and effort. If, however, managers are not anticipating competitor reactions and should be, the possibility of their being blindsided by a competitor’s reaction to a decision that was (otherwise) a good decision looms large (Moore and Urbany 1994). Andy Grove (1999), for instance, suggests it may be worthwhile to be a little paranoid, i.e., to “...guard constantly against other people’s attacks” (p. 3), in order to keep the organization in fighting trim and to avoid unpleasant competitive surprises. Is competitive paranoia needless, costly behavior? Interestingly, Clark and Montgomery’s (1996) results showed that (in a simulation) while paranoia didn’t help, it didn’t hurt. Therefore, in the face of the potentially considerable consequences of being blindsided by competitors, paranoia may be the preferred mode, although ideally the firm would want to be “just right.”

We need to know much more about the conditions under which strategic competitive reasoning is important and when it can be safely ignored; that is, what level of reasoning about competitors is “just right.” We need to identify and calibrate the antecedents and consequences of competitive paranoia, and of being blindsided. We need to develop, and train managers to implement, strategies to overcome the managerial limitations suggested in this study, particularly in conditions where it is most dangerous to ignore competitive response. For instance, developing models of marketing competition that account for uncertainty about competitors and the resulting tendency to discount or possibly ignore potential insights about competitive behavior may be quite productive.

All of this, of course, rests on the presumption that strategic competitive reasoning is actually helpful, not

merely “not harmful.” This proposition, which is difficult to prove, yet true almost by implication, drove our interest in why managers seem to do so little strategic competitive reasoning. Nevertheless, the real value of strategic competitive reasoning to any firm will depend on a host of factors, some that raise its perceived value and others than lower it. Here we focused on those factors that lower the perceived value. It is equally critical to understand factors that enhance the perceived value of strategic competitive reasoning. An important next step is to identify circumstances where the returns from thinking strategically about competitors exceed the costs of doing so.

9. Final Thoughts

The studies presented here add to a recent stream of research that we hope gathers interest and strength. Dekimpe et al. (2001) and Leeftang and Wittink (1996) each find that the most common actual response to competitors is “no response.” Recall also that Clark and Montgomery (1996) found that most competitive reactions were not even perceived by managers in a simulation and that such underperception lowered performance. Our results reiterate that attention to competitor reactions in decision making is limited, and suggest this may be driven largely by low perceived returns from thinking strategically about competitors. It is heartening to note that respondents in the first two studies were more likely to consider competitor reactions in future decisions, perhaps suggesting learning. Also, executives in Study 3 suggest that decision makers better understand the positive returns from competitive intelligence as they become more experienced in using it.³ Thus, instituting processes that address the low perceived returns side of the equation may have an especially significant payoff. To do so, we need to remove the blinders from managers and academics alike. We again second Laurent’s (2000) appeal for a part of the marketing research portfolio to be devoted to enhancing the external validity of marketing models and frameworks. We hope that the research presented here might modestly contribute to that objective.

³ One president of a consulting firm in Study 3 noted that “Most North American executives are not very competitor-oriented or competitive intelligence ‘savvy.’ However, after appropriate intelligence education/orientation they quickly adjust to competitive issues and the use of business intelligence and, in my experience, become more sensitive to the competitive-dimension of their own business decisions and actions.” Another intelligence professional in the petroleum industry noted that “...once decision-makers are exposed to good competitive intelligence and the impact it can have on improving the quality of the decisions one makes about the business, they will use and value competitive intelligence.”

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