Richard A. Gooner, Neil A. Morgan, & William D. Perreault Jr.

Is Retail Category Management Worth the Effort (and Does a Category Captain Help or Hinder)?

Category management (CM) is challenging for retailers that sell thousands of products across hundreds of categories and often lack the resources and capabilities to manage all of them intensively. Some retailers respond by picking one supplier to be a "category captain" that manages the category—including rivals' brands—on their behalf. Others worry that influential captains will be opportunistic and that the benefits of intensive CM are simply not worth the costs. However, there is little conceptual development or empirical evidence concerning CM best practices. The authors develop a comprehensive model of retail CM based on a synthesis of field interviews and relevant literature, especially work on governance value analysis theory. Their test of the model using category and financial growth data from U.S. supermarket chains shows that more intensive CM improves results. Furthermore, use of a category captain increases CM effort and results, without increasing opportunism or problems with other suppliers. The authors also find that retailers with more resources are less likely to rely on help from a category captain; yet the level of retailer resources is not related to CM intensity. Thus, "go-it-alone" retailers do not deploy their own resources on CM and miss out on the corresponding performance improvements.

Keywords: interorganization relationships, governance; channels of distribution, supplier networks, brand management, retailing

In increasingly competitive markets, managers and scholars must rethink traditional approaches to creating and capturing value, including how interorganization relationships are handled (e.g., Cannon and Perreault 1999; Frazier et al. 2009; Palmatier, Dant, and Grewal 2007; Wathne and Heide 2004). Nowhere is this more evident than in the channel for consumer packaged goods (CPGs), in which category management (CM) is a key issue for both suppliers and retailers (e.g., Gajanan, Basuroy, and Beldona 2007; Lindbloom and Olkkonen 2006). Category management involves the allocation of resources within sets of complementary and/or competing brands to maximize planned outcomes (e.g., Basuroy, Mantrala, and Walters 2001; Morgan, Kaleka, and Gooner 2007) and involves the analysis of category-level data, setting goals for category performance, and the formulation and execution of plans to maximize category-level results (e.g., Desrochers, Gundlach, and Foer 2003; Dupre and Gruen 2004).While CM is common among CPG manufacturers, retailers typically sell thousands of products across hundreds of categories, and as a result, most lack the resources to intensively manage all the categories they sell. Some experts urge retailers to address their CM challenge and ramp up the intensity of their CM efforts by leveraging the resources and capabilities of a lead supplier—or even to designate a "category captain" supplier to manage the category (including rivals' brands) for them (e.g., Aastrup, Grant, and Bjerre 2007; Gruen and Shah 2000). However, this idea is controversial. There are anecdotal reports of successes, but many retailers fear that this idea carries significant risks, including opportunistic behaviors by lead suppliers such as manipulating data analyses to lead to CM decisions that favor their own brands at the expense of the retailer and other suppliers. Furthermore, in most categories, retailers work with multiple suppliers to provide required levels of consumer choice. Many retailers fear that giving one supplier an influential role in their CM will prompt damaging push-back from other suppliers, such as reducing trade allowances or delaying access to new products. Some retailers are also cautious because of public policy concerns that reliance on a category captain may inhibit competition and lower consumer welfare (e.g., Desrochers, Gundlach, and Foer 2003; Steiner 2001).

Therefore, retail CM is an important but problematic area for retailers and their suppliers, and it is challenging from both theoretical and public policy perspectives. Despite this, there is little empirical evidence on retail CM (Dhar, Hoch, and Kumar 2001; Gruen and Shah 2000). Most prior CM research has drawn on analytical models of

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channel behavior, and the limited empirical work has focused only on specific CM elements such as opportunistic supplier behaviors (Morgan, Kaleka, and Gooner 2007) or the appropriation of any incremental CM rents (Basuroy, Mantrala, and Walters 2001). Therefore, managers have no comprehensive evidence-based guidance regarding whether more intensive retail CM pays off and little insight into the costs and benefits of using a lead supplier to help their retail CM efforts. This is unfortunate, because many retailers report having failed to make their CM efforts and associated supplier relationships work (e.g., Howe 2006; Kumar 2005), and many retailers remain skeptical and even fearful of CM.

Integrating field interviews and the literature, we develop a comprehensive new conceptual model of retail CM and its key antecedents and outcomes. We test this model using data on 35 product categories from a representative sample of U.S. supermarket chains. We complement this model test by contrasting the results achieved when retailers choose to rely (or not) on a category captain. In combination, our results show that retailer skepticism about CM's benefits—and fears about relying on a category captain—are both unfounded. We show that more intensive CM improves financial results and that retailers that allow a lead supplier more influence benefit from more intensive CM. We also show that even when retailers possess the required CM resources, they frequently undermanage categories and, as a result, underperform. Contrary to retailer fears, we find that, on average, a category captain is no more likely act opportunistically and actually provokes *less*—not more—damaging push-back response from other suppliers. Our results provide important new insights into retail CM and illuminate several theoretically important but underresearched aspects of buyer–supplier relationships.

We begin with a brief discussion of how our conceptual model was developed. Then, we present our model of retail CM, its antecedents, and outcomes, along with formal hypotheses of relationships between constructs we identify as key to understanding retail CM. We then describe our data collection and tests of the hypothesized relationships. We report the results and their implications for theory, managerial practice, and public policy. We conclude with a discussion of the limitations of our study and directions for further research.

Conceptualization and Hypotheses

Theories advanced in marketing and management suggest myriad factors that could be relevant to understanding retail CM activities, the role or impact of suppliers in retail CM, and likely antecedents and consequences of different CM approaches (e.g., Morgan, Kaleka, and Gooner 2007). However, no comprehensive framework for understanding CM exists. To develop a conceptualization reflecting the specific context of retail CM and narrow the focus to only the key factors required for a comprehensive model, we first conducted qualitative fieldwork.

After synthesizing academic and trade literature relevant to CM, we developed a semistructured telephone interview protocol based on discussions with a convenience sample of top managers involved in retail CM from four retailers and three CPG suppliers. We included open-ended questions about different CM activities for supermarket retailers, the extent to which suppliers were involved in retail CM decisions and their execution, and the different costs and benefits of retail CM efforts. We then used a snowball sampling approach to identify 49 managers (21 retail buyers and CMs, 11 CM consultants, 10 supplier managers, and 7 top retail executives) with whom we conducted in-depth telephone interviews. The interviewees represented a wide range of retailers (ranging from those with as few as 3 stores to national chains with more than 400 stores); leading suppliers of food, beverage, perishable, and nonfood products; and consultants working for major consulting firms engaged in CM. We also interviewed leaders of major trade associations and editors and analysts from the trade press. These interviews helped us identify factors key to understanding retail CM and its antecedents and outcomes and to elicit managers' beliefs concerning cause and effect relationships among these factors.

Multiple theories were potentially relevant to exploring different aspects of the conceptualization of retail CM that emerged in our fieldwork. However, recent governance value analysis (GVA) extensions of transaction cost analysis (TCA) (e.g., Ghosh and John 2005, 2009) have created a new theoretical lens that we viewed as being the single theory that most closely aligned with our original fieldwork-based CM conceptual model. Therefore, we use GVA as a theoretical lens for exploring the relationships suggested in our model. In essence, GVA combines the cost minimization calculus of TCA with the resource-based view insight that firm-specific resources drive realized strategy positions. Consistent with GVA, we contend that retail CM is a governance mechanism that enables retailers and suppliers to organize and align their resources and transactions to promote and leverage cooperation in ways that create and claim value (cf. Ghosh and John 1999). While no single study—especially the first one in a new research area—can offer a comprehensive test of GVA theory, we show that ideas that are distinctive to GVA theory help support and inform hypotheses about relationships among the constructs identified by our fieldwork as most important to understanding retail CM.

Our fieldwork-based conceptualization suggests that in retail CM, retailers and their suppliers (1) have different resource profiles, (2) use these different resources to create and claim value with CM, and (3) are self-interested insofar as they seek to organize and align themselves in ways that both are efficient and deliver them the greatest total value. Therefore, the central problem in retail CM is how to efficiently and effectively coordinate the category-level actions of these different parties when competition among retailers and between suppliers combines with dynamic consumer demand to require continuous adaptation. Creating value through retail CM requires close retailer–supplier cooperation, but the different resource profiles and self-interests between the parties involved also creates tensions in how any value created is claimed and by whom.

In the following section, we synthesize our qualitative insights with those available from the GVA and other rele-

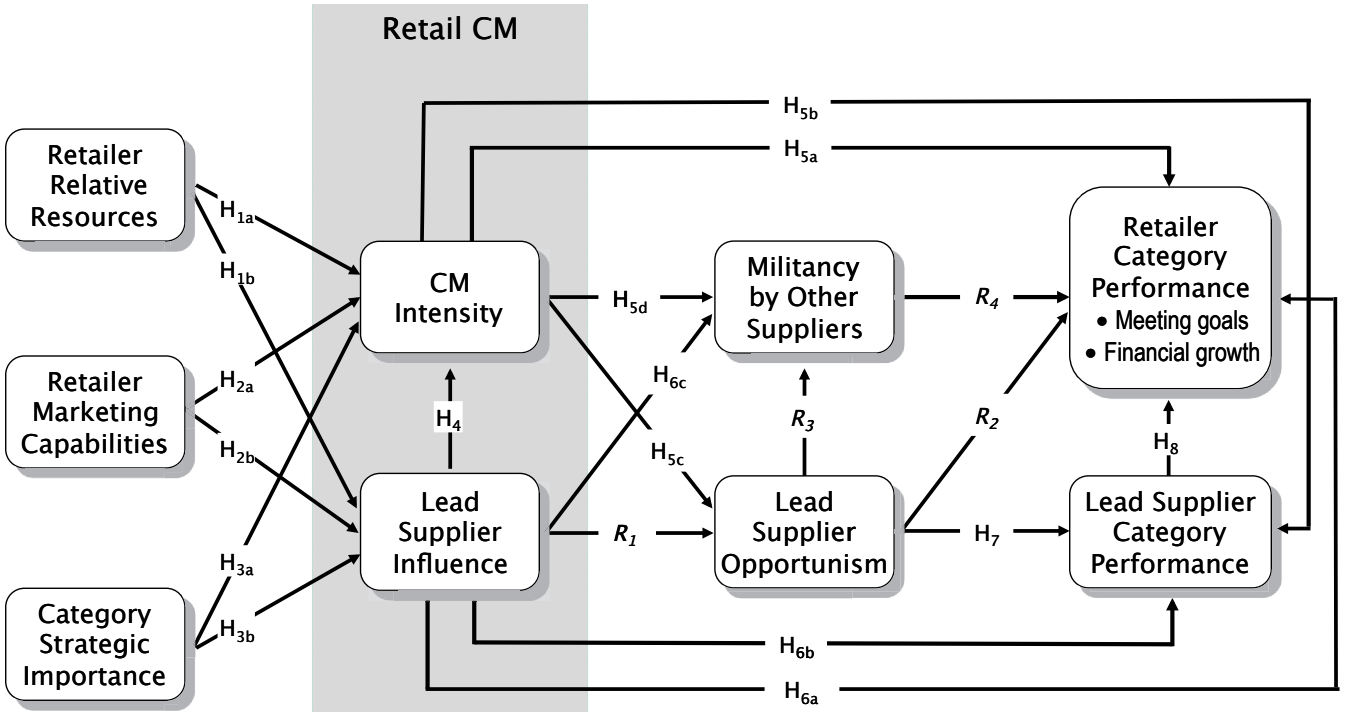
vant literature to develop the model summarized in Figure 1. Our model focuses on when and how the use of a CM governance mechanism (lead supplier influence) generates resources for retail CM (the intensity with which CM activities are performed in a category) and the resulting benefits (both retailer and lead supplier category performance outcomes) and problems created (lead supplier opportunism and militant push-back behaviors by other suppliers). We first describe our conceptualization of retail CM, and then we discuss formal hypotheses of the relationships represented in Figure 1. Four of the relationships between the constructs in Figure 1 have been examined in a related study of supplier opportunism in the U.K. supermarket supply chain (Morgan, Kaleka, and Gooner 2007). Therefore, we do not develop formal hypotheses for these four relationships here; however, we include them in our model and briefly compare the path coefficients from the two different studies in our discussion of results.

Retail CM

Two key aspects of retail CM are at the heart of our model (Figure 1). First is CM intensity, or the time and effort devoted to retail CM activities, regardless of whether they are performed by the retailer or with the help of one or more suppliers. This may range from devoting considerable resources to detailed category-level analyses, planning, and execution designed to maximize category performance to a simple "straight rebuy" or "resupply" situation. Second, lead supplier influence involves the role of the supplier that has the most influence on the retailer's CM. This may range from a retailer-designated category captain that manages the category on the retailer's behalf to a supplier that has little more influence than any other on a retailer's CM decisions and actions. Thus, our conceptualization of retail CM comprises two continua—CM intensity and lead supplier influence—encompassing situations in which little or no retail CM activities are performed and the retailer simply relies on "market" competition among suppliers to get whatever help and support is available from each supplier, as well as situations in which a retail category is intensively managed, sometimes by leveraging the resources of an influential lead supplier. Next, we elaborate on these two central retail CM constructs.

Category management intensity is the extent to which CM activities (i.e., category-level goal setting, analysis, planning, and execution) are performed in a specific product category. From a GVA perspective, CM intensity involves resource deployments designed to create valuable strategic positions among consumers by coordinating the efforts of the retailer and all the suppliers to the category. Such retailer–supplier coordination in CM includes analyzing assortments of manufacturers' and store-brand stock-keeping units (SKUs) to maximize category-level profits; planning and executing supporting shelf-sets, promotional schedules, feature advertising, endcap allocations, cross-merchandizing, and so on; and logistical activities, including inbound-delivery timing and quantity/product mix required for retailer warehouse and direct-to-store deliveries, supplier in-store product-handling, reverse logistics, and so on. Because consumers' needs and rivals' strategies are constantly shifting, effective retail CM requires frequent adaptation.

FIGURE 1
Model of Retail CM



However, even large supermarket chains generally lack the resources to intensively manage all the categories they sell, though competitive pressures make it risky not to intensively manage a product category. Therefore, retailers face difficult decisions involving how much time, effort, and other resources they will allocate to CM in each of the categories they sell and how to deal with CM resource shortfalls.

The second key aspect of retail CM is lead supplier influence. The lead supplier is the supplier to the category that has the most influence (relative to other suppliers) over the retailer's CM decisions and actions (Morgan, Kaleka, and Gooner 2007). From a GVA perspective, lead supplier influence is a form of plural governance. It is hierarchical in terms of decision control and rights over the development and execution of the retailer's category-level strategies (e.g., Grossman and Hart 1986; Heide and John 1992). At the same time, lead supplier influence is also a relational governance form in that it allows the lead supplier and retailer to cooperate without formal agreements or contracts, which are deliberately avoided because of antitrust concerns. A retailer that faces resource deficits and wants to leverage a lead supplier's resources and capabilities to create and capture greater value through CM may allow that supplier to wield a great deal of influence. This extends to the supplier operating as a category captain that effectively manages the category and its suppliers on the retailer's behalf. At the other end of the continuum, a retailer may not cede extra influence or control over CM to any supplier, in which case the lead supplier has only slightly more influence than any other and may even simply be "first among equals." This occurs, for example, when retailers see downstream costs and risks that would lower their ability to claim any joint value created by relying on one highly influential supplier.

Interviewees emphasized that even when a lead supplier has a great deal of influence (or is even designated as a category captain), the retailer usually also works with and carries products from other suppliers in the category to give consumers the choices they want. As a result, a highly influential lead supplier directly affects the marketing of its own brands, the brands of rival category suppliers, and even the retailer's private label products. Thus, a retailer's decision to use a lead supplier in its CM efforts also affects its relationships with competing suppliers in the category, most of which maintain an ongoing relationship with the retailer.

Antecedents of Retail CM

Our fieldwork highlights three key resources required for effective retail CM: knowledge of category consumers and their buying behavior, financial resources for making and executing CM decisions, and brand awareness among consumers in the category. Interviews suggest that relative to suppliers, retailers typically face resource deficits in these key CM resources because suppliers specialize in fewer categories and, in general, earn higher margins. The trade literature suggests that a retailer can increase its available CM resources by leveraging its relationship with a lead supplier (e.g., Kumar 2005). However, our interviews revealed significant retailer fears of losing direct control over their CM activities. Governance value analysis theory posits that such fears may be well founded because leveraging a supplier's resources can create a value-claiming benefit for the supplier (e.g., Ghosh and John 2009). Thus, retailers must trade off the potential costs of decreased CM value-claiming rights against the potential CM value-creating benefits of having access to superior CM resources. Our fieldwork suggests that retailers are only willing to cede influence in their CM to a supplier in return for access to CM resources that are clearly superior to those available in-house. Therefore, we posit the following:

> H_1: The greater the retailer's CM resources relative to those of the lead supplier to the category, (a) the greater is the CM intensity, and (b) the lower is the level of lead supplier influence on retailer CM.

The literature distinguishes between resources such as those identified previously and capabilities—the processes by which such resources are combined and deployed to achieve positional advantage among consumers (e.g., Vorhies and Morgan 2005). Capabilities can affect not only a firm's ability to engage in particular tasks but also its "make or buy" decision of who should perform those tasks (e.g., Argyres 1996). From this perspective, our interviews highlighted the role of the retailer's marketing capabilities in its CM decision making. Whether necessary retail CM resources are available in-house or are accessed through relationships with an influential lead supplier, retailer interviews indicate that strong marketing capabilities are required to effectively engage in retail CM. Consistent with the GVA logic outlined previously for CM resources, possession of strong marketing capabilities should mean that retailers are both more able to effectively engage in intensively managing a product category and less likely to have to seek such capabilities from a lead supplier. This suggests the following:

> H_2: The greater the retailer's marketing capabilities, (a) the greater is the CM intensity and (b) the lower is the level of lead supplier influence on retailer CM.

The literature advocates that retailers allocate their scarce CM resources to large, profitable, or traffic-building product-categories that are most important to achieving their overall objectives (e.g., Blattberg and Fox 1995). A retailer that does not have needed resources and capabilities in-house can either seek CM help from one or more suppliers or simply pay less attention to the category. According to GVA, retailers are more likely to leverage supplier resources in strategically important categories because these are where the most joint value can be created, which may best offset any increased supplier value-claiming costs (Ghosh and John 1999). However, suppliers face their own resource allocation decisions (Gruen and Shah 2000). Our interviews indicate that in line with GVA, suppliers prioritize retail CM opportunities that both enhance their influence with the retailer and provide advantage over rival suppliers. Suppliers evaluate not only category characteristics (e.g., dollar sales) but also other drivers of a category's importance to the retailer (e.g., traffic-building) in determining

the extent to which they are willing to invest in supporting a retailer's CM efforts. Therefore, we posit the following:

H_3: The more strategically important the product category to the retailer, the greater is the (a) CM intensity and (b) lead supplier influence on retail CM.

Lead Supplier Influence and CM Intensity

As outlined previously, retailers often suffer deficits in resources and capabilities needed for effective CM and are commonly advised to seek help from an influential lead supplier to bolster their CM efforts (e.g., Blattberg and Fox 1995). From a GVA perspective, this suggests that a retailer's need for the resources required to create value through CM can be such that the retailer will cede significant influence over CM decisions to a lead supplier in return for the resources. This is consistent with the GVA literature in suggesting that given that the central adaptation requirements of retail CM are noncontractible, the CM "decision rights" should be secured by the party that can produce the greatest systemwide adaptation value (e.g., Ghosh and John 2009; Grossman and Hart 1986). Our interviews suggest that when this occurs, the lead supplier is more willing to deploy its own resources to help execute the retail CM plans it helps shape. Thus, allowing a lead supplier greater influence can lead to an enlarged pool of CM resources and capabilities for the retailer (e.g., Corsten and Kumar 2005). Therefore, we posit the following:

H_4: The greater the lead supplier's influence on the retailer's CM, the greater is the CM intensity.

Consequences of Retailer CM

Trade analysts argue that retail CM offers category-level benefits for both the retailer and suppliers, with claims of sales increases of up to 11% and cost reductions of as much as 2% of sales (e.g., Cannondale Associates 1999; Freedman, Reyner, and Tochtermann 1997). From a GVA perspective, such potential benefits represent the realized adaptation value of retailer–supplier coordination that results from the new information and insight created by analyzing current and potential performance at the retail category level. Effective retail CM creates synergies by coordinating the marketing efforts of individual SKUs, brands, and suppliers, which can result in both enhanced systemwide decision making and lower costs (e.g., Blattberg and Fox 1995; Desrochers, Gundlach, and Foer 2003). From a value-claiming perspective, our fieldwork suggests that the value created by retail CM is not fully appropriated by either the retailer or any single supplier—not least because of sensitivity to antitrust concerns.

Nonetheless, our interviews suggest that retailers usually claim the majority of the value that CM creates. This is because from a "what gets measured gets done" perspective, analyzing category-level data to set goals and track performance in retail CM provides the retailer with a control mechanism needed to both improve and monitor category sales and cost performance (e.g., Anthony 1988; Simons 1995). Thus, our fieldwork indicates that CM is a mechanism whereby the retailer can have sufficient category-level control to ensure that it claims a significant amount of the value created by coordinating its efforts with those of its suppliers.

Our interviews indicate that suppliers may also benefit from more intensive retail CM. For example, when more intensive CM efforts increase category-level sales, it was suggested that lead supplier sales usually increase at least proportionately to their category share. Furthermore, if SKUs of low-performing brands are dropped—as is often the case when a category is more intensively managed—lead suppliers, which often market leading brands, usually benefit. From a GVA perspective, this suggests that while retail CM creates significant value, it does not allow all of this value to be claimed by the retailer—even if the retailer has the necessary resources to make and execute appropriate CM decisions without the help of a supplier. However, more intensive CM does give retailers greater category-level overview and insight, which enhances the retailer's ability to monitor its suppliers. Our interviews suggest that such enhanced scrutiny provides a disincentive for lead suppliers to engage in opportunistic behaviors.

The ability to claim value created by retail CM efforts may also extend to other suppliers. Our interviews suggest that better coordination through CM can increase the efficiency of all suppliers' marketing efforts and is therefore welcomed even by suppliers that are not the lead supplier to the category. This is consistent with prior evidence that when specific investments are modest (as for nonlead suppliers), buyer–supplier coordination can improve channel efficiency (e.g., Buvik and John 2000). As a result of retail CM not allowing the retailer and lead supplier to claim all its value-creation benefits, managers indicated that retailers could expect fewer push-back and acting-out-type militant behaviors from other suppliers in implementing their CM plans. Such militant behaviors are consistent with a more active and negative framing of TCA conceptualizations of acquiescence (i.e., militant behaviors are those that deliberately impede effective and efficient supply chain management) among less influential suppliers in a supply chain (e.g., Williamson 1991). This leads us to posit the following:

H_5: The greater the CM intensity, the better are the category performance outcomes for both (a) the retailer and (b) the lead supplier, and the lower are the levels of (c) lead supplier opportunism and (d) militancy by other suppliers.

In addition to the hypothesized indirect benefits to the retailer and all category suppliers from leveraging lead supplier resources through enhanced retail CM intensity, our interviews also suggest additional direct retailer and lead supplier benefits. From a retailer perspective, although CM intensity involves the extent to which CM activities are undertaken for a product category, retailer interviews indicate that the quality of CM activities are also often enhanced when they leverage the resources and capabilities of a lead supplier. Retail managers believe the CM planning and implementation skills available from a carefully selected lead supplier deliver category-level performance benefits beyond those accruing from greater CM intensity alone. For lead suppliers, our interviews indicate that a lead supplier that is influential in the retailer's CM often gains

preferential shelf-facings, larger assortments, promotional display space, and other advantages that increase its category share. This is consistent with evidence in other channel settings of a relationship between supplier decision-making participation and support and a buyer's resource allocations (e.g., Anderson, Lodish, and Weitz 1987). In GVA terms, a direct relationship between a lead supplier's CM influence and its category performance suggests that influence on retail CM provides the lead supplier with a value-claiming benefit that is not available to other suppliers. Indeed, our interviews indicate that this goal motivates lead suppliers to share their CM resources and expertise with the retailer.

However, there may also be downside costs associated with lead supplier influence on retail CM. For example, Morgan, Kaleka, and Gooner (2007) find a positive relationship between a lead supplier's influence and its opportunism in a study of the U.K. supermarket supply chain. Therefore, we include this path in our model (R1). Our interviews suggest that another likely cost of lead supplier influence is its effect on other suppliers. A high level of CM influence by one supplier is unlikely to be welcomed by its rivals—as one manager commented, "No one—including us—responds happily to a competitor making decisions for their brand." Transaction cost analysis theory posits that a key outcome of one supplier having greater power in a firm's supply chain is less cooperation among the other suppliers (e.g., Rindfleisch and Heide 1997; Williamson 1991). Interviews reveal that retailers fear that using a lead supplier in CM may provoke even more active forms of militant behaviors by other suppliers. Such responses may be expected if a lead supplier is perceived by other suppliers to use its CM influence to gain, for example, unwarranted preferential shelf placements for its own brands or the most beneficial promotional slots. Some retailers indicated that they avoid relying on a lead supplier in their CM precisely because they fear retaliation from other suppliers that may withhold promotional support, market information, or other resources required to effectively manage the category. Thus, we posit the following:

H_6: The greater the influence of the lead supplier on the retailer's CM, the better are the category performance outcomes for both (a) the retailer and (b) the lead supplier, and (c) the greater the level of militancy by other suppliers.

Consequences of Lead Supplier Opportunism and Militancy by Other Suppliers

The literature and our interviews suggest that both lead supplier opportunism and militancy by other suppliers toward the category give rise to costs that can create significant channel inefficiencies (e.g., Rindfleisch and Heide 1997; Williamson 1993). For example, Morgan, Kaleka, and Gooner (2007) report that lead supplier opportunism has a direct negative effect on the performance of U.K. grocers. They also posit an indirect effect through increased militancy by other suppliers but find that this militancy has an insignificant effect on retailer performance. We include paths for these relationships in our model (R2 and R3/R4, respectively). However, our interviews also suggest costs to the lead supplier. For example, retailers interviewed believe that they can usually detect and punish opportunistic behavior by lead suppliers. There are obvious negative supplier performance implications when a retailer punishes an opportunistic lead supplier by terminating its influential role in the retailer's CM. Thus, we posit the following:

H_7: The greater the level of lead supplier opportunism, the lower is the category performance of the lead supplier.

Relationship Between Lead Supplier Outcomes and Retailer Outcomes

Finally, our interviews reveal that from a value-claiming perspective, retailer–lead supplier CM relationships are informal and do not rely on formal governance agreements and controls. Governance value analysis indicates that such relational approaches can be appropriate when facing adaptation and coordination needs such as those associated with retail CM (Ghosh and John 1999). The literature suggests that when retailer–lead supplier CM relationships are formed to maximize mutually beneficial outcomes, improved lead supplier outcomes should also lead to improved outcomes for the retailer (e.g., Bergen, Dutta, and Walker 1992; Macneil 1980). Furthermore, our interviews suggest that suppliers are increasingly competing with one another to win the position of influence on retailer CM. Suppliers recognize that they enjoy this position at the retailer's pleasure and that both retailer and supplier CM outcomes can be observed by the retailer. A lead supplier cannot simply improve its own performance at the expense of the retailer. Rather, consistent with the channel influence literature (e.g., Anand and Stern 1985), most suppliers believe that retailers simply choose to work on retail CM with the supplier that they expect to deliver them the best economic outcomes. Both retailer and supplier managers interviewed agree that if an influential lead supplier can enhance its own category performance, it is highly motivated to ensure similar gains for the retailer, because that is what will enable that supplier to maintain its position of CM influence. This suggests the following:

H_8: The lead supplier's category performance outcomes are positively associated with the retailer's category performance outcomes.

Research Method

No secondary data are available for the key constructs relevant to testing our model (Figure 1). In addition, retail CM often differs among product categories, even within the same retail chain (Dhar, Hoch, and Kumar 2001), so any research in this arena must consider a wide range of categories. Therefore, we adopted a two-tier survey data collection research design to collect data from a large number of supermarket chains on 35 product categories identified as representative of those sold by supermarket retailers. These categories appear in Table 1, ranked in descending order according to composite estimates of U.S. national sales volume.

TABLE 1
Sample of Representative Food and Nonfood Product Categories

Sampling Group	Sales Rank[a]	Product Category	Mean Strategic Importance[b]
Group 1	1	Snacks/salty snacks	6.25
	2	Disposable diapers	4.95
	3	Pet care	5.05
	4	Bakery products	6.00
	5	Carbonated beverages	6.56
	6	Cereals	5.67
	7	Cookies and crackers	5.72
Group 2	8	Laundry detergents/bleach	4.91
	9	Cough and cold remedies	4.67
	10	Oral hygiene	4.07
	11	Bottled water	4.20
	12	Ice cream	5.19
	13	Fresheners/deodorizers	2.81
	14	Deodorant	3.19
Group 3	15	Household cleaners	2.94
	16	Baby foods, formulas, and electrolytes	4.42
	17	Coffee	5.62
	18	Soap/bath needs	3.11
	19	Hair care	4.29
	20	Candy	4.40
	21	Desserts, gelatins, and pudding mixes	2.98
Group 4	22	Film and cameras	5.58
	23	Milk	5.77
	24	Butter and margarine	3.68
	25	Cheese	5.22
	26	Pasta	4.63
	27	Spices and seasonings	3.40
	28	Yogurt	3.36
Group 5	29	Vitamins	3.10
	30	Toilet tissue	5.17
	31	Jams, jellies, and spreads	3.18
	32	Soups	3.36
	33	Sugar and sugar substitutes	2.81
	34	Shortening and oil	2.69
	35	Flour	2.11

[a]U.S. supermarket sales volume based on a composite of ACNielsen and Information Resources Inc. data.
[b]As rated by the retailers in our sample using a seven-point scale ("least" to "most").

Survey Population and Responses

The *Progressive Grocer* (2004) *Marketing Guidebook* lists all 590 U.S. supermarket buying offices (which house and support buyers and category managers). Many supermarkets have policies against releasing information about suppliers and participating in research. Therefore, we faxed a personalized letter to the president or chief executive officer of each buying office explaining the research, requesting participation, and offering a report with benchmark results in return. To make providing data more manageable, we asked each buying office to provide data on only five product categories by randomly selecting one category from each of the five (ordered) groupings in Table 1. Then, we sent each buying office president a cover letter along with five questionnaires for those categories. We asked the president to give the category-specific questionnaire to the manager most familiar with the supermarket's business and suppliers in that category. Thus, each retailer received questionnaires for different categories that represented a range of sales volumes, and each questionnaire was completed by the most knowledgeable manager.

We received 359 completed questionnaires from 107 separate buying offices; we subsequently excluded 12 questionnaires because of missing data. The response rate represents 21% of the retailers in our population, providing responses for an average of more than three categories per retailer. We obtained data from retail chains that are collectively responsible for approximately 60% of U.S. supermarket sales and 46% of all U.S. grocery sales. We also obtained good coverage of the 35 categories selected for our sample. The average number of responses per category was 10; some categories had up to 15 responses, and the lowest number of responses was 7. The lead suppliers identified by respondents accounted, on average, for 47.4% of the retailers' category sales and had been supplying them for an average of 18.5 years.

Tests for nonresponse bias included a comparison of secondary data for buying offices that participated in our research with those that did not, which indicated no significant differences in dollar sales and number of stores operated. We also compared the mean scores for all constructs between early and later respondents (those responding before and after the median date of response) and found no significant differences between the two groups.

One year after the initial survey, we contacted the presidents of the participating buying offices again and asked for objective financial growth performance data (percentage change in sales, profit, and market share over the past 12 months) for each of the five categories. We received these data for 256 of the 347 (74%) retailer product categories for which we had survey data.

Measures

Many of the constructs in Figure 1 are new to this research design, so for these we combined insights from our fieldwork and the literature to develop questionnaire items and then used standard statistical tools to evaluate them. To enhance face validity, we refined the wording and content of an initial set of questionnaire items and instructions according to feedback from six industry managers. These were then further refined on the basis of a pretest of 20 category managers/buyers randomly selected from our general population. After responding to questions about other lead supplier characteristics, we also asked the retailer's category manager to indicate if the lead supplier was considered the retailer's "category captain" for the category. Our lead supplier opportunism measure extends Brown, Dev, and Lee's (2000) scale using insights from our fieldwork. Our measure of militancy by other suppliers is a more active and negative framing of the acquiescence measure developed by Morgan and Hunt (1994). Our fieldwork and the literature indicate that category objectives vary among retailers (e.g., Gruen and Shah 2000) and even

between categories for the same retailer (e.g., Dhar, Hoch, and Kumar 2001). In measuring retailer category performance, we therefore asked respondents to rate category performance relative to their objectives over the past year using four seven-point semantic differential scales. As noted previously, 12 months later we also obtained data covering the subsequent financial growth performance of 256 of the 347 categories for which we collected initial survey data. Table 2 lists the constructs, respondent questions, scale items, and anchors. Table 3 provides a correlation matrix for our constructs

Assessment of Measures

We used confirmatory factor analysis (CFA) to assess our measures (e.g., Gerbing and Anderson 1988). Our measurement model fit well with the data ($\chi^2 = 1225.5$, d.f. = 665, $p < .001$; incremental fit index [IFI] = .957; Tucker–Lewis index [TLI] = .949; comparative fit index [CFI] = .957; and root mean square error of approximation [RMSEA] = .049). The composite reliabilities for the scales ranged from .85 to .96 (see Table 2), suggesting excellent reliability. The strong loadings and significant t-values for each item on the constructs they are intended to represent (Table 2) support the convergent validity of our measures (e.g., Anderson and Gerbing 1988). For each possible pair of constructs we compared chi-square statistics in measurement models in which the covariance between the two constructs was allowed to vary and then fixed at one (e.g., Bagozzi, Yi, and Phillips 1991). Changes in chi-square were far greater than the critical value in each case, supporting discriminant validity in each model. We also computed the average variance extracted (AVE) values of each construct. These ranged from 58% to 85%, while the shared variances between the constructs ranged from 0% to 46%, indicating discriminant validity among our constructs (e.g., Fornell and Larcker 1981). We evaluated the convergent validity of our retailer category performance measure using the objective financial growth performance data on percentage changes in sales, profit, and market share for each surveyed product category. These measures were significantly correlated ($p < .001$) with the meeting retailer category goals performance scale with coefficients of .335, .527, and .539, respectively.

Hypothesis Testing

We tested our hypotheses using structural equation modeling (SEM). We controlled for measurement error using full SEMs in which we estimated the nine constructs and specified relationships between them (Figure 1) simultaneously. We estimated two separate models. The first used the full sample and the meeting retailer category goals performance dependent measure, and the second used the subset of the sample for which we had the follow-up objective financial growth data, using the three growth indicators to estimate a single latent dependent measure. For each model, we estimated all the paths shown in Figure 1 and also included a same-source factor to control for possible common method bias (e.g., Netemeyer et al. 1997); when we excluded a same-source factor , the substantive results for both models remained essentially the same.

To account for potential CM policy differences between retailers, we also controlled for retailer-specific fixed effects on the CM variables in our model. Specifically, we regressed dummy variables for the retail chains onto the indicants of the CM intensity and lead supplier influence latent constructs and then subtracted the portion of the indicants that was explained by the chain effects before computing the constructs. The results are substantively the same as when the retailer fixed effects are not included, but the addition of this control step enhances confidence in our results.

As Table 4 shows, the structural equation models—both for retailer category financial growth and also for meeting retailer category performance goals—fit the data well; the IFI, CFI, and TLI statistics are all well above .9 and RMSEAs are well below .08. The models explain 49% of the variance in retailers' meeting category goals performance and 23% of the variance in retailers' objective financial growth. We also compared our hypothesis-testing models with more complex models that introduced additional paths not shown in Figure 1. These neither significantly increased model fit nor enhanced understanding of retail CM. Therefore, the SEMs based on the relationships in Figure 1 provide stable and parsimonious estimates of the multivariate relationships in our data.

To provide additional insights, we supplement the SEM results with an analysis of variance to evaluate differences in means (for all the variables in our model of retail CM) between CM situations in which the retailer is relying on a category captain and those in which the lead supplier is not a category captain. Although this analysis is descriptive rather than a test of the underlying causal mechanisms, it is a useful supplement to our SEM analysis in that it provides additional insights into a central question in retail CM practice—that is, on the conditions in which retailers rely on a category captain and on the results that category captains produce.

Results and Discussion

Table 4 provides coefficients for all the paths in the model we tested. To aid the interpretation of our findings, we conducted follow-up interviews in which we discussed our results with 24 managers (17 of whom participated in our survey data collection). When appropriate, we include insights from these follow-up interviews in our subsequent discussion.

SEM Hypothesis Testing Results

H_{1a}, which suggests a positive relationship between the retailer's relative CM resources and CM intensity, is not supported in either the meeting category goals or the objective financial growth SEM model. However, the H_{1b} relationship between the retailer's relative CM resources and lead supplier CM influence is strongly supported in both models, with coefficients of –.609 and –.638 ($p < .001$), respectively. Conversely, the H_{2a} posited relationship between retailer marketing capabilities and CM intensity is supported in both models with coefficients of .180 and .178 ($p < .001$), respectively, while the hypothesized negative

TABLE 2
Constructs and Measure Assessment

Constructs, Questions, and Items (All Measured on Seven-Point Scales)	Composite Reliability	AVE	Standardized Loading
Retailer's Relative Resources			
Please indicate the extent to which your firm has more or less of each of the following when compared to the resources of the supplier who has the most influence on how you manage this category... ("much less" to "much more")	.95	84%	
•Knowledge of consumers who shop this category of products			.92
•Financial resources available for this category of products			.86
•Insight into consumer buying habits for this category of products			.96
•Level of brand awareness with consumers who shop this category of products			.92
Retailer Marketing Capabilities			
This store or chain... ("strongly disagree" to "strongly agree")	.85	67%	
•Has a reputation with suppliers as a very capable marketer			.73
•Is a sophisticated marketing organization			.84
•Possesses strong marketing capabilities			.88
Category Strategic Importance			
This particular category... ("strongly disagree" to "strongly agree")	.91	71%	
•Offers a higher gross margin percentage			.54
•Acts as a "traffic builder" for the store			.94
•Generates much larger dollar sales than other categories			.90
•Is key to our ability to compete effectively			.93
CM Intensity			
Please indicate the total amount of time and effort devoted to each of the following activities for the set of products in this category at your chain, taking into consideration the total work done by you, others in the company, and/or by one or more suppliers… ("none" to "a great deal")	.91	58%	
•Analyzing pricing			.75
•Determining the impact of special displays			.79
•Analyzing profitability of individual SKUs			.88
•Evaluating private label products			.53
•Implementing promotion or advertising plans			.85
•Adjusting logistical arrangements			.61
•Changing the assortment of SKUs			.80
•Developing detailed category performance objectives			.83
Lead Supplier Influence			
Considering this category of products, the supplier who has the most influence... ("strongly disagree" to "strongly agree")	.95	81%	
•Has significant responsibility for execution in this category			.85
•Has a big impact on category goal setting			.96
•Strongly influences the planning of marketing initiatives			.96
•Significantly influences how other suppliers' SKUs are marketed			.83
•Has significant input into the analysis done for this category			.88
Lead Supplier Opportunism			
Considering this category of products, the supplier who has the most influence... ("strongly disagree" to "strongly agree")	.90	69%	
•Alters facts to suit their needs			.84
•Often acts to benefit itself at our expense			.87
•Gives complete, even unfavorable, information (reverse scored)			.73
•Lacks integrity when not closely monitored			.88
Militancy by Other Suppliers			
Please indicate whether there has been more or less of each of the following behaviors on the part of suppliers for this category other than the most influential supplier… ("much less" to "much more")	.96	85%	
•Sabotaging good ideas from another supplier			.93
•Arguing with my decisions			.84
•Obstructing programs that we initiate			.96
•Interfering with what needs to be done to meet our objectives			.95
Lead Supplier Category Performance			
Please indicate the extent to which each of the below has increased or decreased… ("big decrease" to "big increase" anchors with "about the same" midpoint)	.89	67%	
•Most influential supplier's total category shelf space			.79
•Most influential supplier's share of category business			.90
•Ads, displays and features for most influential supplier's products			.81
•Most influential supplier's profits from this category at your store			.78

TABLE 2
Continued

Constructs, Questions, and Items (All Measured on Seven-Point Scales)	Composite Reliability	AVE	Standardized Loading
Retailer Category Performance			
Please indicate your assessment of the category's performance versus objectives during the past year (semantic differential)	.95	83%	
•"Excellent" to "poor"			.93
•"Well short of goal" to "far exceeded goal"			.90
•"Outstanding" to "unsatisfactory"			.94
•"Improving" to "getting worse"			.88

TABLE 3
Construct Intercorrelations

Construct	1	2	3	4	5	6	7	8	9
1. Retailer relative resources	1.0								
2. Retailer marketing capabilities	.258**	1.0							
3. Category strategic importance	–.152**	.167**	1.0						
4. CM intensity	–.185**	.214**	.677**	1.0					
5. Lead supplier influence	–.607**	–.073	.350**	.425**	1.0				
6. Lead supplier opportunism	–.063	–.263**	–.127*	–.046	–.014	1.0			
7. Militancy by other suppliers	–.037	–.078	.016	–.152**	–.128*	.144**	1.0		
8. Lead supplier category performance	–.288**	.059	.387**	.393**	.447**	–.225**	–.006	1.0	
9. Meeting retailer category goals	–.174**	.200**	.537**	.604**	.451**	–.183**	–.116*	.482**	1.0
10. Objective category financial growth	–.029	.102	.380**	.436**	.246**	–.058	–.134*	.343**	.551**
11. Category captain lead supplier	–.498**	–.111*	.207**	.307**	.773**	–.035	–.204**	.312**	.178**

*$p < .05$.
**$p < .01$.

TABLE 4
Standardized Path Coefficients for Two Structural Equation Models

Paths Modeled			Retailer Category Performance Dependent Variable: Meeting Retailer Category Goals	Retailer Category Performance Dependent Variable: Objective Financial Growth
H_{1a} Retailer's relative resources	→	CM intensity	.017	.119
H_{1b} Retailer's relative resources	→	Lead supplier influence	–.609***	–.638***
H_{2a} Retailer marketing capabilities	→	CM intensity	.180***	.178***
H_{2b} Retailer marketing capabilities	→	Lead supplier influence	.056	.047
H_{3a} Category strategic importance	→	CM intensity	.545***	.572***
H_{3b} Category strategic importance	→	Lead supplier influence	.242***	.220***
H_4 Lead supplier influence	→	CM intensity	.342***	.425***
H_{5a} CM intensity	→	Retailer category performance	.485***	.338***
H_{5b} CM intensity	→	Lead supplier category performance	.153**	.184**
H_{5c} CM intensity	→	Lead supplier opportunism	.016	.073
H_{5d} CM intensity	→	Militancy by other suppliers	–.221***	–.185*
H_{6a} Lead supplier influence	→	Retailer category performance	.139*	–.045
H_{6b} Lead supplier influence	→	Lead supplier category performance	.396***	.401***
H_{6c} Lead supplier influence	→	Militancy by other suppliers	–.067	–.075
R_1 Lead supplier influence	→	Lead supplier opportunism	.019	.025
H_7 Lead supplier opportunism	→	Lead supplier category performance	–.143*	–.071
R_2 Lead supplier opportunism	→	Retailer category performance	–.099*	–.006
R_3 Lead supplier opportunism	→	Militancy by other suppliers	.259***	.241***
R_4 Militancy by other suppliers	→	Retailer category performance	–.026	–.122
H_8 Lead supplier category performance	→	Retailer category performance	.181***	.161*
Fit Indexes				
Meeting Retailer Category Goals Model				
$\chi^2 = 1303.84$, d.f. = 681, $p < .001$; IFI = .952; CFI = .952; RMSEA = .051				
Objective Category Financial Growth Model				
$\chi^2 = 1311.74$, d.f. = 644, $p < .001$; IFI = .924; CFI = .923; RMSEA = .068				

*$p < .05$.
**$p < .01$.
***$p < .001$.

relationship with lead supplier CM influence in H_{2b} is not supported in either model. H_{3a} and H_{3b}, which link category strategic importance with CM intensity and lead supplier CM influence, are strongly supported, with coefficients of .545 and .572 ($p < .001$) and .242 and .220 ($p < .001$), respectively.

In terms of the relationship between the two components of retail CM at the heart of our model, our results strongly support H_4, with path coefficients for the lead supplier influence–retail CM intensity relationship of .342 and .425 (both $p < .001$), respectively, in the meeting retailer category goals and objective financial growth models. This supports industry analysts' recommendations that retailers' CM resource deficits can be overcome through CM relationships with lead suppliers, and the GVA insight that leveraging a lead supplier's resources and capabilities into increased retail CM intensity involves giving the supplier influence over the retailer's CM decisions and actions in return.

From a retail CM benefits perspective, the path coefficients of .485 and .338 (both $p < .001$) strongly support H_{5a}, which links CM intensity with retailer performance in both the meeting retailer category goals and objective financial growth models. Both models also support H_{5b}, which links CM intensity with the lead supplier's category performance, with coefficients of .153 and .184 (both $p < .01$), respectively. Moreover, coefficients of –.221 ($p < .001$) and –.185 ($p < .05$) support the negative effect of more intensive CM on militant behaviors by other suppliers (H_{5d}). However, we find no support for H_{5c}, which posits a negative link between CM intensity and lead supplier opportunism. As we discuss subsequently, this may be because the absolute level of opportunism is low, and it appears to be less of a problem than many retailers anticipate. We also find some support for the H_{6a} proposition that retailers can benefit from lead supplier CM influence beyond the benefits that accrue through greater CM intensity, with a coefficient of .139 ($p < .05$) in the retailer category performance model. However, the insignificant coefficient in the objective financial growth model indicates that this benefit may apply to objectives other than those related to financial growth. Our results also indicate strong support for H_{6b}, which links lead supplier influence on retailers' CM directly to the lead supplier's performance, with path coefficients of .396 and .401 (both $p < .001$) in the two models.

From a downside risk and cost perspective, in contrast to Morgan, Kaleka, and Gooner (2007), we find no evidence in either SEM that a lead supplier's influence on retail CM is related to its opportunism (R1). This may be a result of differences in the U.S. and U.K. contexts. For example, the U.K. market is dominated by a small number of powerful retailers that keep CM largely in-house and view exercising their power to gain price leverage over suppliers as the normal "rules of the game." As a result, U.K. suppliers may have a greater incentive to exploit any influence they have. Alternatively, the different results may be a result of including CM intensity in our comprehensive CM model, which provides lead suppliers with a greater performance benefit from working with rather than against the retailer's interests.

Consistent with Morgan, Kaleka, and Gooner (2007), our SEM results show that when opportunism emerges, it can both damage the retailer's category performance directly (R2) and incite militant behaviors by other suppliers (R3). However, also consistent with Morgan, Kaleka, and Gooner, the absence of a significant, negative militancy–retailer performance relationship (R4) in either of our models suggests that nonlead suppliers have limited "punitive capacity." We find no support for H_{6c}, which links lead supplier influence with increased militancy by other suppliers. We find some support for the hypothesized negative relationship between lead supplier opportunism and lead supplier performance (H_7) with a significant negative coefficient of –.143 ($p < .05$) in the meeting retailer category goals model. Finally, both SEM models support H_8, which links lead supplier category performance with retailer category performance, with path coefficients of .181 ($p < .001$) and .161 ($p < .05$), respectively.

Discussion of SEM Results

These results offer important new insights into the benefits of retail CM. First, more intensive CM efforts bring performance benefits to both the retailer and lead supplier. In addition, with a significant, negative relationship with militancy by other suppliers, our study suggests that this can occur in ways that may also be appreciated by the other suppliers to a category. From a simple "more effort delivers more results" perspective, these results may appear intuitive for the retailer; however, they contrast with the widespread skepticism regarding claims of CM benefits among retailers in our fieldwork and in the trade press. In addition, the finding that *both* retailers and suppliers (including those who may have little or no influence on retail CM) claim these CM value-creation benefits contradicts prior analytical work suggesting that retailers will claim all of any CM benefits (e.g., Basuroy, Mantrala, and Walters 2001; Gajanan, Basuroy, and Beldona 2007). Second, our results show that lead supplier influence on retailer CM also brings positive benefits for both the lead supplier and the retailer—beyond those that accrue to both parties through driving greater CM intensity. In addition, the evidence we present of some direct benefits of lead supplier influence to retailer category performance suggests that even when retailers have and deploy needed CM resources to intensively manage a category, the quality of CM may be enhanced by involving lead suppliers.

Our SEM results also offer important new insights concerning when greater retail CM intensity is most likely. First, consistent with GVA, we find that when retailers' in-house CM resources are inferior, they seek help from a lead supplier by ceding influence over their CM decisions. However, when retailers possess superior CM resources, we find that they are not using them to engage in more intensive CM. Given the CM performance benefits we show, this is a missed opportunity for some of the retailers in our sample. Conversely, we find that while retailers with greater marketing capabilities engage in more intensive CM, the absence of these capabilities does not appear to motivate retailers to seek CM support from an influential lead sup-

plier. Thus, while more capable retailers are engaging in more intensive CM, many retailers with their own CM resources apparently allow their fears of relying on a lead supplier to blind them to an important opportunity to enhance their CM efforts and forgo CM's benefits as a result.

Second, we find that more retail CM occurs in categories that are strategically important to the retailer. At one level, this is intuitive: Retailers should allocate scarce CM resources wherever they can most contribute to achieving their strategic objectives. Likewise, lead suppliers that want to maximize their retail CM influence will allocate their own resources to the retailer categories that will give them the greatest influence. However, both core competence (e.g., Hamel and Prahalad 1994) and positioning (e.g., Porter 1996) strategic logic suggest that retailers should keep direct control over activities that are central to their long-term competitive advantage. In addition, GVA supports these arguments but, importantly, also posits that firms can allow external control of strategically important activities if the value creation and claiming benefits of doing so can be protected by an appropriate governance mechanism (e.g., Ghosh and John 1999, 2005). That the retailers in our sample generally allow a lead supplier more CM influence in the retailer's most strategically important categories in exchange for access to the resources necessary to create value through CM indicates that, despite the skepticism and fears voiced in the literature and our fieldwork, retailers believe that CM is such a governance mechanism.

Finally, from a downside risk and costs perspective, our SEM results clearly show that retailer fears regarding retail CM are overblown. Opportunism by lead suppliers does exist in our sample, and when it does, it damages the retailer's and lead supplier's performance. However, we show that opportunism is no more likely to occur in categories under retail CM. Moreover, we also show that retail CM is likely to reduce rather than incite militant behaviors by other suppliers. Collectively, these results indicate that retail CM is an effective value-creating and claiming mechanism in which retailer–lead supplier CM relationships can be win-win—and that this can be accomplished without sacrificing the retailer's relationships with its other suppliers. However, if judged by their CM actions, it is apparent that to some of the retailers in our sample, these conclusions are either not obvious or not believed. To provide greater insight into this, we now turn to a follow-up descriptive analysis.

Profile of Category Captain Conditions and Outcomes

Table 5 presents means and standard deviations for all of the variables in our Figure 1 model of retail CM for the total sample as well as for situations in which the retailer has elected to use a category captain and those in which the lead supplier is not a category captain. Note that in our sample, which is representative of a large number of categories and supermarket chains, half the retail CM situations we examine involve reliance on a category captain. Next, we briefly profile the characteristics of these retail CM situations in which a category captain is used.

Table 5 confirms that category captains enjoy dramatically higher (5.47 vs. 2.66) mean CM influence than suppliers in traditional roles, and on average the categories they support are managed much more intensively (means of 4.77 vs. 4.03). This indicates that the category captain measure converges with our retail CM conceptualization and its key measures.

On average, retail CM settings managed by category captains are more strategically important to retailers (4.74 vs. 4.10) than those managed without a captain, and retailers acknowledge that these are categories in which they on average have lower relative resources (2.79 vs. 4.63) and marketing capabilities (4.87 vs. 5.14). Retailers report that the mean level of opportunism is relatively low for both category captains and other lead suppliers—and importantly, the difference (2.45 vs. 2.54) does not approach statistical significance ($p < .517$). Despite the similar mean levels of opportunism by category captains and other lead suppliers, retailers report that militancy by other suppliers is on average significantly lower with category captains (3.33 vs. 3.88). However, an even greater benefit highlighted in this analysis is that category captains are associated with

TABLE 5
Descriptive and ANOVA Statistics for Total Sample and Subgroups of those Retailers Using or Not Using a Category Captain

Construct	Total Sample (n = 347) M (SD)	Category Captain (n = 174) M (SD)	No Category Captain (n = 173) M (SD)	F (*p*-Value) d.f. = 1,346
Lead supplier influence	4.07 (1.82)	5.47 (1.04)	2.66 (1.26)	513.84 ($p < .001$)
CM intensity	4.40 (1.21)	4.77 (.96)	4.03 (1.32)	35.78 ($p < .001$)
Retailer relative resources	3.71 (1.85)	2.79 (1.61)	4.63 (1.61)	113.68 ($p < .001$)
Retailer marketing capabilities	5.20 (.99)	4.87 (.99)	5.14 (1.13)	5.65 ($p < .018$)
Category strategic importance	4.42 (1.55)	4.74 (1.36)	4.10 (1.67)	15.41 ($p < .001$)
Lead supplier opportunism	2.50 (1.30)	2.45 (1.17)	2.54 (1.42)	.421 ($p < .517$)
Militancy by other suppliers	3.60 (1.34)	3.33 (1.38)	3.88 (1.24)	14.94 ($p < .001$)
Lead supplier category performance	4.63 (.75)	4.86 (.66)	4.40 (.76)	37.13 ($p < .001$)
Meeting retailer category goals	4.60 (1.30)	5.05 (.92)	4.15 (1.47)	47.13 ($p < .001$)
Objective financial growth	1.47 (2.67)	1.97 (2.95)	1.02 (2.31)	7.41 ($p < .007$)

much higher average performance for the retailer in meeting its category objectives (5.05 vs. 4.15) and achieving financial growth (1.97 vs. 1.02). Category captains clearly do not produce this result by trading off their own well-being for the benefit of the retailer. To the contrary, category captain mean performance gains are on average higher (4.86 vs. 4.40) while achieving higher performance for their retail partners. These descriptive results are consistent with the estimates produced by the SEM analysis, but the magnitude of the advantage of using a category captain is even clearer, suggesting that no retailer or supplier should ignore the potential value of such collaborations.

These results offer new insights into the use of category captains. The incidence of category captain relationships we observe is more common than is widely believed among industry analysts. (Both retailers and suppliers have been reticent to provide estimates of the extent of the use of category captains.) When retailers enter into such category captain relationships with a lead supplier, our findings suggest that the beneficial effects of retail CM for both retailers and suppliers may be even greater than those revealed in our SEM results. Category captain situations exhibit significantly higher levels of both CM intensity and lead supplier influence on retail CM and significantly higher mean category performance outcomes for both retailers and lead suppliers. In addition, the downside risks and costs of CM may be even lower when the lead supplier to the category is a category captain—with similarly low levels of opportunism and significantly lower levels of militant behaviors by other suppliers when using category captains. Overall, this suggests that retailers' outsourcing of CM to category captain lead suppliers offers a viable way to enhance channel system efficiency. However, as we observe here, only half our sample of retail CM situations is retailers benefiting from such arrangements.

Implications for Theory

Our study offers contributions to theory in three main areas. First, we develop and test a comprehensive new model of retail CM. Our model reveals the importance of the intensity of CM efforts in a category in understanding retail CM. Most prior work has adopted an analytical perspective and viewed CM as a binary variable (i.e., does the retailer "do" CM or not? e.g., Gajanan, Basuroy, and Beldona 2007). We show that this framing is unrealistic and may therefore potentially produce misleading insights. Both our fieldwork and empirical results indicate that retailers' CM resources are scarce. Retailers must therefore make strategic resource allocations regarding how intensively to manage each of the categories that they sell. Therefore, it is unlikely—if not impossible—for any retailer selling 300-plus product categories to simply make and execute a policy decision to manage all its categories intensively. We also observe a wide range of different CM intensity values across the 347 CM situations for which we have data—with less than 10% of these categories being managed at either extremely low or extremely high intensity (2 or less or 6 or more on a seven-point scale). Thus, we show that CM intensity is rarely an "all or nothing" decision at either the retailer or the category level. This suggests the need for finer-grained analytical CM models that allow for different levels of CM intensity rather than simply the existence (or nonexistence) of retail CM.

In addition, the research streams considering CM and buyer–seller relationships have developed independently of one another. Our model offers the first integration of these research streams, considering both the level of CM activities (CM intensity) and who performs them (lead supplier influence). We show that both aspects of retail CM need to be examined simultaneously, because studying either component in isolation presents an incomplete picture of retail CM and produces potentially erroneous conclusions. For example, our SEM results indicate that focusing on either lead supplier influence or CM intensity would significantly understate the benefits of retail CM to both retailers and lead suppliers. Similarly, ignoring lead supplier influence's effect on retail CM would miss its critical role in driving CM intensity in our results, while focusing only on lead supplier influence would miss other suppliers' reduction in militancy associated with more intensive CM efforts. Thus, we show that any comprehensive model capable of explaining when retail CM occurs and its costs and benefits must include both of these components. Our data—representing a wide variety of product categories sold by U.S. supermarket retailers—provide strong support for our model. Our empirical results are specific to the U.S. supermarket channel, but our theorizing has wider applications to other markets in which retailers and wholesalers sell multiple brands from multiple suppliers.

Second, we offer new insights into the mechanisms by which retail CM adds value in a network supply-chain context. For example, we find that relying on a lead supplier in retail CM leads to improved performance for the retailer and the lead supplier, without provoking greater levels of push-back from other suppliers. Furthermore, the greater CM intensity produced by relying on lead suppliers actually reduces other suppliers' militancy. These outcomes may be even stronger when the lead supplier is a designated category captain. Overall, this supports the idea that dyadic buyer–supplier relationships can affect the rest of the supply network (e.g., Anderson, Håkansson, and Johanson 1994). Indeed, in retail CM and other analogous settings (e.g., vendor-managed inventory, outsourcing of R&D to "first-tier" parts suppliers), the dyadic buyer–lead supplier relationship is designed to create such network effects. However, in the face of supply network interdependencies, such buyer–seller relationships can clearly give rise to costs as well as benefits. In our U.S. supermarket context, we do not observe significant lead supplier opportunism and other supplier militancy risks and costs. However, in other situations in which nonlead suppliers are less dependent on a small number of large buyers and/or have a higher punitive capacity, such network costs might outweigh CM's benefits.

Third, we provide new insights relevant to the emerging GVA perspective on interorganizational relationships and marketing strategy that incorporates firm-specific resource differences (e.g. Ghosh and John 1999, 2005; Palmatier, Dant, and Grewal 2007). Importantly, despite the potential for conflicting goals and power-dependency issues, our

results show that sharing of needed resources can be accomplished in ways that result in true win-win relationships between buyers and suppliers—even in a context that our fieldwork revealed uses no formal contracts to safeguard the ability to claim value from their joint efforts. Thus, consistent with GVA, appropriately designed and managed buyer–seller coordination is clearly a viable relational mechanism to expand resource availability, enable new value-creating strategies to be conceived and executed, and allow the outcomes to be jointly claimed by both parties. This has important implications. For example, it suggests that channel research using analytical models should allow for win-win relationships such as those we observe, rather than focusing only on zero-sum games (e.g., Basuroy, Mantrala, and Walters 2001; Gajanan, Basuroy, and Beldona 2007).

Implications for Managers and Policy Makers

Our study offers several important new insights for managers. First, in the absence of credible evidence of CM benefits, many retailers have undermanaged the product categories they sell. We show that retailers engage with lead suppliers when facing deficits in needed CM resources and ramp up their CM intensity and category performance as a result. However, we also show that when retailers possess the needed CM resources in-house, they are not using these resources to increase the intensity of their CM efforts. This is short-sighted. Contrary to the skepticism uncovered in our fieldwork, we show that more intensive retail CM has performance benefits for both retailers and suppliers. The fact that we find these benefits in a sample of 35 categories, across a large proportion of the U.S. supermarket population, enhances confidence in the generalizability of this relationship. It also suggests that retailers can benefit from CM across a wider range of the product categories they sell than has been previously believed. Thus, retailers should prioritize both the *development* and *deployment* of resources needed for effective CM. In doing so, our results suggest that the development of in-house retailer marketing capabilities should clearly be a priority.

Second, our results indicate that retailers should actively seek to use effective suppliers to serve as category captains to more intensively manage the product categories they sell and to improve category performance. We show that retailers and influential lead suppliers can collaborate in retail CM in a win-win manner and that retailer fears concerning the downside risks and costs associated with allowing a supplier to have significant CM influence are overblown. The CM benefits we uncover for lead suppliers also suggest that producers should be open to overtures from retailers and should also initiate category captain relationships. A supplier that can document success in CM relationships with other retailers, especially in noncompeting markets, will likely have an advantage in this effort.

Third, although we find that an influential lead supplier is no more likely to be opportunistic and that average levels of opportunism are low, some opportunism does still exist. Our results show that this opportunism damages the lead supplier's as well as the retailer's performance and also provokes other suppliers' militant behaviors. Thus, retailers should continue to be vigilant in their monitoring—particularly when they do not use a category captain—and should encourage all suppliers to report such opportunism when they see it. Supplier managers should also note that retailers are readily able to detect and punish opportunism and that the performance benefits of being influential in retailers' CM in the U.S. supermarket supply chain offer rewards that make any short-term benefits of opportunism look even less attractive.

Finally, our findings on retailers' use of category captains in retail CM are also of interest to public policy makers. Antitrust analysts have discussed the potential for a category captain to either unfairly disadvantage competing suppliers to a product category or to collude with them (e.g., Desrochers, Gundlach, and Foer 2003; Steiner 2001). Category captains are the norm in some CM situations, and they directly affect the marketing of rivals' products. They are potentially able to restrict competition and thereby damage consumer welfare. Our findings of decreased militancy by other suppliers when retailers use designated category captains suggest that some force—competition limiting power, collusion, or a combination—is at work. However, the increased efficiency and effectiveness in meeting consumer needs suggested by improvements in retailer and category captain category performance—apparently not at the expense of other suppliers—may be an equally important consideration from a social welfare perspective.

Limitations and Research Directions

There are several limitations in our study. First, much of the data was collected at the same time, thus limiting our ability to evaluate causality. However, we based the ordering of relationships tested on insights generated in our fieldwork, and it is supported in the literature. Moreover, by collecting financial growth data a year later for a large subset of our sample, we were able to confirm the retail CM–performance relationships. Nonetheless, further research utilizing longitudinal research designs may be useful in confirming the causal ordering of the other relationships uncovered in our research. For example, time-series analysis of category-level scanner data before and after the introduction of a CM system could evaluate the performance effects on the retailer, lead supplier, and other suppliers. Second, although we sampled 35 representative product categories, other categories that are defined by different retailers in more idiosyncratic ways may be handled differently. Thus, care should be applied in generalizing our results to other categories. In addition, in the interest of generalizing our findings across a broad range of categories, this research uses a cross-category and cross-retailer design. Further research examining individual categories and retailers may provide a richer understanding of the contingencies associated with category performance.

Our findings suggest several additional areas for further research. First, in this initial research, we focus on linking the deployment of resources in retail CM with performance outcomes for retailers and suppliers. However, we do not explicitly distinguish which party's resources are actually

being deployed in the retailer's CM. Does it matter whether it is primarily the retailer's, the lead supplier's, or other suppliers' resources—and if more than one of these, in what combination? This is a promising line of inquiry for theoretically interesting and managerially relevant CM research.

Second, although we adopt a retailer perspective, our findings of lead supplier benefits suggest that a key question for further research is the cost to a supplier of supporting—or even taking over—retailers' CM. In addition, our interviews suggest that suppliers increasingly view jockeying for the category captain position as the basis of intersupplier competition. This raises important new questions. For example, what resources and strategies are required to compete effectively to be a category captain? Furthermore, given supplier consolidation and the network nature of the supply chain, what is the impact of multicategory and multiretailer competition on supplier strategies and performance? For example, category captains and other suppliers may consciously or unconsciously share in the value created in retail CM. Is this a result of tacit agreements with other suppliers not to exclude them from CM benefits because of multipoint contacts in which rival CPG suppliers act as category captain for the same category for different retailers and/or as category captain on different categories for the same retailer?

Finally, given the public policy concerns surrounding the impact of retail CM on competition and consumer welfare, retailer–supplier CM relationships are clearly an area in which further research is required. For example, researchers should examine the impact of using category captains on the wholesale prices of both the lead and other suppliers' brands—and the subsequent retail prices charged to consumers. In addition, as highlighted previously, there is multipoint contact among suppliers in this channel and likely lead/nonlead supplier role reversals when most CPG firms sell across multiple categories and all sell to multiple retailers. It is therefore important to examine whether and how such multipoint contact among suppliers may reduce channel competition and efficiency and how it affects wholesale prices.

Conclusion

Despite skepticism among managers, we show that positive performance outcomes can be realized by both a retailer and a category captain when a retailer's product categories are more intensively managed and a category captain has significant influence over the management of all the brands in the category. We also show that many of the feared downside costs and risks associated with retail CM are overblown and are outweighed by the benefits for retailers and suppliers that serve as category captain. Our study provides the first evidence that retail CM is an effective value-creating and value-claiming mechanism in which retailer–supplier relationships can be win-win. However, even when they have the needed resources in-house, we find that many retailers are undermanaging the product categories they sell. Apparently, they do not want to cede control to an influential lead supplier but then do not take steps to increase CM intensity and category performance unilaterally. We show that this is shortsighted and leads to suboptimal performance.

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