RETAILER MERCHANDISING DECISIONS: USING RETAILER PERCEPTIONS TO DEVELOP A MULTI-LEVEL COMPETITIVE STRATEGIC PROFIT MODEL

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The purpose of this study is to examine the role of the Strategic Profit Model and channel cooperation/competition approaches to retailer profit maximization on how retailers make merchandising decisions. The paper explores whether retailers place more importance on profit or on turnover issues, and whether retailer-controlled variables or manufacturer-retailer cooperation variables are more important in making such decisions. The paper develops a multi-level competitive strategic profit model that describes the behavior of retailers in a fractured market. Using data from furniture retailers, descriptive evidence is offered to understand the conditions and circumstances under which different strategic variables are important to retail decision making. Results indicate that the importance of prescriptive strategic merchandising variables vary with market size and competitive environment.

INTRODUCTION

Scholars have offered a variety of models intended to provide profitability guidance to retailers. For many years, the Strategic Profit Model (SPM) has been touted as a framework that retailers can use to compare the various offerings of different manufacturers (e.g., Berman and Evans 1998; Levy and Weitz 2001). Alternatively, channel cooperation-competition models have taken the perspective that retailers can achieve profitability by aligning or not aligning themselves with manufacturers. In a channel, competition at both the manufacturer and the retail level affect profitability decisions of retailers and manufacturers differently. While sharing a common channel, retailers and manufacturers may have very different strategic interests (Choi 1996).

These two disparate approaches to understanding profitability decisions provide prescriptions for merchandising decisions and profitable retailer behavior. Each, however, is limited in perspective, leaving "real world" questions unanswered. While the strategic profit model articulates the necessary steps for profitability through sales enhancement or asset control, it does not provide retail managers guidance on which strategy to follow under different conditions of manufacturer or retail competition. Conversely, while theoretical models of channel cooperation/competition describe conditions under which retailers should lead or follow manufacturers in multi-level competitive environments, they lack prescriptive advice on how to use retail level strategic variables to achieve profitability. As such, neither approach fully describes how retailers actually make merchandising decisions.

The purpose of this paper is to examine retailers' perceptions concerning various factors from the SPM and channel cooperation/competition approaches in an effort to understand how retailers make merchandising decisions. Specifically, we explore whether retailers place more importance on profit or on turnover issues, and whether retailer-controlled variables or manufacturer-retailer

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cooperation variables are more important in making decisions. In the process we develop a multi-level competitive strategic profit model that describes the behavior of retailers in a fractured market. Using data from furniture retailers, descriptive evidence is offered to understand the conditions and circumstances under which different strategic variables are important to retail decision making.

BACKGROUND

Retailers wish to maximize their profits within the context of their local competitive environments. Competition exists among retailers (inter-store competition) and among the brands they stock (inter-brand competition). Because the interests of retailers and manufacturers overlap but do not necessarily coincide (the former most interested in where consumers buy, the latter most interested in what consumers buy), competing brand and store objectives complicate the profitability decisions of both retailers and manufacturers. Various theoretical models have dealt with issues of retailer profit strategies, and with competition within and between channels of distribution.

The Strategic Profit Model

The Strategic Profit Model (SPM) is designed to guide retailer decisions for profit maximization. The SPM offers two paths (sales profitability and asset turnover) that retailers with different strategic objectives and different financial characteristics can use to obtain strong financial performance (Levy and Weitz 2001). Using the sales profit approach, retailers rely on data from their income statement, such as sales, cost of goods sold and operating expense to make merchandising decisions. With the asset turnover approach, retailers rely on data from their balance sheets, such as inventory, accounts receivable, and other assets, to make merchandising decisions. Retailers pursue the sales profit path by focusing on maximizing sales and minimizing variable expenses. The turnover path encourages retailers to maximize returns by minimizing inventory and fixed costs of doing business.

Tradeoffs that retailers may make between sales maximization and inventory turnover are broken down in the SPM model. When considering whether or not to sell various products, the SPM can be used to evaluate the financial performance of products and proposed strategies. Retailers may increase their Return on Investment (ROI) by increasing their profit margins or increasing their inventory turnover. For example, one study identified Publix as having a higher profit margin than Winn-Dixie, but Winn-Dixie's higher turnover resulted in relatively equivalent returns (Berman and Evans 1998). When evaluating strategies, a retailer must question how many units will be sold, the profitability of each unit, and how fast the product will sell (Weitz, Castleberry and Tanner 2000). A sales profit focus encourages retailers to hold large inventories, while an asset turnover focus encourages retailers to minimize inventories.

The Strategic Profit Model is not without limitations. The SPM assumes that retailers can rely on or find manufacturers who support their pricing or turnover strategies. While many retailers have initiated efficient consumer response or quick replenishment programs (forms of just-in-time inventory management for retailing), these programs require the support of manufacturers who are willing to invest in the technology and logistics commitments necessary to make these programs work. Not all manufacturers can or will make that commitment. One implication is that the strategic profit choices of retailers require different levels of channel cooperation between retailers and manufacturers. However, the SPM does not provide prescriptive advice on how managers should handle competitive pressures beyond the local environment, or the willingness of manufacturers to support any given retailer's competitive strategy. These factors may affect the decisions retailers make concerning the level and form of channel cooperation best suited for their profit strategy.

Optimization Models of Channel Competition and Retailer Profitability

Historically, profit optimization models focused on manufacturer pricing decisions (see Rao (1984) for

a review of pricing models). In the last two decades, researchers have taken an interest in the pricing decisions of retailers. Farris and Albion (1980) provide a detailed intuitive analysis of the effects of manufacturer competition on retail prices. Subsequent research has attempted to model the pricing issues they identified. For example, Jeuland and Shugan (1983) analyzed the case of a single manufacturer selling through a single retailer in the context of channel cooperation, while Chu (1992) considered successive channel monopolies to understand new product introduction. Work by Lal and Staelin (1983), McGuire and Staelin (1983), Shugan (1985) and Jeuland and Shugan (1985) examined competitive effects on pricing in exclusive channels of distribution, assuming that retailer competition mirrors manufacturer competition. Shugan and Jeuland (1988) and Ingene and Parker (1995) examined the pricing decisions of selling a single product through multiple outlets. Here, inter-store competitive pressures were examined, but the assumption of a monopoly manufacturer excluded the effects of inter-brand competition on pricing decisions. The common question left unexamined, however, was the effect of multiple levels of competition on strategic retailing decisions.

Choi (1996) provides a model of decision making in the face of multi-level competition that has broader application than those mentioned previously. His duopoly common retailer channel model assumes two competing manufacturers selling through two competing retailers. Here, retailers set prices to maximize profitability, cognizant of manufacturer competition. Choi's model allows us to understand the effects of manufacturer competition on retailer profitability. Choi derives the effects of store and brand substitutability on retailer profitability. Equilibrium results are calculated assuming both retailers and manufacturers as channel leaders, and assuming cooperation between the two (Retailer Stackelberg, Manufacturer Stackelberg, and Vertical Nash equilibriums, respectively).

Choi's findings indicate that together retailers and manufacturers are better off if they cooperate than if they compete. However, what is good for the channel may not be good for any single channel member, making cooperation difficult. For example, product differentiation tends to increase the profits of manufacturers while decreasing the profits of retailers. Similarly, store differentiation tends to increase the channel sales profits of retailers while decreasing the profits of manufacturers. Therefore, manufacturer-retailer cooperation is unlikely when manufacturers sell through multiple channels, and/or retailers carry multiple brands, even though this is optimal for both.

What does this mean for retailers, in a fractured market, when multiple brands are sold through multiple retailers? In a multi-level channel environment, retailer and manufacturer profit objectives are in conflict. As Choi puts it, "...there is a conflict as to the levels of product and store differentiations between retailers and manufacturers. That is, manufacturers want more product differentiation while retailers want less, and manufacturers want less store differentiation while retailers want more" (1996, p. 127). Retailers should choose brands that tend to differentiate themselves from other retailers. Manufacturers, on the other hand, should pursue retailers that are as perceptually substitutable as possible. Given this, retailers in fragmented markets should not assume vertical channel cooperation. While this may seem a *prima facea* statement, its validation requires us to re-evaluate the Strategic Profit Model. The lack of vertical cooperation within channels should create strategic preferences among retailers for the sales profit path over, and against the asset turnover path.

Channel optimization models have their limitations. First, Choi's model, while appealing, is also prescriptive, and has not been supported empirically. How important are manufacturer-controlled marketing variables to retailers, compared to those variables that retailers can control? If retailers place greater importance on their own strategies than on the strategic objectives of manufacturers, then Choi is right, and we should incorporate multi-level competitive pressures into the Strategic Profit Model.

Second, while Choi finds that retailers are wise to act in their own best interests, limited advice is offered on how this should be done. Unlike the SPM, Choi does not offer alternatives for meeting the strategic objectives of retailers, given a multi-level competitive environment. The SPM can be useful in determining the relative impact of various strategies, if informed by Choi's multi-level perspective of competition.

Combining the two perspectives described above, we might conclude that multiple paths to profitability exist for retailers. Choices between profitability through sales revenue and product turnover, however, should not be made independently of the horizontal and vertical competitive realities of a retailer's environment. Even though channel cooperation is in the best interest of both retailers and manufacturers, competitive pressures between manufacturer brands and among retailers encourage decision makers at each level of the channel to establish positions of channel leadership. In short, inter-channel competition fosters intra-channel competition. This reality should affect the SPM choices made by retailers. Similarly, the attractiveness of different profit paths should affect the form of channel leadership most attractive to retailers (retailer-led channels versus manufacturer-led channels).

DEVELOPING A MULTI-LEVEL COMPETITIVE STRATEGIC PROFIT MODEL

Combining the findings of these two paradigms, we propose that perceived competition and channel cooperation will affect the strategic profit choices of retailers, including merchandising strategies, and vice versa. The Multi-Level Competitive Strategic Profitability Model (MLC-SPM) is offered as a descriptive model that combines the theoretical expectations of the SPM and Choi's multi-level competition model to better understand the strategic profit choices made by retailers in competitive environments. In this model, retailers balance the attractiveness of the profitability paths with the choice of whether to cooperate, be a channel leader or be a channel follower. Retailer perceptions of the importance of reliance on manufacturer advertising, brand name merchandise, financing and delivery support of manufacturers, or cultivation of their store image while minimizing inventory carrying costs and/or maximizing sales volume reflect their strategic decisions to secure profitability in the face of retailer and manufacturer competition.

In the MLC-SPM model, retailer strategy choices are determined by the nature of the competitive environment, both in terms of number of competitors and number of potential customers. The greater the number of competitors, and/or the fewer the number of customers, the more intense the retail competitive environment.

Market Size, Horizontal Competition and Merchandising Decisions

When the number of retail competitors is large, manufacturers are less reliant on any one retailer to carry out their strategic objectives. It is in retailers' best interests to establish their competitive position in the market. Retailers will place great importance on those merchandising variables that enhance store image. Here it is in the best interest of retailers to take a position of channel leadership. When the number of local competitors is few, however, variables that help a retailer stand out in the crowd are less important. Competition is fierce, as well, when the base of potential customers is small. Retailers cannot rely on sales volume to achieve profitability, so they focus their attention on minimizing the investment necessary to be profitable. Here it may be in the best interest of retailers to allow manufacturers to take a position of channel leadership. When the population is large, however, retailers can rely on sales volume to achieve profitability, and the importance of manufacturer support, through financing, brand equity or advertising support becomes less important.

These two environmental factors create different kinds of competitive environments, leading to different channel relationships between retailers and manufacturers (see Figure 1). When there are many competitors and the population is large, it is in the best interest of retailers to assert channel leadership.

Alternatively, when the number of competitors is few, and the population is small, it is in the best interest of retailers to allow manufacturers to take positions of leadership. When there are many competitors and the population is small, retailers must simultaneously build store image and rely on manufacturers to reduce their asset allocation; retailers in these circumstances should cooperate. In the fourth case, where retailers face few competitors in large markets, there is a tendency to ignore merchandising decisions. The importance of merchandising variables will depend on the channel structure pursued by retailers.

TESTING THE MODEL

In order to test the MLC-SPM, surveys were designed to assess the importance of retailer-leadership and manufacturer-leadership merchandising variables. The furniture industry was chosen based on its fragmented nature and consumer behavior for durable goods. Consumers make most of their furniture purchases in traditional retail stores although they have other competitive options available to them. The study was conducted by mailing questionnaires to 500 furniture retailers, varying in size (sales and square footage) and trade area. Respondents were offered a summary of the results for their participation.

The Survey Instrument

The purpose of the survey was to understand furniture retailers' importance perceptions of a variety of strategic retailing variables. Using seven point Likert scales (1 = very unimportant, 7 = very important), retailers were asked to rate the importance of factors used to make merchandising decisions. Strategic retailing variables included importance of expected net sales, the fit of merchandise with their store's image, their expectations of the turnover of inventory, the financial terms offered by manufacturers, the ability of the manufacturer to make the merchandise available, manufacturer advertising and cooperative advertising, as well as the brand name of the merchandise (Levy and Weitz 2001). These variables were chosen because prior research in the furniture industry indicated that they are important decision making variables for furniture retailers, and because they were expected to discriminate well between firms competing through sales and asset management, and between those whose focus was on retailer versus manufacturer level channel leadership. Respondents were also asked categorical (descriptive) questions concerning their annual sales (45.3% < $1 million, 44.3% $1-5 million, 10.4% > $5 million), the size of their store (18.5% < 10,000 ft^2, 29.5% 10,000-20,000 ft^2, 20.4% 20,000-30,000 ft^2, 14.8% > 30,000 ft^2), and the approximate population (37.5% < 50,000, 29.5% 50,000 – 100,000, 33.0% > 100,000) and number of competitors in their trade area (39.0% < 7, 18.0% 8-11, 33.0% > 12).

Sample Response

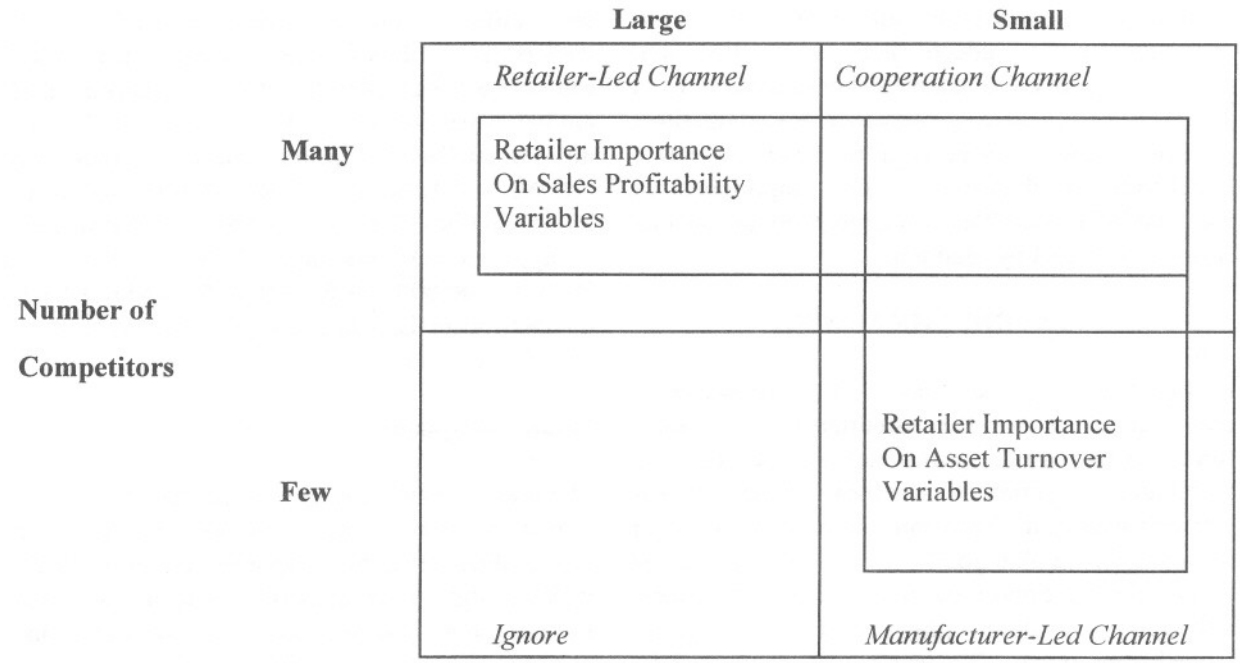
The mailing was done only once, resulting in 121 usable surveys. After subtracting for non-deliverables (11), the response rate was 25.2%, which is high for an industrial single mailing study. Further, item non-response was low (item non-response excluded an additional 15 surveys, for a usable response of 21.9%). These factors, coupled with a high rate of requests for copies of the final report, indicate that the study was of significant interest to participants, and was taken seriously by respondents.

Analysis

A three-step procedure was used to assess the MLC-SPM. Initially, a cluster analysis based on squared Euclidian distances was used to form four clusters, reflecting the importance of merchandising factors to the survey respondents. Then, differences in importance variables across segments were examined to describe the strategic thinking of retailing clusters. Additionally, differences in retail environment conditions were examined to develop descriptive characteristics of the observed retailing segments.

Cluster Analysis. Clusters were identified along the two dimensions of interest, strategic profit preferences and channel cooperation. The resulting

FIGURE 1
Multi-Level Competitive Strategic Profit Model



clusters were then assessed in terms of the importance of strategic variables and profile consistency. Cluster analysis was deemed appropriate, since it has been empirically demonstrated to effectively disseminate differences in responses and subsequently classify cases into uniquely different groups/clusters (Punj and Stewart 1983).

Clustering based on Anderberg's (1973) nearest centroid sorting procedure was employed to classify all retailers into one of four segments, according to their importance evaluations of eight merchandising factors (expected net sales, fit with store image, expected inventory turnover, financial terms, availability of merchandise from manufacturer, advertising support, brand name and cooperative advertising). A set of initial cluster seeds was set randomly, and successive iterations of clusters were conducted, until the sum of squared distances from the cluster means was minimized. Table 1 provides a summary of correlations among the determinant variables.

Up to fifteen iterations were allowed. Convergence was satisfied after four iterations. Four clusters of unequal size emerged from this process. Overall model fit was good ($F = 26.99$), with overall model R^2 of 0.311.

Differences in Importance Variables. Given differences in competitive environments, we would not expect all retailing strategies to be of equal attractiveness to retailers. Of interest to us were differences in the importance of retailing factors among the segments. Table 2 summarizes the means and standard deviations of each retailing factor, by cluster. One-way ANOVAs were performed to

determine whether differences among cluster means were significant. All variables except "brand name" were significant, with F-values of model fit ranging from 6.27 to 40.141, with p-values of 0.0137 to less than 0.0001.

The means of four variables (net sales, fit with store image, expected inventory turnover and merchandise availability) were high for clusters 1 and 2, and low for clusters 3 and 4. This suggests that clusters 1 and 2 place a great deal of importance on retail level variables that affect directly their ability to manage their strategic performance, while these variables are of relatively little importance to clusters 3 and 4. Similarly, four variables (financial terms, advertising support, brand name and cooperative advertising) possessed relatively high means for clusters 2 and 4, but relatively low means for clusters 1 and 3. This suggests that clusters 2 and 4 place a great deal of importance on manufacturer support variables to manage their strategic performance, while clusters 1 and 3 do not. Combined, these results suggest that Cluster 1 members place great importance on retailer-led variables, Cluster 2 places great importance on retailer- and manufacturer-led variables, Cluster 4 places importance only on manufacturer-led variables, while Cluster 3 does not place much importance on any of the variables.

Characteristic Profiles. We examined differences in store size, store sales, number of competitors and population of retail market. Table 3 provides Spearman non-parametric correlations between cluster membership on the one hand, and store (size and annual sales) and environmental (competition and market size) variables on the other. Neither store variable correlated with cluster membership, suggesting that neither store size nor annual sales discriminated among the four groups of stores. This should not be surprising, if retailers are engaged in profit-seeking activities. Indeed, the consistency across clusters suggests that differences in strategies reflect situation specific profit maximizing decisions. (As one would expect, however, store size and store sales were strongly correlated.) Thus, differences in importance placed on retailing variables are not explainable by differences in either store size or annual sales.

Environmental variables, on the other hand, tell a different story (see Table 4). Cluster 1 reported an average of 21.58 competitors, while Cluster 2 reported 22.32, Cluster 3 reported 8.2 and Cluster 4 reported 6.43. Clearly, a difference in competitive environment exists between those faced by Clusters 1 and 2, on the one hand, and Clusters 3 and 4 on the other.

Similarly, differences exist between the mean size of markets served by respondent retailers. While Clusters 1 and 2 both have larger markets than Clusters 3 and 4, in both sets the former has a larger average population than the latter. The difference is stark when population per store is examined. The population base available to support each retailer is much larger in Clusters 1 and 3 (18,902-23,407 per store) than in Clusters 2 and 4 (9,453-10,860 per store). Clusters 1 and 3 serve larger effective markets than Clusters 2 and 4. We conclude that differences among clusters reflect differences in environmental conditions.

Describing Furniture Retailing Segments

Combined, these results suggest that retailers across the clusters think differently about retailer and manufacturer controlled variables, and that these variables play different roles in their profit strategies. Two sets of patterns emerge that inform us about the relationship between environmental variables and importance of retail merchandising factors. When retailers face many competitors, as is the case in Clusters 1 and 2, a great deal of emphasis is placed on those variables within the control of retailers that enhance sales. When local competitors are few in number, these variables are less important. This is reasonable, since fierce retail competition forces retailers to differentiate themselves from others on dimensions other than brands carried. Within levels of competition, retailers in larger communities, as in the cases of Clusters 3 and 4, a great deal of emphasis is placed on factors that reduce operating costs by relying on manufacturer support. When populations are large, manufacturer reliance is less important. This is reasonable, since advertising and financing costs are fixed in the short run, and retailers in smaller communities are less

likely to have as great a cash flow as their counterparts in larger communities. The trade off, however, is that these retailers have to hand over more channel control to manufacturers than those in more urban areas.

The strategic options employed by furniture retailers, then, are as follows. The largest segment of retailers (Cluster 2) face many competitors in relatively small markets. They place importance both on those variables that will enhance their ability to differentiate their stores, and those variables that reflect support from manufacturers. This requires retailers to pursue cooperative strategies with manufacturers. The second largest segment (Cluster 1) faces many competitors, and tends to be located in very large markets. They place a great deal of importance on those variables that will differentiate themselves from competitors, but less importance on manufacturer opportunities to lower their costs. They pursue strategies that will allow them to be channel leaders. Two smaller segments (Clusters 3 and 4) are found in communities with relatively few competitors. In the case of Cluster 4, where market size is comparatively small, manufacturer support variables are important, but retailers have the luxury of not worrying about the need to differentiate themselves in the market. Being channel followers is the most effective strategy for them. For all intents and purposes, those in Cluster 3 face little competition in relatively large markets. No strategic merchandising variables appear to be important to their strategic decisions.

CONCLUSIONS AND IMPLICATIONS FOR MANAGERS

The strategic profit model provides prescriptions for retailers on how to maximize profits, either by focusing on increasing sales or by decreasing asset allocation. Choi's (1996) analysis shows that the nature of the inter-channel competitive environment affects the optimal arrangement for channel cooperation. This paper proposes that the strategic choices of retailers can be best understood by examining, simultaneously, the importance of strategic profit and channel cooperation variables available to retailers.

Implications

The multi-level competitive strategic profit model (MLC-SPM) proposed in this paper argues that retailers have four competitive choices at their disposal: lead, follow, cooperate or ignore. Each approach is appropriate for a different set of retailer strengths and competitive realities. The importance retailers place on strategic variables changes with competitive circumstances.

Several conclusions emerge from this study. First, the strategic profit model offers two independent, but apparently not mutually exclusive, approaches to profit maximization. Indeed, while some retailers indicated strong reliance on either decision variables that enhance revenue or reduce asset allocation, the most commonly pursued merchandising approach placed importance on both. The prescriptive model offers these approaches as alternatives, but in practice it appears that retailers in relatively small, competitive environments pursue both objectives simultaneously.

Second, the importance of merchandising variables to strategic decisions depends on the competitive retail environment. The greater the local competition, the more likely retailers are to focus on those strategic factors that enhance their ability to generate revenue. Further, within the context of retail competition, the larger the market the less likely retailers are to seek support from manufacturers to lower cost structures. Hence, we conclude that the size and competitiveness of retail markets affect the strategic choices made by retailers.

Third, the willingness of retailers to cooperate with, and extend sovereignty to, manufacturers, is context dependent, and affects the strategic choices of retailers. Results indicate that firms are most likely to take a position of channel leadership when they are in retail environments of intense competition. In this case, Choi's retailer-led Stackelberg solution to channel cooperation provides the best insight into the channel relationships in competitive environments. Alternatively, by relying on manufacturer support, retailers relinquish their claim

TABLE 1
Correlation Matrix: Importance of Strategic Retailing Variables

Variable	Net Sales	Fit w/ Store Image	Inventory Turnover	Financial Terms	Merchandise Availability	Nat'l Adver. Support	Brand Name	Cooperative Advertising
Fit w/ Store Image	0.510[a]							
Inventory Turnover	0.501[a]	0.578[a]						
Financial Terms	0.155[c]	0.118	0.159[c]					
Merchandise Availability	0.281[a]	0.556[a]	0.557[a]	0.138				
Nat'l Adver. Support	0.169[c]	0.160[c]	0.188[b]	0.303[a]	0.259[a]			
Brand Name	0.271[a]	0.323[a]	0.296[a]	0.288[a]	0.241[a]	0.324[a]		
Cooperative Advertising	0.027	0.101	0.109	0.242[a]	0.164[b]	0.721[a]	0.302[a]	
Means (std dev)	5.860 (1.422)	5.857 (1.423)	5.585 (1.464)	4.129 (1.949)	5.576 (1.571)	3.483 (1.665)	4.400 (1.552)	3.533 (1.665)

[a] $p < .01$, [b] $p < 0.05$, [c] $p < 0.10$

TABLE 2
Means (and Standard Deviations) of Importance Variables, by Cluster

Cluster	Net Sales	Fit w/ Store Image	Inventory Turnover	Financial Terms	Merchandise Availability	Nat'l Adver. Support	Brand Name	Cooperative Advertising
1	6.048 (0.999)	6.073 (1.081)	5.463 (1.051)	3.050 (1.753)	5.550 (1.011)	2.075 (1.071)	3.650 (1.424)	2.000 (1.072)
2	6.147 (1.096)	6.025 (0.939)	6.138 (1.059)	4.937 (1.612)	6.134 (1.166)	4.441 (1.286)	5.044 (1.263)	4.418 (1.220)
3	3.400 (2.510)	1.600 (0.894)	3.000 (2.345)	1.400 (0.894)	1.600 (1.342)	1.800 (0.837)	1.800 (1.304)	2.200 (1.304)
4	3.714 (2.138)	3.600 (1.140)	3.000 (1.414)	4.857 (1.864)	2.833 (1.169)	3.429 (1.618)	4.286 (1.254)	5.000 (1.000)
Model Fit (F-value)	20.63	27.71	14.51	6.27	19.47	12.70	1.42	40.41
Model Significance (p-value)	<0.0001	<0.0001	0.0002	0.0137	<0.0001	0.0005	0.2351	<0.0001
Variable Significance (t-test)	-4.54[a]	-5.26a	-3.81[a]	2.50[b]	-4.41[a]	3.56[a]	1.19	6.36[a]

[a] $p < .01$, [b] $p < 0.05$, [c] $p < 0.10$

TABLE 3
Spearman Correlation Coefficients

Variable	Cluster	Store Size	Annual Sales	Number of Competitors
Store Size	-0.067			
Annual Sales	-0.142	0.476[a]		
Competitors	-0.175[b]	0.074	0.255[a]	
Market Size	-0.234[a]	0.218[b]	0.553[a]	0.604[a]

[a] $p < .01$, [b] $p < 0.05$, [c] $p < 0.10$

TABLE 4
Summary of Retail Environments, by Cluster

Cluster	N	Average # of Competitors	Average Market Size	Population per Store
1	41	21.58	505,139	23,407.7
2	68	22.32	242,387	10,859.6
3	5	8.20	155,000	18,902.4
4	7	6.43	60,786	9,453.5

to channel leadership. Here, Choi's manufacturer-led Stackelberg solution to channel cooperation provides the best insight into the channel relationships in competitive environments.

The findings of this study suggest that the SPM is not fully utilized by retailers, and that combining it with Choi's perspective may be a more complete description of what occurs as retailers select products. While the SPM was never intended to be a descriptive model, it is interesting, nonetheless, that retailers appear to interpret its prescriptions differently in different retail environments.

Directions for Future Research

The model tested in this case assumes a duopoly at the manufacturer and retailer levels. Clearly, in the furniture market, as with other consumer markets, multiple manufacturers and retailers exist. Replication and validation in other markets would enhance the generalizability of these findings.

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