STRATEGIC GROUPS IN RETAILING BASED ON PORTER'S GENERIC MARKET BASED STRATEGIES

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The first study of strategic groups was conducted by Hunt in 1972. Since then, there have been a number of studies investigating the concept of strategic groups. However, there is still a lot of confusion, and there is very little consensus on a number of issues related to this concept. In particular, issues related to: (1) the definition of the concept of strategic groups, (2) competition between strategic groups, and (3) the relationship between group membership and their performance. This paper attempts to clarify the concept of strategic groups and tries to resolve these issues through a study of the retail sector. The paper then tests four hypotheses and finds support for three of them using data from the retail sector. The results show the existence of strategic groups in the retailing industry using variations of Porter's three generic strategies.

INTRODUCTION

Hunt (1972) studied the home appliance industry and found that groups of firms were following different strategies. He labeled this phenomenon "strategic groups". The definition of strategic groups that have used by scholars revolve around Porter's (1979) statement that, "…an industry can thus be viewed as composed of clusters or groups of firms, where each group consists of firms following similar strategies in terms of the key decision variables," (page 215). However, scholars have defined strategic groups in a number of different ways. This author agrees with a large part of Porter's definition, however, there are some underlying issues in Porter's definition that have added to the confusion and have led authors to misinterpret this concept.

Multiple scholars have empirically analyzed the concept of strategic groups. For instance, Newman (1973, 1978), finds strategic groups in the chemical goods industry differ on the degree of vertical integration, product differentiation and product diversification. In the consumer goods industry, the differences are primarily based on the relative size of firms (Porter 1973), which finds support in Caves and Pugel's (1980) study of some US manufacturing industries. Based on a study of some declining industries like baby food manufacturers, cigar makers, leather tanners, etc., Harrigan (1980) finds the differences to be along the dimension of the strategic posture of firms. Factors like market position, resource commitments and assets are used to identify strategic groups by McGee and Thomas (1986), and Thomas and Venkatraman (1988), while factors like technological skills, brand name reputation and management ability are used by Itami (1988). Brown and Glennon (2000) use cost structures to group banks into different strategic groups. Davies, et al. (2001), use Kohonen's self-organizing map as a substitute for cluster analysis to group firms in the UK hotel industry. Mas Ruiz (1999) finds instability in the number and strategy of the different strategic groups over time in the Spanish banking industry.

Strategic groups are formed due to differences on manufacturing, marketing, financial, and structural variables in the brewing industry (Hatten 1974, Hatten and Schendel 1977; and Hatten; Schendel and Cooper 1978). A study of some 2450 strategic business units from 50 manufacturing industries by Hergert (1983) show a mix of variables like advertising, R&D, assets, sales, and market share to be the reason for the formation of strategic groups. In the medical supply and equipment business the differences between groups are mainly due to

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the customer groups and customer needs served by firms (Howell and Frazier 1983). Product strategy is the main element for the formation of strategic groups in 19 consumer goods industries (Oster 1982). Differences in size and investment behavior are the primary reasons for the existence of strategic groups in the textiles petroleum business (Primeaux 1985).

Strategic groups in the paints industry differ on 21 marketing variables (Dess and Davis 1984) and differences in marketing strategy variables contributed to the formation of strategic groups (Hawes and Crittenden 1984). A study of the Finnish knitwear industry by Lahti (1983) show that size and the nature of the product group the firms were selling led to the formation of strategic groups. Lewis and Thomas's (1990) study of the U.K. retail grocery industry find strategic groups to exist based on grocery store size. Mascarenhas and Aaker (1989) report the existence of three strategic groups in the oil-drilling industry. Galbraith, Merrill and Morgan's (1994) study of the market for non-tactical Navy information systems reports the existence of three different strategic groups. Strategic group analysis has been recommended as tool for strategic marketing by Flavian and Polo (1999). Leask and Parker (2004), apply strategic mapping to the pharmaceuticals industry in the UK. Panayides (2002) finds the existence of strategic group based on relationships in professional services and likens it to market segments. Similarly, Flavian, Haberberg and Polo (1999) find the existence of strategic groups in food retailing in UK and Spain and also liken it to segmentation or the five force analysis. Panagiotou (2006) recommends the structure-conduct-performance as the basis for strategic group analysis. Leask and Parnell (2005) recommend the use of a firm's product or service portfolio for strategic group analysis. Nair and Filer (2003) recommend the use of co-integration analysis for strategic group's competitive behavior. Feka and Xouris (1997) group the Greek dairy industry based on their strengths and weaknesses. Peng, Tan and Tong (2004), find the existence of strategic groups in Taiwan based on ownership types. Spencer, Peyrefitte and Churchman (2003) find the importance of task and institutional environments the formation of cognitive strategic groups in the health care industry. Finally, Leask and Parker (2006), provide a thorough review of the issues surrounding strategic groups with a study of the UK pharmaceutical industry.

The current debate on issues relating to strategic groups revolve around four areas: (1) the definition of the concept, (2) do strategic groups really exist, or are they methodological artifacts, and not theory based, (3) competition between strategic groups, i.e., do different strategic groups compete with each other, and finally (4) the relationship between strategic groups and performance, i.e., are firms in one strategic group more profitable than firms in other groups.

Thus, this paper has three goals: (1) to define the concept of strategic groups so that it is theory based, and from a market based strategy perspective, (2) to clarify how competition takes place within and among strategic groups, and (3) to clarify the strategy-performance relationship of firms in strategic groups. The paper then tests four hypotheses related to the above issues using data collected from the retail sector.

STRATEGIC GROUPS – DEFINITION

The first problem with the issue of "strategic groups" is its definition. The definition(s) put forth by scholars have been very diverse, contributing to the confusion. This author thinks that strategic groups should be defined using only one criterion – the market-based strategies used by firms in the different groups. Unfortunately, this has not been done so far. To this end, this author thinks that the best approach in setting the theoretical foundation for strategic groups is to either use Porter's (1985) generic strategies of low-cost, differentiation, and niche, or Miles and Snow's (1978) strategic typologies of prospectors, analyzers, defenders, reactors. The next step should then be to perform cluster analysis to support these theories.

Not too long ago, Nayyar (1989), and McGee and Thomas (1989) made an attempt to clarify some unresolved issues in this debate. However, subsequent papers on this topic still seem to be very confusing. One of issues that has contributed to this confusion is that scholars have used criteria other than strategies to define strategic groups. For instance, Mascarenhas and Aaker (1989) use mobility barriers to define strategic groups. However, this author thinks that as proposed by Porter (1979), and others, mobility barriers and other factors are nothing more than conditions that are necessary for the existence of strategic groups. Strategic groups should be defined based on their distinctive strategies. Mobility (entry) barriers prevent companies from easily moving from one strategic group to another by replicating the strategy of companies in the other group. Movement from one strategic group into another group may not be very easy, and barriers to entry may differ among strategic groups (Porter 1979). The following example may help explain this phenomenon.

When Toyota, Nissan, and Honda had wanted to penetrate the luxury segment of the auto industry that was primarily dominated by European imports like Mercedes Benz and BMW, their mobility from their predominantly cost leadership group was hampered not by their ability to produce a luxury car, but by the image of their brands in the minds of consumers. American consumers associated Japanese auto manufacturers with quality cars at reasonable prices, but did not associate Japanese cars with luxury and prestige. Thus, the only option Toyota, Nissan, and Honda had was to start a new strategic business unit, and market its new line of luxury cars under an entirely different brand name – Lexus, Infiniti, and Acura respectively. In this case, the mobility barrier for Toyota, Nissan, and Honda was the negative attitude of consumers, not toward their ability to manufacture a quality product, but toward the perception of luxury and prestige associated with the company's name.

Strategic groups are firms in an industry with similar cost structures, resource profiles, product diversification and formal organization (Bogner, Mahoney and Thomas 1998, and McGee and Thomas 1986). However, this author disagrees with that statement. For instance, BMW, Mercedes Benz (a division of Daimler-Chrysler), Lexus (a division of Toyota), Infiniti (a division of Nissan), compete with Cadillac (a division of General Motors). Similarly, Seiko (a manufacturer of watches) has different brands of watches – Seiko, Pulsar, Lorus, etc., which compete with Citizen in one segment, and Timex in another. It is quite clear that these competitors do not have similar resource profiles, cost structures, product diversification or formal organization. In fact the companies may be very different on all of the above factors. This author thinks that in the final analysis, firms with multiple strategic business units and multiple products (brands) compete against each other in different market segments through their brands or strategic business units. This competition then bubbles up to the corporate level. Thus, firms can have very dissimilar cost structures, resource profiles, product diversifications, and formal organizations, and still compete with one another in different segments.

Another problem with studies in the area of strategic groups is that there has been some confusion about the concept of market segments, which is integral to the understanding of the concept of strategic groups. The arguments put forth by Caves and Porter (1977) and others give the impression that different strategic groups target the same set of customers. Porter (1979) also makes mixed and confusing statements linking market segments and strategic groups. Porter states, "...when strategic groups are targeting for very different segments, their effect on each other is much less severe. ...A particular strategic group will be most exposed to rivalry from other strategic groups if it competes for the same market segments...." (page 218). This author thinks that these are very confusing statements since different strategic groups do not target the same segment. Different strategic groups target different groups (segments) of customers who are attracted by a different set of offerings. Only companies within a particular strategic group target the same group (segment) of customers.

To clarify the above argument, one needs to understand the concept of market segments. A market segment is defined as a group of people (consumers, buyers) who have similar wants, needs, and desires. Consumers in different segments have different needs. This author thinks that "strategic groups" are synonymous with companies serving the same market segment. For instance, in the hotel/motel industry, there are different types of consumers and there are different types of motels/hotels targeting these different consumers. The price-conscious customers in the hotel/motel industry are typically targeted by Motel 6, Super 8, Sleep Inn, Days Inn, etc., while people who want more services, etc., and are willing to pay a higher price, are targeted by Holiday Inn, Quality Inn, Best Western, etc., and higher up are the Hyatt, Hilton, Sheraton, etc., and finally, hotels that target the up-scale segment include hotels like the Four Seasons, Ritz Carlton, etc.

Similarly, in the auto industry, consumers who buy low priced brands like Kia (low cost strategy), Hyundai, etc., buy them because they are inexpensive, while those who buy a Toyota Camry, Honda Accord, etc., (differentiation strategy) are willing to pay a higher price for a car that is bigger, has more features/options, is more reliable, etc. Finally, people who buy a Rolls Royce (focus strategy) are willing to pay a fortune for something that is very unique and prestigious.

Thus, the argument that two strategic groups who are using different strategies, let's say of cost leadership and niche, are competing for the same types of customers is not correct. The strategic group that is using the low cost strategy is trying to attract customers who value low price, the strategic group that is using the differentiation strategy is going after consumers who want something different and are willing to pay a higher price, while the strategic group that is using the focus/niche strategy is going after consumers who are willing to pay a very high price for the exclusivity and prestige associated with that brand.

The Proposed Definition of Strategic Groups Based on Market Segments

This author thinks that the definition of strategic groups should be based on market strategies used by firms in the industry, and not on any other factor. For a strategic group to exist and be successful it must offer consumers something that is different than another strategic group. In the same vein Galbraith, Merrill, and Morgan (1994) propose, "customer preferences, beliefs, and prejudices all assist in the formation of viable strategic groupings" (page 615). This author proposes the following definition and hopes that it clarifies the concept of strategic groups.

> ***A strategic group is a group of firms (or strategic business units, or brands) operating within an industry where the firms (or strategic business units, or brands) within a group compete for the same group of customers (segment), using similar market- related strategies.***

Strategic Business Units (or brands) in other strategic groups compete for a different group of customers using strategies that are different than other strategic groups. Different strategic groups do not compete with each other, since they are pursuing different groups of customers.

Nohria and Garcia-Pont (1991) use cluster analysis to analyze strategic groups in the automobile industry and their findings support the above proposition. The authors use variables like relative size, relative market share, breadth of product line, relative technological sophistication, relative organizational capability, and relative labor cost to group firms. The resulting cluster analysis shows eight strategic groups (clusters) of automobile manufacturers which could just as easily be defined in terms of market segments that were being served by the different automobile manufacturers. The first cluster consists of General Motors and Ford, and even though these two companies are the largest in the world, they compete with each other in very similar market segments. The second cluster consists of AMC and Chrysler. The third cluster consists of, Fiat, VW, PSA, and Renault. The fourth cluster had the South Korean auto manufacturers of Hyundai, KIA, and Daewoo, with a sub-cluster that consisted of Seat, Alfa Romeo, and Rover. The fifth cluster has the European auto manufacturers: Volvo, Daimler-Benz, Saab, and BMW. The sixth cluster has Fuji, Suzuki, Daihatsu and Isuzu, the seventh cluster has Honda, Mazda and Mitsubishi, while the last cluster has Nissan and Toyota. There are other clusters that are not part of the cluster analysis: Jaguar and Porsche, and some new Taiwanese entrants. Thus, this author thinks that a strategic group is nothing more than a group of companies who serve the same market segment and compete against each other using similar market related strategies. These companies are very different from companies in another strategic group who serve a different market segment using different market related strategies to attract a different group of customers.

METHODOLOGICAL ARTIFACTS OR THEORY BASED

Probably the biggest criticism against the concept of the strategic group is that it is not theory based. There are a number of scholars who think that strategic groups are nothing more than a creation of the statistical method (cluster analysis) used in identifying strategic groups. Those who assert that strategic groups exist and are theory based include Cool and Schendel (1987), Figenbaum and Thomas (1990), Harrigan (1980, 1985), McGee and Thomas (1986), Nath and Gruca (1997), Porac et al., (1995), and Thomas and Venkatraman (1988). There are others who think that strategic groups are nothing more than artifacts of the methodology (cluster analysis) used to study them. These include Barney and Hoskisson (1990), Cool (1985), Cool and Schendel (1987), Hatten and Hatten (1987), Mehra and Floyd (1999), Reger and Huff (1993), Tang and Thomas (1992), and Thomas and Venkatraman (1988). McGee, Thomas and Pruett (1995) think that the study of strategic groups has a number of shortcomings. In the same vein, Mehra (1994) thinks that the inconsistent findings in strategic group research could be due to incorrect operationalization of the constructs.

This author agrees with the former group that strategic groups do exist. However, this author also agrees with the latter group in that the former group has failed to give the theoretical foundation for the concept of strategic groups. This author thinks that this debate can be resolved only if the concept of strategic groups is grounded in theory. For this to happen researchers should first clarify what is meant by the term strategic groups, what types of strategic groups will exist, and why, i.e., a-priori rather than ex post facto. Secondly, based on this theory, researchers should then use statistical methods like cluster analysis to support that theory. If the former is absent, then one has to conclude that strategic groups are nothing more than a creation of the methods (cluster analysis) used to identify strategic groups. Unfortunately, what has been done in the past is that researchers have used cluster analysis to come up with strategic groups, without hypothesizing what groups will exist, and why, before performing cluster analysis on their data.

As stated earlier, this paper proposes that the theory base for strategic groups could be the generic strategies proposed by Porter (1985), or the strategies proposed by Miles and Snow (1978). This paper uses Porter’s generic strategies as the theoretical base, and so the discussion will be focused only on the three generic strategies proposed by Porter.

Firms within the strategic group using the strategy of cost leadership typically aim to reduce the cost of doing business and pass the cost saving to customers. The strategic group of firms who rely on differentiation does not try to attract customers on the basis of low price, but on the basis of a different or slightly superior product/service for which the customers are willing to pay a higher price. Finally, firms relying on the focus (niche) strategy attempt to provide a very exclusive product/service to its customers and charge a very high premium for its offerings. The above explanations lead to the following hypotheses.

Hypothesis 1: A strategic group is a group of firms that compete against each other using similar strategies to attract the same group of customers. There are different strategic groups (in an industry) following strategies similar to Porter's generic strategies of low cost, differentiation, and focus/niche.

Hypothesis 2: There are a number of strategic groups within an industry, each using a different strategy to pursue a different group of customers, with different needs and different customer profile.

This author disagrees with Caves and Porter (1977) who believe that there is greater rivalry between firms from different strategic groups in comparison to firms within the same group, and agrees with Smith et al., (1997), who make the opposite argument, and thinks that only firms operating within a strategic group compete against each other. Firms in different strategic groups do not compete against each other since their offerings to their customers, whose needs may be different, are different from each other.

This author disagrees with Porter (1973, 1979), who thinks that competition increases with increasing strategic distance (defined as the difference between different strategic groups in terms of the key strategic decision variables). Porter goes on to add that, "...diversity of strategies will enhance rivalry among groups" (page 218), and competition between groups is much stronger than competition within groups. This author couldn't disagree more.

If the arguments put forth by Porter are correct, then Kia's brand of cars, which basically uses a low cost strategy, should be a very strong competitor of Rolls Royce, which uses a focus strategy. It seems very clear that Kia's cars compete very strongly with the likes of Honda's Civic, Hyundai's Elantra, Toyota's Tercel, Chrysler's Neon, etc., and not with Rolls Royce, not even with Honda's Accord and Toyota's Camry. If one were to calculate the price elasticity of demand, one would easily be able to find out which brands compete against each other.

This author agrees with Cool and Dierickx (1993) who state that competition (rivalry) will increase with decreasing strategic distance, i.e., firms within a strategic group compete with each other much more strongly than with firms in another strategic group. It is also worth pointing out that firms do not compete against each other, it is the brands of the firms in the different market segments that compete with each other. Mas Ruiz, Nicolau-Gonzalbez and Ruiz-Moreno (2005) find asymmetry in the rivalry between small and large firms in Spanish Banks. Duysters and Hagedoorn (1995) find intra-group rivalry leads to inter-group co-operation.

RELATIONSHIP BETWEEN GROUP MEMBERSHIP AND PERFORMANCE

Here again, there is disagreement as to whether group membership affects performance. There are those who think that firms in different strategic groups have different profitability while others think that group membership has no effect on performance. Those who report significant relationship between group membership and firm performance include Cappel, Pearson and Romero (2003), Castle (2003), Chan-Olmsted and Li (2002), Chang and Hsu (2005), Cool and Dierickx (1993), Coombs, Ketchens and Hoover (2004), Dess and Davis (1984), Ferguson, Deephouse and Ferguson (2000), Fiegenbaum and Thomas (1990), Gonzalez-Fidalgo and Ventura-Victoria (2002), Lewis and Thomas (1990), McNamara, Luce and Thompson (2002), Marlin, Huonker and Sun (2002), Menor, Roth and Mason (2001), Nair and Kotha (2001), Oster (1982), Oustapassidis (1998), Porter (1979), Short, Palmer and Ketchen Jr., (2002), and Wen-Long and Yi-Hsuan Hsin (2006), i.e., some strategic groups are more profitable than others. On the other hand, Cool and Schendel (1987, 1988), Howell and Frazier (1983), and Petraf and Shanlery (1997), doubt the existence of any relationship between group membership and performance and conclude that the so-called relationship is nothing more than improper identification of mobility barriers, and firm effects. Findings by Mas Ruiz (1998, 2000), report no relationship between strategic groups and their performance, and the findings of Nair and Kotha (2001) are also not conclusive since they find that different strategic groups have different performance during different time periods.

It has been argued that the reason there are these differences in performance is because strategies (and their distinct advantages) cannot be easily imitated, and these have been called mobility barriers. According to Caves and Porter (1977), Caves (1984), and Porter (1979), not all strategies are equally successful and this inequality in profits between strategic groups is maintained through the existence of mobility barriers and the height of the mobility barriers determine a strategic group's profitability. Elevated status is the reason why firms in the health care industry resist movement from one strategic group to another group (Churchman and Woodard 2004). Firm performance is a function of the exit/mobility barriers in their strategic groups (Hoyt and Hugh 2004, Jeho, Kyungmook and Rho 2002). However, Mascarenhas and Aaker's (1989) study of the oil-drilling industry shows just the reverse, i.e., the more protected the groups the lower their profitability. This author thinks that it is very likely that firms in the strategic group that are highly protected spend more resources to protect themselves, hence the lower profitability.

This author disagrees with Cool and Dierickx (1993) who liken mobility barriers to 'walled medieval cities' that protected the cities from hostile invaders. "Cities that have higher and thicker walls than others are more successful in protecting themselves, those strategic groups which are protected by higher mobility barriers can be expected to be more profitable" (page 57). This author thinks that even though it is true that higher and thicker walls may discourage invaders from invading the city, they may not completely prevent invasion. However, just like invaders who have penetrated the thickest and the highest of all walls if they perceive there to be wealth inside a city, the mobility barriers of strategic groups can also be overcome by competitors who think that the benefits exceed the cost. Mobility barriers may discourage, but may not completely prevent firms from entering a strategic group.

This author thinks that erecting and maintaining these mobility barriers by firms within a strategic group are not cost free. Just as it costs to build and maintain higher and thicker walls, it costs money to erect and maintain mobility barriers. Firms in strategic groups that have erected high mobility barriers spend a lot of resources in erecting and maintaining those mobility barriers through advertising, R&D, differentiated products, etc. However, if other firms (who are not part of the profitable strategic group) see that the benefits associated from spending resources to overcome those mobility barriers far exceed the costs associated with them, then, they will definitely do that. An example of this is the case of Toyota's Lexus division and Nissan's Infiniti division that overcame the mobility barrier associated with prestige that was created by Mercedes Benz and BMW because it saw that the profitability margin in the luxury segment was much higher than the lower and medium price segment, and thus a very lucrative segment to invade.

Logic dictates that in the long run there will be no relationship between group membership and performance, even if there are high entry barriers. If one were to use the three generic strategies proposed by Porter - low cost, differentiation, and focus/niche - as the theoretical foundation for the existence of strategic groups, then there is no reason to believe that firms following the strategy of low cost will be more profitable than those following the strategy of niche or differentiation. If this were the case, then why would any firm consciously follow a strategy that yields low performance results? It is likely that in the short run, a strategic group, and hence firms within that group, can be more profitable than others within an industry. However, in the long run, this may not be sustainable. Firms who are not part of the profitable strategic group will try to enter the strategic group with higher profitability. This is supported by the findings of Wiggins and Ruefli (1995) who conclude that the, "instability of the performance group memberships over time does not support the existence of mobility barriers" (page 1642), and also by Mas Ruiz (1999) who reports intra-industry instability in the number of strategies in the Spanish banking sector. Osborne, Stubbart and Ramprasad (2001) find relative stability in the number of strategic groups, but a shift in the number of members within groups (Figenbaum, Sudharshan and Thomas (1990).

This author thinks that the performance of strategic groups will differ based on market characteristics, i.e., a particular strategy (strategic group) will perform better under one market condition, but may not perform as well in a different market condition. For instance, a differentiation strategy may be successful in a growth industry while another strategy (maybe low cost) may provide better results in a mature industry.

Studies that establish a relationship between strategic groups and profitability may have been due to more efficient firms in the more profitable group and less efficient ones in the less profitable groups. This author agrees with Nayyar (1989) that firms following different strategies may be able to achieve the same performance which is also supported by Karnani (1984) who reports that firms using Porter's generic strategies show the same profitability. Lawless, Bergh and Wilsted (1989) find significant performance differences of firms within strategic groups. Zuniga, et al. (2004), find significant performance differences among strategic groups in Spanish private banks in some years, but not in other years. Anthanassopoulos (2003) finds performance differences between and within strategic groups in the UK grocery industry. McNamara, Deephouse and Luce (2003) find performance differences within groups to be significantly larger than across groups. Thus, the conclusion by Cool and Dierickx (1993, page 57) that, "group membership has proven to be a poor predictor of firm performance," seems to be on the mark. Based on the above arguments, the following two hypotheses are proposed.

Hypothesis 3: There are mobility barriers between strategic groups. However, these mobility barriers will be overcome if the benefits (profits) are greater than the costs of overcoming these barriers.

Hypothesis 4: There is no relationship between strategic groups and their performance, i.e., profitability does not depend on group membership. All groups may be more or less equally profitable in the long run.

RESEARCH METHODOLOGY

Five hundred questionnaires were mailed to general managers of different types of retailers. The mailer contained the questionnaire, along with a pre-paid return envelope. The survey consisted of forty-three items soliciting information about the strategy of the respondent's company vis-à-vis its competitors. The strategy construct is measured using Porter's three generic strategies of low cost, differentiation and focus/niche. Multiple items are used to measure each of the three generic strategies. The survey also has another fifteen items soliciting information about the nature of the company, and target customers. Seventy-six completed questionnaires (response rate of 15.2 percent) were received out of which only sixty-six were usable. The respondents came from a variety of retailers.

Respondent Profile

The respondents came from a variety of retailers. About fifty-two percent of the respondents identify their firm as the market leader, followed by about thirty-nine percent of the firms identifying their company as the market challenger. About seventy-one percent of the respondents report that their company's sales has been growing, followed by about fifteen percent of the respondents who say that their sales are falling. Profits of about seventy six percent of the firms have been growing, followed by about eleven percent of the firms who say that their profits are falling. Finally, about seventy-nine percent of the firms identify themselves as large retailers, while about twelve percent of the firms identify themselves as medium-size retailers.

Data Analysis

The first stage of the data analysis involved the use of factor analysis to reduce the data such that it was more manageable, without sacrificing the meaningfulness of all the variables involved in the study. This resulted in eleven factors with eigenvalues of 1.0 or more. Table 1 shows the results of the factor analysis.

The next step involved the use of the factors to group retailers into different groups. Cluster analysis is performed using complete linkage and Euclidian distance. This resulted in five clusters with different characteristics as shown in Table 2. Based on their characteristics, firms in the first two clusters are competing based on low cost, but they concentrate on different factors to achieve low cost. Firms belonging to the next cluster are following a niche strategy. Firms belonging to the fourth cluster are using the differentiation strategy, while firms that are part of the fifth cluster do not seem to be using a coherent strategy, and are thus labeled as stuck in the middle. As can be seen from the table, the five clusters are significantly different from each other on the eleven factors.

Table 2 shows that firms belonging to cluster 1 rate themselves very high on low cost – store design, low cost – technology, and low cost – vertical integration. The second cluster has the highest rating on low cost – sales promotion, low cost – inventory, and the lowest rating on differentiation – packaging (meaning that they carry products with low quality packaging). These two clusters are low cost clusters, but they seem to compete on the basis of low costs of different factors. The third cluster is close to a niche strategic group since the scores on five of the twelve factors are quite close to the maximum score of 5.0. Firms belonging to the third cluster have very high scores on differentiation – advertising, differentiation – design and décor, differentiation – packaging, and the lowest score on low cost – store design. Retailers in the fourth cluster score high on differentiation – employees, differentiation – suppliers, and low cost – employees. It is very likely that this group may be differentiating based on employees, but also not pay them as much as their competitors, thus there exists some contradiction. Finally, firms in the fifth cluster have the lowest scores on all factors, except low cost – store design, and differentiation – packaging. It appears that this group of retailers has not been able to follow a consistent strategy, and could be labeled – stuck in the middle. The above table thus supports hypothesis one. There are five distinct clusters, and members of each cluster are following a strategy that is different from members of other strategic groups.

Next, hypothesis two is tested which states that each strategic group pursues a different group of customers. Respondents were asked four questions related to the nature of their customers – on the issues of price sensitivity, brand consciousness, and willingness to pay more for extra service and shopping experience. Table 3 shows the results.

Table 3 supports the second hypothesis that the customers of the different strategic groups are

TABLE 1
Factor Loadings: Retailers

Item	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
Differentiation (employees)											
Carry superior products	***.575***	.241	.131	.187	.233	-.189	.289	.213	-.040	-.226	-.207
Recruit better qualified employees	***.758***	.183	.071	.154	.154	-.006	.264	.128	.249	.085	.078
Spend more time training employees	***.761***	.318	.046	.089	.146	.002	.046	-.006	.327	.101	.081
Have more salespeople on the floor	***.814***	.134	-.030	.037	.198	-.055	.127	.169	-.071	.231	.047
Have more service people on the floor	***.864***	.108	-.038	-.007	.205	.081	-.020	.063	.008	.108	.112
Provide extra services for our customers	***.500***	.338	-.085	.017	.224	-.131	.429	.029	.072	.324	.157
Differentiation (advertising)											
Use advertising to create an upscale image	.252	***.732***	-.035	.174	.229	-.059	.081	.241	.074	.146	-.125
Use high quality ads.	.293	***.767***	.035	.260	.121	-.065	.062	.112	.095	.190	.037
Have high rate of advertising	.092	***.812***	.098	.141	.107	.046	.100	.139	.117	.132	-.015
Use reputable, well know	.166	***.695***	-.126	.041	.181	.046	.256	-.065	-.047	.093	.195
Low Cost (store design)											
Design store to cut lighting	.041	-.096	***.882***	.084	-.108	.015	.001	.127	.112	-.083	.072
Design store to cut heating	.016	.050	***.923***	.080	.000	.027	.091	.007	.024	-.002	.024
Design store to cut A/C	.022	.044	***.957***	.067	.067	-.033	.053	-.008	-.020	.008	.008
Stores in low rent areas	-.042	-.013	***.527***	.204	.151	-.107	-.214	.267	.401	-.005	.316
Store size for economies of scale	-.002	.196	***.679***	.451	-.048	.135	-.250	-.043	.095	.027	.041
Low Cost (technology)											
Constantly invest in tech. To keep costs down	.230	.187	.094	***.797***	.157	-.153	-.021	.051	-.084	.026	.169
Automate operation to cut	.019	.113	.160	***.767***	.192	.117	.007	.244	.061	.049	-.101
Invest in technology to remain efficient	.109	.245	.176	***.841***	.103	-.036	-.082	-.068	.129	.033	.151
Invest in technology to substitute for labor	-.134	-.099	.344	***.626***	.142	.413	.099	-.032	.179	.101	.085
Differentiation (design and décor)											
Spend money in the interior design of our store	.261	.217	-.081	.175	***.813***	.040	.167	.107	.013	.085	-.076
Spend money in the interior décor of our store	.093	.049	-.181	-.058	***.855***	.006	.061	-.051	-.085	.152	.070
Spend money in the upkeep of our store	.208	.313	.094	.299	***.667***	-.287	.000	-.023	.133	.101	-.130
Spend money on the exterior of our store	.389	-.090	.206	.254	***.672***	.050	.150	-.036	-.115	.088	.090
Spend money for in store displays	.211	.291	-.050	.172	***.681***	.108	.183	.225	.156	-.044	-.075

(Table 1 continued on next page)

TABLE 1 (*continued*)

Item	F1	F2	F3	F4	F5	F6	F7	F8	F9	F10	F11
Low Cost (sales promotion)											
Hire employees at the lowest cost	.033	.056	.165	.038	.077	***.795***	.092	.251	.097	.069	.188
More frequent sales promotions than others	.010	.398	.128	.036	-.070	***.592***	-.159	.084	.248	.008	.040
Have bigger sales promotions than others	.100	.323	.093	.076	.001	***.545***	-.105	.065	.224	.044	.085
Differentiation (brands and services)											
Carry selective brands	.323	-.035	.191	.041	.210	-.170	***.515***	.184	.150	-.195	.050
Carry renowned brands	.321	.080	.141	.275	-.061	.204	***.468***	.037	-.062	-.309	-.030
Provide delivery to our cus-	.248	.394	.055	-.087	.202	.007	***.611***	.099	-.109	.173	-.127
Provide gift wrapping to our customers	.094	.010	-.134	-.128	.228	.089	***.785***	.187	.047	.163	.160
Low Cost (employees)											
Price our products higher to	.211	.023	.091	.028	.124	.308	.268	***.610***	-.135	-.026	.269
Higher profit margins than others	.217	.305	.060	.163	.086	.058	.171	***.600***	-.163	.028	.256
Offer very little benefits to employees	-.079	.017	.012	-.016	.037	.492	.257	***.592***	.128	.110	.169
Discourage unionization to keep labor costs down	.187	.181	.069	.078	-.019	.022	-.018	***.770***	.211	.045	.017
Low Cost (vertical integration)											
Own our own warehouse(s) to lower costs	.334	.251	-.007	.446	.016	.218	.137	.168	***.530***	.122	-.129
Own our own transportation system to lower costs	.077	.231	.025	.258	.104	-.089	.198	.322	***.510***	.485	-.029
Carry low price brands	.104	.068	.375	.128	-.025	.108	-.297	.084	***.677***	-.011	.037
Own our own manufacturer(s) to lower costs	.164	.250	.055	.007	-.016	.174	.209	-.020	***.747***	.052	.189
Differentiation (suppliers)											
Buy from suppliers who are	.477	.185	.005	.138	.285	.206	.093	.151	.001	***.507***	.138
Buy from reputable suppliers	.185	.338	-.009	.078	.180	.154	.020	-.015	.004	***.741***	.060
Low Cost (inventory)											
Keep very little inventory so as not to tie up cash	.031	.108	.287	-.011	.207	.137	.055	.252	.180	.084	***.519***
Have lower volume than others	.123	.117	.098	.171	-.213	.199	.141	.252	.128	.065	***.721***

TABLE 2
Cluster Descriptors and Test for Significance

Factor Scores	Clusters 1 Low Cost	2 Low Cost	3 Niche	4 Differentiation	5 Stuck in middle	F	Sig.
Factor 1 ***Differentiation (employees)***	3.80	3.07	4.19	4.33*	1.33**	17.60	0.000
Factor 2 ***Differentiation (advertising)***	3.69	3.62	4.40*	2.25	1.23**	18.30	0.000
Factor 3 ***Low Cost (store design)***	3.03*	2.31	1.52**	2.50	2.00	9.26	0.000
Factor 4 ***Low Cost (Technology)***	3.82*	3.54	3.56	3.25	2.17**	2.94	0.032
Factor 5 ***Differentiation (design and décor)***	3.54	2.93	4.34**	4.20	1.67**	14.80	0.000
Factor 6 ***Low Cost (sales promotion)***	2.92	3.45*	2.72	2.41	1.35**	7.08	0.000
Factor 7 ***Differentiation (brands and services)***	3.37	2.77	4.17*	4.13	1.58**	10.30	0.000
Factor 8 ***Low Cost (employees)***	2.40	2.82	2.73	3.50*	1.13**	5.98	0.000
Factor 9 ***Low Cost (vertical integration)***	3.48*	3.45	3.12	3.06	1.15**	8.43	0.000
Factor 10 ***Differentiation (suppliers)***	4.02	3.93	4.19	4.38*	1.17**	24.90	0.000
Factor 11 ***Low Cost (inventory)***	2.65	3.11*	2.50	3.00	1.07**	4.90	0.002

Scores are based on a Semantic Differential rating scale of 1 – 5.
*signifies highest score of any group for that factor
**signifies lowest score of any group for that factor

TABLE 3
Customer Difference Between Strategic Groups

Customers Who Are	Clusters 1	2	3	4	5	F	Sig.
Price sensitive	4.10	3.86	2.46	3.50	3.00	5.10	0.00
Brand conscious	3.13	3.00	4.35	4.50	3.33	4.53	0.00
Willing to pay for extra services	2.87	2.57	4.00	3.75	1.00	7.89	0.00
Willing to pay for shopping experience	2.94	2.64	4.00	4.50	1.00	7.35	0.00

Scores are based on a Semantic Differential rating scale of 1 – 5, 5 being highest, and 1 being lowest.

TABLE 4

Market Segment	Clusters 1	2	3	4	5	F	Sig.
Easy to enter our segment	2.19	2.64	2.30	4.50	1.60	3.20	0.019
Easy to replicate strategy of successful retailer	2.00	2.42	1.92	4.00	1.67	2.89	0.030
Easy to sustain successful strategy	2.29	2.79	2.39	2.50	1.12	1.44	0.233
Segment is very saturated	3.48	3.71	2.90	3.25	1.33	3.67	0.010
Growth rate in segment is very high	3.32	2.93	2.69	3.00	1.10	5.98	0.000
Segment is more profitable than other segments	3.10	2.93	3.23	4.00	1.11	6.87	0.000

Scores are based on a Semantic Differential rating scale of 1 – 5, 5 being highest, and 1 being lowest.

significantly different from each other on the four variables. The information in Table 3 is consistent with the strategy followed by firms in each cluster (strategic group). Firms in cluster 1 and 2 are following the low cost strategy, and consistent with that, the customers of cluster 1 and 2 have the highest score on the issue of price sensitivity. Clusters 3 and 4 have the highest scores on brand consciousness, willing to pay extra for services and shopping experience, which is consistent with the focus/niche and differentiation strategy of the two clusters. Finally, cluster 5 has scores that are in the middle for all of the four variables signifying that firms belonging to cluster five are stuck in the middle.

Next, hypotheses three and four are tested. Hypothesis three states that there are mobility barriers between strategic groups, but these mobility barriers will be overcome if the benefits (profits) are greater than the costs of overcoming these barriers. To this end respondents were asked how easy it was to enter their segment, replicate strategy of a successful retailer and sustain the successful strategy.

Table 4 shows the results. Table 4 shows that cluster 4 has the highest score on ease of entry to its segments and the highest score on ease in replicating a successful strategy. Cluster 4 has the second highest score on sustaining a successful strategy. Firms within this strategic group also say that their segment is the most profitable segment in the industry. This supports hypothesis three that it is easy to enter a highly profitable segment, and replicate the strategy of companies in that segment if the benefits (profits) of entering the segment far outweigh the costs of entry.

Hypothesis four states that there is no relationship between strategic groups and their performance, i.e., profitability does not depend on group membership. All groups may be more or less equally profitable in the long run. Respondents were asked about the profitability of their segment. Table 4 shows that cluster four is the most profitable segment, while cluster 5 is the least profitable segment, and the difference is statistical at the 0.05 level. Thus, hypothesis four is rejected. However, it should also be noted that this may be a short term phenomenon since firms that are part of strategic group four also state that it is easy to enter their segment and replicate the strategy of a successful retailer in their segment. It is very likely that in the long run the more highly profitable strategic group will entice new entrants and this higher profitability will be negated. A long term longitudinal analysis could show different results.

DISCUSSION, CONCLUSION AND MANAGERIAL RECOMMENDATIONS

This paper attempts to clear the confusion surrounding the concept of strategic group, especially the definition of the term, the rationale for the existence of strategic groups, competition within and among strategic groups, and finally, the relationship between group membership and performance of the different strategic groups.

In the view of this author, the area of strategic groups is still unexplored in marketing and the author encourages researchers to study this area in depth from the perspective of strategic marketing, especially strategic groups based on market related strategies. For instance, researchers may want to study how easy or difficult it is for companies to jump from one strategic group to another. Are some barriers easier to overcome than others? Are the mobility barriers in some industries based on perceptions of consumers? Or are barriers based on technical capability, resources, etc. This type of evaluation will help a firm if it is trying to invade another strategic group. Before invading any strategic group, firms should try to find out what mobility barriers they will be confronted with, and what they should do in order to overcome those barriers. In some instances it may be very difficult to invade a strategic group, while in some cases it may be relatively easy. For instance, in some consumer goods industries the mobility barriers may be consumer perceptions while in the high technology industrial product industries it may be technical expertise. It all depends on the nature of the industry. A thorough analysis of the mobility barriers in their respective industries will prevent firms from making such mistakes, which might end up costing them enormous resources in terms of time and money, and maybe humiliation in the marketplace.

Scholars can also study the relationship between group membership and profitability under different market conditions. For instance, is the relationship between performance and strategic group membership affected by different market conditions? Will a strategic group following a low cost strategy be more profitable and successful in a mature market while the strategic group following a differentiation strategy will be more profitable if the market is in growth?

Another area related to strategic groups that researchers may want to explore is the issue of market leadership within the industry versus leadership with a strategic group. This author believes that the phrase "market leader" has been used quite loosely in business. As far as marketing goes, the term market leader should be used based on leadership within a strategic group rather than the whole industry. Thus, even though General Motors may be the market leader in the auto industry, it is not the market leader in each strategic group (segment).

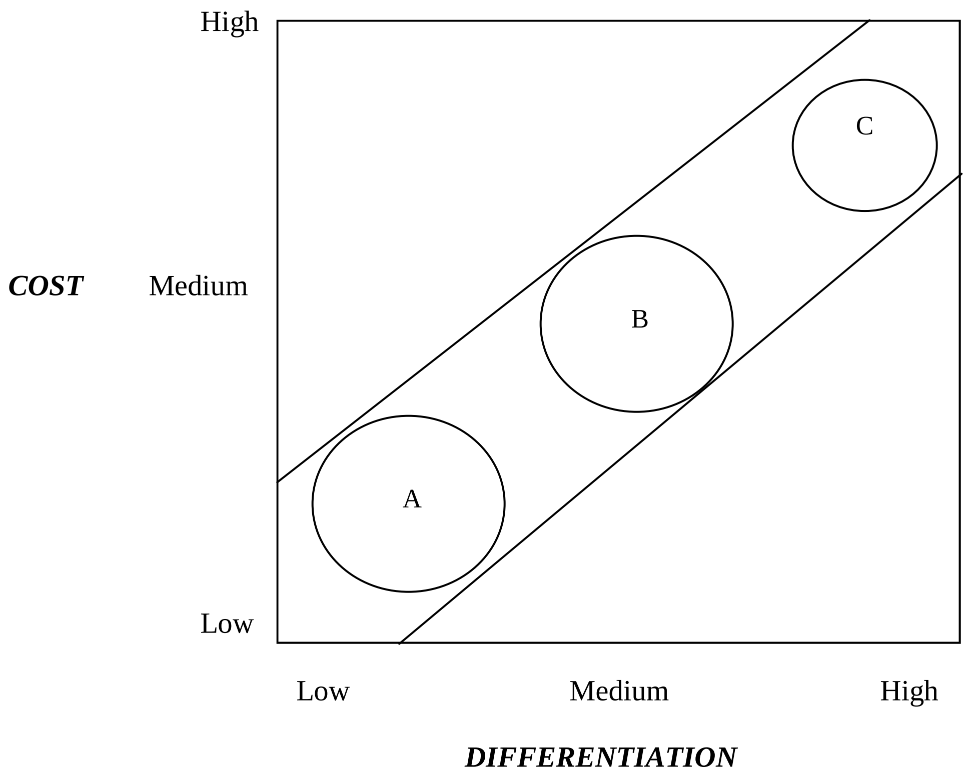
Researchers may want to explore whether the industry leader will be the leader in each strategic group. This author believes that the industry leader will not be the leader in each strategic group. For instance, if the industry leader wants to invade and enter a strategic group, will it be able to become the leader in that new strategic group? Can Wal-Mart (which is the industry leader) be the market leader in the upscale fashion apparel retail industry, or the electronics retailing industry? What determines who will be the market leader? Good Resources? Good strategy? The evidence seems to be mixed here. In the auto industry, Toyota, with fewer resources than Daimler-Chrysler overtook Mercedes Benz as the market leader in the luxury segment in the U.S. and is now on track to become the market leader in the auto industry, beating General Motors for the top spot.

Figure 1 shows a strategic map. It is a graphical representation of strategic groups in an industry. The horizontal axis measures differentiation and the vertical axis measures cost. Both axes have three categories – low, medium, and high. Firms using the strategy of cost leadership (low cost) will be grouped in the lower left hand corner – similar to circle A. Firms following the strategy of differentiation will find themselves somewhere in the middle – similar to circle B. Finally, firms that follow the strategy of focus/niche will find themselves grouped in the upper right hand corner, similar to C. The strategic map may look different for an emerging or mature industry.

These strategic groups will have a tendency to form along a diagonal band, as shown by the figure. However, the shape and size of the circles may be different depending on the stage of the life cycle of the industry. For instance, if the industry is mature, the circles may be more oval and stretched out in both directions, rather than circular since there may be a tendency by the strategic groups to emulate the strategy of the group closest to it. Or there may be more than the three strategic groups. As can be seen in the figure, there are no strategic groups outside the diagonal band. Consumers may perceive strategies of companies that lie outside the diagonal band to be contradictory, and inconsistent. Firms may also not be able to make such strategies work. For instance, if a firm tried to pursue a strategy of high differentiation and low cost, then this may not be feasible from a business point of view and also may be perceived as contradictory by consumers.

These examples may help understand this concept. In the retail industry, firms like Wal-

FIGURE 1
Strategic Map



A = Low Cost B = Differentiation C = Niche

Mart, K-Mart, etc., will comprise the low cost strategic group. Retailers like Sears, JC Penney, Mervyn's, Target, etc., will fall somewhere in the middle signifying the strategy of differentiation, and finally, stores like Neiman Marcus, Nordstrom, etc., would be in the upper right hand corner using the niche strategy. Similarly, if one were to look at the auto industry, cars like Bentley, Lamborghini, Ferrari, etc., will comprise the niche group, while cars like Honda Accord, Toyota Camry, Ford Taurus, etc., make up the differentiation group, and cars like Mercedes Benz, BMW, Jaguar, Cadillac, Infiniti, Lexus, etc., will make the upper differentiation strategic group, while cars like Kia, Hyundai, Geo, etc., comprise the low cost group.

This author thinks that even though the study of strategic groups has been going on for more than thirty years, this area still needs to be explored further. This study suffers from similar limitations as some other studies. The response rate was quite low. Maybe the length of the questionnaire discouraged prospective respondents. Also, the study was conducted using data from only one industry (retail). Future studies could overcome this problem by studying a diverse group of industries and hopefully having a higher response rate. Studies in the future could also refine the questionnaire.

REFERENCES

Athanassopoulos, Antreas D. (2003), "Strategic Groups, Frontier Benchmarking and Performance Differences: Evidence from the UK Retail Grocery Industry," *Journal of Management Studies,* 40 (4), June, 921-953.

Barney, J.B. and R.E. Hoskisson (1990), "Strategic Groups: Untested Assertions and Research Proposals," *Managerial and Decision Economics*, 11(3), 187-198.

Biggadike, Ralph, E. (1981), "The Contributions of Marketing to Strategic Management," *Academy of Management Review*, 6(6), 621-632.

Bogner, W., J. Mahoney and H. Thomas (1998), "Paradigm Shift: The Parallel Origin, Evolution, and Function of Strategic Group Analysis with the Resource-Based View of the Firm," *Advances in Strategic Management*, 15, 63-100.

Brown, Jeffrey A.. and Dennis C. Glennon (2000), "Cost Structures of Banks Grouped by Strategic Conduct," *Applied Economics*, 32 (12), October, 1591-1605.

Cappel, Sam D., Terry R. Pearson and Eric J. Romero (2003), "Strategic Group Performance in the Commercial Airline Industry," *Journal of Management Research*, August, 3 (2), 53-60.

Castle, Nicholas G. (2003), "Strategic Groups and Outcomes in Nursing Facilities," *Health Care Management Review*, 28 (3), 217-227.

Caves, R.E. and M.E. Porter (1977), "From Entry Barriers to Mobility Barriers: Conjectural Decisions and Contrived Deterrence to New Competition," *Quarterly Journal of Economics*, 91, 421-434.

_____ and Thomas Pugel (1980), *Intra-Industry Differences in Conduct and Performance: Viable Strategies in U.S. Manufacturing Industries*, New York University Monograph.

Chan-Olmsted, Sylvia M. and Jack C. C. Li (2002), "Strategic Competition in the Multichannel Video Programming Market: An Intraindustry Strategic Group Study of Cable Programming Networks," *Journal of Media Economics*, 15 (3), 153-174.

Chang, Wen-Chih and Yen Hsu (2005), "Strategic Groups, Performance, and Issues Related to Product Design Strategy," *International Journal of Innovation Management*, 9 (2), 133-154.

Churchman, Richard L. and Beth Woodward (2004), "Strategic Group Stability: Evidence from the Health Care Industry," *Health Care Management Review*, 29 (2), 139-149.

Cool, K. (1985), "Strategic Group Formation and Strategic Group Shifts: A Longitudinal Analysis of the U.S. Pharmaceutical Industry, 1963-1982," doctoral dissertation, Purdue University.

Cool, K. and D. Schendel (1987), "Strategic Group Formation and Performance: The Case of the U.S. Pharmaceutical Industry, 1963-1982," *Management Science*, September, 1102-1124.

_____ and _____ (1988), "Performance Differences among Strategic Group Members," *Strategic Management Journal*, 9(3), 207-223.

_____ and Ingemar Dierickx (1993), "Rivalry, Strategic Groups, and Firm Profitability," *Strategic Management Journal*, 14, 47-59.

Coombs, James G., David J. Ketchens Jr. and Vera L. Hoover (2004), "A Strategic Groups Approach to the Franchising-Performance Relationship," *Journal of Business Venturing*, *19* (6), November, 877-897.

Curry, Bruce, Fiona Davies, Paul Phillips, Martin Evans and Luiz Moutinho (2001), "The Kohonen Self-Organizing Map: An Application to the Study of Strategic Groups in the UK Hotel Industry," *Expert Systems*, 18 (1), 19-31.

Dess, G. G. and P. S. Davis (1984), "Porter's (1980) Generic Strategies as Determinants of Strategic Group Membership and Organizational Performance," *Academy of Management Journal*, 27, 467-488.

Duysters, Geert and John Hagedoorn (1995), "Strategic Groups and Inter-Firm Networks in International High-Tech Industries," *Journal of Management Studies*, 32 (3), 359-382.

Feka, V. and D. Xouris (1997), "Mapping Strategic Groups: An International Example," *Journal of Business and Industrial Marketing*, 12 (1), 66-76.

Ferguson, Tamela D., Davie L. Deephouse and William L. Ferguson (2000), "Do Strategic Groups Differ in Reputation," *Strategic Management Journal*, 21 (12), 1195-1215.

Fiegenbaum, Avi, D. Sudharshan and Howard Thomas (1990), "Strategic Time Periods and Strategic Groups Research: Concepts and an Empirical Example," *Journal of Management Studies*, 133-148.

_____ and Howard Thomas (1990), "Strategic Groups and Performance: The U.S. Insurance Industry, 1970-84," *Strategic Management Journal*, 11, 197-215.

Flavian, Carlos, Adrian Habergerg and Yolanda Polo (1999), "Subtle Strategic Insights from Strategic Group Analysis," *Journal of Strategic Marketing*, 7, 89-106.

_____ and Yolanda Polo (1999), "Strategic Group Analysis as a Tool for Strategic Marketing," *European Journal of Marketing*, 33 (5/6), 548-570.

Galbraith, Craig S., Gregory B. Merrill and George Morgan (1994), "Bilateral Strategic Groups: The Market for No Tactical Navy Information Systems," *Strategic Management Journal*, 15, 613-626.

Gonzalez-Fidalgo, Eduardo and Juan Ventura-Victoria (2002), "How Much do Strategic Groups Matter?" *Review of Industrial Organization*, 21 (1), 55-72.

Harrigan, Kathryn Rudie (1980), *Strategies for Declining Industries*, Lexington Books, D. C. Heath, Lexington, Massachusetts.

_____ (1985), "An Application of Clustering for Strategic Group Analysis," *Strategic Management Journal*, 6, 55-73.

Hatten, K.J. (1974), "Strategic Models in the Brewing Industry," *doctoral dissertation*, Purdue University.

_____ and M.L. Hatten (1987), "Strategic Groups, Asymmetrical Mobility Barriers and Contestability," *Strategic Management Journal*, 8(4), 329-342.

_____ and D. E. Schendel (1977), "Heterogeneity within an Industry," *Journal of Industrial Economics*, 26 (2), December, 97-113.

_____, _____ and A. C. Cooper (1978), "A Strategic Model of the U.S. Brewing Industry: 1952-1971," *Academy of Management Journal*, 21 (4), 592-610.

Hawes, J. M. and W. F. Crittenden (1984), "A Taxonomy of Competitive Retailing Strategies," *Strategic Management Journal*, 5 (3), July-September, 275-289.

Hergert, M. (1983), "The Incidence and Implications of Strategic Groupings in U.S. Manufacturing Industries," *doctoral dissertation*, Harvard University.

Howell, R.D. and G.L. Frazier (1983), "Business Definition and Performance," *Journal of Marketing*, 47, Spring, 59-67.

Hoyt, James and Sherman Hugh (2004), "Strategic Groups, Exit Barriers and Strategy Decision Constraints in High-Tech Companies," *Journal of High Technology Management Research*, 15 (2), August, 237-248

Hunt, M. S. (1972), "Competition in the Major Home Appliance Industry 1960-1970,"*doctoral dissertation*, Harvard University.

Itami, H (1988), *Mobilizing Invisible Assets*, Harvard University Press, Cambridge.

Jeho, Lee, Lee Kyungmook and Sangkyu Rho (2002), "An Evolutionary Perspective on Strategic Group Emergence: A Genetic Algorithm-Based Model," *Strategic Management Journal*, August, 23 (8), 727-747.

Karnani, A. (1984), "Generic Competitive Strategies-An Analytical Approach," *Strategic Management Journal*, 5(4), 367-380.

Lahti, A. (1983), *Strategy and Performance of a Firm: An Empirical Investigation in the Knitwear Industry in Finland in 1969-81*, Helsinki School of Economics, Helsinki.

Lawless, Michael W., Donald D. Bergh and William D. Wilsted (1989), "Performance Variations among Strategic Group Members: An Examination of Individual Firm Capability," *Journal of Management*, 15 (4), 649-661.

Leask, Graham, and David Parker (2004), "An Application of Strategic Group Theory to the UK Pharmaceuticals Industry," *European Business Journal*, 1-9.

_____ and _____ (2006), "Strategic Group Theory: Review, Examination and Application in the UK Pharmaceutical Industry," *Journal of Management Development*, 25 (4), 386-408.

_____ and John A. Parnell (2005), "Integrating Strategic Groups and the Resource Based Perspective: Understanding the Competitive Process," *European Management Journal*, 23 (4), 458-470.

Lewis, P. and H. Thomas (1990), "The Linkage between Strategy, Strategic Groups, and Performance in the U.K. Retail Grocery Industry," *Strategic Management Journal*, 11, 385-397.

McGee, J. and H. Thomas (1986), "Strategic Groups: Theory, Research & Taxonomy," *Strategic Management Journal*, 7(2), 141-160.

_____, _____ and Mark Pruett (1995), "Strategic Groups and the Analysis of Market Structure and Industry Dynamics," *British Journal of Management*, 6, 257-270.

McNamara, Gerry, Rebecca A. Luce and George H. Thompson (2002), "Examining the Effect of Complexity in Strategic Group Knowledge Structures on Firm Performance," *Strategic Management Journal*, 23 (2), 153-171.

_____, David L. Deephouse and Rebecca A. Luce (2003), "Competitive Positioning within and across a Strategic Group Structure: The Performance of Core. Secondary and Solitary Firms," *Strategic Management Journal*, 24 (2), 161-182.

Marlin, Dan, John W. Huonker and Sun Minghe (2002), "An Examination of the Relationship between Strategic Group Membership and Hospital Performance," *Health Care Management Review*, 27 (4), 18-29.

Mas Ruiz, Francisco J. (1998), "Dynamic Analysis of Competition in Marketing Strategic Groups in Spanish Banking," *European Journal of Marketing*, 32 (3/4), 252-279.

_____ (1999), "Dynamic Analysis of Competition in Marketing: Strategic Groups in Spanish Banking," *International Journal of Bank Marketing*, 17(5), 233-250.

_____ (2000), "The Supplier-Retailer Relationship in the Context of Strategic Groups," *International Journal of Retail & Distribution Management*, 28 (2), 93-106.

_____, Juan L. Nicolau-Gonzalbez and Filipe Ruiz-Moreno (2005), "Asymmetric Rivalry between Strategic Groups: Response, Speed of Response and Ex Ante vs. Ex Post Competitive Interaction in the Spanish Bank Deposit Market," *Strategic Management Journal*, 26 (8), 713-745.

Mascarenhas, Briance and David A. Aaker (1989), "Mobility Barriers and Strategic Groups," *Strategic Management Journal*, 10, 475-485.

Mehra, Ajay (1994), Strategic Group: A Resource Based Approach," *Journal of Socio-Economics*, 23 (4), 425-440.

_____ and Steven W. Floyd (1999), "Product Market Heterogeneity, Resource Imitability and Strategic Group Formation," *Journal of Management*, 24 (4), 511-531.

Menor, Larry, J., Aleda V, Roth and Charlotte H. Mason (2001), "Agility in Retail Banking: A Numerical Taxonomy of Strategic Service Groups," *Manufacturing & Service Operations Management*, 3 (4), Fall, 273-292.

Miles, R.E. and C.C. Snow (1978), *Organizational Strategy, Structure, and Process*, New York: McGraw-Hill.

Nair, Anil and Suresh Kotha (2001), "Does Group Membership Matter? Evidence from the Japanese Steel Industry," *Strategic Management Journal*, 22, 221-235.

_____ and Larry Filer (2003), "Co-integration of Firm Strategies within Groups: A Long Run Analysis of Firm Behavior in the Japanese Steel Industry," *Strategic Management Journal*, 24 (2), 145-160.

Nath, Deepika and Thomas S. Gruca (1997), "Convergence Across Alternative Methods for Forming Strategic Groups," *Strategic Management Journal*, 18:9, 745-760.

Nayyar, P. (1989), "Strategic Groups: A Comment," *Strategic Management Journal*, 10(1), 101-103.

Newman, H. H. (1973), "Strategic Groups and the Structure/Performance Relationship: A Study with Respect to the Chemical Process Industries," *doctoral dissertation*, Harvard University.

_____ (1978), "Strategic Groups and Structure/Performance Relationship," *Review of Economics and Statistics*, 60, 417-427.

Nohria, Nitin and Carlos Garcia-Pont (1991), "Global Strategic Linkages and Industry Structure," *Strategic Management Journal*, 12, 105-124.

Osborne, J. David, Charles Stubbart and Arkalgud Ramprasad (2001), "Strategic Groups and Competitive Enactment: A Study of Dynamic Relationships between Mental Models and Performance," *Strategic Management Journal*, May, 22 (5), 435-455.

Oster, Sharon (1982), "Intra-industry Structure and the Ease of Strategic Change," *Review of Economics and Statistics*, 64 (3), August, 376-384.

Oustapassidis, Kostas (1998), "Performance of Strategic Groups in the Greek Industry," *European Journal of Marketing*, 31 (11/12), 936-973.

Panagiotou, George (2006), "The Impact of Managerial Cognitions on the Structure-Conduct-Performance (SCP) Paradigm: A Strategic Group Perspective," *Management Decision*, 44 (3), 423-441.

Panayides, Photis, M. (2002), "Identification of Strategic Groups Using Relationship Marketing Criteria: A Cluster Analytic Approach in Professional Services," *The Service Industries Journal*, 22 (2), 149-166.

Peng, Mike W., Justin Tan and Tony W. Tong (2004), "Ownership Types and Strategic Groups in an Emerging Economy," *Journal of Management Studies*, 41 (7), 1105-1129.

Peteraf, M, and M. Shanlery (1997), "Getting to Know You: A Theory of Strategic Group Identity," *Strategic Management Journal*, Special Issue, 18, 165-186.

Porac, J., H. Thomas, F. Wilson, D. Paton and A. Kanfer (1995), "Rivalry and the Industry Model of Scottish Knitwear Manufacturers," *Administrative Science Quarterly*, 40, 203-227.

Porter, Michael E (1973), "Consumer Behavior, Retail Power, and Manufacturing Power, and Manufacturer Strategy in Consumer Goods Industries," *doctoral dissertation*, Harvard University.

_____ (1979), "The Structure within Industries and Companies' Performance," *Review of Economics and Statistics*, 61, 214-227.

_____ (1985), *Competitive Advantage: Creating and Sustaining Superior Performance*, The Free Press, New York.

_____ (1998), *Competitive Strategy*, The Free Press, New York.

Primeaux, Walter, J. Jr. (1985), "A Method for Determining Strategic Groups and Life Cycle Stages of an Industry," in H. Thomas and D.M. Gardner (eds.) *Strategic Marketing and Management*, John Wiley, Chichester.

Reger, R. K., and A. Huff (1993), "Strategic Groups: A Cognitive Perspective," *Strategic Management Journal*, 14(2), 103-124.

Short, Jeremy C., Timothy B. Palmer and David J. Ketchen, Jr., (2002), "Resource-Based and Strategic Group Influence on Hospital Performance," *Health Care Management Review*, 27 (4), 7-17.

Smith, Ken G., Curtis M. Grimm, Stefan Wally and Greg Young (1997), "Strategic Groups and Rivalrous Firm Behavior: Towards a Reconciliation," *Strategic Management Journal*, 18 (2), 149-157.

Spencer, Barbara, Joseph Peyrefitte and Richard Churchman (2003), "Consensus and Divergence in Perceptions of Cognitive Strategic Groups: Evidence from the Health Care Industry," *Strategic Organization*, May, 1 (2), 203-230.

Tang, M. and H. Thomas (1992), "The Concept of Strategic Groups: Theoretical Construct or Economical Convenience," *Managerial and Decision Economics*, (13), 323-365.

Thomas, Howard and N. Venkatraman (1988), "Research in Strategic Groups: Progress and Prognosis," *Journal of Management Studies*, 15:6, November, 537-555.

Wen-Long, Chang and Jasmine Yi-Hsuan Hsin (2006), "The Study of the Motivation and Performance of the Incubators' Strategic Alliances: Strategic Groups Perspective," *Journal of American Academy of Business,* 8 (2), 126-133.

Wiggins, Robert R. and Timothy W. Ruefli (1995), "Necessary Conditions for the Predictive Validity of Strategic Groups: Analysis without Reliance," *Academy of Management Journal,* 38 (6), December, 1635-1657.

Zuniga-Vincente, Jose Angel, de la Fuente-Sabate Juan Manuel and Isabel Suarez-Gonzalez (2004), "Dynamics of the Strategic Group Membership-Performance Linkage in Rapidly Changing Environment," *Journal of Business Research,* 57 (12), December, 1378-1390.