The Theory of Multimarket Competition: A Synthesis and Implications for Marketing Strategy

Multimarket competition refers to competitive situations in which the same firms compete against each other in multiple markets. The theory of multimarket competition suggests that the phenomenon of mutual forbearance may reduce the market-level intensity of competition between two firms when the multimarket contact between them (the number of markets in which they compete) increases. Mutual forbearance, a form of tacit collusion in which firms avoid competitive attacks against those rivals they meet in multiple markets, is proposed to occur because multimarket competition increases the familiarity between firms and their ability to deter each other. In this article, the authors examine how multimarket contact increases familiarity and deterrence. Furthermore, they provide an extension of the theory of multimarket competition by developing a conceptual model that identifies competitive and market factors that moderate the relationship between the degree of multimarket contact and the intensity of competition. The authors also examine the implications of multimarket competition for marketing strategy in the context of two marketing strategy issues: product line rivalry and entry strategy.

Interfirm rivalry, the extent to which firms compete against each other in a specific market through actions and reactions, influences their ability to gain and sustain competitive advantage (Dickson 1992; Porter 1980). Analysis of interfirm rivalry, an integral part of marketing strategy research, traditionally has been conducted by examining market structure characteristics (e.g., concentration, entry barriers), marketing strategy variables (e.g., product differentiation), and characteristics of firms such as size and resources (for example, see Buzzell and Gale 1987; Robinson 1988). In an attempt to gain richer insights into this phenomenon, marketing scholars in recent years have focused on the behavioral aspects that drive interfirm rivalry and on competitive decision making influenced by such rivalry (e.g., Clark and Montgomery 1996; Day and Nedungadi 1994; Heil and Robertson 1991; Mullins and Walker 1996). In that tradition, we examine how multimarket or multipoint competition, “a situation where firms compete against each other simultaneously in several markets” (Karnani and Wernerfelt 1985, p. 87), affects the competitive behavior of firms. The following example is illustrative of multimarket competition.

America West, a U.S.-based regional airline, started flights from Houston, Tex., with low introductory fares. In November 1989, Continental Airlines, the dominant airline in Houston, retaliated against this “attack” by lowering prices. However, instead of lowering prices for flights originating from Houston, Continental Airlines lowered prices for flights out of Phoenix, Ariz., America West’s hub and dominant served market. Furthermore, Continental Airlines, in posting the lower fares on computerized reservation systems, used a fare code intended to communicate its displeasure with and response to America West’s low-priced entry into Houston. Subsequently, America West withdrew its low introductory fare in the Houston market, following which Continental Airlines withdrew its low fare promotion in the Phoenix market (Nomani 1990).1

The competitive interchange between these two airlines has an interesting characteristic: A competitive attack by a firm in the focal market of another firm sparked a reaction by the latter in the attacker’s focal market. Competitive interactions of this type are common in multimarket competition. Such competition is becoming prevalent in an increasing number of industries, such as the global tire industry (Gimeno 1994); sets of related industries such as telephone and cable (Keller 1993; Parker and Roller 1997); and industries characterized by geographically distinct markets such as airlines, banks, and supermarket chains (Gimeno 1994). The increase in multimarket competition can be attributed to the increase in related product diversi-

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1Continental Airlines and America West subsequently entered into a code-sharing arrangement, an alliance in which they coordinate their flight schedules on certain routes and feed passengers into each other’s connecting flights.
Multimarket Competition and Interfirm Rivalry: The Mutual Forbearance Hypothesis

Multimarket Competition and Mutual Forbearance

The roots of the theory of multimarket competition can be traced to industrial organization economics (e.g., Bernheim and Whinston 1990; Edwards 1955) and sociology (Simmel 1950). It is a quickly evolving stream of literature in strategic management (e.g., Chen 1996; Gimeno and Woo 1996; Karnani and Wernerfelt 1985) and population ecology (e.g., Barnett 1993; Baum and Korn 1996). The focus of the theory is interfirm competition (Baum and Korn 1996). Multimarket competition research envisions a firm occupying a potentially unique market domain that is defined by activities in various geographic-product markets. There are many different ways of defining markets (for example, see Rao and Steckel 1998, pp. 120–24). For the purpose of this article, a geographic market is defined as the lowest geographic unit that comes under the jurisdiction of a manager who has decision-making authority over any of the competitive strategy variables that might be employed in the context of competitive actions and reactions. For example, an individual sales territory could be the lowest geographic unit if the sales manager in charge of the territory has the authority to initiate actions along competitive strategy dimensions, such as price or advertising, to compete in that market. A product market is a set of goods or services that serves similar functions, is created by the use of similar technology, and is used by similar consumers (Abell 1980). The intersection of geographic and product markets constitutes a geographic-product market. The market domain of a firm is the set of geographic-product markets in which it operates. For example, if a firm operates in two geographic markets with two products, its market domain will comprise four geographic-product markets.

If the market domains of competing firms overlap in multiple geographic-product markets, the firms are engaged in multimarket competition. The extent of market domain overlap is characterized by the degree of multimarket contact. Multimarket contact between two firms is the aggregation of all contacts between them in geographic-product markets (Gimeno and Woo 1996). A contact occurs when two firms compete in the same geographic-product market. As the degree of multimarket contact between two firms increases, they are likely to become more interdependent. That is, the outcome of actions initiated by a firm becomes more contingent on the actions and reactions of its rivals. Furthermore, increasing multimarket contact provides firms with more opportunities to compete against each other and retaliate in different markets. The degree of such rivalry is captured by the intensity of competition between firms, defined as the aggressiveness and speed of the actions and reactions they initiate to compete in the market (Chen 1996). Intensity of competition is reflected in frequent and aggressive changes in marketing mix variables (Chen 1996), such as prices and advertising, that influence profit margins (Gimeno and Woo 1996, 1999).

Although multimarket competition increases the opportunity that rivals have to compete with each other, the greater market overlap may not translate into higher intensity of competition. On the contrary, the theory of multimarket competition suggests that the intensity of competition between firms with overlapping market domains may be dampened by a phenomenon known as “mutual forbearance” (Baum and Korn 1996, 1999; Clark and Montgomery 1997; Edwards 1955; Gimeno 1994; Gimeno and Woo 1996; Karnani and Wernerfelt 1985), which we discuss next.
Mutual forbearance. Mutual forbearance is tacit collusion as a consequence of firms competing in many markets and the resulting increase in their interdependence. Tacit collusion, as opposed to direct collusion, which is illegal, is a situation in which two firms understand each other’s motives and strategies and implicitly coordinate to avoid competing intensely. Extant theory suggests that two different processes may be responsible for mutual forbearance as a result of higher degrees of multiamarket contact: familiarity (Baum and Korn 1999) and deterrence (Bernheim and Whinston 1990; Edwards 1955; Porter 1980). Familiarity is the extent to which tacit coordination is enhanced by a firm’s awareness of the capabilities and actions of a rival. Deterrence is the extent to which a firm is able to prevent its rivals from initiating aggressive actions that may be harmful to its interests in the market. It is a consequence of the ability of the firm to cause its rivals serious financial loss by retaliating aggressively to their actions. In the next section, we examine the impact of multiamarket competition on familiarity and deterrence to elucidate how multiamarket competition engenders mutual forbearance.

In this article, the scope of actions and reactions that are likely to be constrained by multiamarket competition is limited to the type of actions that are undertaken repeatedly by firms, such as promotional activities (consumer and trade sales promotions, sales force incentives, advertising campaigns, and so forth). Competitive actions of firms in the realm of more fundamental research and development-driven innovations might not be constrained by multiamarket competition, because it is unlikely that firms would hold back on introducing dominant technological breakthroughs due to mutual forbearance. Such Schumpeterian breakthroughs would change the very nature of competitive advantage in the marketplace in favor of the innovating firm by allowing it to differentiate its offerings substantially from those of its rivals. Firms might be inclined to view mutual forbearance as preferable to the alternative of all-out rivalry, but surely not as a preferable alternative to dominating a market by introducing potentially valuable radical innovations.2

Multimarket Contact and Familiarity

Familiarity between rivals is likely to influence the extent to which firms engage each other with actions and reactions (Chen and Miller 1994). In the complex environment that characterizes most markets (with many firms), it becomes virtually impossible for firms to garner all information about rivals and become familiar with them. In effect, the information available to firms about the competitive environment rarely meets the information requirements for competing effectively, because firms are complex entities with a large number of action variables available to them. In such complex decision arenas, firms construct imperfect versions of the external competitive reality, and these socially constructed versions of competition may guide decisions and strategies much more than “objective reality” (Porac and Rosa 1996).

The social construction of rivalry implies that firms might not, as a matter of routine, realize their interdependence with other firms and often might engage in competitive actions with little consideration as to how these actions influence their rivals or how their rivals may respond. For firms to realize that their market actions and fortunes are interdependent with those of other firms (which then become rivals), it is necessary for them to become aware of these firms and then recognize that their market fortunes overlap. This awareness is a function of the market assessment activities undertaken by firms and would involve collecting information, assimilating this information, identifying rivals, and comparing strengths and weaknesses with those rivals. When firms collect information about the market, multiamarket rivals may receive greater attention than those rivals encountered in fewer markets. Consequently, firms may become more familiar with the strategies, capabilities, and actions of multiamarket rivals. Multiamarket competitors thus may become more salient rivals than those firms that are encountered in fewer markets. For example, with higher degrees of multiamarket contact, the firms involved would have more common prior experiences in competitive engagements. Such experiences get captured in the collective memory of the firm as “war stories” (see Weick 1995), further enhancing the firm’s beliefs regarding the competitive characteristics of that rival. This familiarization process therefore determines the history of competition between firms in a market. Competitive history encompasses incumbents’ reputation for retaliation, their tactics and strategies, and the nature of their relationships with suppliers and clients (Grucza and Sudarshan 1995). When firms encounter each other in multiple markets, they are likely to share a much richer history of competition.

In effect, firms that are encountered in many markets are more likely to figure as important rivals than firms that are encountered in fewer markets. Therefore, multiamarket contact facilitates mutual learning by providing these firms with the opportunity to become familiar with each other and recognize their interdependence—how the outcomes of a firm’s actions are influenced and, consequently, how its actions are constrained by the possibility of competitive reactions. However, as we noted previously, mere familiarity may not be sufficient to engender mutual forbearance. For mutual forbearance to occur, firms also need the ability to deter each other. Otherwise, powerful firms may have no incentive to refrain from aggressive rivalries with relatively weaker firms (Teece, Pisano, and Shuen 1997). The effect of multiamarket contact on deterrence is discussed next.

Multimarket Contact and Deterrence

Deterrence is a result of the ability of firms to cause serious financial damage to their rivals and occurs when firms hold credible threats of retaliation against each other. In such conditions, firms might not compete aggressively because the expected gains from aggressive moves may be lower than the future losses due to competitive retaliation. Furthermore, in contrast to familiarity, which is gained from prior interactions with a rival, deterrence requires future in-

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2The discussion relating to the scope of actions and reactions that might be constrained by multiamarket competition has benefited from the comments and suggestions of an anonymous reviewer.
teractions between the firms so that a response can be made to a current attack. In effect, it is the possibility of repeated interactions in the future that allows for retaliation and creates a link between the future payoffs for a firm and its present actions. This link is called “the shadow of the future” because “the future casts a shadow back upon the present, affecting current behavior patterns” (Parke 1993, p. 799). In effect, the knowledge that competitors can retaliate in the future against current attacks may prevent firms from undertaking aggressive actions (Heide and Miner 1992). For deterrence to take place effectively, firms should believe that their rivals have not only the ability to retaliate aggressively and hurt them, but also the opportunity to do so. Next, we discuss why multimarket competition is proposed to increase the ability of firms to deter each other by examining how it provides firms with greater ability and opportunity to hurt their rivals through retaliation.

Ability to hurt. In multimarket competition, the ability to retaliate in multiple markets implies that the future losses from multimarket warfare are likely to be considerably more than would be the case in a single-market context (Edwards 1955). The action that a firm takes in a particular geographic-product market (e.g., through a price promotion) may result in gains in that market, but also may cause much larger losses in other geographic-product markets. The possibility of higher losses arises because rivals may retaliate in many geographic-product markets to an action that the focal firm initiates in one geographic-product market. Therefore, relative to the single-market context, severe rivalry in multimarket competition may inflict much heavier losses on firms.

Opportunity to hurt. Although the ability to hurt rivals is a necessary condition to cause deterrence, a firm also must perceive its rivals as having the opportunity to hurt it by retaliating. In the single-market context, retaliation is only possible in future interactions in that market. If the attacked market is one in which the firm has an important position, future retaliation in that market may even be a costly move for the attacked firm. In the case of multimarket competition, however, the larger number of markets of overlap provide more areas to retaliate against competitive attacks. Therefore, relative to the single-market competitive context, multimarket competition increases the opportunities for retaliation by extending the interdependence of firms from the time dimension (future) to the time and space dimensions (multiple markets). This extension enables firms to retaliate in markets in which response is less costly or more convenient for them.

Multimarket Contact and Intensity of Competition: The Mutual Forbearance Hypothesis

The foregoing discussions on (1) multimarket contact and familiarity and (2) multimarket contact and deterrence provide insights into how multimarket contact is capable of leading to reduced rivalry through mutual forbearance. As game theory suggests, the basic condition for mutual forbearance (tacit collusion) to be sustained would be for each firm to perceive (1) that the payoff of engaging in tacit collusion or mutual forbearance is likely to be greater than what can be gained by reneging on an implicit agreement and (2) that other firms share the same belief (Schelling 1960). By increasing the ability of firms to deter each other, multimarket competition may make the payoff from mutual forbearance more attractive than that from aggressive rivalry. By increasing the familiarity between firms, multimarket competition may make it easier for firms to realize that they share the same beliefs regarding the beneficial nature of mutual forbearance and to (implicitly) coordinate their expectations. As Schelling (1960) notes, what deters firms is not the aggressive retaliation that could arise when a rival initiates an action in a multimarket context, but rather the expectation that such retaliation could occur. If the firms involved in multimarket competition share this expectation (through increased familiarity), they may eschew aggressive competitive behavior.

In summary, the theory of multimarket competition draws a distinction between the breadth and intensity of rivalry between two firms. As a result of mutual forbearance, broad or multimarket rivals (firms that compete in many markets) may not be the most intense rivals in specific markets (Gimeno and Woo 1996). Mutual forbearance is defined at the interfirm level in specific geographic-product markets. That is, as a result of mutual forbearance, multimarket contact is proposed to affect the intensity of competition between firms within the various geographic-product markets in which they compete. The foregoing discussion describing the process through which multimarket competition influences interfirm rivalry is represented by the model shown in Figure 1. The model suggests that multimarket competition may endow firms with greater ability to deter each other from taking aggressive actions through a “thicker” shadow of the future. Furthermore, it may increase the level of familiarity that firms have of each other’s capabilities and expectations through a richer history of interaction. Increased deterrence and familiarity may lead to mutual forbearance, which lowers the intensity of competition between these firms. This discussion is summarized in the mutual forbearance hypothesis, as follows:

Mutual forbearance hypothesis: There will be an inverse relationship between the degree of multimarket contact between firms and the intensity of competition between them in specific geographic-product markets.

Multimarket Contact and Intensity of Competition: A Review of the Empirical Evidence

A summary of the empirical studies that focus on the impact of multimarket contact on the intensity of competition between firms is presented in Table 1. As is detailed in Table 1, the recent empirical evidence, by and large, lends support to the mutual forbearance hypothesis. However, the support for a negative relationship between the degree of multimarket contact and intensity of competition has not always been consistent. Some previous studies find multimarket contact unrelated to the intensity of competition between firms (e.g., Rhoades and Heggstad 1985). It is conceivable that the lack of support for the mutual forbearance hypothesis in previous research may be due to the use of cross-sectional...
Multimarket Contact and Intensity of Competition: A Process Model

- Multimarket contact between focal firm and rivals
- Larger number of interactions with rivals
- Better understanding of interdependence and overlapping market fortunes with rivals
- Greater attention to rivals in market scanning and competitor information acquisition
- Richer competitive history
- Increased familiarity
- Mutual forbearance
- Lower intensity of competition
- Thicker shadow of the future
- Ability to hurt
- Larger revenue exposure to rivals’ actions
- Opportunity to hurt
- Rivals’ opportunity to retaliate in multiple markets
- Lower expected payoff from rivalry
- Increased deterrence

Multimarket Contact and Intensity of Competition: A Contingency Model

Moderator variables affect the relationship between multimarket contact and intensity of competition between firms through the familiarity between firms and/or their ability to deter each other. Such moderating variables are typically characteristics of the competitive or market environment. Our discussion here focuses on the moderating effects of three competitive factors (spheres of influence, resource similarity, and organizational structure of competing firms) and one market factor (seller concentration) in the relationship between multimarket contact and intensity of competition. Spheres of influence refers to the extent to which different multimarket competitors have dominant market positions in different markets (Edwards 1955). Resource similarity is the extent to which the competing firms are comparable in terms of resource endowments, or resources critical for success in the market (Chen 1996). Organizational structure refers to the extent to which a firm is able to control and coordinate its actions jointly in multiple geographic-product markets. Seller concentration is a measure of the number of firms in a market and the pattern of dispersion of total industry sales among competitors in that market. A conceptual model delineating the moderating influences of these variables is presented in Figure 2 and discussed next.

**Spheres of Influence**

Spheres of influence occur when firms engaged in multimarket competition dominate different markets among those in which they overlap (Edwards 1955; McGrath, Chen, and...
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<td>Heggestad and Rhoades (1978)</td>
<td>187 local banking areas in 1972</td>
<td>Dep.: Rivalry measured as market share instability&lt;br&gt;Indep.: Count measure of multimarket contact&lt;br&gt;Controls: Concentration, growth, limited branding dummy, unit banking dummy</td>
<td>Multimarket contact reduces rivalry in banking areas.</td>
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<td>Scott (1982)</td>
<td>437 firms (among the 1000 largest) included in the FTC Line of Business data in 1974</td>
<td>Dep.: Profit/sale per Line of Business&lt;br&gt;Indep.: Probability of observing less contact and its dummy above the median value&lt;br&gt;Controls: Concentration, minimum efficient scale, advertising intensity, geographic market size, assets/sales, market share</td>
<td>Interaction between multimarket contact and concentration has a significant effect. Profits are approximately 3% higher when both seller concentration and multimarket contact are high.</td>
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<td>Alexander (1985)</td>
<td>67 market areas (banking) in six states</td>
<td>Dep.: Performance (service charge ratio in deposits, interest rate on loans)&lt;br&gt;Indep.: Multimarket contact</td>
<td>Quadratic interaction effects of multimarket contact with concentration were more significant.</td>
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<td>Feinberg (1985)</td>
<td>391 manufacturing companies in the FTC Line of Business Data for 1976</td>
<td>Dep.: Income/sales&lt;br&gt;Indep.: Multimarket contact&lt;br&gt;Controls: Company study: Market share, average sales per market, concentration, assets/sales, advertising ratio&lt;br&gt;Industry study: Diversification, assets/sales, advertising ratio, market growth, imports, minimum efficient scale, consumer focus, cost disadvantage ratio</td>
<td>Company study supports mutual forbearance hypothesis and finds a quadratic interaction with concentration. Industry study supports mutual forbearance hypothesis.</td>
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<td>Rhoades and Heggestad (1985)</td>
<td>A: Same as in Heggestad and Rhoades (1978)&lt;br&gt;B: 154 banking areas including 1074 banks&lt;br&gt;C: 210 banking areas with 1443 banks</td>
<td>Dep.: Industry performance variables&lt;br&gt;Dep.: Rivalry operationalized as change in rank&lt;br&gt;Dep.: Performance (For study B and C, other variables were the same as in Heggestad and Rhoades 1978)</td>
<td>The results were contrary to mutual forbearance hypothesis. No relationship to multimarket contact.</td>
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<td>Mester (1987)</td>
<td>171 savings and loan firms in California</td>
<td>Dep.: Rivalry measured as instability of market shares, and performance as firm profits and prices&lt;br&gt;Indep.: Multimarket contact as count and probabilistic measures</td>
<td>Contact affects behavior in 77.8% of cases. The interaction between contacts and concentration was more significant. Effects contradict mutual</td>
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Indep.: Concentration, dummy for airports with slot constraints, multimarket contacts among rivals, new entry dummy, labor strike dummy, deregulation dummy | Multimarket contact is related positively to rivalry. |
| Singal (1993) | 14 mergers among airline companies between 1984 and 1987 | Dep.: Yield per mile (performance), change in yield per mile  
Indep.: Multimarket contact | Multimarket contact has a significant positive effect on performance, thereby supporting mutual forbearance hypothesis. |
| Barnett (1993) | Life history of every firm that operated in the consumer premises equipment and service sector of the telephone industry in any state from 1981 to 1986 | Dep.: Exit rate from a market  
Indep.: Number of single-point and multipoint competitors | If market is critical for a firm, multimarket contact reduces rivalry. |
Indep.: Multimarket contact Controls: Concentration, minimum efficient scale, % imports, % exports, research and development intensity, diversification, growth rate, capacity utilization, capital stock, capital–output ratio, presence of foreign multinational enterprises | Multimarket contact has a significant positive effect on performance. |
| Evans and Kessides (1994) | 1000 largest routes in U.S. airline industry between 1984 and 1987 | Dep.: Log of average price  
Indep.: Direct flight, round-trip ticket, distance, route market share, concentration (route and airport), airport market share, multimarket contact | Multimarket contact has a significant positive effect on performance. |
| Baum and Korn (1996) | Data describing the route changes of California-based commuter air carriers from January 1979 through December 1984 | Dep.: Rate of market entry and exit  
Indep.: Market domain overlap, multimarket contact, concentration, spheres of influence | Multimarket contact has a strong positive effect on prices. |
| Gimeno and Woo (1996) | U.S. Department of Transportation data on 48 airlines across 3171 markets for fourth quarters from 1984 through 1988 | Dep.: Yield (average price charged divided by the distance of the market)  
Indep.: Multimarket contact, strategic similarity Controls: Service attributes, exogenous market characteristics, cost position, market structure | Multimarket contact and its interaction with spheres of influence are related significantly to lower entry and exit. However, the interaction of multimarket contact and concentration was insignificant. |
Indep.: Multimarket contact, concentration Controls: Price of inputs, capacity, size, age, process technology | Multimarket contact strongly decreases rivalry, whereas strategic similarity moderately increases rivalry. |
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| Multimarket contact has a greater positive effect on price as home market concentration increases. | Boeker et al. (1997) | 286 California-based hospitals from California Health Facilities Commission's annual disclosure survey (1980–1986) | Dep.: Market exit (as an indirect indicator of intensity of competition) 
Indep.: Multimarket contact (market overlap for specific service), mode of service, chief executive change, performance 
Control: Density, contracting, historic exit rate, statewide service density, medical doctors per capita, ownership, hospital size |
Indep.: Regulation (none, low, high), dummy variables for specific firms and competitors in specific markets, cross ownership, multimarket contact, first entrant's lead over the second entrant, age of the cellular system |
| Multimarket contact explains noncompetitive prices (as a result of lower intensity of competition). | Fernandez and Marin (1998) | 2221 hotel establishments in Spain | Dep.: Price 
Indep.: Multimarket contact, concentration 
Controls: Age, hotel category, quality distance, local wages, local demand |
| Multimarket contact has a positive effect on collusion at low levels of market concentration; negative effect at high levels of market concentration. | Baum and Korn (1999) | Data describing the route changes of California-based commuter air carriers from January 1979 through December 1984 | Dep.: Rate of market entry and exit 
Indep.: Multimarket contact, multimarket contact with a rival relative to the multimarket contact with other competitors, size of competitor 
Control: Focal airline characteristics, competitor airline characteristics, aggregate environmental characteristics |
| Multimarket contact has an inverted-U relationship with rate of entry and exit. Relative multimarket contact and the interaction of multimarket contact with firm size have significant effects on entry and exit. The rate of entry and exit were considered the aggregate measure of interfirm rivalry. | | | U.S. Department of Transportation data on 48 airlines across 2897 markets |
| | | Reciprocal multimarket contacts decrease rivalry and increase market share sustainability more than nonreciprocal multimarket contacts. | Gimeno and Woo (1999) |

U.S. Department of Transportation data on 28 airlines across 3000 markets from 1984 to 1988
When firms are involved in multimarket competition, their market position may not be similar in all overlapping markets. Differences may arise from factors such as differing area and levels of technological knowledge, specialization, and different transportation costs because of different plant locations (Bernheim and Whinston 1990; Gimeno 1999). This will result in spheres of influence, that is, different firms being dominant in different markets. If the firms that have multimarket contact also have different spheres of influence, this may accentuate the inverse relationship between multimarket contact and intensity of competition further (Baum and Korn 1996).

Consider, for example, a two-firm, two-market situation, in which Firms A and B compete against each other in markets X and Y, so that Firm A is dominant (the market leader) in Market X and Firm B is dominant in Market Y. If A attacks B in Market Y, B is likely to retaliate by attacking A in the market in which A has more to lose, namely, Market X. At the same time, Firms A and B will want to prevent severe rivalry in the markets they dominate, because if such an eventuality arises, the dominant firm is the one that has more revenue or profits at risk. This situation may lead to reciprocal tacit collusion, in which A will allow B to dominate Market Y as long as it is allowed to dominate Market X. In a way, the asymmetry of competitive market positions in different markets leads to symmetry in overall retaliatory capability for the firms. This, in turn, may enhance mutual forbearance and lower the intensity of competition between these firms. Spheres of influence limit rivalry by serving as mechanisms for the transfer of power; retaliatory power in one market can be deployed to sustain a dominant position in another market (Bernheim and Whinston 1990). In the absence of spheres of influence, Firm A may have no reason to cooperate with Firm B in Market Y. In effect, Firm B has transferred the power to retaliate against Firm A in Market X to enforce Firm A’s cooperation in Market Y. However, for spheres of influence to take effect, firms need credible threats of retaliation in each other’s dominant markets. footholds in rivals’ spheres of influence manifest themselves as credible threats (Karnani and Wernerfelt 1985).

Bernheim and Whinston (1990) suggest that it is spheres of influence that lead to the reduction in the intensity of competition in a multimarket scenario and that mere aggregation of contacts might not lead to mutual forbearance. However, it seems likely that aggregation of contacts, as described previously, will lead to mutual forbearance because of increased deterrence and familiarity. Spheres of influence will enhance deterrence because firms will be interested in protecting specific key markets from retaliatory moves by rivals and therefore may refrain from taking actions that are likely to provoke reactions in such markets. In effect, at a given level of multimarket contact among firms, the presence of different spheres of influence may make the firms even less prone to taking aggressive actions (Baum and Korn 1996). In such cases, firms would want to prevent multimarket competitive reactions that are targeted at their spheres of influence. Spheres of influence affect the relationship between multimarket contact and intensity of com-
petition by influencing the ability of firms to deter each other. This argument has received empirical support in Gimeno’s (1999) work.

**Proposition 1:** The negative relationship between the degree of multimarket contact and the intensity of competition between firms will be stronger in conditions of high resource similarity than in conditions of low resource similarity.

**Resource Similarity**

Resource similarity is the extent to which a firm’s tangible and intangible resource endowments (resources critical for success in the market) are comparable to those of its competitors. Resource similarity may affect interfirm rivalry because competitive advantage is derived from the ability of a firm to develop and sustain valuable resources that are different than those of its competitors (Teece, Pisano, and Shuen 1997). Consequently, firms with similar resources are likely to have similar strategic strengths and weaknesses in the marketplace (Chen 1996) and compete using similar strategies (Gimeno and Woo 1996).

As we noted previously, rivalry is a result of social constructions of the competitive environment by firms. Firms with similar resources may be more likely to view each other as significant competitors because they will be more alert to each other’s actions (Porac and Thomas 1990). However, this increased focus also means that these firms may be able to understand each other’s strategies and capabilities better and become more familiar with each other compared with firms that are less similar in terms of resource bundles. The ability of these firms to become familiar with each other is aided further by the likelihood that firms with similar resources will pursue similar strategies.

In addition, firms with similar resource bundles may be in a better position to sustain a cooperative arrangement, such as mutual forbearance, because they hold credible threats of retaliation against each other (Chen 1996). That is, firms with similar resource bundles may be able to deter each other better because they can match competitive actions, thus rendering the actions invalid (Teece, Pisano, and Shuen 1997). In signaling terms (Heil and Robertson 1991), a signal from a competitor endowed with similar resources is likely to be considered more credible than a signal from a competitor endowed with dissimilar resources. Consequently, regardless of multimarket contact, if one firm has a resource advantage over its rival, it may not be motivated to forbear from aggressive competition because of the perception that it can outmaneuver the competition, which cannot match its resources. Therefore, the ability of multimarket contact to reduce intensity of competition between firms becomes greater when the firms are similar in their resource endowments. Empirically, Baum and Korn (1999) find that size differential of firms, an indicator of resource dissimilarity, interacted with multimarket contact in influencing the rate of entry and exit in a market. In summary, resource similarity enhances the familiarity between multimarket competitors and increases the credibility of retaliation expectations, thus increasing the forbearance effects of multimarket contact.

**Proposition 2:** The negative relationship between the degree of multimarket contact and the intensity of competition between firms will be stronger in conditions of low resource similarity than otherwise.

**Organizational Structure of Competing Firms**

The preceding discussion makes it apparent that appropriate coordination and control among the different organizational units that manage the activities in the different geographic-product markets are critical for the effectiveness of multimarket strategies (Gimeno and Woo 1999). For example, consider Firm A and Firm B, which compete with each other in Markets X and Y, with different administrative units managing the operations of the firms in each market. For mutual forbearance to take place, the two firms should have administrative units that are willing and capable of coordinating their strategies across the two markets. That is, multimarket competition will lead to mutual forbearance and lower intensity of competition only if each firm achieves effective coordination between the administrative units that manage the operations in the two markets. In the absence of such intrafirm coordination, competition converges to market-by-market competition. Such competition may be less than optimal for overall firm performance. For example, an administrative unit within a firm, in its attempt to maximize its performance within its geographic-product market, may initiate actions that lead to multimarket retaliation by a better coordinated rival, which leads to losses in many markets, even if the administrative unit that initiates the original action benefits from the outcome. In effect, what is optimal behavior at the administrative unit level may be suboptimal at the firm level. Therefore, organizational structures that provide firms with the ability to coordinate actions across markets may improve their ability to deter rivals in a multimarket context. This discussion is summarized in Proposition 3:

**Proposition 3:** The negative relationship between the degree of multimarket contact and the intensity of competition between firms will be stronger when the firms have organizational structures characterized by a greater degree of coordination of actions across the units that manage decision making in the different markets than otherwise.

**Seller Concentration**

Seller concentration is a measure of the oligopolistic nature of the market and an important predictor of competitive behavior. It is often computed as the percentage of market sales accounted for by the largest few firms in the market (e.g., four- and eight-firm concentration ratios) or by the Herfindahl-Hirschman index, defined as the sum of squared market shares (Oster 1994). Multimarket con-

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3We gratefully acknowledge that organizational structure-related issues raised by two anonymous reviewers were instrumental in our refining the conceptual model and including organizational structure as a moderator variable.
tact may fail to sustain a tacit collusive arrangement, such as mutual forbearance, in conditions of low seller concentration. It is likely to have little additional effect on mutual forbearance when seller concentration is very high. In markets of moderate concentration, however, the impact of multimarket contact on intensity of competition is likely to be most pronounced. A more detailed discussion follows.

**Low seller concentration.** In conditions of low seller concentration, firms do not possess the ability to deter each other, because no firm has enough of a stake in the market (Areeda and Turner 1979). Furthermore, the difficulty that firms may encounter in becoming sufficiently familiar with each other when there are many competitors also suggests that multimarket contact may not be effective as a learning mechanism to ensure tacit collusion in fragmented markets. Moreover, retaliatory moves in less concentrated markets influence many firms, which may lead to escalation of rivalry rather than deescalation.

**High seller concentration.** In conditions of high seller concentration, because a significant share of the total market revenues will be dispersed among fewer firms, firms are more likely to refrain from intense rivalry because they would have sizable revenues and market shares at stake. For example, the absolute monetary loss from an aggressive price war may be higher compared with what it would be in conditions of low seller concentration. Therefore, the potential for higher losses that already exists when seller concentration is high, along with increased opportunities for retaliation, provides the motivation for deterrence in multimarket competition.

Furthermore, when seller concentration is high, firms have a higher likelihood of becoming more familiar with each other because, when faced with fewer competitors, they are likely to be able to monitor their competitors better (Porac and Rosa 1996). Implicit coordination of activities between firms therefore may be easier when familiarity enables them to recognize their interdependence. In effect, firms may not even require multimarket contact to become familiar with each other or attain a market position at which it serves the firm better to refrain from intense competition. That is, concentrated markets may provide firms with the necessary and sufficient conditions for mutual forbearance that multimarket contact provides—familiarity and deterrence—and thereby serve as a substitute for multimarket contact as far as creating conditions for tacit collusion is concerned. As a result, multimarket contact may have little additional effect on forbearance in concentrated markets.

**Moderate seller concentration.** In markets of moderate concentration, in which firms may lack the necessary power to deter rivals, as well as the necessary familiarity to coordinate activities tacitly, multimarket contact may be able to enhance both these conditions to foster mutual forbearance. Therefore, multimarket contact is more likely to ensure mutual forbearance in markets of moderate concentration (Areeda and Turner 1979; Bernheim and Whinston 1990) compared with markets of high or low concentration. In support of this argument, Alexander (1985), Feinberg (1985), and Gimeno, Marin, and Woo (1998) find a quadratic inter-

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**Implications for Marketing Strategy and Research**

The implications of multimarket competition for marketing strategy and research are discussed here in reference to two issues germane to marketing strategy: product line rivalry and market entry.

**The Multimarket Nature of Product Line Rivalry**

*Product line rivalry.* A *product line* is defined as “a group of products within a product class that are closely related because they function in a similar manner or are sold to the same customer groups or are marketed through the same types of outlets or fall within given price ranges” (Kotler 1994, p. 434). *Product line rivalry* is defined as the competitive actions and reactions taken by firms when they compete with one another using product lines. Firms often compete using product line strategies in multiple product markets. For example, the product line rivalry among the consumer products multinationals Colgate-Palmolive, Henkel, Procter & Gamble, and Unilever spans across a variety of geographic markets (e.g., several countries in Africa, Asia, Europe, North America, and South America) and product lines (e.g., laundry detergents, toiletries, household cleansers).

Product lines emerge as a result of intrafirm product differentiation. Product differentiation is the process by which marketing managers make a product physically and/or perceptually different from competing products. It is a generic strategy for achieving competitive advantage (Porter 1980). Often, firms introduce differentiated products within a product market as a growth strategy (to cater to varying consumer tastes or exploit economies of
scale and scope) or as an entry deterrent strategy (to prevent rivals from entering the market), thereby creating product lines (Oster 1994). When competing firms segment the market in similar ways, product line rivalry becomes a form of multimarket competition. This is explained next.

Product line rivalry and multimarket competition. Product line strategies associated with competing firms segmenting the market in similar ways is likely to bring firms into greater contact with each other, leading to increased multimarket competition. That is, the more similar the product lines of two firms, the greater the multimarket contact possibilities are, provided the firms operate in the same geographic markets. Product line similarity implies that firms have lines of similar breadth (number of products) targeted at similar market segments. Given the notion of similar product lines bringing firms into greater contact with each other, product line rivalry may be influenced by the characteristics of multimarket competition. When the product lines of two firms evolve to become more similar and their product markets increasingly overlap, the greater multimarket contact may reduce the intensity of competition between firms in a specific market. Furthermore, if different firms dominate different product markets (segments), these markets (segments) may serve the function of spheres of influence, thereby providing added motivation for the firms to reduce the intensity of competition.

However, before mutual forbearance takes effect, firms may extend their product lines and enter different markets. The motivation for this strategy normally is attributed to the desire of firms for growth or entry deterrence, but it also could follow from firms’ attempts to establish footholds in markets dominated by their rivals to signal their intent and ability to compete aggressively in those markets, if warranted (Karnani and Wernerfelt 1985). Therefore, firms may use product lines to establish footholds in the segments dominated by their rivals and deter these rivals from becoming overly aggressive in their own spheres of influence.

Although establishing these footholds may lead to retaliation and, in turn, to costs associated with combating such rivalry, firms still may establish footholds because they serve as credible commitments of retaliation to future attacks in their spheres of influence. Deterrence is often possible only if a firm establishes a credible commitment to respond should it be subjected to competitive attacks in its markets (Schelling 1960). A firm’s actual presence in a market is likely to be perceived by rivals as a more credible commitment of the firm’s potential to retaliate than the mere possibility that it may enter the market. Furthermore, actual presence may be required to highlight interdependence, through heightened familiarity, to prevent future attacks by a firm’s rivals. Therefore, even if a firm is aware that a competitor is likely to respond in kind to its attempts to establish a foothold in its competitor’s market, it still may attempt to do so because the cost of building these footholds may be considered lower than the cost of aggressive rivalry. Even if the original entry may have been with aggressive intent, a foothold retaliation may limit firms to deterring each other with limited presence in each other’s markets.

The pet food industry: An illustration of the multimarket nature of product line rivalry. The case of the U.S. pet food industry (Stuart 1991) provides additional insights into the multimarket nature of product line rivalry. The U.S. pet food industry consists of dog food in five segments (dry, semimoist, canned, snack, and soft-dry) and cat food in three segments (dry, moist, and canned). The industrywide market share leader in 1985 was Ralston Purina (26.9%), followed by Carnation Foods, a subsidiary of Nestlé (12.2%). The other leading players in the market were Kal Kan Foods, a subsidiary of Mars (8.4%); H.J. Heinz (7.8%); Quaker Oats (7.1%); Alpo Pet Foods, a subsidiary of Grand Metropolitan PLC (7.1%); and Gaines Pet Foods (6.6%).

The segmentwise market share figures (Maxwell 1986) reveal that different firms dominated different segments in 1985. For example, Ralston Purina was the market share leader in the dry dog food and dry and moist cat food segments and was the second-biggest player in snack and soft-dry dog food segments. Carnation was the market share leader in the canned cat food segment and the second-largest brand in the dry cat food segment. Furthermore, Carnation had a strong presence in the canned dog food segment. Heinz led the snack dog food segment and was a strong second in the canned cat food segment. Gaines dominated the semimoist dog food segment, and Quaker Oats led the soft-dry dog food segment. Alpo dominated the canned dog food segment. All the leading firms, except Kal Kan, dominated at least one of the different segments in the market. This suggests that the pet food industry was an example of an industry with product line competition in which different firms dominated different segments of the market.

The theory of multimarket competition suggests that the firms may observe mutual forbearance in these circumstances. However, if the mutual forbearance behavior is upset by an action taken by a competitor, the reactions may be swift and aggressive. In this particular case, actions taken by Quaker Oats sent the industry into a spiral of competitive activity. By acquiring Gaines in 1986, Quaker entered the dry dog food segment dominated by Ralston Purina. Ralston Purina retaliated by acquiring Benco in 1987 and establishing a foothold in the semimoist dog food segment dominated by Quaker Oats. Following this, all major competitors in the industry attempted to broaden their product scope (from dog foods or cat foods to dog foods and cat foods), conceivably to establish footholds in their competitors’ spheres of influence. For example, Heinz, a dominant firm in the cat food segments, entered the dry and canned dog food seg-

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4This example is meant to illustrate and clarify the nature of multimarket competition. We do not intend it to be considered robust empirical evidence of the phenomenon, because this example is susceptible to alternative explanations. At the very least, we are not in a position to rule out such alternative explanations. Nevertheless, this example illustrates the nature of firm behavior in markets characterized by multimarket competition.
ments, and Alpo, a major player in the dog foods market, entered the dry cat food segment and enhanced its market position in the canned cat food segment from 4% to 9.1%. By 1990, all firms had established a presence in three or more of the dog food segments and two or more of the cat food segments (see Maxwell 1991). As a consequence, in 1990, the industry was characterized by much higher multimarket contact than in 1985. Subsequent to the episodes of mutual invasion, that pattern and intensity of competition changed somewhat. In July 1990, Ralston Purina, the industry leader, announced its first price increase in two years, which was followed by most rivals (Stuart 1991). The firms also stopped their stream of product introductions in their rivals’ main markets and began launching superpremium extensions of their existing brands (e.g., Purina O.N.E. by Ralston Purina, Expert by Kal Kan, and “advanced formula” Cycle by Quaker Oats). The segment positions of the dominant firms changed little between 1990 and 1992. All these factors imply a likely decrease in the intensity of competition among the firms in the period between 1990 and 1992. This example serves to illustrate the dynamics of multimarket competition when firms compete using product lines.

**Observations.** The foregoing discussion demonstrates how firms might use product lines to establish footholds in the segments dominated by their rivals. When these firms established footholds in the critical markets of their rivals and signaled their capability to retaliate against the segment leader, each firm seemed to focus on enhancing its position further in those market segments in which it already held a dominant position. In effect, multimarket competition fostered by the similarity in the product lines of firms may constrain their strategic flexibility. Furthermore, product line strategy may have a strategic import that goes beyond the desire of firms to block competition, serve varied consumer tastes, and exploit potential economies of scale and scope, which are the reasons commonly attributed to the use of product line strategies by firms (Oster 1994). As we described previously, a firm may use a product line strategy to establish footholds in competitors’ key markets to protect its interest in the segments that it dominates. This dimension of the strategic intent of a firm is likely to become apparent only when the multimarket nature of product line rivalry is considered.

Furthermore, for the firms involved in product line rivalry, even simple actions such as a price promotion in a particular geographic-product market could have disastrous consequences if they send firms on a competitive spiral that has effects in many markets. Therefore, in such situations, firms may need to consider the consequences that their actions conceivably could have on multiple markets that normally might not enter into their strategic calculus when contemplating a plan of action. In addition, as we noted in the section on the moderating impact of organizational structure on mutual forbearance, there is a need for efficient information sharing and coordination among the managers responsible for various products in a product line in order to implement efficient multimarket strategies. The need for such coordination may have been an underlying motivation for the increasing use of category management by firms. Category management, in which a single decision maker is responsible for a product line (Zenor 1994), facilitates better coordination of strategies for the various brands within a product line and thereby enables firms to formulate and implement multimarket strategic actions for the whole product line. The category manager may be willing to forebear from competitive actions in some products to deter rivalry in some other products within the product line.

**Market Entry Strategies**

**Entry strategy and competitive history.** Market entry from the perspective of the incumbent, as well as the perspective of the new entrant, has been a topic that has received a significant amount of attention in marketing (Clark and Montgomery 1997). Entering a new market with a new or existing product is a commonly used growth strategy, but it is also prone to extremely high failure rates. New product failure rate is often as high as 80%, which suggests the need for a well-conceived plan for entering the market that considers the various facets that may influence the success of the entrant (Green, Barclay, and Ryans 1995). Gruca and Sudarshan (1995), in developing a framework for entry deterrence strategy, suggest that the competitive environment is a key factor that, through its dimensions of cost conditions, demand conditions, legal climate, and competitive history, shapes an incumbent’s response to an entrant’s strategy. Competitive history, which encompasses incumbents’ reputation for retaliation, their tactics and strategies, and the nature of their relationships with suppliers and clients (Gruca and Sudarshan 1995), can act as an effective barrier to competitive entry. Competitive history, in this sense, is the knowledge that potential entrants have about incumbents’ ability and motivation to respond, and it may influence their decision to enter specific markets. As Clark and Montgomery (1997) argue and experimentally

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5The end of mutual invasion strategies can be identified by tracking the changes in the firms’ revenue concentration in a few segments. A Herfindahl-Hirschman index is constructed for each firm and reflects the concentration of revenues in a few segments. A higher index reflects that firms are focusing on fewer segments for a greater proportion of their revenues (greater revenue concentration in a few markets), and a lower index represents greater diversity across segments (revenues for firms are spread out more evenly across various segments). The revenue weighted index for firms was highest in 1983 and fell quickly between 1985 and 1990. After 1990, the index increased again, which implies that firms were relying more on their spheres of influence for increasing their revenues and initiating fewer entries into other segments.

6The market share instability (an indicator of intensity of competition) among major firms was evaluated using market share instability indexes for each segment (Ogur 1976), with market shares defined relative to all major firms in the industry (to eliminate the effect of marginal firms). The revenue weighted average across segments indicates that market share instability peaked in 1986 and was also high in 1989–90. After 1990, market share instability decreased, with the 1992 index being the lowest in the 1983–1992 period. This also implies that intensity of competition in this industry decreased after 1990.
demonstrate, a potential entrant’s perception of the aggressiveness and intelligence of incumbents determines its own propensity to enter a market. Therefore, competitive history is likely to be a critical input as firms devise entry and entry deterrence strategies to gain and sustain competitive advantage.

**Multimarket competition and competitive history.** When incumbents and potential entrants are single-market firms, potential entrants must evaluate competitive history indirectly, because by definition, they are not present in the market that they are trying to enter. When firms compete in multiple markets, however, the potential entrant can use the lessons from the rich history of interactions with the incumbent in multiple markets for strategic decisions on market entry. Multimarket contact fosters greater familiarity among firms about the ability and motivation of their rivals to act and react in a given competitive environment. Therefore, multimarket competition contributes an additional dimension of competitive history among firms in a market. The increased number of interactions, as a result of multimarket contact, will both highlight and shape the rivalry among firms. Therefore, the behavior of firms in a multimarket context, rather than in a single market, constitutes the entire competitive history among them. These considerations suggest the need for broadening the scope of the competitive history construct to encompass the history of competition in not only the focal market, but also other markets in which the fortunes of the firms are interdependent.

*The entry strategy of U2: An illustration of multimarket contact and competitive history.* In 1994, United Airlines announced plans for launching a short-haul subsidiary, named U2, to cater to several California commuter airtravel markets dominated by Southwest Airlines. As of December 1993, United and Southwest were competing head-to-head in 95 other city pair markets in the industry, from which United and Southwest obtained 9% and 31% of their airtravel revenues, respectively. Southwest signaled its intent to retaliate in multiple markets to this proposed action by publicizing its plans to enter some longer-haul routes served by United Airlines, conditional on United’s behavior. Over time, Southwest Airlines has developed a reputation of being a competitor that does not capitulate, a reputation that was built on the basis of its history of rivalry with other airlines in many markets. Although U2 initially tried to compete directly with Southwest, it swiftly made its exit from many routes because Southwest, true to reputation, did not yield. As of now, U2 has only minimal market overlap with Southwest Airlines. It is conceivable that the rapid repositioning of U2 away from Southwest Airlines’ routes in California was also based on considerations, such as the latter’s competitive history in mutually contested markets and the possibility that it might retaliate in multiple markets, as threatened.9

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9 For additional insights, see Carey (1998), McCartney (1996), and O’Brien (1994).

**Observations.** Firms, when they formulate market entry strategies, may benefit from considering the potential impact that their decision to enter new markets can have on other markets in which they currently compete. This calculation may change the estimates of future revenues that might result from entry. Entry strategy formulation based on a broader construal of the competitive history construct also may sensitize a firm to other markets it can enter more effectively. In some of these markets, though the projected gross revenue may be lower, the competitive retaliation also may be lower and the actual net revenue therefore higher. In other words, consideration of the impact of multimarket competition may significantly alter the outcome of the cost–benefit analysis that firms undertake before a market entry, thus influencing the choice among alternative entry strategies.

**Future Research Directions**

The research stream in multimarket competition is still evolving, thus providing several avenues for further research. Although the mutual forbearance effect of multimarket competition (the inverse relationship between the degree of multimarket contact and intensity of competition) has received empirical support, the contingency effects of pertinent competitive and market factors have not been examined in an integrative manner. Against this backdrop, an empirical examination of the conceptual model developed here could lend additional insights into the nature of the relationship between multimarket contact and intensity of competition.

The process by which multimarket competition influences the intensity of competition between firms also calls for empirical verification. That is, the role that multimarket contact plays in enhancing deterrence and familiarity among firms should be verified to lend substance to the theory that underlies the relationship between multimarket contact and intensity of competition. This would call for approaches that capture the mental maps of managers in firms that engage in substantial multimarket competition. The extent to which multimarket contact plays a role in the determination of a firm’s familiarity with other firms and the degree to which it deters these firms from acting against each other can be gauged through detailed interviews with managers, observation of actual behavior, or self-report measures. Furthermore, such studies will help shed light on how managers mentally map their market and determine their rivals and thereby contribute substantially to strategic decision-making knowledge. The influence of multimarket competition on the cognitive construction of rivalry is, therefore, another promising stream of research.

Another critical issue regarding multimarket competition is the extent to which managers use multimarket contact as a deliberate strategy to elicit cooperation from their firm’s competitors. Much research in this area assumes or implies that there is a deliberate strategic intention in a firm’s use of multimarket contact to ensure mutual forbearance through increased deterrence of competitors and increased familiarity with competitors. The question then is whether multimarket contact is an out-
come of rational strategic planning by managers or an accidental outcome of marketplace dynamics. Or, is it an incremental adaptive strategic learning process in which multikarket contact is both a result of strategic intent and an outcome of random marketplace dynamics? The answers to these questions may lie in an empirical examination of the process that underlies the emergence of mutual forbearance as a result of multikarket contact (Korn and Baum 1999).

Although the focus of this article has been multikarket contact, it must be highlighted that multikarket contact is only one of the many forces that influence the market behavior of firms. The role that multikarket contact might play in shaping the competitive behavior of firms along with other influences provides many opportunities for research. The moderating role that Clark and Montgomery (1997) observe for multikarket contact in the relationship between competitive reputation and entry deterrence is an example of one such outcome. In continuing with this stream of research, researchers can examine how multikarket competition influences entry strategies, entry deterring strategies, and other competitive market behavior of firms jointly with other factors, such as other market and cost characteristics.

Much of the empirical research in multikarket competition conceptualizes multiple markets along the geographic market dimension. This leaves the empirical aspects of the multikarket impact of overlapping product markets, characterized by product line rivalry, considerably underresearched. With regard to the multikarket impact of product line rivalry, possible research directions include (1) the impact of product line similarity on the intensity of competition between firms, (2) the constraining effects of multikarket competition on the product line strategies of firms, and (3) the extent to which product line strategies are used to establish footholds in important markets.

In the case of multinational enterprises (MNEs), it is possible to envision a firm reacting to being attacked in one national market through actions in a different national market. This could be more prevalent for firms that use the transnational form of coordination (Bartlett and Ghoshal 1989). In this form of organization, an MNE coordinates its activities on a global basis. Therefore, it is likely that an attack in a specific country market would cause an MNE organized transnationally to evaluate the merits of retaliating in a different country market (Watson 1982). Likewise, when contemplating attacking a multikarket rival in a specific country market, an MNE might take into account the country market(s) in which the rival is most likely to retaliate. The dearth of empirical research examining multikarket competition in the global marketing context provides opportunities for additional research in this area.

### Methodological Issues

Extant research on multikarket competition provides insights into some methodological issues to which marketing scholars contemplating empirical research in multikarket competition must be sensitive. This section captures these insights.

### Data Sources

Much of the empirical research in multikarket competition has been conducted using secondary data sources. For example, Alexander (1985) and Mester (1987) use data from the banking industry, and Baum and Korn (1996) and Gimeno and Woo (1996) use data from the airline industry. In these cases, overlap in geographic markets is considered the determinant of multikarket contact. Other industry-specific data used include data from the telephone industry (e.g., Barnett 1993; Parker and Roller 1997). Multi-industry data sources used for studying the impact of multikarket contact include Federal Trade Commission (FTC) Line of Business data (e.g., Evans and Kessides 1994; Gimeno and Woo 1996) and event history analysis (e.g., Barnett 1993; Baum and Korn 1996) seem more appropriate. Furthermore, as demonstrated by Clark and Montgomery (1997) and Phillips and Mason (1992), experiments can be used effectively to study the impact of multikarket competition in controlled situations. This approach could be particularly valid for examining the process that underlies the impact of multikarket contact on intensity of competition. That is, experiments could be useful for studying the impact of multikarket contact on deterrence and familiarity. Furthermore, the impact of multikarket competition on how firms define rivals and rivalry (the extent to which multikarket contact contributes to the social construction of rivalry within firms) could be analyzed using qualitative methods, such as depth interviews of the managers involved in making the decisions.

### Research Methods

Cross-sectional and longitudinal approaches have been used to conduct research in this area. Because the phenomenon of multikarket competition delineates an impact that is shaped over time, longitudinal approaches such as panel data methods (e.g., Evans and Kessides 1994; Gimeno and Woo 1996) and event history analysis (e.g., Barnett 1993; Baum and Korn 1996) seem more appropriate. Furthermore, the impact of multikarket competition on how firms define rivals and rivalry (the extent to which multikarket contact contributes to the social construction of rivalry within firms) could be analyzed using qualitative methods, such as depth interviews of the managers involved in making the decisions.

### Measurement

The constructs central to the proposed conceptual model are multikarket contact, intensity of competition, spheres of influence, resource similarity, organizational structure, and seller concentration. In Table 2, we outline alternative operationalizations and studies that have employed these operationalizations. A critical issue regarding operationalization of multikarket contact and spheres of influence is the definition of the market. Typically, research in multikarket contact is conducted in industries in which clear geographic delineation of markets is possible (e.g., airline, banking). However, marketing strategy researchers would be equally interested in multikarket competition in the context of product line rivalry, for which market definition would need to encompass the two dimensions of product markets and geo-
graphic markets. Therefore, market definition in such cases may benefit from the approach we have used in defining a geographic-product market.

It also should be noted that there are different ways of evaluating intensity of competition. One method is direct observation of competitive attacks and responses by rivals (for example, see Chen 1996). Another method focuses on the impact of these actions and reactions on price or performance. For example, Gimeno and Woo (1996) use the price charged by the firm (after controlling for costs) as a measure of the intensity of competition. Studying actual actions and reactions would provide a finer-grained approach to analyzing intensity of competition. It should be noted, however, that such data are difficult to obtain, and looking at output measures such as price is often the only practical route to operationalizing intensity of competition. Alternative operationalizations, however, are possible in the context of survey data (for a measure of intensity of competition, see Jaworski and Kohli 1993). Resource similarity often is operationalized using proxies such as firm size and strategic group membership. Researchers may need to move to less coarse measures of this construct by studying actual resources available to firms (Chen 1996). A more detailed discussion of measurement issues is beyond the scope of this article.

### Conclusion

In this article, we examine the impact of multimarket competition on the competitive behavior of firms. Multimarket competition may affect the strategies of firms by influencing their ability and motivation to deter competitors, as well as by fostering better understanding of competitors. In this competitive scenario, rivalry between firms in the market is expected to be shaped, in part, by their level of multimarket contact. The mutual forbearance agreement that can emerge effectively will constrain the strategies that firms can use in these circumstances. Even a price promotion for a brand in a particular market may elicit multimarket competitive retaliations if the promotion is considered predatory by the firm’s competitors. An extension of a firm’s product line by launch of a variant or an attempt to expand the firm’s scope of operations geographically may cause competitors to retaliate against the firm in other markets in which they compete.

The notion of mutual forbearance and lower rivalry arises from the possibility of firms comprehending the multifaceted nature of such competition and, as a result, recognizing tacit collusion as a more viable strategy. Therefore, multimarket competition may act as a constraint, reducing the degrees of freedom firms have in implementing strategies. However, such multimarket retaliatory tactics

### TABLE 2
Research on Multimarket Competition: Operationalization of Constructs

<table>
<thead>
<tr>
<th>Construct</th>
<th>Measure</th>
<th>Representative Research</th>
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<tbody>
<tr>
<td>Multimarket contact</td>
<td>Count measure (sum of the number of markets in which the firms compete outside the focal market)</td>
<td>Baum and Korn (1996); Evans and Kessides (1994); Feinberg (1985); Gimeno and Woo (1996); Mester (1987)</td>
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<tr>
<td></td>
<td>Probabilistic measure</td>
<td>Mester (1987); Scott (1982)</td>
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<td>Intensity of competition</td>
<td>Performance based:</td>
<td>Feinberg (1985); Gimeno and Woo (1996); Heggestad and Rhoades (1978); Hughes and Oughton (1993); Mester (1987)</td>
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<td>Price-cost margin</td>
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<td>Price levels</td>
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<td></td>
<td>Income/sales</td>
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<td>Market share instability</td>
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<td></td>
<td>Action based:</td>
<td>Barnett (1993); Baum and Korn (1996, 1999)</td>
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<td></td>
<td>Market entry and exit</td>
<td></td>
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<tr>
<td>Spheres of influence</td>
<td>Market dominance measures such as market share</td>
<td>Baum and Korn (1996); Gimeno (1999)</td>
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<td></td>
<td>Market dependence (percentage of overall firm revenues from the market)</td>
<td>Gimeno (1999)</td>
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<td></td>
<td>Resource centrality (the extent to which the market unit draws on critical firm resources)</td>
<td>Gimeno (1999)</td>
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<tr>
<td>Resource similarity</td>
<td>Competitor’s size</td>
<td>Baum and Korn (1999)</td>
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<tr>
<td></td>
<td>Strategic group membership</td>
<td>Barnett (1993); Gimeno and Woo (1996)</td>
</tr>
<tr>
<td>Seller concentration</td>
<td>Herfindahl-Hirschman index</td>
<td>Gimeno (1994)</td>
</tr>
<tr>
<td>Structure of the firm</td>
<td>Centralization of decision making for the relevant markets</td>
<td>Jaworski and Kohli (1993)</td>
</tr>
</tbody>
</table>
could be objectionable from an antitrust perspective. Although U.S. antitrust explicitly has ignored multimarket reactions (focusing only on horizontal dominance of markets), it is likely that strong multimarket reactions against small competitors could be interpreted as predatory behavior. Dodgson, Katsoulacos, and Pryke (1990) prepared a report to the Competition Directorate of the European Commission (the equivalent of the FTC or Department of Justice) in which they discussed multimarket responses in the aviation market as predatory behavior. Therefore, multimarket reactions could be construed as predatory behavior.10

Finally, we do not mean to imply that multimarket contact always reduces the intensity of competition through mutual forbearance. Akin to the observation made by Gatignon, Weitz, and Bansal (1990) in reference to seller concentration—namely, that it only provides the potential for collusion—we note that multimarket competition also provides only the potential for mutual forbearance and, therefore, lower intensity of competition. Thus, mutual forbearance is not a deterministic outcome of multimarket contact. For example, General Motors and Ford compete aggressively in most markets, despite substantial multimarket contact. Even when conditions are ripe for mutual forbearance between two firms in a specific market, a third firm can prevent them from competing less intensely. It is possible that the third firm does not share the incentive that propels the other two toward mutual forbearance and may unleash intense competition in the market that may prevent or unravel mutual forbearance among its rivals.11 Regardless, for the reasons described in this article, marketing strategy researchers and marketing managers stand to benefit from considering the impact of multimarket competition on the competitive dynamics between firms.

10 We thank a reviewer for drawing this issue to our attention.

11 We thank a reviewer for drawing this issue to our attention.

REFERENCES


