BART J. BRONNENBERG, SANJAY K. DHAR, and JEAN-PIERRE DUBÉ\*

## National Brands, Local Branding: Conclusions and Future Research Opportunities

We begin by thanking Mike Kruger, Len Lodish, Berk Ataman, Carl Mela, and Harald van Heerde for their thoughtful comments on our article (Bronnenberg, Dhar, and Dubé 2007). After responding to these comments, we summarize several general directions for further research that have emerged from this discussion. Both Kruger's (2007) and Lodish's (2007) comments confirm that practitioners are well aware of the striking geographic differences in performance that many brands face across U.S. markets. Although the sources of these differences remain unclear, marketers nevertheless routinely take great care to tailor their marketing to local brand performance. Determining the sources and the economic consequences of these differences presents an excellent opportunity for additional academic research, which, to date, has studied geography in a limited context. Ataman, Mela, and Van Heerde's (2007) comment takes a different angle. Replicating our analysis on a different data set, they show that the geographic patterns in the U.S. market do not emerge strongly in France. Their findings point toward more general questions about the spatial scale at which geography might be expected to matter and, perhaps more important, the scope of an "independent market."

Kruger (2007) agrees that national brand manufacturers are aware of geographic differences in brand shares and that they account for such differences when they set regional marketing plans. He points out (p. 21) that managers may not be aware of the ubiquity of this phenomenon: "A contribution of Bronnenberg, Dhar, and Dubé's (2007) article may be to reassure marketing managers that they are not alone in these regional skews; almost everybody has them." He also points out that managers remain unaware of the specific sources of these differences. Although Kruger is unable to provide a rationale for the sources of these regional differences across U.S. markets, he offers three compelling arguments for why such differences would persist over time. First, Kruger (2007) notes that advertising and promotional allowances are frequently allocated to markets on the basis of a brand's performance through such measures as the brand development index. This practice does not point to the specific origins of why brand shares differ across markets, but it offers an explanation for why differences in brand shares would persist over time. This line of reasoning also implies that the historic initial conditions within a market may be important for understanding current marketing outcomes. Bronnenberg, Dhar, and Dubé (2006) provide some evidence that historic entry patterns in the groundcoffee and mayonnaise categories are good predictors of the observed current differences in market shares across markets. Kruger's argument presents a potential explanation for why historic entry patterns would persist in such a manner.

Second, Kruger (2007) posits the existence of feedback loops between brand share and retail distribution; that is, success begets success. Not only do strong brands receive better distribution (e.g., Bronnenberg, Mahajan, and Vanhonacker 2000; Farris and Reibstein 1995), but new products may also fare better in a market if they are offered by a leading manufacturer. Again, this line of reasoning helps explain the persistence of market shares over time and how historic initial conditions in a category might continue to influence brand performance over time.

Third, Kruger (2007) conjectures that there may be a confound between a retailer effect and the geographic effect. In the soft-drink industry, he finds systematic evidence for a brand × retailer interaction. However, this finding does not appear in the bottled-water category. We examine this issue using all 30 categories in Bronnenberg, Dhar, and Dubé (2006) and find no corroborating evidence of a brand × retailer interaction. Testing for a retailer effect is tricky because retailers that operate in only one market are confounded with the so-called market effect by construction. To avoid this confound, we focus only on retailers that operate in two or more geographic markets. Our results indicate that retailer-specific effects account for only approximately 20% of the share variation and thus do not appear to explain the strong geographic patterns in shares. This still leaves the possibility that retailer effects exist in selected categories. The largest soft-drink manufacturers use expensive direct-store delivery systems and are responsible for their own shelf placement in stores. As with the

<sup>\*</sup>Bart J. Bronnenberg is Professor of Marketing, Anderson School of Management, University of California, Los Angeles (e-mail: bart.bronnenberg@anderson.ucla.edu). Sanjay K. Dhar is James H. Lorie Professor of Marketing (e-mail: sanjay.dhar@chicagogsb.edu), and Jean-Pierre Dubé is Professor of Marketing (e-mail: jdube@chicagogsb.edu), Graduate School of Business, University of Chicago.

geographic effects, in cases in which retailer effects are present, it would be interesting to study their origins.

Lodish (2007) points out that practitioners are aware of the share differences described in our article. Indeed, we adapted the title of our article from the SABMiller (2005, p. 13) Web site, which further makes the point that the U.S. beer market "operates as a series of smaller, very different markets" and that the company uses a marketing strategy tailored to the different conditions of each market.

Lodish (2007) provides an interesting discussion of how he spearheaded an initiative through Information Resources Inc. (IRI) to document differences in the marginal effectiveness of promotional instruments on sales across geographic markets. The initiative then encouraged marketing managers to tailor their marketing efforts across markets accordingly. Similar geographic differences in promotion responses have been documented in recent academic literature (Boatwright, Dhar, and Rossi 2004). To the extent that manufacturers have followed IRI's recommended guidelines, these findings are consistent with Kruger's (2007) observation that consumer packaged good (CPG) manufacturers routinely allocate marketing budgets differently by market on the basis of the belief that the marginal benefit of marketing instruments varies from market to market.

In general, we fully agree with Lodish's (2007) closing remarks about the importance of determining the sources of these cross-market differences. On the basis of both Kruger's (2007) and Lodish's comments, we deduce that besides the recognition of geographic differences, little is known about the origins of these differences. We also agree that a better understanding of these long-term geographic patterns in share levels and marketing effectiveness may have a fundamental impact on practitioners' and academics' abilities to formulate better marketing strategies.

Finally, Ataman, Mela, and Van Heerde (2007) attempt to replicate our analysis using a French multicategory retailer account-level CPG data set with analogous time and location indexation. Notably, they are unable to replicate our main findings of a strong geographic component to market share variation in the French context. Consistent with our results, they find a large brand  $\times$  market interaction effect (76.5% of the variation) when they pool their data across time, market, and brand. However, most of this variation is driven by a strong brand main effect and a relatively small market main effect; effectively, the geographic component is very small. The lack of a geographic effect is evident directly in their raw data, which exhibit little dispersion in a brand's market share across French regional areas. The geographic dispersion in shares for national CPG brands in the United States is approximately four to five times larger than in France (see Table 1 in our article [Bronnenberg, Dhar, and Dubé 2007] and Table 1 in Ataman, Mela, and Van Heerde's [2007] comment, respectively). Not surprising, the lack of a sizable geographic component implies that Ataman, Mela, and Van Heerde find a larger temporal component to the share variation in their data. From a marketing practitioner perspective, their evidence suggests that brandshare performance is considerably more stable across French regional markets than across U.S. regional markets. Therefore, the development of a truly national marketing campaign could be easier in the French context.

Ataman, Mela, and Van Heerde's (2007) findings raise the question as to when geography might be expected to matter. Despite the striking role of geography in U.S. brand shares, the lack of geographic differences in France is perhaps not surprising. France encompasses a considerably smaller area, with approximately 7% of the land area and 20% of the population of the continental United States. In terms of land area, spatial analysis of brand shares in France would roughly correspond to confining the spatial analysis of the United States to Texas. At this spatial scale, our data display less share dispersion and stronger brand effects, as Ataman, Mela, and Van Heerde find. In the U.S. data, we find evidence of spatial dependence up to 500 miles. If we extrapolate this result to the French context, this would imply roughly only two to three independent regions in France.

In the U.S. context, there are several precedents for thinking of ACNielsen Scan Tracks as independent markets. As Ellickson (2006) discusses, supermarket firms cluster their distribution centers in major cities and serve surrounding areas from these facilities. Trade Dimensions uses these distribution networks to divide the Untied States into 52 distribution regions, roughly comparable to ACNielsen's 50 U.S. Scan Tracks. Similarly, U.S. CPG manufacturers routinely develop regional marketing plans. For example, Miller Brewing has divided the United States into 61 submarkets, each with its own marketing plan. For these reasons, it is not surprising that even federal antitrust authorities also routinely treat ACNielsen Scan Tracks as independent markets in legal matters (see, e.g., FTC v. Coca-Cola Co., 641 F. Supp. 1128 1986). Because of space constraints, Ataman, Mela, and Van Heerde (2007) are unable to provide a motivation for how they constructed their submarkets in France and why they expect them to constitute independent markets. However, given the small spatial scale, the highly concentrated population (i.e., in Paris), and the lack of major natural barriers (versus the East-West Rocky Mountain Divide and the Great Lakes in the United States), it is unlikely that geography would play as strong a role in the French context as in the United States. A more comparable analogy to the spatial scale of the United States is Western Europe. Therefore, an interesting replication of this analysis would examine pan-European brands (as in Ter Hofstede, Wedel, and Steenkamp 2002) and analyze the data at the county or provincial level.

In summary, this discussion highlights several important findings and several directions for further research. The striking geographic differences in a national brand's shares and marketing responsiveness across U.S. markets is of practical importance to managers and of substantive interest to academics. Furthermore, marketing managers are fully aware of these patterns and take them into account when they set locally tailored marketing plans. However, first, neither managers nor academics are able to account for the sources of these differences. Future academic research that can account for the sources of these differences would have a fundamental impact on the understanding of marketing strategy.

Second, current marketing practice allocates budgets predominantly to strong markets, implying that managers virtually forgo "fighting" for their weaker markets and accept their fate. It would be ideal to determine ways that firms could reinitialize the market conditions. In particular, is there anything a firm that faces weak local conditions can do to improve its long-term performance in the market? This line of research may require access to true long-term data sets, especially sources that contain the initial launch periods in a category. Recent efforts at IRI to compile a publicly available database may be a big step toward this end. For mature categories, researchers may need to consult historic archives to compile information on the conditions under which different regions launched new categories.

Third, to generalize beyond the U.S. context, another question that arises from this discussion is how the geographic scope of a market is defined. At what level of geographic disaggregation should firms target their marketing efforts? Similarly, at what level of granularity should academics collect data to obtain a precise read on marketing outcomes, such as shares, and the marginal impact of marketing variables, such as prices, promotions, and advertising?

## REFERENCES

- Ataman, M. Berk, Carl F. Mela, and Harald J. van Heerde (2007), "Consumer Packaged Goods in France: National Brands, Regional Chains, and Local Branding," *Journal of Marketing Research*, 44 (February), 14–20.
- Boatwright, Peter, Sanjay Dhar, and Peter Rossi (2004), "The Role of Retail Competition and Retail Strategy as Drivers of Promotional Sensitivity," *Quantitative Marketing and Economics*, 2 (2), 169–90.
- Bronnenberg, Bart J., Sanjay K. Dhar, and Jean-Pierre Dubé (2006), "Market Structure and Geographic Distribution of

Brand Shares in Consumer Package Goods Industries," working paper, Graduate School of Business, University of Chicago.

- , \_\_\_\_\_, and \_\_\_\_\_ (2007), "Consumer Packaged Goods in the United States: National Brands, Local Branding," *Journal* of Marketing Research, 44 (February), 4–13.
- —, Vijay Mahajan, and Wilfried R. Vanhonacker (2000), "The Emergence of Market Structure in New Repeat-Purchase Categories: The Interplay of Market Share and Retailer Distribution," *Journal of Marketing Research*, 37 (February), 16–31.
- Ellickson, Paul (2006), "Does Sutton Apply to Supermarkets?" Rand Journal of Economics, forthcoming.
- Farris, P. and D. Reibstein (1995), "Market Share and Distribution: A Generalization, a Speculation, and Some Implications," *Marketing Science*, 14 (3), 190–202.
- Kruger, Michael W. (2007), "How Geographic Variation Persists: Comments on 'Consumer Packaged Goods in the United States: National Brands, Local Branding," *Journal of Marketing Research*, 44 (February), 21–22.
- Lodish, Leonard M. (2007), "Another Reason Academics and Practitioners Should Communicate More," *Journal of Marketing Research*, 44 (February), 23–25.
- SABMiller (2005), Annual Report 2005, (accessed October 19, 2006), [available at http://www.sabmiller.com/NR/rdonlyres/ A6FCED67-AA84-445A-BF62-7F4BB4EA0D6B/0/SAB ANNUALREPORTweb1.pdf].
- Ter Hofstede, Frenkel, Michel Wedel, and Jan-Benedict E.M. Steenkamp (2002), "Identifying Spatial Segments in International Markets," *Marketing Science*, 21 (Spring), 160–77.