Effects of Product Categories on Consumers' Spending in Multiple Retail Formats: An Abstract

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Abstract In this study, we propose a multivariate tobit model to examine the effects of different types of frequently purchase products on consumers' spending in retail formats. There is a rich marketing literature that studies the determinants of consumers' purchases in the stores that belong to the same retail format (e.g., Bell & Lattin, 1998; Bodapati & Srinivasan, 2006; Briesch, Chintagunta, & Fox, 2009). However, there is little empirical research that addresses the issue of consumers' patronage for retail formats. Among the few studies that explicitly model consumers' retail format patronage behavior (e.g., Bhatnagar & Ratchford, 2004; Fox, Montgomery, & Lodish, 2004), the focus has been on the impact of overall store characteristics, such as store price and assortment indices, which are constructed based on information of a number of categories, to represent the attractiveness of a shopping basket of a consumer.

The proposed model enables us to identify major product categories and corresponding marketing strategies, to which consumers respond well in their spending in different retail formats. This knowledge can help retailers better allocate resources across categories more effectively to improve overall consumer store patronage. For producers in each product category, it is also valuable to identify the retail format to which consumers respond most for different marketing strategies.

Another goal of the research is to examine the nature of relationships between different retail formats (i.e., complementary or substitution). From a retailer's perspective, it is crucial to identify which types of stores it competes fiercely and which types of stores it may be benefited from. This can help retailers better direct their efforts for competition.

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We apply the proposed model using a comprehensive in-home scanning data of longitudinal purchases of 1321 metropolitan households in a large southwestern city in the USA. The data contains detailed purchase information of these households in 286 grocery categories across 46 retail chains, over a 53-week period dated from September 2002 to September 2003. The data also contains the demographic information of the households, such as household income and household sizes. This rich data allows us to fully demonstrate the application of the proposed model.

References Available Upon Request