Chapter 14

Using POS Data for Price Promotions Evaluation:
An Empirical Example from a Slovenian Grocery Chain

Danijel Bratina
University of Primorska, Slovenia

Armand Faganel
University of Primorska, Slovenia

ABSTRACT

Price promotions have been largely dealt with in the literature. Yet there are just a few generalizations made so far about this powerful marketing communication tool. The obvious effect, that all authors who have studied price promotions emphasize, is quantity increase during price promotions. Inference studies about the decomposition of the sales promotion bump do not converge to a generalization or a law, but end in radically different results. Most of these studies use consumer panel data, rich of demographical characteristics and consumers' purchasing history. Companies that use such data, available from marketing research industry, usually complain that data is old and expensive. The authors start with literature review on price promotions in which they present existing models based on consumer panel data (Bell, et al., 1999; Mela, et al., 1998; Moriarty, 1985; Walters, 1991; Yeshin, 2006). Next they present existing POS analysis models and compare their findings to show the high level of heterogeneity among results. All existing models are based on powerful databases provided by professional research institutions (i.e. Nielsen or IRI) that usually cover the whole market for the analysed brand category geographically. The authors next apply existing models to find which best suits data available for Slovenian FMCG market. They show two models analysis – quantity (SCAN*PRO) and market share (MCI) and their power for explanatory and forecasting research using POS data. Having dealt with more than 30 brand categories within a wider research, they conclude that the models developed are usable for a fast decision making process within a company, but their exploratory power is still poor compared to panel data.

INTRODUCTION

In the past 30 years marketing expenditures' monitoring is gaining a great deal of attention from academia and practitioners. Traditionally is the marketing budget among the first to be cut in crisis times, mostly because of lack of accountability and standardization of metrics. In terms of costs, price promotions rank high in marketing budgets (Mela et al.,1997) and since more than 90% (Abraham & Lodish, 1987) of FMCG (fast moving consuming goods) are sold on promotions, it is natural that a great part of marketing research is being spent on methods of price promotions accountability. Price promotions are also perceived to be the most powerful short-term marketing tool and, unfortunately, also the easiest to copy from the competition.

Brand managers, facing the shrinking of funding for their brands' marketing support, are striving to develop models that would help them determine the best price promotions strategies and supporting activities.

Even though price promotions are such a powerful tool, useful models have only started to appear in research papers since the year of 2000. van Heerde et al. (2001) and Bucklin & Gupta (1999) claim the reasons for such late researchers' interest for price promotions to be:

1. Lack of brand managers' time;
2. Undeveloped information technology for large scale analysis;
3. Unwillingness of brand managers' to search for accountability of their actions, that would shed light on marketing (brand) managers performance;
4. Data unavailability; and
5. Price concerns.

The three real problems (point 2., 4. and 5.), are successfully overcome, with the exponential development of computer processors' power and data storage capacities. Thus from year 2000 on

several models of price promotions effectiveness and efficiency have been developed. In terms of data used, price promotions models can be sub-divided into three categories:

1. Models that use consumer (households) panels;
2. Models that use store panels and;
3. Models that use scanner level data on a store level.

Consumer panels' models (mostly basing on probability choice models) have been historically developed first. Such models can analyze a great deal of information (heterogeneity of consumers, heterogeneity of brands, and heterogeneity of stores). Their negative side is represented by their cost and data availability. The same is true for store panels.

It has been no more than a decade from the development of first scanner level data models, which use secondary data (POS scanner) to analyze price promotions. Models that use scanner level data have the advantage of being cheaper to use (once developed) and promptly available for decision making as data for model tuning is readily available within each retailer's information database. On the down side of these models is lack of consumer data, making them unusable for consumer heterogeneity analysis, and also store heterogeneity analysis as data from competitors' stores are unavailable for analysis.

In our paper we present two models (a share model and a sales model) that use scanner data to analyze price promotions effectiveness. We prove that some generalizations resulting from previous meta analysis (Assmus, et al., 1984; Bell et al., 1999; Bucklin & Gupta, 2000; Conchar, & Zinkhan, 2005; Tellis, 1988; van Heerde, 1999) can be done, while we also give support to some other research done with consumer panels.

This chapter is organized as follows. First we present the state of the art with main generalizations on price promotions and open questions. In

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