Promotion Dynamics

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Abstract

Promotions affect sales after the immediate sales bump. In other words, they have dynamic effects on consumer purchase behavior outside the period of the promotional offer. The objective of this monograph is to present a comprehensive overview of the various dynamic effects of promotions. We believe there is an opportunity for such a monograph since the literature on dynamic promotion effects is vast and quite scattered. There have been so many researchers who have worked in this field across decades, using very wide-ranging terminologies, methodologies and data, that we believe there is a need to catalogue the current state of affairs. To keep the discussion centered on a common theme, we focus in particular on the dynamic effects of *price promotions*, (rather than non-price promotions) offered to *consumers* (rather than to the trade or to sales force).

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1

Introduction

Firms spend a significant part of their marketing budgets on sales promotions. Promotion accounted for roughly 75% of marketing expenditures for US packaged goods manufacturers during 1997–2007, and the other 25% was for advertising (Trade Promotion, 2007). In 2007, 60% of the budget was spent on promotion to the trade (i.e., from manufacturers to retailers) and 14% on manufacturer promotions to consumers. Since the impact of promotions on sales is usually immediate and strong (Blattberg et al., 1995), promotions are attractive to results-oriented managers seeking to increase sales in the short term (Neslin, 2002). In a recent meta-analysis, Bijmolt et al. (2005) report that the average short-term sales promotion elasticity is -3.63, which implies that a 20% temporary price cut leads to a 73% rise in sales. There are few, if any, other marketing instruments that are equally effective.

Promotions also affect sales after the immediate sales bump. In other words, they have dynamic effects on consumer purchase behavior outside the period of the promotional offer. The objective of this article is to present a comprehensive overview of the various dynamic effects of promotions. We believe there is an opportunity for such an article since the literature on dynamic promotion effects is vast and quite scattered. There have been so many researchers who have worked in this field across decades using very wide-ranging terminologies, methodologies, and data that we believe there is a need to catalog the current state of affairs. To keep the discussion centered on a common theme, we focus in particular on the dynamic effects of *price promotions* (rather than non-price promotions) offered to *consumers* (rather than to the trade or to sales force). Price promotions are current-period temporary price reductions to enhance sales or loyalty. In contrast for example, loyalty programs often offer future discounts on a long-term basis. For a discussion of the particular dynamics that have been observed for loyalty programs, we refer to Blattberg et al. (2008).

We envision two target audiences for this article. The first is marketing students and marketing professionals seeking insights into the dynamic effects of promotions. For this audience, this article illustrates the dynamic effects with several graphs, shows what has been found in the literature, and indicates what managers can do with these findings. The second audience is academic researchers new to the promotions area who are interested in studying dynamic promotion effects. This audience hopefully not only benefits from model equations and the literature summary, but also derives inspiration from our suggestions for future research.

Our organization of the article reflects both these audiences. To illustrate the in-total six different dynamic promotion effects, we use as a device an econometric model of household purchase behavior. For each effect (each section) we follow the same structure. We start by showing the equation that accommodates the dynamic effect under consideration, and next we show in a graph how the effect shows up in simulations of the purchase behavior aggregated across households. Next we discuss the empirical findings on that effect based on the literature. Finally, we discuss each effect's managerial implications and future research avenues. Note that our emphasis is on discussing what the dynamic phenomena are and what we know about them. The econometric model serves as a vehicle for rigorously introducing each phenomenon. See Van Heerde and Neslin (2008) for a more detailed discussion of sales promotion modeling.

The dynamic effects covered in this article are the following. Promotions may lead to stockpiling and deceleration (Section 3) and state dependence (Section 4). Promotions may also affect reference prices, which affect subsequent purchase behavior (Section 5). Over time, after repeated exposure to price promotions, consumers may become more price sensitive (Section 6). Promotions may have permanent effects on consumer behavior (Section 7) and lead to competitive reactions (Section 8).

Before we start with discussing the different dynamic effects, we present in Section 2 the basic model without these dynamic effects. After that, we gradually expand the basic model with the components to capture each of the dynamic effects.

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