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Disentangling the effects of promotion mix on new product sales: An examination of disaggregated drivers and the moderating effect of product class

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A B S T R A C T

The typical firm invests 20% of its promotional budget on sales promotions in an effort to drive short-term sales, Limited insight into the differential impacts of various sales promotions as well as the conditions under which they are most effective in lifting the sales of new products remain despite the rich body of research on sales promotions in the marketing literature. This research seeks to address these gaps by demonstrating the effects of two types of sales promotions on high-value consumer durable goods. Specifically, we investigate the effects of cash rebates and financing incentives on consumer perceptions of value and sales across luxury and mass goods in the automobile industry. Our findings suggest that although both categories of promotional strategies are effective sales booster, cash rebates are more effective in the mass market while financing rates offer significant new product sales benefits in the luxury market.

1. Introduction

Manufacturers often utilize sales promotions to boost sales and influence consumers' purchase behavior (Neslin, 2002). These promotions are universally focused on driving purchase behavior, moving consumers out of a holding pattern by offering incentives to take action before promotional offers expire (Blattberg, Briesch, & Fox, 1995; Nijs, Dekimpe, Steenkamps, & Hanssens, 2001). Promotional efforts have proven to be particularly effective in supporting the launch of new products into competitive markets (Hooley, Greenley, Cadogan, & Fahy, 2005). Given evidence of their effectiveness, firms continue to invest heavily in sales promotions to the tune of $70 billion annually, which accounts for nearly 20% of total promotional spending (ZenithOptimedia, 2013), and they have remained an area of focus in the marketing literature. For more than 30 years, scholars have investigated the effect of promotions on various aspects of firm performance, which has provided great insights into how and why promotions drive consumer demand. Within these broader investigations, a relatively small subset have focused on understanding how promotions drive initial perceptions of quality and sales for newly introduced products. Additionally, less is known about how simultaneous promotions may impact consumer demand and firm performance, which is becoming an increasingly important issue for industries like automotive, where firms have large promotional budgets and must allocate this budget across mass and luxury brands with their annually refreshed product offerings (Fig. 1).

While the desired outcome of promotional investments is constant across new and established products and industries, the composition of the promotion mix can vary significantly across industries. For example, in automotive industries, promotions often focus on financing offers from manufacturers or cash rebates. Considerable research has been conducted to understand how promotions can be structured to drive conversion (Silk & Janiszewski, 2008) and leveraged for success in the presence of price competition and price discrimination (Demirag, Keskinocak, & Swann, 2011). Throughout these investigations, when scholars focus on analyzing the impact of the promotional mix on firm performance, the level of granularity in the data begins to disappear. With few exceptions, academic investigations often aggregate promotion strategies into a single variable, such as, "promotion incentives" (Gangwar, Kumar, & Rao, 2013; Leeflang & Parreño-Selva, 2012; Pauwels, Silva-Risso, Srinivasan, & Hanssens, 2004). This approach provides some evidence of the impact of promotions in general but

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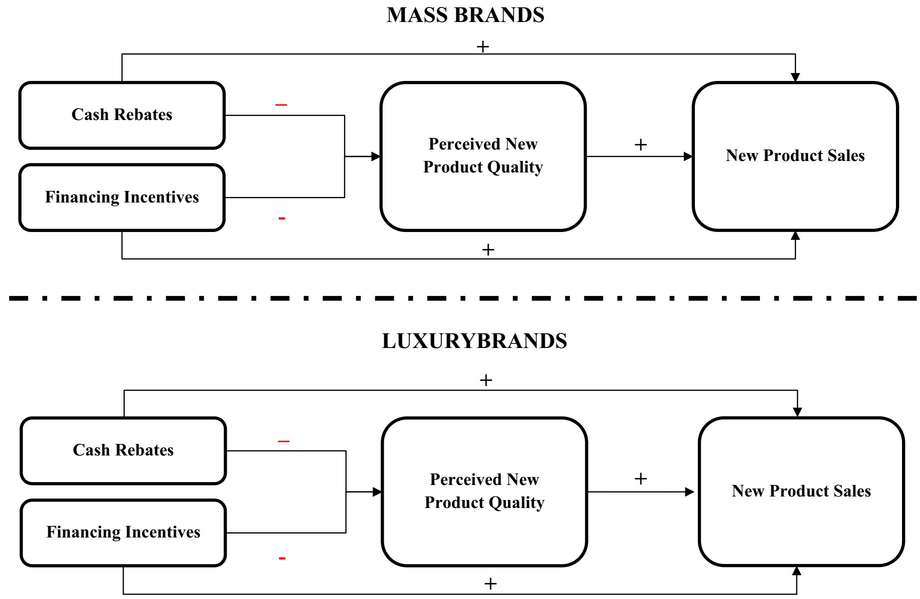

Fig. 1. Tested model: The differential effects of promotions for mass versus luxury brands.

offers little actionable guidance to managers who need to manage a promotional budget across an array of investment areas. One notable exception to this tendency to aggregate promotional types into a single bucket is a study by Lu and Moorthy (2007), which demonstrates the differential effectiveness of coupons and rebates as promotional strategies that are conditional on consumers' reservation price and redemption costs (Table 1).

Failing to disaggregate sales promotions into their respective tactical investment areas results in considerable information loss, and we contend that doing so could result in flawed conclusions. For example, in industries like the automotive industry, the two most common promotions to induce new product purchase are cash rebates and financing incentives. While both result in cost savings for consumers, they could have differential effects on initial consumer attitudes (i.e., perceptions of quality) and sales. As a result, aggregating these investments into a global "promotion incentives" bucket will, at best, result in a lack of actionable guidance for managers and, at worst, lead to incorrect conclusions regarding the effectiveness of promotions in driving attitude change and firm performance. Building on this issue, most prior research focuses at either the industry level or within a focal product category with little variance in the brands under investigation. This narrow lens limits the ability to assess product class contingencies that could alter the nature of the relationship between promotions and sales. One notable factor missing in prior research is product class (luxury versus mass). The very nature of promotions and consumer mix for these classes of goods could result in substantial swings in the effectiveness of sales promotions in driving new product sales.

The current study seeks to provide advanced research on the impact of the promotion mix on new product sales by addressing these two shortcomings of the extant literature. Specifically, our first contribution focuses on disaggregating promotional strategies at the tactical level by operationalizing financing incentives and cash rebates in the U.S. automotive industry. As such, we focus on a single industry to tease out the effects of the two categories of promotional strategies that are particularly relevant in a consumer durable industry. In doing so, we provide new insight into the effectiveness of two unique promotional investments in driving consumers' perceptions of quality for newly introduced products. Second, we examine the effects of these promotions across luxury and mass product classes, thus offering an improved understanding of promotion types that can offer the biggest return for the various product classes. Finally, when testing these effects, we introduce a new method to the marketing literature, which addresses the data frequency mismatch issue by applying mixed data sampling regression (MIDAS) as pioneered by Ghysels, Santa-Clara, and Valkanov (2004).

Our results demonstrate considerable value in disaggregating promotional incentives and modeling their impact separately for luxury and mass goods. For example, while our findings reveal that both categories of sales promotions (i.e., financing incentives and cash rebates) affect consumers' perceptions of quality, cash rebates deplete consumers' perceived quality, whereas financing incentives strengthen perceived quality. Additionally, the impact of financing incentives on perceived quality is more pronounced in the mass market than in the luxury market. Interestingly, we find no difference in the impact of cash rebates on perceived quality across mass and luxury markets. Furthermore, empirical estimates suggest that managers may employ perceived quality as a strategic asset that can effectively boost sales, irrespective of product class. However, the strategic asset is more effective in the luxury market than in the mass market. Our findings identify critical contingencies regarding the promotions-performance relationship and in doing so have considerable implications both for researchers and practitioners. In the following sections, we introduce the conceptual basis for our model, describe the MIDAS method, and discuss the results.

2. Drivers of new product performance

2.1. Defining sales promotions

Sales promotions are a critical component of a firm's marketing mix. These promotional tactics operationalize short-term techniques to generate almost immediate impact on sales volume and influence consumers' purchase patterns (Neslin, 2002). In the current study, we focus on financing incentives and cash rebates—two critical consumer-oriented promotional strategies frequently employed in high-value consumer durable goods industries (Attanasio, Koujianou Goldberg, & Kyriazidou, 2008). This study focuses on the U.S. automobile industry, a particularly appropriate product category in which both types of promotional strategies are critical demand boosters because of the relatively high price of the purchase. Automobile purchases are one of the biggest purchase decisions consumers make, often being a purchase equal to approximately 60% of consumers' annual salaries. In 2015, for