

Some Effects of Price Discounting on Discounted and Competing Brands' Sales

Janet Hoek and Leon Roelants

This research monitored daily sales of promoted and competing products (for cornflakes, fruit juice and washing powder) before, during and after a price discount promotion. The supermarket provided daily sales figures from checkout scanners for the discounted product and its key competitors. Sales were monitored for three periods: 1. A period of three weeks prior to the discount promotion to enable establishment of a base sales level. 2. The week during which the discount ran. 3. A post-promotion period of three weeks, to allow a comparison of post-promotion and base level sales. Sales during the promotion period increased markedly for each discounted product. When the discount period ended, sales declined for each brand, however, in most cases sales remained above the weekly sales level recorded before the promotion commenced. Unlike the cornflakes and washing powder though, sales of the fruit juice declined to below base level following the promotion. In general, sales of competitors' products declined during the discount week. However, in some cases they increased, though never to the levels recorded by the promoted brand. Some implications of these results are discussed.

Keywords: price promotions, discounting, brand switching, stockpiling

Introduction

The use of in-store promotion techniques has increased rapidly in recent years and current predictions indicate that companies will allocate more than 70% of their promotion budgets to "below-the-line" or merchandising activities by the mid 1990s (Erickson & Dagnoli 1989). Temporary price discounting is a well known merchandising technique whereby manufacturers, retailers, or both, offer consumers an economic incentive to induce them to purchase a particular brand. Research into price discounting has concentrated on three key issues: the effect price discounts have on market share, brand-switching and purchase quantity and timing.

Effect on Market Share

Massy and Frank (1965) investigated the short term effects of temporary price discounts and found that both brand-loyal and non-loyal buyers responded to a discount promotion. Hinkle (1965) argued that a brand's age may influence the extent to which a price discount can increase its share. He found that price discounts were most effective with new brands, which tended to achieve higher gains with smaller price reductions than more established brands. More than a decade later, Dodson, Tybout and Sternthal (1978) corroborated Hinkle's findings and concluded that price discounting increased the market share of the promoted product, at least in the short term. Furthermore, they suggested that a high discount led to a greater increase in market share than a low discount.

Effect on Brand Switching

Other studies explored the subsequent behaviour of brand switchers to determine whether consumers reverted to the purchase patterns they held prior to the promotion. Lawrence (1969) and Shoemaker and Shoaf (1977) concluded that this was the case and suggested the

market share gained from the promotion could be as temporary as the promotion itself. Thus they concluded that these promotions may have a limited effect because they serve only to disrupt consumers' short-term purchase behaviour, which eventually resumes its normal pattern.

Effect on Purchase Timing and Quality

Temporary price discounts may affect other aspects of consumers' purchase behaviour, such as the quantity of product they purchase, and their interpurchase intervals. Wilson, Newman and Hostak (1979) found a strong relationship between the buying situation and the number of units purchased.

Shoemaker (1979) concluded that price discounts have more effect on the quantity purchased than on buyers' inter-purchase interval, although later research questioned this. Blattberg Eppen and Lieberman (1981), Neslin, Henderson and Quelch (1985) and Gupta (1988) concluded that these promotions may only displace sales that would have otherwise occurred at the product's usual price, thus delaying their subsequent purchase of it and competing brands. These conclusions raise an important question about the cost-effectiveness of price discounts.

In summary, manufacturers who promote their brands by way of temporary price discounts may, in the short term, induce buyers of competing brands to purchase their product, but it appears that price discounts do not usually have a permanent effect on consumers' brand preferences. Research into purchase timing has generally concluded that this is disrupted during discount periods. However, the effect on competing brands' sales has not received detailed research attention. The research reported in this paper was designed to address this issue, and monitored daily sales of promoted and competing products before, during and after a price discount promotion.

Method

Sales data on brands in three product categories (cornflakes, fruit juice and washing powder) were collected from a major supermarket during June, July and August 1990. The supermarket provided daily sales figures from checkout scanners for the discounted product and its key competitors. The monitoring period was divided into three phases:

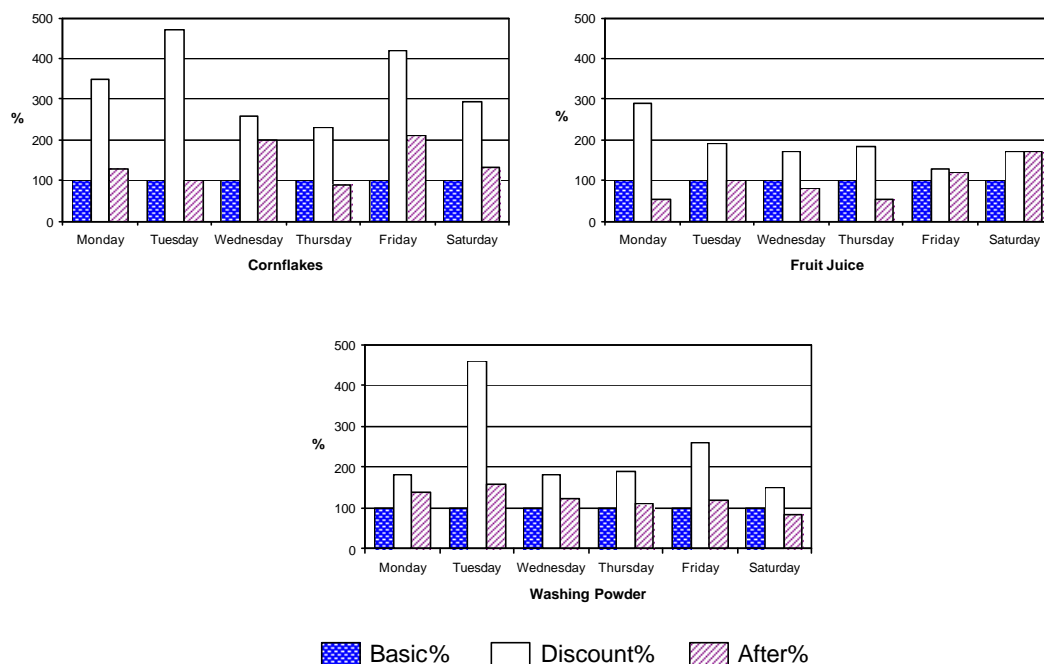
1. A period of three weeks prior to the discount promotion to enable establishment of a base sales level.
2. The week during which the discount ran.
3. A post-promotion period of three weeks, to allow a comparison of post-promotion and base level sales.

Results and Discussion

Effect on Sales

As Figure 1 shows, sales during the promotion period increased markedly for each discounted product.

Figure 1. Sales trends before, during and after a price reduction



When the discount period ended, sales declined for each brand, however, in most cases sales remained above the weekly sales level recorded before the promotion commenced. Unlike the cornflakes and washing powder though, sales of the fruit juice declined to below base level following the promotion.

One possible explanation for this is that consumers stockpiled fruit juice more than the other two products. Although all three products have stable shelf lives, and so could be expected to show similar evidence of any stockpiling, other factors may explain why the sales of fruit juice declined in this way. Whereas neither cornflakes nor washing powder could be expected to show seasonal consumption patterns, fruit juice may. That is, consumers' use of cornflakes and washing powder would appear likely to remain constant, whereas their consumption of fruit juice may peak during the warmer months. This data was collected in winter, when fruit juice consumption could be expected to be lower, making the product more susceptible to stockpiling, and providing a possible explanation for the apparent discrepancy in these results.

The fruit juice results are consistent with Gupta's (1988) claim that the promotional "bump" after discounts is caused by purchase time acceleration and stockpiling.

However, the higher post promotion figures for cornflakes and washing powder indicate that some brand switching may have occurred, and so support Dodson et al.'s (1978) findings.

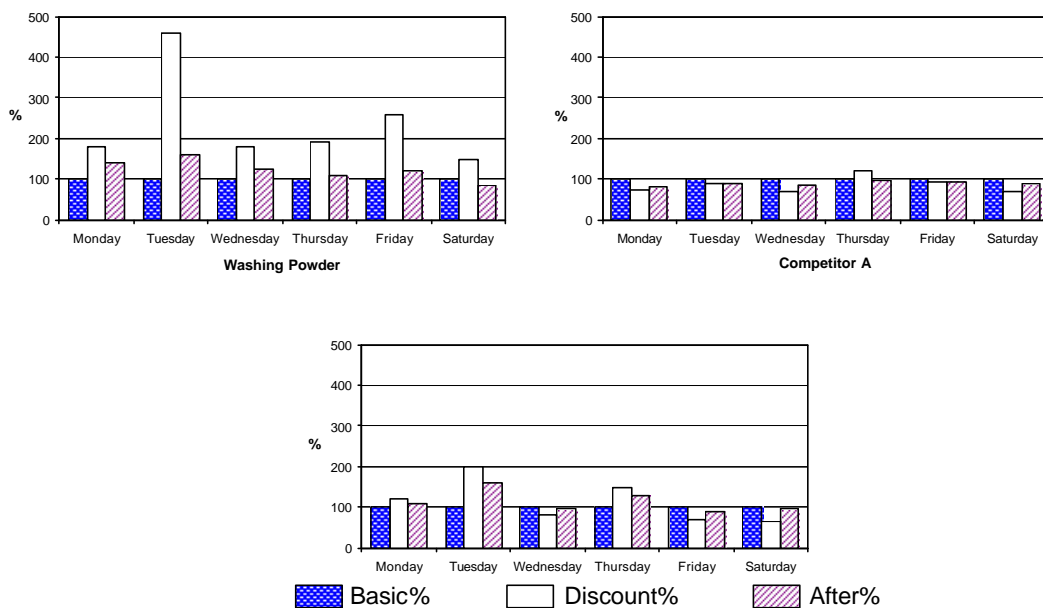
Effect on Competitors

In general, sales of competitors' products declined during the discount week. However, in some cases they increased, though never to the levels recorded by the promoted brand. Figure 2 shows these results for the sales of washing powder and suggests that some consumers changed brands, though not all competing brands were affected to the same extent, or in the same way.

Although chance variations in sales could have caused sales of competing products to rise, these might also have occurred because of a stockout, a situation where a supermarket cannot maintain sufficient stock levels of a brand to meet consumers' demand for it. When this occurs, consumers who would ordinarily have purchased the brand may instead purchase a substitute brand, thus causing sales of competing products to rise, rather than decline. However, why a stockout should cause one competitor's sales to increase, but not another's is more difficult to explain. Consumers may have chosen the cheapest alternative, or the brand that most closely resembled the unavailable product, but these speculations require more detailed investigation before they can be accepted. Research currently underway is examining the presence of stockouts and exploring why their effect on competing brands differs.

Price discounting's potentially beneficial effect on competitors becomes more serious when viewed in connection with the fact that price promotions may not always result in increased profitability for the brand. Thus in the worst situation, manufacturers may exacerbate the loss they incurred running the promotion by enhancing, rather than undermining, their

Figure 2. Effect of discount on competing brands of washing powder



competitors' positions. Research currently in progress is assessing the overall cost-effectiveness of price discounting for different product categories.

In conclusion, this small scale study raises the possibility that a product's susceptibility to stockpiling may affect the extent to which price discounting increases its sales, at least in the medium term. It also highlights a disturbing phenomenon, namely that discount promotions may not necessarily have an adverse effect on sales of competing brands. Although this pilot project examined only a small number of product categories, it suggests two areas where manufacturers could exercise more caution. First, they should not assume that price discounting will serve only to enhance their brands' market positions. Second, they should recognise that discounting may not affect positively the long term sales of the promoted products.

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