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# AiMark insights by Europanel

The category demand effects  
of price promotions

Adapted from a **Marketing Science** publication (2001)

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## The managerial issue

Most research on the outcome of consumer promotions focuses on their effect on brand choice and brand sales. The effect on the total category, however, should be of interest as well, both to manufacturers and retailers.

This study looks at both main effects (does the promotion expand category sales?) and moderating effects (of marketing intensity and competition) on short- and long-run promotional effectiveness. There are several reasons why promotions might increase short-run category demand, like quantity acceleration, increased consumption or category switching. How persistent these effects are is open to question.

These are the factors that we assume might moderate promotion effectiveness:

- (1) frequency and depth of promotions in the category (there is general agreement that these factors impact the effectiveness of any single promotion, however, it is unclear as to how)
- (2) advertising intensity in the category (which, given its mostly non-price focus, is assumed to reduce price sensitivity)
- (3) reactions of competitors, and
- (4) concentration of brands in the category (the lower the number of brands, the more price-sensitive consumers are).



## The analysis

We study the category-demand effects of price promotions in 560 consumer product categories in the Netherlands over a period of four years. To assess the effect of price promotions, we compare category sales after a promotion relative to its baseline level.

This can result in two types of impulse-response functions (see Figure 1): stationary or evolving.

- The first graph (A) shows a short-run positive impact, some dips in the following weeks (dust-settling period), but no effect once the dust is settled (the end of the dust settling period is defined as the first week in a sequence of four weeks with no effect).
- The second graph (B) shows a different effect: the impulse-response function does not converge back to 0, but remains at a level of

1.23. This indicates that a 1% price promotion enhances category sales by 1.23% even after the dust-settling period.

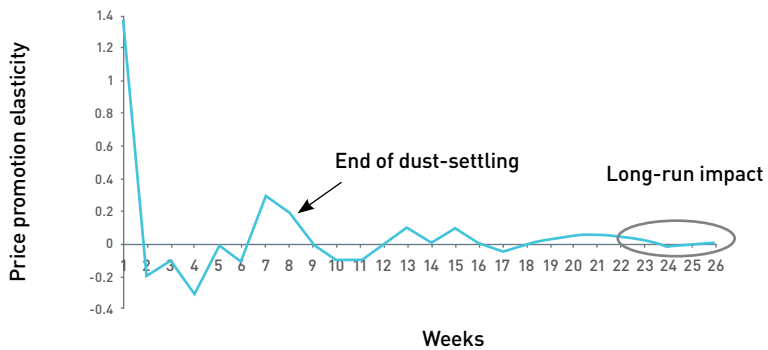
In 58% of all cases investigated, we find short-run category expansion effects. The average short-run elasticity of promotions is 2.21. The dust-settling on average takes ten weeks, but shows two distinct patterns.

In some 40% of the cases we find post-promotion cancellation (for example in toilet paper). In the other 60% we find no post-promotion cancellation, or even purchase reinforcements (caused for example by competitor reactions). In 98% of all cases, there is no long-run effect.



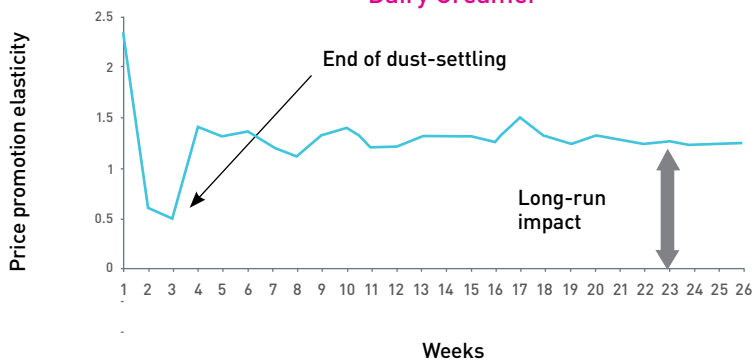
## A: Impulse response function for a stationary market

### Detergent



## B: Impulse response function for an evolving market

### Dairy Creamer





## Conclusions

- Category demand is predominantly stationary, either flat or following an upward or downward trend.
- Consumer sensitivity to promotions is higher in categories with frequent promotions and lower in categories with high advertising intensity.
- There is little effect of competitive reactions (in fact, the typical reaction is none).
- Promotions are also more effective in categories with fewer players, in perishable categories, and less

effective in categories with high new product activity. While promotions show a strong short-term effect on demand, these effects are almost always not persistent.

Overall, we conclude that the power of price promotions lies primarily in preserving the status quo in the category or in meeting short-term targets.

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