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Market share response and competitive interaction: The impact of temporary, evolving and structural changes in prices

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Abstract

Managing pricing is a challenging task due to the significant impact on shares and the likelihood of strong consumer and competitor reaction. The major contributions of this paper are to assess comprehensive share response to temporary, evolving and structural changes in prices and to determine the level of market share as a function of levels of prices. For the empirical analysis, we examine two consumer product categories and find that it is valuable to distinguish among temporary, evolving and structural changes in prices, as their impact on market shares tends to differ. Further, we find that subsequent competitive reaction will influence predictions of price response. Accordingly, it is important for managers to use conjectures regarding competitive price reactions in assessing the impact of policy changes. We conclude with the strategic implications of the findings and discuss a number of opportunities for future research. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

Pricing decisions are important to managers due to the significant and immediate impact of price changes on shares and profits and the potential for strong reactions from consumers and competitors. Pricing ranked third in overall importance among 15 marketing issues in a survey by Davidson and Stacey (1997) and was cited as "extremely important" by 78% of the respondents. Companies continually change their price strategies and tactics with a view to increasing sales or profitability. Some price changes are temporary movements around a fairly stable level consistent with $I(0)$ behavior. For example, a brand that offers a 2-week price discount off a fairly stable level engages in such a temporary effort. Other price changes are permanent if there is no return to the previous level. If a company engages in a regular practice of discount policies, this would lead to evolving prices or $I(1)$ behavior, an example of a permanent change. Another type of permanent

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change is a structural change in price in favor of a new level different from the previous level. If a company announces a one-time 20% price cut, leading to a new price level, this is an example of a structural change. As an illustration, Fig. 1 shows the market share and price series for the Miller brand of beer over 365 weeks while Fig. 2 shows the market share and price series for the Blue Bonnet brand of margarine over 104 weeks. The price series for Miller indicates there is evolution in price or a permanent price change, accompanied by an evolution in market share. Fig. 2 shows that Blue Bonnet brand has a structural change in price along with a structural change in market share in week 62. Finally, it is evident from the graphs that every 4 to 5 weeks both brands have temporary price promotions.

There are other real-world illustrations for the three types of pricing behavior. See the following, for example.

(1) Companies adopt short-term promotional tactics ranging from 25 cents off a six-pack of soda to thousands of dollars off an automobile in order to gain sales in terms of brand switching, repeat purchase, stockpiling and consumption. These tactics correspond to temporary price changes.

(2) A company offers a price discount that generates immediate positive response resulting in subsequent regular practice of offering discounts. The airline pricing tactics in 1992 resulting in price wars is an example of permanent, evolving price behavior. While this type of price behavior may result in short-run gains, it would result in sustained losses due to competitive action and reaction (Dekimpe and Hanssens, 1999). On the other hand, sustained increases in prices can result in substantial long-run profits.

(3) A company reduces prices to a new level by offering a significant one-time price cut. For exam-

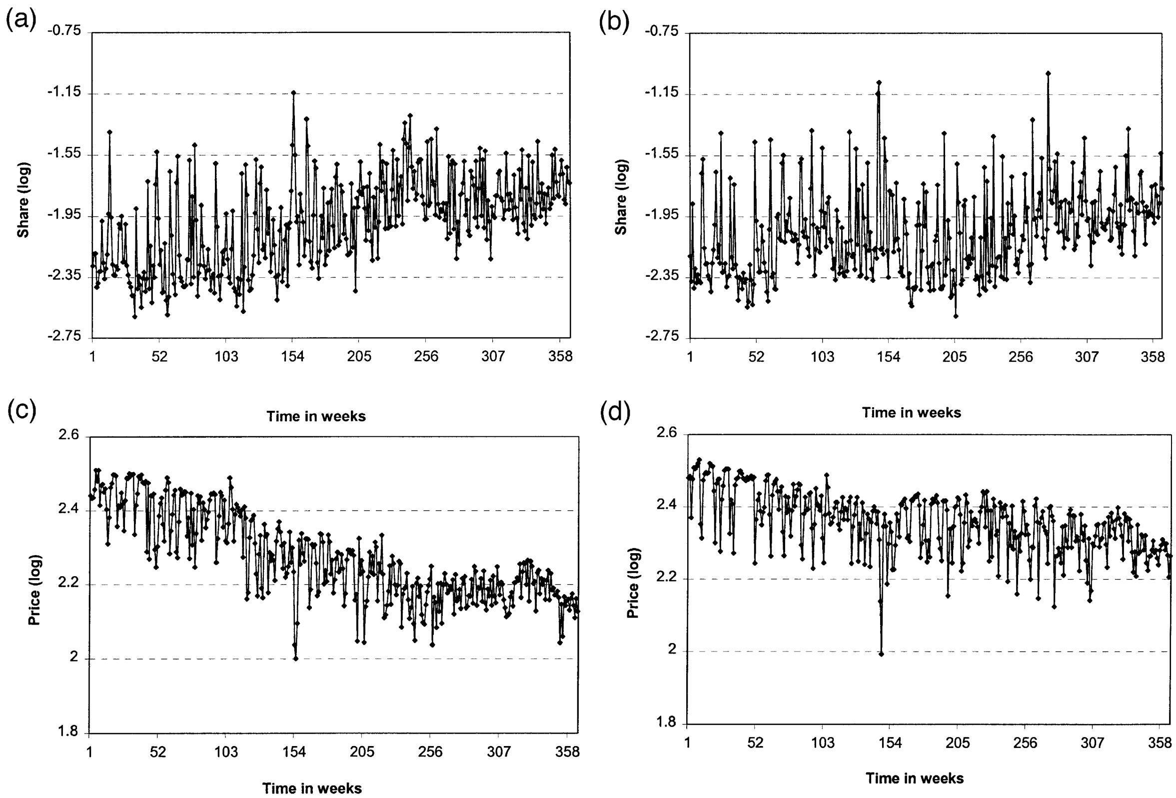

Fig. 1. (a) Market share series (in logs) for Miller. (b) Market share series (in logs) for Budweiser. (c) Price series (in logs) for Miller. (d) Price series (in logs) for Budweiser.