## IMPACT OF PRICE ON BRAND LOYALTY SENSITIVITY

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BASIC question about brand loyalty is how strong the brand to drive repurchasing (Hislop, 2001). Building brand loyalty employs marketing strategy, such as price strategy. The objective of this research is to analyze brand loyalty sensitivity due to price changes. Research instrument is questionnaire. Questionnaire developed based on last brand bought and limited to detergent consumption. Result shows that brand choice is sensitive to price changes. Tendencies to switch to another brand greater when the price changes from 1 per cent to 2 per cent, from 4 per cent to 5 per cent, from 5 per cent to 6 per cent, and from 9 per cent to 10 per cent. This imply to marketing manager that every one digit of price changes on product pricing, will give effect on sales.

## Key Words: Price Changing, Brand Switching, Intention.

## Introduction

For many consumers, price is a very important attribute. The attribute price can indeed be more important on decision making than that of quality, brand name and others. Generalizations about the effect of price should be tempered however because consumer reactions to a price differential clearly depend on the magnitude of the differential as well as the brand names which are considered.

Importance of this phenomena can be studied in Indonesian consumer, where price is changing rapidly, even could be daily live performed on convenience goods, since the economic crisis of 1998. Price changing is reflected by inflation rate. Inflation rate in March term 1998 was 25.13 per cent, and this number is the smallest inflation rate during 1998. The highest inflation rate occurred on December term 1998, 77.63 per cent. Fantastic number of inflation rate ever been faced by a country since 1945 . The changing of price continuously occurs until this day. Even in the last two terms (September and December) inflation rate lowered and became one digit, consumer shopping power still low, referred to Indonesian GDP per capita 7.2 million rupiahs which equal to US $\$ 833$.

One can conclude that consumer consideration to decide product brand is mainly based on price. The main question is how consumer brand decision is effected by price fluctuations. Does consumer move to another brand as price rise?

Good example to study the effect of price fluctuation towards brand sensitivity is to study consumer shopping decision on convenience product, detergent. Detergent must be consumed and bought whether

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it's price rises or not. It's daily requirement of every household. Detergent is produced by many companies and sold using various brands.

Recently, only view research conducted on relationship between pricing and brand loyalty. Most brand researches have been conducted to analyze brand extension, relationship between price and quality perception, etc. It might be common in western or developed country, that decision to shop or not is based on quality perceived not money availability. In developing country such as Indonesia, mainly after economic crisis, the decision not surprisingly is based on price and need.

The objective of this research is to study the effect of brand fluctuation towards brand loyalty.

## Theoretical Background

To understand the relationship between perceived quality and willingness to buy, it is necessary to introduce the concept of the acceptable price range. It is postulated that buyers, generally, have a range of acceptable prices for considering purchases. Thus, buyers may not purchase a product when price is perceived to be too high, nor when price is perceived to be too low. Therefore, the acceptable price range concept provides the implication that perceived value is positive when prices are acceptable. However, perceived value will be positive only when the utility inferred from the perception of quality is greater than the utility sacrificed by paying the price (Monroe, 1984).

There is some evidence that endpoints of the evoked range of prices may impact price judgments. Biswas and Blair (1991) in Janiszewski and Lichtenstein (1999) have shown that consumer purchase intention are sensitive to their perception of the lowest and highest prices in the marketplace.

The threat of consumer anger can account for the stability of prices from one period to the next while also having the potential for explaining some of the dynamic responses of the economy to monetary policy shocks. The consumer reactions are "irrational" in the sense that consumers are maximizing something other than a utility function that depends only on their own material payoffs. Rather, they also wish to harm (or at least not to help) firms that they see as having given them a bad deal. Understandably, this leads firms to be careful not to induce these emotional reactions (Rotemberg, 2003).

Price may serve as a reference point for judging quality when other product information is not available (Monroe, 1976; Zeithaml, 1988). When considering buying a store-branded garment, price may be a key element in the decision process. Baltas (1997) has shown that price is an informational cue that increases consumer sensitivity to private brands.

Till now, one critical attribute of the brand that has been intensively studied by economists is brand price. It is only in the past decade or so that researchers of consumer behaviour in marketing turned their attention to studying price as a perceptual dimension of evaluations with respect to brand quality and brand worth (defined as some measure of quality per unit price.) Past research (Gabor and Granger, 1966; Gardener, 1971; Jacoby, 1970; Leavitt, 1954; McConnell, 1968a; 1968b; Peterson, 1970; Rao, 1972; Tull, Boring and Gonsoir; 1964) has indicated that price is used by consumers as a surrogate for quality in the absence of other brand information and that the importance of price in quality perceptions diminishes when a number of other brand cues are present.

Recent researches on brand were conducted on building strong brands, brand image (via the brand name) on estimates of internal price standards (Biswas and Sherrell, 1993), price effects on brand extension quality evaluations (Taylor and Bearden, 2002), or price perception in brand extension, strategic bundling of price.

The managerial significance of brand extension strategies has been proposed conceptually by Park, Jaworski, and MacInnis (1986), and demonstrated empirically by many researcher, i.e., Aaker and Keller (1990), Keller and Aaker (1992), Bottomley and Doyle (1996), Sunde and Brodie (1993), Bousch and Loken (1991), and Park, Milberg, and Lawson (1991). Consistent findings support the cost-efficiency (Pitta and Katsanis 1995; Smith and Park 1992) and/or revenue-effectiveness of such strategies (Lassar, Mittal, and Sharma 1995; Doyle 1990; Sullivan 1992; Smith and Park 1992).

Previous research also found that the introduction of the minimum pricing policy in 1990 without allowing generic substitution had a relatively small impact on the selection of medicines within the Pharmaceutical Benefits Scheme. However, the effect of generic substitution at the pharmacist level, which was introduced in December 1994, resulted in a marked increase in the percentage of eligible PBS items dispensed at benchmark. Case studies showed a larger premium resulted in a greater shift of patients from drugs with a brand premium to the benchmark alternative.

On new product launch, most marketers use price discount to attract consumer buying. This strategy is used in line with proposition believed that whenever price is presented in a discount format it can perform an informative role in brand choice. Moore and Olshavsky (2006) found from their empirical research that the desirability of a discounted unfamiliar brand does not continue to increase as the size of the price discount increases. Predictions concerning the effects of store type and size of price discount were not confirmed.

## Research Method

## Questionaire Design

Preliminary data collection, a self-administered questionnaire as instrument of research was designed. Questionnaire containing price and brand sensitivity measurement. Question is started by asking the last brand, respondent bought and it's price. This question formed is open, so that respondent has flexibility in filling out the answer, regarding the variety of brand available in market. Questions were asked to the respondents regarding the next shopping trip, it the price rise of the brand was from 1 per cent upto 10 per cent. These are closed questions, with alternative choice "buy" or "not buy".

## Data collection

Research object is detergent, and research subject is households. Respondents were chosen using convenience sampling from lecturer in Gunadarma University. Basic consideration to sampling from Gunadarma University is providing respondent homogeneity. That is, questionnaires were distributed to a convenience sample of women Gunadarma University lecturer, as households shopping decision are made by women. It was filled out on the spot. It takes 5 to 10 minutes when self administered questionnaire is deployed, and up to 20 minutes when interview is deployed.

Data collected then plotted using linear graph to show the sensitivity brand choice and supported by hypothesis test. Regarding studying the effect of price rise toward brand loyalty, the hypothesis to be tested is:
$\mathrm{H}_{0}$ : There is no effect of price rise towards brand loyalty, versus
$H_{1}$ :There is effect of price rise towards brand loyalty
Product brand varied at least into 8 brands. It's interesting also to study the effect of price fluctuations
towards brand loyalty on each brand. Hypothesis was tested using Friedman test non parametric statistics. Hypothesis to be tested is:
$\mathrm{H}_{0}$ : There is no differences on consumer decision among detergent brands as price, versus
$\mathrm{H}_{1}$ : There is differences on consumer decision among detergent brands as price

## Result and Discussion

## Respondent Characteristics

Data collected from 83 households using self administered questionnaire. We asked respondent their intention "to buy" or "not buy" if they find the price of detergent with same brand as they bought before change varied from 1 per cent until 10 per cent. The results are shown in Table 1.

As mentioned before, product brand of detergent varied. We identified 8 brands bought by different households on the last shopping trip, as shown on Figure 1. "Rinso" is the majority brand bought i.e., 40 per cent of total, followed by "attack", 29 per cent, "daia" 16 per cent, "soklin" 7 per cent, "surf" 5 per cent, and "B29", "total", "surf" 1 per cent of each. It's not surprising to see the figure, "rinso" is the most common brand of detergent in Indonesia, even the first brand known as detergent packed. The price among brand also varied. The most expensive for same weight is "attack", followed


Figure 1: Detergent Product Brands and Percentage of Respondent Buying

Table 1: Correlations between Price Rise with Brand Loyalty

|  |  |  | decision | price_raise |
| :--- | :--- | :--- | ---: | ---: |
| Kendall's tau_b | decision | Correlation Coefficient | 1.000 | $-.299(* *)$ |
|  |  | Sig. $(2$-tailed) | .000 |  |
|  | price_raise | N | Correlation Coefficient | $-.299\left({ }^{* *}\right)$ |
|  |  | Sig. $(2$-tailed) | 827 |  |
|  |  | N | .000 | 1.000 |
|  |  |  | 827 | 828 |

** Correlation is significant at the 0.01 level ( 2 -tailed).
by "rinso." One pack of "attack" with 900 grams weight sold Rp. 13500, but "rinso" only Rp. 12500 per pack with weight 1000 grams.

## Studying the Effect of Price Changing Towards Brand Loyalty

To explore brand switching sensitivity, we provided respondents a list of questions, if they will switch to another brand when they find the price of product for the same brand as they bought before rise. We provided 10 different level of price rise, starting with 1 per cent, then followed in ascending order 2 per cent, 3 per cent, 4 per cent, 5 per cent, 6 per cent, 7 per cent, 8 per cent, 9 per cent, and 10 per cent. Even most of respondents said that the level of price rise does not show the real level price rise (most of time, the price change on a range 7-15 per cent these days), Figure 2 show the sensitivity brand switching as price goes high. Sensitivity brand switching was measured by asking respondent action, "buy" or "not buy." From Figure 2 it can be stated that respondent tend to switch to another brand as the price rises. From line created, we can classify 5 regions, with two trends. Region 1 covers the brand switching when price level rise on 1 per cent-2 per cent range, region 2 rise on 2 per cent- 4 per cent range, region 3 rise on 4 per cent- 6 per cent range, region 4 rise on 6 per cent- 9 per cent, and region 5 rise on 9 per cent- 10 per cent. Region 1,3 , and 5 have properties very sharp slope. Region 2 and 4 have lower slope. Hence, we can state, price change from 1 per cent to 2 per cent, from 4 per cent to 5 per cent, from 5 per cent to 6 per cent, and from 9 per cent to 10 per cent give more impact on brand sensitivity than price change from 2 per cent to 3 per cent, or from 3 per cent to 4 per cent, or from 6 per cent to 7 per cent, or 7 per cent to 8 per cent, or from 8 per cent to 9 per cent.

Impact of price changing on brand sensitivity explore deeply by deploying hypothesis test. The hypothesis to be tested is "there is no intention to switch to another brand if price level rises" versus "there is intention to switch to another brand if price level rises." Since intention to switch to another brand variables is measured using ordinal scale, we used Kendall's tau_B correlation coefficient in order to test the hypothesis and measure the correlation. Result shows (as can be seen on Table 1) the rejection of null hypothesis at 0.000 per cent. So that, we can conclude consumer will switch their choice on detergent brand when price goes high. The correlation between brand switching with price changing is -0.299 , means every unit changing on price that tend to be high, the intention to switch to another brand will rise on 0.299. This result does not support. Hoch et al. (1995) result, that consumers are inelastic to price changes for grocery purchases, nor finding by Kalyanaram and Little (1994) that consumers are not affected by small differences in price, provided that prices are close to their expectations. In sum, while visit-to-visit price variation strongly influences brand-level purchase decisions.

In addition, Krishnamurthi et al. (1992) show that brand loyal consumers are more elastic than brand switchers when they make purchase quantity decisions (i.e., a brand loyal consumer will stock up on his or her preferred product).


Figure 2: Brand Switching Line if the Price Rises
The result also does not match with previous research, that is the minimum pricing policy without allowing generic substitution had a relatively small impact on the selection of within the Pharmaceutical Benefits Scheme. It's understandable, provided that the study was on medicines product.

However, the result is in line with Monroe (1984) finding. On the concept of the acceptable price range, it is postulated that buyers, generally, have a range of acceptable prices for considered purchases. Thus, buyers may not purchase a product when price is perceived to be too high, nor when price is perceived to be too low.

From the result above, we can conclude that detergent consumers are not brand loyal. If they are brand loyal, they will be relatively insensitive to prices in their brand choice decisions, yet they respond to deals by stocking up on their preferred brands (Krishnamurthi and Raj, 1991). Brand switchers, on the other hand, act in the opposite manner: they do not stock up on any one brand, but their initial brand choice decisions are highly sensitive to changes in price.

It is not surprising to deal with the result. The relation between price and quality, might exist (Gabor and Granger, 1966, Gardener, 1971, Jacoby, 1970, Leavitt, 1954, McConnell, 1968 a and b, Peterson, 1970, Rao, 1972, and Tull, Boring and Gonsoir, 1964), but consumer is not aware of quality. Detergent, as daily need, is not quality based product. Consumer need not to consider of quality when detergent purchasing is made. This is true to Indonesia consumer, where laundry work is done by household keeper, detergent quality is not factor to be considered by shopping decision maker. Household keeper is not shopping decision maker. Shopping decision maker then will make decision based on product price in deciding which brand to be chosen.

Table 2 shows the statistics test on second hypothesis, i.e., the difference of decision as price goes high among brands. Significant value is 0.000 . Based on Table 2, we can conclude that decision to switch to another brand as price rise is different among brands. Few brands are well known to most of customer, such as "rinso." As pioneer of detergent product, even customer can't be differentiated between brand and product. Most customer say "rinso" to express detergent. The decision to buy "rinso' brand could be as repeated action, without any other considerations. We imply the evidence of past behaviour (habit) on buying intention (Siringoringo and Kowanda, 2007).

## Table 2: Hypothesis Testing on Brand Loyalty with Brand as Price Changing among Different Brand



## Conclusion and Implication

Consumers switch brand when the price rises. The tendencies will be greater when the price level change from 1 per cent to 2 per cent, 4 per cent to 5 per cent, 5 per cent to 6 per cent, and from 9 per cent to 10 per cent. The significance of brand switching due to price level fluctuation is very strong. This implies any rise in price, even a smaller one, will result in brand switching. It's concluded that there is difference in brand loyalty among different brands.

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