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## THE IMPACT OF PRICE INFORMATION ON CONSUMER PURCHASE BEHAVIOUR <sup>1)</sup>

(Pengaruh Informasi Harga Terhadap Perilaku Konsumen)

Ujang Sumarwan <sup>2)</sup>

**ABSTRAK.** Tujuan dari paper ini adalah untuk menganalisa pengaruh informasi harga terhadap perilaku konsumen dalam membeli dan keuntungan yang diperoleh konsumen. Hasil kajian pustaka menunjukkan bahwa harga barang berpengaruh nyata terhadap persepsi konsumen akan mutu barang yang dibelinya. Informasi harga barang sangat penting sebagai bahan pertimbangan dalam pengambilan keputusan bagi konsumen. Konsumen yang mengetahui bermacam-macam harga barang akan memperoleh keuntungan dalam bentuk harga yang murah dari barang yang dibelinya. Namun informasi harga bukanlah satu-satunya faktor yang berpengaruh terhadap perilaku konsumen dalam membeli.

### INTRODUCTION

Consumption is a main activity of much human behaviour. Some of our time is spent acquiring financial resources to be consumers. Human beings as consumers must make some activities in order to obtain their necessary goods and services. These activities which are related to their consumption then become important elements of human behaviour. Buying is one of these activities, this is the frequent activity of consumer because most of products needed by consumers must be obtained in the market. Market provides many alternatives of products and services. Consumers must be intelligent buyers in the market to select their necessities which meet their preferences. Lea, Tarpy and Webley (1987) pointed out that as a buyer, consumer should make a series of choices. The consumer must decide whether or not to buy a certain commodity, to visit a particular shopping area, to enter a particular shop and to buy a particular quantity.

Consumers interact with their environment. Their behaviour in the market is influenced by their family, social and cultural, economic and business environment. Consumers are the focus of considerable influence attempts by business organizations. These companies try to motivate consumers to purchase their products. Businesses influence consumers by providing information through advertising. This information may include types of products made available, product features, where products can be bought, business attitudes, product quality, prices, service offered and store hours. Consumers can evaluate and compare different information and then decide their choice as to which product or store offers them the best advantages. Information may not be the the only factor influencing consumer's decision, but this factor is an important element for consumers as a basis for evaluating and comparing among alternatives. Among many attributes of products, price information can be considered as one of the most important information needed by consumers. From the economic point of view, price plays an important role as constraint factor in consumer's choice. From the psychological aspect of consumer, price may

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mean more than just as an allocative role. By knowing price information, the consumer can attain the potential saving from the market. The purpose of this paper is to analyze the impact of price information on consumer purchase behaviour.

#### CONSUMER PERCEPTION ON PRICE INFORMATION

In microeconomic model of consumer choice, consumers make choices between products, given that consumers have limited resources (income). The concept of utility or satisfaction or preference and diminishing returns underlay this consumer choice behaviour. The model is based on the assumptions that (1) perfect knowledge of consumer's need, (2) preferences are perfectly ordered, (3) utility is maximized. The consumer maximizing utility is considered to be constrained by their resources (income) and market price, more of one good can be obtained only at the expense of another. The consumer's choice occurs where the consumer gains the highest level of utility. This can be described by a simple example; when consumers must consume between two products, they will purchase those products in sufficient quantity so that the marginal utility per dollar of any product equals the marginal utility per dollar of any other product. In brief, consumer equates marginal satisfaction between all products. This model can be illustrated in a simple mathematical model:

$$\frac{MU_x}{P_x} = \frac{MU_y}{P_y} = \dots = \frac{MU_n}{P_n}$$

Where MU is marginal utility, P is price, x and y are specific products and n equals any other product. It is clearly expressed from the above explanation that price plays as an allocative role or constraint factor in the microeconomic model of consumer choice.

Thus, price is an important factor in determining the consumer purchase decision.

In reality, the consumer purchase decision is not as simple as the above model, it is much more complex. Consumers do not often have perfect knowledge. They often make mistakes and do allow emotion to enter their decisions. Maximization of satisfaction may be a goal of consumers, but it is certainly not the only goal. Although there are some weakness of its assumptions, the microeconomic model of consumer choice has given a useful contribution in explaining the consumer behaviour.

In marketing literature and research, price has a various of roles which influences on consumer's choice. Rao and Gautschi (1982) described two kinds of studies which are relevant to the study of price and its influence on choice. The first study is to identify the strength of the price-quality evaluation link. In this context, price plays as non-allocative role. The second study addresses the relationship between the process of consumer judgements of goods and intended choices.

Consumers use a variety of attributes which are associated with product to judge its quality. Some attributes are inherent with the product, these are the physical characteristics of the product. In judging food or beverage product quality, consumers concern with its flavor, aroma, taste, color or size. In evaluating the automobile brand quality, the consumers may concern with handling, horse power, acceleration, gas mileage, safety, driving comfort, passenger comfort, reliability, durability, styling and color. Besides an inherent characteristics of the product, consumers also use external attributes of that product to judge its quality. The information which are often associated with external to the product are price, store image, brand image and promotional message. Either singly or in composite, such attributes (inherent and external) provide the important information to the consumers in building their perception concerning product quality.

There has been a growing awareness of research in consumer behaviour to understand the process of consumer judgment of products. Marketing scholars focused their research on the role of price in conveying information to the consumers about product quality judgment. These studies emphasized the non-allocative role of price rather than the role of price in allocation of the consumer's budget. Valenzi and Andrews (1971) studied the effect of price information on product quality. The respondents were asked to rank the quality of three brands of butter product which had different price from low, medium to high. It was found that quality ratings were positively related to actual product differences despite the presence of price information. Brand with high price was judged as high quality than that with low price.

The above study only provided single cue. Thus, respondents tended to rate quality according to available information (price) rather than on the basis of taste. In this situation, consumers naturally associated price and quality, and hence a positive price-quality relationship appeared. To overcome the weakness of the single cue studies, other studies had experimentally varied other cues in addition to price.

Jacoby, Olson and Haddock (1971) studied the interaction effects of price, composition differences and brand image on perception of brand quality of three beer products. It was found that price had a significant positive effect on the perception of quality when price was the only cue to vary. High priced brand was perceived to be of higher quality than the medium and low priced brands. Price did not operate as an indicator of product quality when it was combined with other variables to vary. Brand name and actual composition characteristics were more significant determiners of perceived quality than was price.

Szybillo and Jacoby (1974) used three different brands of hosiery to examine the determinants of perceived product quality.

They classified the determinants into two categories, intrinsic cue and extrinsic cue. Intrinsic cue was composition differences in three samples of hosiery, while extrinsic cues were price and store image. They discovered that intrinsic cue had a greater effect upon quality perception than did extrinsic cues. Composition differences had a greater effect than did either price or store image information. The effect of price was insignificant when it was combined with the effect of other factor.

Wheatley and Chiu (1977) replicated and extended the experiment of Szybillo and Jacoby (1974). Besides using price, store image and product characteristics, they used socio-demographic characteristics as the predictor of quality perception. It was found that high quality of carpet was associated with a high price, a high prestige store and a dark color. Demographic characteristics (income and education) had also significant effect on perception of quality, but their effect was smaller than other factors. Price was a significant determinant when its effect was combined with other determinants.

Erickson and Johansson (1985) investigated the various roles of price in product evaluation process. The respondents were asked to express their belief about, affective rating of and probability of their purchasing various automobile brands. It was found that higher priced cars were perceived as high quality. Price affected attitude positively through its positive effect of quality perception. Price also had a positive effect on probability of purchase through its effect of quality perception. Price influenced and was influenced by perception of brand quality. Higher priced cars were perceived as high quality and high quality cars were perceived to have higher price. Price was a significant factor when it was combined with other factors to determine quality perception.

Although the above studies provide evidence of a positive price-quality relationship, their result imply that price is not the dominant factor in quality perception. The

above studies used different products, and hence it is probable that price effect on consumer's perception of quality varies among products. Carpet and automobile appeared to be two of several product categories, in which price serves as a guide to quality. Findings of Jacoby, Olson and Haddock (1971) suggested that brand name and taste were more important and possibly dominated price in its effect on quality perception for relatively in expensive grocery products.

#### THE IMPACT OF PRICE INFORMATION ON CONSUMER BENEFIT

In selecting product alternatives, consumers use many types of criteria. Some important criteria include price, brand features, product performance, store image, store location. Consumers typically use more than one criterion when evaluating choices. Among the criteria, price or product cost can be considered one of the most important and consistently used in consumer criterion. When the consumers use price their primary criterion in their decision, price information is really required. Price information can be obtained from many sources. The consumers in the departement stores can get price information from item-marked price, shelf-marked price, memory and register receipt. They also can find the price information in the newspaper advertisements before going shopping. Price information in the form of item-marked price in the stores is very useful for and can give a benefit to consumers by maintaining a high level of price awareness which in turn helps them to be more selective buyers. Lengrehr and Lengrehr (1983) pointed out some benefits of item-pricing: (1) increase price consciousness, (2) discourages inflationary food buying habits, (3) encourages comparison shopping, (4) depends against instantaneous price increase, (5) insures against shelf tags, (6) verifies accuracy of price, (7) informs while shopping and at home.

In the 1970's the supermarket industry introduced price scanner technology to reduce costs of operations. With the installation of this technology, stores did not need to price mark each item. Some stores have removed item prices and expected buyers use shelf price tags as their source of information. By using this scanning technology, stores expected to reduce the operation costs, and hence the potential lower price can be passed on to consumers. On the other hand, consumers needed price information and get the product with lower prices. Item price removal (IPR) which has due to scanning technology meant less information provided to the consumers which potentially could reduce the shopping effectiveness. There has been some research to investigate the effect of this technology on consumer shopping behaviour.

Harris and Mills (1982) found that a majority of consumers indicated that if item price information were removed, their ability to judge the accuracy of prices charges would be impaired. Twenty percent of non-scanning store shoppers indicated they would change stores if scanners were installed. These shoppers tended to have more generally negative predispositions toward supermarkets. These general predispositions were likely to carry over and affect reactions to more specific changes such as the installation of scanners or the removal of item prices. The finding strongly suggested that removal of item price information could reduce the shopping effectiveness of many consumers.

Langrehr and Langrehr (1983) found that opinions on item price removal (IPR) were related with experiences with shopping in IPR environments, extent of price comparison behaviours, and certain demographic variables. Most of the consumers thought stores should supply a price marking instrument to shoppers. A majority of shoppers who had not shopped in an IPR store would likely to switch store if their current store removed prices. However, only one quarter of the shoppers who had shopped in an IPR

store changed store, and price removal was a secondary importance in their decision to switch the store.

Findings of the two studies implied that price information is really needed by consumers. By introducing the scanning technology, the stores did not intend to remove price information. They only changed its price information form from item-marked price to shelf-marked price. By this changing, the stores expected to reduce their operation costs. The shoppers who had been more familiar with item-marked price might get confused when they saw a new form of price information. Shoppers may consider item-marked price was more convenient than was shelf-marked price, or shelf-marked price represented a poor substitute for item-marked price. In brief, the stores are encouraged to provide consumer with the best method of price information. In the future, it can be expected that shoppers who have used the scanner and received its benefit (such as faster check out and more informative receipt) would be more willing to accept item price removal.

Price information among competing sellers are not always available for the consumers except they do some search to find that. Search information is the activity which needs time, effort and money. Consumers are likely to search this information if it will give them some benefit. By knowing the price information from different stores, the consumers can get the potential saving of their purchase. The consumers can compare prices from different stores and get benefit from this evaluation. Because price information search incurs some cost, the consumers would weigh the cost of information against the benefit obtained from that information. By comparing cost and benefits, consumers decide which types of information is worth enough to them that they will engage in information search. Stigler (1961) proposed the economics of information. According to his model, a consumer will search for lower prices among the sellers until the marginal cost of an addi-

tional unit of information equals the marginal returns from the search. In other words, the consumer will search price information as long as the marginal gains from this activity are higher than the marginal costs.

McCracken, Boynton and Blake (1982) studied the impact of food price information on consumers and retailers. They found that consumers who were aware of price report judged the reports to be useful. Consumers used price report for general information rather than as direct input into their store choice decision. It was found that price was not the most important factor in food store selection. Although the price reports were associated with some changes in consumer perceptions of high and low-priced stores, but consumer behaviour remain unmodified. The most important finding of this study was that price reporting can lower the relative level of food prices, both for items individually identified in the report and items not identified in the report.

The above study brings an important implication that price information is not the only factor which has strong effect to change in consumer behaviour. Although price information was considered to be useful but this factor was not strong enough to switch the store preference of consumer, such as consumer changes to low-priced store. Although consumer can get benefit of potential saving of purchasing in the low-priced stores, but consumer remained in his/her stores. In this situation, store image or store loyalty had greater effect on consumer rather than low price information. The non-monetary benefit from store image may be greater than monetary benefit of low priced store. Consumer may consider not only price but also other factors when they want to purchase in the store. Location of the store, service offered may be two important factors which impress the consumer to purchase in specific store which may become his/her store loyalty. In brief, when the consumer received the price information, the consumer does not

directly change to lower-priced store and get benefit of potential saving, but the consumer weighs the monetary and non-monetary benefit of high priced stores against low-priced stores before deciding to modify his/her behaviour (to switch the store).

Zaltman and Wallendorf (1983) reviewed some research concerning information search (external search). They concluded that shoppers visited more stores (a form of external search) if travelling costs were low. Also, people were less likely to search when their past experience with the products exceeded their expectations for them, they were likely to repeat purchases of the same brands rather than spent costs of search for information about other brands. Repeat purchases of a brand occurred more often when search costs were present.

Hall (1983) investigated the dispersion of prices in local food markets and estimated the potential benefits to consumer who made comparison shopping. It was found that food items in 15 local markets were different in the dispersion of prices between small, medium and large food market areas. The potential savings in large market area was much greater than in small one. The dollar benefits of comparison shopping to consumers were likely to be greater than the cost of search in large shopping areas, but may not justify the costs in small and medium size areas. The cumulative savings in the small shopping areas after a search covering four stores range from 3.9 percent to 8.4 percent, while the cumulative savings in the large shopping areas after a search covering the fourth store range from 5.6 percent to 14.0 percent. The dollar value of saving also varied according to the total value of the food purchased. Thus, large families (who usually purchased in larger amount than small families) had more to get the potential saving from comparison shopping than did small families. The author also calculated the cost of search, direct cost and indirect cost. Direct cost is the transportation cost of visiting additional stores and indirect cost is the opportu-

nity costs of the time spent in search. After calculating these two costs under certain assumptions, the author presented some expected value of the benefit from comparison shopping. The benefit would exceed the cost only for households with four or more persons in large shopping areas and for households with six or more persons in medium size shopping areas.

It is clearly expressed from the above study that the potential benefit of price information depends on where the consumer purchased and the total value of product purchased. Large shopping areas mean there are more stores than the small one, and hence price dispersion among store would be greater. The above study estimated the potential saving based on a single point in time. In real life, prices change with varying frequency in all stores. The price of an item in one store relative to another change over time. The cost of search will also change and it may be more and more expensive. Thus, the potential benefit from price search may become smaller. If the price in one store relative to another remain constant during six month period or more, the consumer may get the greater potential saving. If the study used durable goods or automobile which may have price dispersion larger than food, the potential benefit to consumer may be greater and hence it will motivate consumer to search price information among competing seller. Durable goods are purchased less frequent than food, this implies than in the long period, the cumulative saving from purchasing food may be greater than purchasing durable goods.

By using data on grocery purchases, Carlson and Gieseke (1983) analyzed the impact of price search on food purchase costs. In this study, price information was obtained through search among stores, and hence price search was measured by the number of stores visited prior to purchase. It was found that the number of store visits had a negative effect on purchase costs. More price search resulted in lower price. Price



search was associated with expenditure on grocery product, income, education, marital status, and age. Lower price had negative significant effect on the expenditure. In brief, more search led to lower prices, and lower prices encouraged the purchase of greater quantity.

The above study made it clear that price information can derive lower price and consumers can attain the potential saving from this lower price. However, the amount of dollar saving from lower prices can not be known from the above study because the authors did not estimate the cost of search. Thus, cost and benefit comparison of price search was unknown. Buying greater quantity because of lower price can be considered as the benefit for the consumer. Consumer avoided the price increase of products that would be consumed, and hence the consumer purchased the products in large quantity in the present.

## CONCLUSION

Purchase decision is the main activity of much consumer behavior when consumer faces many alternatives in the market. To make an accurate purchase decision, the consumer needs information as a basis for comparing and evaluating the product alternatives. Information is one of the essential inputs in purchase decision process. Some studies found that information had a significant effect on consumer decision effectiveness. Information helped consumers to make their best decision. Information consisted of many attributes of products including its price. Price was one of many attributes which was often used to judge the product quality by consumers. Price was found to have a significant effect on the perception of product quality when price was the only attribute to vary. When other attributes were present, some researchers have found that price remained the significant factor, but others have found that price became insignificant factor in its effect on quality perception. It was possible that price effect on consumer

quality perception varied among products.

Consumers need price information for their buying effectiveness and for shopping comparison. By knowing price information among competing sellers, consumers can get benefit of potential saving of product purchased. Price information is obtained by spending time, efforts and money. Consumers will weigh the cost of information against the benefit obtained from that information. Some studies found that price information can lower the price. However, price information is not strong enough to change consumer purchase behaviour. Price information is not the only factor than affects the consumer purchase behaviour. The dollar value of saving from price information depends on the total value of product purchased and the market size where the consumer searched and purchased.

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