

# AN EMPIRICAL APPROACH TO EVALUATING GROCERY PRICES IN UK SUPERMARKETS

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## ABSTRACT

*This evaluative paper compares the prices of selected national and own label brands in four leading UK supermarkets. The objective is to find out price differentials between manufacturers' and retailers' brands in the leading supermarkets. Prices of nine grocery products were taken from four leading supermarkets and a comparison was made between the prices charged for national brands and those charged for equivalent own label brands. An evaluation of prices within the selected stores reveals that although own label brands were cheaper by a small margin than those of equivalent national brands, a large segment of customers still prefer national brands to own label brands. The review also suggests that more consumers were willing to pay premium prices for national food brands than for own label brands irrespective of price differentials and store image. It is recommended that retailers use packaging information to dispel uncertainty and innovate in areas where they have a strong presence, as this indicates consumer acceptance.*

**Key Terms:** Grocery retailing; store prices; supermarket pricing strategy; grocery brand perception

## INTRODUCTION

Price is probably the most responsive and potent weapon in the retail marketing mix. Yet, according to Omar (1999: 231), the markets in which price wars are fought are littered with corporate casualties and pyrrhic victories. The supermarket sector provides obvious evidence of the most blatant use of price to attract shoppers into the stores. In food and household goods, price competition is particularly fierce (Mintel, 2005), usually in the form of discounting of selected lines, combined with promotion of own-label products.

Walking down the aisle of any UK supermarket will show the display of own-label food products next to that of national food brands. The prices of both brands are displayed next to each other, thus giving consumers price comparisons to take into account when making their purchase decisions. With one of the bases for selling own label food brands being the price differential between own labels and national food brands (McGodrick, 2003), supermarkets normally use comparative pricing strategy to persuade consumers to buy own label products in view of their cheaper prices (Omar,

1998, p. 234). Marketing literature on pricing (Dickson and Sawyer 1990), tends to suggest that consumers' attention to price and as a result quality inferences, depend on time limits (Sethuraman, 2000), type of product, and the habitual nature of the purchase decision (De Wulf et al., 2005). Although, Raju et al. (1995) have suggested that price differential is not an important determinant of brand choice, Sivakumar (1996) observed that consumer brand choices are based not only on price but also on quality.

The purpose of this paper is to investigate consumers' price evaluations in four UK leading supermarkets in order to find out if consumers shop for own-label on the basis of price. Evidence in the literature suggests that price differential between national and own label brands is one of the factors accounting for high own label sales (Sethuraman 1995); and that price differential has a positive relationship with own label shares - meaning that own-labels are gaining sales at the expense of national brands on the basis of lower prices (Raju et al. 1995). Thus, the objective of this paper is to find out the main factors influencing consumer food purchase decisions. The outcome of this review will generate a

better understanding of consumer food shopping decisions which will help supermarkets and food manufacturers to target their brands strategically.

The rest of the paper is organised as follows: in the next section the paper explains what is meant by price and how it applies to the retailer and the consumer. The extant literature on the role of price in the UK supermarket and price-demand relationships is reviewed. Next, consumers' price-value perception is reviewed drawing from previous research in consumer price judgment and shopping decision. The paper then reviews on-spot price checks compiled from four leading UK supermarkets to perform a descriptive analysis of consumers' perceptions of national and own-label prices. Evaluation is based on the relationships between price, perceived quality, and intentions. Finally, the paper concludes by presenting a decision-making guideline derived from the price signal that supermarket managers could use to assess whether they can increase revenues by increasing price.

### THE MEANING OF PRICE

Price is the one element of the marketing mix that produces revenue; the other elements produce costs (Kotler, 2003); and has traditionally operated as the major determinant of buyer choice. Table I, reproduced from Omar (1999) depicts the difference in the meaning of price to the retailer and to the shopper.

In its simplest term, price may be defined as 'what the market will bear or what consumers are willing to pay for an item on offer'. Although price may mean different things to retailers and consumers, the correct definition of the 'right price' to the retailer is 'the price which will bring the largest contribution to overheads and profit' (Omar, 1999). Theoretically, in price-sensitive supermarket sector, the role of price is diverse, and the higher the supermarket sets its price, the fewer units it will sell, but - up to a point - the higher price will be its unit contribution to profit and overheads. Thus the trick is to find the price point at which the largest contribution to overheads and profit will be made (Ortmeyer, et al. 1991).

### THE ROLE OF PRICE IN CONSUMER PERCEPTION

Drawing on literature on consumer judgment and decision-making, this market review paper evaluates the proposition that price serves two distinct roles in consumers' value judgments. First, as a product attribute, price affects the perceived similarity of the target product to the mental prototype of a higher or lower quality product. However, price is not the only attribute used to make similarity based quality judgments. Other relevant and available product attributes moderate the effect of price on quality judgments. Second, as a measure of sacrifice, price serves as the benchmark for comparing utility gains from superior

**Table I: Meaning of Price to the Retailer and the Shopper**

	Price to the retailer	Price to the shopper
1	An element in the retail marketing mix, or the store promotion mix, which can be manipulated within a defined range to achieve corporate objectives, e.g. to promote sales, to create an image, to forestall competition.	A measure of the value of the total bundle of satisfaction they are offered, with the corollary that the significance of price may vary within the decision making process.
2	Part of the relationship which, when taken in conjunction with the sales volume, yields a revenue fund from which costs can be met and a profit obtained.	A cost, particularly where the purchase is for industrial or commercial purposes. It is also a measure of quality. That means 'you may get what you pay for', etc.
3	A measure of the risks to the retailer involved in the sale, and/or an insurance premium against the maturing of these risks.	A measure of the alternatives forgone: either directly, i.e. directly competitive products or substitutes, or indirectly, i.e. alternative uses for the money to be spent.
4	Part of the overall bundle of factors, including discounts, settlement terms, credit terms which can be used to affect both the 'willingness' and the 'ability' of the customer to purchase.	Part of a conglomerate of things which the shopper often takes into account under the heading of price - discounts, settlement terms, credits, credit terms, part-exchange, guarantees which may affect shopper's 'willingness' or 'ability' to purchase.

**Source:** Omar, O. (1999), Retail Marketing, London: Financia Times/Pitman Publishing, p. 232.

product quality. However, this comparison process is dynamic because the relative importance of money and product quality changes across consumption occasions. In terms of the consumer decision-making process, Monroe (2003) explained how consumers perceived supermarket prices, and demonstrates how high prices simultaneously increase as well as decrease purchase intentions.

In supermarket operation, price could be regarded as serving two distinct roles: as a measure of sacrifice and as a signal of quality. These pricing roles have been known for a long time (Leavitt 1954). However, it is not clear when the "signal effect" of price dominates the "sacrifice effect" (Jacoby and Olson 1985, Rao and Monroe 1989, Zeithaml 1988). Evidently, marketing literature suggests that retailers do use consumers' judgments of quality and value to predict when higher prices lead to higher grocery purchases in the supermarket (Dodds, et al., 1991, Harvey, 2003). Thomas et al. (2004) used consumer price-value judgment to show how three broad factors interactively predict consumers' value judgments for merchandise in the supermarkets with uncertain quality: (i) the odds of high quality based on product grouping process (ii) the relative importance of product quality and price evaluation and (iii) the actual distribution of prices in the supermarket. It is important to note that the third factor is exogenous and is largely outside the supermarket's domain of influence. The review in this paper is therefore more relevant to the first two factors.

## PRICE AND PERCEIVED QUALITY RELATIONSHIP

As Thomas et al. (2004) observed, over the past several decades researchers have adopted several different perspectives to explain the positive relationship between price, product quality, and demand. Some of this research has examined the positive relationship between price and quality from a manufacturer's perspective (see for example, Klein and Leffler 1981, Pashigian 1995). These previous approaches examined the optimal strategy for suppliers when there is irregular information about a product whose quality is revealed to consumers only after purchase. When consumers are uncertain of product quality, then profit-maximising firms have to decide

whether or not to charge a price premium as a signal of high quality for national brands (Harvey, 2003). This approach suggests that manufacturers will choose the pricing strategy for national brands that maximises their long-term profits. In such models, description of consumer behaviour is restricted to examining how consumers conduct their price search.

Other researchers have examined price and quality relationship from a consumer perspective. Some investigations into this aspect focused on the relationship between objective product quality and price (for example, Hjorth-Anderson, 1984, Gerstner 1985, Sproles 1977). However, with the proliferation of the perspective that purchase decisions are not based on objective facts but on subjective beliefs, the emphasis shifted from objective product quality to perceived quality (Leavitt 1954, Jacoby and Olson 1985, Nagle and Holden 1987, Monroe 2003). However, an unequivocal positive relationship between price and perceived quality is yet to emerge. While in some studies higher price was associated with high perceived-quality, in other studies no such relationship manifested (Bonner and Nelson 1985, Parasumaran, Zeithaml and Berry 1985). Based on a review of nearly 90 studies done in the past 30 years, Zeithaml (1988, p.11) concluded that a "general price-perceived quality relationship does not exist."

In the light of such research finding, the higher the level of uncertainty with regards to the quality of food brand, the higher the possibility that consumers will use price as a measure of quality (Sivakumar, 1996). Consumers' attitude to price and thus quality inferences is dependent on time limits, the habitual nature of the purchase decision, and the type of product (Urbany et al. 1996).

Selling an own-label brand at a low price would lower consumer perception of quality, which would result in negative price-quality inferences for the own-label brand. Rather than sending out the positive message of being a bargain, a low price offer could send out negative messages of poor quality (Drake and Chung, 2005), especially when consumer value judgments are checked against three main factors enumerated by Thomas et al. (2004) listed previously as: (i) the odds of high quality based on a categorization process (ii) the relative importance of product quality and price evaluation; and (iii) the actual distribution of prices in the market. Consumers are aware that whilst high prices could be a signal for high quality, espe-



cially in categories where quality is uncertain, it is also possible for high prices to be used as a camouflage for inferior products. Thus the high price charged would only be signalling high profits on the part of the retailer.

### GROCERY PRICES IN COMPETING SUPERMARKETS

Previous marketing research has focused on areas such as consumer perceptions of promotional price deals (Sivakumar 1996, Ailawadi et al. 2001), transfer pricing and the meaning of price to suppliers and consumers (Smith 2000, Dawson 2000, Moreau 2001). Other researches have focused on the level of competition that exists between national and own label brands (Sethuraman 1995, Dick et al. 1997). However, this current paper focuses on comparing prices between national and own label brands in leading UK supermarkets.

Consumers are usually willing to pay more for national brands than own label brands because they believe that the higher prices charged by national brands signify a higher quality and value (McGoldrick, 2003). Grocery shoppers may not believe that there is a high quality difference but they may be sensitive to changes in quality and as a result will pay for the more expensive product believing it to be of a better quality, hence the higher price (Sethuraman 2000). Added to this however is the fact that consumers expect certain retail premium ranges to be more cost effective than others in line with the umbrella retail brand proposition. Asda claims that its premium 'Extra Special' food range is 19 per cent cheaper than Tesco 'Finest' and 30 per cent cheaper than Sainsbury's 'Taste the Difference' (Mintel 2005).

There is on average a price discrepancy of 89 per cent between the prices of national brands and that of own label brands. However, in spite of this price difference, available figures (see Table II) shows that own label products under perform their national brand equivalents.

**Table II: Comparison of National and Own-label Food Brands by Supermarket**

		Corn flakes	Soup	Rice	Fish Fingers	Salad Cream	Rice Pudding	Milk	Bread	Tomato Plum	Total
Tesco	O/L (?)	0.75	0.33	0.68	1.15	0.35	0.4	0.34	0.57	0.35	4.92
	NB (?)	1.38	0.59	2.65	1.45	0.85	0.63	0.56	0.96	0.58	9.65
	Pd (%)	84	78	290	26	142	58	65	68	65	
Sainsbury	O/L (?)	0.75	0.33	0.68	1.15	0.36	0.38	0.34	0.57	0.45	5.01
	NB (?)	1.38	0.59	2.65	1.45	0.93	0.63	0.56	0.96	0.57	9.72
	Pd (%)	84	78	290	26	158	66	65	68	27	
Asda	O/L (?)	0.75	0.32	0.74	1.15	0.33	0.38	0.34	0.67	0.35	5.61
	NB (?)	1.38	0.59	2.74	1.45	0.85	0.63	0.55	0.96	0.58	9.73
	Pd (%)	84	84	270	26	157	66	62	43	66	
Morrisons	O/L (?)	0.75	0.38	0.75	1.15	0.33	0.42	0.45	0.5	0.35	5.08
	NB (?)	1.38	0.59	2.74	1.45	0.85	0.58	0.56	0.96	0.58	9.69
	Pd (%)	84	55	265	26	157	50	24	96	66	

**Key:** Pd = Price differentials; NB = National brand; O/L = Own label

**NB** National brand products surveyed are: Kellogg's cornflakes; Heinz soup; Uncle Ben's rice; Bird's Eye fish fingers; Heinz salad cream; Ambrosia rice pudding; Kingsmill Gold Cosy; Mapolina tomato plum

When comparing "like-for-like" item prices, in all cases the national brand prices are higher than those of own-label brand prices of selected grocery items (see Table II). In spite of this price differential, figures released by Mintel, (2005) show that in all categories except rice, national brand products out-perform those of own-label brands. This supports Sethuraman's (2000) explanation that in spite of the higher prices of national brands, consumers will still buy more of them because of their familiarity, imagery or habit. It could be argued that own-labels out-performed the national brands for rice as a result of excessive gap in prices. The over 200 per cent difference in price could possibly be the reason consumers were willing to buy own labels rather than the more familiar national brand in the rice category. This supports arguments by Agarwal and Cha (1998) who suggest that there is an absolute price threshold over which consumers will not cross.

In terms of retailer versus retailer brand, Tesco products are overall cheaper than those of the other supermarkets polled (refer to Table II). Apart from cornflakes and fish fingers where all supermarkets are charging the same prices, Tesco prices in almost all other categories are cheaper than those of their competitors. This has resulted in Tesco having the cheapest shopping basket (see also Mintel, 2005). Based on the general acceptance of Tesco as the leading grocery retailer, it can be assumed that most consumers shop with them because of their low pricing policy. In terms of horizontal price comparisons, the price calculation revealed that national brands exceed own labels by 89 per cent. In spite of the high percentage differential, national brands still dominate the market in all product categories sampled. It is probable that consumers are basing their purchase decisions on non-quality utility factors like product familiarity, image and habit (Sethuraman 2000). This is also consistent with De Wulf et al. (2005) who found that irrespective of actual quality, national brands enjoy a favourable level of brand equity.

## PRICE PERCEPTIONS AND ITS INFLUENCES ON BRAND CHOICE

This could be defined as the manner in which consumers rank brands according to price tiers within the category. This ranking is based on inferences which

are the process of collecting and combining often diverse and complex information into a judgement (Fiske and Taylor 1984, p 283). Thus consumers could perceive a high priced product as having a high quality (Sethuraman, 2000). Price has complex meaning and can play a lot of roles to the consumer. It has long been established that price can be used as a benchmark to signify quality (Leavitt 1954). It is possible for consumers to perceive own-label food brands as lower in quality because of their relatively low price. Meanwhile, rather than thinking that they are getting more value for their money, by inferring that a low priced product has the same value as a higher priced one, consumers could equate the low-priced product with lower quality (Darke and Chung 2005).

With consumers' expectation of keen prices on all foods, and the enjoyment of good promotional offers on brands as well as own label products, consumers now expect good prices as a matter of course. A study conducted by Richardson et al. (1996) shows that next to price, brand familiarity, perceived value for money, and perceived quality variation play an important role in consumer brand evaluation. Dick et al. (1997) believe that taste, overall brand quality and ingredient quality are the main factors apart from price which consumers use when evaluating own label and national brand products.

Finally, the influence of price on choice is dependent on the roles the consumer wishes prices to play at the time of purchase (Sivakumar 1996). Price could be used to determine perceived value or perceived monetary influence (Monroe 1990 p 46). The monetary sacrifice of brand acquisition could be increased by its price and through this reduce the value-in-exchange the consumer would receive from the brand. Thus, from an economic perspective, higher prices are likely to result in higher perceived monetary sacrifice. Thus, using price as a determinant of quality is dependent on the degree of trust the consumer places on the use of price as a quality determinant (Sivakumar 1996). A positive price-quality association increases the quality effect with an increase in price. While a negative price-quality association has the opposite effect (Rao and Monroe 1996). It is probable that price-quality associations are formed from general price levels.

## CONCLUSIONS

Consumers it seems are not just looking for good bargains, but they are also looking to get value for their purchases. They are becoming choosy when shopping and will not settle for just any thing because the price of the product is cheaper. Rather they are making their choices on the basis of taste, familiarity, etc. There is a higher likelihood of repeat purchase if the product appeals after purchase.

The high demand for national food brands in spite of the high price premium placed on them could be attributed to consumer perception of high quality differentials between national and own label brands. With the inability to judge the quality of a food product except through taste, consumers will always buy national food brands based on experience and believing that national brands will always provide higher consumption pleasures.

Own labels are put at a disadvantage because they are operating with less concentration in a competitive market without product differentiation (Ailawadi and Harlam; 2001). With own label brands being less known compared to national brands and unidentifiable with a particular manufacturer (Dick et al; 1996), they are undifferentiated in the minds of the consumer (Richardson; 1997).

## FUTURE RESEARCH DIRECTION

In the light of this market review, it is necessary to emphasize the need to study how consumers make judgments of price, quality and value in relation to supermarket retailing. Also there is a need to investigate how quality perceptions are formed and how these quality perceptions influence perceptions of brand values in relation to national and own-label food brands.

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