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Price Image in Retail Management

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ABSTRACT

Price Image in Retail Management

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Consumers often base their decisions on impressions of the overall price level of a store. For example, decisions of where to shop, whether to buy an item or keep looking for a better price, and whether to buy a more or less expensive option can all be influenced by whether a consumer thinks a store is, in general, high-priced or low-priced. Although impressions of price level are important to both marketing researchers and practitioners, very little research has investigated how consumers form these retailer price images and how they impact subsequent consumer behavior. This the first essay in this dissertation seeks to address this gap in the literature by defining price image within a conceptual framework that identifies the factors most likely to influence price image formation and points the direction for future research by advancing a set of testable propositions regarding the antecedents and consequences of price image. The second essay investigates how a retailer's product line strategy can influence consumers' impressions of its overall price level. I examine the impact of one common retailer strategy—extending the product line with offerings from a higher or lower price tier—on price image as a function of consumers' buying and browsing goals. Conventional marketing strategy suggests that vertical extensions will have a directionally consistent impact on price image. I find that, contrary to the prevailing wisdom, upscale extensions can actually lower a retailer's price image and downscale extensions can raise it. I attribute this outcome to differences in the way consumers with different goals process price information when forming impressions.

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A CONCEPTUAL FRAMEWORK OF PRICE IMAGE

ABSTRACT

Consumers often base their decisions on impressions of the overall price level of a store. For example, decisions of where to shop, whether to buy an item or keep looking for a better price, and whether to buy a more or less expensive option can all be influenced by whether a consumer thinks a store is, in general, high-priced or low-priced. Although impressions of price level are important to both marketing researchers and practitioners, very little research has investigated how consumers form these retailer price images and how they impact subsequent consumer behavior. This essay seeks to address this gap in the literature by defining price image within a conceptual framework that identifies the factors most likely to influence price image formation. I also point the way for future research by advancing a set of testable propositions regarding the antecedents and consequences of price image.

Imagine a consumer standing in a bookstore who, after reading the first few pages of a book, has decided she would like to read the whole thing. This consumer is faced with a decision: should she buy the book at this bookseller, or should she wait and try to find a better price elsewhere? Because this consumer doesn't know exactly how much other retailers are charging for this particular book, she is likely to rely on her impression of the overall price level of this bookstore to guide her decision. In particular, if she is in a store she thinks is generally high-priced, she will be more likely to assume this book is also high-priced and defer purchase to look for a better price at a competitor. If she is in a store she thinks is generally low-priced, on the other hand, she will be more likely to buy it now, reasoning that a price search will yield a low probability of finding a better price. Purchase deferral is only one of the many consumer behaviors influenced by consumers' impressions of a store's overall price level. Retailer price image can also influence consumers' expected prices, price perceptions, perceptions of price fairness, decisions of where to shop and preference for more or less expensive offerings.

Because price images influence so many consumer behaviors—including many that directly impact a seller's bottom line—retailers are justifiably concerned with managing the impressions consumers form of their prices. This task is complicated by the fact that the link between shelf prices and consumers' impressions of the overall price level is imperfect. The link between prices and price image is weakened by the influence of non-price information, such as store ambiance, that consumers use to draw inferences about price level (Barbaro 2006; Buyukkurt and Buyukkurt 1986). Even when price images are based only on prices, consumer evaluations of price information are frequently biased (Alba et al. 1994; Janiszewski and Lichtenstein 1999;

Russo, Medvec, and Meloy 1996), leading to inaccurate assessments of overall price levels. The result is that price images often bear very little resemblance to price reality (Brown 1969, 1971).

The complex network of antecedents that influence price image can leave retailers without a clear strategy for managing consumer impressions and consumers unaware of the factors that could bias their evaluations. Yet, despite the importance of price image to both marketing theory and practice, there has been relatively little research into how consumers integrate the various types of available information into comprehensive price images and how these aggregate impressions influence subsequent consumer behavior (see Blattberg, Briesch, and Fox 1995). This essay addresses this gap by defining price image within a theoretical framework that identifies its most important antecedents and consequences. This framework both organizes the work that has been done in the area and provides direction for future research by advancing a set of testable propositions regarding the formation of price images.

THE CONCEPT OF PRICE IMAGE

I define price image as a consumer's subjective impression of the overall price level of a retailer or product line. Price images represent an evaluation of a set of prices relative to some standard, such as the price level (or perceived price level) of competing retailers. The relative nature of price image judgments distinguish them from judgments regarding the absolute magnitude of the prices offered by a retailer. For example, it makes perfect sense for a consumer to speak of a "low-priced" car dealership where the least expensive car still costs tens of thousands of dollars (i.e., high absolute prices but a low price image) or a "high-priced" newspaper stand where the most expensive item offered costs less than ten dollars (i.e., low

absolute prices but a high price image). In both of these cases, the price images reflected in "low-priced" or "high-priced" judgments represent evaluations of other car dealerships or newspaper stands, respectively. The relative nature of price image judgments also suggests that they are sensitive to what information is included in the consideration set. To illustrate, a particular supermarket may be perceived as low-priced (i.e., as having a low price image) if it is considered relative to local, family-owned grocery stores, but high-priced (i.e., as having a high price image) if it is considered relative to big-box super-centers.

The concept of price image might best be understood by contrasting it with other, related concepts in marketing. In particular, it is informative to compare price image to both price perceptions on the one hand, and to brand and store images on the other. Price perceptions, as described in the behavioral pricing literature (e.g., Monroe 1973), refer to a consumer's subjective evaluation of a single price. Since these evaluations are only one step removed from objective price information, price perceptions are relatively concrete and narrow in scope (since they cover only a single price). Price image is a more abstract concept than a price perception, typically requiring the assimilation of multiple pieces of information in forming an overall impression of a set of prices. Where the result of a price perception is the evaluation of a single price, the result of a price image is an inclusive judgment about the price level of a store or product line. In a retail setting, forming a price image often involves integrating many price perceptions, and possibly additional information, into a single overall evaluation. A price image is created in order to be extended beyond the set of prices a consumer has already observed. Thus, whereas a price perception reflects an evaluation of an observed price, a price image is formed in order to make inferences about prices the consumer has not yet observed.

Price image also differs from brand image (Keller 1998, 2003) and store image (Doyle and Fenwick 1974/1975; Myers 1960). Price image is narrower in scope than brand image and store image since it deals with only a single dimension. For example, a store image may bundle together such diverse information as distance from home or work, quality of merchandise, knowledgeability of sales personnel and store hours (Berry 1969). In contrast, price image incorporates just that knowledge and those associations related to price level. As such, price image may be thought of as the price dimension of a more diverse brand image or a store image. Any entity with a brand image (or store image) will also have a price image; any entity with a price image will also have a brand image (or store image).

Price image is most important in situations where the actual price level is complex or ambiguous. Thus, in a marketplace where only a limited number of vendors carry small, easily comparable assortments, price image is likely to be less important. In cases in which consumers may simply compare all of the relevant prices before making their decisions, there is no need to use a more abstract price image to aid in decision making. On the other hand, in situations where stores have large assortments, or where the assortments vary across retailers, consumers are able to make proportionally fewer direct price comparisons and price image becomes more important in consumer decision making.

The price image concept is most often used in reference to retailers, but it can also be applied to other types of brands as well, including manufacturers and service providers. For example, Bic pens are likely to have a low price image and Rolex watches are likely to have a high price image regardless of the retailer at which they are sold. Research on the psychological associations consumers have of countries of origin (Maheswaran and Chen 2006; Min Han 1989)

suggests that even countries and geographical regions may have an associated price image, which could transfer to offerings originating in those places. In the interest of brevity, this essay will focus on retailer price image. However, many of the concepts and propositions advanced in this price image framework will apply to brand price images more generally.

There are two basic categories of theory that may be used to account for price image formation. One set uses an impression formation paradigm (e.g., Alba et al. 1994; Alba et al. 1999; Buyukkurt 1986; Hamilton and Chernev 2007), often building on some variant of information integration theory (Anderson 1974). According to this view, consumers form impressions by integrating disparate pieces of information into a single aggregate evaluation. An alternative approach is to treat price image formation as a categorization process (e.g., Brown 1969; Brown and Oxenfeldt 1972; Buyukkurt and Buyukkurt 1986), in which features of a store are evaluated in order to determine whether a store fits into the "high-priced" or "low-priced" category. These two types of theories tend to privilege different types of information in the price image formation process. Impression formation theories, while not explicitly limited to price information, tend to emphasize the importance of price in price image formation. This may be because of the relative ease of dealing with sets of numerical information (like prices) within an information integration paradigm (e.g., Levin 1974, 1975). Categorization theories, on the other hand, tend to place more weight on store features that can act as heuristic cues, emphasizing non-price factors over price information. Although these views are not mutually exclusive, they have tended to be treated separately. In this essay, I incorporate the insights from both information integration theories and categorization theories into the proposed framework.

There are many types of information that consumers can use in forming a price image. I divide these myriad antecedents into two groups: information that is directly related to price and information that is not. Price-based antecedents include the characteristics of the actual prices retailers charge for goods. In this context, I propose that the influence of price antecedents on price image formation will be a function of consumers' evaluation strategies. Price image can also be influenced by non-price-based antecedents, such as store policies and store ambiance. I divide non-price antecedents into two groups based on whether the non-price information serves as a signal of a retailer's prices (e.g., a price match guarantee policy) or as a signal of a retailer's cost structure (e.g., high-priced décor). Finally, I discuss the impact of price image on consumer information processing and choice. Figure 1 provides a schematic representation of the relationship between antecedents and consequences of price image included in the conceptual framework proposed in this essay.

Insert Figure 1.1 about here.

PRICE-BASED ANTECEDENTS OF PRICE IMAGE

The prices consumers are exposed to in a retail environment provide an important source of information that can be used in the creation of a price image. I begin by investigating the different types of price information that consumers can use in forming a price image. These price factors include prices, price range, price context, and price discounts.

Prices. One would expect that the actual prices a store charges would have a strong impact on price image. Price image is, after all, an impression of the overall price level. It is thus meant to be representative of all of the prices a retailer charges and is typically thought of as an

integration of all of the available price information into an aggregate impression. The simplest predictions one can make about the impact of prices on a price image is that price image is a function of the average price of products in a category, store or market. In particular, one would expect that as the average price increases [decreases], price image will also increase [decrease].

The general prediction of the relationship between average price and price image is likely to hold regardless of what causes a shift in the average price (Buyukkurt 1986). Thus, the average price could be changed by changing the prices of some or all of the existing options in the product line. However, the average price could also be changed by adding options from a higher or lower price tier while leaving the prices of the original product line unchanged (Hamilton and Chernev 2007). For example, practitioners have noted the relationship between the presence of a downscale option and a lower price image and so have pursued a strategy of adding low-priced items to their assortments. As one consulting firm noted, "A proven strategy [for lowering price image] is to offer an attractive opening price point in each category, which is often accomplished by aggressively pricing a quality private-label product" (A. T. Kearney 2005, p. 10).

Averaging prices across a category or across a store is not the only way for prices to influence price image. Indeed, price image can be strongly influenced by a small number of individual prices. Anything that would make a particular price more salient to the consumer is also likely to increase the impact of that price on price image judgments. For example, the prices of frequently purchased items, big-ticket items, and goods commonly advertised by multiple retailers, are all likely to have a disproportionate influence on price image. Likewise, because they establish the range of prices at a particular store, the highest and lowest priced offerings in a

category may be more influential in price image formation (Janiszewski and Lichtenstein 1999; Volkmann 1951).

Price range. Consumers may also use the range of available prices as information in forming a price image. Understanding the impact of price range on price image is especially important given that some of the common strategies that retailers use in managing their product lines affect the range of prices at a store. For example, deciding to carry products from multiple price tiers (e.g., a good-better-best strategy) will result in a wider range of prices than a more specialized strategy in which a retailer carries a narrower range of merchandise. Retailers also affect their price ranges when they extend their product lines, for example, by adding a private label brand (Cotterill, Putsis, and Dhar 2000; Sayman, Hoch, and Raju 2002; also see Dhar, Hoch, and Kumar 2001). Changes in prices across time will also influence perceptions of price range. Some stores typically charge relatively high prices but periodically feature deep discounts—referred to as a HILO strategy—and others consistently charge relatively low prices without discounting merchandise—an Everyday Low Price (EDLP) strategy (Hoch, Dreze, and Purk 1994). It is expected that a store with a high degree of temporal variance (e.g., a HILO store) would be perceived to have a wider range of prices than a store with a low degree of temporal variance (e.g., an EDLP store).

I propose that the range of available prices will impact price image, such that a store with a wider range of prices will have a lower price image than an otherwise equivalent store with a narrower range of prices. This prediction is based on a categorization theory of price image, where consumers seek to categorize a store as high or low priced based on its features. In particular, I argue that low prices may be more diagnostic of overall price levels than are high

prices, since consumers may believe that "low priced" stores may still carry a handful of upscale items, but that a "high priced" store will seldom carry any downscale items. If this is the case, then the presence of a few low-priced options could be sufficient for a consumer to categorize a store as low priced. In other words, if consumers believe that low prices are more diagnostic of price image than high prices, then consumers would tend to form a lower price image of the store with the wider price range.

Price context. Consumers do not evaluate prices in a vacuum. It has been well documented that the context in which prices are evaluated can influence the perceptions consumers have of those prices (Adaval and Monroe 2002; Janiszewski and Lichtenstein 1999; Monroe 1973; Nunes and Boatwright 2004; Russo 1977). Price context can impact consumer behavior in two different ways, which allows us to make two general predictions about the impact of price context on the formation of price image. First, the local context can influence consumers' price perceptions of the items they buy. Since price images are a function of consumers' price perceptions, I therefore predict that contexts that make the prices of chosen items seem lower [higher] will result in lower [higher] price images. Second, the price context can influence which option consumers choose to buy. Thus, because price image is a function of whether consumers purchase more or less expensive options from a given store, I also predict that contexts that increase [decrease] the chances of choosing less expensive options will result in lower [higher] price images.

There are two general classes of price contexts that can influence both consumers' price perceptions and which options they choose to buy. The first type of price context can impact price images by making prices easier to compare. For example, comparitive price displays (e.g.,

shelf tags marked with a "compare at" competitor's price) reduce consumers' perceptions of a given price by making it easier to compare prices across stores (Biswas and Blair 1991). (Presumably retailers will only facilitate comparisons when it favors them, so I assume that easier comparisons always leads to lower price perceptions.) Previous research has also found that making price information easier to compare—either by providing lists of unit prices (Russo 1977) or by changing the location of items on the store shelf (Dreze, Hoch, and Purk 1994)—can influence which brands and sizes consumers purchase. The explanation given for these findings is that by changing the organization of information, retailers are changing the set of prices consumers compare in making their purchase decisions. This change in price context will often lead to the purchase of larger sizes (i.e., options with lower per-unit prices) or cheaper brands. In both cases, making prices easier to compare lowers price image, either by lowering price perceptions or by encouraging the purchase of a lower priced item.

The second type of price context influences the price image by setting a salient reference price for consumers. For example, displaying prices as a reduction on a previous price gives consumers a high salient reference price, thereby reducing consumers' perceptions of the displayed price (Cox and Cox 1990; Urbany, Bearden, and Weilbaker 1988). The prices of non-chosen items in the decision set also form a context which can influence consumers' price perceptions, such that a high-priced context will make a target price seem less expensive and vice versa (Adaval and Monroe 2002; Janiszewski and Lichtenstein 1999). Even incidental, unrelated prices have been shown to act as reference points, thereby impacting consumers price perceptions (Nunes and Boatwright 2004). In addition to affecting consumers' price perceptions, context-based reference prices can also influence consumers to choose a more or less expensive

option. For example, changing the local consideration set by adding either high quality or low priced alternatives can influence whether consumers choose a more or less expensive option (Nowlis and Simonson 2000; Simonson, Nowlis, and Lemon 1993). In general, any context that sets higher local reference prices will lead to a lower price image.

Price discounts. Many retailers use temporary price discounts to both increase store traffic and to drive the sales of particular items (Chandon, Wansink, and Laurent 2000; Goodman and Moody 1970). In addition to driving consumer purchase behavior, price promotions are likely to also have an impact on the price image. Price discounts can influence price image in two ways. First, price promotions can change price perceptions of chosen options. Second, price promotions can influence which option consumers select, often by encouraging the purchase of a more or less expensive option than otherwise would have been purchased if there had been no promotion.

In general, I propose that increasing price discounts will lead to a decrease in price image. This prediction holds for both cases in which a retailer increases the number of price discounts offered, as well as cases in which a retailer increases the size of the discounts offered. In other words, increasing the frequency of price discounts will lead to a lower price image, as will increasing the depth of price discounts. However, frequency and depth of may not be equally influential on price image formation. Alba and colleagues (1994) examined a scenario in which the prices of 60 grocery items individual products were compared directly across stores. The average price of each store's list was identical, but one store was priced slightly cheaper on a large number of items (high frequency), and the other store was much less expensive on a small number of items (high magnitude). Despite the fact that there was no real savings to be had from

picking one store over the other, participants perceived the high-frequency store to be less expensive. These findings parallel those of Buyukkurt (1986) who also found that high frequency, shallow discounts tended to be more influential than low frequency, deep discounts in price image formation.

Based on the discussion in this section, I can make the following testable propositions regarding the impact of the price antecedents on price image:

P1: Price image is a function of the following price-based antecedents:

a. the average price of products in the store
b. the prices of benchmark items (e.g., frequently purchased or big-ticket items)
c. the range of prices, such that a wider range leads to lower price image
d. prices of options purchased, such that purchase of lower priced options leads to lower price image
e. the ease of comparing prices, such that easier comparison leads to lower price image
f. local reference prices, such that higher reference prices leads to lower price image
g. the frequency of price discounts, such that higher frequency leads to lower price image
h. the depth of price discounts, such that deeper discounts lead to lower price image

EVALUATION STRATEGIES IN PRICE IMAGE FORMATION

The impact of pricing factors on price image is a function of the specific judgment strategies consumers make with regard to price information. Many of the relationships identified in proposition P1 may be weakened or even reversed, depending on the strategy that consumers use

for gathering or evaluating price information. In this section, I identify three sets of judgment strategies consumers can use in forming a price image based on price information. These strategies include product vs. basket evaluations, internal vs. external reference price comparisons, and the use of memory-based vs. on-line price cues.

Item vs. basket evaluations

One basic distinction that can be made in consumers' price image formation strategies concerns whether they evaluate prices individually or aggregated at the level of the shopping trip. On one hand, a consumer might make item-level evaluations, forming a price image by first subjectively evaluating each of the prices they encounter and then aggregating these individual price perceptions into an impression of the overall price level. On the other hand, a consumer might make a basket-level evaluation, forming a price image by first summing up the prices of a commonly purchased basket of items and then evaluating the price of the basket as a whole.

These two different approaches can potentially lead to the formation of different price images based on the same price information. Evaluating item prices individually will tend to increase the attention consumers pay to the prices of any individual offering, thereby increasing the influence of especially salient products, such as frequently purchased or big-ticket items, on price image. Consumers with an item focus will form price images that are strongly influenced by factors that influence consumers' perceptions of individual prices. Thus, any factors that influence consumers' perceptions of individual prices will have a stronger influence on price image for consumers focused on item prices than for consumers focused on basket prices. For example, price perceptions have been shown to be strongly influenced by contextual factors that make comparing prices easier, such as comparative price advertising formats (Della Bitta,

Monroe, and McGinnis 1981), or that provide salient local reference prices, such as when prices are marked as discounts from a previous price (Urbany, Bearden, and Weilbaker 1988; Nystrom, Tamsons, and Thams 1975). These contextual factors should be especially likely to influence the formation of price image among consumers evaluating items individually, relative to consumers who make basket-level evaluations, in which only the aggregate basket price will impact price image.

Price images based on item-level evaluations will also be more sensitive to the range of prices available at a store. Consumers' price perceptions can be strongly affected by the presence of other prices that can serve as reference points (Adaval and Monroe 2002; Janiszewski and Lichtenstein 1999; Nunes and Boatwright 2004). Basket evaluations restrict the price image to just those items that are purchased (i.e., those items that make it into the basket). This approach limits the potential impact of non-chosen options on price image formation. I therefore expect that when forming a price image, factors based on non-purchased options, such as the range of prices in a store, will have a greater impact on consumers with an item focus than consumers with a basket focus.

Relative to basket-level evaluations, item-level evaluations will also increase a consumer's sensitivity to changes in the prices of individual items over time (Alba et al. 1999) for two reasons. First, the impact of any individual price changes will have a relatively small impact on the overall basket price. Thus, a $0.20 increase in price is likely to be more noticeable relative to a $1.00 bar of soap than relative to a $100.00 weekly basket of goods. Second, assuming that the price adjustments are not a part of a systematic shift, most price adjustments will be a part of simultaneous upward and downward adjustments across the store. It is therefore possible that the

impact of individual price adjustments will wash out at the basket level. In other words, it is possible that in a real shopping environment, a $0.20 increase on one item will be offset by a similarly sized decrease on another item or combination of items in the consumer's basket.

A focus on basket prices, on the other hand, will increase the influence of factors that affect the perceptions of aggregated prices. Thus, changes in the average price of items at the store level are likely to have a greater impact on price images formed by consumers evaluating basket prices than by consumers evaluating item prices. This is because relatively small changes at the level of individual prices might be more noticeable when summed up across all the items in a basket. Likewise, factors that encourage consumers to purchase more or less expensive items than they might otherwise buy would have a greater impact for consumers evaluating baskets than for consumers evaluating items. Thus, promotions or contextual factors that change the likelihood of purchasing a less expensive option, would have a stronger influence for a consumer focused on basket prices.

It should be noted that certain contextual and promotional factors can encourage consumers to save money on a per-unit basis, while encouraging them to spend more money overall. For example, when unit prices are salient, consumers may purchase the same brands in larger sizes (Russo 1977)—leading to a larger overall expenditure than usual, even if they realized a savings on a per unit basis. This could potentially result in a higher price image for those evaluating basket prices, who are more influenced by the impact of the larger size on the total basket price, than for those evaluating item prices, who are more influenced by the perception that they are getting a bargain by buying a larger size.

Consumers are obviously more likely to focus on basket prices when they have a well-defined basket reference price. Thus, this heuristic will only be common in situations where consumers shop frequently at a store (or at a type of store), regularly purchase multiple items in a single trip, and regularly purchase similar items. For stores that are only patronized occasionally or at which no regular set of items is purchased, the applicability of the basket price heuristic as a model of price image formation is severely limited. For this reason, basket-level evaluations seem especially well-suited to forming price images of grocery stores, where consumers are more likely to shop frequently for a similar set of items.

The likelihood that consumers will use basket-level evaluations or item-level evaluations in forming price image may also be a function of how much they purchase in a given shopping trip. Bell and Lattin (1998) found that large basket shoppers (i.e., those with a relatively high probability of purchase in any given category) form price images consistent with basket-level evaluations, whereas small basket shoppers (i.e., those with a relatively low probability of purchase in any given category) form price images consistent with item-level evaluations.

The discussion in this section leads to the following testable propositions:

P2: Item-based price images (relative to basket-based prices) are more sensitive to:

a. the prices of benchmark items (e.g., frequently purchased or big-ticket items)
b. the ease of comparing prices, when comparing prices affects price perceptions
c. local reference prices, when reference prices affect price perceptions
d. the range of prices
e. changes in the price of an item over time

and less sensitive to:

f. the average price of products in the store

g. the ease of comparing prices, when comparing prices causes the purchase of higher or lower priced items

h. local reference prices, when reference prices cause the purchase of higher or lower priced items

Internal vs. external reference price comparisons

Because consumer price evaluations are often the result of comparing a given price with a reference point (Briesch et al. 1997; Urbany and Dickson 1991), price image is sensitive to the type of reference points consumers use in their comparisons. Previous research suggests that there are two types of reference price comparisons that may be important in price image formation: internal reference price comparisons, in which a price is compared with some internal standard (Kalyanaram and Winer 1995; Monroe 1973; Rajendran and Tellis 1994; Winer 1986), and external reference price comparisons, in which a price is compared with other contemporaneously observed prices (Mayhew and Winer 1992; Nunes and Boatwright 2004), either within a store (e.g., the prices of other items in the category; Adaval and Monroe 2002; Janiszewski and Lichtenstein 1999) or across stores (e.g., the price of the same product at a competitor; Alba et al. 1994).

The most common account of internal reference price comparisons is based on Adaptation-Level Theory (Helson 1964), which suggests that consumers adapt their reference prices according to previous exposure to the prices of similar items. This adaptation level constitutes an expectation of what an item should cost and consumers evaluate the attractiveness of a price by comparing it with this expectation. External reference price comparisons, on the other hand, have been explained by range theory (Janiszewski and Lichtenstein 1999), in which a price is

evaluated relative to the end points of a salient range of prices, or as contrast effects (Lichtenstein and Bearden 1989), in which a price is contrasted with a single reference point.

I propose that internal and external reference price comparisons will lead to differences in the types of price information that are used in forming a price image. In general, internal reference prices are a function of previous exposure to the prices at different stores (Mayhew and Winer 1992; Urbany, Dickson, and Sawyer 2000) as well as previous prices at a single store (Alba et al. 1999; Rajendran and Tellis 1994). Because internal reference prices evolve based on exposure to previous prices, I propose that price images based on internal reference price comparisons will be more sensitive to changes in price over time than price images based on external reference price comparisons. Internal reference prices adapt to a relatively large amount of price information, making internal reference prices resemble an average of the prices a consumer has seen (Urbany and Dickson 1991). This leads to the prediction that, price images based on internal reference price comparisons will be more sensitive to average prices than price images based on external reference price comparisons. Finally, price images based on internal reference price comparisons will obviously be more sensitive to those benchmark items for which a consumer is most likely to have a well-defined internal reference point.

Price images based on external reference price comparisons, on the other hand, will be more sensitive to contextual factors than price images based on internal reference price comparisons. Thus, I expect that relative to internal reference price comparisons, external reference price comparisons will result in price images that are more sensitive to the range of available prices at a store, contextual factors that influence consumers' price perceptions (e.g., comparative price

displays) or that influence consumers' likelihood for choosing a less expensive option (e.g., providing unit prices).

The discussion in this section leads to the following testable propositions:

P3: Internal reference price-based price images (relative to external reference price-based price images) are more sensitive to:

a. changes in the prices of individual items over time
b. the average price of products in the category, store or market
c. the prices of benchmark items (e.g., frequently purchased or big-ticket items)

and less sensitive to:

d. the range of prices within a category
e. local reference prices
f. the ease of comparing prices
g. the frequency of price discounts
h. the depth of price discounts

Memory-based vs. on-line price cues

The price information that is used in creating a price image may either be a result of an on-line process, where a price image is formed while the price cues are immediately available to the consumer (e.g., while a consumer is walking down the aisles of a store), or it may result from a memory-based process, where a consumer recalls price information that is no longer immediately available (e.g., after a consumer has left the store). Previous research suggests that on-line judgments can differ in predictable ways from memory-based judgments of the same information (Hastie and Park 1986). Building on previous findings, I propose that whether a

price image is formed on-line or based on price cues pulled from memory will moderate the importance of the predictions made in proposition P1.

Because on-line judgments are most often made within a store, I expect that the impact of the local price context will be stronger in on-line price image than in memory-based price image. Thus, changes in the way offerings are displayed (e.g., with prices marked as a reduction on a previous price) or organized (e.g., by price or by brand) are likely to have a stronger impact on price images formed on-line, in the store. Likewise, the influence of options that make up the consideration set but are not ultimately purchased are expected to have a stronger influence on on-line than on memory-based price image formation.

Consumers with the goal of forming an on-line price image may also be more motivated to gather price information in order to form a more accurate impression. In particular, these consumers may intentionally pay more attention to the full range of prices available in any given category. By the same logic, they may also be more motivated to pay attention to the average price of categories rather than focusing on only the prices of the options they intend to purchase. As such, I expect that on-line price image formation will be more sensitive to the range of prices available as well as to average prices.

Memory-based judgments, on the other hand, are likely to be based on a smaller proportion of the overall information, relative to on-line judgments. This is because memory-based judgments are more effortful, requiring consumers to retrieve price information from long-term memory before making a judgment. In fact, consumers have demonstrated an extremely poor facility for retrieving price information (Dickson and Sawyer 1990). This makes easy-to-recall price information, such as the prices of benchmark items (e.g., frequently purchased, frequently

advertised, recently purchased or big-ticket items) especially likely to influence the memory-based formation of a price image relative to the on-line construction of a price image. An additional implication of the difficulty consumers have in recalling prices is that memory-based price images are more likely to be influenced by non-price factors (discussed in a subsequent section of this essay) than price images formed on-line.

The discussion in this section leads to the following testable propositions:

P4: On-line price images (relative to memory-based price images) are more sensitive to:

a. the ease of comparing prices
b. local reference prices
c. the range of available prices
d. the average price of products in a category or store

and less sensitive to:

e. the prices of benchmark items
f. non-price factors

Combined strategies

The previous sections outlined three basic distinctions that can be made among the strategies consumers use in forming price images. It should be noted that these strategies are not mutually exclusive, but instead may be combined into more specific strategies, allowing for more specific predictions about how consumers form price images. For example, one way for consumers to judge the relative price level of a set of retailers is to directly compare the prices of a fixed set of specific goods across stores—what might be referred to as a direct price comparison strategy. Each of these direct price comparisons results in an evaluation, which may then be aggregated

into an overall impression of the relative price levels of both stores. This direct comparison strategy combines several specific aspects of the evaluation dimensions previously discussed. In particular, this combined strategy unites a product focus with external reference price comparisons, where the reference points are the prices of comparable goods at other stores. This strategy can be applied to both an on-line price image formation scenario (e.g., comparing the advertised prices at two different stores) and when a competing store's prices are retrieved from memory.

This particular combined strategy seems to be a common lay-theory among retailers for how consumers form price images. In a survey of grocery store managers, Urbany, Dickson and Sawyer (2000) found that the belief that consumers frequently compare prices across stores drives many retailer pricing decisions. The assumption that consumers frequently use the direct comparison heuristic when forming price images can lead to intense price competition, with retailers quickly responding to competitors' price changes, especially on frequently purchased items. (Interestingly, Urbany, Dickson and Sawyer [2000] also find that, at least in the grocery category, the frequency of consumers' across-store price comparisons may actually be relatively low.) This direct price comparison strategy has also influenced academic research on price image, which has examined how consumers form price image given lists of equivalent prices at competing stores (Alba et al. 1994).

Additional combined strategies can be formed by creating specific constellations of the basic strategies previously defined. For example, a direct basket comparison strategy could be defined by combining basket evaluations with external reference price comparisons in an on-line price image formation. Such a direct basket comparison is possible when consumers are able to

compare the prices of identical baskets of goods across stores. Albertson's grocery stores encouraged exactly such a price image formation strategy by prominently displaying baskets of identical goods at the front of their stores, complete with the receipts and basket totals of several local competitors. Investigating these combined strategies is an important area for further research.

NON-PRICE ANTECEDENTS OF PRICE IMAGE

Retail prices are only one source of information consumers can use in forming a price image. It is often the case that using prices to form a price image can be extremely cognitively difficult, both because of the large number of prices at the average retailer and also because the prices at one store are often not consistently higher or lower than competitors. For example, Brown and Oxenfeldt (1972) found that in a survey of 80 products across several retailers, any particular store was likely to have some offerings priced above the average and some priced below the average. Distractions in the in-store environment and the often harried nature of consumer shopping experiences may further increase the difficulty of thoroughly evaluating price information when forming a price image. Since they are typically much easier to evaluate, non-price factors can therefore also be very influential on consumers' impressions of the overall price level of a store.

Non-price information will therefore be most influential on the formation of price image in those situations where consumers have previously been shown to rely on heuristic rather than systematic processing (Chaiken 1980; Cacioppo and Petty 1979). When consumers are motivated to engage in more effortful, systematic processing, the influence of non-price information is

likely to be less influential unless it is backed up with supporting price information. Consistent with the idea that non-price information is easier than price information for consumers to process and use, Buyukkurt and Buyukkurt (1986) found that consumers were more likely to use non-price information in forming a price image when they were less experienced, under time pressure, did not enjoy shopping, or when they were less price sensitive.

I treat non-price information as signals of imperfectly observable price-level information (Spence 1973). These signals or heuristic cues may either be the result of previous observed correlation between the cue and a price image (e.g., a consumer may note that stores with price match guarantee policies also tend to have low prices) or the result of a logical connection between the cue and price image (e.g., a consumer may reason that stores with price match guarantee policies must have low prices or they would lose money on redemptions) or both.

I divide these non-price signals into two groups based on the type of inference consumers must make in using the information to form a price image. Some signals allow consumers to form direct inferences about a retailer's prices. For example, consumers may interpret the presence of many customers at a store as a signal that the retailer's prices are likely to be lower than its competitors'. In contrast to signals of retailer prices, there are also signals that provide information about a retailer's cost structure. For example, a retailer may signal that they are maintaining a low overhead by having no-frills décor, such as unfinished cement flooring and warehouse shelving. Consumers may use these cost signals to form indirect inferences about the prices at a retailer (i.e., that a store is passing along the higher or lower costs in the form of higher or lower prices). In the following sections, I review both the price signals and the cost

signals that influence price image, discuss the findings of relevant research, and advance a set of research propositions on the impact of non-price antecedents on price image.

Direct Inferences of Price Image: Price Signals

In this section, I discuss several of the signals of retail prices that consumers could use to form direct inferences about the overall price image of a store. These include advertising and promotions, price level assertions, price match guarantee policies, the number of competitors, customer base, newness, and product characteristics of the assortment.

Advertising and promotions. Some theories of price image focus on how the advertising of a select subset of prices impacts the formation of an overall impression of the attractiveness of the prices a retailer charges. In general, advertising is assumed to be a signal of the overall price image of the store, such that stores running advertisements that feature low [high] prices will be perceived to have low [high] price images (Simester 1995). Even advertised price information that is divorced from any particular product can serve as a signal of price image. For example, a common advertising strategy is to provide a lower bound on a retailer's prices, using statements such as "Prices starting at $299." One might expect that these "noncommittal" price advertisements would be poor signals of overall price level, since the temptation exists for retailers to advertise a low entry price to draw in consumers, even though most of the prices are much higher. However, Shin (2005) demonstrates that advertised noncommittal prices can still have a strong signal value in situations where selling costs for the retailer are high. Thus, if the firm absorbs costs during the selling process, even when there is ultimately no sale (e.g., the time, effort and money involved in providing test-drives, product demonstrations, free samples, etc.), there is an incentive for retailers to accurately communicate their price image in order to

discourage consumers unlikely to buy at the retailer's actual price level. In other words, to limit the selling costs in markets where selling costs are high, noncommittal advertised prices can serve as useful signals for consumers in forming price images.

The signal value of advertising is also influenced by the diagnosticity of the advertised price information. For example, due in part to consumers' generally poor knowledge of specific prices (Dickson and Sawyer 1990), comparative price advertising may be more effective in influencing a price image (Cox and Cox 1990). Thus, an advertisement that presents a price as a reduction from a previous level tends to strengthen the signal value of the advertised price, resulting in a lower price image than an advertisement with the price alone. Likewise, advertisements featuring frequently purchased items, for which consumers are more likely to have a more clearly defined reference price, increase the signal value of the advertisement, relative to advertisements featuring infrequently purchased items (Cox and Cox 1990). The result is the formation of a lower price image for a retailer advertising low prices on frequently purchased items than for a retailer offering comparatively low prices on infrequently purchased items.

Even the amount of advertising a retailer engages in can serve as a signal of price image. Among grocery stores, retailers that advertise more frequently in the newspaper (e.g., every week rather than twice a month) are perceived to have lower overall price levels (Brown 1969; Buyukkurt and Buyukkurt 1986). Likewise, retailers that advertise a greater number of specific items in their advertisements have lower price images than those that include fewer items in their ads (Buyukkurt and Buyukkurt 1986).

Advertising may also occur within the store environment in the form of promotions, such as shelf-talkers and end-cap displays. Consumers frequently use promotions as a heuristic cue

signaling savings, even when the promotions are not accompanied by actual reductions in price (Inman, McAlister, and Hoyer 1990; McKinnon, Kelly, and Robison 1981). Thus, an increase in promotions of any type is likely to lead to a decrease in price image.

Price level assertions. One strategy retailers use to signal a low overall price level is to simply claim that their prices are lower. The taglines of some retailers are designed to communicate a low price image through sheer insistence. For nearly two decades, the phrase "Always Low Prices. Always!" adorned Walmart's signage, storefronts and advertising. Target's long-time tagline, "Expect More. Pay Less." is similarly resolute in communicating their low prices. Some retailers even choose to signal low prices with their choice of name: Food-4-Less, Best Buy, Value City, Priceline.com, etc.

Assertions of price level are expected to be effective signals under the same conditions that advertising specific prices serves as effective signals. Thus, in general consumers may use declarations of low prices as signals of lower overall price levels. However, these signals are expected to be stronger in situations when retailers incur a selling cost associated with serving consumers who are unlikely to buy at the retailers actual price level.

Price match guarantees. Many retailers have implemented official store policies designed to reassure consumers that their prices are competitive. One popular policy is the price match guarantee. In its simplest form, the price match guarantee promises that if a customer makes a purchase then later discovers a lower price at a competitor, the guarantor will refund to the customer the difference in prices. Price match guarantees serve as a signal of low prices, and the more generous the guarantee, the stronger the signal value (Biswas et al. 2002; Desmet and Le Nagard 2005). In addition to serving as direct signals of price image, price match guarantees can

also influence price image indirectly, by influencing consumers' perceptions of the prices a retailer charges—potentially reinforcing a low price image by distorting price perceptions to be in line with the previously formed price image (Russo, Meloy, and Medvec 1998). Research suggests that the presence of a price match guarantee increases consumers' estimates of the average and the lowest market prices for a good (Lurie and Srivastava 2005). Thus, a given price is likely to be evaluated as lower at a store with a price match guarantee than at an equivalent store without such a guarantee.

The signal value of a price match guarantee has been found to vary as a function of several different factors. Srivastava and Lurie (2001) found that consumers were more likely to form a lower price image of a retailer with a price match guarantee than of one without, but that this effect was reduced for high-ticket items. Thus, when the base price of a product is low, consumers are more willing to accept that a price match guarantee indeed indicates a low price relative to competitors. As the base price increases, consumers have more to gain from diligently searching out the best price—thereby reducing the need to use a price match guarantee policy in forming price images.

The effectiveness of price match guarantees in influencing price image has also been shown to be contingent on consumer beliefs regarding the behavior of other consumers (Srivastava and Lurie 2004). When consumers believe that there are very few other consumers in the market that will engage in extensive price search, the effectiveness of a price match guarantee as a signal of price image is greatly reduced. In this context, vigilant customers act as a market disciplinary mechanism, checking prices across stores in order to enforce the guarantee by making it expensive (in terms of dollars or reputation) to charge higher prices than competing retailers.

Thus, when the disciplinary mechanism is weak (i.e., when few consumers engage in across-store price comparisons), the signal value of a price match guarantee policy is weakened.

Number of competitors. One basic tenet of market economies is that increased competition tends to drive down prices. It therefore stands to reason that consumers may use the number of competitors in an industry or in a geographical area as a signal of price image, such that a store with a large number of competitors will have a lower price image than an equivalent store with fewer competitors. At one extreme, consumers would tend to form a high price image of a monopolist, simply by virtue of the fact that it is the only firm in the market. Following the same logic, a retailer in competition with only two other stores might be perceived to have a higher price image than an equivalent retailer in competition with eight other stores.

It is important to note that the actual number of competitors is not as important as the *perceived* number of competitors. This perception will, in turn, be a function how consumers categorize retailers. Consumers who group larger sets of retailers together into categories, will perceive a given retailer to have more competitors that will consumers who use finer categories.

The value of the number of competitors as a signal of price level is likely to be moderated by consumers' beliefs about the structure of the competitive landscape (cf, Chernev and Carpenter 2001). Specifically, when the link between the number of firms in a category and the level of competition is strong, the value of the number of competitors as a signal of price image increases. For example, in many markets, a single manufacturer or wholesaler supplies many retailers on similar terms. In these cases, the channel structure dictates that more retailers would not necessarily lead to increased competition, therefore the signal value of perceived competition would be reduced. Thus, the number of competitors is likely to serve as a weaker signal of price

image for stores selling nationally branded goods, which are available to multiple retailers from a single manufacturer, than for stores selling exclusive items. Likewise, the presence of a cartel destroys the link between the number of firms in the category and the level of competition (Porter 1983), thereby reducing the signal value of number of competitors.

Customer base. Consumers frequently make judgments about products based on their evaluations of the people that use them. For example, when consumers are unsure what attribute level might best match their needs, they can use the preferences of others as a guide in making their choices (Prelec, Wernerfelt, and Zettelmeyer 1997). Likewise, a consumer's decision about when to adopt or discontinue use of a product is influenced by whom the consumer sees using it (Berger and Heath 2007). In the same way, consumers may use their perceptions of the type of consumer shopping at a store to draw conclusions about the store's price level: A store full of well-off consumers may serve as a strong signal that the store has high prices, just as a retailer that serves customers who are less-well-off may be perceived as being low-priced. This argument is based on the well-documented "halo effect" (Nisbett and Wilson 1977) where the perceived socioeconomic status of its customers influences the formation of a price image.

It should again be noted that perception may not align with reality. In other words, it may not be the case that stores serving poorer customers have lower prices. In fact, there is some evidence that the opposite may be true. Research indicates that some types of retailers (e.g., large grocery stores) are much less frequent in poorer neighborhoods (Zenk et al. 2005) and that this reduced competition leads to higher prices (Chung and Myers 1999). Thus, if price image were based on a complete empirical analysis of actual prices, consumers might conclude that, at least in some retail categories, customers of a lower socioeconomic status is actually a signal of higher

price image. However, if price image is based on less complete information, consumers may use a store's customers as a signal of price level—regardless of its factual accuracy.

In addition to using the perceived wealth or socioeconomic status of customers as signals of price image, consumers may also use the number of consumers shopping at a store as a signal of overall price level. Consumers may assume that lower priced stores are likely to appeal to a broader base of customers than higher priced stores. If this is true, then a consumer would form a lower price image of a store packed with customers than an otherwise equivalent store with very few shoppers. Some evidence exists to support this proposition. Buyukkurt and Buyukkurt (1986) report that a grocery store described as having few shoppers on Saturdays was predicted to be more expensive than a store described as having a large number of shoppers on Saturdays.

Store newness. In an early watershed article on the non-price factors that influence price image, Brown (1969; see also Brown and Oxenfeldt 1972) compiled personal interviews with more than 1,000 "housewives" in five U.S. cities. Participants rank-ordered a list of four to seven nearby supermarkets based on which had the lowest prices. These responses were compared to information gathered about the characteristics of the stores in question to determine which store characteristics served as the strongest signals of price image. One of the most interesting findings of this survey is that, in four of the five cities, the single strongest predictor of a low price image was newness, such that newer stores were perceived to have lower prices (in the fifth city, newness was the second strongest predictor of low price image). The link between newness and low price image was later replicated in a different survey by Buyukkurt and Buyukkurt (1986).

Brown (1969) offers no explanation for the observed connection between store age and price image other than to somewhat cryptically note that "'newness' is sufficient to overcome the

adverse implications of other characteristics" (p. 189). Buyukkurt and Buyukkurt (1986) also offer no convincing explanation for this finding. Before I speculate as to why store newness may signal low prices, it should be noted that there are limits on how far these results should be generalized. In particular, both surveys were limited to a single retail category: grocery supermarkets. Consumers may have formed different heuristics relating newness to price image for other types of retailers.

One potential reason for the link between store newness and price image is that newer stores benefit from the more recent formation of price images, which have been less frequently updated with actual price information than the price images of older stores. Specifically, when a new store opens, consumers have the opportunity to form a price image from scratch, unencumbered by previous experiences with that store. To the extent that it is common practice for stores to run many discounts and promotions during a grand opening, consumers may form lower price images of new stores. Over time, consumers may recalibrate their price images based on subsequent exposure to the prices. The result would be a price image advantage for a newer store over an otherwise equivalent store with a longer history. The link between store newness and low price image is an area that could benefit from further research.

Product characteristics. Another signal of price image is the constitution of the set of products a retailer carries. For example, consumers can realize a per-unit savings by purchasing larger sizes (e.g., buying a larger box of detergent means a lower price per ounce). The fact that consumers can save money by buying big is now well ingrained in conventional wisdom. Because consumers know that buying larger sizes can result in per unit savings, they may therefore use the package sizes carried by a retailer as a signal of price level. In other words,

stores that offer large or bundled packages may be seen as having lower overall prices than otherwise equivalent stores that offer only smaller sizes.

This connection between package size and price image is especially interesting because it runs contrary to the basket price consumers would pay for equivalent offerings. In other words, consumers buying a fixed list of items would probably pay a higher basket price at a store where the package sizes are very large, than if they were to buy the same brands at a store where the package sizes are smaller. However, because the per-unit prices are lower for larger packages, these consumers may still form a lower price image of the store with the larger packages sizes.

In addition to using different sized packages of the same brands as a signal of price image, consumers may also use differences in the types of brands retailers carry. Thus, a store that carries more national brand-name products would tend to have a higher price image than a store that carries more private label, generic or off-brand merchandise (Buyukkurt and Buyukkurt 1986). The impact of branded vs. unbranded products extend beyond the proportion of each on the store shelves, but can also be influenced by which type of product retailers choose to promote in their advertising. Specifically, stores that exclusively feature national name brands in their advertisements have been shown to send a signal of higher storewide prices than stores with ads that feature unbranded products—holding the actual prices in the advertisements constant (Cox and Cox 1990).

Based on the discussion in this section, I can make the following testable propositions regarding the impact of signals of retailer prices on price image:

P5: Price image is a function of the following signals of retailer prices:

a. advertised prices

b. advertising frequency, such that higher frequency leads to lower price image
c. frequency of promotions, such that higher frequency leads to lower price image
d. assertions of price level
e. the presence of a price match guarantee policy
f. the perceived number of competitors, such that more competitors leads to lower price image
g. the socioeconomic status of its customer base, such that lower status leads to lower price image
h. the perceived number of customers, such that more customers leads to lower price image
i. store newness, such that newer stores lead to lower price image
j. the package size of its offerings, such that larger sizes leads to lower price image
k. the proportion of national brands carried relative to private label, generic, or off-brand merchandise, such that fewer national brands leads to lower price image

Indirect Inferences of Price Image: Cost Signals

In this section I discuss the impact of signals of a retailer's cost structure on consumers' formation of price image. Consumers may use these cost signals to form indirect inferences about the prices at a retailer. Thus, a consumer may form a price image of a retailer by assuming that it is passing along high or low costs in the form of higher or lower prices. These cost signals include cost structure assertions, ambiance, store and assortment size, and service quality.

Cost structure assertions. Just as retailers will sometimes claim to have low prices, they will also sometimes trumpet their low cost structure. These claims are often presented as a reason to believe a claim of low prices. For example, retailers may sell "factory-direct" or "direct to

consumers," thereby keeping costs low by "cutting out the middle-man." Alternatively, a retailer might advertise its lower the cost of good sold by declaring that it sells only overstock, discontinued, volume-discounted, or "scratch and dent" merchandise. Some retailers even work low-cost claims into their names: Big Lots, Overstock.com, Costco, etc. Retailers may also assert a high cost structure, especially as a way of reinforcing claims of high quality. For example, a retailer may declare that its goods are "hand-made" (as opposed to the typically less expensive machine made goods) or "locally grown" (as opposed to the typically less expensive produce purchased from a larger geographic market). Likewise, a retailer might signal high costs by communicating the high costs of its raw materials (e.g., "genuine Italian leather"). In general, assertions of a low [high] cost structure are associated with lower [higher] price images.

Store ambiance. Retailers selling comparable offerings can vary widely in terms of in-store ambiance. For example, a consumer looking to re-carpet a living room could buy substantially similar products from a wholesaler's warehouse, a space with bare concrete floors, open rafters, and forklifts driving up and down the aisles, or from an interior designer's studio, a space with marble floors, chandeliers, and fashionable overstuffed seating. Retailers have many reasons for deciding how to decorate their store space, but one powerful effect of décor is to signal consumers about the retailer's cost structure. Expensive décor signals high retailer costs that are likely to result in higher prices, whereas bare-bones furnishings signal low cost structure that may result in a lower overall price level. In many cases, the signal value of the ambiance is likely to be larger than the actual cost difference between more expensive and less expensive décor. In other words, the higher prices at a store with an upscale ambiance are likely to be higher than just what is needed to cover the costs of more expensive furnishings.

Previous research has recognized the importance of store ambiance on price image formation. Brown (1969; Brown and Oxenfeldt 1972) found that expensive interiors were a strong predictor of a high price image. "Untidy" stores, on the other hand, were very likely to have a low price image. Buyukkurt and Buyukkurt (1986) confirmed these results, finding that "elegant store décor and lighting" signaled high price image and "untidy, messy" interiors signaled low price image.

Store and assortment size. High volume retailers often have a cost advantage over retailers that have lower sales volumes and aren't able to take advantage of economies of scale. Although sales volume is hard to directly observe, consumers may use the more easily-observable store size as a signal of sales volume. By this logic, larger stores are likely to have larger sales volumes and therefore lower cost structures and lower price images. Brown (1969) uncovered several links between store size and price image. Specifically, respondents reported that the single strongest signal of high price image was store size, such that smaller grocery stores were perceived to have higher prices. Brown's results also indicate that supermarkets located in "large shopping centers" tended to have a low price image, suggesting that not just the size of the store, but also the size of the surrounding shopping environs can influence consumers' perceptions of price level. Buyukkurt and Buyukkurt (1986) found similar correlations between store size and price image. Survey respondents indicated that a store described as "one of the largest food retailers in the city" was likely to have lower prices than "one of the smaller food retailers in the city." Likewise, being part of a large chain of stores were found to lead to a lower price image than being a family-owned, independent store, presumably because large chain stores reap the cost benefits high volume retailers.

In contrast to the lower costs associated with high sales volumes, carrying larger assortments (i.e., more options within a particular product category) is often associated with higher retailer costs. Assortment size may therefore also serve as a signal of retailer costs, such that stores with a limited selection within any given category would tend to have a lower cost structure than stores with a wide within-category selection. Thus, a store with larger assortments would tend to have a higher price image than an equivalent store with more limited assortments.

There is a notable exception to the links between store size or assortment size and price image. For retailers selling on the internet, physical store size is meaningless and assortment size loses its value as a signal of retailer costs. Consumers are aware of the cost savings associated with not keeping a physical stock in a retail space, allowing online retailers to cultivate a low price image with assortments that dwarf anything possible in a brick and mortar store.

Service quality. Another cost retailers incur that can be passed along to consumers is a competent work force. As a general rule, the higher the level of service provided by a retailer's employees, the more expensive it is to keep an adequate number of those employees (and to keep them well-trained and happy). Consumers may therefore use the level of service quality as a signal of retailer costs, and make an indirect inference about the overall price level. Specifically, a store with a high level of service quality is also likely to have a high price image. In support of this contention, consumers have previously indicated that a store where a sales person is easy to find are likely to have higher prices than a store where it is hard to find help (Buyukkurt and Buyukkurt 1986). Likewise, a shorter wait in the checkout line, additional services, and longer store hours are all associated with a higher price image (Brown 1969; Buyukkurt and Buyukkurt 1986).

Based on this discussion in this section, I can make the following testable propositions regarding the impact of signals of retailer costs on price image:

P6: Price image is a function of the following signals of retail costs:

a. assertions of cost structure
b. store décor, such that less expensive appointments leads to lower price image
c. store size, such that larger stores lead to lower price image
d. assortment size within a given category, such that smaller assortments lead to lower price image
e. service quality, such that lower quality leads to lower price image

BEHAVIORAL OUTCOMES OF PRICE IMAGE

To this point, this essay has examined some of the antecedents of price image. In this section I address some of the consequences of price image. I group these outcomes into three categories. First, I examine the impact of price image on consumers' expectations of the prices they encounter. This includes consumers' price perceptions and judgments of price fairness. I then examine the impact of price image on choice among retailers. Finally, I investigate the impact of price image on consumers' choices from a store, including how price image can change which option consumers' are likely to prefer as well as how it can change consumers' likelihood of deferring purchase of a preferred option.

Expected Prices

By definition, consumers expect to pay more for the same item at a store with a high price image than they would for a similar item at a store with a low price image. As I demonstrate in

this section, this expectation can, in turn, influence consumers' perceptions of the prices at a given store and also their evaluations of the fairness of those prices.

Price perceptions. Price image may influence price perceptions in one of two ways. First, given consumers' typically poor explicit knowledge of prices (Dickson and Sawyer 1990), consumers may use store price image as a judgment heuristic that replaces evaluation of a price relative to a reference point. The result is an assimilation effect, where a price is perceived to be lower at a low price image store and higher at a high price image store. For example, imagine a consumer shopping at a low-price image store who sees a cordless phone priced at $50. If the consumer does not have a clear reference point for cordless phones, he may assume that $50 is a low price, since the store has a low price image. If the consumer were to see the same phone at the same price at a store with a high price image, on the other hand, he may assume that $50 is a high price.

The second way for price image to influence price perceptions is by shifting the consumer's reference price (Monroe 1973). Since consumers expect higher prices at stores with a high price image, they may be willing to accept higher prices at a high price image store than they would at a store with a reputation for lower prices. This point was elegantly demonstrated in Thaler's (1985) "Beer on the Beach" study. In this study, participants were asked to imagine that they are lying on the beach when a friend offers to bring a cold beer from the only nearby place where beer is sold. The price image of the retailer is manipulated across conditions, with the beer coming either from a fancy resort hotel or from a run-down grocery store. In the high price image condition, participants were willing to pay a maximum of $2.65 (agreeing that if the beer cost any more, they would rather go without). In the low price image condition they were willing

to go thirsty if the beer cost any more than $1.50. Even though the consumption experience was held constant, participants were willing to pay a higher price to a fancy resort than to a run-down grocery store.

The result of this shift in reference prices is a contrast effect, such that a given price seems more expensive at a low price image store and less expensive at a high price image store. Returning to the previous example, a consumer shopping at a low-price image store may have a lower *a priori* reference point for a cordless phone than would the same consumer shopping at a store with a high price image. As a result, the consumer might consider a $50 phone expensive if he sees it at a low-price image store (because he has a lower reference price), whereas he might consider the same price more attractive at store with a higher price image.

It should be noted, of course, that these two predictions run in opposite directions, such that price image can lead to an assimilation effect when it is used as a heuristic and to a contrast effect when it first influences a consumer's reference price. One factor that may determine which of these two effects influence a consumer's price perceptions is the degree to which a consumers' reference price is articulated. When consumers have a very poorly articulated reference price (i.e., when they have only a vague idea of how much an item should cost) they may be more likely to use price image as a heuristic, substituting price image for an evaluation of the price. When consumers have a more clearly articulated reference price, on the other hand, they may be more likely to use their price image-adjusted reference price in evaluating prices. The impact of price image on consumer price perceptions is a fruitful area for future research.

Price fairness. Consumer perceptions of the fairness of the prices they pay have recently received a great deal of attention, both in the popular press and in consumer research. Fairness is

defined as "a judgment of whether an outcome and/or the process to reach an outcome are reasonable, acceptable, or just" (Xia, Monroe, and Cox 2004, p. 1). Price fairness is therefore a judgment of whether a given price is reasonable or just given the process used to set the price. Consumers who believe they are being charged too much may stop buying from a retailer or even actively spread negative information about a seller (Campbell 1999). In some cases, such as when vendors increase prices of especially vital goods like gasoline or medicine, angry consumers may even demand that legislators step in and protect them from what they perceive as unfair treatment (e.g., Jafonsky 2006).

Price image can impact perceptions of price fairness by changing consumers' expectations, such that a given price would be less likely to be perceived as unfair as the price image of the retailer increases. In other words, consumers would be more likely to perceive a high price as unfair at a store with a low price image than at a store with a high price image. Price image is likely to moderate perceptions of price fairness for several reasons. First, higher price image leads to higher expected prices, meaning a given price is less likely to be perceived as unreasonable or unacceptable as a high price image store, because the price is more in-line with consumers' expectations. Second, differences in price image across stores are likely to decrease the perceived similarity of different transactions. Previous research has found that price differences across transactions are more likely to lead to differences in perceived fairness when the transactions are more similar (Xia, Monroe, and Cox 2004). Finally, higher prices are considered fair when they are justified by higher seller costs (Bolton, Warlop, and Alba 2003). To the extent that a high price image is often (though not always) associated with a higher

retailer cost structure, higher prices are likely to be perceived as more fair at high price image stores than at low price image stores.

Choice Among Retailers

One of the consequences of price image that is of most interest to marketing practitioners and researchers alike is its impact on store choice. Retailers are often interested in managing their price images out of fear that consumers will leave for other stores perceived to have lower prices (A. T. Kearney 2005; Fagnani 2001). In general, one would expect consumers to prefer a store with a lower price image to an equivalent store with a higher price image. In fact, several researchers have used store choice as a dependent variable when measuring price image based on the assumption that consumers will tend to prefer lower-price image retailers (e.g., Alba et al. 1994; Bell and Lattin 1998; Buyukkurt and Buyukkurt 1986). Although consumers express a general preference for lower prices, it is clearly not always the case that consumers will choose a low price image retailer over one with a higher price image. For example, when consumers have the goal of splurging or when they are seeking a store with better service or higher quality goods, they may choose a store with a higher price image. Consistent with this reasoning, Hamilton and Chernev (2007) confirm that preference for a lower-price image stores can indeed be reversed when participants are given the goal of spending money.

Choice From a Retailer

In addition to guiding consumers in their choice among retailers, price image may also influence the choices consumers make within a store. In particular, I examine the potential

influence of price image on two types of in-store consumer decision making: product choice and purchase likelihood.

Product choice. Price image is likely to influence consumers' preferences for more or less expensive options in one of two ways. First, consumers may use price image as a judgment heuristic, bypassing price evaluations by shifting all of their price perceptions in the direction of the price image (e.g., assuming that all the prices in a low price image store are low). If the price perceptions of a set of options all shift down, the higher priced options in the set will seem less expensive, thereby increasing the probability that higher priced options will be chosen. In other words, if a consumer perceives all the prices at a store with a low price image to be lower, it will make the higher priced options seem more reasonable. The result will be an increase in the probability that more expensive options at a store with a low price image will be chosen relative to a store with a high price image.

The second way for price image to influence consumers' preferences for more or less expensive options is by changing consumers' reference prices. Deciding whether or not to buy a more expensive option is often based on a comparison between the price and an internal reference point. Consumers may adjust their reference prices based on the price image of the retailer in which they are shopping, such that they increase their reference points in high price image stores and decrease them in low price image stores. Lowering a consumer's reference price will decrease the attractiveness of a high priced option, thereby decreasing the probability that the consumer will purchase a more expensive option. When consumers use price image to adjust their reference points, the result will be a decrease in the choice share of more expensive options at a store with a low price image relative to a store with a high price image.

The influence of price image on consumers' within-store decision making is an extremely important area for further research. In addition to the obvious practical significance for retailers, knowing how price image affects preferences for more or less expensive options can also provide a powerful tool for the study of price image using purchase data. The only attempts at examining price image through empirical modeling have used store choice as the dependent measure (e.g., Bell and Lattin 1998). A robust theory predicting the impact of price image on consumer choice would allow for a great deal of flexibility in using actual purchase data to investigate price image phenomena.

Purchase likelihood. Consumers may use price image to help them decide whether to purchase an item at the offered price or whether to continue shopping and try to find a better deal elsewhere. Often consumers will not know the exact price competitors charge for a given offering and so must make a judgment about the probability of finding a better price at another retailer. Consumers may conclude that there is a high probability of finding a lower price somewhere else if they are at a store with high price image, but a low probability if they are at a store with a low price image. These probability judgments have implications for both price search and purchase likelihood. Specifically, consumers will be more likely to discontinue price search at a store with a low price image relative to a store with a high price image (Srivastava and Lurie 2001) and more likely to defer purchase at a store with high price image than at a store with a low price image (Hamilton and Chernev 2007).

Based on the discussion in this section, I can make the following testable propositions regarding the outcomes of price image:

P7: Price image will impact the following consumer judgments and behaviors:

a. price expectations
b. price perceptions, such that lower price image will lead to lower perceptions when consumers use price image as a substitute for price evaluations and higher perceptions when price image influences internal reference prices
c. perceptions of price fairness, such that lower price image will lead to decreased perceptions of fairness for high prices
d. store choice, such that lower price image will lead to increased store preference
e. purchase of upscale items (relative to downscale items), such that lower price image will lead to increased purchase of upscale items when consumers use price image as a substitute for price evaluations and decreased purchase of upscale items when price image influences internal reference prices
f. extent of price search, such that lower price image will lead to less price search
g. likelihood of purchase deferral, such that lower price image will lead to lower likelihood of deferral

GENERAL DISCUSSION

Price image is of immediate concern for marketing managers because of its influence on myriad consumer judgments and behavior, including expected prices, price perceptions, perceptions of price fairness, store choice, purchase likelihood, and preference for more or less expensive items. Recent increased competition in the form of retailer "category killers" have arguably made price image more important for retailers than ever before (Singh, Hansen, and Blattberg 2006). Yet, despite its obvious practical and theoretical significance, the subject of price image has received very little attention from marketing researchers (see Blattberg, Briesch, and Fox 1995). Retailers actively seeking to establish a particular price image are left without robust theory on which to base their decisions. Likewise, the impact of many common retail

practices on price image has not been adequately investigated. As a result, retailers may be making short term decisions that inadvertently damage their long-term price image strategies (A. T. Kearney 2005). Consumers are also left unaware of the factors that could bias their price image formation, potentially endangering consumer welfare.

This essay addresses this gap in the marketing literature by proposing a conceptual framework that identifies the main antecedents and consequences of price image (see Figure 2). On the antecedent side, I identify two classes of factors that influence price image formation: price-based antecedents and non-price antecedents. Price-based antecedents include those factors that are directly related to price information, such as the range of available prices and the context in which prices are evaluated. I propose that each of these price-based antecedents can have a direct impact on price image formation. However, I also propose that the impact of these factors on price image can be moderated by the evaluation strategy consumers employ. In particular, I identify three specific types of decision strategies that consumers use and discussed how each moderates the impact of price factors on price image formation.

Insert Figure 1.2 about here.

I divide non-price antecedents into two groups: price signals, which facilitate direct inferences about retailer price levels, and cost signals, which facilitate indirect inferences about price levels. Because overall price levels are difficult for consumers to observe, they may use price signals, such as advertising, price match guarantee policies and number of competitors, as a stand-in for actual price level. Consumers can also use signals of a retailer's cost structure to draw inferences about price level by reasoning that costs (or savings) may be passed along to consumers. Information that can signal retailer cost structure include such factors as store

ambiance, store size and service quality. For both price signals and cost signals, I discussed the expected direct predictions of the various factors on price image, as well as potential moderators that would strengthen or weaken the signal value of the information in forming a price image.

The framework also included the key outcomes of price image. In particular, I identified three groups of information processing and decision making outcomes that price image is likely to influence. First, price image, by definition, impacts the prices consumers expect to find at a particular retailer. I argue that based on these price expectations, price image can influence consumers' price perceptions, as well as their perceptions of price fairness, such that a price that is considered fair at one retailer might be considered unfair at a retailer with a different price image. Second, I examine the impact of price image on choice among retailers, including when consumers are likely to prefer stores with a low price image over stores with a high price image and vice versa. Finally, I investigate the impact of price image on consumers' choices from a store, including how price image can change which option consumers' are likely to prefer as well as how it can change consumers' likelihood of deferring purchase of a preferred option.

This essay includes a list of testable research propositions (summarized in Table 1) meant to encourage further research into the antecedents and consequences of price image. In addition to the propositions previously listed, there are several additional promising areas of future research on price image. The antecedents identified in this essay were largely discussed in isolation (though I did discuss likely moderators). For the sake of brevity, there was no attempt made to investigate how these factors might interact with each other. However, it is very likely that the antecedents identified in this essay interact in interesting and important ways in the formation of price images. For example, how do consumers cope with conflicting information of different

types when forming a price image? What kind of price image would a consumer form of a store where the prices of a few key items are perceived to be inexpensive, but the store's décor is very upscale? Do price-based antecedents always trump non-price antecedents when there is a conflict? Or do other factors determine which type of information receives more weight on a situation-by-situation basis? Examination of interactions between the various antecedents of price image is a promising area for future research.

Insert Table 1.1 about here.

This essay identifies the important factors that drive the *formation* of a price image. An important question for many retailers is how to change a price image that already exists in the minds of consumers. Changing a price image is likely to be a function of many of the same price and non-price antecedents as forming a price image, but it may also differ in important ways. For example, previous research suggests that it is extremely difficult for consumers to change an impression once it has been formed. To illustrate, once a link between a brand name and product quality has been established, it can inhibit the acquisition of other, more diagnostic information, such as the link between a particular feature and product quality (van Osselaer and Alba 2000). Consumers may also interpret new information in such a way as to confirm previously held beliefs or preferences (Russo, Meloy, and Medvec 1998). As argued in this essay, consumers may also interpret new price information so that it conforms with a pre-established price image (i.e., an assimilation effect on price perceptions). All of these findings and propositions suggest that established price images may be extremely sticky and that consumers will be unlikely to change them. Given the apparent difficulty in changing established price images, an important

area for future research is to identify those situations in which consumers would update price images and the mechanisms by which these updates occur.

Another important area for investigation is the accuracy of consumers' price images. As made abundantly clear in this essay, the processes by which consumers form price images are fraught with potential biases. These biases could easily cause consumers to form price images that bear no resemblance to price reality. In one of the only investigations of price image accuracy, Brown (1969) found wild variation across the five cities he surveyed, with respondents one city reporting price images that were extremely accurate and respondents in three cities reporting price images that had no correspondence with actual price levels. In a follow-up study, Brown (1971) tested the relationship between price image accuracy and 20 socioeconomic, attitude and behavior variables but found no strong predictors of price image accuracy. In other words, there were *no* groups of shoppers that were especially adept at forming price images that matched actual price levels. It remains an open question whether there are certain consumer characteristics or shopping situations that will consistently increase the accuracy of price images. Given the obvious implications for consumer well being, the topic of consumer price image accuracy is another important area for future research.

ESSAY 2

THE IMPACT OF PRODUCT LINE EXTENSIONS AND CONSUMER GOALS ON THE FORMATION OF PRICE IMAGE

ABSTRACT

This research examines how a retailer's product line strategy can influence consumers' impressions of its overall price level. In particular, I examine the impact of product line extensions—offerings from a higher or lower price tier—on price image as a function of consumers' buying and browsing goals. Conventional marketing strategy suggests that vertical extensions will have a directionally consistent impact on price image. Contrary to the conventional wisdom, I find that when consumers have a buying goal, upscale extensions can actually lower a retailer's price image and downscale extensions can raise it. I attribute this outcome to differences in the way consumers with browsing and buying goals process price information when forming price images.

Product line extensions are an essential part of retailer and manufacturer management strategies. Vertical product line extensions, in which options from a higher or lower price tier are added to a product line, are particularly common in retail settings. For example, Best Buy recently added the upscale Magnolia home theater line to complement its lower-priced electronics offerings. JC Penny has added the upscale Sephora brand, priced much higher than the rest of its cosmetics line. Even Wal-Mart, the prototypical low-price retailer, has experimented with adding a few upscale items to its assortments (Barbaro 2005). In the same vein, many retailers—including many positioned as premium or upscale sellers—have extended their product lines with downscale offerings. Indeed, one major trend in retailing is the introduction of downscale extensions in the form of private label goods (Kumar and Steenkamp 2007).

Most of the research on vertical extensions has been conducted in the context of product line management, seeking to investigate how extensions of a retailer's product line impact consumer preferences (Boatwright and Nunes 2001; Draganska and Jain 2006; Simonson and Tversky 1992), firm profitability (Draganska and Jain 2005), competitive entry (Schmalensee 1978) and brand positioning (Horsky and Nelson 1992). Although vertical extensions are likely to influence consumers' impressions of the price level of a store, to date, the influence of vertical extensions on a retailer's price image has not been investigated.

In this research, I address this gap by examining the impact of vertical extensions on consumers' impressions of the overall price level of a retailer. Understanding how consumers form price images of retailers with vertical extensions is important to both practitioners and marketing researchers because of the myriad consumer behaviors influenced by price images,

including price expectations, purchase likelihood, and store choice. Despite its importance to marketing theory and practice, there has been very little research into how consumers form price images.

How do vertical extensions impact price image? Conventional wisdom suggests that vertical product line extensions have a directionally consistent impact on price image, such that upscale extensions increase price image and downscale extensions decrease price image. In this research, I argue that the impact of vertical extension price image is a function of consumer goals. I show that the vertical extensions can have the opposite effect on price image, such that upscale extensions can decrease, rather than increase, the price image and downscale extensions can increase, rather than decrease price image.

This essay is organized as follows. I begin by reviewing the literature on price image formation, focusing on how consumers form overall impressions based on a set of prices. I then develop a set of theoretical predictions of how vertical product line extensions are likely to influence price image and how consumers' browsing and buying goals might moderate this process. I test our predictions in a series of five empirical studies that offer converging evidence in support of the proposed theory. The essay concludes with a discussion of the theoretical and managerial implications of this research.

THEORETICAL BACKGROUND

Consumers form complex networks of associations around the stores they shop (Martineau 1958; Myers 1960) and the brands they buy (Keller 1998, 2003). Although these amorphous bundles of associations can include almost any kind of information, from quality perceptions

(Berry 1969) to assessments of corporate social responsibility (Brown and Dacin 1997), the price dimension has previously been singled out for special consideration (e.g., Alba et al. 1994; Buyukkurt 1986; Simester 1995). This price dimension of a brand or store image is a price image, which I define formally as a consumers' subjective impression of the overall price level of a retailer, brand or product line.

Price image is important because it can influence many of the perceptions consumers have and the decisions they make. For example, price images have a direct impact on the prices consumers expect to pay at a particular store. It follows directly from the definition of price image that a consumer would expect prices to be higher at a store with a higher price image than at a store with a lower price image. Price image can also influence consumer decision making, such as consumers' purchase deferral decisions. The decision to buy a particular item or defer purchase to look for a better price elsewhere is based, in part, on an estimation of the likelihood of finding a better price at another store (Srivastava and Lurie 2001). Stores with a high price image are associated with a higher likelihood of finding a better price somewhere else. For this reason, higher price image will lead to higher rates of purchase deferral, relative to an otherwise equivalent store with a lower price image. Finally, price image can influence consumers' choice among retailers (Bell and Lattin 1998; Singh, Hansen, and Blattberg 2006). One of the factors consumers use in deciding where to shop is their impression that stores in their consideration set are either "expensive" (i.e., have a high price image) or "inexpensive" (i.e., have a low price image). When consumers are keen to save money, they are more likely to opt for a low price image store relative to a similar store with a higher price image.

Price image has not received the attention by marketing researchers that is warranted by its importance to theory and practice (see Blattberg, Briesch, and Fox 1995). I now know a great deal about how consumers evaluate individual prices (e.g., Monroe 1973), but how they integrate these price perceptions into an impression of the overall price level of a retailer has received much less attention. The relatively small body of work on price image has primarily focused on the role of non-price factors in price image formation. For example, research has found that advertised prices (Cox and Cox 1990; Shin 2005; Simester 1995) and price-match guarantee policies (Biswas et al. 2002; Desmet and Le Nagard 2005; Lurie and Srivastava 2005; Srivastava and Lurie 2001, 2004) can impact the price image that consumers form. Other work has examined the influence of a store's physical characteristics, such as size and newness, on price image (Brown 1969; Buyukkurt and Buyukkurt 1986).

Previous research into the impact of prices on price image has focused on the influence of individual prices within a category (Alba et al. 1994; Alba et al. 1999; Buyukkurt 1986). In other words, previous investigations have tended to study price image by stripping out the context in which prices are typically evaluated in a real-world context (e.g., the prices of the rest of the offerings in a product category). Although this previous research has produced important insights into price image formation, in all of these cases price image was investigated a function of just the prices of items by themselves, and not of the prices in the context of a consideration set. In contrast to previous research, I examine the distribution of prices within a category (as opposed to just the price of a single, chosen item) as a driver price image. In particular, I investigate the influence of vertical extensions on price image when the extension forms a part of the context in which prices are evaluated.

The conventional wisdom predicts that vertical extensions have a consistent impact on price image, such that upscale extensions lead to higher price images and downscale extensions lead to lower price images. Many retailers follow a strategy based on this conventional wisdom, in which downscale items are added as a way of lowering price image (A. T. Kearney 2005) and upscale extensions are added as a way of raising price image. For example, Whole Foods has recently begun to add (and aggressively promote) low priced vertical extensions (Barbaro 2006; Mackey 2007) as a way of lowering its price image, and in the United Kingdom, Burger King recently introduced a £85 ($170) Kobe beef and fois gras hamburger in an effort to create a more upscale image (Sun 2008).

In this research, I argue that, contrary to the conventional wisdom, this retail strategy can sometimes backfire, such that upscale extensions can lead to a lower price image and vice versa. I propose that whether a vertical extension will have a directionally consistent or a directionally opposite impact on price image depends on the consumer's goal when evaluating price information. I discuss consumer goals and their influence on price image formation in the following section.

RESEARCH PROPOSITIONS

Consumers tend to acquire product information toward one of two ends. Consumers with a *browsing* goal are interested in gathering information for possible future use, but not for the immediate purpose of picking one option to put into their shopping basket. These consumers are likely to activate a judgment procedure (as opposed to a choice procedure), in which the objective is to construct an overall assessment of an alternative or set of alternatives (Johnson

and Russo 1984; Slovic 1975; Tversky, Sattath, and Slovic 1988). As such, consumers with a browsing goal will have a relatively broad focus and will be relatively more inclusive when evaluating price information. In contrast, consumers with a *buying* goal are seeking information for use in an immediate purchase decision. These consumers are likely to activate a choice procedure (as opposed to a judgment procedure), which involves selecting one alternative from a set (Bettman, Luce, and Payne 1998; Johnson and Russo 1984). Evaluations made in the context of a choice task are geared toward arriving at a single option to be selected. Relative to consumers with a browsing goal, consumers with a buying goal will have a relatively narrow center of attention, ultimately focusing on the to-be-purchased alternative (cf. Carmon, Wertenbroch, and Zeelenberg 2003; Dhar and Simonson 1992).

Whether a consumer activates a buying or a browsing goal depends in part on the needs associated with the particular shopping trip. In general, consumers will be more likely to browse before making an important or expensive purchase (Claxton, Fry, and Portis 1974; Putsis and Srinivasan 1994) or when they are uncertain about which offering to choose (Urbany, Dickson, and Wilkie 1989). Some consumers may browse in order to keep themselves informed (e.g., "market mavens"; Feick and Price 1987) or simply because they find window shopping an enjoyable activity.

Browsing and buying goals may well lead to differences in the way consumers process information when forming impressions. Thus, consumers with a browsing goal tend to be more inclusive when evaluating information. Previous research on impression formation has found that across a wide variety of domains when people are not directed to pay special attention to any particular piece of information, an equal-weighting model is often a remarkably good predictor

of the impressions people form (Anderson 1974; Levin 1974, 1975). This suggests that consumers with a browsing goal, who are less likely to pay special attention to any particular option, may form overall impressions by integrating the available information, making the resulting impressions are more representative of the available information.

Consumers with a buying goal, on the other hand, tend to have a narrower focus, ultimately concentrating on the selected alternative. The increased focus on one option in the set has two consequences. First, it increases the likelihood that the focal option will be compared to the other options in the set (Adaval and Monroe 2002; Janiszewski and Lichtenstein 1999; Krishna et al. 2006; Volkmann 1951). Second, it increases the likelihood that the evaluation of this option will be over-represented in an overall evaluation of the set (Anderson 1974; Fiske 1980; Wyer and Watson 1969). Taken together, this suggests that consumers with a buying goal will form impressions that are strongly influenced by their evaluation of the chosen option, and, simultaneously, that the evaluation of the chosen option will be sensitive to the context in which it is evaluated.

Building on these findings, I argue that these differences in impression formation are likely to lead to differences in the price images formed of a store with vertical extensions. Consumers with a browsing goal tend to integrate the available price information, incorporating high or low priced extensions into the overall impression. The result is an assimilation effect, such that price image shifts toward the extension. Specifically, consumers with a browsing goal are likely to form a higher price image of a store that carries upscale extensions and a lower price image of a store that carries downscale extensions.

In contrast, I argue that when consumers have a buying goal, they tend to isolate the chosen alternative, comparing it to other options in the set. This prediction builds on previous research showing that an option will be perceived to be less expensive in the context of higher prices and more expensive in the context of lower prices. For example, a $160 phone is perceived to be less expensive in the context of phones priced at $185 and $198 than in the context of phones priced at $128 and $135 (Adaval and Monroe 2002). Likewise an item priced at $1.25 is perceived as more attractive in a set that ranges from $.99 to $1.74 than in a set that ranges from $.74 to $1.49 (Janiszewski and Lichtenstein 1999). I therefore predict that a given option will be perceived to have a lower price in the presence of an upscale extension than in the presence of a downscale extension (Krishna et al. 2006). If, as I propose, consumers with a buying goal over-represent their evaluation of the chosen option when forming an overall impression, the result will be a contrast effect, such that price image shifts away from the extension. Specifically, consumers are likely to form a lower price image of a store that carries upscale extensions and a higher price image of a store that carries downscale extensions.

I test the proposition that consumer goals moderate the impact of vertical extensions on price image formation in a series of five experiments. The first experiment demonstrates that when consumers have a browsing goal, a store with an upscale extension will have a higher price image than a store with a downscale extension, but that when consumers have a buying goal, a store with an upscale extension can have a lower price image than a store with a downscale extension. Experiment 2 demonstrates that this effect is symmetric with respect to upscale and downscale extensions by examining changes in price image relative to a store with no vertical extensions. Experiment 3 tests the mechanism underlying the assimilation and contrast effects.

The fourth and fifth experiments provide a further test of the proposed theory by examining boundary conditions on the finding that when consumers have a buying goal vertical extensions can cause price image to shift in the opposite direction.

EXPERIMENT 1

The goal of Experiment 1 is to test the impact of product line extensions on price image as moderated by consumer goals.

Method

Seventy-three students from a large Midwestern university were recruited to participate in a computer-based lab study on consumer preferences. Participants were given a scenario meant to correspond to a fairly typical shopping experience, namely, one in which they enter a store to buy something in particular, but are exposed to the items in a different category as they traverse the store. Participants were asked to imagine they were in a store for the purpose of buying a particular movie as a gift, but "because you also need a DVD player for yourself, you decide to check out the DVD player section of the store before looking at the movies." Thus, participants were first shown a display of four DVD players before they were then shown the movie that was the main purpose of their visit to the store.

Participants were randomly assigned to the conditions of a 2 (product line extension: upscale vs. downscale) x 2 (consumer goal: browsing vs. buying) factorial design. Product line extension was manipulated by including one DVD player in each set that was either very high priced or

very low priced. In both extension conditions, three of the four DVD players remained the same: Sony ($98.99), Samsung ($96.99), and Sylvania ($99.99). In the upscale extension condition the fourth option was a Panasonic ($279.99) and in the downscale extension condition the fourth option was a Coby ($34.99). In addition to a brand name and a price, all options included a picture and a rating on a five-star scale. The three moderately priced brands were all rated 3.5 stars. The upscale extension was rated 5 stars, and the downscale extension was rated 2 stars. The rating information was included to discourage participants in the downscale extension condition from choosing the downscale extension but instead to choose one of the moderately priced options. The DVD player stimuli used in this experiment are shown in Appendix A.

Consumer goals were manipulated by the presence or absence of a choice task with respect to the set of DVD players. Thus, participants in the buying goal condition were asked, "Which DVD player would you buy?" and selected one of the four brands. In contrast, respondents in the browsing goal condition did not make a choice, but were instead asked "to take a moment to consider these DVD players" before moving on to find the movie they were seeking. In both goal conditions, participants were told that they needed a DVD player, but only in the buying goal condition were they explicitly asked to make a selection.

After viewing the prices of the DVD players, participants were shown a recently-release DVD movie priced at $16.99 and were asked to choose whether to buy the movie now or to go to other nearby stores looking for a better price. The decision to defer purchase was expected to reflect the participants' price image of the store. If, based on the DVD player price information, they formed a high price image of the store, they would be more likely to defer purchase, reasoning that they would be more likely to find a better price elsewhere. In order to make sure

that participants' purchase deferral decisions were in fact based on a judgment of the likelihood of finding a better price elsewhere, participants were also asked to indicate the perceived price competitiveness of the store by rating the likelihood that they would be able to find the movie elsewhere for a lower price, rating this on a nine-point scale ranging from 1 = "I could definitely NOT find a better price" to 9 = "I could definitely find a better price."

Results

I predicted that the impact of vertical extensions on price image is moderated by consumer browsing and buying goals, such that when consumers have a browsing goal upscale [downscale] extensions will lead to higher [lower] price images and when consumers have a buying goal upscale [downscale] extensions will lead to lower [higher] price images. The purchase deferral data summarized in Figure 1 are consistent with these predictions, showing that when participants were simply asked to consider the assortment of DVD players (browsing goal), resulting in an assimilation effect. In particular, when the set included an upscale extension, 72.2% (N = 18) subsequently chose to defer purchase of the movie at the given price. When the set of DVD players included a downscale extension, only 44.4% (N = 18) of participants deferred purchase. This pattern of purchase deferral was reversed when participants had a buying goal, resulting in a contrast effect. Specifically, when the set included an upscale extension, 52.9% (N = 17) deferred purchase, compared to 75.0% (N = 20) who chose to defer when the set included a downscale option.

Insert Figure 2.1 about here.

The significance of these results was tested using a logistic regression model that predicted likelihood of purchase deferral (i.e., buy now vs. wait and look for a better price elsewhere) as a function of product line extension (upscale vs. downscale) and consumer goal (browsing vs. buying). Consistent with our predictions, the analysis revealed that the interaction between extension type and goal is significant ($\chi^2(1) = 4.64$, $p < .05$).

In order to test whether the purchase deferral decisions were a result of participants' judgments of the likelihood of finding a better price elsewhere, I also measured perceived price competitiveness of the store. Participants with a browsing goal indicated they would be more likely to find a better price elsewhere when the set of DVD players included an upscale extension ($M = 7.1$) than when it included a downscale extension ($M = 6.3$). I find the predicted reversal when participants had a buying goal. These participants indicated they would be less likely to find a better price elsewhere when the set included an upscale extension ($M = 6.4$) than when it included a downscale extension ($M = 7.5$). Statistical analysis of these data shows that the interaction between product line extension and consumer goals is significant ($F(1,72) = 4.35$, $p < .05$).

Discussion

This data lends support for the hypothesis that the impact of product line extensions on price image is moderated by consumer goals. In particular, I found that among participants with a browsing goal, those who saw a set containing an upscale extension formed a higher price image than did those who saw a set containing a downscale extension. Among participants with a

buying goal, this pattern was reversed, such that those who saw a set with an upscale extension actually formed a lower price image than those who saw a set with a downscale extension.

Experiment 1 tested the proposed theory by examining the differences between a store with an upscale extension and a store with a downscale extension. This approach raises the question of how consumers would form a price image of a similar store with no vertical extension. In other words, could stores with either an upscale or downscale extension be treated by consumers as no different from a store with no extension? The theory proposed in this research predicts that the impact of browsing and buying goals on price image would be reduced when there is no vertical extension. This is because when there is no vertical extension, the difference between integrating a set of moderate prices and isolating one of these prices and comparing it with other options is not likely to result in large differences in price image. Instead, I predict that when consumers have a browsing goal, they will form a higher price image of a store with upscale extensions than of a store with no extensions, and a higher price image of a store with no extensions than of a store with downscale extensions. In contrast, when consumers have a buying goal, they will form a lower price image of a store with upscale extensions than of a store with no extensions, and a lower price image of a store with no extensions than of a store with downscale extensions. The following experiment includes a condition with no extension in order to test this prediction.

EXPERIMENT 2

The goal of Experiment 2 is to provide a further test of the proposition that the impact of product line extensions on price image as moderated by consumer goals by examining upscale and downscale extensions relative to similar stores with no extensions.

Method

Eighty students from a large Midwestern university were recruited from a paid subject pool to complete a web-based study on consumer preferences. Participants were randomly assigned to the conditions of a 3 (product line extension: upscale vs. downscale vs. no extension) x 2 (consumer goal: browsing vs. buying) factorial design. Participants were asked to imagine that they were shopping at a nearby store for several different types of tea. Each participant saw either three or four brands (labeled Brand A, Brand B, etc.) in three different categories of teas: green tea, black tea, and herbal tea. Participants in the no extension condition saw a set of three prices in each category. For example, the three brands in the green tea category were $3.55, $3.65 and $3.75 per package. In the vertical extension conditions, either a high-priced or a low-priced fourth brand was added to the set. Thus, for green teas, the upscale condition consisted of four teas priced at $3.55, $3.65, $3.75, and $7.39; the downscale condition consisted of teas priced at $3.55, $3.65, $3.75, and $1.81.

Consumer goals were manipulated by the presence or absence of an option identified as being considered for purchase. Participants in the browsing goal condition were simply asked to "take a moment to consider" the prices of the options they were shown. Participants in the buying goal condition, on the other hand, were told that they were "strongly considering buying"

a particular moderately priced option in the set (e.g., Brand B) and were asked to "take a moment to consider the price" of that option. For example, when participants saw the green teas they were told they were considering purchasing the $3.65 box of tea. This manipulation is conceptually similar to the choice manipulation used in the first experiment, but this manipulation has the advantage of allowing us to dictate which option in the set participants would buy.

After viewing either three or four brands of tea of each type (either 9 or 12 in total), participants were asked to evaluate the overall price level of the store. Using a slider anchored at "very low" and "very high," participants rated the prices at this store relative to other stores selling similar items. Based on the position of the slider, participants' responses were converted to a 100-point scale, ranging from 1 for "very low" and 100 for "very high." As a second measure of price image, participants were also asked about their price expectations at this store. By definition, a high price image will lead consumers to expect the price of an unobserved item to be high and vice versa. Participants were told that an 8-pack of paper towels sells for around $10 at other nearby stores and were asked how much they thought a similar pack of paper towels would cost at this store.

Results

I predicted that the impact of vertical extensions on price image is moderated by consumer browsing and buying goals. In particular, when consumers have a browsing goal, they will form a higher price image of a store with upscale extensions than of a store with no extensions, and a higher price image of a store with no extensions than of a store with downscale extensions. In

contrast, when consumers have a buying goal, they will form a lower price image of a store with upscale extensions than of a store with no extensions, and a lower price image of a store with no extensions than of a store with downscale extensions. The results reported in Table 1 are consistent with these predictions.

Insert Table 2.1 about here.

The rating data indicate that the predicted interaction between vertical extension and consumer goal was significant ($F(2,74) = 7.31$, $p < .005$). Planned contrasts revealed that the among participants in the buying goal condition, the difference between price image ratings of the upscale store (38.2) and the downscale store (59.7) was significant ($F(1,74) = 18.86$, $p < .001$). Among the participants in the browsing goal condition, the difference between price image ratings of the upscale store (53.4) and the downscale store (47.6) was directionally consistent with predictions, but was not significant ($F(1,74) = 1.26$). As predicted, the effect of consumer goal appeared to have no impact when there was no vertical extension (47.5 vs. 49.0; $F < 1$).

As a second measure of price image, I also measured participants' expected price. An analysis of variance revealed the predicted interaction between vertical extension and consumer goal on expected price was significant ($F(2,74) = 5.20$, $p < .01$). Planned contrasts showed that the among participants in the browsing goal condition, the difference between expected prices at the upscale store ($10.50) and the downscale store ($8.49) was significant ($F(1,74) = 7.09$, $p < .01$). Among the participants in the buying goal condition, the difference between expected prices at the upscale store ($9.04) and the downscale store ($10.41) was moderately significant ($F(1,74) = 3.52$, $p < .10$). Once again, no effect of consumer goal was found when there was no vertical extension ($9.50 vs. $10.00; $F < 1$).

Discussion

The results of Experiment 2 provide further support for the prediction that the impact of product line extensions on price image is moderated by consumer goals. This experiment also found that the influence of consumer goals on price image was reduced when the stores carried no vertical extensions. I further found that across both dependent measures, participants' evaluations of the store with no extensions fell somewhere in between the evaluations of the stores with either upscale or downscale extensions.

Taken together, the results of the first two experiments show that, contrary to conventional wisdom, upscale extensions can lead to lower price images and downscale extensions can lead to higher price images. The third experiment will examine the process that drives this pattern of price image formation. In particular, I have proposed that when consumers have a browsing goal they integrate price information, forming impressions that are representative of more of the prices in the set. If this account is accurate, then I would expect consumers to evaluate a set with an upscale extension as more expensive than a set with a downscale extension. I have proposed that when consumers have a buying goal, on the other hand, they isolate price information, focusing on the to-be-purchased option and comparing its price to the prices of the other options in the set. This comparison process leads to a contrast effect, such that the presence of an upscale [downscale] option makes the focal option seem less [more] expensive. If this process is accurate, then I would expect consumers to evaluate a chosen option as less expensive in a context that includes an upscale option than in a context that includes a downscale option.

Experiment 3 tests these predictions by examining participants' evaluations of either the set of prices (browsing goal) or the focal option (buying goal) as they are forming a price image.

EXPERIMENT 3

The goal of Experiment 3 was to investigate the process underlying the effects reported in the previous experiments by collecting evaluations of the prices participants were exposed to as they form price images.

Method

One-hundred and twenty eight students from a Midwestern university were recruited to participate in an online study on consumer decision making. Participants were randomly assigned to the conditions of a 2 (product line extension: upscale vs. downscale) x 2 (consumer goal: browsing vs. buying) mixed design, where consumer goal and spending mode were manipulated between subjects and product line extension was manipulated within subjects. Participants visited three pairs of stores, each in a different retail category. One store in each pair was an upscale store (i.e., it included an upscale extension), while the other was a downscale store (i.e., it included a downscale extension).

The first pair of stores sold tote bags: The upscale store sold backpacks priced at $53.60, $59.90, $65.40 and $121.80, and the downscale store sold side-bags priced at $53.60, $58.70, $66.30 and $28.30. The second pair of stores sold office supplies: The upscale store sold fax machines priced at $91, $95 and $182, and the downscale store sold scanners priced at $90, $95 and $37. The third pair of stores sold small appliances: The upscale store sold blenders priced at $32.95, $35.65, $38.45, and $79.15, and the downscale store sold toasters priced at $32.40,

$36.75, $37.90 and $14.85. Thus, all participants saw the same prices across the two stores. The order of the upscale and downscale stores was counterbalanced across store pairs, such that for the tote bag stores and the office supply stores participants saw the upscale stores first and for the small appliances stores participants saw the downscale store first. A sample of the stimuli used in this experiment is shown in Appendix B.

The consumer goal manipulation was similar to that used in Experiment 2, such that in the buying goal condition one of the moderately priced options was singled out as being strongly considered for purchase, whereas in the browsing goal condition, participants were simply asked to "consider the prices" of the options. In order to collect price evaluations to test the proposed assimilation and contrast mechanism, participants were also asked to rate either the set of prices as a whole, or the price of the particular option selected for purchase. Thus, in the backpack store, participants in browsing goal condition were asked to "rate the prices of backpacks at this store" and participants in the buying goal condition were asked to "rate the price of Brand B," the brand they were considering buying. All ratings were made on the same nine-point scale, anchored at 1 = "very low" and 9 = "very high."

After participants saw first one store, then the other, they were asked to choose between them for a return purchase. Using store choice to measure price image raises the question of whether consumers prefer stores with high or stores with low image. Although generally assumed that consumers will prefer stores with a lower price image (A. T. Kearney 2005; Urbany, Dickson, and Sawyer 2000), this will clearly not always be the case. Often consumers' choice among retailers will be driven by the desire to save money. Thus, when consumers are in a "saving mode," they will prefer a store with a low price image to a store with a high price

image. Sometimes, however, consumers are less interested in saving money than they are in meeting some other need, such as getting the best service or the highest quality products. Consumers may be especially unmotivated to find the best price when they are spending someone else's money (e.g., a business dinner). When consumers are in such a "spending mode," they will actually prefer a store with a high price image to a store with a low price image. In order to fully map the connection between price image and store choice, this experiment includes a manipulation of spending mode, such that some participants choose among retailers while in is a saving mode and others choose while in a spending mode.

In the saving mode condition participants were simply asked to choose one store. Given that the only information participants had on which to base their decision was price, I anticipated that these participants would base their choice on where they thought they could save the most money (i.e., the store with the lower price image). Participants in the spending mode condition were asked to choose one store to return to, but they were told, "You are not buying for yourself, but for your boss. He said that price is no object: he wants you to go to the store with the best service and the highest quality products available." Thus, participants in the spending mode condition would form the same relative price images of the two stores, but because they were motivated by concerns other than saving money, they would actually choose the store with the higher price image.

Results

I predicted that the impact of vertical extensions on price image is moderated by consumer browsing and buying goals, such that consumers will form a lower price image of a downscale

store when they have a browsing goal than when they have a buying goal. In terms of choice among retailers, this means that when consumers are in a saving mode, they will be more likely to choose the downscale store when they have a browsing goal than when they have a buying goal. When they are in a spending mode, this choice pattern will be reversed, such that consumers will be more likely to choose the downscale store when they have a buying goal than when they have a browsing goal.

The choice data summarized in Table 1 are consistent with these predictions. For participants in a saving mode, the preference for returning to the downscale store for additional purchases was stronger among participants with a browsing goal (66.7%) than among those with a buying goal (50.6%). As predicted, this pattern of preferences was reversed when participants were in a spending mode, such that 43.4% of participants with a buying goal preferred the downscale store, compared with only 27.5% of participants with a browsing goal.

Insert Table 2.2 about here.

The significance of these results was tested using a logistic regression model, predicting choice of store (i.e., upscale store vs. downscale store) as a function of consumer goal (browsing vs. buying), spending mode (save vs. spend) and retailer category (tote bags, office supplies, and small appliances). Consistent with our experimental predictions, the analysis revealed a significant interaction between consumer goal and spending mode ($\chi^2(1) = 10.45$, $p < .005$), such that in a saving mode, participants with a browsing goal were more likely to choose the downscale store than participants with a buying goal ($\chi^2(1) = 4.68$, $p < .05$). In contrast, in a spending mode, participants with a browsing mindset were significantly less likely to choose the downscale store than participants with a buying goal ($\chi^2(1) = 5.85$, $p < .05$). The analysis

revealed no significant interactions between retailer category and the other experimental factors, suggesting that the reported effects were consistent across the different types of stores.

This experiment also examined how participants evaluated the price information, providing insight into the process by which participants formed a price image. In particular, as a part of the browsing goal manipulation, participants were asked to rate the set of prices as a whole. I expected participants with a browsing goal to integrate the available price information, meaning that participants should evaluate the set as having higher prices when there is an upscale extension than when there is a downscale extension. Participants in the buying goal condition, on the other hand, were asked to imagine they were considering one of the options for purchase and were asked to evaluate the price of that option. I expect that participants' ratings of the focal option will exhibit a contrast effect, such that the option will be evaluated as having a higher price in the presence of a downscale option than in the presence of an upscale option.

The price ratings data are consistent with these predictions. In the browsing goal condition, participants exhibited assimilation when evaluating the set of available prices, such that when the set included an upscale extension the rating was higher ($M = 6.0$) than when the set included a downscale extension ($M = 4.6$). Analysis of variance revealed that the type of extension (upscale vs. downscale) had a significant impact on participants' rating of the set of prices ($F(1,316) = 105.9$, $p < .001$). Participants in the buying goal condition, on the other hand, revealed a contrast effect when evaluating the single option considered for purchase, such that when the set included an upscale extension the item was rated as less expensive ($M = 4.5$) than when the set included a downscale extension ($M = 6.5$; $F(1,327) = 204.8$, $p < .001$). These findings lending support to our theoretical account by demonstrating that price images follow from integration of price

evaluations when consumers are browsing and isolation of the chosen option, comparing its price with other prices in the set when consumers are buying.

Discussion

The results of this experiment provide further support for the prediction that the impact of product line extensions on price image as moderated by consumer goals. This experiment also offers insight into the process by which consumers convert price information into price images. Specifically, the price ratings data collected in this experiment are consistent with the notion that consumers with a browsing goal integrate price information, leading to an assimilation effect, whereas consumers with a buying goal isolate price information, leading to a contrast effect. This experiment also allowed us to test the proposed theory using choice among retailers, a dependent measure with both theoretical advantages and managerial relevance.

So far, the results of the first three experiments have demonstrated the proposed effect and provided insight into the underlying mechanism. According to the integration/isolation mechanism proposed in this research, the contrast effect observed when consumers have a buying goal is driven by a comparison between the focal item and the other items in the set. When the set includes an upscale extension, the focal option seems less expensive and vice versa. This implies that the contrast effect should be reversed in those cases in which consumers with a buying goal choose the extension option. In other words, when consumers choose a vertical extension, their evaluation of this option will drive the price image they form, leading to a directionally consistent shift in price image. Thus, choosing an upscale [downscale] option will lead to a higher [lower] price image. I test this boundary condition in Experiment 4 by

manipulating whether participants in the buying goal condition focus on one of the moderately price options, which would lead to a contrast effect, or on the vertical extension, which would lead to an assimilation effect.

EXPERIMENT 4

The goal of Experiment 4 was to test a boundary condition on the contrast effect observed when consumers with a buying goal form a price image of a store with vertical extensions.

Method

One-hundred and eight students from a Midwestern university were recruited from a paid subject pool to participate in an online study on consumer decision making. Participants were randomly assigned to the conditions of a 2 (product line extension: upscale vs. downscale) x 3 (consumer goal: browsing vs. buying with a moderately priced focal option vs. buying with a vertical extension as focal option) mixed design, where consumer goal was manipulated between subjects and product line extension was manipulated within subjects. Participants visited two hardware stores, where they saw the prices of three or four items in each of four product categories: bolt cutters, hand saws, faucets, and staple guns (14 prices in total). One store was an upscale store (i.e., it included upscale extensions), while the other was a downscale store (i.e., it included downscale extensions). The order was counterbalanced such that some participants visited the upscale store first and some participants visited the downscale store first.

Consumer goal was manipulated implicitly by changing participants' perceptual focus. This manipulation is based on previous research that has shown that consumer attention can be

influenced by the physical properties of visual information, such as size and location of different advertising elements (Pieters and Wedel 2004; Rosbergen, Pieters, and Wedel 1997) or the visual arrangement of choice options (Hamilton, Hong, and Chernev 2007). These findings suggest that featuring one option, such as with a promotion (Inman, McAlister, and Hoyer 1990), could activate an implicit buying goal by focusing consumers on a particular item and isolating that option during the formation of a price image.

In the browsing goal condition, participants saw displays in which all options were the same size and no option was especially prominent (see Appendix C.1). This arrangement was meant to encourage participants to activate a browsing goal by not focusing them on any option in particular. In the two buying goal conditions, participants saw displays in which one of the options was much larger than the others and marked as a "featured item." Across conditions, the featured item was either one of the moderately priced options (see Appendix C.2) or the vertical extension (see Appendix C.3 and C.4). This arrangement was meant to activate an implicit buying goal by drawing participants' attention to one option in the set, thereby isolating this option. It should be noted that all participants saw exactly the same items at exactly the same prices across stores. The only difference between conditions was whether one item was featured and whether this featured item was a vertical extension or one of the moderately priced items.

After participants saw all four product categories first at one store, then at the other, they were asked to choose between them for a return purchase. Specifically, participants were told that "you now have to return to one of these stores for something else—something for which you have not yet seen the prices. Where would you expect the prices to be lower?"

Results

I predicted that consumers will form a lower price image of a downscale store when they have a browsing goal than when they have a buying goal and focus on moderately priced options. When consumers focus on vertical extensions, however, I expect the impact of buying goal to be reduced. In terms of choice among retailers, this means that consumers will be more likely to choose the downscale store when they have a browsing goal than when they have a buying goal and are focused on moderately price items. It also means that consumers will be less likely to choose the downscale store when they have a buying goal and are focused on moderately price items than when they have a buying goal and are focused on vertical extensions.

The data summarized in Figure 3 are consistent with these predictions. Of the participants in the browsing condition, in which none of the options was perceptually focal, 87.2% chose the downscale store to return to for more purchases. In the two buying conditions, price image depended on which option was perceptually focal. When one of the moderately price options in each set was focal, only 73.3% of participants chose the downscale store. When the vertical extension was perceptually focal, 88.2% of participants choose the downscale store.

Insert Figure 2.2 about here.

A logistic regression analysis revealed that choice of store is indeed a function of the perceptual focus condition ($\chi^2(2) = 5.1$, $p < .05$, one-tailed). In particular, participants were significantly less likely to choose the downscale store when one of the moderately priced options was perceptually focal (buying goal) than when there was no perceptually focal option (browsing goal; $\chi^2(1) = 3.0$, $p < .05$, one-tailed). In the two buying goal conditions, the option participants

focused on was a significant predictor of store choice, such that participants were significantly more likely to choose the downscale store when one of the moderately priced options was perceptually focal than when the extension option was focal at both stores ($\chi^2(1) = 3.7$, $p < .05$, one-tailed).

Discussion

This experiment provides insight into a boundary condition of the proposed impact of vertical extensions and consumer goals on price image formation. In particular, I found that the contrast effect previously observed when consumers have a buying goal is reduced when consumers focus on a vertical extension rather than on a moderately priced item. This experiment also provided convergent insight into the mechanism by which consumer goals influence price image formation. Using a perceptual focus manipulation to implicitly activate consumer goals, this experiment shows that directly manipulating which options (if any) participants focus on leads to similar outcomes as more overt manipulations of browsing and buying goals.

An alternative approach for examining the role of consumer focus in moderating the boundary condition on the observed contrast effect in the buying goal condition is to measure consumers' focus as they form price images. In particular, since consumers with a buying goal are likely to ultimately focus on the option that they select for purchase, one can use the options selected by consumers with a buying goal as a measure of which options they focus on when forming a price image. According to the theory proposed in this research, consumers who choose very few vertical extensions (relative to moderately price options) should exhibit a stronger

contrast effect in price image than those who choose more vertical extensions. In other words, consumers who choose the fewest vertical extensions are the most likely to form a high price image of a downscale store and a low price image of an upscale store. Experiment 5 tests these predictions.

EXPERIMENT 5

The goal of this experiment was to provide a further test of a boundary condition of the contrast effect observed when consumers with a buying goal form a price image of a store with vertical extensions.

Method

Ninety-five students from a large Midwestern university participated in an experiment on consumer preferences in exchange for course credit. Participants were randomly assigned to the conditions of a 2 (product line extension: upscale vs. downscale) x 2 (consumer goal: browsing vs. buying) mixed design, where consumer goal was manipulated between subjects and product line extension was manipulated within subjects. Participants shopped in two virtual grocery stores for a list of the same nine items: laundry detergent, tuna, maple syrup, ketchup, apple juice, frozen pizza, pasta sauce, rice, and cat food. For each category on the shopping list, participants were shown pictures of three, four or five branded packages arranged as if they were on store shelves, with the price displayed prominently below each item (36 prices in total). The first store participants saw was an upscale store (i.e., it included upscale extensions), and the second was a downscale store (i.e., it included downscale extensions). For example, in the pasta

sauce category, the upscale store had the following assortment: Barilla ($3.59), Prego ($3.36), Ragu ($3.42), and Isola ($7.12). The downscale store carried the first three brands at the same prices, but replaced the upscale extension with a downscale extension, Hunt's ($1.39). See Appendix D for a sample of the stimuli used in this experiment.

The consumer goal manipulation was a choice/no choice task identical to Experiment 1. Participants in the buying goal condition were asked to select the option they would buy in each of the nine categories in each store. In contrast, participants in the browsing goal condition did not make a choice, but were instead asked "to take a moment to consider these prices before moving on to the next category."

After participants had shopped for each of the nine items, first at one store, then at the other, they were asked to imagine they had to return to one of these stores for additional purchases. In particular, participants were told, "You now have to return to one of these stores for something else—something for which you have not yet seen the prices. Where would you expect the prices to be lower?"

Results

I predicted that the impact of vertical extensions on price image is moderated by consumer browsing and buying goals, such that when consumers have a browsing goal, upscale [downscale] extensions will lead to higher [lower] price images and when consumers have a buying goal upscale [downscale] extensions can lead to lower [higher] price images. The store choice data are consistent with these predictions, such that among participants with a browsing

goal, 79.3% ($N = 29$) chose the downscale store, compared with only 48.5% ($N = 66$) of participants with a buying goal ($\chi^2(1) = 7.28$, $p < .01$).

This experiment also allowed for a test of the proposition that the contrast effect observed in the buying goal condition is a function of which options consumers focus on. In particular, I predicted that participants who chose fewer vertical extensions would form lower price images of the upscale store than participants who chose more vertical extensions. To allow for as complete an analysis as possible, I examined the 18 choices these participants made (one choice in each category X nine categories X two stores) and divided them into five groups based on how frequently they chose a vertical extension. These groups consisted of those who never chose a vertical extension ($N = 9$), those who chose only one extension ($N = 15$), two extensions ($N = 12$), three or four extensions ($N = 17$), and five or more extensions ($N = 13$).

The store choice data summarized in Figure 4 reveal a roughly linear pattern, in which choice of the downscale store increases as participants chose more of the extension options. Specifically, among the participants who chose no vertical extensions in any of their 18 choices, not a single person chose the downscale store. Instead, when asked to choose the store that was likely to have lower prices on unobserved items, all of these participants chose the store with upscale extensions. The percentage of participants indicating that the downscale store has a lower price image increases as the number of extensions chosen increases.

Insert Figure 2.3 about here.

The significance of these choice data was tested using a logistic regression predicting choice of store (upscale store vs. downscale store) as a function of the number of vertical extensions chosen (0 vs. 1 vs. 2. vs. 3-4 vs. 5+). Consistent with our hypotheses, the results reveal that the

frequency of focusing on an extension option is a significant predictor of store choice ($\chi^2(1) = 13.48$, $p < .001$).

Discussion

The results of this experiment provide further insight into the role of consumer focus in moderating the impact of vertical extensions and consumer goals on price image formation. In particular, I found that the contrast effect previously observed when consumers have a buying goal is reduced when consumers with a buying goal choose vertical extensions. The results show that as the number of vertical extensions chosen decreases, the likelihood of choosing the upscale extension increases. Surprisingly, among participants who never chose a vertical extension, every single person indicated that the store with upscale extensions was actually lower-priced than the store with downscale extensions.

GENERAL DISCUSSION

Vertically extending product lines, by adding options priced higher or lower than the rest of the line, has become a very common strategy for retailers. Vertical extensions offer retailers several potential advantages, including expanding the customer base and increasing profitability. Some retailers even use vertical extensions to try to manage their price images: adding a few very low priced options when they want to convey a low price image and a few very high priced options when they want to appear more upscale. Despite the intuitive appeal of this strategy, the research presented in this essay suggests that it may only be effective some of the time, and may, on occasion, backfire. I show that the impact of vertical extensions on price image is moderated

by consumer goals. In particular, when consumers have a browsing goal, the result is an assimilation effect, such that upscale extensions lead to higher price images and downscale extensions lead to lower price images. When consumers have a buying goal, however, the result can be reversed, such that upscale extensions can lead to lower price images and vice versa.

The research in this essay offers convergent evidence for the role of consumer goals in moderating the impact of vertical extensions on price image by using multiple dependent measures to tap price image. Across experiments, price image was measured using purchase deferral (Experiment 1), explicit ratings (Experiment 2), price expectations (Experiment 2) and store choice (Experiments 3-5). Choice among retailers is an important dependent variable for several reasons. First, one of the primary reasons retailers are concerned about managing their price image is its anticipated effects on store choice (A. T. Kearney 2005; Singh, Hansen, and Blattberg 2006; Urbany, Dickson, and Sawyer 2000). Second, choice among retailers has been demonstrated by previous research to be a reliable measure of price image (Alba et al. 1994; Bell and Lattin 1998). Finally, choice among retailers provides a more robust test of the proposed theory because it asks participants to make a relative price image judgment between two stores for which they have been given equivalent information. These divergent dependent measures were consistent in supporting the proposed theoretical predictions. The findings were also reliable across a variety of retail contexts (electronics, small appliances, office supplies, home improvement, grocery, etc.).

Theoretical Contributions

The question of how goals influence consumer behavior has become a fruitful area for research. Previous research has investigated various specific consumer goals as drivers of preference formation and choice (Biehal and Chakravarti 1982; Chernev 2004; Creyer, Bettman, and Payne 1990; Fischer et al. 1999; Lee and Ariely 2006; Markman and Brendl 2000). The role of the common consumer goals of browsing and buying in judgment and decision making has received relatively little attention. Although the goals of browsing (Claxton, Fry, and Portis 1974; Putsis and Srinivasan 1994; Urbany, Dickson, and Wilkie 1989) and buying (Bettman, Luce, and Payne 1998; Dhar and Simonson 1999; Simonson 1989) have previously been studied independently, they are infrequently investigated together. In this research, I propose that a browsing goal leads consumers to be less focused when evaluating information, and more likely to engage in judgment procedures (Johnson and Meyer 1984; Tversky, Sattath, and Slovic 1988), thereby forming impressions that tend to integrate the available information. A buying goal, on the other hand, leads consumers to be more focused, engaging in choice procedures (Johnson and Meyer 1984), isolating one option and over-representing it in impression formation.

This research contributes to the literature on price image and impression formation by documenting that the way that consumer goals can be an important determinant of the type of impression they form. There has been very little investigation into how consumers form a price image based on a set of prices, despite its importance to both marketing theory and practice. Previous research has focused on marketer actions such as advertising (Shin 2005; Simester 1995) or on consumer behavior variables such as basket size (Bell and Lattin 1998; Desai and Talukdar 2003) as drivers of price image. I build upon previous work by suggesting that the

goals that are active when consumers assess prices—seeking to select an option for purchase vs. seeking to gather information without making a choice—can act as a significant factor in determining price image. In particular, I show that a single marketer action, such as vertically extending a product line, can impact price image in dramatically different ways, depending on whether consumers have a browsing goal or a buying goal.

This research also emphasizes the importance of context in investigating how consumers form price images. Previous research into the impact of prices on price image has focused on how consumers form a price image using individual prices within a category. These studies examined price image by stripping out the context in which prices are typically evaluated in a real-world context (e.g., the prices of the rest of the offerings in a product category). In contrast to previous research, I examine the distribution of prices within a category (as opposed to just the price of a single, chosen item) as a driver price image. I thus investigate the influence of vertical extensions on price image—both when the extension is chosen by the consumer and when the extension simply forms a part of the context in which prices are evaluated.

Previous research on vertical extensions has been conducted in the context of product line management, seeking to investigate how extensions impact on consumer preferences (Draganska and Jain 2006; Simonson and Tversky 1992), firm profitability (Draganska and Jain 2005), competitive entry (Schmalensee 1978) and brand positioning (Horsky and Nelson 1992). The research presented in this essay adds to our understanding of how the vertical extensions impact consumer judgments and decision making. Previous research has identified that adding options of higher price and quality (i.e., vertical extensions) can influence consumer preferences among options within a set (Simonson 1989; Simonson and Tversky 1992). Because consumers have a

general aversion to selecting options with extreme values, vertical extensions can increase the likelihood that other options in the set will be chosen by making them seem more moderate by contrast. In one example cited by Simonson (1999), the mail-order sales of a moderately priced bread maker almost doubled when an upscale bread maker was added to the catalogue. Vertical extensions have also been shown to affect consumers' reservation prices, such that high-priced extensions will raise a reservation price and low-priced extensions will lower it (Krishna et al. 2006; Nunes and Boatwright 2004) Although the impact of vertical extensions on consumer choices and reservation prices has been well-documented, this research adds to our understanding of how these extensions affect impression formation, an area that has so far received very little attention.

This research builds upon work done in the area of price perception, by demonstrating when and how price perceptions can influence price image formation. In particular, previous research has shown that the local context can have a powerful impact on how consumers perceive prices. For example, the range of prices in the consideration set can influence price perception, such that when the range extends above [below] than a focal item's price, that price seems less expensive (Adaval and Monroe 2002; Janiszewski and Lichtenstein 1999; Volkmann 1951). This work builds on these findings by showing that when consumers have a buying goal, these reference point effects can spill over from individual price perceptions to price image formation. The current research also shows, however, that when consumers have a browsing goal that these range and reference point effects are reduced, and instead, consumers tend to integrate the available price information into an overall impression.

Managerial Implications

There are several advantages to retailers who pursue a retail strategy that includes vertical extensions. Options priced higher or lower than its other offerings allow a retailer to attract new customers who are more price or quality sensitive than its typical customer. In this way, a retailer might increase its customer base by making a relatively small change to its product line. In addition to potentially drawing in new customers, vertical extensions are often very profitable in their own right: upscale extensions frequently enjoy the high margins that accompany premium pricing, whereas downscale extensions, especially private label goods, are frequently high-margin by virtue of being extremely low-cost.

The most important managerial implication of this research follows from the basic finding that the impact of vertical extensions on price image is not unidirectional, but is instead a function of consumer goals. Thus, for retailers seeking to manage their price image through vertical extensions, it is important to anticipate consumers' likely goal state when shopping in that particular category. With a little foresight, a retailer may often be able to anticipate whether consumers are more likely to have a browsing or a buying goal. To illustrate, for some high-ticket items, such as durable goods, consumers may be especially likely to engage in extensive browsing before buying (Claxton, Fry, and Portis 1974). Likewise, consumers may be more likely to browse in certain categories because browsing for these items is enjoyable. High-end electronics may be one such category. Many Costco stores place their TVs immediately inside the main entrance. Such a placement encourages consumers to browse far more often than they would buy a TV. In other categories, such as food staples like milk and eggs, consumers are far more likely to have a buying goal than a browsing goal. By anticipating the goal consumers are

more likely to have when shopping in a particular category, a retailer may be able to customize its vertical extension strategy to best manage its price image.

In addition to anticipating consumer goals, this research suggests that retailers may also be able to influence a consumers' implicit goal state when evaluating prices. The perceptual focus manipulation used in Experiment 4 (see Appendix C) was very similar to tactics used by retailers by both in the store (e.g., shelf-talkers, end-cap displays) in catalogues and on websites to draw attention to particular items. Strategic use of perceptual focus to encourage an implicit goal state could also allow retailers to better manage their price images.

This research was focused on retailer price image. However, the concept of price image may be applied to the broader notion of brand image (Keller 1998, 2003). In this context, price image encompasses the price-related aspects of the overall brand image, and any entity with a brand image will also have a price image. Thus, although price image is most commonly associated with retailer brands, the concept of price image is applicable to manufacturers as well. Manufacturer brands can have high price images (e.g., Rolex watches, Evian water, Bose sound systems) or low price images (e.g., Bic pens, Keds sneakers, Shasta beverages), independent of the specific retailers through which they are sold. The findings reported in this research make specific predictions for the price image of manufacturer, as well as retailer brands.

TABLE 1.1

SUMMARY OF RESEARCH PROPOSITIONS

Price-based Antecedents

P1: Price image is a function of the following price-based antecedents:

a. the average price of products in the store
b. the prices of benchmark items (e.g., frequently purchased or big-ticket items)
c. the range of prices, such that a wider range leads to lower price image
d. prices of options purchased, such that purchase of lower priced options leads to lower price image
e. the ease of comparing prices, such that easier comparison leads to lower price image
f. local reference prices, such that higher reference prices leads to lower price image
g. the frequency of price discounts, such that higher frequency leads to lower price image
h. the depth of price discounts, such that deeper discounts lead to lower price image

Evaluation Strategies

P2: Item-based price images (relative to basket-based prices) are more sensitive to:

a. the prices of benchmark items (e.g., frequently purchased or big-ticket items)
b. the ease of comparing prices, when comparing prices affects price perceptions
c. local reference prices, when comparing prices affects price perceptions
d. the range of prices
e. changes in the price of an item over time

and less sensitive to:

f. the average price of products in the store
g. the ease of comparing prices, when comparing prices affects purchase of higher or lower priced items
i. local reference prices, when comparing prices affects purchase of higher or lower priced items
j. the frequency of price discounts
k. the depth of price discounts

P3: Internal reference price-based price images (relative to external reference price-based price images) are more sensitive to:

a. changes in the prices of individual items over time
b. the average price of products in the category, store or market

c. the prices of benchmark items (e.g., frequently purchased or big-ticket items)

and less sensitive to:

d. the range of prices within a category
e. local reference prices
f. the ease of comparing prices

P4: On-line price images (relative to memory-based price images) are more sensitive to:

a. the ease of comparing prices
b. local reference prices
c. the range of available prices
d. the average price of products in a category or store

and less sensitive to:

e. the prices of benchmark items
f. non-price factors

Non-price Antecedents

P5: Price image is a function of the following signals of retailer prices:

a. advertised prices
b. advertising frequency, such that higher frequency leads to lower price image
c. frequency of promotions, such that higher frequency leads to lower price image
d. assertions of price level
e. the presence of a price match guarantee policy
f. the perceived number of competitors, such that more competitors leads to lower price image
g. the socioeconomic status of its customer base, such that lower status leads to lower price image
h. the perceived number of customers, such that more customers leads to lower price image
i. store newness, such that newer stores lead to lower price image
j. the package size of its offerings, such that larger packages leads to lower price image
k. the proportion of national brands carried relative to private label, generic, or off-brand merchandise, such that fewer national brands leads to lower price image

P6: Price image is a function of the following signals of retail costs:

a. assertions of cost structure
b. store décor, such that less expensive appointments leads to lower price image
c. store size, such that larger stores lead to lower price image

d. assortment size within a given category, such that smaller assortments lead to lower price image
e. service quality, such that lower quality leads to lower price image

Outcomes

P7: Price image will impact the following consumer judgments and behaviors:
a. price expectations
b. price perceptions, such that lower price image will lead to lower perceptions when consumers use price image as a substitute for price evaluations and higher perceptions when price image influences internal reference prices
c. perceptions of price fairness, such that lower price image will lead to decreased perceptions of fairness for high prices
d. store choice, such that lower price image will lead to increased store preference
e. purchase of upscale items (relative to downscale items), such that lower price image will lead to increased purchase of upscale items when consumers use price image as a substitute for price evaluations and decreased purchase of upscale items when price image influences internal reference prices
f. extent of price search, such that lower price image will lead to less price search
g. likelihood of purchase deferral, such that lower price image will lead to lower likelihood of deferral

TABLE 2.1

PRICE IMAGE RATING AND EXPECTED PRICES AS A FUNCTION OF PRODUCT LINE EXTENSION AND CONSUMER BROWSING AND BUYING GOALS (EXPERIMENT 2)

	Browsing goal			Buying goal		
	Upscale extension	No extension	Downscale extension	Upscale extension	No extension	Downscale extension
Price image rating	53.4	49.0	47.6	38.2	47.5	59.7
Expected prices	$10.50	$9.50	$8.49	$9.04	$10.00	$10.41
	(*N* = 12)	(*N* = 13)	(*N* = 14)	(*N* = 13)	(*N* = 13)	(*N* = 15)

NOTE.— Price image ratings were made on a slider, converted to a 100-point scale, with 100 indicating a very high overall price level. Expected prices were for an item that participants were told sells at other nearby stores for around $10.

TABLE 2.2

RELATIVE CHOICE SHARES OF DOWNSCALE STORE AS A FUNCTION OF CONSUMER BROWSING AND BUYING GOALS (EXPERIMENT 3)

	Saving mode		Spending mode		Combined	
	Browsing goal (%)	Buying goal (%)	Browsing goal (%)	Buying goal (%)	Browsing goal (%)	Buying goal (%)
Tote bags	75.9	62.1	29.4	41.7	73.0	60.0
Office supplies	65.5	55.2	32.4	45.7	66.7	54.7
Small appliances	58.6	34.5	20.6	42.9	69.8	46.9
Total	66.7 ($N = 36$)	50.6 ($N = 29$)	27.5 ($N = 34$)	43.4 ($N = 29$)	69.8 ($N = 70$)	53.9 ($N = 58$)

NOTE.— Choice shares of downscale store relative to upscale store. In saving mode, choice indicates the store with the lower price image; in spending mode, choice indicates the store with the higher price image. These data were combined to reveal the total proportion in both saving and spending mode conditions who indicated that the downscale store had the lower price image.

TABLE 2.3

SUMMARY OF FINDINGS (EXPERIMENTS 1-5)

		Browsing goal		Buying goal	
	Participants' responses	Upscale extension (%)	Downscale extension (%)	Upscale extension (%)	Downscale extension (%)
Experiment 1	Purchase deferral	72.2	44.4	52.9	75.0
Experiment 2	Expected price	105.0	90.4	84.9	104.1
Experiment 3	Store choice	30.2	69.8	46.1	53.9
Experiment 4	Store choice	12.8	87.2	26.7	73.3
Experiment 5	Store choice	20.7	79.3	51.5	48.5

NOTE.— Across studies, different dependent variables were used to measure price image. *Purchase deferral* reflects the percentage of participants who chose to look for a better price elsewhere rather than buy at the current price. A higher rate of purchase deferral indicates a higher price image. *Expected price* reflects how much higher or lower than the average market price participants expected the price of a particular item to be. A higher expected price indicates higher price image. *Store choice* reflects the percentage of participants who selected either the store with upscale extensions or downscale extension as having a lower price image. Because participants in each goal condition chose between an upscale and a downscale store, the store choice shares sum up to 100%.

FIGURE 1.1

A BASIC CONCEPTUAL FRAMEWORK OF PRICE IMAGE

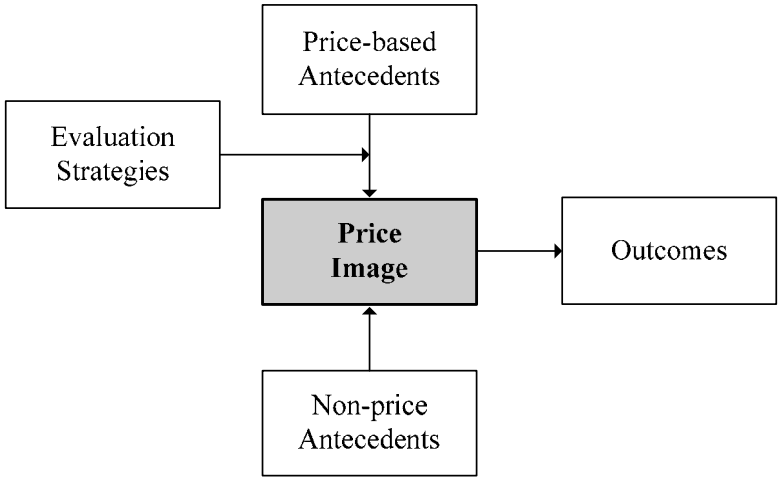


FIGURE 1.2

A COMPLETE CONCEPTUAL FRAMEWORK OF PRICE IMAGE

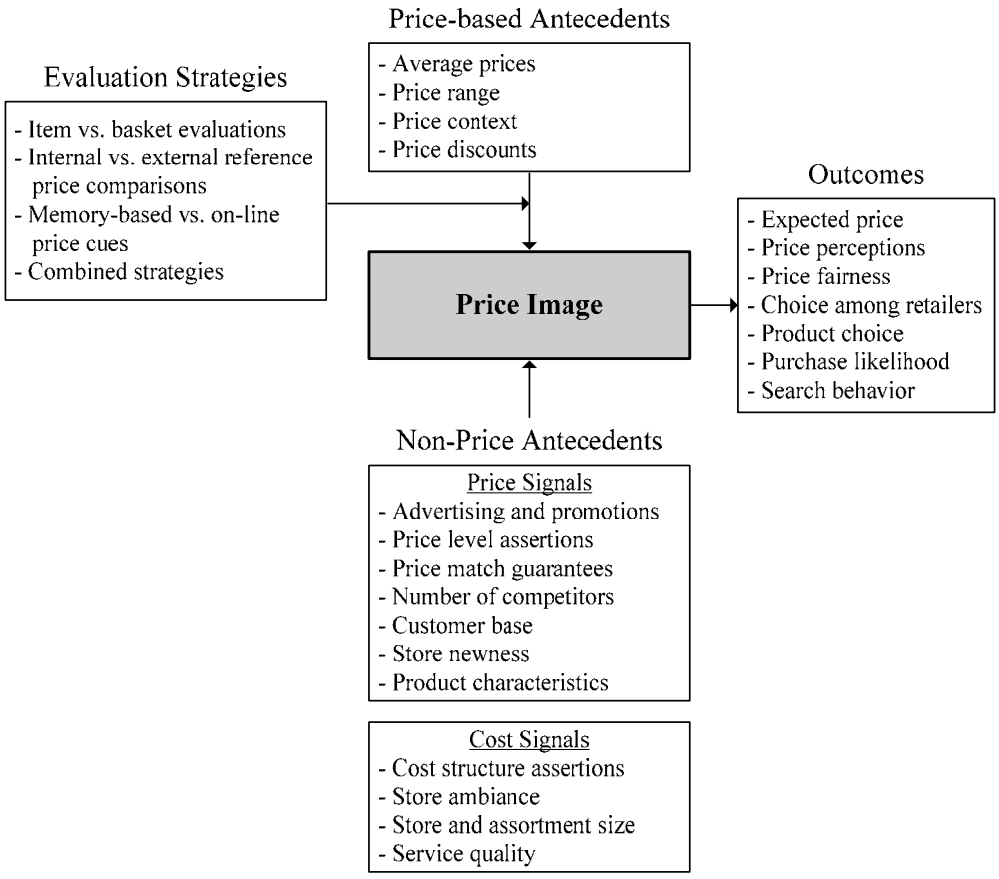
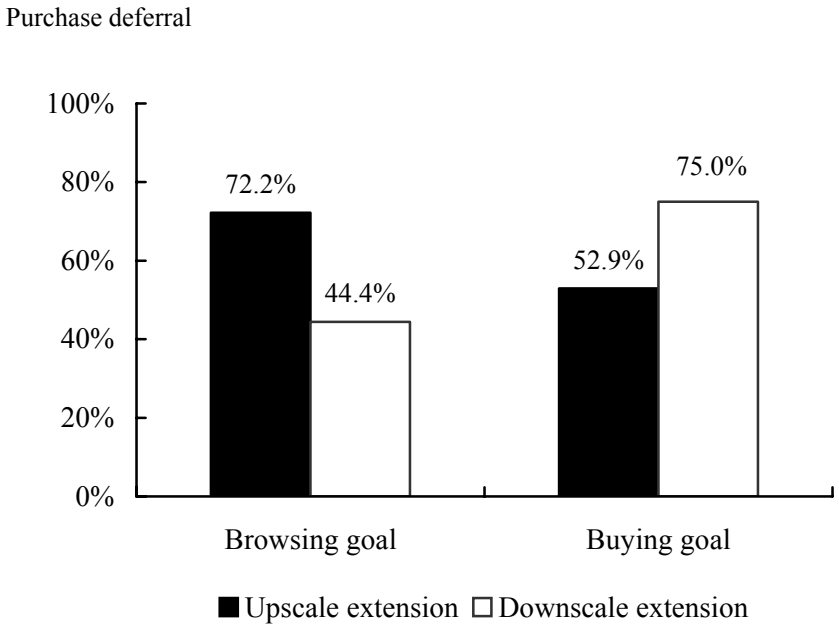


FIGURE 2.1

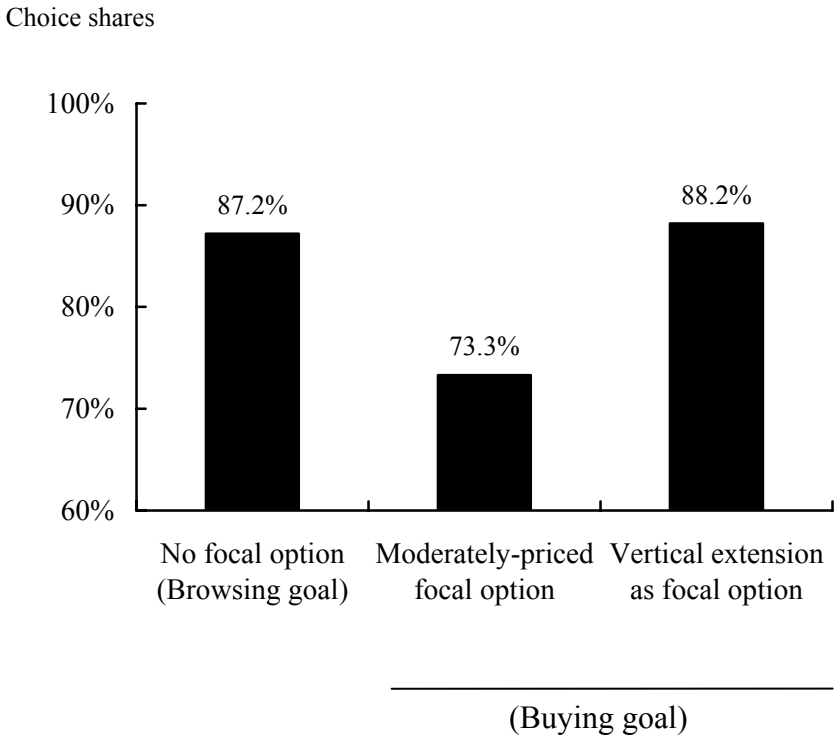
PURCHASE DEFERRAL AS A FUNCTION OF PRODUCT LINE EXTENSION AND CONSUMER BROWSING AND BUYING GOALS (EXPERIMENT 1)



NOTE.— Purchase deferral is the relative share of participants who chose to forego buying at the current price and instead look to other nearby stores for a better price. Rates of purchase deferral increase as price image increases.

FIGURE 2.2

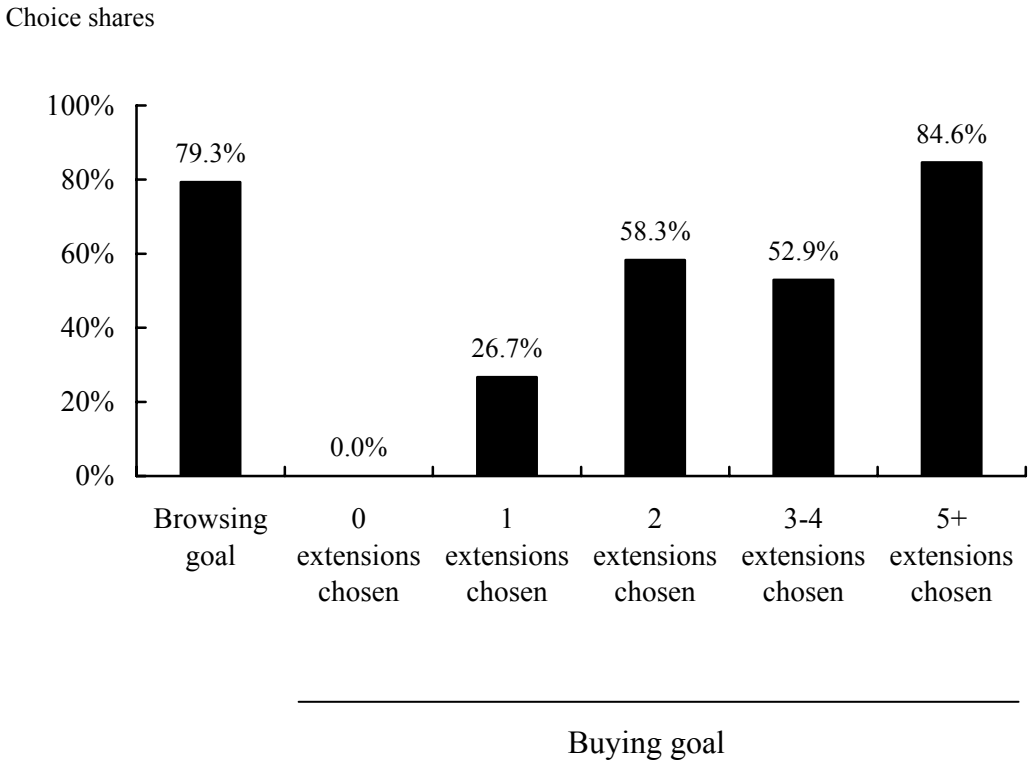
RELATIVE CHOICE SHARES OF DOWNSCALE STORE AS A FUNCTION OF GOAL AND FOCAL OPTION (EXPERIMENT 4)



NOTE.— Choice shares of downscale store relative to upscale store. Choice indicates the store with the lower price image.

FIGURE 2.3

RELATIVE CHOICE SHARES OF DOWNSCALE STORE AS A FUNCTION OF GOAL AND OPTION CHOSEN (EXPERIMENT 5)



NOTE.— Choice shares of downscale store relative to upscale store. Choice indicates the store with the lower price image.

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APPENDIX A

STIMULI USED IN EXPERIMENT 1

1. Set with upscale extension

2. Set with downscale extension

APPENDIX B

STIMULI USED IN EXPERIMENT 3

1. Tote bag store with upscale extension

Store A

Brand A
$121.80

Brand B
$53.60

Brand C
$59.90

Brand D
$65.40

2. Tote bag store with downscale extension

Store B

Brand A
$28.30

Brand B
$58.70

Brand C
$66.30

Brand D
$53.90

APPENDIX C

SAMPLE OF STIMULI USED IN EXPERIMENT 4

1. Set with upscale extension and no perceptually focal option

2. Set with upscale extension and a moderately-priced option as the perceptually focal option

APPENDIX C (CONTINUED)

3. Set with the upscale extension as the perceptually focal option

4. Set with the downscale extension as the perceptually focal option

APPENDIX D

SAMPLE OF STIMULI USED IN EXPERIMENT 5

1. Set with upscale extension

2. Set with downscale extension