

A Hybrid Model: Price and Branding Issues

Faramarz Nikseresht

Faculty member, Department of management, Fazilat University, Semnan, Iran

Masoud lajevardi

PhD student in marketing management, Department of business Management, Semnan Branch, Islamic Azad University, Semnan, Iran

Abstract

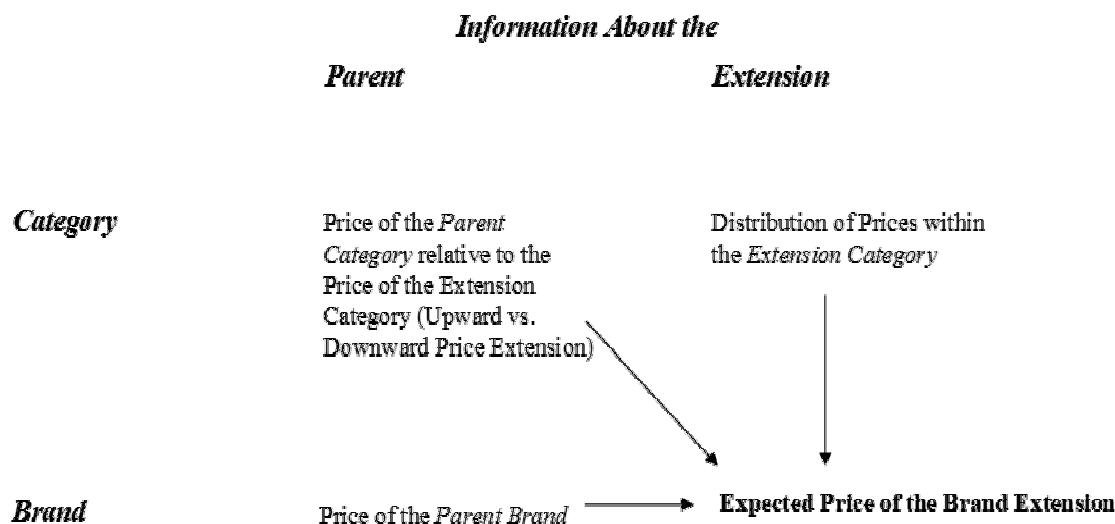
Brand extension has been extensively discussed during the past two decades. The current research identifies and examines the effect of several price-related variables on consumers' judgments of brand extensions. We expect and find that consumers' price expectations of a brand extension are affected by the price of the parent brand. The relative price of the parent category in relation to the extension category also affects consumers' price expectations of the brand extension's price, and moderates the effect of the parent brand price. In addition, the impact of the price of the parent brand and relative price of the parent category on brand extension evaluations is moderated by the distribution or heterogeneity of prices in the extension category. Finally, we find that the impact of consumers' expectation of the brand extension's price is stronger when they are confronted with the actual price of the extension than when they are not.

Keywords: hybrid model, price perception, Brand extensions, Brand attitudes

Introduction

The managerial significance of brand extension strategies has been proposed conceptually (Park, Jaworski and MacInnis 1986) and demonstrated empirically (Aaker and Keller 1990; Keller and Aaker 1992; Bottomley and Doyle 1996; Sunde and Brodie 1993), with consistent findings supporting the cost-efficiency (Pitta and Katsanis 1995; Smith and Park 1992) and/or revenue-effectiveness of such strategies (Lassar, Mittal, and Sharma 1995; Doyle 1990; Smith and Park 1992). Previous studies have identified the cost and revenue benefits of brand extension primarily in terms of building and communicating strong brand positioning (Park, Jaworski and MacInnis 1986; Aaker 1991), enhancing brand awareness (Aaker 1991) and quality associations (Aaker and Keller 1990), and increasing the probability of trial by lessening product risk. However, few studies (except Taylor and Bearden 2002) have focused on the significance of pricing as it relates to brand extension strategies. This omission is significant. Pricing issues should have substantial impact on a brand extension's actual marketplace performance given the critical role of price in consumers' estimations of a brand extension's value (e.g., Thaler 1985). Taylor and Bearden (2002) examined whether the price of the brand extension affected judgments of the brand extension's quality, perceived value, and purchase intentions when the parent and extension categories were similar vs. dissimilar. They found that price of the brand extension had a larger positive impact on the perceived quality of dissimilar extensions than similar extensions, but a larger negative impact on perceived value and purchase intentions for similar vs. dissimilar extensions. Although this study is notable in raising awareness of the potential role of the brand extension's price on brand extension evaluation, a number of additional pricing variables beyond price of the brand extension may affect these judgments even when similarity between the parent and extension categories is controlled. Moreover, these price related variables may affect judgments of the brand extension by affecting a critical variable not examined by Taylor and Bearden (2002) — expectations of the brand extension's price. Among these include the price of the parent brand, price of the parent product category, and the variation of prices among brands in the extension category (see Figure 1).

Figure 1
Source of Reference Price Effects in a Brand Extension Context



However, the price of the parent brand may not directly transfer to consumers' expectations of a brand extension's price. The inference formation mechanism may be more complex for price than for other attributes of the parent brand. To illustrate, consider that Harley Davidson extends its name to the automobile category. Although certain image and product characteristics of Harley Davidson motorcycles—such as its unique engine sound and design—can clearly transfer to Harley Davidson cars, the transfer of its price may not be that simple. On the one hand, the fact that Harley Davidson commands a relatively high price in the motorcycle category (i.e., high parent brand price association) may lead consumers to infer that it will command a premium price in the automobile category. An inference that the brand extension is high priced may subsequently lead consumers to infer that its quality is high. One the other hand, however, because motorcycles are substantially lower in price than the cars (i.e., relatively low product category price), this inconsistent price information may reduce the effect of Harley Davidson's brand-level price association.

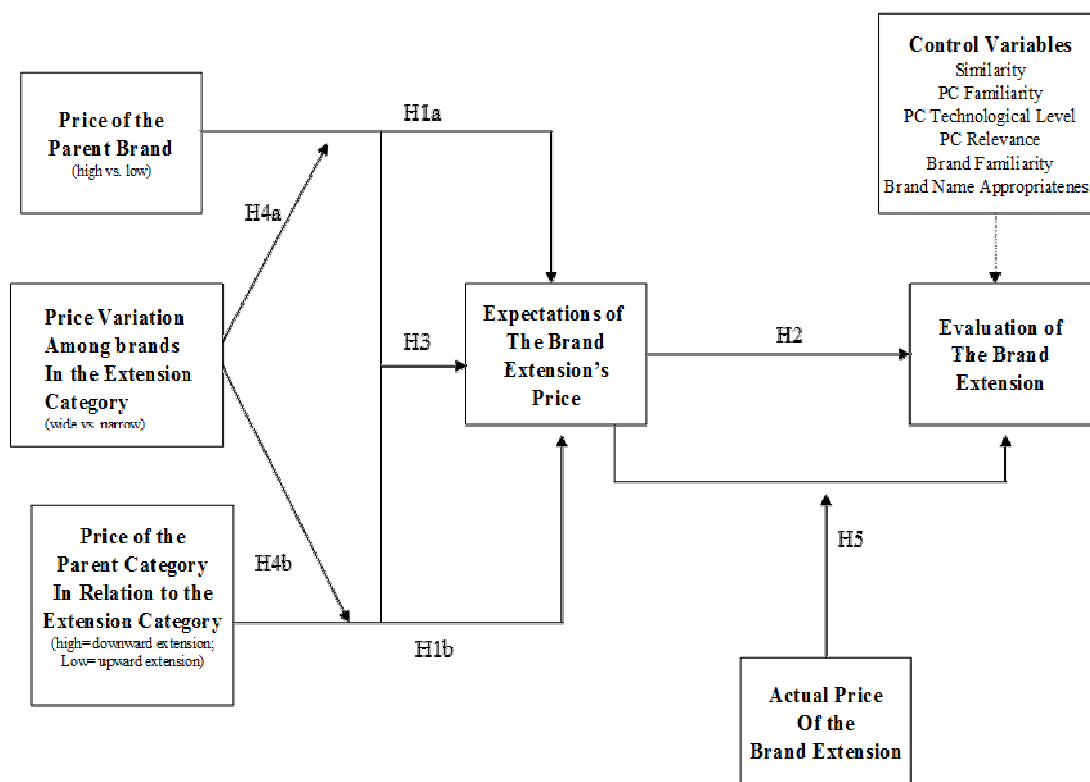
Alternatively, consider a different situation where Harley Davidson extends its name to the cigarette category. Certain image and product characteristics of Harley Davidson motorcycles—such as its rebellious and macho image-- clearly transfer to cigarettes. The fact that Harley Davidson commands a premium price in the motorcycle category (i.e., high parent brand price association) suggests that the brand's prestige price may also transfer to the brand extension, rendering expectations of the brand extension's price high. Moreover, the motorcycle category is higher in price than the cigarette category (i.e., relatively high parent category price), providing price information consistent with the brand-level price association. Thus this category-level price information strengthens the effect of Harley Davidson's brand-level price association. Both factors may lead consumers to expect that the brand extension is of high quality. Adding further complexity to price inferences, consider that unlike brands in the car category, brands in the cigarette category are quite similarly priced (i.e., variation among prices in the extension product category is limited). Because brands in the extension category vary little in price, consumers' expectations of the brand extension's price may be based on their knowledge of extension category prices, rendering information about the price of the parent brand and category potentially irrelevant. Information regarding the parent brand and category price may only affect expectations of the brand extension's price (and its perceived value) when the prices of brands in the extension category are heterogeneous. Heterogeneity implies that the price of the brand extension is unclear (it could take on any value), causing consumers to search for clues that might facilitate a price inference. The price of the parent brand and parent product category may provide two such clues.

Notably, high or low price expectations may not only affect consumers' perceptions of the brand extension's quality, but also perceptions of its value. Taylor and Bearden (2002) partially examined this issue, showing that the price of the brand extension interacted with similarity to affect perceptions of the brand extension's value. However, they examined value perceptions in absence of information about the brand extension's expected price. In actual consumption decisions, consumers can form expected price estimates based

on inferences and prior knowledge and can compare this expected price to the actual price. If consumers expect that a brand extension's price will be high and its quality also high, they may judge the brand extension to have exceptionally high value if the actual price is lower than expected. When price expectations exceed actual price, positive value judgments may be rendered. When they are lower than actual price, value judgments may be negative.

The current research identifies and examines the effect of several price-related variables on consumers' judgments of brand extensions: brand-specific, category-specific, and contextual price related factors. Specifically, we expect and find that consumers' price expectations and evaluations of a brand extension is affected by (1) the price of the parent brand (i.e., a brand-specific price factor). (2) The relative price of the parent category in relation to the extension category (i.e., a category-specific price factor) also affects consumers' price expectations and evaluations of the brand extension, and moderates the effect of the parent brand price. In addition, the effect of the parent brand and parent category price on consumers' price expectation of the brand extension is moderated by (3) the distribution or heterogeneity of prices in the extension category (i.e., contextual price factor: the degree of variation in the price of brands in the extension category). Finally, we find that (4) the impact of consumers' expectation of the brand extension's price on evaluation of the brand extension is stronger when they are confronted with the actual price of the extension than when they are not (see Figure 2).

Figure 2
Summary of Hypothesized Effects



LITERATURE REVIEW AND HYPOTHESES

Expected Price of the Brand Extension and it's Drivers

A central premise of the current research is that consumers form an expectation of the brand extension's price. This price expectation is hypothesized as critical, as it is expected to affect consumers' perceptions of the extension's quality and its value. In general, past research outside of a brand extension context has shown that consumers do indeed form expectations of a brand's price. Moreover, price expectations serve as reference prices. A reference price is defined as a price which consumers use as a standard of comparison when evaluating the price of a product (Winer 1988). Considerable research has found that consumers do indeed develop a reference or expected price for a product and then use this price to evaluate the same product at a later point in time or a different product at the same point in time (e.g., Kalyanaram and Winer 1995; Breisch, Krishnamurthi, Mazumdar and Raj 1997).

Since consumers often form reference prices (Winer 1988) and brand extensions are new products that are based on existing brand names, it is reasonable that consumers use generalized price knowledge to form an

expectation of the brand extension's price. If so, it is important to understand how consumers form this price expectation and what marketing relevant variables drive that expectation. Briesch et al. (1997) suggest there are many sources of a brand's reference price, and that consumers' knowledge, purchase experience, and contextual factors can all drive its derivation. Since the brand extension is new, however, no price history or past price can be accessed from memory. As such, price expectations should be based on other aspects of price knowledge including those identified below.

The Price of the Parent Brand. In a brand extension context, the parent brand name (Chanel) is a salient information clue to consumers. If activated, price knowledge linked to this brand in memory may also be activated and used as a frame of reference for considering the brand extension's price. This effect is consistent with prior work that suggests that the parent brand name provide important cues about the character of the brand extension - cues that likely affect their judgment of it (Aaker and Keller 1990; Keller and Aaker 1992; Broniarczyk and Alba 1994). Thus, consumers' knowledge of (or memory for) the parent brand's price may serve as a frame of reference that affects expectations of the brand extension's price. Specifically, consumers should expect that the brand extension's price is high (low) when the price of the parent brand is similarly high (low) in that category.

Price of the Parent Category (in Relation to the Extension Category). More critical to this study is the identification of another price related variable that may affect price expectations. Specifically, we hypothesize that consumers may also use knowledge of the price of the parent category as a frame of reference for evaluating the price of the brand extension. If they do, we anticipate that changing the referent parent category while keeping the extension category constant would result in different expected prices for the brand extension. Consider, for example, that a parent (e.g., a maker of dress suits) decides to extend its name to a lower priced product category (e.g., handbags). From a referent price perspective, this company would be pursuing a "downward price extension" because the price associated with the extension product category (handbags) is lower than the price of the parent product category (dress suits). Now, consider a parent that plans to extend its name to the same extension category (handbags) but has a different and lower priced parent product (e.g., wallets). From a referent price perspective, this company would be pursuing an "upward price extension", as the price of the extension product category (hand bags) is higher than the price of the parent category (wallets). Upward vs. downward price extensions are exceedingly common in a brand extension context, as they represent two of three possible extension decisions based on the price of the parent category (upward, downward, horizontal).

If consumers do use the price of the parent category to estimate the price of the brand extension, they may estimate the price of the brand extension to be higher (a) when its parent category is higher in price (designer suits) in relation to the extension category (handbags) than (b) when it is lower in price (wallets) in relation to the same extension category. This effect is consistent with the anchoring and adjustment heuristic (Tversky and Kahneman 1974). According to that heuristic, an individual anchors on the most readily available information and insufficiently adjusts up or down from that anchor in evaluating subsequently received information. With a downward price extension, consumers may anchor on the comparatively higher priced parent category and use its price as an anchor in estimating the price of the brand extension. Since adjustments tend to be insufficient, consumers may not adjust price estimates sufficiently to arrive at price that would be expected based on their knowledge of the extension product category alone. In the same vein, anchoring and adjustment would imply that with an upward price extension, consumers might anchor on the comparatively lower priced parent product and use its price as an anchor in judging the price of the brand extension. Again, since adjustments tend to be insufficient, the consumer may not sufficiently adjust price estimates to arrive at a price that might be expected in absence of such framing. Thus, we expect that:

H1: Consumers expect the brand extension will be higher priced (a) when the parent brand price is high vs. low and (b) when the parent category is higher priced than the brand extension category versus when it is lower priced than the brand extension category (e.g., a downward vs. an upward price extension is used).

Consumers have been found to have price-quality schemas (e.g., Peterson and Wilson 1985; Rao and Monroe 1988; Lichtenstein and Burton 1989), and sometimes use price as an indicator of product quality (e.g., Etgar and Malhotra 1981; Olson 1977). This linkage of price with quality is particularly likely in contexts where consumers have limited knowledge of and experience with the product, as would be the case with brand extensions. Since the brand extension is in essence a new product, schematic and inferential knowledge (as opposed to experience-based knowledge) likely affects their perceptions of the brand. As such, we anticipate that when consumers expect that a brand extension's price is high, they infer that its quality is similarly high. Since favorable quality judgments affect brand evaluations, expectations of the brand extension's price should affect evaluations of the brand extension as well. Therefore, we suggest the following hypothesis:

H2: Consumers expect the brand extension will be more favorably evaluated (a) when the parent brand price is high vs. low and (b) when the parent category is higher priced than the brand extension category versus when it is lower priced than the brand extension category (e.g., a downward vs. an upward price extension is

used).

In addition to the main effects of the parent brand and parent category price information on consumers' price expectations of the brand extension, we also expect an interaction effect between the two price information. Specifically, an upward price extension for a high priced parent may yield a conflict between the 'premium price' association of the parent brand and the relatively 'low price' of the parent category. When there is such a mismatch between the parent category and brand price information, confidence regarding the expectation of the brand extension's price declines, making consumers less clear about what the price would actually be. Accordingly, the transfer of the premium price image of the parent brand to the price expectations of the extension may be hindered by the parent category price knowledge. However, a downward price extension creates consistency and consequently a synergy between the parent brand and parent category price associations. As such, the transfer of the 'premium price' image of the parent brand may be further strengthened by the relatively 'high price' information of the parent category.

H3: The effect of the parent brand price on the price expectations of the brand extension will be greater for a downward than an upward price extension.

Variation of Prices in the Extension Category. We also expect that the effects hypothesized in H1 above are moderated by consumers' knowledge of the extent to which prices of brands in the extension category vary. Prices in the extension category may be widely varying, as is the case with cars, or relatively narrow in variation, as is the case with cigarettes. Variation along a given attribute or dimension (e.g., price) often affects the diagnosticity of that information (Ross and Creyer 1992). Diagnosticity in turn affects the extent to which this information is utilized in making judgments or choices (Slovic and Lichtenstein 1971; Feldman and Lynch 1988). Little or no variation in the price of brands in the extension category renders the price of other brands in the extension category highly diagnostic of the brand extension's price. Consumers can simply infer the brand extension's price based on the prices of existing brands in the brand extension context. Given the diagnosticity of this information, consumers should have little to gain by considering other information, such as the price of the parent brand or category. In contrast, when brands in the extension category show wide variation, the price information of these brands is no longer useful in gaining insight into the price of the brand extension. Consumers must therefore rely on other factors, such as the relative price of the parent category or price of the parent brand, to infer price (Ross and Creyer 1992). Thus, whether consumers rely on the price of the parent category (and/or the parent brand) to derive expectations about the brand extension's price likely depends on whether price variation in the extension category is wide or narrow. Hence, we hypothesize that:

H4: Consumers will be more likely to rely on (a) the price of the parent brand and (b) the price of the parent category to infer the price of the brand extension (the effects proposed in H1) when brands in the extension category show wide vs. narrow variation in price.

The Impact of Actual Price of the Extension on the Effects of Price Expectation

When consumers learn the brand extension's actual price (through information search), they may compare the expected price to its actual price. Price expectation becomes more important as consumers form some judgment of the product's value in light of any discrepancy between the expected and actual price (Kalyanaram and Little 1994, Mayhew and Winer 1992). Such "transaction value" judgments (Thaler 1985) should make consumers' evaluations even better or worse.

According to Thaler (1985) the value of a product is a function of two factors: (1) its acquisition value and (2) its transaction value. In a brand extension context, acquisition value is, *certis paribus*, simply the expected price of the brand extension since consumers have no other basis on which to judge the product's worth. Transaction value is conceptualized by Thaler (1985) as the difference between the expected price and the actual price.

To illustrate the impact of actual price on consumers' judgments of the brand extension, consider the following example. First, assume that the expected price of a brand extension is \$70.00 in a downward extension condition and \$50.00 in an upward extension condition. If the actual price of the brand extension is \$40.00, the total perceived value of each product in the two extension conditions would be as follows:

Reflecting the above mentioned conceptualization, the brand extension's value when its actual price is given is [its acquisition value + transaction value] = [its expected price + (expected price-actual price)] or:

(1) $70 + (70-40) = \$100.00$ in the downward price extension condition and

(2) $50 + (50-40) = \$60.00$ in the upward price extension condition.

As we can see in the above example, the difference in expected price or acquisition value (i.e., \$20 = \$70 - \$50) between the upward and the downward extensions is magnified (\$40 = \$100 - \$60) when the actual price is considered and subsequently transaction value is added. Thus, we can anticipate greater effect of the expected price of the brand extension on consumers' extension evaluations when the actual price of the extension is given than when it is not.

This effect is expected regardless of the actual price of the brand extension. To illustrate, assume that

the actual price of the product is \$80.00. In this case, the total value of the brand extension in the two conditions would be as follows:

(3) $70 + (70-80) = \$60.00$ in the downward price extension condition and

(4) $50 + (50-80) = \$20.00$ in the upward price extension condition.

Again, the difference in value (i.e., $\$20 = \$70 - \$50$) between the upward and the downward extensions increases ($\$40 = \$100 - \$60$) when the actual price is considered versus when it is not.

Therefore, we expect that the effect of price expectation (and the factors that are proposed to influence consumers' price expectation) on brand extension evaluation will be magnified when the actual price of the extension is provided versus when it is not.

H5: The effect of the expected price of the brand extension on consumers' evaluations of the brand extension will be greater when the actual price of the extension is given than when it is not.

METHODOLOGY

Design

The study uses a $2 \times 2 \times 2$ between subjects design manipulating (a) price of the parent brand (high versus low) (b) price of the parent category relative to the extension category (upward versus downward category price extension), and (c) variation in the price of brands in the extension category (wide versus narrow). The design results in eight extension scenarios. We first describe the three pretests designed to develop the stimulus materials and experimental manipulations, and then describe the main study.

Pretests

Pretest 1. Pretest 1 was designed to identify parent and extension product categories that would allow us to manipulate the experimental factors and control for confounding factors. Several criteria were deemed necessary in selecting these categories. First, we needed parent product categories that were equally familiar to subjects to avoid confounding familiarity with price of the parent category. Second, to control for the effects of similarity observed in other studies, we needed to identify parent and extension product categories that were perceived as equally similar. Third, to manipulate the upward vs. downward price extension, we needed parent product categories that were either high or low in price level compared to the extension product category. Finally, we needed an extension product category that was relatively unfamiliar so as to credibly manipulate variation in price of brands in the extension category (wide vs. narrow) without using two different extension product categories. We selected car navigation systems as the extension product category as we anticipated it would be relatively unfamiliar to subjects given the recent introduction of brands in this category to the marketplace.

A team of graduate students ($N=5$) were asked to list two parent product categories that satisfied the product category criteria noted above. Based on their perceptions, we selected notebook computers and cellular phones as the parent categories. The former is higher priced than car navigation systems and hence represents a downward price extension. The latter is lower priced than car navigation systems and hence represents an upward price extension.

To verify familiarity of the parent and extension product categories, a group of undergraduate business students ($N=25$) rated their familiarity with car navigation systems, notebook computers and cellular phones on a 7-point familiarity scale (1=very unfamiliar, 7=very familiar). As expected, subjects were relatively unfamiliar with the extension product category (car navigation systems; $\bar{X} = 3.65$) and were relatively familiar with the two parent product categories ($\bar{X} = 5.79$ for notebook computers; $\bar{X} = 5.62$ for cellular phones). Familiarity levels between cellular phones and notebook computers were not significantly different ($t=0.15$, $p= n.s.$). Parent products were also viewed as familiar by virtue of consumers' prior ownership of them (88% of respondents owned notebook PCs and 79% owned cellular phones). As expected, prior ownership of the extension category was not strong (9% owned car navigation systems). In addition, subjects were asked to indicate perceived relevance of the product categories on a 7-point scale (1=not relevant at all; 7=very relevant). The results support our expectations that the products are relevant to students ($\bar{X} = 6.12$ for notebook PCs and $\bar{X} = 5.79$ for cellular phones, $t=1.36$, $p= n.s.$; $\bar{X} = 4.78$ for car navigation systems).

Subjects also used a 7-point similarity scale (1= not at all similar; 7=very similar) to indicate the similarity between car navigation systems on the one hand and notebook computers and cell phones on the other. Several dimensions of similarity were rated: similarity in technology, benefits, usage, image and overall similarity. Car navigation systems were perceived to be similar and equally high for each parent product category (e.g., overall similarity: $\bar{X} = 5.12$ for notebook computers and $\bar{X} = 4.89$ for cellular phones). These two means were not significantly different from one another ($t=1.06$, $p= n.s.$) suggesting that similarity between the parent and extension categories is not confounded with the parent product category price. The technology level associated with each parent category compared to that of the extension was also measured on a 7-point scale (1=lower than the extension

category; 7=higher than the extension category) to check the potential confounding with the category price level. No significant difference between the two parent categories were observed ($\bar{X} = 4.21$ for notebook PCs and 3.95 for cellular phones) in their relative technology level to the extension category ($t = 1.21$; $p = n.s.$).

Finally, subjects used two 7-point scaled items to indicate how each parent product category related to the extension product category in terms of price (1=less expensive than car navigation systems, 7=more expensive than car navigation systems; 1=lower priced than car navigation systems, 7=higher priced than car navigation systems). Consistent with the manipulation of upward vs. downward price extension, subjects perceived notebook computers to be higher priced than car navigation systems ($\bar{X} = 4.91$ and 5.13, respectively), and cell phones to be lower priced than car navigation systems ($\bar{X} = 2.78$ and 2.90, respectively). Combined, the results suggest that these stimuli met the criteria for product categories identified above.

Pretest 2: Pretest 2 was designed to identify appropriate brand names for the parent product categories selected in pretest 1. To avoid confounding effects of quality or other associations with established brand names, we used hypothetical brands (Keller and Aaker 1992). Fifteen students used a 7-point scale to indicate how appropriate several candidate names (e.g., Accurus, Logica, Monarch, Netch) were to each parent product category (1 = not at all appropriate, 7 = very appropriate).

For notebook computers, Accurus and Monarch were viewed as relatively appropriate ($\bar{X} = 4.97$ and 4.86, respectively) while Netch and Monarch were viewed as relatively appropriate for cell phones ($\bar{X} = 5.46$ and 4.98, respectively). Although Monarch was not the highest rated name in either category, it was viewed as relatively appropriate for both parent product categories and its ratings did not vary by product category ($t=0.74$, $p= n.s.$). Hence Monarch was chosen as the parent brand name. Subjects also indicated that the name Monarch was relatively appropriate for the car navigation system category ($\bar{X} = 4.74$).

Pretest 3. Information about the price range of brands in the extension product category was provided to respondents in Pretest 3 to manipulate variation in price among brands in the extension product category. In the wide variation case, brands of car navigation systems were said to vary in price from \$300 to \$750. In the narrow variation case, they were said to vary in price from \$475 to \$625. Both narrow and wide price variations had an average price of \$525. To determine whether subjects perceived the narrow and wide price ranges as different, twenty undergraduate students were randomly assigned to one of the two variation conditions and asked to indicate the degree of perceived variation in price on a 7-point scale (1=all are about the same, 7=a lot of variation). As anticipated, ratings in the wide case were significantly greater than those in the narrow case ($\bar{X} = 4.56$ and 3.23, respectively; $p < .01$).

Subjects were then asked to respond to a set of questions that assessed their familiarity with, ownership of, and perceived relevance of the parent and extension categories. They then responded to a set of questions regarding the expected price of the brand extension, their evaluations of it and their perceptions of its quality.

Subjects were asked an open-ended question to indicate their price expectations for the proposed extension (expected price). Three 7-point scales were used to indicate the perceived quality of the brand extension. Subjects indicated the extent to which they thought the brand extension would be of (1) very poor quality or (7) very high quality; whether the brand extension would be low (1) or high in reliability (7), and whether the workmanship of the brand extension would be low (1) or high (7). The items were averaged to form a single index of perceived quality ($\alpha = .91$).

Three questions used a 7-point format to assess subjects' evaluations of the brand extension. Subjects indicated how much they liked the brand extension (1= dislike very much; 7= like very much), how favorable they were toward it (1= very unfavorable; 7= very favorable), and how likely they were to choose it if they were to make a purchase from the extension product category (1= not at all likely; 7= very likely). The items were averaged to form a composite measure ($\alpha = .89$).

To control for order effects, two versions of the questionnaire were developed—one with brand evaluations preceding the expected price and perceived quality measures, the other with brand evaluations following these measures.

Subjects were also asked to rate their reliance on a list of information sources such as the long tradition of Monarch notebook computers, the price of "Monarch" notebook computers compared to other brands, Monarch's orientation toward quality and innovation, its notebook computers' performance record, and the customer satisfaction and quality ratings of Monarch notebook computers (e.g., in the downward price extension situations) when responding to the price expectation questions on a 7-point scale (1=did not use it at all, 7=used it very much). These questions were asked to determine whether subjects indeed relied on price of the parent in arriving at their expectations of the brand extension's price.

After several intervening questions (e.g., purchase criteria of PCs and favorite PC brands), subjects were given information about the actual price of the brand extension (a "Monarch" car navigation system priced

at \$490 in both upward and downward extension situations). Then, several questions about liking, favorability, and purchase intention were asked to assess subjects' evaluations of the brand extension using a 7-point format. These questions were designed to test H5. The items were again averaged to form a composite measure of brand extension evaluation ($\alpha = .91$).

Finally, subjects answered several manipulation check questions regarding price of the parent brand, price of the parent category relative to the extension category, and perceived variation in the price of brands in the extension category. The items used to indicate these manipulation checks were identical to those used in the pretests. Subjects were also asked to respond to questions about the perceived similarity between the parent and the extension categories, perceived technology level of the parent category, the extent to which the brand name fit between the parent and extension categories, product relevance to them, and ownership of the parent and the extension products. Subjects were subsequently debriefed and thanked.

RESULTS

The manipulation check results indicate successful induction of the treatment conditions. Consumers were more likely to perceive that parent categories were high priced when the parent category was high priced ($\bar{X} = 4.95$) vs. low priced ($\bar{X} = 2.63$) in relation to the extension category. They were more likely to see the parent brand as high priced when a high priced ($\bar{X} = 5.58$) vs. a low priced ($\bar{X} = 3.37$) parent brand was used within the parent category. Finally, they were more likely to perceive brands in the extension category as having high variation in prices in the wide ($\bar{X} = 4.24$) vs. the narrow variation condition ($\bar{X} = 3.42$) (all p 's < .001). No other effects were significant. There were no differences between brands in any condition in terms of potential confounding factors such as perceived technology level, perceived similarity of the parent and extension categories (in terms of benefits, technology, manufacturers, consumers) or brand name fit (to the extension or the parent product). Hence, these factors are not discussed further. Subjects' familiarity with, perceived relevance of, and ownership of the parent and the extension product categories which were also potential confounding factors were similar to the results of Pretest 1.

Test of Hypotheses

Effects of Price Extension Direction and Extension Category Price Variation. To test H1-H4 we conducted a 2x2x2 ANOVA. The univariate ANOVA results are presented in **Table 1**. Before carrying out the analysis, the effect of question order (i.e., price expectation measure first versus evaluation measure first) was examined. There were no effects for presentation order, nor did presentation order interact with any other condition. Hence the results are pooled across the two presentation orders.

Table 1. ANOVA Results

Independent Variables	Dependent Variables	MS	F	p
Parent Category Price (Upward vs. Downward Price Extension)	Expected Price	609.27	16.75	.001
	Perceived Quality	14.19	11.08	.001
	Brand Extension Evaluation	19.03	15.70	.001
Parent Brand Price (High vs. Low)	Expected Price	665,272.42	18.29	.001
	Perceived Quality	36.93	28.83	.001
	Brand Extension Evaluation	32.45	26.78	.001
Extension Product Category Variation (Wide vs. Narrow)	Expected Price	3414.08	.09	NS
	Perceived Quality	.41	.32	NS
	Brand Extension Evaluation	.07	.06	NS
Parent Category Price x Parent Brand Price	Expected Price	126,851.33	3.49	.05
	Perceived Quality	.52	.41	NS
	Brand Extension Evaluation	.17	.14	NS
Parent Category Price x Extension Product Category Variation	Expected Price	32,435.78	.89	NS
	Perceived Quality	1.14	.89	NS
	Brand Extension Evaluation	1.04	.86	NS
Parent Brand Price x Extension Product Category Variation	Expected Price	149,927.50	4.12	.01
	Perceived Quality	3.37	2.63	NS
	Brand Extension Evaluation	5.56	4.59	.01
Parent Category Price x Parent Brand Price x Extension Product Category Variation	Expected Price	11,374.16	.31	NS
	Perceived Quality	.00	.00	NS
	Brand Extension Evaluation	.01	.00	NS

Price Extension Direction. H1 proposes that consumers expect the price of the brand extension to be higher when it is from a higher priced parent brand or a higher priced parent category (the downward direction)

than when it is from the lower priced parent brand or category (the upward direction). Consistent with H1, the results reported in **Table 1** show a significant main effect of parent brand price ($F=18.29$; $p=0.001$) and parent category price ($F=16.75$; $p=0.001$) on price expectation of the brand extension. Consumers expected a higher price for the brand extension when the parent brand was high priced ($\bar{X} = 622.80$) than when it was low priced ($\bar{X} = 506.86$). Consumers also had higher price expectations of the brand extension when a downward ($\bar{X} = 621.15$) vs. an upward price extension ($\bar{X} = 509.90$) was used. Thus, H1 is supported. It appears that the price of the parent category plays a role similar to the price of the parent brand.

That consumers relied on price of the parent in forming their expectations of the brand extension's price is reinforced by their judgments of which information sources they utilized in arriving at estimates of the brand extension's price. The price of the parent brand was the most significant factor subjects relied on ($\bar{X} = 5.32$, vs. \bar{X} 's = 4.51, 4.70, 4.75, and 4.70 for long tradition, orientation toward quality and innovation, strong performance record, and prior reports regarding customer satisfaction, respectively). Since the effect of the parent brand's price and the price of the parent category exert similar effects on the expected price of brand extension, these results may also be interpreted as supporting H1.

H2 proposes that consumer evaluations of the brand extension will be more favorable when it is from a higher priced parent brand or a higher priced parent category (the downward direction) than when it is from the lower priced parent brand or category (the upward direction). Consistent with H2, the results reported in **Table 1** show a significant main effect of parent brand price ($F=26.78$; $p=0.001$) and parent category price ($F=15.70$; $p=0.001$) on brand extension evaluation. Thus, H2 is supported.

H3 proposes that the effect of the parent category price will interact with the effect of the parent brand price on the price expectations of the brand extension. The results revealed in **Table 1** support this hypothesis, showing a significant interaction between the parent brand price and the parent category price on price expectation of the brand extension ($F=3.49$; $p=0.05$). Consistent with H3, the effect of the parent brand price on consumers' expectations of the brand extension's price was greater in the downward vs. the upward price extension condition. Specifically, in the downward price extension situation, the expected price of the extension for the high-priced parent brand ($\bar{X} = 705.40$) is much higher than that for the low-priced parent brand ($\bar{X} = 536.89$; $t = 3.22$, $p = 0.00$). In the upward price extension situation, however, the expected price of the extension for the high-priced parent brand ($\bar{X} = 543.57$) is not that higher than that for the low-priced parent brand ($\bar{X} = 475.52$; $t = 1.59$, $p = 0.06$).

Extension Product Category Price Variation. H4 states that the effect of price of the parent brand and parent category on price expectations of the brand extension will be greater when brands in the extension category show wide versus narrow variation in price. This proposed interaction was supported for price of the parent brand ($F=4.12$; $p=0.01$), but not for the price of the parent category ($F=0.89$; $p=ns$). Consistent with H4a, the price of the parent brand was more likely to affect inferences about the price of the brand extension when the prices of brands in the extension category showed wide variation (X 's = 652.92 vs. 482.48 for high vs. low priced parent brands) as opposed to narrow variation (X 's = 592.69 vs. 529.79 for high vs. low priced parent brands). However, inconsistent with H4b, the price of the parent category under the wide (X 's = 502.14 vs. 636.04 for upward vs. downward price extension) vs. narrow price variation conditions (X 's = 517.81 vs. 606.26 for upward vs. downward price extension) did not differentially affect inferences about the price of the brand extension. Thus, H4 was supported only for the price of the parent brand, not the price of the parent category.

Impact of Actual Price on the Price Expectation Effects. H5 proposes that the effect of the expected price of the brand extension on consumers' evaluations of the brand extension would be magnified when the actual price of the extension is given versus when it is not. To test this hypothesis, first we ran two regression analyses, one using evaluations before subjects were given the actual price and the other using evaluations after they were given the actual price as dependent measures. Expected price served as the independent variable in both analyses. The beta of the after-equation ($b = .77$; std. dev. = .105; $t = 7.30$) was significantly greater than that of the before-equation ($b = .48$; std. dev. = .095; $t = 5.09$; $t = 28.16$; $p = 0.00$). The improvement in model fit for the before-equation (R -square = .12) versus the after-equation (R -square=.22) also supports the greater influence of price expectation on brand extension evaluation when actual price is present. That is, the impact of the expected price on subjects' evaluations of the brand extensions after learning the brand extension's actual price was significantly greater than that before learning the brand extension's actual price.

Since the impact of expected price becomes greater when actual price is given, we also expected the factors that influence consumers' expectation of the brand extension's price to have a greater impact on evaluations of the brand extension when the actual price of an extension is present than when it is not. Earlier, we found strong main effects of parent category price and parent brand price on expectations of the brand extension's price. Thus, we expected that the effects of these two variables on brand extension evaluation would

be greater when an actual price is given than when it is not. To examine this, we conducted 2x2 ANOVA on before-actual-price evaluation and after-actual-price evaluation measures with parent category price and parent brand price as independent variables. The results show that the main effects of parent category price and parent brand price both increase considerably when an actual price is provided: effect size (eta squared) = .193 versus .062 for parent category price, and .223 versus .113 for parent brand price (see **Table 2**). These findings further support H5.

Table 2. ANOVA Results for Brand Extension Evaluation Before and After Actual Price
(1) Extension Evaluation before Actual Price

Independent Variables	MS	F	p	Eta-squared
A. Parent Category Price (Upward vs. Downward)	15.62	12.44	.001	.062
B. Parent Brand Price (High vs. Low)	29.83	23.77	.000	.113
A x B	.08	.07	.80	.000

(2) Extension Evaluation after Actual Price

Independent Variables	MS	F	p	Eta-squared
A. Parent Category Price (Upward vs. Downward)	57.62	44.42	.000	.193
B. Parent Brand Price (High vs. Low)	69.36	53.47	.000	.223
A x B	2.67	2.06	.15	.011

DISCUSSION

The results of our study generally support H1-H5. First, our results suggest that in addition to the price of the parent brand, the price of the parent category also plays a critical role on consumers' expectations of a brand extension's price and their evaluations of the brand extension. Specifically, consumers have higher price expectations and more favorable evaluations regarding a brand extension when the parent category is high (vs. low) priced in relation to the brand extension and when the parent brand is a high priced vs. a low priced brand within the parent category. Second, the parent category price moderates the effects of the parent brand price. When the parent category price information is consistent with the parent brand price association (i.e., with downward price extensions), the effect of the parent brand price is strengthened. However, when there is a conflict between the two (i.e., with an upward price extensions), the effect of the parent brand's price is reduced. Third, price variation in the extension category moderates consumers' expectation of a brand extension's price. The effects of the parent category and parent brand price on consumers' price expectations are greater when brands in the extension product category show wide vs. narrow variation in price. While price of the parent category exerts a consistent effect on consumers' evaluations of the brand extension, the price of the parent brand is diagnostic of the brand extension's price only when products in the extension category show wide vs. narrow variation. Finally, the results show that the effect of the expected price of the brand extension on consumers' extension evaluations is greater when the actual price of the extension is given than when it is not. One observed result was unanticipated – specifically did not hypothesize, yet observed that the price of the parent category influenced the expected price of the brand extension even under a narrow price variation condition while the price of the parent brand did not. Specifically, even though consumers do not appear to use the price of the parent brand in inferring the price of the brand extension when brands in the extension category are similarly priced, they do appear to rely on price of the parent category. It appears that, in certain situations, the price of the parent category itself carries information value in inferring the price of the brand extension to a greater degree than the price of the parent brand. This makes sense because the price of the parent category is more stable than the price of the parent brand. A well-known finding in the pricing literature is that consumers judge the price of a product as favorable or unfavorable in comparison with a reference point (Thaler 1985; Tversky and Kahneman 1981; Kahneman and Tversky 1979). Marketers may do well to suggest a higher reference price (given its linkages to quality and the evaluations of the brand extension as shown here), but have the actual price lower than expected. Such a strategy may further heighten consumers' evaluations of the brand extension, as a good and high quality brand is priced lower than what it is expected. Positive effects on perceived value and choice likelihood are hence anticipated. Our results appear to support such a strategy.

REFERENCES

Aaker, David A. (1991), *Managing Brand Equity: Capitalizing on the Value of a Brand Name*, New York: The

Free Press.

- _____, and Kevin L. Keller (1990), "Consumer Evaluations of Brand Extensions", *Journal of Marketing*, 54 (1), 27-42.
- Bottomley, Paul A. and John R. Doyle (1996), "The Formalization of Attitudes toward Brand Extensions: Testing and Generalizing Aaker and Keller's Model", *International Journal of Research in Marketing*, 13 (4), 365-377.
- Briesch, Richard A., Lakshman Krishnamurthi, Tridib Mazumdar and S. P. Raj (1997) Krishnamurthi, Mazumdar, and Raj (1997), "A Comparative Analysis of Reference Price Models", *Journal of Consumer Research*, 24 (September), 202-214.
- Broniarczyk, Susan M. and Joseph W. Alba (1994), "The Importance of the Brand in Brand Extensions", *Journal of Marketing Research*, 31 (2), 214-229.
- Doyle, Peter (1990), "Building Successful Brands: The Strategic Options", *Journal of Consumer Marketing*, 7 (2), 5-21.
- Etgar, Michael and Naresh K. Malhotra (1981), "Determinants of Price Dependency: Personal and Perceptual Factors," *Journal of Consumer Research*, 8 (September), 217-222.
- Feldman, Jack M. and John G. Lynch (1988), "Self-Generated Validity and Other Effects of Measurement on Belief, Attitude, Intention, and Behavior", *Journal of Applied Psychology*, 73, 421-435.
- Kalyanaram, Gurumurthy and Russell S. Winer (1995), "Empirical Generalizations from Reference Price Research", *Marketing Science*, 14 (3), G161-G169.
- Kalyanaram, Gurumurthy and John D. C. Little (1994), "An Empirical Analysis of Latitude of Price Acceptance in Consumer Package Goods", *Journal of Consumer Research*, 21 (December), 408-418.
- Keller, Kevin L. and David A. Aaker (1992), "The Effects of Sequential Introduction of Brand Extensions", *Journal of Marketing Research*, 29 (1), 35-51.
- Lassar, Walfried, Banwari Mittal and Arun Sharma (1995), "Measuring Customer-Based Brand Equity", *Journal of Consumer Marketing*, 12 (4), 1-65.
- Lichtensetin, Donald R. and Scot Burton (1989), "The Relationship Between Perceived and Objective Price-Quality," *Journal of Marketing Research*, 26 (November), 429-443.
- Mahew, Glen E. and Russell S. Winer (1992), "An Empirical Analysis of Internal and External Reference Prices Using Scanner Data", *Journal of Consumer Research*, 19 (June), 62-70.
- Olson, Jerry C. (1977), "Price as an Informational Cue: Effects on Product Evaluations", in A. G. Woodside, J. D. Sheth, and P. D. Bennett (eds.), *Consumer and Industrial Buying Behavior*, New York: Elsevier, 267-286.
- Park, C. Whan, Bernard J. Jaworski and Deborah J. MacInnis (1986), "Strategic Brand Concept/Image Management", *Journal of Marketing*, 50 (October), 135-145.
- Peterson, Robert A. and William R. Wilson (1985), "Perceived Risk and Price Reliance Schema as Price-Perceived Quality Mediators," in *Perceived Quality: How Consumers View Stores and Merchandise*, Jacob Jacoby and Jerry C. Olson, eds., Lexington MA: D. C. Heath and Company, 247-268.
- Pitta, Dennis A. and Lea Prevel Katsanis (1995), "Understanding Brand Equity for Successful Brand Extension", *Journal of Consumer Marketing*, 12 (4), 51-65.
- Rao, Akshay R. and Kent B. Monroe (1988), "The Moderating Effect of Prior Knowledge on Cue Utilization in Product Evaluations," *Journal of Consumer Research*, 15 (September), 253-264.
- Ross, William T. Jr. and Elizabeth H. Creyer (1992), "Making Inferences About Missing Information: The Effects of Existing Information", *Journal of Consumer Research*, 19 (June), 14-25.
- Slovic, Paul and S. Lichtenstein (1971), "Comparison of Bayesian and Regression Approaches to the Study of Information Processing in Judgment", *Organizational Behavior and Human Performance*, 11, 172-194.
- Smith, Daniel C. and C. Whan Park (1992), "The Effects of Brand Extensions on Market Share and Advertising Efficiency", *Journal of Marketing Research*, 29 (3), 296-314.
- Sunde, Lorraine and Roderick J. Brodie (1993), "Consumer Evaluations of Brand Extensions: Further Empirical Results", *International Journal of Research in Marketing*, 10 (1), 47-54.
- Thaler, Richard (1985), "Mental Accounting and Consumer Choice," *Marketing Science*, 4 (Summer), 199-214.
- Tversky, Amos and Daniel Kahneman (1974), "Judgment Under Uncertainty: Heuristics and Biases", *Science*, 185 (Sept), 1124-1131.
- _____, and Daniel Kahneman (1981), "The Framing of Decisions and The Psychology of Choice", *Science*, 211 (January), 453-458.
- Winer, Russell S. (1988), "Behavioral Perspectives on Pricing: Buyers' Subjective Perceptions of Price Revisited," in T. Devinney (ed.), *Issues in Pricing: Theory and Research*, Lexington MA: Lexington Books