

## **Brand equity, marketing strategy, and consumer income: A hypermarket study**

Hui-Chu Chen  
TransWorld University

Robert D. Green  
Lynn University

### **ABSTRACT**

As a result of the 2008 global economic recession, consumers have less income and have turned to less expensive brands and retail stores. This study examines the relationships of consumer demographics, shopping behavior, and the marketing activities (mix) that influence customer-based brand equity. A sample of 435 hypermarket shoppers is classified by low, middle, and high income segments. Using comparative (ANOVA) and causal (multiple regression) statistical analysis, the findings are similar for low and high income groups and some differences with middle income shoppers.

Keywords: Brand equity, marketing strategy, consumer income



## INTRODUCTION

With the 2008 global recession, corporate profits have declined that has resulted from less consumer spending. Unemployment increased, and many who continued as employed earned less income. Between 2007 and 2009, household income declined 4.1 percent (Brackey, Williams, & Maines, 2010). The consequences has been more price-sensitive consumers who once shopped at upscale retail stores and purchased luxury products, but has switched to discount, low-priced retail stores, e.g., Wal-Mart. During the first year of the recession, Wal-Mart experienced a 9.8 percent increase in profits and a 7.5 percent rise in revenues (Bustillo & Zimmerman, 2008).

During the same time, some families have even discontinued purchasing health insurance (Brackey et al., 2010). As well, “Middle class households reined in spending mainly on discretionary items. On average, from 2007 to 2009, they cut spending 20.1% on alcoholic beverages, 15.2% on clothing, and 9.5% on restaurants and other food away from home. They also spent less on some groceries, cutting back on items such as fresh milk and cream, as well as seafood” (Murray, 2010a, p. A4). The economic recession from December 2007 to June 2009 (18 months) was the longest since World War II and the most severe with a loss of 21 percent of Americans’ net worth (Murray, 2010b). In order to compete, retailers have used very aggressive discounting strategies (Holmes, 2010).

Furthermore, price-sensitivity has had a long-term impact. Retailers are mounting efforts to increase private (store) brands. This strategy is “to take advantage of recession-pinched consumers’ increasing desire to buy cheaper store brands rather than more expensive brand-name products” (Zimmerman, 2009, p. B3). Carrefour, the second largest retailer to Wal-Mart, has experienced the impact of the “recession-pinched” consumers with having high prices and losing market share. Carrefour has refocused its strategy with Carrefour Discount private brands, and changed the “quality for all” slogan to “The positive is back” (Passariello, 2010).

In 2009, the top 100 global brands declined 4.6 percent in value (Vranica, 2010). Six of the ten highest ranked brands had less value than in 2008, e.g., Microsoft (-4 percent), General Electric (-10 percent), Nokia (-3 percent), Disney (-3 percent) (*Business Week*, 2009). In 2010, the 100 top brands had an increase of 4 percent from 2009. However, two of the top ten brands experienced a brand value decline, e.g., General Electric (-10 percent), Nokia (-15 percent), and Toyota fell from the top ten brands (Vranica, 2010).

Brand value, or equity is influenced by the consumers’ perceptions of the brand and their ability and willingness to purchase. Marketing and brand managers have the control to develop marketing strategies to position the brand and to increase brand equity. On the other hand, consumers must have enough disposable income to buy the brand, regardless of the strategy. Moreover, these consumers have differences in their ability (income) to purchase that influence their brand decisions, and the brand value. Therefore, the purpose of the study is, do income groups have different marketing strategy perceptions that influences brand equity? This study includes a review of the branding literature, the methodology of the research, the findings, a discussion of the results, and the conclusions.

## LITERATURE REVIEW

A few independent organizations have estimated brand value. Interbrand is one, and has valued and ranked firm and product brands since 1999 by specific criteria. For example, more than 30% of the firm's earnings must be from outside its home country. This eliminates many brands, e.g., Wal-Mart. In addition, parent companies are not included, e.g., Procter & Gamble, but its brands may be included, e.g., Gillette (*Business Week*, 2006). Based on such parameters, leading international brands for 2010 included Coca-Cola (at #1 with \$70.5 billion), IBM (at #2 with \$64.7 billion), Microsoft (#3 with \$60.9 billion), McDonald's (at #6 with \$33.6 billion), Gillette (at #13 with \$23.3 billion), IKEA (at #28 with \$12.5 billion), Gap (at #84 with \$4.0 billion) (*Wall Street Journal*, 2010). The theoretical and empirical basis for the study follows with consumer income implications for branding.

### Conceptual Framework

Brand equity is defined as "a set of brand assets and liabilities linked to a brand, its name and symbol, that add to or subtract from the value provided by a product or service to a firm and/or to that firm's customers" (Aaker, 1991, p. 15). Aaker (1991) posits five dimensions of brand equity – brand loyalty, brand awareness, perceived quality, brand association, and other propriety brand assets. Brand equity has been studied for two purposes: (1) financial value for mergers and acquisitions and (2) improve marketing strategy and productivity (Keller, 1993). Aaker's brand equity theory was further developed to a consumer's perspective.

Keller defined customer-based brand equity "as the differential effect of brand knowledge on consumer response to the marketing of the brand" (1993, p. 2). This brand knowledge includes brand awareness (brand recall and recognition) and brand image (types, favorability, strength, and uniqueness of brand associations). Keller determines that "consumer-based brand equity occurs when the customer is aware of the brand and holds some favorable, strong, and unique brand associations in memory" (1993, p. 17). Moreover, branding and brand management are applicable to retail brands, e.g., retail and store image, perceived retail brand association, as well as to retail brand equity measurement (Ailawadi and Keller, 2004). The customer, for this study, is a retail shopper and a member of an income group – low, middle, or high.

The focus of this study is to improve marketing strategy, e.g., "consumers response to the marketing of the brand" (Keller, 1993, p. 2), in order to increase customer-based brand equity, e.g., "(the consumer) holds some favorable, strong, and unique brand associations in memory" (Keller, 1993, p. 17). Such marketing activities includes the product or brand positioning to specific target market(s) using specific strategies of product, price, place, and promotion (McCarthy, 1971).

### Empirical Studies

In an early study of customer-based brand equity (CBBE) measurement, Lassar, Mittal, and Sharma (1995) identified five constructs. These include performance, social image, value, trustworthiness, and attachment. Yoo, Donthu, and Lee (2000) consolidated these five, and used three measures to test CBBE. The researchers measured perceived quality, brand loyalty and brand awareness/association in a three consumer-product study. Yoo et al. (2000) did recognize

marketing strategy (marketing mix elements), or marketing efforts as antecedents of brand equity, and operationalized the marketing mix as: (1) price, (2) store image, (3) distribution intensity, (4) price deals, and (5) advertising spending.

Pappu, Quester, and Cooksey (2005) challenged combining brand awareness and brand association. Pappu et al. (2005), first, used two products, and then for retailer CBBE (Pappu & Cooksey, 2006). Both studies successfully tested the four dimensions for CBBE. Unlike Yoo, Donthu, and Lee (2000), neither Pappu et al. studies (2005; 2006) tested the marketing mix and CBBE relationship. This retailer CBBE study will use the four construct measures of: (1) brand loyalty, (2) brand awareness, (3) perceived quality, and (4) brand association (Pappu et al., 2006). For this study, the customer is either a low, middle, or high income retail shopper that has been exposed to the retailers' marketing mix and determines its influence, and which marketing mix element(s) contributed to customer-based brand equity.

Loyalty is "a deeply held commitment to rebuy or repatronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior" (Oliver, 1999, p. 34). Rebuy or repatronize can be influenced by the inelastic price changes, and positively affected by promotions and product assortment at mass merchandisers but differences between income levels are not significant (Fox, Montgomery, & Lodish, 2004). However, in a British retail store study, high income shoppers showed a significant difference between the level of loyalty – 38 percent high and 25 percent low loyalty – that was influenced by price (East, Harris, Willson, & Hammond, 1995). Moreover, brand loyalty with price elasticity is higher for brands being promoted frequently, having high market share, and targeting high income geographic market areas (Mulhern, Williams, & Leone, 1998). Higher income segments tend to be more price-deal, or coupon prone than lower income groups (Bawa & Shoemaker, 1987), and coupon redemption is greater as income increases (Levedahl, 1988). Product offerings (variety), also, have a positive influence on superstore shoppers (Brown, 2004).

Brand awareness is the "customers' ability to recall and recognize the brand, as reflected by their ability to identify the brand under different conditions ..... linking the brand – the brand name, logo, symbol, and so forth – to certain associations in memory" (Keller, 2003, p. 76). Promotions, specifically advertising play a critical role in creating brand awareness. For example, "the brand with the higher advertising budget yielded substantially higher levels of brand equity. In turn, the brand with the higher equity in each (product) category generated significantly greater performance and purchase intentions" (Cobb-Walgren, Ruble, & Donthu, 1995, p. 25). Furthermore, effective marketing communications efforts increase "the level of confidence regarding the product's expected performance" (Villarejo-Ramos & Sánchez-Franco, 2005, p. 442). Lower income groups have greater awareness of price than higher income levels (Rosa-Díaz, 2004). In developing awareness, brand name and image are important in affecting perceptions and attitudes (Aaker, 1996) that results from appropriate marketing strategies, e.g., advertising, pricing, to a specific target market, e.g., an income group (Kotler & Keller, 2006).

Perceived quality is the "customer's judgment about a product's overall excellence or superiority ..... (that) is (1) different from objective or actual quality, (2) a higher level abstraction rather than a specific attribute of a product, (3) a global assessment that in some cases resembles attitude, and (4) a judgment usually made within a consumer's evoked set" (Zeithaml, 1988, pp. 3 and 4). Brand price and promotional expenditures have positive relationships on perceived quality that leads to customer retention, or loyalty (Kanagal, 2009). Extrinsic cues

such as higher price points and greater level of advertising signals better (positive) consumers' perceived quality of the brand (Richardson, Dick, & Jain, 1994). However, price and brand name cues for perceived quality have been found to have a positive and significant relationships while no such significant relationship to store name for perceived quality (Rao & Monroe, 1989). Such cues have greater influence on lower than average income groups (Dmitrović & Vida, 2007).

Brand association "consists of all brand-related thoughts, feelings, perceptions, images, experiences, beliefs, attitudes," (Kotler & Keller, 2006, p. 188) and "is anything 'linked' in memory to a brand" (Aaker, 1991, p. 109). This association may be emotional, e.g., safe in a Volvo, self-expressive, e.g., creative with an Apple, or social, e.g., bikers posting their pictures on the Harley Davidson Web site (Aaker, 2009) and influenced by the purchasing involvement (Slama & Tashchian, 1985). For retail stores, store image, e.g., perceptions (Porter & Claycomb, 1997), and product assortments, e.g., store/private and national brands (Kara, Rojas-Méndez, Kucukemiroglu, & Harcar, 2009), affect association. Such images and assortments create purchasing motivations of emotion, self-expressiveness, social, and involvement aspects for the retail stores. For example, "ultimate success of a brand and a retailer is determined by how closely the images of the selling organization and the (brands) meet the (association) expectations of the consumer" (Porter & Claycomb, 1997, p. 385). Furthermore, branding strategy to increase purchase involvement is related to brand association, e.g., Web picture postings by Harley bikers of their recent rides (Aaker, 2009). Research has found that the middle income group tends to be involved and associate with brands that lead to the purchase decisions (Slama & Tashchian, 1985).

The literature and the reported empirical results that have been researched lack the findings for the relationship of marketing strategies and brand equity for various income levels. Indications are that there are such relationships. However, this has not been researched, and no clear conclusions determined. Therefore, this study examines the retail strategies in creating customer-based brand equity by income groups.

## **METHODOLOGY**

This study is non-experimental, exploratory explanatory research design. Retail shoppers are assigned to three income groups, e.g., low, middle, high. Other demographic characteristics, e.g., gender, marital status, age, shopping behavior, e.g., purchase amounts, shopping frequency, and their perceptions of the stores' marketing strategies, e.g., price, advertising spending, and for their brand equity, e.g., brand loyalty, awareness, perceived quality, association, are self-reported. The data analysis includes a comparison of and the causal relationship for the three income groups.

### **Sample, Data Collection, and Shoppers' Characteristics**

Retail consumers were surveyed in Kaohsiung city, Taiwan, the second largest city in the country. A quota sampling plan was used to collect the data at the country's four largest hypermarkets. The proportionate sample was based on estimated market share that included Carrefour (35 percent), R-T Mart (30 percent), Costco (25 percent), and Géant (10 percent). A systematic selection procedure for shoppers at the four hypermarkets was used each day (weekdays and weekend days) and times of day (morning, afternoon, and evening). A self-report questionnaire (paper and pen) was completed by participants 18 years of age or older, which

included three parts. First, a nine-question demographic and shopping characteristics section was researcher-developed. Second, a 15-item retail marketing mix instrument developed by Yoo, et al. (2000) that was used in their product branding study. The retail marketing mix elements (price, advertising spending, price deals, store image, and distribution intensity) were measured by a 5-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree). Third, a 23-item instrument developed by Pappu and Quester (2006) that was used in their customer-based brand equity (CBBE) (brand loyalty, brand awareness, perceived quality, and brand association) study of specialty and department stores. The CBBE section items were measured by a 7-point Likert-type scale (1 = Strongly Disagree to 7 = Strongly Agree).

**Table 1** Shopper Characteristics by Income Level

Characteristics	Low Income Shopper		Middle Income Shopper		High Income Shopper	
	No.	%	No.	%	No.	%
<b>Total</b>	195	44.9	141	32.4	99	22.7
<b>Gender</b>						
Male	136	69.7	38	27.0	45	45.5
Female	59	30.3	103	73.0	54	54.5
<b>Marital Status</b>						
Single	86	44.1	47	33.3	18	18.2
Married	95	48.7	93	66.0	75	75.8
Divorced	8	4.1	1	0.7	2	2.0
Widowed	6	3.1	0	0.0	4	4.0
<b>Age</b>						
18-24	39	20.0	3	2.1	2	2.0
25-34	76	39.0	75	53.2	23	23.2
35-44	52	26.7	48	34.0	32	32.3
45-54	18	9.2	6	4.3	27	27.3
55 and Older	10	5.1	9	6.4	15	15.2
<b>Educational Level</b>						
College Graduate Degree	2	1.0	12	8.5	12	12.1
College Undergraduate Degree	61	31.3	70	49.7	33	33.3
Attended College (No Degree)	30	15.4	3	2.1	4	4.0
High School Graduate	75	38.5	49	34.8	42	42.5
Less Than High School Graduate	27	13.8	7	4.9	8	8.1
<b>Occupation</b>						
Corporate Executive, Manager	5	2.6	9	6.4	18	18.2
Administrative Personnel	5	2.6	9	6.4	16	16.2
Sales, Technician, Clerical	89	45.6	70	49.6	47	47.4
Skilled Labor	31	15.9	43	30.5	13	13.1
Unskilled Labor	65	33.3	10	7.1	5	5.1
<b>Avg. Purchase Amount (Per Visit)*</b>						
US\$16.00 or Less	41	21.0	7	5.0	8	8.1
US\$16.01-\$48.00	93	47.7	40	28.4	23	23.2
US\$48.01-\$80.00	39	20.0	44	31.1	25	25.2
US\$80.01-\$112.00	11	5.6	23	16.3	18	18.2
US\$112.01-\$144.00	7	3.6	17	12.1	15	15.2
US\$144.01 or More	4	2.1	10	7.1	10	10.1
<b>Purchase Experience</b>						
Not Purchased at This Hypermarket	21	10.8	11	7.8	8	8.1
Purchased at This Hypermarket	174	89.2	130	92.2	91	91.9
<b>Hypermarket Shopping Frequency</b>						
Less Than Once Per Week	138	70.7	85	60.3	74	74.7
1 to 3 Times Per Week	44	22.6	51	36.2	15	15.2
4 or More Times Per week	13	6.7	5	3.5	10	10.1
<b>Shopper By Hypermarket</b>						
Carrefour	81	41.5	45	31.9	29	29.3
RT-Mart	62	31.8	42	29.8	22	22.2
Costco	32	16.4	37	26.2	40	40.4
Géant	20	10.3	17	12.1	8	8.1

Note: \* indicates 1 NT (Taiwan Dollar) = US\$.032

The proportionate sample, according to hypermarket market share, includes 435 participants. This sample has been split as to monthly income that is represented by low income shoppers (less than US\$1,100) ( $n = 195$ ), middle income (US\$1,100 to US\$1,600) ( $n = 141$ ), and high income (more than US\$1,600) ( $n = 99$ ). See Table 1 for detailed participants demographic profiles and shopping characteristics for the three income groups. Generally, males have greater representation (69.7 percent) for lower income, fewer for middle income (27.0 percent), and about the same for high income (45.5 percent) than females. The three groups were either single or married with the majority being married for middle (66.0 percent) and high (75.8 percent) income groups. The majority of low (65.7 percent) and middle (87.2 percent) income shoppers were between 25 and 44 years old, while high income (59.6 percent) group were 35 to 54 years of age. Interesting, the largest number of low (38.5 percent) and high (42.5 percent) income groups had high school education, and the middle income shoppers (49.7) had a college undergraduate degree. The highest number for all three groups was employed in sales, technicians, or clerical positions. However, the second highest for low income shoppers was unskilled labor, middle income was skilled labor, and high income was corporate executives or managers.

Shopping characteristic questions included average purchase amount (per visit), prior purchase experience at that hypermarket, and hypermarket shopping frequency. The questionnaires were coded as to which hypermarket the respondent shopped. The majority of low income shoppers (68.7 percent) purchased less than US\$48.00 each visit, the middle income (59.5 percent) and high income (48.4 percent) between US\$16.00 and US\$80.00. About 90 percent of all shoppers had prior experience at that hypermarket. The majority in each income group shopped less than once per week at the hypermarket. The highest number of low (41.5 percent) and middle (31.9 percent) income groups shopped at Carrefour, while the high income shoppers (40.4 percent) were at Costco, a membership club hypermarket.

### **Analytical Procedures**

With classifying shopper in levels of income, a comparison is completed to find significant differences between the three income groups. To perform three group tests (ANOVA), a minimum of 50 participants should be in each group (Hair, Anderson, Tatham, & Black, 1998). The group with the least respondents ( $n = 99$ ) is high income. Therefore, each group exceeds the required minimum. Furthermore, the causal relationship is determined by the 14 independent variables (nine shopper characteristics and five marketing mix elements) and customer-based brand equity for each income group in this study. For multiple regression, the number of respondents should be 50 plus eight times the number of predictor variables, or  $n \geq 50 + 8(m)$  (Green, 1991). This study requires at least 162 respondents ( $n = 50 + 8[14]$ ). The data includes 435 participants, exceeding the minimum for multiple regression analysis.

Varimax rotations with Kaiser-Meyer-Olkin criterion (eigenvalue greater than 1.0) were used to examine construct validity and to extract items for the retail marketing mix and customer-based brand equity instruments. Of the 15-item marketing mix instrument, there were three items for each of the five retail elements (Yoo, et al., 2000). Only one item was regrouped – from distribution intensity to advertising spending. Therefore, price includes three items, advertising spending four items, price deals three items, store image three items, and distribution intensity two items. The 23-item brand equity instrument included four brand loyalty items, four brand awareness, five perceived quality, and ten brand association (Pappu & Quester, 2006).

Two brand awareness items were regrouped to brand loyalty. One brand awareness item became brand association. Finally, three brand association items were regrouped as brand awareness. Hence, brand loyalty includes six items, brand awareness four items, brand association eight items, and the five original perceived quality items remain unchanged. These constructs were tested for reliability using Cronbach's alpha scores and all easily exceeded the minimum of 0.70 (Nunnally & Bernstein, 1994) with a range for retail marketing mix elements from 0.751 to 0.912 and for customer-based brand equity dimensions from 0.843 to 0.942.

## FINDINGS

To determine the significant differences ( $p < 0.05$ ) between low, middle, and high income shoppers, analysis of variance (ANOVA) with post hoc tests (Scheffé method) were completed for the five marketing mix elements, total marketing mix (unweighted average of the five elements), the four brand equity dimensions, and total brand equity (unweighted average of the four dimensions). The results were that only two marketing mix elements show significant differences – advertising spending and store image. Post hoc tests found that low income shoppers had a significant greater perceived hypermarket advertising spending than high income participants. On the other hand, high income shoppers have a significant greater perception of the hypermarket store image than low income respondents do. See Table 2. However, while not significant the only other variable that low income shoppers had a greater mean score (more favorable) than either of the other two income groups was price. Furthermore, while not significant the high income shoppers have more favorable perceptions (higher mean scores) of price deal, distribution intensity, total marketing mix, and each brand dimension (brand loyalty, brand awareness, perceived quality, and brand association) and total brand equity than the other two income groups.

Pearson correlation coefficient examined the bivariate relationships between the independent variables of the marketing mix elements (price, advertising spending, price deals, store image, and distribution intensity) and the dependent variables of the brand equity dimensions (brand loyalty, brand awareness, perceived quality, and brand association). The results are shown in Table 3. No findings exceed .800, indicating acceptable levels of correlation. However, the three bivariate correlations that exceeded .700 were related to the brand equity dimensions of brand loyalty, perceived quality, and brand association. Of particular interest, price is significant ( $p < 0.05$ ) and negatively correlated with all other variables. Specifically, as price decreases, each CBBE dimension increases, hence higher brand equity. The only other negative correlation is between advertising spending and perceived quality, but not significant ( $p < 0.05$ ). The remaining three dimensions related to advertising spending ranged from .094 to .132. Price deal, store image and distribution intensity correlations with each brand equity dimension are significant ( $p < 0.05$ ), positive, and reasonable strong ranging from .448 to .500, .447 to .686, and .447 to .500, respectively.



**Table 2 Income Groups' Comparisons for Marketing Mix and Brand Equity**

Elements/Dimensions	Mean For Low Income Shopper	Mean For Middle Income Shopper	Mean For High Income Shopper
<b>Marketing Mix Elements<sup>1</sup></b>			
Price	2.8650	2.8440	2.8350
Advertising Spending	3.0410*	2.9592	2.7626*
Price Deal	3.2872	3.1820	3.3165
Store Image	3.1282*	3.1702	3.3737*
Distribution Intensity	3.2410	3.2411	3.3939
Total Marketing Mix	3.0133	3.0000	3.0350
<b>Brand Equity Dimensions<sup>2</sup></b>			
Brand Loyalty	3.9402	4.0390	4.1391
Brand Awareness	4.9679	4.9681	5.1187
Perceived Quality	4.1928	4.2766	4.4808
Brand Association	4.5923	4.6410	4.8662
Total Brand Equity	4.4007	4.4616	4.6368

Note: <sup>1</sup> and <sup>2</sup> indicate marketing mix elements measured by a 5-point Likert-type scale and brand equity dimensions measured by a 7-point Likert-type scale, respectively. \* indicates significances of < 0.05.

**Table 3 Income Groups' Correlations for Marketing Mix and Brand Equity**

Elements/Dimensions	Price	Advertising Spending	Price Deal	Store Image	Distribution Intensity	Brand Loyalty	Brand Awareness	Perceived Quality	Brand Association
Price	1.000								
Advertising Spending	-.005	1.000							
Price Deal	-.461**	.199**	1.000						
Store Image	-.157**	-.075	.413**	1.000					
Distribution Intensity	-.175**	.280**	.390**	.466**	1.000				
Brand Loyalty	-.215**	.094*	.452**	.555**	.489**	1.000			
Brand Awareness	-.262**	.124**	.448**	.447**	.447**	.661**	1.000		
Perceived Quality	-.254**	-.075	.455**	.686**	.479**	.788**	.622**	1.000	
Brand Association	-.322**	.132**	.500**	.524**	.500**	.716**	.695**	.754**	1.000

Note: \* and \*\* indicate significances of < 0.01 and < 0.05 (differences) levels, respectively.

To determine the relationship of shopper demographics and characteristics and the hypermarkets' marketing mix/strategy, and customer-based brand equity, multiple regression models (forward stepwise) were tested for the three income categories. Each income group's analysis includes an equation for the four brand equity dimensions and brand equity (unweighted average of the four dimensions) as dependent variables. Therefore, each income group has multiple regression equation for (1) brand loyalty, (2) brand awareness, (3) perceived quality, (4) brand association, and (5) brand equity. Independent variables tested are shopper demographics and characteristics (nine variables) and marketing mix/strategy (five variables), or 14 predictors for the brand dimensions and brand equity. Shopper demographics and characteristics are gender, marital status, age, education, occupation, average purchase amount per shopping visit, prior visit to the hypermarket, shopping frequency at the hypermarket, and the hypermarket name. Furthermore, marketing mix, or strategy includes price, advertising spending, price deals, store image, and distribution intensity. The independent variable is included in the model only if it is significant at or less than 0.05.

For low income shoppers, the explained variance (adjusted R<sup>2</sup>) for the five equations ranged from 31.3 percent for brand loyalty to 46.8 percent for brand equity, and 39.2 percent for

**Table 4 Regression Models for Low Income Shoppers' Brand Equity**

<b>Panel A: Brand Loyalty Dimension</b>					
R <sup>2</sup> = .327		Adjusted R <sup>2</sup> = .313		Standard Error = 1.00082 F = 23.099 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-.993	.523			
Store Image	.711	.125	.357	5.700	.000
Price Deal	.546	.121	.283	4.510	.000
Education Level	.137	.055	.149	2.484	.014
Purchase Experience	.495	.234	.127	2.119	.035
<b>Panel B: Brand Awareness Dimension</b>					
R <sup>2</sup> = .463		Adjusted R <sup>2</sup> = .452		Standard Error = .83156 F = 40.981 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	.516	.422			
Purchase Experience	1.902	.193	.526	9.834	.000
Price Deal	.417	.107	.232	3.879	.000
Distribution Intensity	.204	.088	.140	2.321	.021
Store Image	.231	.106	.124	2.179	.031
<b>Panel C: Perceived Quality Dimension</b>					
R <sup>2</sup> = .411		Adjusted R <sup>2</sup> = .392		Standard Error = .78916 F = 21.835 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-.579	.464			
Store Image	.642	.103	.384	6.235	.000
Distribution Intensity	.311	.086	.235	3.596	.000
Purchase Experience	.572	.190	.176	3.014	.003
Gender	.264	.125	.120	2.112	.036
Hypermarket	.165	.064	.162	2.578	.011
Price Deal	.257	.105	.159	2.446	.015
<b>Panel D: Brand Association Dimension</b>					
R <sup>2</sup> = .451		Adjusted R <sup>2</sup> = .436		Standard Error = .74735 F = 31.051 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	.261	.380			
Distribution Intensity	.307	.079	.237	3.883	.000
Purchase Experience	1.033	.174	.322	5.936	.000
Store Image	.402	.095	.245	4.224	.000
Gender	.409	.118	.189	3.459	.001
Price Deal	.313	.098	.197	3.213	.002
<b>Table E: Brand Equity</b>					
R <sup>2</sup> = .484		Adjusted R <sup>2</sup> = .468		Standard Error = .68707 F = 29.410 Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T
(Constant)	-.231	.365			
Store Image	.499	.088	.321	5.676	.000
Purchase Experience	.901	.161	.297	5.614	.000
Price Deal	.357	.090	.237	3.972	.000
Distribution Intensity	.228	.073	.186	3.132	.002
Education Level	.082	.038	.115	2.169	.031
Gender	.233	.109	.114	2.138	.034

perceived quality, 43.6 percent for brand association, and 45.2 percent for brand awareness. All independent variables have positive relationships to the dependent variables. Store image and price deal were the only two marketing mix elements that were included in all equations. Prior purchase experience was the only demographic and shopping characteristics variable in all models. Logic would indicate that low income shoppers would be price sensitive, e.g., price included with an inverse relationship. However, price was not in any of the models, but price deal, such as one-time or short-term price discounts (coupons, rebates), was. See Table 4, Panels A, B, C, D, and E.

The explained variance for middle income shoppers ranged from 44.5 percent for brand association to 66.0 percent for perceived quality, and 50.0 percent for brand awareness, 55.8 percent for brand loyalty, and 64.2 percent for brand equity. Unlike the low income shoppers, middle income shoppers were price sensitive with price being included in each equation and having inverse relationships with the dependent variables. This inverse relationship is consistent with the Pearson correlation coefficient (bivariate) findings (see Table 3). All other independent variables had positive relationships. In addition to price, distribution intensity and store image marketing mix elements were in each regression model. No demographic and shopping characteristic variable was in all equations. However, prior purchase experience was the only one that was included in four of the five models. See Table 5, Panels A, B, C, D, and E.

For high income shoppers, the explained variance ranged from 51.1 percent for brand loyalty to 71.9 percent for brand equity, and 64.3 percent for brand association, 65.7 percent for brand awareness, and 69.9 percent for perceived quality. All independent variables have positive relationships to the dependent variables except for hypermarket in the brand awareness regression model. Store image was the only marketing mix element that was included in all equations. However, distribution intensity and price deal were in four of the five models. Price was not a significant influence for any of the dependent variables. No demographic and shopper characteristic variable appeared in all models. However, prior purchase experience was included in four of the five equations. See Table 6, Panels A, B, C, D, and E.

In summary, the comparisons between income groups found only two marketing mix elements that were significantly different. See Table 2. Low income shoppers were more favorable of their hypermarket's advertising than the high income group. On the other hand, high income shoppers had significantly more favorable perceptions of their hypermarket's store image than the low income group. The remaining variables were not significant. However, the high income shoppers were more favorable (higher mean scores) for all of the other marketing mix elements and brand equity dimensions than the other groups except for price. Fifteen regression models were completed, five dependent brand equity variables for the three income groups. See Table 7 for the summary. The explained variances ranged from 31.3 percent for low income brand loyalty to 71.9 percent for high income brand equity. Clearly marketing mix elements were better predictors of brand equity dependent variables than demographic and shopping characteristics. Store image was included in all (15) equations, while distribution intensity and price deal were predictors in 13 and 11 regression models, respectively. Price was only in all (5) of the middle income shoppers' equations, and as expected, it was inversely related to the brand equity dependent variables. The only consistent shopper demographic and characteristics was prior purchase experience, which was in 13 equations.

**Table 5 Regression Models for Middle Income Shoppers' Brand Equity**

<b>Panel A: Brand Loyalty Dimension</b>									
R <sup>2</sup> = .577		Adjusted R <sup>2</sup> = .558		Standard Error = .79456		F = 30.475		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	-.150	.641							
Distribution Intensity	.634	.092	.459	6.866	.000				
Price Deal	.238	.112	.143	2.120	.036				
Store Image	.358	.119	.213	3.018	.003				
Purchase Experience	.742	.256	.167	2.894	.004				
Price	-.309	.109	-.179	-2.820	.006				
Age	.167	.079	.122	2.115	.036				
<b>Panel B: Brand Awareness Dimension</b>									
R <sup>2</sup> = .514		Adjusted R <sup>2</sup> = .500		Standard Error = .71289		F = 35.966		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	2.404	.464							
Store Image	.394	.102	.277	3.854	.000				
Purchase Experience	1.325	.225	.354	5.888	.000				
Distribution Intensity	.345	.082	.296	4.209	.000				
Price	-.360	.089	-.248	-4.041	.000				
<b>Panel C: Perceived Quality Dimension</b>									
R <sup>2</sup> = .670		Adjusted R <sup>2</sup> = .660		Standard Error = .59424		F = 69.063		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	1.016	.381							
Store Image	.847	.088	.589	9.671	.000				
Price	-.268	.074	-.182	-3.605	.000				
Hypermarket	.204	.053	.204	3.888	.000				
Distribution Intensity	.275	.072	.234	3.801	.000				
<b>Panel D: Brand Association Dimension</b>									
R <sup>2</sup> = .465		Adjusted R <sup>2</sup> = .445		Standard Error = .71964		F = 23.480		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	2.398	.494							
Store Image	.395	.105	.290	3.770	.000				
Distribution Intensity	.355	.083	.318	4.253	.000				
Price	-.388	.090	-.279	-4.295	.000				
Purchase Experience	.598	.228	.167	2.619	.010				
Age	.152	.072	.137	2.118	.036				
<b>Panel E: Brand Equity</b>									
R <sup>2</sup> = .657		Adjusted R <sup>2</sup> = .642		Standard Error = .55762		F = 42.805		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	1.138	.450							
Store Image	.469	.083	.357	5.634	.000				
Distribution Intensity	.384	.065	.356	5.923	.000				
Price	-.299	.077	-.223	-3.900	.000				
Purchase Experience	.661	.180	.191	3.673	.000				
Price Deal	.166	.079	.128	2.112	.037				
Age	.117	.055	.109	2.109	.037				

**Table 6 Regression Models for High Income Shoppers' Brand Equity**

<b>Panel A: Brand Loyalty Dimension</b>									
R <sup>2</sup> = .521		Adjusted R <sup>2</sup> = .511		Standard Error = .98621		F = 52.152		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	-.556	.475							
Store Image	.956	.163	.501	5.848	.000				
Distribution Intensity	.433	.121	.308	3.587	.001				

  

<b>Panel B: Brand Awareness Dimension</b>									
R <sup>2</sup> = .678		Adjusted R <sup>2</sup> = .657		Standard Error = .74321		F = 32.278		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	-.020	.510							
Store Image	.569	.151	.332	3.769	.000				
Purchase Experience	1.206	.288	.260	4.192	.000				
Distribution Intensity	.295	.096	.232	3.058	.003				
Shopping Frequency	.383	.121	.199	3.166	.002				
Hypermarket	-.207	.082	-.160	-2.521	.013				
Price Deal	.321	.143	.183	2.241	.027				

  

<b>Panel C: Perceived Quality Dimension</b>									
R <sup>2</sup> = .712		Adjusted R <sup>2</sup> = .699		Standard Error = .64311		F = 57.977		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	-1.196	.436							
Store Image	.966	.118	.609	8.172	.000				
Price Deal	.413	.120	.255	3.453	.001				
Hypermarket	.203	.070	.169	2.892	.005				
Purchase Experience	.637	.246	.149	2.589	.011				

  

<b>Panel D: Brand Association Dimension</b>									
R <sup>2</sup> = .661		Adjusted R <sup>2</sup> = .643		Standard Error = .66345		F = 36.297		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	-.222	.398							
Price Deal	.586	.127	.382	4.621	.000				
Store Image	.331	.131	.220	2.524	.013				
Purchase Experience	.874	.246	.216	3.547	.001				
Distribution Intensity	.248	.086	.223	2.891	.005				
Purchase Amount	.113	.050	.148	2.264	.026				

  

<b>Panel E: Brand Equity</b>									
R <sup>2</sup> = .730		Adjusted R <sup>2</sup> = .719		Standard Error = .59037		F = 63.666		Significant F = .000	
Variable	Regression Coefficient	Standard Error	Standardized Coefficient	T	Significant T				
(Constant)	-.606	.352							
Store Image	.669	.112	.444	5.954	.000				
Price Deal	.409	.112	.266	3.646	.000				
Purchase Experience	.818	.219	.201	3.728	.000				
Distribution Intensity	.259	.075	.232	3.427	.001				

**Table 7 Regression Models Summary for Low-Middle-High Income Shoppers' Brand Equity**

Brand Dimensions	Low Income Shopper		Middle Income Shopper		High Income Shopper	
	Explained Variance	Significant Influences	Explained Variance	Significant Influences	Explained Variance	Significant Influences
Brand Loyalty	31.3%	Store Image Price Deal Education Level Purchase Experience	55.8%	Distribution Intensity Price Deal Store Image Purchase Experience Price* Age	51.1%	Store Image Distribution Intensity
Brand Awareness	45.2%	Purchase Experience Price Deal Distribution Intensity Store Image	50.0%	Store Image Purchase Experience Distribution Intensity Price*	65.7%	Store Image Purchase Experience Distribution Intensity Shopping Frequency Hypermarket* Price Deal
Perceived Quality	39.2%	Store Image Distribution Intensity Purchase Experience Gender Hypermarket Price Deal	66.0%	Store Image Price* Hypermarket Distribution Intensity	69.9%	Store Image Price Deal Hypermarket Purchase Experience
Brand Association	43.6%	Distribution Intensity Purchase Experience Store Image Gender Price Deal	44.5%	Store Image Distribution Intensity Price* Purchase Experience Age	64.3%	Price Deal Store Image Purchase Experience Distribution Intensity Purchase Amount
Brand Equity	46.8%	Store Image Purchase Experience Price Deal Distribution Intensity Education Level Gender	64.2%	Store Image Distribution Intensity Price* Purchase Experience Price Deal Age	71.9%	Store Image Price Deal Purchase Experience Distribution Intensity

Note: \* indicates inverse (-) relationship to the brand dimension.

## DISCUSSION

The results from the study have several implications for brand researchers and brand managers. From the comparisons (ANOVA), there are only two significant differences between low, middle, and high income groups – higher advertising spending for low income and better store image for high income. The low-income segment is somewhat more price sensitive, e.g., the store having high prices, and advertising occurs frequently and with expensive advertisements than middle and high income shoppers. To increase brand equity, hypermarkets targeting low income shoppers should consider less advertising and refocus pricing strategy to lower price points and increase coupons (short-term, one-time price discounts). On the other hand, the high income group felt that the hypermarket had effective price deals, positive store image, and greater distribution intensity. To increase brand equity, the focus for this income segment, therefore, should be on coupons, improving store image, and offering more product assortments, since they had high levels of brand equity. Moreover, high income shoppers consistently indicated greater customer-based brand equity. While there was no significant differences between the income groups, the high income segment was more brand loyal, had

more brand awareness, and had greater perception of quality and with better brand association (higher mean scores). The comparison findings are supported, at least in part, by prior research. For example, price, e.g., low income segment, and promotional activities and product assortments, e.g., high income segment, influences brand loyalty (Fox et al., 2004), brand awareness (Aaker, 1996), and perceived quality (Dmitrović & Vida, 2007), but does not support brand association (Slama & Tashchian, 1985).

Marketing mix elements, which are controllable, provide marketers the opportunities to position brands to specific target markets, e.g., income categories (Kotler & Keller, 2006). The

**Table 8 Retail Store Marketing Mix Elements in the Regression Equations for Low-Middle-High Income Shoppers' Brand Equity**

Marketing Mix Elements	Low Income Shopper	Middle Income Shopper	High Income Shopper
Price	0	5*	0
Advertising Spending	0	0	0
Price Deal	5	2	4
Store Image	5	5	5
Distribution Intensity	4	5	4

Note: \* indicates inverse (-) relationship to the brand dimensions.

causal relationship of these elements offer brand managers the strategy to create customer-based brand equity. Specific to this study particular such marketing activities have important implications. While price and advertising spending are not significant factors, price deals, store image, and distribution intensity are major predictors for low income shoppers. See Table 8. In fact, advertising spending does not influence any of the three groups, and price only influences brand equity for the middle income group. The middle income segment is highly price sensitive with an inverse relationship in each of the five regression equations. Furthermore, short-term price discounts, or price deal appears in two of the five equations (brand loyalty and total brand equity). In addition to the price related elements, store image and product assortment are significant contributors to brand equity. On the other hand, high income shoppers, similar to low income, respond to price deal, store image, and distribution intensity that create brand equity from this segment. Clearly, these three marketing activities are critical to mass merchandisers regardless of income levels.

## CONCLUSIONS

A critical aspect to identify a target market and for consumers' purchase decisions is their ability to pay (Kotler & Keller, 2006). The purpose of the study was, do income groups have different marketing strategy perceptions that influences brand equity? This study examined three income groups (low, middle, high) to compare differences for other demographic characteristics, shopping behavior, their perception of the retailers' marketing strategy as related to, or influence on customer-based brand equity. Furthermore, a causal analysis for each for each income segment was determined. From the data analyses, the results were conclusive.

The data were collected from 435 shoppers at four hypermarkets in Kaohsiung city, Taiwan. The comparison between income groups, using ANOVA tests, found two significant differences – (1) low income shoppers had significantly higher perceptions of advertising spending than the high income group and (2) high income shoppers had significantly higher store image perception than low income segment. Moreover, 15 multiple regression models had high

explained variances (31.3 percent to 71.9 percent) that revealed particular, significant findings. The marketing activities for store image and distribution were significant for the three income groups' brand equity. However, price deal was a better predictor for low and high income groups than middle income. On the other hand, while price was not significant in any regression equations for low and high income groups, it was significant in all (5) equations for middle income. Therefore, similarities occurred between low and high income shoppers and some differences with middle income segment.

While this study has contributed to the branding literature, it has certain limitations. First, the data were collected in one city and the findings should not be generalized beyond Kaohsiung city. Second, the shoppers were from four hypermarkets. The results may not be indicative of other types of retail store formats, e.g., convenience, specialty, departments stores. Third, while the number of participants in each income group met statistical criteria, the groups were not equally represented and might have influenced the results.

However, the study provides particular future research opportunities. First, the study should be tested in other geographic areas and for other types of retail stores. Second, a balanced, quota sample by income group should be a criteria. Third, while the three income group classification is consistent with prior studies (Dmitrović & Vida, 2007; East et al., 1995; Levedahl, 1988), the unexpected results of similarities between low and high income shoppers and the significant role price played in the middle income brand equity warrants having further examination with more, expanded groups, e.g., four, five, or six segments, to further focus and identify casual relationships for more than three income categories.

## REFERENCES

- Aaker, D. (2009). Beyond Functional Benefits. *Marketing News*, (September, 30), 23.
- Aaker, D.A. (1991). *Managing Brand Equity*. New York: The Free Press.
- Aaker, D.A. (1996). Measuring Brand Equity across Products and Markets. *California Management Review*, 38(3), 102-120.
- Ailawadi, K.L. & Keller, K.L. (2004). Understanding Retail Branding: Conceptual Insights and Research Priorities. *Journal of Retailing*, 80(4), 331-342.
- Bawa, K. & Shoemaker, R.W. (1987). The Coupon-Prone Consumer: Some Findings Based on Purchase Behavior across Product Classes. *Journal of Marketing*, 51(October), 99-110.
- Brackey, H.J., Williams, D., & Maines, J. (2010). Our Incomes Take Big Hit in Recession. *South Florida Sun-Sentinel*, (September 29), 1A, 11A.
- Brown, J.D. (2004). Determinants of Loyalty to Grocery Store Type. *Journal of Food Products Marketing*, 10(3), 1-11.
- Business Week* (2006). The 100 Top Brands. (August 7), 60-66.
- Business Week* (2009). 100 Best Global Brands. (September 28), 50-56.
- Bustillo, M. & Zimmerman, A. (2008). Wal-Mart Defies Retail Slowdown. *Wall Street Journal*, (November 14), A1, A11.
- Cobb-Walgren, C.J., Ruble, C.A., & Donthu, N. (1995). Brand Equity, Brand Preference, and Purchase Intent. *Journal of Advertising*, 24(3), 25-40.
- Dmitrović, T. & Vida, I. (2007). Saliency of Product Origin Information in Consumer Choices. *Journal of Contemporary Management Issues*, 12(2), 1-23.
- East, R., Harris, P., Willson, G., & Hammond, K. (1995). Correlates of First-Brand Loyalty. *Journal of Marketing Management*, 11(5), 487-497.



- Fox, E.J., Montgomery, A.L., & Lodish, L.M. (2004). Consumer Shopping and Spending across Retail Formats. *Journal of Business*, 77(Special), S25-S60.
- Green S.B. (1991). How Many Subjects Does It Take To Do A Regression Analysis? *Multivariate Behavioral Research*, 26(3), 499-510.
- Hair, J.F., Jr., Anderson, R.E., Tatham, R.L., & Black, W.C. (1998). *Multivariate Data Analysis* (5<sup>th</sup> edition). Upper Saddle River, NJ: Prentice Hall.
- Holmes, E. (2010). Retailers Set Holiday Discounts. *Wall Street Journal*, (October 6), B2.
- Kanagal, N. (2009). Role of Relationship Marketing in Competitive Marketing Strategy. *Journal of Management and Marketing Research*, 2(May), 1-17.
- Kara, A., Rojas-Méndez, J.I., Kucukemiroglu, O., & Harcar, T. (2009). Consumer Preferences of Store Brands: Role of Prior Experiences and Value Consciousness, 17(2), 127-137.
- Keller, K.L. (1993). Conceptualizing, Measuring, and Managing Customer-Based Brand Equity. *Journal of Marketing*, 57(1), 1-22.
- Keller, K.L. (2003). *Strategic Brand Management* (2<sup>nd</sup> edition). Upper Saddle River, NJ: Prentice Hall.
- Kotler, P. & Keller, K.L. (2006). *Marketing Management* (12<sup>th</sup> edition). Upper Saddle River, NJ: Prentice Hall.
- Lassar, W., Mittal, B., & Sharma, A. (1995). Measuring Customer-Based Brand Equity. *Journal of Consumer Marketing*, 12(4), 11-19.
- Levedahl, J.W. (1988). Coupon Redeemers: Are They Better Shoppers? *Journal of Consumer Affairs*, 22(2), 264-283.
- McCarthy, E. J. (1971). *Basic Marketing: A Managerial Approach* (4<sup>th</sup> ed.). Homewood, IL: R.D. Irwin.
- Mulhern, F.J., Williams, J.D., & Leone, R.P. (1998). Variability of Brand Price Elasticities across Retail Stores: Ethnic, Income, and Brand Determinants. *Journal of Retailing*, 74(3), 427-446.
- Murray, S. (2010a). Middle Class Slams Brakes on Spending. *Wall Street Journal*, (October 6), A4.
- Murray, S. (2010b). Slump Over, Pain Persists. *Wall Street Journal*, (September 21), A1, A2.
- Nunnally, J.C. & Bernstein, I.H. (1994). *Psychometric Theory*. New York: McGraw-Hill.
- Oliver, R.L. (1999). Whence Consumer Loyalty. *Journal of Marketing*, 63(Special Issue), 33-44.
- Pappu, R. & Cooksey, R.W. (2006). A Consumer-Based Method for Retail Equity Measurement: Results of an Empirical Study. *Journal of Retailing and Consumer Services*, 13(4), 317-329.
- Pappu, R., Quester, P.G., & Cooksey, R.W. (2005). Consumer-Based Brand Equity: Improving the Measurement-Empirical Evidence. *Journal of Product & Brand Management*, 14(2/3), 143-154.
- Passariello, C. (2010). Carrefour's Makeover Plan: Become IKEA of Groceries. *Wall Street Journal*, (September 16), B1, B2.
- Porter, S.S & Claycomb, C. (1997). The Influence of Brand Recognition on Retail Store Image. *Journal of Product & Brand Management*, 6(6), 373-387.
- Rao, A.R. & Monroe, K.B. (1989). The Effect of Price, Brand Name, and Store Name on Buyers' Perceptions of Product Quality: An Integrative Review. *Journal of Marketing Research*, 26(August), 351-357.

- Richardson, P.S., Dick, A.S., & Jain, A.K. (1994). Extrinsic and Intrinsic Cue Effects on Perceptions of Store Brand Quality. *Journal of Marketing*, 58(October), 28-36.
- Rosa-Díaz, I.M. (2004). Price Knowledge: Effects of Consumers' Attitudes Toward Prices, Demographics, and Socio-Cultural Characteristics. *Journal of Product & Brand Management*, 13(6), 406-428.
- Slama, M.E. & Tashchian, A. (1985). Selected Socioeconomic and Demographic Characteristics Associated with Purchasing Involvement. *Journal of Marketing*, 49(Winter), 72-82.
- Villarejo-Ramos, A.F. & Sánchez-Franco, M.J. (2005). The Impact of Marketing Communication and Price Promotion on Brand Equity. *Brand Management*, 12(6), 431-444.
- Vranica, S. (2010). Brands Recover, With Some Casualties. *Wall Street Journal*, (September 16), B9.
- Wall Street Journal* (2010). 2010 Top Global-Brands Ranking. (September 16), Retrieved September, 2010, from [http://s.wsj.net/public/resources/documents/st\\_BRAND\\_20100908.html](http://s.wsj.net/public/resources/documents/st_BRAND_20100908.html).
- Yoo, B., Donthu, N., & Lee, S. (2000). An Examination of Selected Marketing Mix Elements and Brand Equity. *Journal of the Academy of Marketing Science*, 28(2), 195-211.
- Zeithaml, V.A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. *Journal of Marketing*, 52(July), 2-22.
- Zimmerman, A. (2009). Wal-Mart Gives Makeover To Its Private-Label Line. *Wall Street Journal*, (March 17), B3.

#### Authors Biographies

Hui-Chu Chen, Ph.D., is Assistant Professor in the College of Business Administration at TransWorld University, Yulin, Taiwan (R.O.C.). Prior to entering academe, Dr. Chen had a successful business career in Taiwan. She holds a Doctor of Philosophy (Corporate and Organizational Management) degree from Lynn University (USA). She has published in the *International Journal of Management and Marketing Research* and other referred publications. Dr. Chen has research interests in brand management and management strategies.

Robert D. Green, D.B.A., is Professor of Marketing in the College of Business and Management at Lynn University, Boca Raton, Florida (USA). He has held faculty positions in the U.S. (Indiana State University) and internationally (United Arab Emirates and Ecuador). Dr. Green has had articles in *Journal of Management and Marketing Research*, *Research in Business and Economics*, *Journal of Business & Entrepreneurship*, *Global Business and Finance Review*, and more than 60 other referred publications.