

## Sustainability of Commercial Banks: Role of Brand Image over Brand Equity

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### Abstract

Sustainability has become a major concern for any business. A large number of studies have linked a positive relationship between sustainability and brand equity. We have used seven factors model viz.; perceived quality, brand awareness, brand association, brand image, brand name, brand loyalty and overall brand equity to measure brand equity. Since, Brand Image and Brand Loyalty have loaded in Factor analysis of the study; we aimed at exploring the influence of brand image over brand equity of Islami Bank Bangladesh Limited (IBBL). Both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were run to investigate the causal relationship and model fit analysis of the model respectively. Primary data was collected from 330 respondents after interviewing with structured questionnaire within Dhaka city. Interview period was December 2012. SEM resulted in four factors loading; where brand image and brand loyalty were found to have strong influence over brand equity. CFA signified the model fit and explained strongest influence of brand image.

**Keywords:** Brand equity, Brand image, Factor Analysis

### 1. Introduction

The most comprehensive and useful definition of “Sustainability” was given by Dow Jones Sustainability Indexes as “a business approach that creates long-term shareholder value by embracing opportunities and managing risks from economic, environmental and social developments”. Branding is one of the most dominant factors in today’s business. Many companies believe that brand is their most valuable asset. The marketers want to reduce marketing expense and increase sales to create marketing efficiency. Strong brand equity can ensure higher profit margin. The concept of brand equity and its measurement have gained considerable attention from academicians, practitioners, and researchers. Customer-based brand equity means measurement of cognitive and behavioral brand equity at individual customer’s level. The customer-based brand equity focuses on “customer mind-set” and is explained with perceived quality, awareness, associations, image, loyalty and asset (Aaker, 1991 & Keller, 1993).

A good number of empirical researchers have found a wide range of dimensions after measuring brand equity through brand image. Brand image is consumers’ perception for a brand related to numerous associations formed through experiencing of the brand. Brand image is multidimensional in nature. There has no consensus on measuring brand image. This study promises valued information for the operationalisation of customer based brand equity components and how they interact with each other in the system of banking industry.

Experience of a brand is largely influenced by its utility. When service meets the expectation, a positive brand image is supposed to be created. This study proposed seven dimensions; perceived quality, brand awareness, brand associations, brand image, brand loyalty, brand name and overall brand equity for measuring brand image.

## 2. Objectives

The main objective of the study is to evaluate brand equity of Islami Bank Bangladesh Limited with the help of dimension analysis.

### 2.1. Hypothesis

In order to fit the model, we used Confirmatory Factor Analysis (CFA) where the following hypothesis has tested:

H0: Brand Image and Brand Loyalty have no significant influence over Brand Equity

H1: Brand Image and Brand Loyalty have significant influence over Brand Equity

## 3. Literature Review

Randheer, Al-Motawa and Khan (2012) examined brand image over brand equity. Brand image formulates in three dimensions; value, quality and awareness. Questionnaire was designed by 30 items and data was collected from 658 students. To establish uni-dimensionality, reliability and convergent validity they were using confirmatory factor analysis; fit index, cronbach alpha, Better bonnet coefficient. Before confirmatory factor analysis they were use exploratory factor analysis. To make a decision need to focus more on brand image.

Doostar, Abadi and Abadi (2012) suggested that Brand equity has a direct impact on consumer purchase decisions. This survey used 400 buyers' opinion on their daily consumption (food product). Customer based was examined using SPSS software for data analysis and hypothesis testing.

Fatema, Azad and Fatema (2012) examined Brand Equity using Exploratory Factor Analysis. The calculated factor loadings were three with first motivated factor as Brand Image. The study used 645 Customers of Islami Bank Bangladesh limited to determine customer based brand equity that mentioned the Latent variables where most significant variable was brand image. It used the Aaker's five factor model. But, finally the study found causal relationship among seven dimensions of Brand equity proposed by the researchers.

Lee and Leh (2011) found strong correlation between brand image and brand equity on Malyasion Brand. Based on 30 constructs were compiled four factor loading; brand awareness, brand association, perceived quality and brand loyalty. This factors Cronbach alpha 0.96 were eigenvalue greater than 1.0.

Gill and Dawra (2010) studied brand image on toothpaste. They used 260 samples to evaluate the mediating role of brand image over brand equity. According to them, there were two groups in defining brand equity; a) a customer's additional preference for a branded product over a no-name product and b) a set of assets proposed by Aaker's model. After reconciling both the groups the authors found that Aaker's model was inadequate in examining brand equity.

Atilgan, Akinci, Aksoy and Kaynak (2009) depicted global brand of brand equity measured by four dimension such as perceived quality, brand loyalty, brand associations and brand trust. To highlight / calculated the global brand over brand equity three renewed countries; USA, Turkey and Russia, this countries are economically and culturally dissimilar.

Tong and Hawly (2009) studied on causal relationship among the four dimensions of brand equity and overall brand equity in the sportswear industry. To evaluate customer based brand equity in the Chinese sportswear market. The data was collected from 304 actual consumers with china's two largest cities; Beijing and Shanghai. China is the world's fastest growing market for sportswear products, this study also provided important insights of Chinese consumer's perceptions. The findings concluded Brand association and brand loyalty have strongest influence on brand equity. However, perceived quality and brand awareness's found negligible influence.

Kayaman and Arasli (2007) studied on hotel industry. Their study depicts that improve brand image gets highest preference for hotel industry in measuring customer based brand equity which consisted of brand awareness, brand loyalty, perceived quality and brand image. Their study supported three dimensional model of customer based brand equity.

Sriram, Balachander and Kalwani (2007) evaluated the usefulness of brand equity from store-level data. The authors used random co-efficient logit demand model along with the impact of marketing actions; advertising, sales promotions and product innovations. The study measured of strongly positioned popular brands and significant price premium in niche markets. The paper suggested that, brand manager can track brand equity using store level data and achieve brand equity targets.

Yahoo and Donthu (2001) found that the new brand equity scale was reliable, valid, parsimonious and generalize able with several cultures and products. Multistep psychometric tested by theoretical and practical implications of the study. They evaluated 12 brands three product categories; athletic shoes, film for cameras and color televisions sets.

Number of 1530 (American, Korean American and Korean) customers was participated to measure customer based brand equity scale.

#### 4. Methodology

The required data was collected from primary sources. We used structured questionnaires focusing on taking the interviews of the customers which was divided into two parts; first part is concerned with the demographic variable and second part associate with twenty five (25) observed variables.

In order to identify the brand image of Islami Bank Bangladesh Limited, a number of 330 (33×10) respondents were interviewed from the respective customers, based on Dhaka City with 33 branches. From each branch, a number of 10 respondents have been selected randomly. The respondents were asked to fill in the questionnaire by measure the seven constructs on a 5-point Likert scale (1 = Low score of agree to 5 = highly agree) as suggested by Anderson and Gerbing (1988).

Theory derived from the most often used literature survey and repeatedly used criteria are used in this study. Both Exploratory Factor Analysis and Confirmatory Factor Analysis were used to examine the proposed model. In the study data reliability was found through Cronbach Alpha which was used of which a value of more than 0.70 is proposed which seems to reflect the idea in many literatures of what an acceptable Alpha should be (Nunnally, 1967). For the factor loading and principle component analysis the following criteria were used: factor loadings should be  $>.50$  and the difference between factor loadings of an item on two factors should be  $>.10$ . If items in the scales yielded by the factor analysis did not meet the criteria, they were removed from the scales. Therefore, the scales which were adopted in this study have fewer items than the scales as developed in the paper.

#### 5. Model Specification

The following assumes that the  $p$  observed variables (the  $X_i$ ) that have been measured for each of the  $n$  subjects have been standardized.

$$X_1 = a_{11}F_1 + \dots + a_{1m}F_m + e_1$$

$$X_2 = a_{21}F_1 + \dots + a_{2m}F_m + e_2$$

$$X_p = a_{p1}F_1 + \dots + a_{pm}F_m + e_p$$

The  $F_j$  are the  $m$  common factors, the  $e_i$  are the  $p$  specific errors, and the  $a_{ij}$  are the factor  $p \times m$  factor loadings. The  $F_j$  have mean zero and standard deviation one, and are generally assumed to be independent. (We will assume this orthogonality below, but it is not true for oblique rotations.) The  $e_i$  are also independent and the  $F_j$  and  $e_i$  are mutually independent of each other.

In matrix form this can be written as:

$$X_{p \times 1} = A_{p \times m} F_{m \times 1} + e_{p \times 1}$$

Which is equivalent to?

$$\sum = AA^T + COV(e)$$

Where  $\sum p \times p$  is the correlation matrix of  $X_{p \times 1}$ . Since the errors are assumed to be independent,  $cov(e)$  should be a  $p \times p$  diagonal matrix. This implies that

$$Var(X_i) = \sum a_{ij}^2 + Var(e_i)$$

The sum of  $a_{ij}^2$ 's squared factor loadings is called its communality (the variance it has in common with the other variables through the common factors). The  $i$ th error variance is called the specificity of  $X_i$  (the variance that is specific to variable  $i$ ).

#### 6. Analysis and Findings

Of the selected respondents, 330 were successfully interviewed and were used in the final analysis. Structural Equation Modeling (SEM) was employed for Exploratory Factor Analysis and Confirmatory Factor Analysis.

##### 6.1. Exploratory Factor Analysis

In Exploratory Factor Analysis the aggregate measures for data were correlated with each other and with the scales derived from factor analysis. To assess the reliability and internal consistency of the scales several criteria were used. Items that did not meet the criteria were left out from subsequent analyses. This was done to increase the homogeneity of the scales.

I followed the two-step approach recommended by Anderson and Gerbing (1988). In the first stage, the measurement model was analyzed to ensure sufficient reliability and validity of the constructs. In the second stage, the factor loading of each variable were tested and analyzed.

6.2. Reliability

At first, we examined internal consistency of the collected data. Often, only Cronbach's Alpha ( $\alpha$ ) (Cronbach, 1951) is given as an indication of internal consistency. This, however, has two problems. First,  $\alpha$  is affected by the number of items in a scale. A value of Alpha higher than 0.70 has been suggested as adequate by Nunally (1967). However,  $\alpha$  of a scale with many items can be higher with a relatively low average inter-item correlation. In a uni-dimensional scale, a relatively high average inter-item correlation would be expected. Secondly,  $\alpha$  is affected by dimensionality within a scale. Although  $\alpha$  decreases as a function of multidimensionality, it can reasonably be high even when items are somewhat interrelated (Cortina, 1993). Therefore, not only Cronbach  $\alpha$  but also the average of the scale were calculated.

The scale statistics for the dimensions of brand equity are presented in Table 01. It shows that among all the latent factors, only demographic variable, consisting of 6 observed variables has a score of 0.245 only. This lowest value of Cronbach Alpha signifies low consistency of observed data. This may because of the fact that most of the observed variables content missing data. All other latent variables have scores of more than 0.7 with the exception of "Overall Brand Equity".

This demonstrates consistency of the observed variables. The values of inter-item mean of all the variables ranges from 4.3 to 4.6 excluding demographic variable (Table 01). The values of Inter-item Standard Deviation (SD) of the latent factors reveal that respondents were heterogeneous in nature (Cronbach, 1951). The combined result of Cronbach Alpha for all the 32 variables scores 0.913 which is really high. This overall high value of Cronbach Alpha signifies almost consistency of all the collected data used for the paper.

Table 1. Reliability Score of Latent Factors

| SL. No. | Latent Factor/<br>Unobserved Variables | No. of Items | Cronbach Alpha ( $\alpha$ ) | Inter-item Mean | Inter-item Std. Deviation |
|---------|----------------------------------------|--------------|-----------------------------|-----------------|---------------------------|
| 1       | Perceived Quality                      | 4            | .701                        | 4.223           | 2.952                     |
| 2       | Brand Awareness                        | 3            | .739                        | 4.173           | 2.200                     |
| 3       | Brand Association                      | 4            | .783                        | 4.386           | 2.933                     |
| 4       | Brand Loyalty                          | 5            | .794                        | 4.165           | 3.867                     |
| 5       | Overall Brand Equity                   | 3            | .632                        | 4.177           | 2.256                     |
| 6       | Brand Image                            | 3            | .738                        | 4.433           | 2.038                     |
| 7       | Brand Name                             | 3            | .655                        | 4.535           | 1.700                     |
| 8       | Demographic Variables                  | 6            | .245                        | 2.302           | 2.730                     |

Source: Computed with primary data using SPSS (20)

Adequacy of sampling was done using Kaiser-Meyer-Olkin measurement in Table 02. All 25 observed variables were considered for the test. It has resulted in 0.921 and signified satisfactory sampling adequacy for testing farther factor analysis. Bartlett's Test of Sphericity was also tested which results positive Chi-Square with significant level of 0%.

Table 2. KMO and Bartlett's Test

|                                                  |                    |          |
|--------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |                    | .921     |
| Bartlett's Test of Sphericity                    | Approx. Chi-Square | 3847.615 |
|                                                  | df                 | 300      |
|                                                  | Sig.               | .000     |

It should be noted that BN1, PQ1,PQ4,BAW3,BAS3,BAS4,BL1,BL2,BL3,OBE1,OBE2,OBE3 and BIM3 are significantly and positively (Appendix, Table I) loaded to run factor analysis. This represents Nonparametric Zero-Order Correlations Coefficient between the 25 observed variables. Using the results, we have reduced 13 observed variables in order to make the factor to be loaded properly. In the simple regression test, they found to be less influential than the correspondent observed variables and hence reduction of these eight variables gives a properly loaded factor result.

Scree Plot

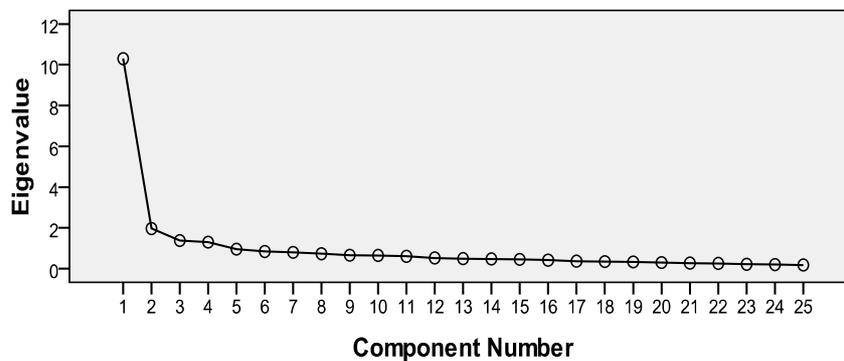


Figure 1. Scree plot

Table 03 shows the results of the factor analysis using PCA with varimax rotation technique to determine dimensions of observed variables. After grouping the variables with a factor loading higher than 0.5 under a factor, the result of factor analysis shows that there were three Brand Equity dimensions effect the total customer based Brand Equity. These four factors are accounted for total variance of 59.263% (Table 3).

**First Dimension (Brand Position):** This component is composed of initial four observed variables namely BIM1 (I can rely on Shariah aspects to transact with IBBL), BIM2 (IBBL offers guaranteed Halal products), BL4 (I will be IBBL customer's even if they increased price of the service), BL5 (I would like to recommend IBBL to my friends) with factor loading of .759, .732, .597 and .692 respectively. This component alone is accounted for 38.801% of variation with an Eigen value of 8.148 (Table 03). Such high result signifies that within this analysis the above-mentioned six observed variables are mostly significant for the calculation of customer based Brand equity of IBBL.

**Second Dimension (Customers' Intension):** This dimension consists of four variables namely BAW1; Some special characteristics of the bank come to my mind quickly, BAW2; I can recognize the bank quickly among other competing banks, PQ2; Service of the banks would be of very good quality, PQ3; Service from the Bank offers excellent features, with factor loading of .697, .755, .660 and .730 respectively. This dimension is second most priority factor for higher level of brand equity scoring Eigen value of 1.699 with 8.088% of variance (Table 03).

**Third Dimension (Brand Associations):** This dimension consists of four observed variables namely BAS1 (IBBL has very unique brand image, compared to competing brands), BAS2(I respect and admire people who have account at IBBL) with factor loading of .702 and .653 respectively. This dimension is the third most priority factors for brand equity calculation with Eigen value of 1.353 with 6.443% of variance (Table 03).

Table 3. Factor analysis of Customer Based Brand Equity

|               | Component |       |       |       |
|---------------|-----------|-------|-------|-------|
|               | 1         | 2     | 3     | 4     |
| BIM1          | .759      |       |       |       |
| BIM2          | .732      |       |       |       |
| BL4           | .597      |       |       |       |
| BL5           | .692      |       |       |       |
| BAW1          |           | .697  |       |       |
| PQ2           |           | .660  |       |       |
| PQ3           |           | .730  |       |       |
| BAS1          |           |       | .702  |       |
| BAS2          |           |       | .653  |       |
| BN2           |           |       |       | .702  |
| BN3           |           |       |       | .824  |
| Eigenvalues   | 8.148     | 1.699 | 1.353 | 1.262 |
| % of Variance | 38.801    | 8.008 | 6.443 | 6.011 |

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Third Dimension (Brand Associations): This dimension consists of four observed variables namely BAS1 (IBBL has very unique brand image, compared to competing brands), BAS2(I respect and admire people who have account at IBBL) with factor loading of .702 and .653 respectively. This dimension is the third most priority factors for brand equity calculation with Eigen value of 1.353 with 6.443% of variance (Table 03).

Forth Dimension (Brand name): his component consists of initial four observed variables namely BN2 (Easy to understand the brand positioning of IBBL by its naming), BN 3(Whenever I think of Islamic Banking, the name of IBBL comes in mind) with factor loading of .702 and .824 respectively. This component alone accounts for 6.011% of variation with an Eigen value of 1.262 (Table 03). Such high result signifies that within this analysis the above-mentioned six observed variables are mostly significant for the calculation of customer based Brand equity of a brand

Above results signify that Brand Image and Brand Loyalty (with observed variables of BIM1, BIM2, BL4 and BL5) have been placed into first dimension of factor analysis and hence a higher percentage of importance is required for creating brand image than others latent variables of customer based brand equity. It is also to be mentioned here that such high result for brand image creates an opportunity to reshape the model of brand equity given by Aaker's five factor model.

### 6.3. Confirmatory Factor Analysis

According to the results gathered in the study in earlier part, we found component of Brand image and brand loyalty has been positioned in the first factor. With that connection, we have tested Confirmatory factor analysis for the said sample where individual performance of each observed variable is tested with the latent variable e.g. Brand Image and Brand Loyalty. Correlation between these two latent variables has also tested here. The following model (Figure 02) has been briefly explaining the relations as guided above.

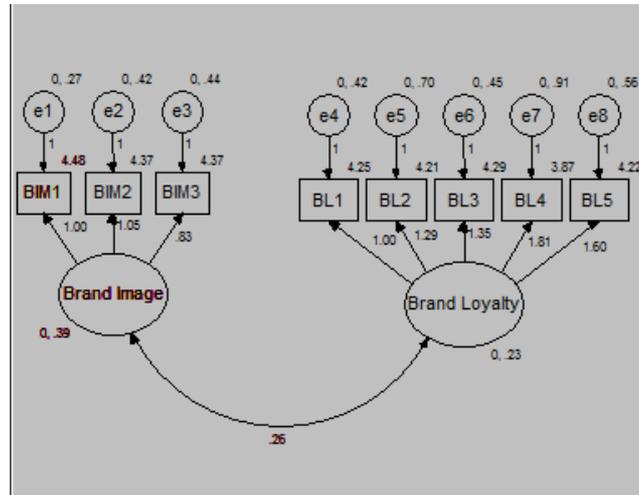


Figure: 02  
 Contribution of Brand Image and Brand Loyalty over Brand Equity  
 Minimum was achieved  
 Chi-square = 100.028  
 Degrees of freedom = 19  
 Probability level = .000

#### 6.4. Maximum Likelihood Estimates

As the results are shown in Appendix, estimates of the following model parameters describe the acceptance of the model. The manifest variables are accepted as significant at .05 levels. Parameters are:

- Regression weights:  
 Level of significance for regression weight is accepted for each observed variables excepting BIM1 and BL1. The probability of getting a critical ratio as large as 11.451 in absolute value is less than .001. In other words, the regression weight for Brand Image in the prediction of BIM2 is significantly different from zero at the .001 level (two-tailed). These statements are approximately correct for large samples under suitable assumptions.
- Variances of exogenous variables  
 The probability of getting a critical ratio as large as 99.09 in absolute value is less than .001. In other words, the intercept in the equation for predicting all are significantly different from zero at the .001 level (two-tailed).
- Covariances among exogenous/ latent variables  
 The probability of getting a critical ratio as large as 7.546 in absolute value is less than .001. In other words, the covariance between Brand Loyalty and Brand Image is significantly different from zero at the .001 level (two-tailed).

Table 4. Model Fit Summary

| CMIN               |      |         |    |      |         |
|--------------------|------|---------|----|------|---------|
| Model              | NPAR | CMIN    | DF | P    | CMIN/DF |
| Default model      | 25   | 100.028 | 19 | .000 | 5.265   |
| Saturated model    | 44   | .000    | 0  |      |         |
| Independence model | 8    | 923.157 | 36 | .000 | 25.643  |

NPART is the number of distinct parameters ( $q$ ) being estimated. Two parameters (two regression weights, say) that are required to be equal to each other count as a single parameter, not two. CMIN is the minimum value,  $\hat{C}$ , of the discrepancy,  $C$ .  $P$  is the probability of getting as large a discrepancy as occurred with the present sample (under appropriate distributional assumptions and assuming a correctly specified model). That is,  $P$  is a “p value” for testing the hypothesis that the model fits perfectly in the population.

One approach to model selection employs statistical hypothesis testing to eliminate from consideration those models that are inconsistent with the available data. Hypothesis testing is a widely accepted procedure and there is a lot of experience in its use. However, its unsuitability as a device for model selection was pointed out early in the development of analysis of moment structures (Jöreskog, 1969).

$P$  value is assuming that the Default model is correct, the probability of getting a discrepancy as large as 100.028 is .000. Again, the Independence model is correct, the probability of getting a discrepancy as large as 923.157 is .000.

Table 5. Model Fit Summary

| Model              | RMSEA |       |       |        |
|--------------------|-------|-------|-------|--------|
|                    | RMSEA | LO 90 | HI 90 | PCLOSE |
| Default model      | .114  | .092  | .136  | .000   |
| Independence model | .274  | .259  | .289  | .000   |

A value of the RMSEA of about .05 or less would indicate a close fit of the model in relation to the degrees of freedom. This figure is based on subjective judgment. It cannot be regarded as infallible or correct, but it is more reasonable than the requirement of exactness. RMSEA = .114 for the Default model and RMSEA = .274 for the Independence model signify that the model is a close fit.

So, the model is significantly stating strong influence of brand image over brand equity. As a result, the null hypothesis of  $H_0$  is rejected and Alternative hypothesis  $H_1$  (Brand Image and Brand Loyalty has significant influence over Brand Equity) is accepted.

## 7. Conclusion

Effective brand management contributes to long term sustainability of the financial institution besides enhancing the customer loyalty. Future researches may also be carried out by using the greater sample size to investigate more about the customer satisfaction in an Islamic banking perspective. There are many other factors as price, processing time, convenience etc that might influence the customer’s decision making process. Hence, they may also be incorporated in this model while carrying out the future researches. This study has focused only on the customers of Islami Bank Bangladesh Ltd. For future research, comparison of different Islamic banks may also be carried out to determine the best practices.

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**Appendix**

Appendix (Table I)

List of variables and their short name

| Short Name | Type                                                                                               |
|------------|----------------------------------------------------------------------------------------------------|
| PQ         | <b>Perceived Quality</b>                                                                           |
| PQ1        | I trust the quality of the service (based on Shariah)                                              |
| PQ2        | Service of the banks would be of very good quality                                                 |
| PQ3        | Service from the bank offers excellent features                                                    |
| PQ4        | Service provided by IBBL is of low cost than other banks                                           |
| BAW        | <b>Brand Awareness</b>                                                                             |
| BAW 1      | Some special characteristics of the bank come to my mind quickly                                   |
| BAW 2      | I can recognize the bank quickly among other competing banks                                       |
| BAW 3      | I am familiar with the brand                                                                       |
| BAS        | <b>Brand Association</b>                                                                           |
| BAS1       | IBBL has very unique brand image, compared to competing brands                                     |
| BAS2       | I respect and admire people who have account at IBBL                                               |
| BAS3       | I like the brand image(Islamic image) of IBBL                                                      |
| BAS4       | I like and trust IBBL for its Shariah Compliance                                                   |
| BL         | <b>Brand Loyalty</b>                                                                               |
| BL1        | I consider myself to be loyal to IBBL                                                              |
| BL2        | When doing banking, IBBL would be my first choice                                                  |
| BL3        | I will keep on using IBBL as long as it provides me satisfied service                              |
| BL4        | I will be IBBL's customer even if they increased price of the service                              |
| BL5        | I would love to recommend IBBL to my friends                                                       |
| OBE        | <b>Overall Brand Equity</b>                                                                        |
| OBE1       | Even if another brand has the same features as IBBL, I would prefer to use IBBL                    |
| OBE2       | If another brand is not different from IBBL in any way, it seems rationale to be with IBBL         |
| OBE3       | IBBL is more than a bank to me                                                                     |
| BIM        | <b>Brand Image</b>                                                                                 |
| BIM1       | I can rely on Shariah aspects to transact with IBBL                                                |
| BIM2       | IBBL offers guaranteed Halal products.                                                             |
| BIM3       | As the personnel of IBBL are practicing Muslims, I feel secured of its Shariah compliant services. |
| MN         | <b>Brand Name</b>                                                                                  |
| BN1        | Its name is more convincing and directly reflects Islam.                                           |
| BN2        | Easy to understand the brand positioning of IBBL by its naming.                                    |
| BN3        | Whenever I think of Islamic banking, the name of IBBL comes in mind.                               |

Appendix (Table II)

Nonparametric Zero-Order Correlations Coefficient between the observed variables

BNS | .194 | .280 | .287 | .221 | .286 | .332 | .401 | .348 | .313 | .384 | .267 | .320 | .404 | .340 | .191 | .243 | .376 | .368 | .227 | .317 | .240 | .213 | .344 | .455 | 1.000

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

**Model Estimation**

**Estimates (Group number 1 - Default model)**

**Scalar Estimates (Group number 1 - Default model)**

**Maximum Likelihood Estimates**

**Regression Weights: (Group number 1 - Default model)**

|                        | Estimate | S.E. | C.R.   | P   | Label |
|------------------------|----------|------|--------|-----|-------|
| BIM1 <--- Brand Image  | 1.000    |      |        |     |       |
| BIM2 <--- Brand Image  | 1.047    | .091 | 11.451 | *** |       |
| BIM3 <--- Brand Image  | .833     | .083 | 10.052 | *** |       |
| BL1 <--- Brand Loyalty | 1.000    |      |        |     |       |
| BL2 <--- Brand Loyalty | 1.293    | .152 | 8.486  | *** |       |
| BL3 <--- Brand Loyalty | 1.351    | .144 | 9.414  | *** |       |
| BL4 <--- Brand Loyalty | 1.814    | .197 | 9.229  | *** |       |
| BL5 <--- Brand Loyalty | 1.605    | .168 | 9.552  | *** |       |

**Intercepts: (Group number 1 - Default model)**

|      | Estimate | S.E. | C.R.   | P   | Label |
|------|----------|------|--------|-----|-------|
| BIM1 | 4.478    | .045 | 99.090 | *** |       |
| BIM2 | 4.373    | .051 | 85.746 | *** |       |
| BIM3 | 4.367    | .047 | 93.504 | *** |       |
| BL1  | 4.250    | .045 | 93.830 | *** |       |
| BL2  | 4.205    | .058 | 72.913 | *** |       |
| BL3  | 4.295    | .052 | 82.995 | *** |       |
| BL4  | 3.870    | .072 | 54.036 | *** |       |
| BL5  | 4.218    | .060 | 70.257 | *** |       |

**Covariances: (Group number 1 - Default model)**

|                                | Estimate | S.E. | C.R.  | P   | Label |
|--------------------------------|----------|------|-------|-----|-------|
| Brand Loyalty <--> Brand Image | .265     | .035 | 7.546 | *** |       |

**Variances: (Group number 1 - Default model)**

|               | Estimate | S.E. | C.R.   | P   | Label |
|---------------|----------|------|--------|-----|-------|
| Brand Image   | .388     | .053 | 7.307  | *** |       |
| Brand Loyalty | .233     | .043 | 5.404  | *** |       |
| e1            | .271     | .032 | 8.458  | *** |       |
| e2            | .419     | .043 | 9.760  | *** |       |
| e3            | .444     | .040 | 11.044 | *** |       |
| e4            | .425     | .038 | 11.286 | *** |       |
| e5            | .698     | .061 | 11.414 | *** |       |
| e6            | .447     | .043 | 10.395 | *** |       |
| e7            | .908     | .085 | 10.681 | *** |       |
| e8            | .564     | .056 | 10.052 | *** |       |