# Measuring the Perceived Service Quality: An Empirical Study of Islamic Banks in the UAE

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### **ABSTRACT**

This study measures the perceived level of service quality in the UAE Islamic banks, using a modified SERVQUAL model. The study attempts to determine the extent of the correlation and relationship that might exist between the service quality dimensions and Islamic banking variables on the one hand and between these and the independent variables on the other. The Islamic banking variables in this study include: return on investment accounts, services compliance with Islamic Shari'ah, financings compliance with Islamic Shari'ah, competitive service fees, competitive finance rate, availability of all banking services, availability of profit-sharing finance, employee awareness of Islamic banking services and products and the trustworthiness of Shari'ah boards. The service quality dimensions include: tangibles, assurance, reliability, responsiveness and empathy, while the independent variables include: avoiding interest-based financing or riba, customers' familiarity with products and services and customers' demographic factors.

Theoretically, the Islamic banks's service quality model that is used in this study proved to be reliable and viable to measure the perceived service quality in Islamic banks. In addition, the study proved that the level of customers familiarity with Islamic bank products and services, riba and Islamic banking variables have significant effect on customers' perceptions of the service quality offered by the UAE Islamic banks.

The study's empirical findings have proved the Islamic banking variables, reliability, tangibles and assurance have extreme importance over the remaining dimensions, which the UAE Islamic banks customers take in account when they judge the level of perceived service quality in their bank. Revealing such customer preferences can help Islamic banks in the UAE in setting effective and efficient customer segmentation plan and marketing mix strategy.

The study, also, demonstrated that the distinction of providing high quality banking services will result in achieving high profitability, customer loyalty, and steady growth. This study also argues that management competence in human resource management, allocation of sufficient funds to develop liquidity management tools and diversifying the financial and investments portfolios will enable the UAE Islamic banks to sustain the niche market they are aiming to occupy.

### Introduction

In the two decades up to 1992, the number of studies and articles that are published by academic researchers and business professionals on the subject of service and service quality reached around 15,000 and the number continues to rise.<sup>1</sup>

The underlying reason for this increase is that the service sector has become a major employer, adding greatly to the economy.<sup>2</sup> For instance, by the end of 1977, the value of services in the United States economy exceeded that of manufactured products, accounting for 66 per cent of the total Gross National Product (GNP), and 58 per cent of global GNP.

Business firms can therefore derive numerous advantages from excellent quality.<sup>3</sup> Thus, some researchers have found that a high level of quality affects price, as there is a "relationship cost" resulting from the level of trust and confidence. In other words, an excellent perceived quality leads to a high price. However, Rust and Oliver disagree, arguing that despite excellent quality, too high a price will result in the customer still rating the product as poor value.<sup>4</sup>

Another advantage of excellent quality is long-term income, because attracting a new customer costs a company more than keeping an old one. Moreover, excellent quality produces the solid word – of mouth (WOM) recommendation that stems from an image of good quality, whereas poor quality can cause a customer to tell ten other people about his dissatisfaction. In this regard, Zeithaml points out that much research and fieldwork has revealed that delivering excellent service quality will produce value added benefits to businesses, resulting in increased operational profit and decreased operational cost.<sup>5</sup>

The Profit Impact of Marketing Strategists (PIMS) study of US service business firms mentions that there is a strong correlation between quality and profitability, particularly in the case of the world-class quality company whose costs are lower because customer requirements are better known. Moreover, good quality results in customer loyalty, repeat purchases, an avoidance of price wars, market share improvements, and the ability to command a high price without losing market share.

It appears that many leading companies use quality in order to be different, to increase productivity; to obtain customer loyalty and to avoid price competition. For instance, the US Technical Assistance Research Programs Institute (TARP) reported that each customer retained by a bank for over five years equated to roughly \$175 in profits. Also, the American Society for Quality Control (ASQC) and the GALLUP organization reported a strong relationship between quality and price realization. They further noted

<sup>2</sup> Cronin J. Joseph and Steven A. Taylor, "Measuring service quality: A re-examination and extension", *Journal of Service Marketing*, Vol. 56, Issue 3, July 1992, pp. 55-68.

<sup>&</sup>lt;sup>1</sup> Stewart, Scott Ian, "Customer satisfaction in the metropolitan ambulance service", *Unpublished thesis*, Victoria Graduate School of Business, Faculty of Business and Law, August, 2001; and Garvin, David A., *Managing quality: the strategic and competitive edge*, The Free Press, New York, 1988, p.36.

Armisted, G. Colin and Graham Clark, Customer service and support: Implementing effective strategies, Pittman Publishing, London, 1992, p.156.
 Rust, T. Roland and Richard L. Oliver, Service quality insights and managerial implications from the frontier, Roland T.

<sup>&</sup>lt;sup>4</sup> Rust, T. Roland and Richard L. Oliver, Service quality insights and managerial implications from the frontier, Roland T. Rust and Richard L. Oliver (eds.), *Service quality: New directions in theory and practice*, Sage Publications, California, 1994, pp.1-19.

<sup>&</sup>lt;sup>5</sup> Zeithaml, Valarie A., et al., "Communication and control processes in the delivery of service quality", John E. G. Bateson (ed.), *Managing service marketing: Text and readings*, The Dryden Press, Second Edition, Florida, 1992, p. 522.

<sup>&</sup>lt;sup>6</sup> Zeithaml, V. A., et al., *Delivering quality service: Balancing customer perceptions and expectations*, The Free Press, New York, 1990, p. 2.

that a satisfied customer tells only a few people, while the dissatisfied one will, on average, tell 19 others.<sup>7</sup>

Since it has become more difficult for organizations to diversify, they have been forced to regard service quality as one of the weapons of competition. The evidence in the area of material commodities production or services manufacturing indicates that quality determines an organization's market share and investment returns, in addition to being a method of reducing expenses.

The aim of this study is to test the extent to which it is possible to use a modified SERVQUAL to measure the perceived service quality in Islamic banks in the United Arab Emirates, based on the SERVQUAL model as presented by Parasuraman and his colleagues.<sup>8</sup> It is possible to express the study problem in the following questions:—

- i. In accordance with the modified SERVQUAL model, what is the current perceived level of service quality of the UAE's Islamic banks?
- ii. What is the relative importance of the service quality dimensions in explaining the overall perceived service quality from the point of view of Islamic bank customers in the UAE, and how viable and reliable are these dimensions?
- iii. Do the dimensions of service quality contribute equally to the variations in the overall service quality?
- iv. What are the most influential dimensions in the modified SERVQUAL model on the perceived level of service quality of Islamic banks in the UAE?
- v. What is the relative importance of Islamic banking variables, which include: *Shari'ah* Board Trustworthiness, Employee Awareness of Islamic Banking Services and Products, Availability of Profit-Sharing Finance, Availability of all banking services, Competitive Finance rate, Competitive Service fees, Financings Compliance with Islamic *Shari'ah*, Services Compliance with Islamic *Shari'ah*, Return on Investments Accounts, in forming the perception of the level of service quality provided by the UAE Islamic banks.
- vi. Is there a correlation between the level of service quality as perceived by the customers of the UAE Islamic banks and the factor of avoiding interest-based financings (*riba*)?
- vii. Does the extent of a customer's familiarity with Islamic bank products and services affect his or her perception of service quality in these banks?
- viii. To what extent do a customer's demographic factors, such as age, education, income and number of years of dealing with banks, participate in influencing that customer's perception of service quality in the UAE Islamic banks?

### Literature Review

**Service Quality Definition** 

Palmer defines service quality as the perceived level of service performance, 9 while service quality from Goetsch's, Howcroft, Murdick and Smith, Creedon and Lewis and Lewis and Booms agreed that service quality definition is to satisfying the needs and expections of the customers. 10 11 12 13

Fortuna, Ronal M., "The quality imperative", The Ernest & Young Quality Improvement Consulting Group (ed.), *Total quality: A manager's guide for the 1990s*, Kogan Page Limited, London, Second Edition, 1992, pp. 5-25.
 Zeithaml, Valarie, et al., cit. op. p.131.

<sup>&</sup>lt;sup>9</sup> Palmer, Adrian, *Principles of service marketing*, Dementfort University, McGraw-Hill Book Company Europe, Berkshire, England, 1994, p.131.

<sup>&</sup>lt;sup>10</sup> Goetsch, David L. and Stanley B. Davis, *Introduction to total quality: quality management for production, processing, and services*, Prentice-Hall Inc., Second Edition, 1997, New Jersey, p. 3.

<sup>&</sup>lt;sup>11</sup> Blanchard, R. F. and R. L. Galloway, "Quality in retail banking", *International Journal of Service Industry Management*, Vol. 5, No. 4, 1994, pp. 5-23.

Parasuraman and Liljander and Tore agreed on that service quality is the difference between expectation and the performance of the service or the perception of the customer. in this regrds Parasuraman defined service quality "the direction and degree of difference between the customers' perception of the service and their expectations about it" and Liljander and Tore have defined service quality as the difference between what a service company should offer and what it actually does offer. <sup>15</sup>

### The SERVQUAL Model

It was Parasuraman and his colleagues who developed the service quality measurement model known as SERVQUAL. This model is based on a comparison between the customer's expectations of the standard of service he will receive and his perception of the standard of service which is actually delivered. This leads to a determination of the gap or correspondence between expectations and perceptions that is carried out by using the five dimensions which represent service quality: tangibles, reliability, responsiveness, assurance and empathy. Parasuraman explains the importance of the measurement model as lying in the fact that it has been designed to suit a large selection of services. The basic structure of this model consists of a number of expressions that may be modified in accordance with the nature of the service organization being measured. This measurement model is considered highly valuable if used regularly to trace the directions of service quality. Furthermore, Parasuraman et al. see the service quality measurement model they developed as one of the models that have been shown to enjoy a high degree of validity and stability. <sup>16</sup>

SERVQUAL has been used in several studies in wide range industries, for instance; Reidenbach and Beverly used SERVQUAL to measure individual perception of the service quality of hospital operations, <sup>17</sup> Headley and Miller used SERVQUAL to measure the quality of medical care, <sup>18</sup> Mehta and Durvasula <sup>19</sup> and Mehta and Durvasula <sup>20</sup> proved the importance of service quality in the business-to-business market. Lin et al. attempted to measure the correlation between service provider personality and service performance by using the SERVQUAL model. <sup>21</sup> Meanwhile, other studies researched the reliability

<sup>12</sup> Jensen, John B. and Robert E. Markland, "Improving the application of quality conformance tools in service firms", *Journal of Service Marketing*. Vol. 10, Issue 1, 1996, p. 35.

<sup>&</sup>lt;sup>13</sup> Parasuraman, A., et al., *A conceptual model of service quality and its implications for future research*, Ben M. Enis, Keith K. Cox and Michael P. Mokwa (eds.), Marketing classic: A selection of influential articles, Eighth Edition, Prentice Hall, New Jersey, 1995, p. 405.

<sup>&</sup>lt;sup>14</sup> Parasuraman, A., et al., *SERVQUAL: A multiple-item scale for measuring customer perception of service quality, Working Paper*, Cambridge, Massachusetts, Marketing Science Institute, 1986.

<sup>&</sup>lt;sup>15</sup> Liljander, Veronica, and Tore Standvik, "The relation between service quality, satisfaction and intentions", Paul Kunst and Jose Lemmink (ed.), *Managing service quality*, Paul Chapman Publishing Ltd, London, UK, 1995, pp. 45-61.

<sup>16</sup> Zeithaml, Valarie A., et al., op. cit., p. 46.

<sup>&</sup>lt;sup>17</sup> Reidenbach, R. Eric and Beverly Sandifer-Smallwood, "Exploring perceptions of hospital operations by a modified SERVQUAL approach", *Journal of Health Care Marketing*, Vol. 10, No. 4, December 1990. pp. 47-55.

<sup>18</sup> Headley, Dean E. and Stephen J. Miller, "Measuring service quality and its relationship to the future", *Journal of Health* 

<sup>&</sup>lt;sup>18</sup> Headley, Dean E. and Stephen J. Miller, "Measuring service quality and its relationship to the future", *Journal of Health Care Marketing*, Vol. 13, Issue 4, Winter 1993, p. 32.

<sup>&</sup>lt;sup>19</sup> Mehta, Subhash C. and Srinivas Durvasula, "Relationships between SERVQUAL dimensions and organizational performance in the case of a business-to-business service", *Journal of Business & Industrial Marketing*, Vol. 13, Issue 1, 1998.

<sup>&</sup>lt;sup>20</sup> Mehta, Subhash C. and Srinivas Durvasula, "Relationships between SERVQUAL dimensions and organizational performance in the case of a business-to-business service", *Journal of Business & Industrial Marketing*, Vol. 13, Issue 1, 1998.

<sup>1998.

21</sup> Lin, Neng-Pai, et al., " Investigating the relationship between service providers' personality and customers' perceptions of service quality across gender", *Total Quality Management*, Vol. 12, Issue 1, January, 2001.

and viability of SERVQUAL model such as Jensen and Markland, <sup>22</sup> Nel et al., <sup>23</sup> Detchin and Oakland, <sup>24</sup> Grapentine, <sup>25</sup> Simon Cooke, <sup>26</sup> Liljander and Standvik <sup>27</sup> and Cronin <sup>28</sup>.

### **Measuring Service Quality in Banks**

Lewis defined many attributes which have a considerable negative influence on the processes of forming service quality in banking: for instance, inaccurate statements of account, slow approval of credit applications, long queues, few ATMs, few branches, unwilling employees, incomprehensible or over-complicated statements of account, high interest rates, poor training and lack of empowerment of contact personnel.<sup>29</sup>

Lassar et al. studied the effect of service quality on customer satisfaction in private banking. SERVQUAL is found to possess a high level of validity and is recommended for measuring service quality in this sector particularly. Their findings confirm those of Philip and Hazlett's study, which stated that SERVQUAL is a valid tool for diagnostic purposes. They also confirm the findings of Carman, who suggests that many industries may reveal their own dimensions, and other antecedents must be added, besides rewording the statements that describe those antecedents. The statements are compared to the statements of the statement of the

Blanchard pointed out, in his study of the implications of SERVQUAL for British banks, that SERVQUAL is able to provide top management with the essential tools for understanding customer expectations, and for setting service specifications and standards.<sup>32</sup>

In addition, Wuhrer conducted a study to measure the service quality of a banking group in Austria. He found that the SERVQUAL instrument is distinguished by high reliability if developed and based on a typology of clients, as it will add a distinctive description. Wuhrer concluded that service quality must be planned carefully and that the contingencies of the different features and branches of the bank should be taken into account.<sup>33</sup>

Blanchard studied the retail banking business of one of the leading British banks to measure the level of service quality of the bank, and concluded his findings by supporting

<sup>&</sup>lt;sup>22</sup> Jensen, John B. and Robert E. Markland, "Improving the application of quality conformance tools in service firms", Journal of Service Marketing. Vol. 10, Issue 1, 1996, p. 35.

<sup>&</sup>lt;sup>23</sup> Nel, Deon, et al., "The SERVQUAL instrument: reliability – validity in South Africa", *South Africa Journal of Business Management*, Vol. 28, Issue 3, September 97.

<sup>&</sup>lt;sup>24</sup> Detchin, John A. and John S. Oakland, "Total quality management in services", *International Journal of Quality and Reliability Management*, Vol. 11, November 4, 1994, pp. 6-28.

<sup>&</sup>lt;sup>25</sup> Grapentine, Terry, "The history and future of service quality assessment", *Marketing Research*, Winter 1998/Spring 1999. Vol. 10, No. 4, pp. 4-17.

<sup>&</sup>lt;sup>26</sup> Jensen, John B. and Robert E. Markland, op. cit., p. 35.

<sup>&</sup>lt;sup>27</sup> Liljander, Veronica and Tore Standvik, "The relation between service quality, satisfaction and intentions", Paul Kunst and Jose Lemmink (eds.), *Managing service quality*, Paul Chapman, London, 1995, p. 58.

<sup>28</sup> Cronin, J. Joseph and Steven A. Toulor, "Managing service and "Managing service and "Managing services".

<sup>&</sup>lt;sup>28</sup> Cronin, J. Joseph and Steven A. Taylor, "Measuring service quality: A reexamination and extension", *Journal of Service Marketing*, Vol. 56, No.3, 1992, pp. 55-68.

Lewis, Barbara R. and Sotiris Spyrakopoulos, "Service failures and recovery in retail banking: The customers' perspective", *International Journal of Bank Marketing*, Vol. 19, No. 1, 2000, pp. 37-47.

<sup>&</sup>lt;sup>30</sup> Lassar, Walfried M., et al., "Service quality perspectives and satisfaction in private banking", *The International Journal of Bank Marketing*, Vol. 18, No. 4, 2000, pp. 181-199.

Philip, George and Shirley-Ann Hazlett, "The measurement of service quality: A new P-C-P attributes model", International Journal of Quality & Reliability Management, Vol. 14, No. 3, 1997, pp. 260-286.
 Blanchard, R. F. and R. L. Galloway, "Quality in retail banking", International Journal of Service Industry Management,

<sup>&</sup>lt;sup>32</sup> Blanchard, R. F. and R. L. Galloway, "Quality in retail banking", *International Journal of Service Industry Management* Vol. 5, No. 4, 1994, pp. 5-23.

<sup>&</sup>lt;sup>33</sup> Wuhrer, Gerhard A., "Quality positioning in the Austrian banking industry: A benchmark case study", Paul Kunst, and Jos Lemmink (eds.), *Managing service quality*, Paul Chapman, London, 1995, pp.1-12.

the SERVQUAL model, demonstrating that it provides an excellent framework for the analysis, classification and diagnosis of customer perceptions.<sup>34</sup>

Oppewal and Vriens studied the effect of changes in service quality dimensions on the consumer's perception of service quality in the banking industry, their findings support using the performance part of SERVQUAL after making some adjustments to the dimensions and the attributes to suit the nature of the banking business. For instance, they agreed that SERVQUAL is good as a starting point to measure service quality in banks after adding different attributes, such as price, assortment and accessibility (which includes opening hours), location and transportation availability.<sup>35</sup>

Stafford's study identifies the importance of the characteristics of different demographic groups in perceiving banking service quality, with service quality being a key factor enabling banks to retain their current market share, and with SERVQUAL as a proper tool of measurement and control for the level of service quality in banking. Lepak's study showed that such characteristics of banks as progressiveness, finance stability, the experience of the finance officer, aggressive efforts to attract and retain business, interest rate offers on finance and investment, service content and fees and branch behaviour are highly influential factors in forming the customer's perception of service quality. The state of the finance of the finance and investment, service content and fees and branch behaviour are highly influential factors in forming the customer's perception of service quality.

Lee et al. measured the retail banking service, and their findings support the existence of a relation between service quality and customer satisfaction. The findings also support the validity of SERVQUAL instrument to identify more service quality variation. The researchers recommended that the business organization should improve tangible factors such as facilities and equipment, the behaviour of the contact person was found to affect the perception of the customer.<sup>38</sup>

### Measuring the Service Quality of Islamic Banks

Othman and Owen measured service quality of the Kuwait Finance House (KFS) by modified SERVQUAL model which they called CARTER. The results obtained from this study revealed that the KFH's customers evaluate service quality dimensions such as compliance with Islamic Shari'ah, assurance and responsiveness, as the most important, while dimensions such as tangibles, reliability and empathy are rated as the least important.<sup>39</sup>

Naser and Montinho studied the Islamic banking experiment, and recommended that, in the light of the vast amount of market competition, Islamic bank management should set up a performance evaluation system. This would include Islamic business ethics, such as compliance with Islamic law, customer satisfaction, and customer loyalty programmes,

<sup>&</sup>lt;sup>34</sup> Blanchard, R. F. and R. L. Galloway, "Quality in retail banking", *International Journal of Service Industry Management*, Vol. 5, No. 4, 1994, pp. 5-23.

<sup>&</sup>lt;sup>35</sup> Oppewal, Harman and Marco Vriens, "Measuring perceived service quality using integrated conjoint experiments", *The International Journal of Bank Marketing*, Vol. 18, No. 4, 2000, pp. 154-169.

<sup>&</sup>lt;sup>36</sup> Stafford, Marla Royne, "Demographic discriminators of service quality in banking industry", *Journal of Services Marketing*, Vol. 10, No. 4, 1999, pp.6-22.

<sup>&</sup>lt;sup>37</sup> Lepak, Greg M., "A Bayesian approach for analyzing the services of banking institutions", *International Journal of Consumer Affairs*, Vol.32, No.1, Summer, 1998, pp. 121-146.

Journal of Service Marketing, Vol. 14, No. 2/3, 2000, pp. 217-232.
 Othman, Abdul Qawi and Lynn Owen, "The multidimensionality of the CARTER model to measure customer service

Othman, Abdul Qawi and Lynn Owen, "The multidimensionality of the CARTER model to measure customer service quality (SQ) in the Islamic banking industry: A study of the Kuwait Finance House", *International Journal of Islamic Financial services*, Vol. 3, No. 4, April-June, 2001, Available from: <a href="http://www.islamic-finance.net/journal.html">http://www.islamic-finance.net/journal.html</a>, [Accessed on 25 May 2004].

the introduction of new products and services, the provision of a high yield on deposits, and the continuous improvement of effective and efficient operations. 40

Metawa and Al-Mossawi studied customer behaviour in Islamic banks in Bahrain. They found that contact persons must have adequate motivation and be equipped with state-ofthe-art technology in order to serve the customer better. They also recommended measurement and evaluation of the antecedents that affect the service quality in Islamic banks: for instance, factors such as the availability of credit, professional advice, friends' advice, convenient location, the variety of bank services, the quality of bank service, the availability of ATMs, opening hours, return on investment, the friendliness of the bank's personnel, understanding customers' financial needs, special services for women, and the bank's reputation.<sup>41</sup>

Naser et al. studied customer satisfaction in an Islamic bank in Jordan, and found that customers chose their bank on the basis of various criteria, including convenient location, friends' recommendations, reputation and image of the bank, availability of credit, competitive interest rate, employees' friendliness, competitive charges, opening hours, availability of ATMs and branches, and confidentiality and quality of service on current accounts. 42 The importance of those antecedents depended on many factors: namely, age, gender, income, marital status, occupation, culture and type of banking,

Finally, a study conducted by Al-Tamimi and Al-Amiri to measure the service quality of two Islamic banks operating in the United Arab Emirates used the original SERVQUAL dimensions and statements, and found that empathy and tangibles were the most important dimensions for the customers of those banks. The study also demonstrated that the number of years of dealing with the bank, age and education had a considerable influence on customer evaluation of service quality.

### **Research Methodology**

Based on the stated purpose and the questions mentioned above, the following hypotheses are formulated:

**Group One:** Hypotheses to test the differences between the customers of the different Islamic banks

Hypothesis 1 H0: There are no significant differences between the UAE Islamic Banks in the perceived service quality as measured by the SERVQUAL dimensions.

Hypothesis 1-1 H0: There are no significant differences between the UAE Islamic banks regarding the tangibles dimension.

Hypothesis 1-2 H0: There is no significant difference between the UAE Islamic banks as regards the empathy dimension.

Hypothesis 1-3 H0: There is no significant difference between the UAE Islamic banks as regards the assurance dimension.

<sup>40</sup> Naser, Kamal and Luiz Montinho, "Strategic marketing management: The case of Islamic banks", *International Journal* of Bank Marketing, Vol. 15, No. 6, 1997, pp. 187-203.

Metawa, Saad A. and Mohammed Al Mossawi, "Banking behavior of Islamic bank customers: Perspectives and

implications", *International Journal of Bank Marketing*, Vol. 16, No. 7, January 1998, pp. 299-313.

42 Naser, Kamal, et al., "Islamic banking: A study of customer satisfaction and preferences in Jordan", *International Journal* of Bank Marketing, Vol. 17, No. 3, 1999, pp. 135-150.

Al-Tamimi, Hassein A. Hassan and Abdullah Alamiri, "Analyzing service quality in the UAE Islamic banks", Journal of Financial Services Marketing, Vol. 8, No. 2, 2003, pp. 119-132.

- Hypothesis 1-4 H0: There is no significant difference between the UAE Islamic banks as regards the reliability dimension.
- Hypothesis 1-5 H0: There is no significant difference between the UAE Islamic banks as regards the responsiveness dimension.
- Hypothesis 2 H0: There is no significant difference in overall service quality among the Islamic banks in the UAE.
- **Group Two:** Hypotheses to test the relationship between the variables in the model
- Hypothesis 3 H0: There is no significant relationship between the SERVQUAL dimensions and the avoidance of interest (riba) item.
- Hypothesis 4 H0: There is no significant relationship between the SERVQUAL dimensions and customer familiarity with Islamic banking products and services.
- Hypothesis 5 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's gender.
- Hypothesis 6 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's nationality.
- Hypothesis 7 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's age.
- Hypothesis 8 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's level of education.
- Hypothesis 9 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's number of years of dealing with Islamic banks in the UAE.
- Hypothesis 10 H0: There is no significant relationship between the SERVQUAL dimensions and the customer's monthly income.
- Hypothesis 11 H0: There is no significant relationship between the Islamic banking variables and the SERVQUAL dimensions.
- Hypothesis 11-1 H0: There is no significant relationship between the Shari'ah boards' trustworthiness and the SERVQUAL dimensions.
- Hypothesis 11-2 H0: There is no significant relationship between employee awareness of Islamic banking services and products and the SERVQUAL dimensions.
- Hypothesis 11-3 H0: There is no significant relationship between the availability of profit-sharing finance and the SERVQUAL dimensions.
- Hypothesis 11-4 H0: There is no significant relationship between the availability of all banking services and the SERVQUAL dimensions.
  - Hypothesis 11-5 H0: There is no significant relationship between competitive finance rates and the SERVQUAL dimensions.
- Hypothesis 11-6 H0: There is no significant relationship between competitive service fees and the SERVQUAL dimensions.
  - Hypothesis 11-7 H0: There is no significant relationship between financings compliance with Islamic Shari'ah and the SERVQUAL dimensions.
  - Hypothesis 11-8 H0: There is no significant relationship between services compliance with Islamic Shari'ah and the SERVQUAL dimensions.
- Hypothesis 11-9 H0: There is no significant relationship between the returns on investment accounts and the SERVQUAL dimensions.

**Group Three:** Hypothesis aims to test the existence of relationships in the model for measuring the service quality of Islamic banks in the UAE

- Hypothesis 12 H0: The Islamic banking variables do not have an effect on the SERVQUAL dimensions.
- Hypothesis 13 H0: The Islamic banking variables do not have an effect on the perception of overall service quality of the UAE Islamic banks.
- Hypothesis 14 H0: The Islamic banking variables, avoidance of interest and customer familiarity with Islamic banking products and services do not have an effect on the SERVQUAL dimensions.
- Hypothesis 15 H0: The SERVQUAL dimensions, Islamic banking variables, avoidance of interest and customer familiarity with Islamic banking products and services do not have an effect on the perceived overall service quality of the UAE Islamic banks.
- Hypothesis 16 H0: Gender, age, income, education, nationality, experience, avoidance of interest and customer familiarity with Islamic banking do not have an effect on the SERVQUAL dimensions.
- Hypothesis 17 H0: Gender, age, income, education, nationality, experience, avoidance of interest and customer familiarity with Islamic banking products and services do not have an effect on the Islamic banking variables.
- Hypothesis 18 H0: Gender, age, income, education, nationality, experience, avoidance of interest, customer familiarity with Islamic banking, the SERVQUAL dimensions and Islamic banking variables do not have an effect on the perceived overall quality of service of the UAE Islamic banks.

### Measuring Customers' Perceptions: Modelling

The study will depend on the modified SERVQUAL model to measure the customers' perceptions of the level of service quality in the UAE Islamic banks. The study will also depend on the recommendations of many studies, such as those undertaken by Churchill, Surprenant, Woodruff et al., Bolton and Drew and Cronin, that support the use of a performance-based model to measure service quality in business firms.<sup>44</sup>

In addition, the SERVQUAL model that was developed by Parasuraman and his colleagues to measure service quality has been chosen because it is widely used by researchers in many industrial and service areas worldwide. <sup>45</sup> It also enjoys an acceptable degree of credibility and constancy, with its constancy factor ranging between 87 and 94 per cent. <sup>46</sup> Moreover, another researcher supports using the SERVQUAL model to measure service quality for the following reasons: <sup>47</sup>

- 1. SERVQUAL is a well documented model.
- 2. Many studies in the field have discussed extensively the strengths and weaknesses of SERVQUAL.
- 3. SERVQUAL has been used by many researchers in a number of different industries.

<sup>44</sup> Cronin J. Joseph and Steven A. Taylor, "Measuring service quality: A re-examination and extension", *Journal of Service Marketing*, Vol. 56, Issue 3, July 1992, New York, pp.55-68.

<sup>46</sup> Parasuraman, A., et al., "Reassessment of expectations as a comparison standard in measuring service quality: Implications for further research", *Journal of Marketing*, Vol. 58, Issue 1, January 1994, New York, pp.111-124.

<sup>47</sup> Zhu, X. Faye, et al., "IT-Based service and service quality in consumer banking", *International Journal of Service Industry Management*, Vol. 13, No.1, 2002, pp. 69-90.

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<sup>&</sup>lt;sup>45</sup> Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p. 131.

4. Previous studies have proved a steady and strong relationship between SERVQUAL and other global measures.

Further, the hypothesized model is a causal construct consisting of perceived Islamic banking services, which comprise a number of variables derived from much of the current literatures, in which studies have clearly identified the influence of Islamic banking variables on the formation of a customer's perception of service quality in Islamic banks. These variables include: *Shari'ah* compliance in Islamic banking services and products, competitive fees, competitive finance rates, availability of profit and loss sharing finance, employees' awareness of Islamic banking, the financial performance of Islamic banks that is reflected in the return on customers' investment accounts, the availability of banking services and the trustworthiness of the *Shari'ah* board in an Islamic bank.

The causal model hypothesizes that the perception of the quality level of the Islamic banking variables has a direct influence on the perception of the other five dimensions of the SERVQUAL model, which consist of several attributes measuring service quality.<sup>48</sup>. Figure (1) illustrates the modified model for measuring the perceived service quality of Islamic banks in the UAE.

The model hypothesized that a higher customer evaluation of Islamic banking services will result in raising the overall service quality ratings, and this will lead to increasing the customer's satisfaction, overall service quality being measured by two performance items in the questionnaire. At the same time, customer satisfaction is an antecedent of the perceived service quality in the model, in which a high rating of the perceived level of service quality in the UAE Islamic banks will result in increasing the customer's satisfaction. Also, the extent of a customer's familiarity with Islamic banking services and products, avoiding dealing with interest (*riba*), customer experience with Islamic banking and some of a customer's demographic variables are hypothesized to affect the customer's evaluation process of the quality of Islamic banking services, and his perception of service quality in general, that is measured by five dimensions in SERVQUAL as follows:

- 1. Tangibles, which means the extent to which equipment, material and technological facilities, buildings, etc. are available;
- 2. Reliability, which refers to the extent to which the organization is capable of fulfilling the promised service in an exact way;
- 3. Responsiveness: that is, the extent to which the organization is willing to help customers and offer a quick and excellent service;
- 4. Assurance, which refers to the extent to which the employees of the organization possess the knowledge and skill necessary to retain the customers' confidence and make them feel secure;
- 5. Empathy, which describes the extent to which service providers show personal interest in the customer by trying to understand his needs and putting themselves in his place.

### **Questionnaire Design**

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SERVQUAL development studies have recommended that the scale items used to measure service quality dimensions should differ from one industry to another. <sup>49</sup>Thus,

<sup>&</sup>lt;sup>48</sup> Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p. 131.

<sup>&</sup>lt;sup>49</sup> Cronin J. Joseph and Steven A. Taylor, "Measuring service quality: A re-examination and extension", *Journal of Service Marketing*, Vol. 56, Issue 3, July 1992, New York, pp.55-68.

they have preferred to use the five point LIKERT scale instead of the seven point scale as it reduces the frustration level,<sup>50</sup> and does not mislead the customer.<sup>51</sup> The five points of the scale represent the following five categories of response: (5) strongly agree; (4) agree; (3) neutral; (2) disagree, and (1) strongly disagree.

Furthermore, to overcome the bias that may exist in the two parts of the questionnaire relating to the original SERVQUAL model, one questionnaire will be distributed, since previous studies have indicated that this will be adequate to reflect the perception of the bank customers under study, and also in order to make the research process more practical. 52

The questionnaire consists of three parts: the first part includes 38 items which are designed to measure the attitudes of Islamic bank customers in the UAE towards the level of service quality they actually perceive and their perception of Islamic banking services. Service performance will be measured by overall service quality, which is measured in the questionnaire by two separate items, since overall service quality is clearly defined and interpreted. The last item is designed to measure the effect of the *riba* factor on the customers' perception of service quality and hence on their decision to choose the Islamic bank.

Table (1) Islamic Banks Service Quality Dimensions

Quality Dimension	Statements
Tangibles	1-5
Reliability	6-10
Assurance	11-15
Empathy	16-21
Responsiveness	22-25
Islamic Banking	26-35

The second part includes 15 items using the LIKERT scale and measures the extent of customers' familiarity with Islamic bank products and services, such as current accounts, savings accounts, investment deposits, credit cards, cheque collection, letters of guarantee, letters of credit, car finance by *Murabaha*, goods finance by *Murabaha*, construction finance by *Istisna*, trade finance by foreign *Murabaha*, service finance (such as medical, education and travel) by service *Murabaha*, projects finance by *Mudarabah*, projects finance by *Musharakah*, and real estate and equipment finance by *Ijarah*. The 5 points of the LIKERT scale represent the following categories of response: (5) strong familiarity; (4) very good familiarity; (3) good familiarity; (2) poor familiarity; and (1) No familiarity at all.

The third part of the questionnaire deals with other variables that affect the customers' perception of service quality such as demographic characteristics and history of dealing with Islamic banks.

### **Sampling**

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<sup>&</sup>lt;sup>50</sup> Buttle, Francis, "SERVQUAL: Review, critique, research agenda", *European Journal of Marketing*, Vol. 30, Issue 1, 1996, p. 65-75.

<sup>&</sup>lt;sup>51</sup> Philip, George and Shirley-Ann Hazlett, "The measurement of service quality: a new P-C-P attributes model", *International Journal of Quality & Reliability Management*, Vol. 14, Issue 3, 1997, pp. 260-286.

Philip, George and Shirley-Ann Hazlett cit. op., pp. 260-286; and Buttle, Francis, cit. op., p. 65-75.
 Zhu, X. Faye, et al., "IT-Based service and service quality in consumer banking", *International Journal of Service Industry Management*, Vol. 13, No.1, 2002, pp. 69-90.

UAE Islamic bank customers represent the study's population, whether UAE citizens or expatriates, and the study's element is defined as any customer who has bank dealings in the form of owning a bank account, obtaining a financing loan, or conducting money transfers between banks.

In view of the large size of the study's population and owing to limitations of time and expense<sup>54</sup>, the study will depend on the sampling method. A simple random sampling of 300 subjects was drawn to represent the study's population, on the basis of the recommendations of Nannaly's study, as cited by Bahia, which states that a total of 300 respondents is sufficient to test the measurement scale.<sup>55</sup>

Since all Islamic banks in the United Arab Emirates have a large network of branches distributed throughout the country's cities, and in order to guarantee the maximum participation of Islamic bank customers, one branch in each city was chosen, each branch having two separate sections, one for male and one for female customers.

In order to distribute the questionnaires to the correct proportion of female to male customers, the researcher consulted the statistical reports of the Ministry of Planning in the United Arab Emirates which stated that the percentages of males and females in the total UAE population were 67.6 and 32.3 per cent respectively.<sup>56</sup> The sample distribution of males and females is illustrated in Table 6.2.

### **Data Collection and Response Rate**

For the purpose of data collection, a one-tier questionnaire containing closed-ended statements and questions was directed and administered by the researcher to bank customers. A pilot study of a sample of 10 subjects was carried out before the full distribution of questionnaires, the main goal of the pilot study being to identify any obstacles which might obstruct the collection of the required data. The feedback obtained from the pilot study highlighted problems relating to the length of the questions and the time required to complete the questionnaire. To overcome these problems, the researcher prepared the questionnaire in Arabic and in English; in addition, the customer was briefed on the goals and purpose of the study to ensure his or her full understanding of the subjects being investigated and the meaning of each of the statements appearing in the questionnaire.

The response rate from the study sample was 93.8 per cent: 290 questionnaires were returned, four of which were disregarded because they were incomplete, leaving a total of 286 questionnaires which were valid for the purposes of analysis.

In addition, it was decided that a number of structured interviews would be conducted by the researcher to obtain supplementary information. The researcher believed that the interviews would also enable him to gain insights into the most important difficulties and challenges confronting Islamic banks in the UAE, and the strategies used by their managements to overcome them.

<sup>55</sup> Bahia, Kamilia and Jacques Nantel, "A reliable and valid measurement scale for the perceived quality of banks", *International Journal of Bank Marketing*, Vol.18, Issue 2, 2000, pp. 84-91.

<sup>&</sup>lt;sup>54</sup> Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p. 227.

<sup>&</sup>lt;sup>56</sup> Economic report, Ministry of Planning of The United Arab Emirates, available from <a href="http://www.uae.gov.ae/mop/eco-report">http://www.uae.gov.ae/mop/eco-report</a>, [Accessed on 14 October 2004].

The interview was designed to include several open-ended questions relating to the general experience of Islamic banking in the country and in particular to the challenges facing Islamic banks. The interview questions were sent to the executive managers of Islamic banks in the UAE, and also to the heads of the *Shari'ah* committees of those banks, prior to conducting the interviews.

### **Data Analysis**

### Validity and Reliability of the Study

The retained questionnaires were entered directly into computer software called SPSS release 12.0, after disregarding the uncompleted questionnaires and applying a coding system to the items on the questionnaire.

The Validity test purposes to confirm that the dimensions in the conceptual structure are presented and emerge well in the model. Validity is measured by applying factor analysis, the Kaiser-Mayer-Olkin measure being used to measure the sampling adequacy, and in this study the result of the test was .807, which is considered good. In order to measure sphericity in the study, a Bartlett's test was applied, which showed that the sample was significant at 0.000, which is also acceptable and indicating absolute significant. <sup>57</sup>

A reliability test was also applied in this study, as this tests the consistency and the positive correlation between the model's variables. Reliability is measured by Cronbach's Alpha: the closer the Cronbach's Alpha result is to one, the higher the reliability of the study. In our study, the Cronbach's Alpha result was .841, which indicates a high degree of reliability.<sup>58</sup> Table (2) illustrates the reliability test and factors analysis test results related to the study sample.

Table (2) Reliability Test and Factors Analysis test of the UAE Islamic Banks Sample

Reliability test	•	Cronbach's Alpha	.841
	Measuring Sampling Adequacy	Kaiser-Mayer-Olkin	.807
Factors Analysis	Bartlett's Test of	Approximate Chi Square	9273.447
Sp	Sphericity	df	2016
		Sig.	.000

### **Hypotheses Testing**

The conceptual model for measuring the service quality of Islamic banks in the UAE was based on the assumption that the dependent variables, which include the Islamic banking variables, SERVQUAL dimensions and overall service quality, are correlated, and that the dependent variables are influenced by the independent variables. The independent variables include: customer demographic factors, the degree of familiarity with Islamic banking services and products, the number of years' experience with Islamic banks and avoidance of interest.

<sup>57</sup> Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992. p. 284.

<sup>58</sup> Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p.284.

The hypotheses tests are based on the assumption that the confidence level is 0.05, which is generally accepted by social science researchers.<sup>59</sup> In order to test the model hypotheses, three further groups of hypotheses were formatted to serve the purpose of inferring the existence of differences between the groups of Islamic bank customers, the correlation between the model's variables and the influencing relationships between the model's variables.

### **Results Discussions**

### **Descriptive Analysis**

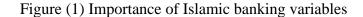
Figure (1) clearly illustrates the level of importance that the UAE Islamic banks' customers attach to the Islamic banking variables, which definitely participate effectively in forming the customers' perceptions regarding service quality. The diagram also highlights the fact that the customers attach great importance to the Islamic banking variables in the UAE Islamic banks, indicating that these variables play an important role in shaping customers' perceptions of the service quality in those banks.

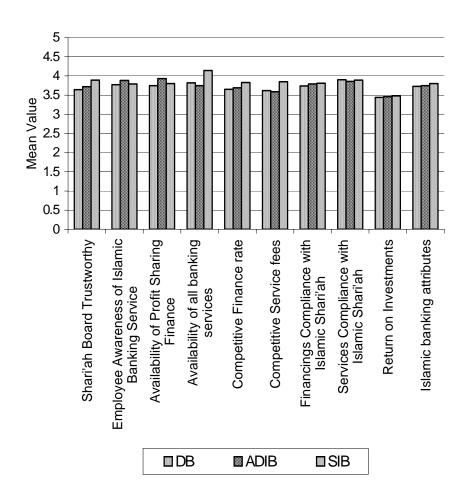
This applies particularly to the compliance with Islamic *Shari'ah* and to the *Shari'ah* boards' trustworthiness, and is in line with other studies that have asserted that the religious advisors are of crucial importance and should be trustworthy by the consensus of the Muslim community. Furthermore, the availability of all the Islamic banking services and products seemed to be highly appreciated by the UAE Islamic banks' customers, which is also in line with the findings of other studies, that the insufficiency of banking services and products in Islamic banks induces some customers to continue dealing with conventional banks. 61

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Al Gaoud, L. M. and Mervyn K. Lewis, "Corporate governance in Islamic banking: The case of Bahrain", 1999.
 Naser, Kamal, et al., "Islamic banking: a study of customer satisfaction and performance in Jordan", *International Journal of Bank Marketing*, Vol.17, No.3, 1999, pp 135-150.

<sup>&</sup>lt;sup>59</sup> Sekaran, Uma, *Research methods for business: A skill-building approach*, Second Edition, John Wiley & Sons, Canada, 1992, p. 265.





The study results also, show that the customers attached great importance to tangibles, empathy and reliability, and their view of the latter dimension is in line with the findings of studies undertaken by Zeithaml et al., Wuhrer, Angur and Al-Tamimi and Al-Amiri, 62 who argue that reliability is the most important dimension. By contrast, the study's findings run contrary to those of other studies in the field which have found that assurance and responsiveness are the most important SERVQUAL dimensions, while tangibles, reliability and empathy are the least important, Figure (2) shed light on these results.

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<sup>&</sup>lt;sup>62</sup> Zeithaml, Valarie, et al., *Delivering quality service: Balancing customer perceptions and expectations*, New York: The Free Press, 1990, p. 28; and Wuhrer, Gerhard A., "Quality positioning in the Australian banking industry: A benchmark case study", Paul Kunst, and Jos Lemmink (eds.), *Managing service quality*, Paul Chapman Publishing Ltd, London, UK, 1995, pp.1-12; and Angur, Madhukar, G., et al., "Service quality in the banking industry: An assessment in a developing economy", *International Journal of Bank Marketing*, Vol.17, No. 3, 1999, pp. 116-125; and Al-Tamimi, Hassein A. Hassan and Abdullah Alamiri, "Analyzing service quality in the UAE Islamic banks", *Journal of Financial Services Marketing*, Vol. 8, No. 2, 2003, pp. 119-132.

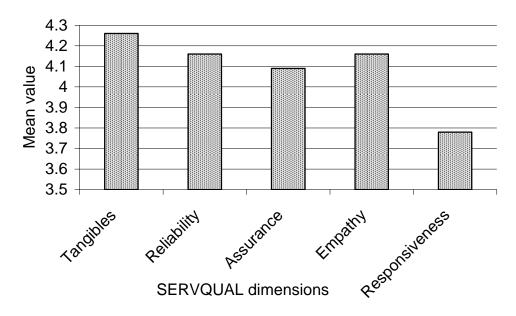
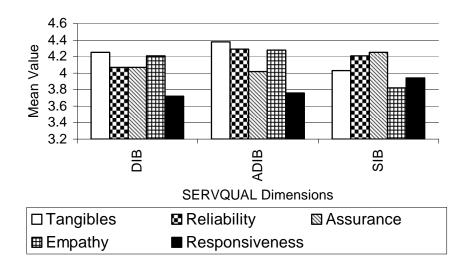


Figure (2) Importance of the consolidated SERVQUAL dimensions

According to these findings, the managers of the UAE Islamic banks should spare no effort in installing state-of-the-art equipment, materials and technological facilities. In addition, when designing a new branch building, management should make sure they allow for adequate parking space and locate the banks where there is easy access for the customers, and also provide the most convenient interior arrangements. Furthermore, the management must guarantee a reliable and accurate service to their customers and appear more capable of fulfilling the promises that have been announced in promotions, and most importantly, they must endeavour to show a personal interest in their customers' concerns and an understanding of their needs.

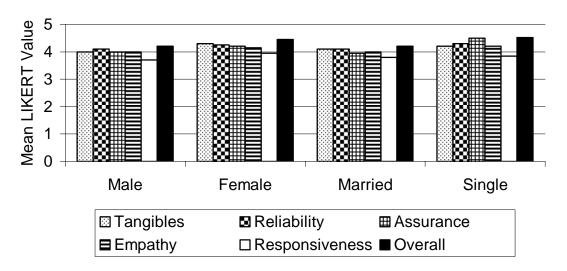
Figure (3) illustrates the perceived level of service quality that is measured by the SERVQUAL dimensions varies from one Islamic bank to another in the UAE. For instance, tangible items, such as computers, ATMs, buildings and equipment, make up the most important dimension according to the customers of the Dubai and Abu Dhabi Islamic Banks, while the customers of the Sharjah Islamic Bank appreciated assurance, which includes the level of trustworthiness and accuracy in the bank's operation and its employees, more highly.

Figure (3) Importance of SERVQUAL dimensions in each Islamic bank



The descriptive analysis using a comparison of the mean of the SERVQUAL dimensions and overall service quality across the demographic factors of the customers of the UAE Islamic banks showed that male customers have a high appreciation of reliability items such as performance accuracy and service availability, while, by contrast, female customers consider tangible items, which include modern machines and interior décor, as being more important. Concerning customers' marital status, married customers appear to accord a high importance to tangibles and reliability, while single customers have a greater appreciation of assurance items, such as the knowledge and courtesy of the service providers. It appears from Figure (4) that single females attach greater importance to both the SERVQUAL dimensions and overall service quality than single males, and therefore the quality of service in the other categories needs to be improved by the UAE Islamic banks.

Figure (4) Importance of SERVQUAL dimensions across customers' gender and marital status



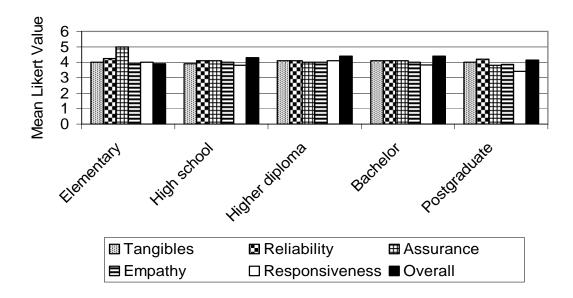
Similarly, with regard to customers' ages, figure (5) illustrating that young customers in the age range between 20 and 30 have a high appreciation of reliability items, customers aged between 31 and 40 appreciate service quality dimensions, customers between the ages of 41 and 50 assign a high importance to responsiveness, which refers to the willingness and promptness of the service providers, and customers aged over 50 accord a high importance to tangibles and reliability items. It appears from Figure 8.5 that

customers in the age range 41 to 50 have a greater appreciation of the SERVQUAL dimensions, while young customers whose age range is from 20 to 30 see overall service quality as being more important; it is thus recommended that the banks promote a high quality of service for other age groups.

Figure (5) Importance of SERVQUAL dimensions across customers' ages

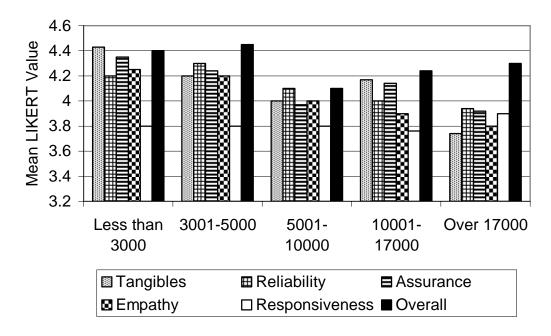
Equally, it seems from Figure (6) that the education of the UAE Islamic banks' customers plays a highly significant role in forming their perception of service quality. For example, illiterate customers do not have much interest in advanced technology, and therefore prefer the assurance dimension, which reflects the level of the service providers' willingness, courteousness and empowerment to serve and assist the customers. At the same time, reliability and tangibles are highly appreciated by educated customers, who are able to deal with state-of-the-art technology. In sum, it is recommended that Islamic banks in the UAE consider their customers' preferences according to their level of education when setting customer segmentation, introducing products and service development and developing service quality programmes.

Figure (6) Importance of SERVQUAL dimensions across customers' education



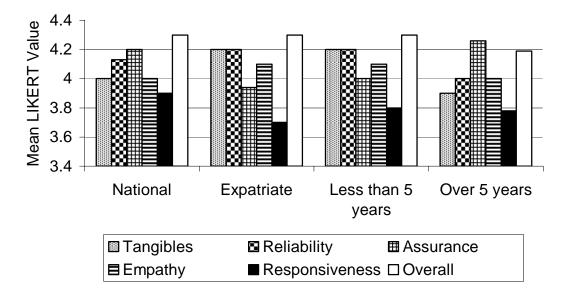
Similarly, the perception of SERVQUAL dimensions and overall service quality of the surveyed customers of the UAE Islamic banks varies according to their monthly income, as illustrated in Figure (7). Also, the importance of each of the service quality dimensions differs according to each income group. For instance, those customers who earn less than 10,000 Dirham per month consider both tangibles and assurance as the most important dimensions, while those who earn more than 10,000 Dirham per month consider tangibles, assurance and reliability to be the most important dimensions. It can be concluded that the low income customers of the UAE Islamic banks are highly satisfied, since they had a positive perception of overall service quality and were also highly appreciative of the technology and the bank's environment, in addition to the extent of knowledge and courtesy offered to customers by the service provider in the bank, while the high income category was highly appreciative of the reliable and accurate transactions, in addition to the availability of state-of-the-art equipment and the extent of the service provider's knowledge and courtesy.

Figure (7) Importance of SERVQUAL dimensions across customers' monthly income



UAE national customers seem to accord great importance to assurance and reliability, while expatriate customers feel that tangibles and reliability are more important, although both categories see overall service quality as important. With regard to the customers' experience of dealing with Islamic banks, Figure 8.8 also illustrates that customers who have less than 5 years' experience rate overall service quality highly and appreciate the tangibles and reliability dimensions, while customers with over 5 years' experience consider assurance to be more important.

Figure (8) Importance of SERVQUAL dimensions across customers' nationality and experience of dealing with Islamic banks



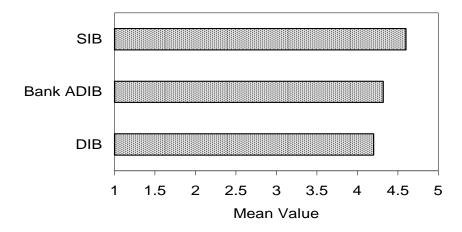
### The Importance of avoiding Riba

The descriptive analysis of the study showed that avoiding *riba* is a critical issue, and is the major incentive for customers to deal with an Islamic bank in the UAE. This result is supported by the mean value of the avoidance of *riba* item in the questionnaire, which amounted to 4.3 on the five-point LIKERT scale, which is considered a very high score. This result is in line with the findings of other studies in the field, such as those undertaken by Al-Tamimi and Alamiri, Naser et al., Metawa and Al Mossawi and Othman and Owen. <sup>63</sup> Figure (9) sheds light on this result.

Figure (9) The importance of avoiding *riba* 

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<sup>&</sup>lt;sup>63</sup> Al-Tamimi, Hassein A. Hassan and Abdullah Alamiri, "Analyzing service quality in the UAE Islamic banks", *Journal of Financial Services Marketing*, Vol. 8, No. 2, 2003, pp. 119-132; and Naser, Kamal, et al., "Islamic banking: A study of customer satisfaction and preferences in Jordan", *International Journal of Bank Marketing*, Vol. 17, No. 3, 1999, pp. 135-150; and Metawa, Saad A. and Mohammed Al Mossawi, "Banking behavior of Islamic bank customers: Perspectives and implications", *International Journal of Bank Marketing*, Vol. 16, No. 7, January 1998, pp. 299-313; and —, "Service quality", *Alwatan Quarterly Journal*, The Secretariat General of the Cooperative Council for the Arab States of the Gulf, Riyadh, Issue no. 47, March 1998, pp. 247-283; and Othman, Abdul Qawi and Lynn Owen, "The multidimensionality of the CARTER model to measure customer service quality (SQ) in the Islamic banking industry: A study of the Kuwait Finance House", *International Journal of Islamic Financial services*, Vol. 3, No. 4, April-June, 2001, Available from: <a href="http://www.islamic-finance.net/journal.html">http://www.islamic-finance.net/journal.html</a>, [Accessed on 25 May 2004]; and Structured interview with Mr. Abdul Naser Al Mannai, Head of Shari'ah Supervision, Sharjah Islamic Bank, Sharjah, 10 May 2005.

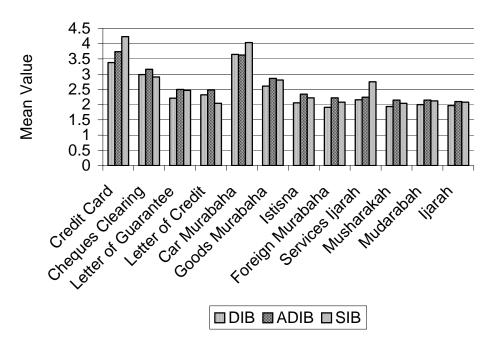


As a result, it is highly recommended that the UAE Islamic banks include their commitment to avoiding *riba* in their mission statement as a strategic goal; the mission statement should also be clearly announced and brought to the notice of the customers in order to uphold the relationship of trust between management and customer, which in the long run will retain existing customers and attract new ones.

## The Effect of Familiarity with Islamic Banking Products and Services on Perceived Service Quality

The descriptive analysis of the study also showed that the UAE Islamic banks' customers are less familiar with Islamic banking products and services than with conventional products. This result is supported by the mean value of the level of customer familiarity with Islamic banking products and services, where the result was as low as 2.7, which is considered poor; the only exceptions were regarding credit cards and car finance by *Murabahah*, which in fact imitate the interest-based loans in conventional banks, as mentioned earlier in this work. Figure (10) illustrates the mean values of customer familiarity with the UAE Islamic banking products and services.

Figure (10) Level of customer familiarity with Islamic banking services and products



Accordingly, it is recommended that Islamic banks in the UAE enhance the level of awareness of and familiarity with their products and services in the public in general and in their customers in particular. These results of the study are confirmed by Mr. Saad Abdul Razzaq, Chief Executive Officer of the Dubai Islamic Bank, who stated that the major obstacle facing Islamic banks nowadays in the UAE banking market is the poor level of customer familiarity with and awareness of Islamic banking products and services; he also recommended that the Islamic banks' management should start immediately to set up ambitious programmes to educate customers. <sup>64</sup>

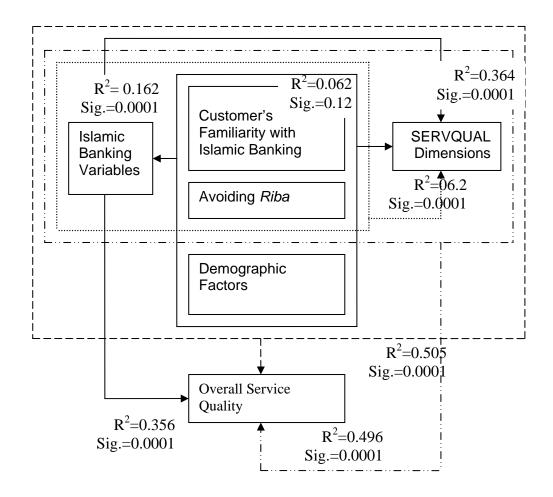
### Discussion on the Results of the Hypotheses Testing

The conceptual model test was carried out using a multiple-regression test that tested the effect of the independent variables on the dependent variables in the perceived service quality model of the UAE Islamic banks. Figure (11) shows and summarises the nature of this relationship.

Figure (11) Multi-regression results for the UAE Islamic banks

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<sup>&</sup>lt;sup>64</sup> Structured interview with Mr. Saad Abdul Razzaq, Chief Executive Officer, Dubai Islamic Bank, Dubai, 6 December 2004.



A test was carried out on the strength of the relationship between the Islamic banking variables and the SERVQUAL dimensions. The results showed the existence of a significant relationship between the Islamic banking variables and the SERVQUAL dimensions. Nevertheless, testing the differences among the customers concerning their perception of service quality, as measured by the ANOVA test, revealed the existence of differences in perception regarding the tangibles items and empathy; these two dimensions should thus be the pivotal elements when the management of the UAE Islamic banks set out their marketing segmentation plan.

Furthermore, Pearson's correlation and Chi square tests were used in this study to measure the relationship between the independent variables and the perceived service quality as measured by the SERVQUAL dimensions, and the results revealed the existence of a significant relationship between perceived service quality and the avoidance of interest in the UAE Islamic banks. Thus, it is recommended that the UAE Islamic banks periodically inform the customer about their strict commitment to Islamic *Shari'ah* and emphasize the fact that their *Shari'ah* members are well known and trustworthy. Figure (12) sheds light on this relationship.

Figure (12) Difference between the Islamic banking variables of the UAE Islamic banks

Shari'ah Board Trustworthiness	Employee Awareness of Islamic Banking Services and Products	Availability of Profit-Sharing Finance	Availability of all banking services	Competitive Finance rate	Competitive Service fees	Financings Compliance with Islamic	Services Compliance with Islamic Shari'ah	Return on Investment Accounts
R=0.33 Sig.=0.0001	R=0.47 Sig.=0.0001	R=0.40 Sig.=0.0001	R=0.47 Sig.=0.0001	R=0.38 Sig.=0.0001	R=0.43 Sig.=0.0001	R=0.50 Sig.=0.0001	R=0.52 Sig.=0.0001	R=0.44 Sig.=0.0001
familia	stomer's semiliarity with amic banking R=0.03 Sig.=0.83				R=0.2′ Sig.=0	Riba	ding a	

The study results showed that there was no relationship between the level of customers' familiarity with Islamic bank products and services and the perceived service quality as measured by the SERVQUAL dimensions. Nevertheless, the multiple regression analysis of the effect of customer familiarity in conjunction with the Islamic banking variables and the avoidance of *riba* revealed the existence of a positive correlation with the SERVQUAL dimensions and overall service quality. This confirms the findings of another study, which demonstrated that customer awareness of and familiarity with Islamic banking products and services has a significant effect on the formation of the perception of service quality, and that therefore increasing the level of this awareness and familiarity among customers is crucial in order to improve the service quality of the Islamic banks, to design successful marketing strategies and efficient advertising campaigns and thereby achieve high profitability. 65

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<sup>&</sup>lt;sup>65</sup> Metawa, Saad A. and Mohammed Al Mossawi, "Banking behavior of Islamic bank customers: Perspectives and implications", *International Journal of Bank Marketing*, Vol. 16, No. 7, January 1998, pp. 299-313.

In addition, a Chi square test was used to prove the existence of differences resulting from the demographic factors of the UAE Islamic banks' customers. It showed that there are significant differences in both the education and income categories. The banks must therefore consider these differences when implementing their marketing segmentation strategies and service quality programmes. Figure (13) illustrates the differences between the Islamic banking variables of the UAE Islamic banks.

 $Chi^2 = 280.82$ Age  $Chi^2 = 449.12$ Education  $\overline{\text{Sig.}=0.002}$  $Chi^2 = 97.81$ Number of years Sig.=0.32dealing with bank  $Chi^2 = 86.45$ **SERVQUAL** Gender dimensions  $Chi^2 = 107.55$ Nationality Sig.=0.12 $Chi^2 = 410.56$ Customer Sig.=0.06 familiarity with Islamic banking  $Chi^2 = 410.56$ Monthly income

Figure (13) Differences between customers' demographic factors

### **Conclusion and Recommendations**

### **Theoretical Implications**

- 1. This study has demonstrated that the conceptual model that was used to measure the perceived level of service quality of the UAE Islamic banks is characterized by a high level of reliability and viability; it can therefore be relied upon when measuring the perceived level of service quality in the Islamic banks.
- 2. The study has further proved that the Islamic banking variables that were used to represent the nature of Islamic banking in the study's model have a significant effect on customers' perceptions of the quality of service offered by the UAE Islamic banks. These variables also have a significant relationship with the service quality dimensions that are included in the conceptual model for measuring service quality in the UAE Islamic banks. In sum, the inclusion of Islamic banking variables as a separate dimension within the original service quality dimensions, such as are included in the SERVQUAL model, in order to measure the level of service quality in Islamic banks, is strongly recommended.
- 3. The study has also proved that the extent of customers' familiarity and awareness of UAE Islamic bank products and services plays a crucial role in forming their perceptions of the quality of service offered by these banks.
- 4. This study also confirms the findings of other studies, that demonstrated that the avoidance of *riba* (interest-based financing) is an important reason why customers prefer to deal with Islamic banks in the UAE.

### **Managerial Implications**

- 1. The descriptive analysis of the study showed that all service quality dimensions in general are very important from the point of view of the UAE Islamic banks' customers. However, the study's findings produced evidence that the most important dimensions are reliability, tangibles and assurance, which confirms the findings of other studies in the field.
- 2. The descriptive analysis revealed that the UAE Islamic bank customers differ in their perception of which of the service quality dimensions are most important, according to a number of their demographic characteristics. Accordingly, the UAE Islamic banks must utilize these differences among their customers. The customers' preferences may be used to determine customer segmentation and customers' needs, which will help in achieving a high level of service quality and in turn lead to the bank's retaining its customers. 66
- 3. The study's findings also revealed that low income and very high income customers represented only a small percentage of the total customers of the UAE Islamic banks. It is therefore recommended that special attention be paid to these two categories in such a manner that low profitability customers can be encouraged to use low cost delivery channels such as ATMs, telephones, the Internet and interactive TV, and the high profitability customer can be directed towards a professional service provider, such as a Very Important Person Department (VIP).<sup>67</sup>
- 4. The study showed that Islamic banking variables are important in determining the level of service quality as perceived by the UAE Islamic banks' customers. The Islamic banking variables that are proposed in this study include: *Shari'ah* compliance in Islamic banking services and products, competitive fees, competitive finance rates, availability of profit-sharing finance, employees' awareness of Islamic banking, the financial performance of Islamic banks that is reflected in the return on customers' investment accounts, the availability of banking services and the trustworthiness of the *Shari'ah* board in an Islamic bank.
- 5. The correlation analysis and multiple regression study showed that all these variables have significant relationships with service quality dimensions and have a significant effect on customers' perceptions of the service quality level in the UAE Islamic banks. On the basis of this result, it is recommended that Islamic banks in the UAE make these variables visible to the bank's customers and consider them when developing and designing new products and services as an integral dimension. In order to develop and enhance the visibility of Islamic banking variables, it is suggested that the UAE Islamic banks consider the following recommendations:
- 1. The *Shari'ah* board must be independent and have a high level of transparency, together with a uniformity of decisions and scholars' opinions.
- 2. The study's findings confirm those of other studies regarding the importance of employees' awareness of Islamic bank products and services. On account of this, it is suggested that the following methods be used by the UAE Islamic banks in order to broaden the knowledge related to Islamic banking products and services:

Newman, Karin, "Interrogating SERVQUAL: A critical assessment of service quality measurement in a high street retail bank", *The International Journal of Bank Marketing*, Vol. 19, No. 3, 2001, pp. 126-139.

Edris, Thabet A. and Mohammed A. Almahmeed, "Service considered important to business customers and determinants of bank selection in Kuwait: A segmentation analysis", *International Journal of Bank Marketing*, Vol.15, No.4, 1997, pp. 126-133.

- a. The human resourses departments in the UAE Islamic banks can play crucial roles in boosting the awareness of Islamic banking services among the bank's employees by carrying out the following: launching scheduled training courses, printing brochures, holding in-house inductions and providing new employees with an orientation kit to ensure that sufficient information is given them regarding general terms and conditions of Islamic banking products and services.
- b. The branch operation department also has an important role to play in increasing employees' awareness by supporting the service providers, who are working on the front line and who are in touch with their customers on a daily basis, with updated manuals and accurate information about the products and services.
  - I. The study's findings confirm the importance of the availability of profit-sharing finance and all banking services in the UAE Islamic banks. On the basis of this finding, it is recommended that the UAE Islamic banks allocate sufficient funds to support research and development efforts in order to develop new mid-range and long-range instruments and improve the risk-sharing products using financial re-engineering, designing and development. The output of this research will produce innovative and developed products and services which can be used to substitute for interest-based products and services and to hedge the financial risks that are expected from investment activities.
- 4. The study showed that the competitive finance and service rate, the compliance of finance and services with Islamic *Shari'ah* and returns on investments are also variables which play a major role in forming the customers' perceptions of the service quality of UAE Islamic banks. Islamic banks in the UAE are therefore advised to consider the following recommendations:
  - a. Implement effective research and development efforts to make all banking services and products that are also offered by conventional banks available to their customers at reasonable and competitive prices.
  - b. Distribute a high profit rate on customers' savings, as the finding of this study confirmed that of other studies, that a high return on investment participates largely in elevating the perceived level of service quality.
- 5. The relationship between *riba* and service quality dimensions in the UAE Islamic banks was found to be positive, which confirms the findings of other studies in the field. It is therefore recommended that the motto of *Shari'ah* compliance be reflected in the bank's mission statement, advertisements, products and service applications and employees' behaviour.
- 6. The descriptive analysis of customers' familiarity with the UAE Islamic banks' products and services revealed that the surveyed customers have a high level of familiarity with conventional banking services such as opening accounts, credit cards, cheque collections and car finance, whereas they have a low level of familiarity with conventional Islamic banking products and services such as *Musharakah*, *Mudarabah*, *Ijarah* and *Istisna*, which meant that the overall mean score of the customers' familiarity level with the UAE Islamic banks' products and services was very low. This result confirms those of other studies which found that a high level of customer familiarity with and awareness of Islamic bank products and services is of prime importance when devising an effective marketing strategy and a successful plan to win customer loyalty. The following are essential methods of raising the

customers' familiarity with and awareness of UAE Islamic bank products and services:

- 1. Holding free public lectures, workshops and seminars on Islamic banking services and products for customers during the evenings, weekends and holidays, and during festivals.
- 2. Funds and scholarships may be made available to encourage schools and universities to include Islamic finance and banking as a subject in their syllabuses.
- 3. The branch might organize periodic on-site workshops in the evenings to which a small group of customers may be invited free of charge.
- 4. Publications such as booklets and magazines could be distributed to the public, schools and university libraries.
- 5. Using media education via television and Internet websites is another approach towards furthering the awareness and knowledge of Islamic banking products and services.

### **Limitations of the Study**

In view of the fact that the study will examine the perceived service quality of Islamic banks operating in the UAE, and taking into account the constraints of time and cost involved, other topics pertaining to Islamic banks, such as religious duties and community obligations, will not be a focus of the study. Furthermore, since the objective of the study concerns the operational part of Islamic banks, and in particular measuring the perceived service quality of the UAE Islamic banks, the study will therefore avoid discussing any issues related to historical experiments in Islamic banking, or Islamic law that is related to Islamic banking transactions. The focus of the study is thus limited to three Islamic banks that are established and which already have branch networks within the United Arab Emirates: these are the Dubai Islamic bank, Abu Dhabi Islamic Bank and Sharjah Islamic Bank.

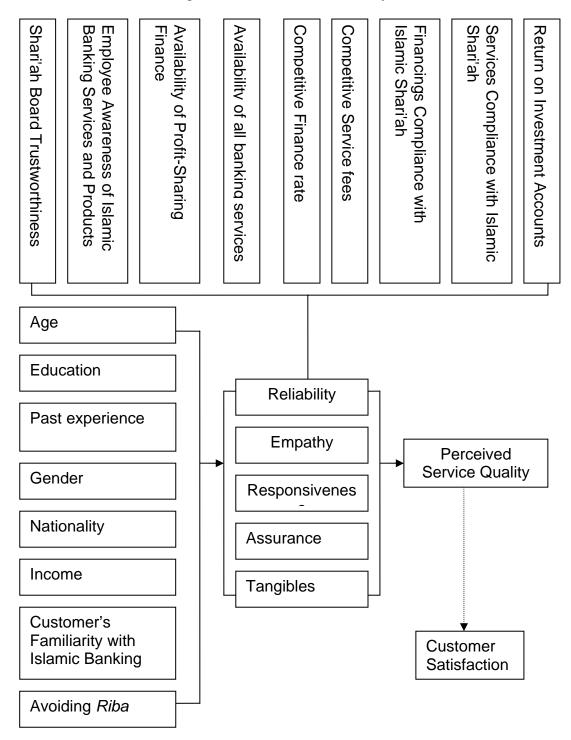
### **Recommendations for Future Research**

Regardless of the constraints of time and finances, this study may be considered as providing additional support to those efforts that have been made to improve service quality in business enterprises. Moreover, this study provides much food for thought, and general guidelines for further research, as follows:

- 1. For reasons of cost and time this study has concentrated on only three of the older Islamic banks in the UAE. Further research is therefore needed to cover the newly established and recently converted banks along with other Islamic financial service companies in order to understand the whole picture of the Islamic banks' service quality in the UAE.
- 2. A Service Quality Index is a pressing requirement as it would be useful for benchmarking the level of service quality in the banking industry. A study concentrated on all banks in the UAE is therefore recommended in order to construct this index.
- 3. Other factors, such as leadership and bank size, might have an effect on the service quality in Islamic banks. Further research is therefore needed to test the relationship between leadership and bank size and the perceived service quality in the Islamic banks.
- 4. In this study, a single method was used to judge the perceived level of service quality. Subsequent research might consider using multiple measurement methods, such as SERVPERF and Mystery Shopper, to minimize any deviation or bias that may occur when using only one method.

Appendix A

The Model of Measuring the Perceived Service Quality of the UAE Islamic banks



## Appendix B

### **Descriptive statistics**

Descriptive statistics of perceived service quality

Variables	Mean	S.D.
Tangibles	4.26	0.68
Reliability	4.16	0.71
Assurance	4.09	0.73
Empathy	4.16	0.80
Responsiveness	3.78	0.79
Perceived service quality SERVQUAL	4.11	0.52
Shari'ah boards' trustworthiness	3.71	0.98
Employee awareness of Islamic banking services	3.81	0.82
Availability of profit-sharing finance	3.82	0.82
Availability of all banking services	3.86	0.91
Competitive finance rates	3.70	0.92
Competitive service fees	3.65	0.96
Financings compliance with Islamic Shari'ah	3.77	0.98
Services compliance with Islamic Shari'ah	3.89	0.82
Return on investments	3.46	1.0
Islamic banking variables	3.76	.070

## Descriptive statistics of perceived service quality

Variables	Mean	S.D.
Current accounts	3.89	1.21
Savings accounts	3.50	1.29
Investment deposits	3.08	1.28
Credit cards	3.65	1.25
Cheque clearance	3.03	1.33
Letters of guarantee	2.35	1.25
Letters of credit	2.32	1.30
Car Murabahah finance	3.72	1.21
Goods Murabahah finance	2.72	1.42
Istisna finance	2.179	1.21
Foreign Murabaha finance	2.04	1.17
Service <i>Ijarah</i> finance	2.29	1.23
Musharakah	2.03	1.13
Mudarabah	2.07	1.19
Ijarah	2.03	1.15
Customer's familiarity	2.71	0.86
Avoidance of interest (riba)	4.31	0.89

Descriptive statistics for the study variables across Islamic banks

Variables	DI	DIB		ADIB		ΙΒ
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Tangibles	4.25	0.64	4.38	0.61	4.03	0.86
Reliability	4.07	0.73	4.29	0.68	4.21	0.69
Assurance	4.07	0.71	4.02	0.76	4.25	0.74
Empathy	4.21	0.80	4.28	0.68	3.82	0.93
Responsiveness	3.72	0.78	3.76	0.82	3.94	0.75
Total SERVQUAL dimensions	4.07	0.52	4.17	0.47	4.06	0.60

Descriptive statistics for customer familiarity and avoidance of interest across Islamic banks

Variables	DI	DIB		ADIB		В
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Current accounts	3.74	1.31	3.98	1.09	4.16	1.07
Savings accounts	3.23	1.35	3.70	1.21	3.93	1.07
Investment accounts	3.01	1.38	3.14	1.20	3.19	1.13
Credit cards	3.38	1.30	3.74	1.16	4.23	1.02
Cheque clearance	2.99	1.32	3.16	1.33	2.91	1.38
Letters of guarantee	2.21	1.24	2.5	1.26	2.47	1.22
Letters of credit	2.32	1.38	2.48	1.27	2.04	1.03
Car Murabaha	3.65	1.26	3.63	1.21	4.04	1.06
Goods Murabaha	2.61	1.33	2.86	1.46	2.81	1.59
Istisna	2.06	1.12	2.34	1.26	2.22	1.34
Foreign Murabaha	1.91	1.05	2.22	1.27	2.08	1.31
Services Ijarah	2.16	1.11	2.24	1.21	2.75	1.50
Musharakah	1.94	1.07	2.15	1.17	2.04	1.25
Mudarabah	2.00	1.15	2.15	1.18	2.12	1.31
Ijarah	1.97	1.11	2.10	1.12	2.08	1.31
Customer familiarity	1.97	0.86	2.81	0.92	2.79	0.73
Avoidance of interest	4.20	0.94	4.32	0.77	4.60	0.79

## Descriptive statistics for the Islamic banking variables across Islamic banks

Variables	DIB		ADIB		SIB	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Shari'ah boards' trustworthiness	3.64	1.04	3.72	0.87	3.89	1.00
Employee awareness of Islamic banking services	3.77	0.89	3.88	0.67	3.79	0.84
Availability of profit- sharing finance	3.75	0.86	3.93	0.72	3.80	0.85
Availability of all banking services	3.82	0.95	3.75	0.92	4.14	0.71
Competitive finance rates	3.65	1.00	3.69	0.91	3.83	0.72
Competitive service fees	3.62	1.02	3.59	0.95	3.85	0.77
Financings compliance with Islamic <i>Shari'ah</i>	3.74	1.02	3.79	1.01	3.81	0.78
Services compliance with Islamic <i>Shari'ah</i>	3.90	0.86	3.86	0.83	3.89	0.70
Return on investments	3.44	1.08	3.46	0.99	3.48	0.80
Islamic banking variables	3.73	.75	3.75	0.71	3.80	0.50

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